

Customer Ref: 01747 Response Ref: ANON-KU2U-GW2U-C
Name: Stuart Salter
Response Type: Agent / Consultant
On behalf of: Wallace Land Investments

Supporting Info: Yes
Email: stuart@geddesconsulting.com

Choice 1 A

We want to connect our places, parks and green spaces together as part of a city-wide, regional, and national green network. We want new development to connect to, and deliver this network. Do you agree with this? - Select support / don't support

Short Response: Not Answered

Explanation: Not Answered

Choice 1 B

We want to change our policy to require all development (including change of use) to include green and blue infrastructure. Do you agree with this? - Support / Object

Short Response: Not Answered

Explanation: Not Answered

Customer Ref: Response Ref:
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Response Type
On behalf of:

Supporting Info
Email

Choice **1 C**

We want to identify areas that can be used for future water management to enable adaptation to climate change. Do you agree with this? - Yes / No

Short Response

Explanation

Choice **1 D**

We want to clearly set out under what circumstances the development of poor quality or underused open space will be considered acceptable. Do you agree with this? - Yes / No

Short Response

Explanation

Choice **1 E**

We want to introduce a new 'extra-large green space standard' which recognises that as we grow communities will need access to green spaces more than 5 hectares. Do you agree with this? - Yes / No

Short Response

Explanation

Customer Ref: Response Ref:
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Response Type
On behalf of:

Supporting Info
Email

Choice 1 F

We want to identify specific sites for new allotments and food growing, both as part of new development sites and within open space in the urban area. Do you agree with this? - Yes / No

Short Response

Explanation

Choice 1 F

We want to identify specific sites for new allotments and food growing, both as part of new development sites and within open space in the urban area. Do you agree with this? - Upload (max size 3mb)

Short Response

Explanation

Choice 1 G

We want to identify space for additional cemetery provision, including the potential for green and woodland burials. Do you agree with this? - Yes / No

Short Response

Explanation

Customer Ref: Response Ref:
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Response Type
On behalf of:

Supporting Info
Email

Choice **1 H**

We want to revise our existing policies and green space designations to ensure that new green spaces have long term maintenance and management arrangements in place. Do you agree with this? - Yes/No

Short Response

Explanation

Choice **2 A**

We want all development (including change of use), through design and access statements, to demonstrate how their design will incorporate measures to tackle and adapt to climate change, their future adaptability and measures to address accessibility for people with varying needs, age and mobility issues as a key part of their layouts. - Yes / No

Short Response

Explanation

Choice **2 B**

We want to revise our policies on density to ensure that we make best use of the limited space in our city and that sites are not under-developed. Do you agree with this? - Yes / No

Short Response

Explanation

Customer Ref: Response Ref:
Name
Response Type
On behalf of:

Supporting Info
Email

Choice **2 C**

We want to revise our design and layout policies to achieve ensure their layouts deliver active travel and connectivity links. Do you agree with this? - Yes / No

Short Response

Explanation

Choice **2 D**

We want all development, including student housing, to deliver quality open space and public realm, useable for a range of activities, including drying space, without losing densities. Do you agree with this? - Yes / No

Short Response

Explanation

Choice **3 A**

We want all buildings and conversions to meet the zero carbon / platinum standards as set out in the current Scottish Building Regulations. Instead we could require new development to meet the bronze, silver or gold standard. Which standard should new development in Edinburgh meet? - Which standard?

Short Response

Explanation

Customer Ref: Response Ref:
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On behalf of:

Supporting Info
Email

Choice **4 A**

We want to work with local communities to prepare Place Briefs for areas and sites within City Plan 2030 highlighting the key elements of design, layout, and transport, education and healthcare infrastructure development should deliver. Do you agree with this? - Yes / No

Short Response

Explanation

Choice **4 B**

We want to support Local Place Plans being prepared by our communities. City Plan 2030 will set out how Local Place Plans can help us achieve great places and support community ambitions. - How should the Council work with local communities to prepare Local Place Plans?

Short Response

Explanation

Choice **5 A**

We want City Plan 2030 to direct development to where there is existing infrastructure capacity, including education, healthcare and sustainable transport, or where potential new infrastructure will be accommodated and deliverable within the plan period. Do you agree with this? - Yes / No

Short Response

Explanation

Customer Ref: Response Ref:
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Response Type
On behalf of:

Supporting Info
Email

Choice 5 B

We want City Plan 2030 to set out where new community facilities are needed, and that these must be well connected to active travel routes and in locations with high accessibility to good sustainable public transport services. Do you agree with this? - Yes / NO

Short Response

Explanation

Choice 5 C

We want to reflect the desire to co-locate our community services close to the communities they serve, supporting a high walk-in population and reducing the need to travel. Do you agree with this? - Yes / No

Short Response

Explanation

Choice 5 D1

We want to set out in the plan where development will be expected to contribute toward new or expanded community infrastructure. Do you agree with this? - Yes / No

Short Response

Explanation

Customer Ref: Response Ref:
Name
Response Type
On behalf of:

Supporting Info

Email

Choice 5 D2

We want to use cumulative contribution zones to determine infrastructure actions, costs and delivery mechanisms. Do you agree with this? - Yes / No

Short Response

Explanation

Choice 5 E

We want to stop using supplementary guidance and set out guidance for developer contributions within the plan, Action Programme and in non-statutory guidance. Do you agree with this? - Yes / No

Short Response

Explanation

Choice 6 A

We want to create a new policy that assesses development against its ability to meet our targets for public transport usage and walking and cycling. These targets will vary according to the current or planned public transport services and high-quality active travel routes. Do you agree with this? - Yes / No

Short Response

Explanation

Customer Ref: Response Ref:
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On behalf of:

Supporting Info
Email

Choice **6 B**

We want to use Place Briefs to set the targets for trips by walking, cycling and public transport based on current and planned transit interventions. This will determine appropriate parking levels to support high use of public transport. Do you agree with this? - Yes / No

Short Response

Explanation

Choice **7 A**

We want to determine parking levels in development based on targets for trips by walking, cycling and public transport. These targets could be set by area, development type, or both and will be supported by other measures to control on-street parking. Do you agree with this? - Yes / No

Short Response

Explanation

Choice **7 B**

We want to protect against the development of additional car parking in the city centre to support the delivery of the Council's city centre transformation programme. Do you agree with this? - Yes / No

Short Response

Explanation

Customer Ref: Response Ref:
Name
Response Type
On behalf of:

Supporting Info
Email

Choice **7 C**

We want to update our parking policies to control demand and to support parking for bikes, those with disabilities and electric vehicles via charging infrastructure. Do you agree with this? - Yes / No

Short Response

Explanation

Choice **7 D**

We want to support the city's park and ride infrastructure by safeguarding sites for new park and ride and extensions, including any other sites that are identified in the City Mobility Plan or its action plan. Do you agree with this? - We want to support the city's park and ride infrastructure by safeguarding sites for new park and ride and extensions, including any other sites that are identified in the City Mobility Plan or its action plan.

Short Response

Explanation

Choice **8 A**

We want to update our policy on the Cycle and Footpath Network to provide criteria for identifying new routes. Do you agree with this? - Yes / No

Short Response

Explanation

Customer Ref: Response Ref:
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Response Type
On behalf of:

Supporting Info
Email

Choice **8 B**

As part of the City Centre Transformation and other Council and partner projects to improve strategic walking and cycling links around the city, we want to add the following routes (along with our existing safeguards) to our network as active travel proposals to ensure that they are delivered. Do you agree with this? - Yes / No

Short Response

Explanation

Choice **8 C**

We want City Plan 2030 to safeguard and add any other strategic active travel links within any of the proposed options for allocated sites. We also want the City Plan 2030 to include any new strategic active travel links which may be identified in the forthcoming City Plan 2030 Transport Appraisal, the City Mobility Plan, or which are identified through this consultation. Do you agree with this? - Yes / No

Short Response

Explanation

Choice **8 C**

We want City Plan 2030 to safeguard and add any other strategic active travel links within any of the proposed options for allocated sites. We also want the City Plan 2030 to include any new strategic active travel links which may be identified in the forthcoming City Plan 2030 Transport Appraisal, the City Mobility Plan, or which are identified through this consultation. Do you agree with this? - Upload new cycle routes

Short Response

Explanation

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Email

Choice 9 A

We want to consult on designating Edinburgh, or parts of Edinburgh, as a 'Short Term Let Control Area' where planning permission will always be required for the change of use of whole properties for short-term lets. Do you agree with this approach? - Yes / No

Short Response

Explanation

Choice 9 B

We want to create a new policy on the loss of homes to alternative uses. This new policy will be used when planning permission is required for a change of use of residential flats and houses to short-stay commercial visitor accommodation or other uses. Do you agree with this? - Yes / No

Short Response

Explanation

Choice 10 A

We want to revise our policy on purpose-built student housing. We want to ensure that student housing is delivered at the right scale and in the right locations, helps create sustainable communities and looks after student's wellbeing. Do you agree with this? - Yes / No

Short Response

Explanation

Customer Ref: Response Ref:
Name
Response Type
On behalf of:

Supporting Info
Email

Choice **10 B**

We want to create a new policy framework which sets out a requirement for housing on all sites over a certain size coming forward for development. Do you agree with this? - Yes / No

Short Response

Explanation

Choice **10 C**

We want to create a new policy promoting the better use of stand-alone out of centre retail units and commercial centres, where their redevelopment for mixed use including housing would be supported. Do you agree with this? - Yes / No

Short Response

Explanation

Choice **11 A**

We want to amend our policy to increase the provision of affordable housing requirement from 25% to 35%. Do you agree with this approach? - Yes / No

Short Response

Explanation

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Choice 11 B

We want City Plan 2030 to require a mix of housing types and tenures – we want the plan to be prescriptive on the required mix, including the percentage requirement for family housing and support for the Private Rented Sector. Do you agree with this? - Yes / No

Short Response: Not Answered

Explanation: Not Answered

Choice 12 A

Which option do you support? - Option 1/2/3

Short Response: Option 3 (Blended)

Explanation: Please refer to separate representation on behalf of Wallace Land Investments (ANON-KU2U-GW2N-5).

Choice 12 B1

Do you support or object to any of the proposed greenfield areas? (Please tick all that apply) - Support Greenfield - Support - Calderwood

Short Response: Not Answered

Explanation:

Customer Ref: Response Ref:
Name
Response Type
On behalf of:

Supporting Info

Email

Choice **12 B2**

Do you support or object to any of the proposed greenfield areas? (Please tick all that apply) - Support Greenfield - Support - Kirkliston

Short Response

Explanation

Choice **12 B3**

Do you support or object to any of the proposed greenfield areas? (Please tick all that apply) - Support Greenfield - Support - West Edinburgh

Short Response

Explanation

Choice **12 B4**

Do you support or object to any of the proposed greenfield areas? (Please tick all that apply) - Support Greenfield - Support - East of Riccarton

Short Response

Explanation

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Choice 12 B5

Do you support or object to any of the proposed greenfield areas? (Please tick all that apply) - Support Greenfield - Support - South East Edinburgh

Short Response: Yes

Explanation

Choice 12 B6

Do you support or object to any of the proposed greenfield areas? (Please tick all that apply) - Support Greenfield - Object - Calderwood

Short Response: Not Answered

Explanation

Choice 12 B7

Do you support or object to any of the proposed greenfield areas? (Please tick all that apply) - Support Greenfield - Object - Kirkliston

Short Response: Not Answered

Explanation

Customer Ref: Response Ref:

Name

Response Type

On behalf of:

Supporting Info

Email

Choice **12 B8**

Do you support or object to any of the proposed greenfield areas? (Please tick all that apply) - Support Greenfield - Object - West Edinburgh

Short Response

Explanation

Choice **12 B9**

Do you support or object to any of the proposed greenfield areas? (Please tick all that apply) - Support Greenfield - Object - East of Riccarton

Short Response

Explanation

Choice **12 B10**

Do you support or object to any of the proposed greenfield areas? (Please tick all that apply) - Support Greenfield - Object - South East Edinburgh

Short Response

Explanation

Customer Ref: Response Ref:

Supporting Info

Name

Email

Response Type

On behalf of:

Choice **12 BX**

Do you support or object to any of the proposed greenfield areas? (Please tick all that apply) - Explain why

Short Response

Explanation

Choice **12 C**

Do you have a greenfield site you wish us to consider in the proposed Plan? - Greenfield file upload

Short Response

Explanation

Choice **12 C**

Do you have a greenfield site you wish us to consider in the proposed Plan? - Greenfield file upload

Short Response

Explanation

Customer Ref: Response Ref:

Supporting Info

Name

Email

Response Type

On behalf of:

Choice **12 C**

Do you have a greenfield site you wish us to consider in the proposed Plan? - Greenfield file upload

Short Response

Explanation

Choice **12 D**

Do you have a brownfield site you wish us to consider in the proposed Plan? - Brownfield sites upload

Short Response

Explanation

Choice **13 A**

We want to create a new policy that provides support for social enterprises, start-ups, culture and tourism, innovation and learning, and the low carbon sector, where there is a contribution to good growth for Edinburgh. Do you agree with this? - Yes / No

Short Response

Explanation

Customer Ref: Response Ref:
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On behalf of:

Supporting Info
Email

Choice 14 A

We want City Plan 2030 to support the best use of existing public transport infrastructure in West Edinburgh and accommodate the development of a mix of uses to support inclusive, sustainable growth. We will do this through ‘an area of search’ which allows a wide consideration of future uses within West Edinburgh without being tied to individual sites. Do you support this approach? - Yes / No

Short Response

Explanation

Choice 14 B

We want to remove the safeguard in the existing plan for the Royal Highland Showground site to the south of the A8 at Norton Park and allocate the site for other uses. Do you agree with this approach? - Yes / No

Short Response

Explanation

Choice 14 C

We want City Plan 2030 to allocate the Airport’s contingency runway, the “crosswinds runway” for the development of alternative uses next to the Edinburgh Gateway interchange. Do you agree with this approach? - Yes / No

Short Response

Explanation

Customer Ref: Response Ref:

Supporting Info

Name

Email

Response Type

On behalf of:

Choice 15 A

We want to continue to use the national 'town centre first' approach. City Plan 2030 will protect and enhance the city centre as the regional core of south east Scotland providing shopping, commercial leisure, and entertainment and tourism activities. Do you agree with this? - Yes / No

Short Response

Explanation

Choice 15 B

New shopping and leisure development will only be allowed within our town and local centres (including any new local centres) justified by the Commercial Needs study. Outwith local centres, small scale proposals will be permitted only in areas where there is evidence of a lack of food shopping within walking distance. Do you agree? - Yes / No

Short Response

Explanation

Choice 15 C

We want to review our existing town and local centres including the potential for new identified centres and boundary changes where they support walking and cycling access to local services in outer areas, consistent with the outcomes of the City Mobility Plan. Do you agree? - Yes / No

Short Response

Explanation

Customer Ref: Response Ref:
Name
Response Type
On behalf of:

Supporting Info
Email

Choice 15 D

We want to continue to prepare and update supplementary guidance for our town centres to adapt to changing retail patterns and trends, and ensure an appropriate balance of uses within our centres to maintain their vitality, viability and deliver good placemaking. Instead we could stop using supplementary guidance for town centres and set out guidance within the plan. Which approach do you support? - Yes / No

Short Response

Explanation

Choice 15 E

We want to support new hotel provision in local, town, commercial centres and other locations with good public transport access throughout Edinburgh. Do you agree with this approach? - Yes / No

Short Response

Explanation

Choice 15 G

We could also seek to reduce the quantity of retail floorspace within centres in favour of alternative uses such as increased leisure provision and permit commercial centres to accommodate any growing demand. Do you agree with this approach? - Yes / No

Short Response

Explanation

Customer Ref: Response Ref:
Name
Response Type
On behalf of:

Supporting Info
Email

Choice **16 A1**

We want to continue to support office use at strategic office locations at Edinburgh Park/South Gyle, the International Business Gateway, Leith, the city centre, and in town and local centres. Do you agree? - Yes / No

Short Response

Explanation

Choice **16 A2**

We want to support office development at commercial centres as these also provide accessible locations. - Yes / No

Short Response

Explanation

Choice **16 A3**

We want to strengthen the requirement within the city centre to provide significant office floorspace within major mixed-use developments. Do you agree? - Yes / No

Short Response

Explanation

Customer Ref: Response Ref:
Name
Response Type
On behalf of:

Supporting Info
Email

Choice 16 A4

We want to amend the boundary of the Leith strategic office location to remove areas with residential development consent. Do you agree? - Yes / No

Short Response

Explanation

Choice 16 A5

We want to continue to support office development in other accessible locations elsewhere in the urban area. Do you agree? - Yes / No

Short Response

Explanation

Choice 16 A5

We want to continue to support office development in other accessible locations elsewhere in the urban area. Do you agree? - Do you have an office site you wish us to consider in the proposed Plan?

Short Response

Explanation

Customer Ref: Response Ref:

Supporting Info

Name

Email

Response Type

On behalf of:

Choice **16 B**

We want to identify sites and locations within Edinburgh with potential for office development. Do you agree with this? - Yes/No

Short Response

Explanation

Choice **16 C**

We want to introduce a loss of office policy to retain accessible office accommodation. This would not permit the redevelopment of office buildings other than for office use, unless existing office space is provided as part of denser development. This would apply across the city to recognise that office locations outwith the city centre and strategic office locations are important in meeting the needs of the mid-market. Or we could Introduce a 'loss of office' policy only in the city centre. - Yes / No

Short Response

Explanation

Choice **16 E1**

We want to identify proposals for new modern business and industrial sites to provide necessary floorspace at the following locations. Do you agree? - Yes / No - Support - Leith Strategic Business Centre

Short Response

Explanation

Customer Ref: Response Ref:
Name
Response Type
On behalf of:

Supporting Info

Email

Choice 16 E2

We want to identify proposals for new modern business and industrial sites to provide necessary floorspace at the following locations. Do you agree? - Yes / No - Support - Newbridge

Short Response

Explanation

Choice 16 E3

We want to identify proposals for new modern business and industrial sites to provide necessary floorspace at the following locations. Do you agree? - Yes / No - Support - Newcraighall Industrial Estate.

Short Response

Explanation

Choice 16 E4

We want to identify proposals for new modern business and industrial sites to provide necessary floorspace at the following locations. Do you agree? - Yes / No - Support - The Crosswinds Runway

Short Response

Explanation

Customer Ref: Response Ref:
Name
Response Type
On behalf of:

Supporting Info
Email

Choice 16 E5

We want to identify proposals for new modern business and industrial sites to provide necessary floorspace at the following locations. Do you agree? - Yes / No - Do not support - Leith Strategic Business Centre

Short Response

Explanation

Choice 16 E6

We want to identify proposals for new modern business and industrial sites to provide necessary floorspace at the following locations. Do you agree? - Yes / No - Do not support - Newbridge

Short Response

Explanation

Choice 16 E7

We want to identify proposals for new modern business and industrial sites to provide necessary floorspace at the following locations. Do you agree? - Yes / No - Do not support - Newcraighall Industrial Estate.

Short Response

Explanation

Customer Ref: Response Ref:
Name
Response Type
On behalf of:

Supporting Info
Email

Choice 16 E8

We want to identify proposals for new modern business and industrial sites to provide necessary floorspace at the following locations. Do you agree? - Yes / No - Do not support - The Crosswinds Runway

Short Response

Explanation

Choice 16 EX

We want to identify proposals for new modern business and industrial sites to provide necessary floorspace at the following locations. Do you agree? - Explain why

Short Response

Explanation

Choice 16 F

We want to ensure new business space is provided as part of the redevelopment of urban sites and considered in Place Briefs for greenfield sites. We want to set out the amount expected to be re-provided, clearer criteria on what constitutes flexible business space, and how to deliver it, including the location on-site, and considering adjacent uses, servicing and visibility. Do you agree? - Yes / No

Short Response

Explanation

Customer Ref: Response Ref:

Name

Response Type

On behalf of:

Supporting Info

Email

Choice **16 G**

We want to continue to protect industrial estates that are designated under our current policy on Employment Sites and Premises (Emp 8). Do you agree? - Yes / No

Short Response

Explanation

Choice **16 H**

We want to introduce a policy that provides criteria for locations that we would support city-wide and neighbourhood goods distribution hubs. Do you agree? - Yes / No

Short Response

Explanation



RICCARTON VILLAGE

...a *breath* of fresh air

ECONOMIC REPORT



March 2019



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Report Overview

This report summarises the nature of the ambitious and uniquely sustainable economic growth for West Edinburgh and the Edinburgh City Region that could be realised by the development of Riccarton Village. The Village is planned to build on Riccarton's 2,000 Higher Education jobs and the area's ongoing investment linked to the City Deal, while adding value through providing improved services and facilities to local communities. The report also identifies the development's alignment with the Council's objectives presented within the Edinburgh Economic Strategy.

Riccarton Village will deliver more than £1 billion of construction investment over 20 years through the creation of new green space; provision of thousands of new homes (including affordable homes); a major new transport hub; a new village centre; and a new primary school.

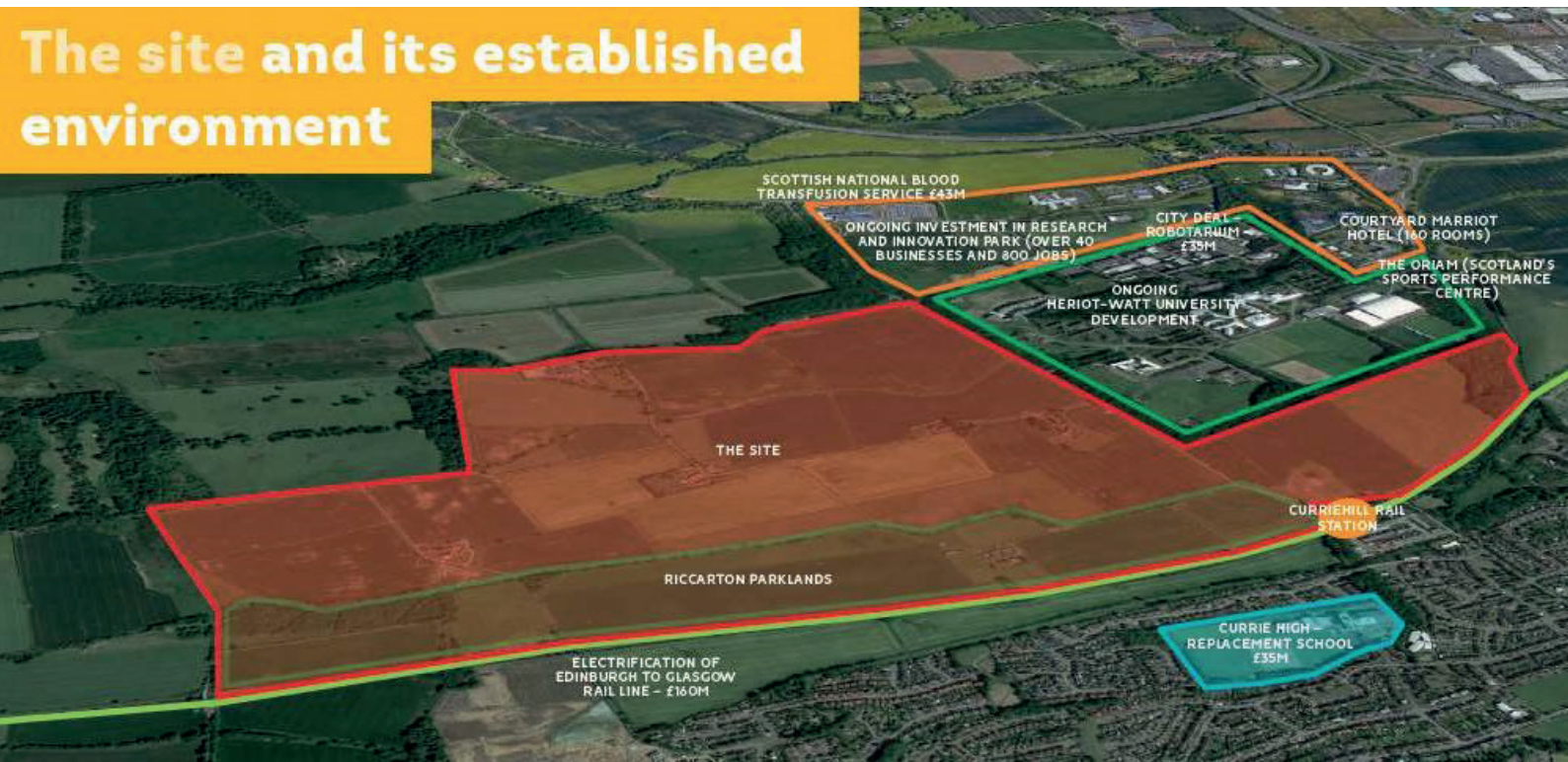
The Village's new transport hub proposed around the underutilised Curriehill Rail Station is an important opportunity to create more connected, faster and efficient public transport for the residents of the Edinburgh City region. Edinburgh Waverley is 19 minutes by train from Curriehill Station. With an additional 7,800 people living in the villageⁱ, patronage on this service will increase, leading to more environmentally friendly, efficient commuting to and from Edinburgh for work and leisure.

There is potential for vast economic growth, as outlined in the Total Economic Impact section below, in West Edinburgh that would be uniquely realised by the development of Riccarton Village based around its proximity to Heriot-Watt University and Research Park.

Recent and current expansion projects at Cambridge University, the University of York, and Norwich Research Park have been taking place, based around residential, infrastructure and employment land development. These provide comparable precedents for Riccarton in terms of ambitious growth in successful cities based around higher education institutions.

Riccarton Village Proposed Site

The site and its established environment



80 Hectares of new Green Space



£1,050m total construction investment



3,600 new homes, including 900 affordable homes



Enhanced sustainable transport links



New town centre with 25,000 sqm commercial space



New primary school in Village



3,160 jobs created



1,250 new investment & research jobs



£321m total economic output each year

Riccarton Village Location and Transport Connectivity

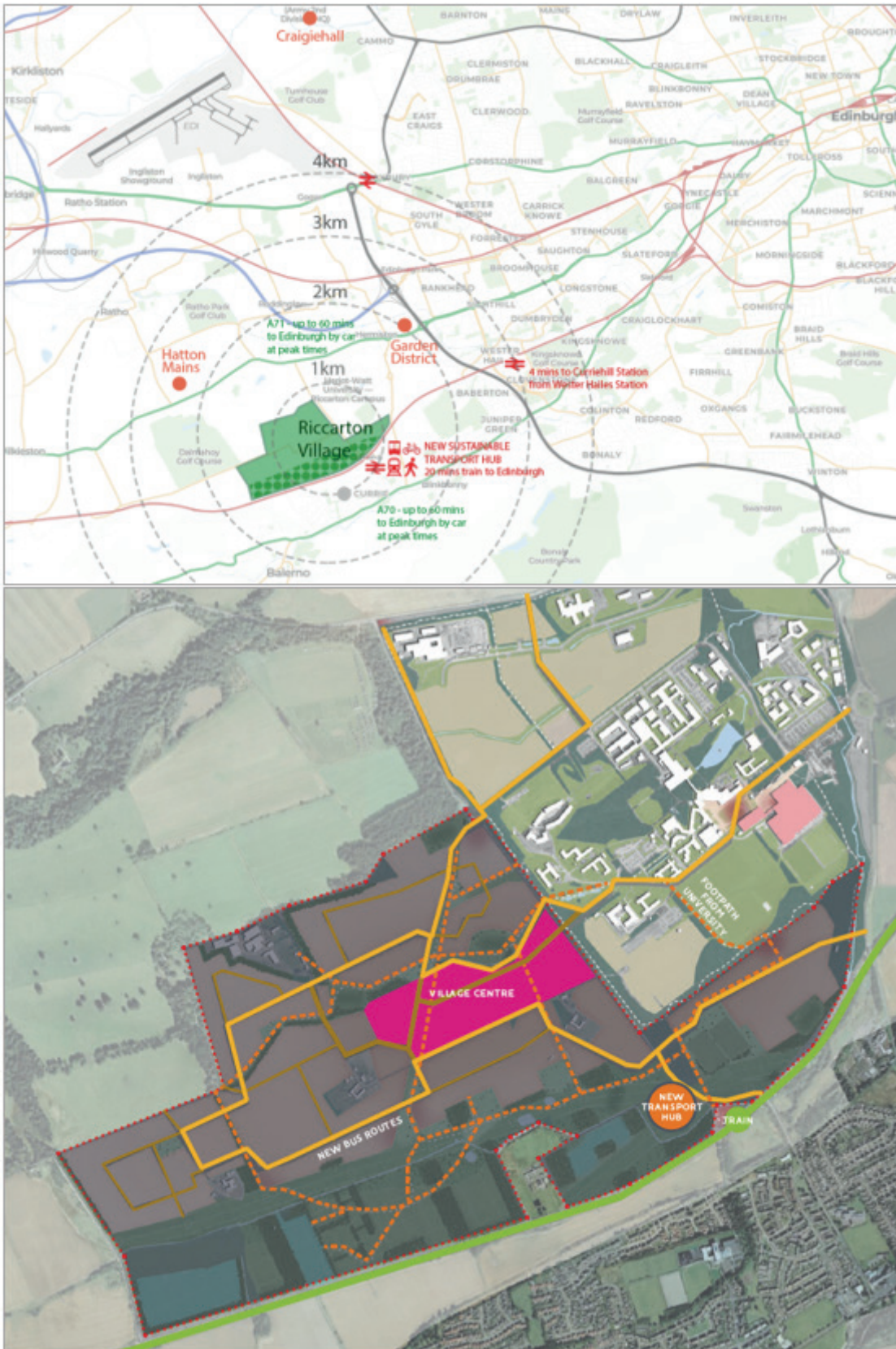


Figure 1: Riccarton Village site layout. The Village will be set next to Curriehill Rail station.

Riccarton Village Total Gross Economic Impacts



Construction

Output	GVA	Jobs (FTE)
£94m (per annum)	£43m (per annum)	440 (on completion)



Riccarton Village Centre

Output	GVA	Jobs (FTE)
£80m (per annum)	£47m (per annum)	1,370 (on completion)



Investment & Research

Output	GVA	Jobs (FTE)
£107m (per annum)	£68m (per annum)	1,250 (on completion)



Parklands

Output	GVA	Jobs (FTE)
£40m (per annum)	£280m (per annum)	100 (on completion)



Total Economic Impact

Output	GVA ⁱⁱ	Jobs (FTE)
£321m (per annum)	£438m (per annum)	3,160 (on completion)

Riccarton Village Centre Economic Impact



25,000 sqm

Gross community and commercial floor space to provide community facilities, shops, cafes and health services.



1,370 jobs

The centre will support 1,370 gross jobs (FTE) in Scotland, 820 net jobs within Edinburgh City, with 91% (or 750) of these jobs within West Edinburgh.



Village Centre Impact

£80m Annual Gross Economic Output in Scotland

£47m Annual Net Economic Output in City of Edinburgh

£41m Annual Net Economic Output in West Edinburgh

Riccarton Parklands Economic Impact



80 Hectares of New Green Space

- Largest green space to be established in the city for 100 years
- 3x the size of The Meadows
- A green network in the area with visitor attractions



Parkland Job Creation

100 Gross jobs (FTE) in Scotland

50 Net jobs (FTE) in City of Edinburgh
(all in West Edinburgh)



Social & Economic Value

£280m Social & economic value
per annum to neighbouring communities & visitors



Parkland Impact

£40m Annual Gross Scottish Economic

£21m Annual Net Economic Output in City of

£18m Annual Net Economic Output in West Edinburgh

New Housing Economic Impact



3,600 NEW HOMES close to transport infrastructure, university campus and new employment centre

900 AFFORDABLE HOMES, contributing to Scottish Government targets



Council Tax Revenue

£4.6m Council Tax revenue generated per annum on completion

Investment and Research Economic Impact



1,250 Gross jobs (FTE) supported in Scotland

770 Net jobs (FTE) supported in City of Edinburgh

710 Net jobs (FTE) supported in West Edinburgh



£68m Gross Value Added (GVA) per annum

£107m Gross Economic Output per annum

Construction Economic Impact



£1,050m total cost of development

20 years of construction employment



240 jobs direct jobs per year from 2021

4,800 person years worth of jobs over 20 years



£850m Total Gross Value Added (GVA)

£1,870m Total Gross Economic Output

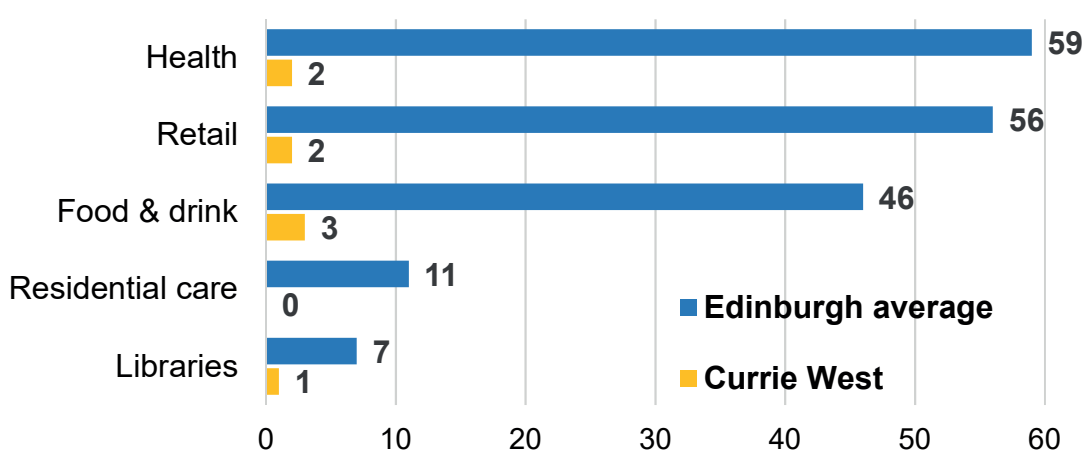
Riccarton Village Economic Impact Report

Meaningful Socio-Economic Impact

Once fully developed, Riccarton Village will deliver an additional £321 million of economic output each year, generate £438 million of additional value (including social value for the community from Riccarton Parklands) each year, and provide 3,160 annual additional full-time equivalent jobs. Nearly three-quarters of Riccarton’s impact on economic output, and four out of every five jobs, will be captured within West Edinburgh. The additional economic growth supported by Riccarton Village will make an annual contribution of £18 million in business and income tax revenues across the City of Edinburgh Council area, of which £15 million will be from West Edinburgh alone (see Appendix 1 for further details on impact calculations).

The development will provide 3,600 new homes, including 900 affordable homes, close to major transport infrastructure, and current and new employment centres. These homes will generate £4.6 million per annum in new Council Tax revenue. There are areas in West Edinburgh that are in the most deprived 5% in Scotland (see Figure 2) – it is anticipated the new housing and employment created in Riccarton Village would provide accessible employment opportunities for residents living in deprivation, with Wester Hailes rail station being only 4 minutes away from Curriehill rail station. It will also improve accessibility to employment and services for some areas in the south west of the city where access is an issue, including Currie (see Chart 1).

Chart 1: Number of jobs per 1,000 residents



Source: Business Register and Employment Survey (Scottish Government 2018)

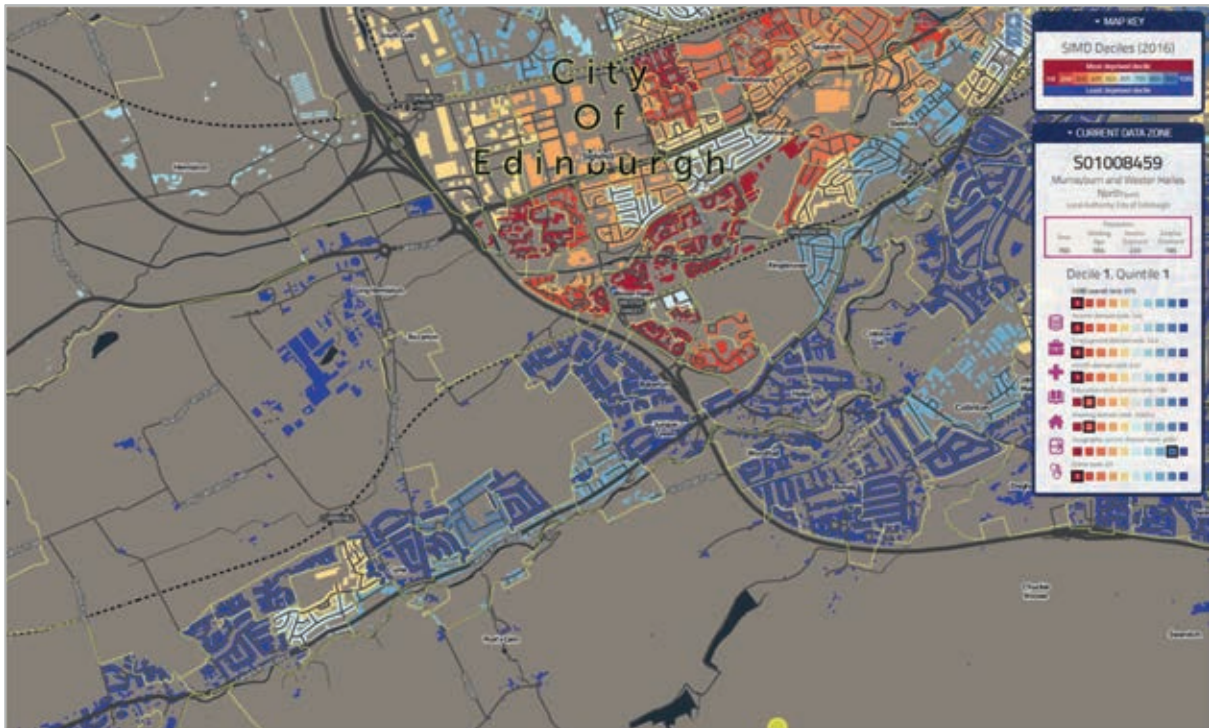


Figure 1: Map of the area surrounding Riccarton Village showing levels of deprivation. Red = higher deprivation. Source: Scottish Government (2016)

Riccarton Parklands, extending to over 3 times the size of the Meadows, will help to create up to 100 jobs and deliver £280 million of social value each year to the neighbouring communities and those visiting the park (see Appendix 1 for calculations). This includes value gained from use by residents, heritage value, aesthetic appeal, symbolic appeal and existence value. The Parklands is envisaged to be a well-maintained social hub for residents of Riccarton Village, Currie, and other surrounding villages. It can be a place that regularly hosts social and cultural events, due to its accessible location and scale.

Building on Existing Investment and Infrastructure

As of 2012, Heriot-Watt University was generating £278m of GVA for the Scottish Economy per annum and supported 6,254 jobs (Biggar Economics 2012). Riccarton Village has the potential to encourage considerable further growth related to Heriot-Watt University, Riccarton and the Edinburgh and South East Scotland City Region deal.

- Heriot-Watt Research Park, extending to 160 acres, is seeing large-scale development including a new National Robotarium and the Scottish National Blood Transfusion Centre, and has c.60 acres remaining to expand;
- Oriam, Scotland's National Sports Performance Centre, opened in August 2016; and
- The Marriott Courtyard Hotel opened at Heriot-Watt in 2017.

The development of Riccarton Village, providing 3,600 new homes with an estimated 7,800 residents, providing full services, facilities, and transport links, could accelerate the long-term sustainable growth of these regionally and nationally important facilities. Oriam, for example, would be much better linked to a significantly increased regular customer base. It is considered that Riccarton Village could support an additional 1,250 jobs linked to investment and research in the area (See Appendix 1 for calculations).

Local Services Contributions – Transport & Education

Riccarton Village will deliver transport and travel improvements that would substantially contribute towards helping the Council provide more sustainable transport for its residents. The Transport Hub around Curriehill Rail Station will include a park & ride, bus terminus and routes linked to the new community, Heriot-Watt University and Hermiston Park and Ride, and provide a cycle station/facilities. Furthermore, traffic management will be introduced on the A71.

These improvements will have a direct impact on reducing traffic congestion in the Riccarton area through improved traffic management and increased public transport use. This can lead to indirect economic impact to the city as local workers lose fewer work-hours through shorter, more efficient journey times (Inrix 2014). Additionally, attractive commuting methods and times should encourage more businesses to locate, and workers to seek employment in the Riccarton area.

A new 2-stream primary school will form part of Riccarton Village. This is roughly the equivalent of an investment into education infrastructure of over £13.5m, considering that the Council's Proposed Developer Contributions Supplementary Guidance indicates that this figure is the cost of a new 14 class primary school and 80-pupil nursery.

Furthermore, Riccarton Village would also fund any increased capacity required at the replacement Currie High School that is directly brought about by its development.

Riccarton Village Centre

The village centre is situated directly adjacent to Heriot-Watt, where around 10,500 staff and students visit every weekday. It will also serve the new population of Riccarton Village and the surrounding communities such as Currie, and Balerno. This diverse local population will create a steady stream of custom provided by weekday and weekend/evening usage, ensuring that the village centre is economically successful and sustainable. Referring back to Chart 1, there is evidently a need for further services and facilities for the local area. The 25,000 sqm of floorspace that would be provided within

the 12ha village centre would also provide further social value through incentives to encourage the location of employment generating social enterprises.

Deliverability Impact

If Riccarton Village was allocated in the forthcoming Local Development Plan in 2021, then construction could begin immediately due to its lack of constraints to development and availability of existing infrastructure. No other large-scale development sites in West Edinburgh benefit from the same locational and infrastructure advantages of Riccarton Village.

There are several ways that developing Riccarton Village can be considered to have a particularly unique and early economic advantage:

- This is not a standalone housing development. Locating homes directly adjacent to Heriot-Watt University and Research Park provides the opportunity to co-locate housing and a key hub of employment to enhance its growth.
- The Village Centre, commencing in 2023, provides a further source of economic activity and jobs that will be sustained by the co-location of existing communities including the staff and students of Heriot-Watt University and Research Park;
- The Transport Hub, programmed by 2025 would ensure early economic benefits of the improved connectivity to Heriot-Watt University and Edinburgh City Centre.

This impact of early delivery would relate particularly to the construction industry where the large majority of contracts would be expected to be given to businesses and people local to Edinburgh. Figure 3 shows the anticipated deliverability timeline. With the ability to develop within the site from two separate locations, Riccarton Village can be built at pace with two to three private developers and Registered Social Landlords/Council delivering both social and affordable homes from the outset. With the village centre, primary school, and the transport hub all due to be in progress by 2024, West Edinburgh would see a powerful employment boost in the short-to-medium term.

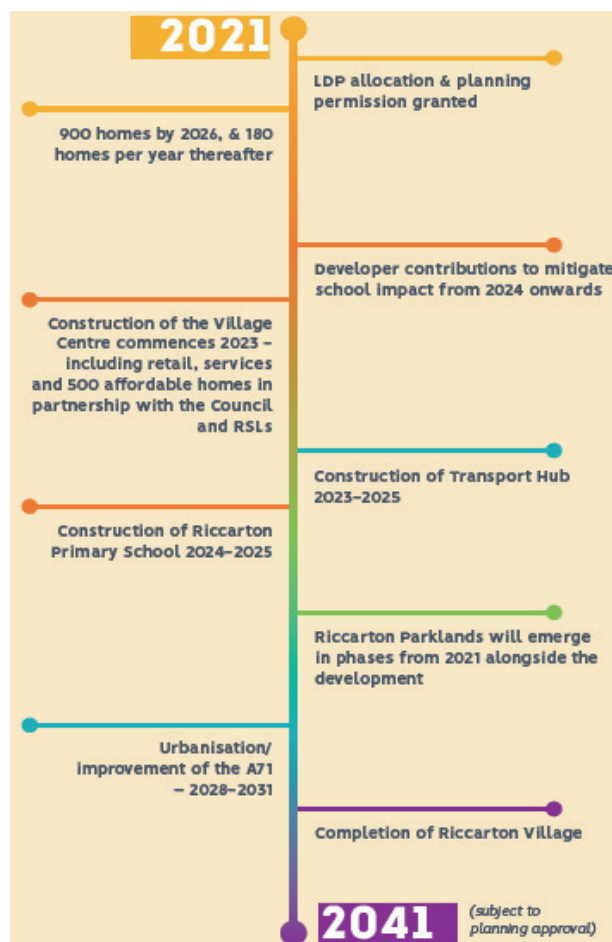


Figure 2: Riccarton Village Deliverability Timeline

Case Studies

It is considered that Riccarton Village is a unique development based on successful growth and economic principles found in other recent developments within the UK.

North West Cambridge Development is currently building 3,000 homes and associated infrastructure around Cambridge University. Planning permission was granted in 2013 and Phase 1 is now complete. The area is seeing comprehensive growth involving more academic and research facilities, and community facilities built into the overall cohesive masterplan.

The University of York is developing a new campus creating 3,300 new student flats, 2,000 new jobs and 25 ha of land for “Science City York”. This is in line with the University’s ambitious growth program to increase student numbers by 50%.

Additionally, management at Norwich Research Park have been developing their landholding as part of their long-term growth targets to provide the most modern and efficient transport links possible and reduce its carbon footprint.

Appendix 2 presents full details of these recent comparable developments and their impact on local economies. These exemplars are all based around creating more sustainable new communities in mixed use development sites close to universities, and have significant effects in addressing housing shortages, enhancing connectivity and generating sustainable economic impact.

Supporting Edinburgh’s Economic Strategy

“[The Council] ...will work with Edinburgh Airport and Heriot-Watt University to ensure that West Edinburgh reaches its potential as a vibrant new city quarter delivering a new suburban district supported by high quality amenities.” – Edinburgh Economic Strategy.

The city’s Economic Strategy stresses the need to look for new ways to tackle poverty, raise incomes and address the cost of living for vulnerable households. The Strategy also emphasises the need to build on strong collaborations with partners including universities to attract overseas investment in the city, helping to promote Edinburgh as a global meeting place for the flow of knowledge and new ideas.

Riccarton Village can contribute to all of the Council’s 8 steps for ‘good growth’, improving access to public transport and employment opportunities for West Edinburgh including some of Edinburgh’s most challenged communities, and better integrating the university with the local communities to deliver a world class place supporting development and economic growth across West Edinburgh.

Contribution of Riccarton Village to the “8 steps to good growth”

Step	Economic Rationale	Contribution of Riccarton Village	Comparison: Other Major West Edinburgh Sites
1. Tackling Barriers	<p>Although Edinburgh is a successful city, 22% of its children grow up in poverty and school attainment rates for pupils in deprived areas are less than half of the city average.</p> <p>There is a need for new ways to tackle poverty, raise incomes and address cost of living for vulnerable households.</p>	<p>Delivers step-change in public transport use and active travel through a public transport and cycle hub, connecting existing communities with the campus and the wider city, reducing reliance on road network. Especially important for half of communities surrounding Riccarton Village, where lack of access to public transport is a major source of deprivation and transport costs are a source of poverty.</p> <p>Creates new construction, research and education employment next to some of Edinburgh’s most deprived communities, e.g. Wester Hailes.</p>	<p>Alternative sites do not have the same proximity to mainline rail stations and a global university to deliver same step-change in transport or employment. Impact in tackling deprivation and poverty is therefore more limited.</p> <p>Hatton Mains – Heavy reliance on A71 road.</p> <p>Edinburgh’s Garden District – Some parts have access to public transport but much less integrated.</p>

Step	Economic Rationale	Contribution of Riccarton Village	Comparison: Other Major West Edinburgh Sites
2. Reform Skills	<p>There is a polarisation in the Edinburgh labour market, with a lack of career progression for many workers and a lack of opportunity for many communities to access quality employment.</p> <p>There is a need for action, or else such problems will become more pressing and the city will be held back as the economy develops and changes.</p>	<p>Will better integrate Heriot-Watt with deprived communities nearby and across the city through the provision of transport, amenities, green space and employment, in turn forging relationships with schools and businesses in these areas, raising their ambitions and potential.</p>	<p>Alternative sites are mainly residential focused and not connected with any University facilities. They also do not have the same quality of transport links with nearby communities and further afield.</p>
3. Low Carbon Economy	<p>Economic growth needs to be clean and meet the city's carbon reduction goals (42% reduction in CO2 emissions over 2005-20), including improving the energy efficiency of buildings, increasing the use of heat networks, and supporting more sustainable transport solutions.</p>	<p>Will provide a district heating scheme for the area. This more efficient energy system will reduce fuel usage and costs for residents and businesses and substantially contribute to the city's carbon reduction targets.</p> <p>The public transport and cycle hub will ensure more Edinburgh residents use sustainable transport every day.</p>	<p>District heating is likely to play a role at alternative sites, also contributing to energy efficiency goals, but the transport solutions for these sites will be much less sustainable due to a lack of a public transport and cycle hub.</p>
4. Fair Work	<p>Need to support social enterprises in Edinburgh to facilitate inclusive growth and encourage fair work and socially responsible practices across all sectors and businesses.</p>	<p>Current engagement with social enterprises to establish their interest of being based in the Village and what incentives could be provided to attract them.</p>	<p>Not known.</p>
5. Entrepreneurial City	<p>Need to maintain Edinburgh's position as one of the most innovative and entrepreneurial economies in the UK, including by attracting foreign direct investment and supporting start-ups and growing businesses. Strong collaboration with universities is part of this.</p>	<p>Allows for over 2,800 university and business employees in Riccarton to live and work in the same place, enhancing business support and knowledge exchange.</p> <p>Includes flexible workspace in masterplan.</p> <p>Transport hub also allows for easier access of other businesses to Riccarton and for the campus to reach out across the City Region.</p>	<p>Alternative sites are not connected to the Heriot-Watt University campus and cannot offer the same level of potential contribution. The lack of a transport hub also limits business engagement and knowledge exchange.</p>

Step	Economic Rationale	Contribution of Riccarton Village	Comparison: Other Major West Edinburgh Sites
6. Data Capital	One of the major aims of the Edinburgh & South East Scotland City Region Deal is to establish the city region as the data capital of Europe, led by the University of Edinburgh and Heriot-Watt University. Fundamental to this is supporting collaboration and exchange between researchers, businesses and the public sector.	<p>The university will be a more attractive and connected community to live and work, helping it to attract talent. This will create a more vibrant setting for City Deal and other potential investment.</p> <p>The Research Park will have a clear and more prominent gateway for current and prospective tenants.</p>	Alternative sites do not have proximity to the university to maximise the potential of this investment.
7. Culture & Tourism	Ensure that residents, businesses and visitors continue to benefit from the success of Edinburgh's tourism & culture sectors.	Will provide a new destination for recreation and leisure in West Edinburgh, including substantial new greenspace.	Alternative sites are largely focused on the creation of new residential units and not the creation of new and distinctive places.
8. World Class Place	Spatial development plans will manage investment in a sustainable way across 4 key zones – City Centre, Waterfront, West Edinburgh and South-East Edinburgh, linking local people to opportunities created by development and creating new affordable quality housing and a modern efficient transport network. For West Edinburgh, this is about creating a vibrant new suburban district for residents and businesses supported by quality amenities.	<p>Provision of a well-connected village through a modern and efficient transport network.</p> <p>Providing 3,600 new homes, including 900 affordable homes to meet the city's housing needs.</p> <p>Linking local people to the opportunities created by the development, especially employment, but also transport, greenspace and quality amenities, including a new medical practice and community hub.</p>	Alternative sites are largely focused on creation of new residential suburbs without the same level of connectivity or relationship with employment.

Conclusions

Riccarton Village will deliver meaningful positive socio-economic impacts:

- Once developed, the proposals will generate over £320 million of additional economic output per year, mostly captured within West Edinburgh.
- It will develop much needed housing, including a substantial proportion of affordable housing.
- It will create employment and local services that will benefit the new and existing neighbouring communities, where there is acute housing, employment, and income deprivation.
- Riccarton Parklands will provide significant new usable green space for local residents and workers with significant social and economic value.

The development will respond to and build on the unique existing infrastructure, and recent/ongoing investment in the Riccarton area:

- This will include a major new transport hub that will better connect and serve the region and West Edinburgh to and from the city centre.
- The development can support the acceleration of growth at a key economic hub for West Edinburgh that is supported by City Deal funding - Heriot-Watt University and Research Park, and surrounding business in Riccarton.

The site's development is able to start immediately following its LDP allocation, allowing the following benefits to be realised more quickly than alternative constrained sites:

- The overall site can be developed simultaneously from two separate directions to deliver private and affordable homes quickly.
- This early delivery can bring forward construction jobs to West Edinburgh and the growth of a new community to Riccarton.

Finally, the development can meet all of the Council's principles for "good growth", and case studies elsewhere show that these plans are achievable and can maximise impacts for the benefits of government, education bodies, businesses and residents if undertaken properly and by taking account of the needs of all key stakeholders.

Appendix 1 – Basis for Impact Calculations

Calculation of economic impact was based on assessing the likely direct, indirect and induced impacts of the development, considering local and national multipliers, leakage and displacement.

The economic impact assessment considers the communities across West Edinburgh, the City of Edinburgh, the Edinburgh City Region and Scotland as a wholeⁱⁱⁱ. Naturally, different levels of multipliers, leakage and displacement will apply across these areas.

The economic impact is described using economic indicators including output, employment and Gross Value Added (GVA). GVA is the measure of the value of goods and services produced and is measured by output (or turnover) minus intermediate consumption (excluding employee costs).

The economic impact measures in this report are based on an economic impact model published by the Scottish Government. A guide is available describing the modelling methodology and multipliers (Scottish Government, 2017). The latest version of the Scottish Government's economic impact model is available to download.

Construction impacts

The proposed development includes a new transport hub, primary school, medical practice, community facilities, retail and leisure facilities, greenspace, road network improvements and 3,600 new homes. The total cost of the development is estimated to be £1,050 million (2018 prices). The building costs (£650 million) for the 3,600 homes account for most of the total development cost^{iv}.

The latest Scottish Government Annual Business Statistics (Scottish Government, 2018) were used to calculate output per Full-Time Equivalent (FTE) job in the construction sector^v. The figures were adjusted to current (2018) prices using deflators (HM Treasury, 2018).

The adjusted figures allow an estimate to be made of how many FTE jobs are likely to be required to complete a construction project of a given value. There are 4,800 construction jobs directly associated with the proposed development. Riccarton Village will take 20 years to complete and the 4,800 jobs should be considered as 4,800 person-years worth of employment, sustaining 240 jobs each year.

The latest Scottish Input-Output tables show multiplier effects for a range of different industries. The multipliers capture secondary effects, including ‘induced effects’ generated through additional household spending and ‘indirect effects’ generated through supply chain effects.

Scotland’s construction industry has an employment multiplier of 1.85. This means for every 100 jobs within the construction industry, a further 85 jobs are sustained through secondary effects. The total construction impact of the proposed development will therefore support 8,800 person-years of employment, or 440 jobs each year during the development of Riccarton Village.

The Scottish Input-Output tables also include indicators to show direct and secondary effects in terms of output and GVA. The output directly sustained by the construction of the proposed development is £1,050 million (the development costs). The total construction impact of the proposed development will support £1,870 million of output across Scotland, including secondary impacts (based on an output multiplier of 1.78).

The GVA directly sustained by the construction of the proposed development is £430 million. The total construction impact of the proposed development will support £850 million of GVA across Scotland, including secondary impacts. This is shown in Chart A.1.

Chart A.1: Gross economic impact of construction (£m)

	Direct	Indirect	Induced	Total
Output	£1,050	£570	£250	£1,870
Gross Value Added (GVA)	£430	£270	£150	£850
Employment (person-years)	4,800	2,700	1,300	8,800
Jobs (FTE)	240	135	65	440

Source: 4-consulting based on Scottish Government economic impact model

Adjustments for leakage and displacement were made to provide the net construction impact. The following assumptions were made.

- *Leakage:* Using local workers will minimise leakage outside of the local area, but it would be reasonable to expect some leakage outside of Edinburgh. For example, some suppliers and workers are likely to be drawn from across Scotland. Based on the Homes & Communities Agency Additionality Guide (Dancer, 2014), it is assumed that 20% of the construction impacts leak outside the Edinburgh city region, 30% outside the City of Edinburgh and 50% outside of West Edinburgh. Leakage will be minimal for Scotland and is assumed to be 0%.
- *Displacement:* This considers the likelihood that construction activity may be displaced from elsewhere in the area. It is likely there will be some displacement. However, there is likely to be available capacity in the local construction industry with subdued economic growth across Scotland. A displacement figure of 20% was assumed across all areas (including Scotland), apart from West Edinburgh where displacement was assumed as 10%.
- *Multipliers:* The multiplier effects set out above are for the Scottish economy. The multiplier effects for Edinburgh's economy will be lower as some supply chains will involve suppliers based elsewhere in Scotland. The multiplier effects for the Edinburgh city region are assumed to be 85% of the effects for Scotland, 75% for the City of Edinburgh and 60% for West Edinburgh.

The relative multiplier effects set out above are applied to all impact components. The additionality guidance also describes how deadweight effects should be measured. Deadweight is considered for public sector interventions to tackle market failure, it is therefore not appropriate to consider deadweight in the context of this proposed development.

Chart A.2 summarises the gross and net economic impact arising from the construction of the proposed development for Scotland and the economic impact captured within each area. Detailed gross and net construction impacts are appended (Charts A.11 to A.13).

The net construction impact will sustain £690 million of output, £310 million of GVA and 3,300 person-years of employment (165 jobs) in West Edinburgh. West Edinburgh captures nearly half (46%) of the net impact from construction, with one-quarter (25%) of the net impact arising outside of the Edinburgh city region.

Chart A.2: Gross & net impact of construction (£m)

	Output	GVA	Person-years	Jobs (FTE)
Scotland (gross)	£1,870	£850	8,800	440
Scotland (net)	£1,500	£680	7,000	350
Edinburgh region	£1,120	£510	5,300	265
Edinburgh city	£930	£420	4,300	215
West Edinburgh	£690	£310	3,300	165

Source: 4-consulting based on Scottish Government economic impact model

Riccarton Village Centre

The centre of Riccarton Village will provide community facilities, shops, cafes and health facilities. The floorspace associated with community and commercial activities will total around 25,000 sqm.

The latest employment density guide (Homes & Communities Agency, 2015) provides a guide to the likely number of jobs supported per unit of floor space. The number of jobs created per unit of floorspace can be used to estimate the number of on-site jobs that will be supported by the proposed development.

The operating impact measures the economic activity generated once the commercial and leisure space is occupied. An 85% gross to net floorspace ratio is used in the calculations, 15% of the floorspace will be taken up by corridors, staircases toilets and other non-commercial use. This suggests that the net internal area for the Riccarton Village Centre will be 21,250 sqm.

The number of on-site jobs was based on an assumption of 75% high street shops, food stores, restaurants and cafes and 25% cultural and visitor centres and business incubation space. This suggests around 1,090 FTE jobs, shown in Chart A.3, will be supported by the Riccarton Village Centre (rounded to the nearest 10 jobs).

Input-Output figures were adjusted to current (2018) prices. The adjusted figures allow an estimate to be made of the output and GVA sustained by each FTE job. Estimates of turnover and GVA were based on the retail and food and drink sectors (75%) and the creative and cultural services sectors (25%).

The Centre directly sustains output of £52 million and GVA of £31 million. Multipliers were applied to the direct output, GVA and jobs with the total impact (including secondary effects) set out in Chart A.3. The gross impact of the Riccarton Village Centre will sustain £80 million of output, £47 million of GVA and 1,370 jobs.

Chart A.3: Gross economic impact of Riccarton Village centre (£m)

	Direct	Indirect	Induced	Total
Output	£52	£13	£15	£80
Gross Value Added (GVA)	£31	£7	£9	£47
Employment (FTE jobs)	1,090	140	140	1,370

Source: 4-consulting based on Scottish Government economic impact model

Adjustments for leakage and displacement were made to provide the net economic impact. The following assumptions were made.

- *Leakage:* It is likely that most jobs will be held by people living within the Edinburgh city region. It is assumed that 5% of the jobs may benefit those outside the region, 10% outside the City of Edinburgh and 20% outside of West Edinburgh. Leakage will be minimal for Scotland (assumed to be 0%).
- *Displacement:* It is likely there will be some displacement, but the office space will provide the region with a distinct offer. Retail and leisure space is more likely to displace activities from elsewhere in the city. A displacement figure of 40% was assumed across Scotland, 35% across the Edinburgh city region, 30% for the City of Edinburgh and 25% for West Edinburgh.

Chart A.4 summarises the gross and net economic impact arising from the Riccarton Village Centre for Scotland and the economic impact captured within each area. Detailed gross and net impacts are appended (Charts A.15 to A.17).

The net impact of the Centre will sustain £41 million of output, £24 million of GVA and 750 jobs in West Edinburgh. West Edinburgh will capture most (91%) of the net impact on employment from the Riccarton Village Centre (Chart A.18 appended), with the remaining net impact on jobs (9%) benefiting the rest of the City of Edinburgh.

Chart A.4: Gross and net impact of Riccarton Village centre (£m)

	Output	GVA	Jobs
Scotland (gross)	£80	£47	1,370
Scotland (net)	£48	£28	820
Edinburgh region	£47	£28	820
Edinburgh city	£46	£27	820
West Edinburgh	£41	£24	750

Source: 4-consulting based on Scottish Government economic impact model

Investment and research impacts

Heriot-Watt University's Riccarton Campus is one of the largest in Scotland with 2,000 jobs directly related to the university onsite. However, it performs relatively poorly in terms of the number of knowledge economy business jobs on campus and the local area relative to the size of the campus.

The Riccarton Village development includes proposals to develop the current entrance to the research park into a clear and more prominent gateway. This gateway will help with traffic flow and provide a more attractive entrance to the park for current and prospective tenants.

The ratio of knowledge economy jobs to university jobs at the Riccarton campus (0.4) is likely to rise towards a ratio for similar developments (around 0.8). Although Riccarton would remain behind city centre campuses, an additional 800 FTE jobs would be sustained on the research park or elsewhere in Riccarton (Chart A.5).

Input-Output figures were adjusted to current (2018) prices. The adjusted figures allows an estimate to be made of the output and GVA sustained by each FTE job. Estimates of turnover and GVA were based on the research and development sector.

Additional investment and research activities will directly sustain output of £70 million and GVA of £46 million. Multipliers were applied to the direct output, GVA and jobs with the total impact (including secondary effects) set out in Chart A.5. The gross impact of additional investment and research will sustain £107 million of output, £68 million of GVA and 1,250 jobs.

Chart A.5: Gross economic impact of investment & research (£m)

	Direct	Indirect	Induced	Total
Output	£70	£18	£19	£107
Gross Value Added (GVA)	£46	£11	£11	£68
Employment (FTE jobs)	800	270	180	1,250

Source: 4-consulting based on Scottish Government economic impact model

Adjustments for leakage and displacement were made to provide the net economic impact. The following assumptions were made.

- *Leakage*: It is likely that most jobs will be held by people living within the Edinburgh city region. It is assumed that 5% of the jobs may benefit those outside the region, 15% outside the City of Edinburgh and 30% outside of West Edinburgh. Leakage will be minimal for Scotland and is assumed to be 0%.
- *Displacement*: This considers the likelihood that activities may be displaced from elsewhere in the area. The development will help draw investment to an already successful location where most business have strong links with the university. It is therefore likely that displacement from (other locations in Scotland) will be low. A displacement figure of 30% was assumed across Scotland, 25% across the Edinburgh city region, 20% for the City of Edinburgh and 5% for West Edinburgh.

Chart A.6 summarises the gross and net economic impact arising from additional investment and research activities for Scotland and the economic impact captured within each area. Detailed gross and net impacts are appended (Charts A.19 to A.21).

The net impact of additional investment and research will sustain £55 million of output, £36 million of GVA and 710 jobs in West Edinburgh. West Edinburgh will capture most (81%) of the net impact on employment from the Riccarton Village Centre (Chart A.22 appended).

Chart A.6: Gross and net impact of investment & research (£m)

	Output	GVA	Jobs
Scotland (gross)	£107	£68	1,250
Scotland (net)	£64	£41	880
Edinburgh region	£62	£40	840
Edinburgh city	£62	£39	770
West Edinburgh	£55	£36	710

Source: 4-consulting based on Scottish Government economic impact model

Riccarton Parklands

The Riccarton Village development includes a park around 50% larger than the combined size of the Meadows and Leith Links. Cultivated areas of gardens and parks can be valued in terms of use by residents, heritage value, aesthetic appeal, symbolic appeal and existence value.

Scottish Natural Heritage (SNH) produces a regular natural capital assessment, which measures the potential value of uses of cultivated gardens and parks in both monetary terms and social values.

The latest index shows that entertainment accounts for around 12% of the overall value gained by communities from cultivated areas of gardens and parks. This suggests a total of £8.30 of social, economic and environmental value will be derived alongside every £1 of commercial value^{vi}.

The above figure was adjusted downwards as the overall value figure includes sacred or religious uses. These uses are not currently envisaged for Riccarton Parklands, suggesting a total of £7.00 of social, economic and environmental value will be derived alongside every £1 of commercial value.

Initial estimates suggest modest entertainment activities across Riccarton Parklands are likely to generate around £40 million of activities each year covering food, drink, festivals, events and other recreational activities^{vii}. This suggests a total of £280 million will be realised by Riccarton Parklands each year in social, economic and environmental values.

Chart A.7: Gross impact of Riccarton Parklands (£m)

	Value
Output	£40
Economic and social value	£280
Employment (FTE jobs)	100

Source: 4-consulting based on Scottish Government economic impact model

Adjustments for leakage and displacement were made to provide the net economic impact. The following assumptions were made.

- *Leakage:* It is likely that most of the park's benefits will be enjoyed by people living within the Edinburgh city region. It is assumed that 15% of benefits will accrue to those outside the Edinburgh city region, 25% outside the City of Edinburgh and 50% outside of West Edinburgh. Riccarton Parklands is likely to attract visitors from outside of Scotland with leakage assumed to be 10%.
- *Displacement:* This considers the likelihood that activities may be displaced from elsewhere in the area (including recreational activities displaced from other parks and gardens). A displacement figure of 60% was assumed across Scotland, 50% across the Edinburgh city region, 30% for the City of Edinburgh and 10% for West Edinburgh.

Chart A.8 summarises the gross and net economic impact arising from additional investment and research activities for Scotland and the economic impact captured within each area. The net impact of additional investment and research will sustain £18 million of output, £126 million of economic and social value and 50 jobs in West Edinburgh.

The City of Edinburgh will capture the most value from Riccarton Parklands as the city gains a significant new destination for local residents. This will generate recreational value for Edinburgh and help support jobs and output in West Edinburgh. The net impact for the Edinburgh city region is slightly lower as Riccarton Parklands will draw some visitors away from other destinations from across the region.

Chart A.8: Gross and net impact of Riccarton Parklands (£m)

	Output	Value	Jobs
Scotland (gross)	£40	£280	100
Scotland (net)	£14	£101	40
Edinburgh region	£17	£119	40
Edinburgh city	£21	£147	50
West Edinburgh	£18	£126	50

Source: 4-consulting based on Scottish Government economic impact model

Total economic impact

Chart A.9 summarises the gross annual economic impact for Riccarton Village on Scotland once the proposals are fully developed. At the end of the 20-year development, the annual gross economic impact will have risen to additional £321 million of output and £438 million of additional value, of which £178 million is Gross Value Added (GVA)^{viii}. The additional jobs created at the end of the twenty years will rise to 3,160.

Chart A.9: Total gross economic impact of Riccarton Village (£m)

	Output	GVA	Jobs
Construction	£94	£43	440
Riccarton Village centre	£80	£47	1,370
Investment & research	£107	£68	1,250
Riccarton Parklands	£40	£280	100
Total	£321	£438	3,160

Source: 4-consulting based on Scottish Government economic impact model

Chart A.10 summarises the net annual economic impact for Riccarton Village once the proposals are fully developed after twenty years. The annual gross economic impact for West Edinburgh will have risen to additional £149 million of output, £202 million of additional value and 1,680 additional jobs.

Chart A.10: Total net impact of Riccarton Village (£m)

	Output	Value	Jobs
Scotland (gross)	£321	£438	3,160
Scotland (net)	£201	£204	2,090
Edinburgh region	£182	£213	1,970
Edinburgh city	£176	£234	1,860
West Edinburgh	£149	£202	1,680

Source: 4-consulting based on Scottish Government economic impact model

Tax revenues

The net economic impact of Riccarton Village will make an annual contribution of £18 million to government revenues across the City of Edinburgh Council area (Chart A.24 appended), of which £15 million of revenues will be generated from additional activities in West Edinburgh.^{ix}

The revenues include corporation tax, income taxes, national insurance and VAT. Just over half of these revenues are collected in Scotland or directly assigned to the Scottish Government, with the remainder going to the UK Treasury.

As well as additional business and payroll taxes, Riccarton Village will generate council tax revenues from the new 3,600 homes. The latest data from the Scottish Government shows the average council tax bill was £1,275 in 2018-19, after discounts. This suggests an additional £4.6 million of council tax revenues will be raised per annum upon completion of the Riccarton Village development.

Detailed economic impact tables

Chart A.11: Gross and net impact of construction on output (£m)

	Direct	Indirect	Induced	Total
Scotland (gross)	£1,050	£570	£250	£1,870
Scotland (net)	£840	£460	£200	£1,500
Edinburgh region	£670	£310	£140	£1,120
Edinburgh city	£590	£240	£100	£930
West Edinburgh	£470	£150	£70	£690

Source: 4-consulting based on Scottish Government economic impact model

Chart A.12: Gross and net impact of construction on GVA (£m)

	Direct	Indirect	Induced	Total
Scotland (gross)	£430	£270	£150	£850
Scotland (net)	£340	£220	£120	£680
Edinburgh region	£280	£150	£80	£510
Edinburgh city	£240	£110	£70	£420
West Edinburgh	£200	£70	£40	£310

Source: 4-consulting based on Scottish Government economic impact model

Chart A.13: Gross and net impact of construction (person-years employment)

	Direct	Indirect	Induced	Total
Scotland (gross)	4,800	2,700	1,300	8,800
Scotland (net)	3,800	2,200	1,000	7,000
Edinburgh region	3,100	1,500	700	5,300
Edinburgh city	2,700	1,100	500	4,300
West Edinburgh	2,200	700	400	3,300

Source: 4-consulting based on Scottish Government economic impact model

Chart A.14: Net impact of construction (£m and person-years employment)

Area	Output	Share	GVA	Share	Jobs	Share
West Edinburgh	£690	46%	£310	46%	3,200	46%
Rest of Edinburgh city	£240	16%	£110	16%	1,200	17%
Rest of Edinburgh region	£190	13%	£90	13%	1,000	11%
Rest of Scotland	£380	25%	£170	25%	1,700	26%
Total net impact	£1,500	100%	£680	100%	7,000	100%

Source: 4-consulting based on Scottish Government economic impact model

Chart A.15: Gross and net impact of Riccarton Village centre on output (£m)

	Direct	Indirect	Induced	Total
Scotland (gross)	£52	£13	£15	£80
Scotland (net)	£31	£8	£9	£48
Edinburgh region	£32	£7	£8	£47
Edinburgh city	£33	£6	£7	£46
West Edinburgh	£31	£5	£5	£41

Source: 4-consulting based on Scottish Government economic impact model

Chart A.16: Gross and net impact of Riccarton Village centre on GVA (£m)

	Direct	Indirect	Induced	Total
Scotland (gross)	£31	£7	£9	£47
Scotland (net)	£19	£4	£5	£28
Edinburgh region	£19	£4	£5	£28
Edinburgh city	£20	£3	£4	£27
West Edinburgh	£19	£3	£3	£24

Source: 4-consulting based on Scottish Government economic impact model

Chart A.17: Gross and net impact of Riccarton Village centre on employment

	Direct	Indirect	Induced	Total
Scotland (gross)	1,090	140	140	1,370
Scotland (net)	650	80	80	820
Edinburgh region	670	70	70	820
Edinburgh city	690	60	60	820
West Edinburgh	650	50	50	750

Source: 4-consulting based on Scottish Government economic impact model

Chart A.18: Net impact of Riccarton Village centre (£m)

Area	Output	Share	GVA	Share	Jobs	Share
West Edinburgh	£41	85%	£24	86%	750	91%
Rest of Edinburgh city	£5	11%	£3	11%	70	9%
Rest of Edinburgh region	£1	2%	£1	3%	-	-
Rest of Scotland	£1	2%	-	-	-	-
Total net impact	£48	100%	£28	100%	820	100%

Source: 4-consulting based on Scottish Government economic impact model

Chart A.19: Gross and net impact of investment and research on output (£m)

	Direct	Indirect	Induced	Total
Scotland (gross)	£70	£18	£19	£107
Scotland (net)	£42	£11	£11	£64
Edinburgh region	£43	£9	£10	£62
Edinburgh city	£44	£9	£9	£62
West Edinburgh	£42	£6	£7	£55

Source: 4-consulting based on Scottish Government economic impact model

Chart A.20: Gross and net impact of investment and research on GVA (£m)

	Direct	Indirect	Induced	Total
Scotland (gross)	£46	£11	£11	£68
Scotland (net)	£28	£7	£7	£42
Edinburgh region	£28	£6	£6	£40
Edinburgh city	£29	£5	£5	£39
West Edinburgh	£28	£4	£4	£36

Source: 4-consulting based on Scottish Government economic impact model

Chart A.21: Gross and net impact investment and research on employment

	Direct	Indirect	Induced	Total
Scotland (gross)	800	270	180	1,250
Scotland (net)	560	190	130	880
Edinburgh region	570	160	110	840
Edinburgh city	540	140	90	770
West Edinburgh	530	110	70	710

Source: 4-consulting based on Scottish Government economic impact model

Chart A.22: Net impact of investment and research (£m)

Area	Impact	Share	GVA	Share	Jobs	Share
West Edinburgh	£55	86%	£36	86%	710	81%
Rest of Edinburgh city	£7	11%	£3	7%	60	7%
Rest of Edinburgh region	£0	-	£1	2%	70	8%
Rest of Scotland	£2	3%	£2	5%	40	4%
Total net impact	£64	100%	£42	100%	880	100%

Source: 4-consulting based on Scottish Government economic impact model

Chart A.23: Total net impact of Riccarton Village (£m)

	Output		Value		Jobs	
	Construction	Other	Construction	Other	Construction	Other
Scotland (gross)	£94	£227	£43	£395	440	2,720
Scotland (net)	£75	£126	£34	£170	350	1,740
Edinburgh region	£56	£126	£26	£187	265	1,700
Edinburgh city	£47	£129	£21	£213	215	1,640
West Edinburgh	£34	£114	£16	£186	165	1,510

Source: 4-consulting based on Scottish Government economic impact model

Chart A.24: Net impact of tax (£m)

	Corporation Tax	PAYE	Other production taxes	Net taxes on products (including VAT)	Total
Scotland (net)	£2.6	£12.1	£1.6	£2.7	£19.0
Edinburgh region	£2.3	£11.3	£1.5	£2.6	£17.8
Edinburgh city	£2.3	£11.1	£1.5	£2.6	£17.5
West Edinburgh	£1.9	£9.5	£1.3	£2.3	£15.0

Source: 4-consulting based on Scottish Government economic impact model

Appendix 2 – Case Studies

CASE STUDY: NORTH WEST CAMBRIDGE



The North West Cambridge development comprises a 150 hectare (370 acre) site and was granted outline planning consent in February 2013. The development is due to cost a total of £1bn.

- 1,500 Homes for University & College Staff & 1,500 Private Houses for Sale
- Accommodation for 2,000 Postgraduates
- 100,000 sqm of Academic & Research Facilities
- Community Facilities / Hotel
- Sustainable Transport Provision

Rationale

The scheme was commissioned due to a critical housing shortage in Cambridge. In the past 10 years, its population has risen by 11%, while employment has risen by 32%, three times the national average. Property prices since the financial crash have risen by 7.5% per year, leading to affordability issues. In 2017, Cambridge University received between 12,000 and 14,000 enquiries from staff and postgraduate students looking for somewhere to live in the city, with the University only having access to 360 properties in which to house them. To create a vibrant sustainable new neighbourhood, the scheme heavily invested in public transport and a new cycle superhighway. Retail, schools and a health centre were also provided to integrate the community.

The main objection to the site was the fact that the development is on Green Belt land. To counter this, the University committed to a sustainable and environmentally responsible design. Features include:

- An artificial lake that collects, treats and re-uses rainwater for drainage throughout the development
- 60 ha (over one-third of the development) as open, green space
- Solar panels
- Gas-fuelled CHP energy centre
- Cycling, car share and bus facilities to discourage car use

Progress to Date

Phase 1 (known as Eddington) is now completed and includes:

- 700 homes for University and College staff
- 325 postgraduate student rooms
- 700 market homes
- Facilities including primary school, community centre, nursery, GP surgery, retail units and hotel
- Public green space and landscaping
- Roads and transport routes

Preparation of the business case for Phase 2 is now underway.

Project Director Heather Topel

“This isn’t purely an academic or residential campus; we see it as an extension of the city, it’s part of Cambridge. And in order for that to work, we had to make it a community project from the outset.”

Resident Views

Kingsley Gale-side, Research Associate

“Rental prices in Cambridge meant the key worker scheme at Eddington was the only way I could afford to live in a high-quality apartment, with generous space, but also in a leafy, pleasant location close to everyday amenities. The quality of the build here is high, meaning the homes offer exceptional value for money.”

Emilia Swietlik, Associate Research Assistant

“I wanted to live at Eddington because I think it is a great opportunity to be surrounded by like-minded people with similar priorities. When you’re 34 you need to have your own space and Eddington gave me that opportunity. It’s really well connected too, you can easily get to the city centre to meet up with friends.”

CASE STUDY: HESLINGTON EAST CAMPUS, UNIVERSITY OF YORK



- £750m expansion in Green Belt - 65 hectares
- New academic apartments providing accommodation for 3,300 students
- Performing Arts Centre
- Sports Facilities
- 25 hectares for Science City York
- Potential to increase student numbers at the university by 50% to 15,400
- Potential to create 2,000 new jobs

Rationale

A strategic review of the University resulted in a plan to expand in order to be able to meet demand from well-qualified applicants who are currently turned away; to widen access to a wider range of diverse students who will be able to benefit from the enhanced provision; and to permit sustainable growth of high-quality research.

The overall masterplan was to increase the total student numbers at the University by 50% to 15,400 as well as creating up to 2,000 new jobs.

The main objection to the site was its location on Green Belt land. The masterplan sought to counter this by minimising the impact on the natural environment. This included tree planting and keeping the lake (around which the site is built) free from vehicles and utilities.

A number of footpaths and cycle tracks were also included in the masterplan, along with structural landscape to minimise the visual impact of the development.

The development provided links to the existing campus for pedestrians, cyclists and general traffic and a low emission transport system between University sites.

The masterplan was based on the 'triple bottom line' principles of sustainability, in which development must contribute to social responsibility, environmental neutrality or enhancement and financial viability. Sustainable building materials were used where possible and the University plans included efficient and modern waste and recycling facilities.

Progress to Date

The scheme was granted planning, with the design brief winning a Royal Town Planning Institute (RTPI) award in 2010.

The development now houses a number of University departments including Theatre, Film & Television and Computer Science. The Sports Village features the only Olympic-sized velodrome in the North East of England. A residential expansion phase contract was awarded to GRAHAM in 2018.

University of York Vice-Chancellor Brain Cantor.

"[We needed to] sustain critical mass to compete effectively and to drive the local and regional economy though the provision of new knowledge, knowledge transfer, the provision of skilled graduate labour, and collaborative research and development."

Resident Views

"The ugly prefabs, their greyness brightened only occasionally by a stretch of reddening ivy, are still there at York – but they're down the road at the 'old' campus. Heslington East is the Center Parc-like jewel in the crown of a University."

"Heslington East is beautiful. There are great buses between the two campuses and York is such an affordable place to live."

"Love the lake and pretty areas around campus and Heslington East is very modern"

CASE STUDY: NORWICH RESEARCH PARK



- Established in 1992
- Partnership between University of East Anglia, the Norfolk and Norwich University Hospital (NNUH) and 4 independent world-renowned research institutes.
- The Park employs over 12,000 people including 3,000 scientists and clinicians.

Rationale

The Research Park sought planning permission to expand to build on its existing expertise and to compete with areas such as Cambridge and London. The overall goal was to entice new companies to move to the region and to benefit the area as a whole.

The Park committed to devising a number of measures to improve connectivity and reduce the carbon footprint of the site. New direct access was created between the NNUH, Bob Champion Research & Education Building and the existing Norwich Bioscience Institutes. This was to support better walking access to buses. As the development continued, more paths were created with open plazas to encourage walking within the site.

A number of cycle paths were also included in the masterplan, with the majority of employed staff on the site having access to a Cycle 2 Work Scheme.

Employees have access to a discounted bus pass, with a number of existing bus routes serving the site. Park & Ride services are also available.

Progress to Date

As detailed in the Research Park's latest Annual Report, the overall occupancy at the site is 85%. This includes 75 non-partner organisations that employ over 350 people.

The reputation of the Park has been growing in recent years and in 2018 it was awarded the Outstanding Achievement Award at the Norfolk Business Awards. Long-term targets to be achieved by 2030 have been put in place to ensure the Research Park is globally recognised by the end of this timeframe.

The Park engages with the surrounding community by working with local schools and colleges, providing learning opportunities, jobs and local growth.

The Park believes the lifestyle it can offer scientists, researchers and others as a major part of its appeal to tempt professionals and firms further up the A11 from Cambridge.

NRP's Executive Chairman David Parfrey

"It's a great place to work but you can also afford to buy a house and you don't have to live in a concrete

Local Business Views

ABC Food Law

"We chose Norfolk because it is a centre for farming, agri-businesses and the food industry. We located at Norwich Research Park in particular because of its worldwide reputation within the food industry for innovation and state-of-the-art technological development."

Big C

"We are absolutely delighted we made the move to Centrum (at Norwich Research Park). The open plan working has enhanced communication between the team and enabled us to develop more opportunities for partnership working among healthcare and the medical communities, which in turn could lead to increased access to further funding."

Appendix 3 – References

- Biggar Economics. (2012). Heriot-Watt University: Economic Impact Study. Retrieved from: https://warwick.ac.uk/research/warwickcommission/chancellorscommission/resources/secondary_research/heriot_watt_university_economic_impact_report.pdf
- City of Edinburgh Council. (2018). Edinburgh's Economic Strategy. Retrieved from: http://www.edinburgh.gov.uk/info/20220/economic_development/385/a_strategy_for_jobs
- Dancer, S. (2014). Additionality Guide: fourth.
- Edinburgh and South East Scotland City Region Deal. (2015). Accelerating Growth - About us. Retrieved from: <http://www.acceleratinggrowth.org.uk/about-us/>
- Home & Community. (2015). Employment Density Guide 3rd edition.
- Inrix. (2014). Traffic Congestion to Cost the UK Economy More Than £300 billion Over the Next 16 years. Retrieved from: <http://inrix.com/press-releases/traffic-congestion-to-cost-the-uk-economy-more-than-300-billion-over-the-next-16-years/>
- North West Cambridge Development. (2019) Our vision. Retrieved from: https://www.nwcambridge.co.uk/sites/www.nwcambridge.co.uk/files/nwcd_visionbrochure_screenready.pdf
- Norwich City Council. (2017). Norwich Economic Analysis. Retrieved from: https://www.norwich.gov.uk/download/downloads/id/4343/norwich_gva_report_3.pdf
- Scottish Government. (2016). SIMD16 Analysis City of Edinburgh. Retrieved from: <https://www2.gov.scot/Resource/0051/00510713.pdf>
- Scottish Government, (2017). Input-Output Methodology Guide.
- Scottish Government. (2018). Scottish Annual Business Statistics 2016. Retrieved from: <https://www2.gov.scot/Topics/Statistics/Browse/Business/SABS>
- Treasury, H.M., 2018. The Green Book. Central Government Guidance on Appraisal and Evaluation

ⁱ Based on 3,600 homes multiplied by 2.16 persons per dwelling. Source: <https://www.nrscotland.gov.uk/files//statistics/household.../house-est-17-publication.pdf>

ⁱⁱ Including the monetary value of social benefits generated by Riccarton Parklands.

ⁱⁱⁱ Economic impact metrics were produced for West Edinburgh based on data for the Almond and Pentland Hills electoral wards. The latest available BRES data (2017) shows the Almond and Pentland Hills electoral wards accounts for 13% of employment in Edinburgh. The Edinburgh city region is based on the six councils in the Edinburgh and South East Scotland City Region Deal.

^{iv} Development costs were rounded to the nearest £50 million and shown in terms of 2018 prices (this does not include inflation over the next twenty years). The overall development cost includes the costs associated with building affordable housing.

^v Output (or turnover) per job was separately identified for the construction of buildings and civil engineering. The average output per job for the whole development was based on the construction of buildings (75%) and civil engineering (25%). This results in a higher ratio of output per job compared to average for the Scottish construction industry.

^{vi} This ratio is a conservative estimate as not all entertainment will be associated with a commercial value.

^{vii} The latest BRES data suggests there are around 250 jobs in sustainable tourism in the area of The Meadows. This suggests a turnover of around £10 million, however, most commercial activities are likely to result from events, festivals and mobile businesses operating across the park.

^{viii} Around half of the £40 million of economic activity (£20 million) from Riccarton Parklands is assumed to translate into Gross Value Added (GVA) as the wages of workers and operating profits of commercial activities on the park.

^{ix} The Scottish economic impact model was extended to show the share of turnover accounted for by key taxes (including PAYE taxes and corporation tax). The same shares were applied to impacts on the turnover of industry sectors supported by Riccarton Village. This approach is similar to the modelling of Gross Value Added (GVA) based on a share of turnover for each industry sector.

Technical Memo



DATE: 29th April 2019
TO: Alex Forsyth (Wallace Land), Bob Salter (Geddes Consulting)
FROM: Michael Stewart, Natalie Robson (Kaya Consulting)
CC:
SUBJECT: Floodplain Modelling for Riccarton Development

Kaya Consulting Ltd. was commissioned by Wallace Land to undertake mathematical modelling of the Murray Burn and an unnamed watercourse, as they flow through the proposed development site at Riccarton. The modelling will allow the prediction of the extent of the 200 year floodplain within the site that in turn will help inform the development of the Masterplan of the site.

The approach taken in this technical memo is consistent with SEPA and City of Edinburgh Council guidance for flood risk assessments and flood modelling. Kaya Consulting is a specialist flood management consultancy, based in Edinburgh. Kaya undertake more than 100 flood risk assessments every year.

1 Overview of Site

The proposed development site is shown in Figure 1. The site is currently agricultural land. It is bounded by an active rail line to the south, Herriot Watt University to the north-east and further agricultural land to the north and west.

The Murray Burn flows through the southern and eastern parts of the site. Towards the south-western part of the site the watercourse flows through agricultural land with low-lying fields adjacent to the channel. The SEPA flood maps of the area show flooding of land close to the channel. The burn then passes under road crossings associated with the Curriehill train station and the access road to the station. Downstream of the station the Murray Burn flows in a more defined and steep-sided valley, as it bends to the north to parallel Riccarton Mains Road.

There is a small unnamed watercourse in the north-west of the site that flows into the Heriot Watt campus. Within the site the watercourse lies within a defined valley. The watercourse joins the Murray Burn downstream of the site.

2 Calculation of Flood Flows

A hydrological assessment was undertaken to estimate design flows for the Murray Burn and unnamed watercourse. Scottish Planning Policy requires flood risk assessments to consider the 1 in 200 year flood flow, i.e., the flood event with a 0.5% chance of occurring in any one year. City of Edinburgh Council

guidance requires flooding to be considered for the 1 in 200 year + 30% flow, to account for future changes in flow due to climate change.

2.1 Estimation of Design Flows for the Murray Burn

The FEH (Flood Estimation Handbook) web-service estimated the catchment of the Murray burn downstream of the site to be 5.37km². This catchment was re-assessed based on site topography, LiDAR and site observations. The final catchment of the Murray Burn was calculated to be slightly larger than considered in the FEH database. The sub-catchments flowing to the Murray Burn are shown in Figure 2.

Given the small size of the catchment, design flows for the catchment were calculated based on standard rainfall-runoff and empirical methods. A number of different methods were considered, with the highest flows generated by the FEH Rainfall-Runoff model. Separate FEH Rainfall-Runoff models were generated for each of the inflow tributaries to the Murray Burn and the model was run for a range of different storm durations.

The highest flood flow at the downstream end of the Murray Burn was calculated as 12.6m³/s, based on a 3.9 hour storm. For most applications the storm duration that produces the largest flood peak (the critical storm) also produces the largest flood extent when used in flood modelling. However, for the Murray Burn it was found that due to restrictions caused by the culverts close to the Curriehill station, the largest flood extent was produced by long duration rainstorms. For such events the peak flow is lower than that produced by the critical storm, but the volume of flood waters is larger (area under the flow hydrograph). This is illustrated in Figure 3 with a number of flow hydrographs generated with different storm durations.

Through iterating the flood model, a flood event of 15.1 hours produced the largest flood extent and was used to generate the flood map for the watercourse.

2.2 Estimation of Design Flows for the Unnamed Watercourse

The catchment of the unnamed watercourse is shown in Figure 4, based on site topography, LiDAR and site observations. The catchment at the edge of the site is 0.79km².

Given the small size of the catchment, design flows for the catchment were calculated based on standard rainfall-runoff and empirical methods. The highest flow was generated using the FEH Rainfall-Runoff model, giving a peak 200 year flow of 1.7m³/s.

3 Flood Modelling

3.1 Modelling of the Murray Burn

A linked 1D/2D Flood Modeller model of the Murray Burn was developed to determine the 200 year and 200 year + 30% flood extents.

A 1D model of the Murray Burn was developed using cross-sections surveyed for this study. 58 cross-sections were surveyed and incorporated into the model. The location of the cross sections surveyed can be seen in Figure 5. Structures within this reach were also surveyed and incorporated in the model.

These included;

- 1.8 x 1m box culvert at Gowanhill Farm Road
- 0.85m diameter circular culvert at a field crossing in the south-west part of the site
- 1.33 x 1.06m arch culvert and 1.1m diameter circular culvert at the Currievale Farm access road
- 1.3 x 1.97m arch culvert at Curriehill Station access road
- 1.8 x 1.7m arch culvert at Curriehill Road
- 2.1m x 1.7m arch culvert under railway downstream of site

The flood extent within the site was controlled to a large extent by the capacity of the crossings close to Curriehill station. Consistent with recent SEPA guidance these crossings were modelled with a degree of blockage, to account for debris accumulation during flooding. Both crossings were modelled with 20% of the culvert area assumed blocked.

The model incorporated flow hydrograph boundaries at the upstream model extent and along the model's length based on the catchments identified in Section 2. The downstream boundary was set as "normal depth" at the measured bed slope at the downstream end of the model.

To best represent the floodplains, site area and overtopping flow path of Murray Burn, a 2D modelling approach was used to represent overbank flows, connected to the 1D at the top of the river banks, either side of the channel. The topography of the 2D area was based on the available LiDAR of the area, supplemented by the site topographical survey.

The 200 year and 200 year + 30% flood maps of the Murray Burn are shown in Figure 6.

3.2 Modelling of the Unnamed Watercourse

A conservative 2D modelling approach was used to model the unnamed watercourse. This was considered suitable as the watercourse sits within a clearly defined valley. The model also assumed that the culvert under the road to the east of the site was fully blocked.

An Inflow hydrograph was included at the upstream point of the watercourse based on the design flows calculated in Section 2. The downstream boundary was based on the measured bed slope downstream of the site.

The predicted 200 year and 200 year + 30% floodplains for the unnamed watercourse are shown in Figure 7. The modelling shows flooding confined to the valley close to the watercourse. More detailed modelling (including channel survey) would likely result in a small floodplain extent and this could be considered as the project progresses.

4 Conclusions

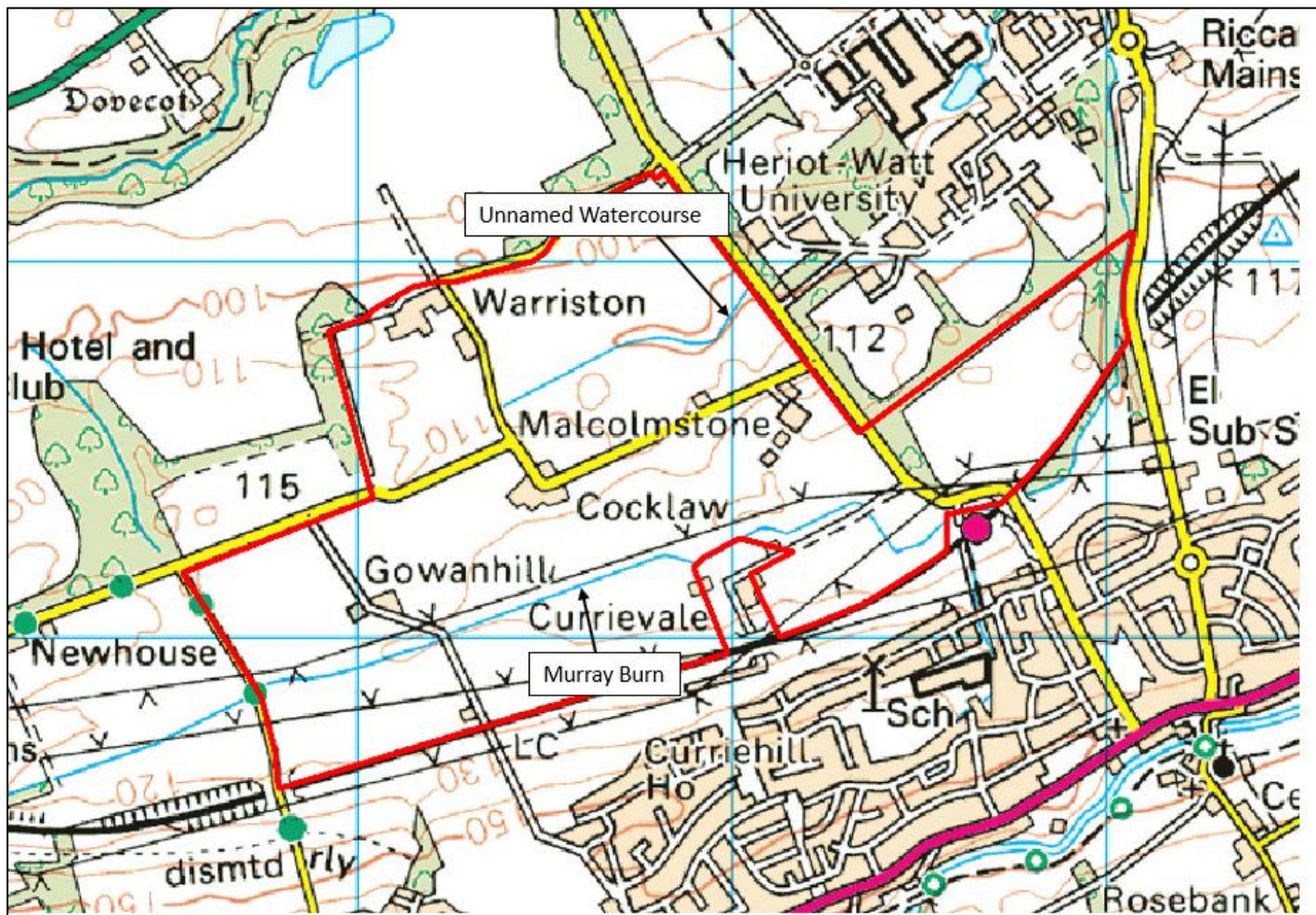
This technical note describes the calculation of 200 year and 200 year + 30% floodplain extents for the proposed development at Riccarton. The base case floodplains include 20% blockage of key crossings that impact flooding at the site.

Based on SPP, land within the 200 year floodplain is not normally suitable for most types of development, including residential or commercial. SEPA Vulnerability guidance suggests there are types of development that are suitable for floodplain areas, including sports pitches, recreation areas and some types of car parking (not directly associated with residential development). Any development within the floodplain should not reduce the flood storage capacity of the floodplain.

In the first instance we recommend that the floodplains calculated in this memo are used to limit development at the Riccarton site. It is noted that access to the Curriehill railway station and along Curriehill Road to Heriot Watt University are currently affected by flooding. It is suggested that during development of the site Masterplan that options are considered to provide flood free access. This could include the construction of access roads across the floodplain. Land raising for primary access routes is allowed under SPP, as long as any loss in floodplain storage is compensated through lowering of land elsewhere. Given the scale of the site, there are many options to provide compensatory flood storage, to allow improvements to the current road access.

There may also be opportunities to increase flood storage along the Murray Burn flood corridor to reduce the risk of flooding downstream of the site and within Edinburgh. This would include the lowering of land adjacent to the Murray Burn upstream of the Curriehill railway station to store flood waters. Associated with this it is also possible to consider the re-naturalisation of the Murray Burn through farmland to the west of the station. As shown by the flood map in Figure 6, the current channel of the burn may not follow the natural low point of the valley in all locations, with the topography of the area suggesting the watercourse used to follow a more natural meandering course to the north of the current straightened channel. This offers opportunities to re-align the channel to a more natural route. By increasing the channel length and linking it to natural floodplain areas, this would also tend to increase flood storage.

Figure 1: Site location, with site boundary in red



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Figure 2. Catchments flowing to the Murray Burn

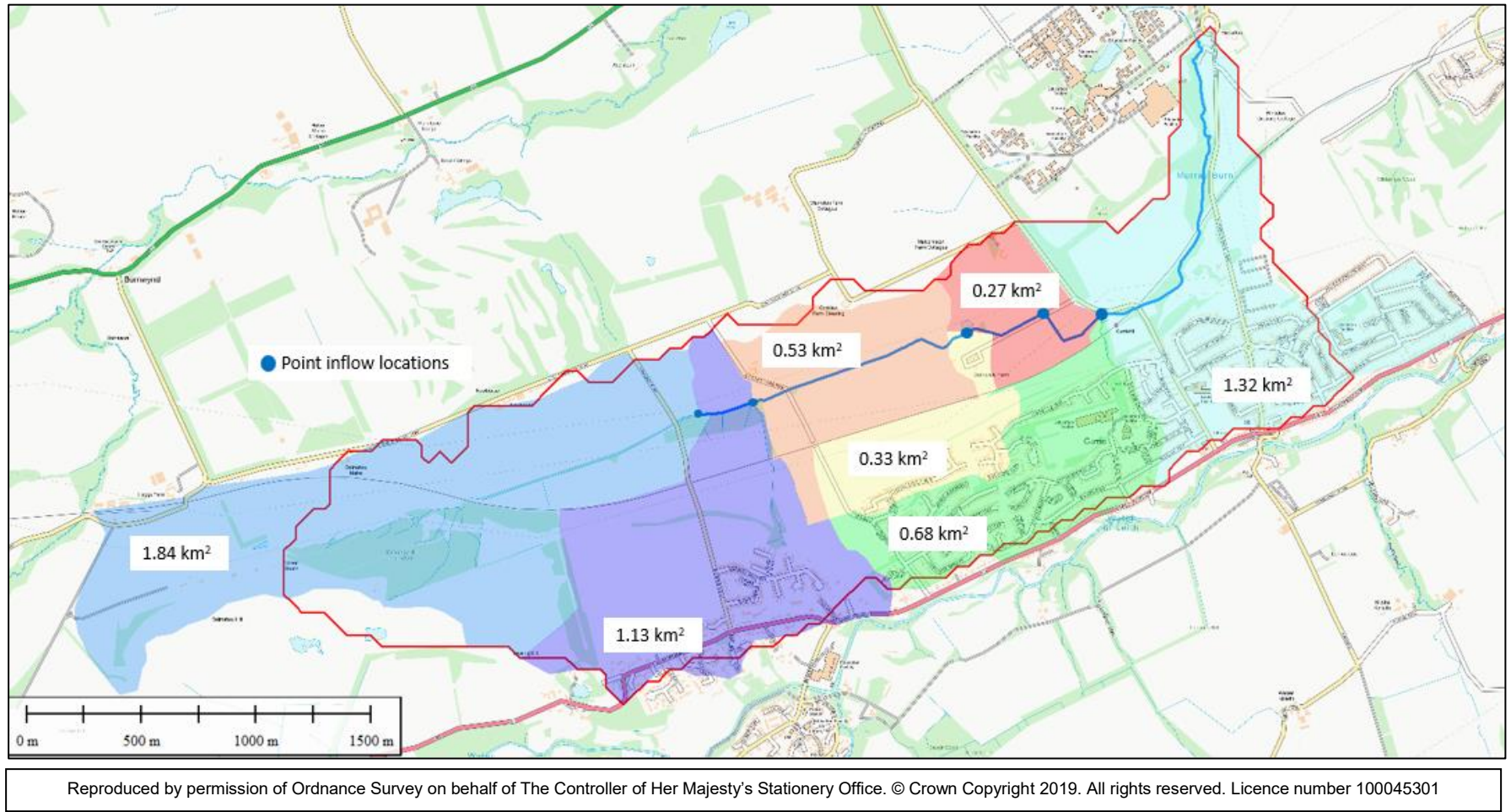


Figure 3. Storm Duration Hydrographs. Peak flows are produced by shorter duration storms, but volume under hydrograph is higher for long duration storms. The hydrograph that produced the largest flood extent was used in modelling

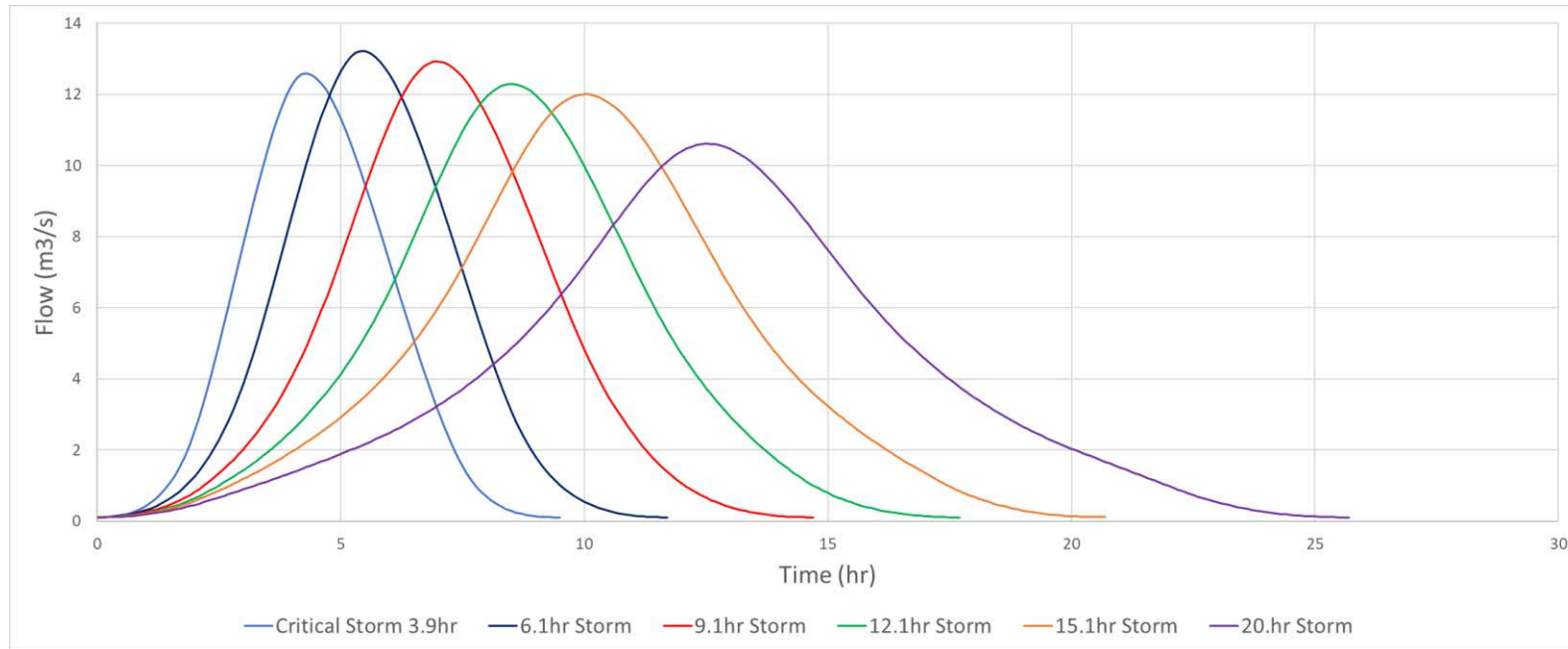


Figure 4. Unnamed watercourse catchment

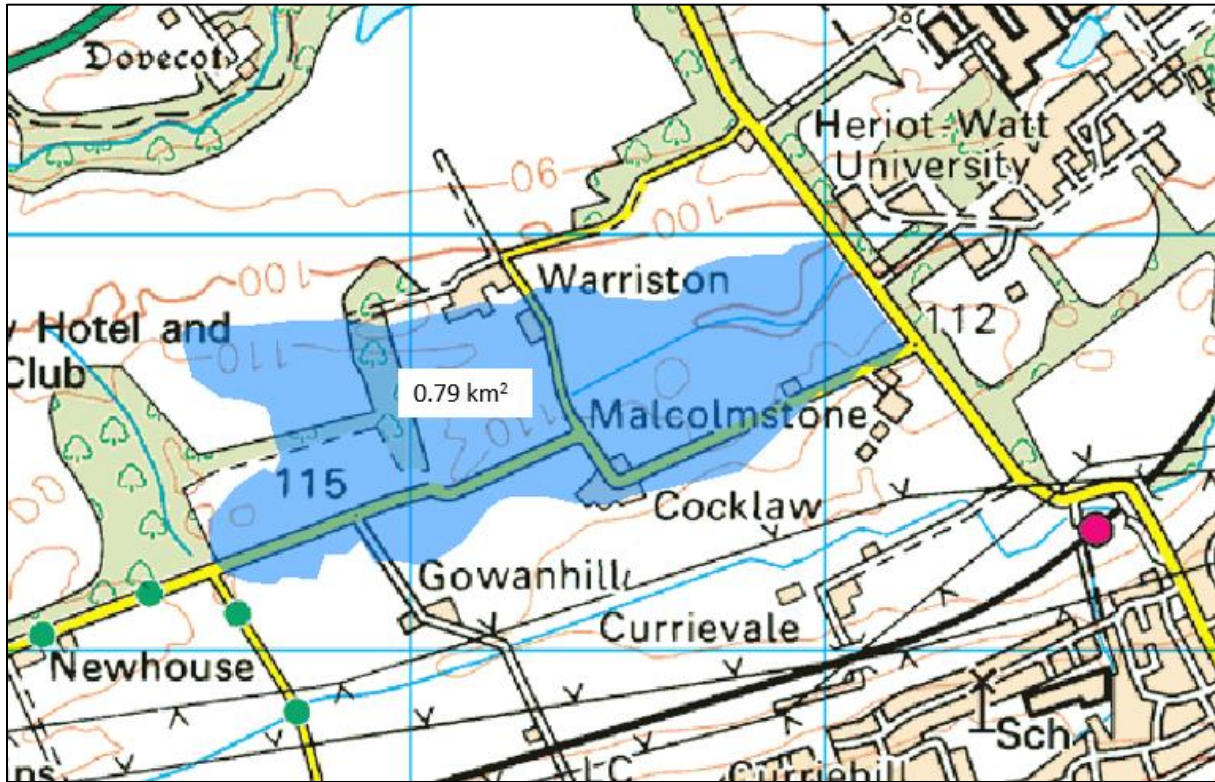


Figure 5. Model cross-section locations

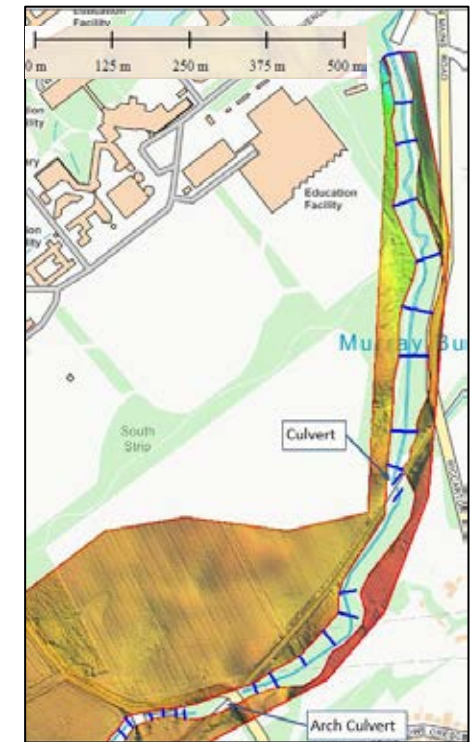
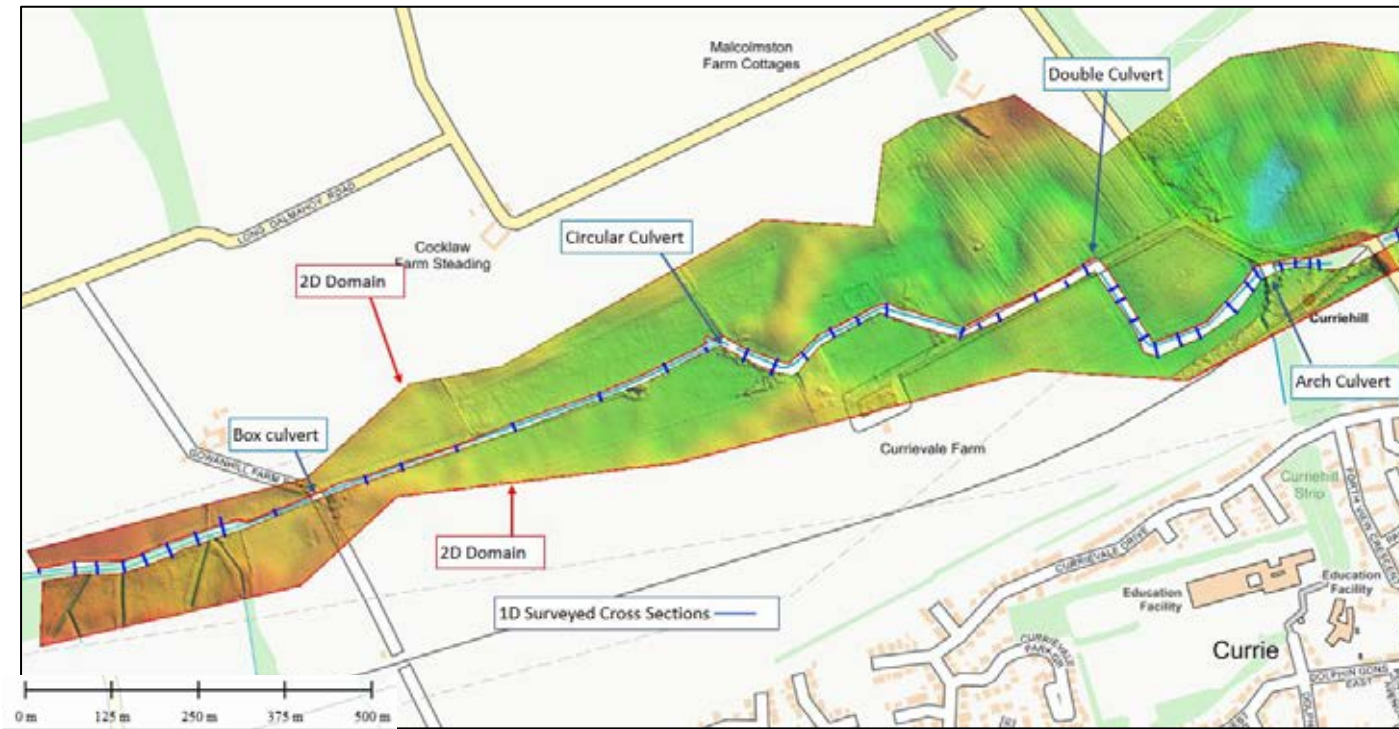


Figure 6. Floodplain extent for Murray Burn at the site.

Maps show;

Light Blue: 200 year flow with 20% blockage of key culverts/crossings

Dark Blue: 200 year flow + 30% for future climate change + 20% blockage of key culverts/crossings

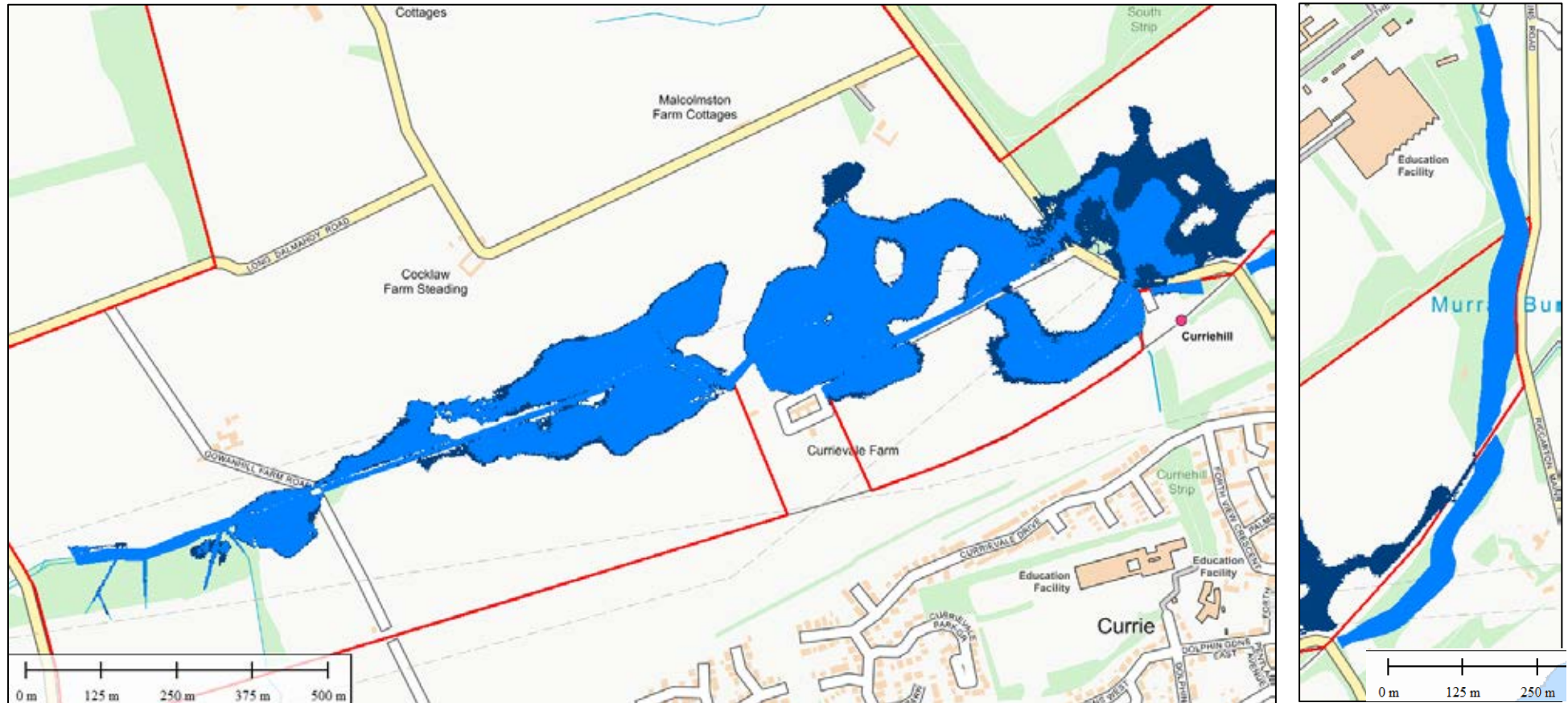


Figure 7. 200 year and 200 year + 30% floodplains for the Unnamed Watercourse (both are approximately the same)



Background

- 1.1 Wallace Land Investments is promoting an area of land identified as *South of Riccarton* (Site Ref: 44) as part of the City of Edinburgh Council's *Choices for City Plan 2030* (Main Issues Report (MIR)) for residential led development. This site is being promoted as two options, the whole of the site (Site Ref: 44) and a smaller site (*South of Riccarton Phase 1*).
- 1.2 This Preliminary Education Infrastructure Note (this Note) provides a preliminary assessment of the education infrastructure requirements arising from the impacts from new homes proposed for both options for the site.
- 1.3 As part of the Council's *Choices for City Plan 2030* (Main Issues Report (MIR)), the Council has undertaken a *...high-level assessment of the new school infrastructure which is likely to be required to support the housing need identified for City Plan*. This high-level assessment is set out in the Council's *Housing Study* (January 2020).
- 1.4 The Council has undertaken a *Greenfield Site Assessment of South of Riccarton* (Site Ref: 44) in preparation of the MIR, presented in its *Housing Study*. The *Greenfield Site Assessment* includes commentary on the sites impact on community infrastructure. It concludes that there is currently insufficient primary and secondary schooling to accommodate the site. Specific challenges raised by the Council are addressed in the following sections of this Note.
- 1.5 Although denominational schooling is not directly addressed in the Council's site assessments, the Council notes that additional denominational primary schools and at least one denominational secondary school will be required in the City.
- 1.6 The Council's high-level assessment is based on the following assumptions, as set out in Section 5 of the *Housing Study*:
- The Council's 2019 (increased) Child per House Ratios (CHRs) have been adopted;
 - The maximum primary school size is a three stream school (630 pupils);
 - The maximum secondary school size is 1,400 pupils; and
 - Greenfield sites have been assessed on the basis of 65 dwellings per hectare and an 80/20 house/flat split.
- 1.7 It is noted that the Council is currently seeking education infrastructure in support of its adopted LDP development strategy based on its 2018 (original) CHRs. These LDP CHRs are lower than the Council's 2019 (increased) CHRs used in the MIR. The Council recently published its *LDP Action Programme 2020*, and does not seek to amend the level of education infrastructure sought for existing allocations following the Council's publication of its 2019 (increased) CHRs.
- 1.8 On this basis, this Note highlights the number of pupils expected from the site applying both the 2018 and 2019 CHRs. However, it is Geddes Consulting's opinion that the 2018 (original) CHRs should currently be used for consistency with the Council's current education infrastructure delivery for the adopted LDP
- 1.9 It is also noted that the Council have assessed sites based on an aspirational gross 65 dwellings per hectare and an 80/20 house/flat split. This is addressed in more detail in the density analysis submitted in support of this representation. Given the nature of the site and an analysis of the

Council's dataset used to determine potential density for comparative sites, it is considered that a net density of 40 dwellings per hectare (dph) is realistic and comparable for the site.

- 1.10 However, it is not physically possible to secure a density of 65 dwellings per hectare without a substantial increase in the proportion of flats. To achieve the Council's potential density, a 67.7/32.5 house flat split is required.
- 1.11 This Note also highlights the number of pupils expected if the net density was increased to 65dph(net) as well as 40 dph.
- 1.12 The Council notes that a full Education Assessment will be prepared to assess the impact of pupils from new homes on the education infrastructure as part of the supporting information for the Proposed Plan for this site. It is our recommendation that this assessment is undertaken at an early stage, in a transparent manner and with guidance from Scottish Government. It is our opinion that the Council's assessment of education infrastructure requirements as part of the adopted LDP significantly overstates the scale of education capacity required.

Pupils from South of Riccarton

- 1.13 The total number of pupils expected from the whole of the site and Phase 1, based on 40 and 65dph, are set out in Appendix 1 of this Note. The number of pupils is broken down by level (primary and secondary) and sector (non-denominational and denominational (RC)) for flats and houses.
- 1.14 The tables in Appendix 1 highlight the total number of pupils based on both the Council's 2018 (original) CHRs which are currently used to establish infrastructure requirements for the adopted LDP and the 2019 (increased) CHRs.
- 1.15 It should be noted that the figures presented in Appendix 1 represent the total pupils expected to be generated from the development of the site. Not all of these pupils will be in schools at any one time due to development programming and transitioning of pupils from a school system i.e. P1 to P7 and then onto secondary school.

Primary Schooling

Non-denominational Primary Schooling

- 1.16 The site is located within the Currie Primary School catchment area. The latest school roll and capacity for the School, as reported by the Council, is set out in the following table:

School	2019/20 School Roll	Reported Capacity	%
Currie PS	502	546	92%

Source: Council 2019 School Roll Projections

- 1.17 The School is currently operating at 92% occupancy of its reported capacity and currently has spare capacity for only 44 additional pupils. However, it is noted that the Council's *2019 School Roll Projections* project that the School's roll will fall from a peak of 531 pupils in the 2021/22 School Year to 447 by the 2027/28 School Year.
- 1.18 It is noted that the School was recently extended by four classrooms and currently has 19 classrooms available. Planning permission has also been secured for a future second phase extension which can provide four additional classrooms. This can provide up to 693 pupils based on the Council's *working capacity* or 702 planning capacity.
- 1.19 The Council's *2019 School Roll Projections* do not expect that this extension will be required to mitigate existing trends of the impact of the adopted LDP strategy. If this extension was delivered,

the principle of which is established, by 2027/28 there would be capacity which could be utilised to support further development in the area of more than 1,000 new homes. This is without taking into account the lesser impact of any flats and that not all pupils will require accommodation at one time due to development programming and pupil transitioning. The actual capacity in terms of new homes will be significantly higher, but will require detailed assessment.

1.20 The total number of non-denominational primary pupils from the site are set out in Appendix 1 of this Note, based on both options for the site and the Council's CHRs.

1.21 A new primary school will be required as part of the proposals for the site to support pupils from new homes, although there is existing and future capacity in existing schools to support initial phases of the development. The scale of the new primary school will be dependant on the total capacity of the site and the rate of completions. The following table sets out the approximate scale of the new primary school required based on the options presented and the Council's CHRs:

Site	2018 CHRs		2019 CHRs	
	40dph	65dph	40dph	65dph
Whole Site	2.5 stream	3 stream	3 stream	3.5 stream
Phase 1	1.5 stream	2 stream	2 stream	2 stream

1.22 The proposal will provide a serviced site and funding for a new primary school. Depending on the scale of proposal, density and CHRs adopted, between a 1.5 to 3.5 stream primary school will be required (albeit the Council does not want to build 3.5 stream schools). However, it is not considered that 65dph on the site can't realistically be achieved, therefore it is considered that no more than a three stream school will be required. This can be accommodated within a 2ha school site allocated within the proposal.

Denominational Primary Schooling

1.23 The site is located within the St Cuthbert's RC Primary School catchment area. The latest school roll and capacity for the School, as reported by the Council, is set out in the following table:

	2019/20 School Roll	Reported Capacity	%
St Cuthbert's RC PS	200	210	95%

Source: Council 2019 School Roll Projections

1.24 The School is currently operating at 95% occupancy of its reported capacity and currently has spare capacity for only 10 additional pupils. The Council's *2019 School Roll Projections* project that the School's roll remains relatively stable for future years.

1.25 The proposals are expected to generate a total of between 50 to 100 additional denominational primary pupils, depending on the final scale and density of the proposal. However, not all pupils will require accommodation at one time. It is likely that one to two additional classrooms will be required to mitigate the direct impact of the proposals. Further analysis will be required to establish whether this can be provided at an existing school i.e. through reconfiguration, extension or catchment area review.

1.26 If it is established that there is a requirement for a new denominational primary school to serve the wider area, one option may be to deliver a joint campus school as part of the proposals.

Secondary Schooling

Non-Denominational Secondary Schooling

1.27 The site is located within the catchment area of Currie Community High School. The latest school roll and capacity for the School, as reported by the Council, is set out in the following table:

	2019/20 School Roll	Reported Capacity	%
Currie High	719	900	80%

Source: Council 2019 School Roll Projections

- 1.28 The School is currently operating at 80% occupancy of its reported capacity and currently has spare capacity for 181 additional pupils. This existing capacity is equivalent to accommodating pupils generated from around 1,000 new homes in the catchment area, without taking into account the lesser impact of flats, development programming and pupil transitioning.
- 1.29 The Council's *2019 School Roll Projections* project that the School's roll will not be breached in future years, reaching a peak of 841 pupils. However, it is known that the existing Currie Community High School is to be replaced. The capacity of the replacement school will be 1,000 pupils, an increase in capacity of 100 pupils from the existing school. The school is programmed to be open by 2023.
- 1.30 Depending on the scale and density of the proposal, there may be a requirement to provide additional non-denominational secondary school capacity. If additional capacity is required, this may be delivered at the site of the replacement Currie High School, either as part of the initial replacement or future expansion. This would need to be considered as part of a detailed feasibility study.
- 1.31 There is also a possibility that pupils can attend another local secondary school (rather than a replacement Currie Community High School). Wester Hailes Education Centre (WHEC) is currently operating with a school roll of 337 pupils, which is 45% of its reported capacity of 750 pupils. As recognised within the Council's assessment, there is the potential for a replacement WHEC to support significant capacity to support more than 2,00 new homes in the area, without taking into account the lesser impact of flats, development programming and pupil transitioning.
- 1.32 Riccarton Village can fund a proportionate share of a direct bus service from the site to the existing or new WHEC to provide a safe route to school for pupils with other development in the area.
- 1.33 Further capacity may also be released within the exiting Currie High School catchment area through a catchment area review.
- 1.34 If further analysis demonstrates that there is a justified need for a new secondary school in the area, the site at South of Riccarton is of a sufficient scale that it can support a secondary school site or some form of joint campus with primary schooling. It may also be that the replacement of Currie High School on the site would provide greater opportunity to provide more capacity in an efficient manner while also allowing the existing site to be used for development or community infrastructure. This matter will require further consideration as part of the Council's detailed Education Appraisal for the Proposed Plan.

Denominational Secondary Schooling

- 1.35 The site is located within the catchment area of St Augustine's RC High School. The latest school roll and capacity for the School, as reported by the Council, is set out in the following table:

	2019/20 School Roll	Reported Capacity	%
St Augustine's RC High	773	900	86%

Source: Council 2019 School Roll Projections

- 1.36 The School is currently operating at 86% occupancy of its reported capacity and currently has spare capacity for 127 additional pupils. This existing capacity is equivalent to accommodating

pupils generated from more than 4,000 new homes in the catchment area, without taking into account the lesser impact of flats, development programming and pupil transitioning.

- 1.37 The Council's *2019 School Roll Projections* project that the School's roll will not be breached in the next five years as a result of the existing LDP development strategy and existing trends.
- 1.38 Any new denominational secondary school capacity, including the provision of a new school will require to be addressed at a strategic scale across the west of Edinburgh. It is likely that any new school would require a school roll of at least 600 pupils to be viable. This is equivalent to accommodating pupils generated from more than 20,000 new homes in the catchment area, without taking into account the lesser impact of flats, development programming and pupil transitioning. It may be that extending existing schools or reviewing admissions policies is a more efficient means to address any future capacity constraints.

Conclusions

- 1.39 The scale of education mitigation as a result of the proposals for the site will be dependant on the scale of development, its density and the rate of development. Although education mitigation will be required as a direct and cumulative result of the development, there is existing capacity which is available or can be provided at existing schools to support an initial phase of the development of the site.
- 1.40 A new primary school will be delivered on site as part of the proposals. The timing for the delivery of the school will be subject to detailed assessment, however, it will not be required at an early date due to the availability of interim capacity. A 2ha site can accommodate up to a three stream primary school on the site. This is considered to be the realistic maximum scale of school required even if the whole site was to come forward with the housing proposed at a higher density.
- 1.41 It is likely that additional denominational primary school capacity will also be required. Further assessment will be required to establish whether this can be delivered at existing schools through reconfiguration, extension or catchment area review. If a denominational new primary school is required to serve the wider area, a joint campus primary school could be considered as part of the proposals.
- 1.42 There are various options available which will require to be assessed in detail to address any capacity constraints at the non-denominational and denominational secondary schools.
- 1.43 This Note demonstrates that education capacity is not considered to be an insurmountable barrier to the allocation of the site as part of the emerging City Plan and there is interim capacity solutions to mitigate initial phases of development of the site.
- 1.44 Riccarton Village is willing to make a proportionate financial contribution towards the cost of providing the necessary education infrastructure including serviced land for a primary school (2 ha) as a result of the direct and cumulative impact of the development in accord with Circular 3/2012.

Appendix 1 South of Riccarton Pupil Generation

2018 (original) CHRs

Dwelling Type	Primary CHR	Primary ND CHR	Primary RC CHR	Secondary CHR	Secondary ND CHR	Secondary RC CHR
House	0.3	0.26	0.04	0.2	0.17	0.03
Flat	0.07	0.06	0.01	0.03	0.026	0.004

Whole Site		Primary			Secondary		
Type	40dph (net)	Total	ND	RC	Total	ND	RC
Houses	2430	729	632	97	486	413	73
Flats	1170	82	70	12	35	30	5
Total	3600	811	702	109	521	444	78

Whole Site		Primary			Secondary		
Type	65dph (net)	Total	ND	RC	Total	ND	RC
Houses	1775	533	462	71	355	302	53
Flats	4140	290	248	41	124	108	17
Total	5915	822	710	112	479	409	70

Phase 1		Primary			Secondary		
Type	40dph (net)	Total	ND	RC	Total	ND	RC
Houses	1148	344	298	46	230	195	34
Flats	552	39	33	6	17	14	2
Total	1700	383	332	51	246	210	37

Phase 1		Primary			Secondary		
Type	65dph (net)	Total	ND	RC	Total	ND	RC
Houses	835	251	217	33	167	142	25
Flats	1945	136	117	19	58	51	8
Total	2780	387	334	53	225	193	33

2019 (increased) CHRs

Dwelling Type	Primary CHR	Primary ND CHR	Primary RC CHR	Secondary CHR	Secondary ND CHR	Secondary RC CHR
House	0.375	0.326	0.049	0.23	0.2	0.03
Flat	0.112	0.097	0.014	0.046	0.04	0.006

Whole Site		Primary			Secondary		
Type	40dph (net)	Total	ND	RC	Total	ND	RC
Houses	2430	911	792	119	559	486	73
Flats	1170	131	113	16	54	47	7
Total	3600	1042	906	135	613	533	80

Whole Site		Primary			Secondary		
Type	65dph (net)	Total	ND	RC	Total	ND	RC
Houses	1775	666	579	87	408	355	53
Flats	4140	464	402	58	190	166	25
Total	5915	1129	980	145	599	521	78

Phase 1		Primary			Secondary		
Type	40dph (net)	Total	ND	RC	Total	ND	RC
Houses	1148	431	374	56	264	230	34
Flats	552	62	54	8	25	22	3
Total	1700	492	428	64	289	252	38

Phase 1		Primary			Secondary		
Type	65dph (net)	Total	ND	RC	Total	ND	RC
Houses	835	313	272	41	192	167	25
Flats	1945	218	189	27	89	78	12
Total	2780	531	461	68	282	245	37

South of Riccarton Phase 1 Site Assessment Review



Background

- 1.1 City of Edinburgh (the Council) has undertaken a *Greenfield Site Assessment* of an area of land identified as *South of Riccarton* (Site Ref: 44) in preparation of the *Choices for City Plan 2030* (Main Issues Report (MIR)) (2020).
- 1.2 This *Site Assessment Review* relates to Phase 1 of the development of land known as *South of Riccarton* (Site Ref: 44) as identified within the Council's *Housing Land Study*. This Phase 1 site is immediately available and is deliverable during the plan period. A separate representation promoting the full extent of the site *South of Riccarton* has also been submitted as part of this consultation process. Both site representations are supported by an *Indicative Development Framework* (IDF) and a *Development Framework Report* (DFR).
- 1.3 The *City Plan 2030* will replace the adopted Local Development Plan (LDP) (2016). The Council's latest *Development Plan Scheme* (January 2020) anticipates that the *City Plan 2030* will be adopted by February 2022.
- 1.4 The MIR is the first stage in the Council's consultation process for the emerging *City Plan 2030*. It is therefore the first opportunity for interested parties to contribute to the formulation of the Council's development strategy in the emerging *City Plan 2030*.
- 1.5 The MIR sets out ...*the Council's preferred approach to changing policy in our new plan*. The MIR identifies four key topics. Within each key topic are four choices. These set out the Council's proposed changes to the adopted LDP and at least one reasonable alternative. In total, the MIR identifies 16 Choices, including **Choice 12 – Building our new homes and infrastructure**.
- 1.6 **Choice 12 – Building our new homes and infrastructure** sets out how the Council will provide additional homes through the allocation of land for new homes. To do this, the Council will:
- A. *Decide how many homes to provide,*
 - B. *Who will deliver these new homes, and*
 - C. *Where we will deliver the homes in the most sustainable way.*
- 1.7 The MIR identifies three options for how and where new homes will be delivered. These three options are as follows:
- **Option 1 Delivery by the Council and its partners within the Urban Area**
 - **Option 2 Delivery through market housing by releasing Greenfield land**
 - **Option 3 A Blended Approach**
- 1.8 The MIR confirms that the Council's preferred option is Option 1. Option 1 proposes that there will be no release of sites within the designated Green Belt for the delivery of new homes. As recognised within the MIR, Option 1 ...*may not be financially viable for the Council and its partners to deliver, or possible for the Council to achieve an annual delivery rate to prevent the release of further green belt land*.
- 1.9 The Council's preferred Option 1 represents a potential sustainable approach to the delivery of housing requirements through the re-use of brownfield land in urban locations. It however presents a potentially high-risk development strategy for the following reasons:

- As highlighted by the Council, brownfield sites can be associated with high abnormal costs for the future development and consequently, may not be viable. The Council has not assessed the viability of future development on these sites.
- Some of the Council's brownfield sites are currently active employment areas and may not prove to be available for development and thus, not effective housing sites in the future.
- Some large strategic employment areas have a high existing use land value that is more valuable than a potential change of use to residential development. This is due to the valuation of these employment area which are based on an income in perpetuity investment valuation. These employment areas would therefore prove not be viable for the Council to CPO.
- Brownfield sites can be in multiple ownerships and it may prove necessary to use CPOs to acquire the necessary land for development. This use of CPO powers has the potential to cause delays in the delivery of housing.
- Brownfield sites can often have issues relating to the capacity and availability of existing services. There can also be difficulties in the installation and construction of new services to serve a brownfield site. The availability of land can often be constrained in the vicinity of brownfield sites and this can prevent the ability to expand local infrastructure such as local schools.

- 1.10 Accordingly, a development strategy based only on urban, brownfield sites may not realise the scale of housing required within the necessary timescale due to ongoing concerns over site effectiveness. This is highlighted by reference to the Council's 2014 *Housing Land Study* and the limited progress made in redeveloping these sites in the interim period. Paragraph 2.2 of the *Housing Study* confirms that sites which remain undeveloped from the Council's 2014 *Housing Land Study* have been carried forward into the *Housing Study*. Given that the balance of these sites have not been developed over the last 5 years, their prospects for future development could be limited.
- 1.11 Options 2 and 3 propose the release of greenfield land from the Green Belt. In order to deliver the required amount of new homes, there is a requirement to allocate additional greenfield sites in addition to the realistic assessment of those limited number of effective urban sites which can be delivered in the plan period in the defined *Urban Area*.
- 1.12 All three Options presented in the MIR are supported by maps which identify all sites the Council consider have the ...*potential to deliver our new homes*.
- 1.13 The site *South of Riccarton Phase 1* is not identified within any of the Council's proposed Options for development. The Council's *Greenfield Site Assessment*, as contained within the *Housing Study* prepared in support of the MIR, concludes that the wider *South of Riccarton* site is not suitable for development. Commentary on the Council's *Greenfield Site Assessment* is contained within this Assessment.
- 1.14 This representation examines the site *South of Riccarton Phase 1*'s development potential with regard to the Council's *Greenfield Site Assessment*. This representation also provides an assessment of *South of Riccarton Phase 1* against the Council's SEA requirements as set out within the *Environmental Report* prepared in support of the MIR.
- 1.15 This representation relates *South of Riccarton Phase 1*. A separate representation promoting the wider site *South of Riccarton* (Site Ref: 44) has also been submitted as part of this consultation process.

Greenfield Site Assessment

1.16 The Council has published supporting document *Housing Study* (January 2020) in support of the MIR. The *Housing Study... sets out the approach to meeting the Outcome of City Plan 2030 to achieve a city in which everyone lives in a home they can afford* (Page 1, *Housing Study*).

1.17 Part 2b *Greenfield Site Assessment* of the *Housing Study* provides an assessment of all greenfield land deemed to have potential for development. These areas of greenfield land are split into 134 *Assessment Sites*, which are grouped into seven sectors.

1.18 Each of these *Assessment Sites* was analysed by the Council based on its potential for development in the emerging *City Plan 2030* period. The Council's analysis takes the following into account:

- *current use*
- *broad environmental constraints*
- *public transport accessibility*
- *known development interest and planning history*

1.19 Taking these matters into account, the Council then assessed all *Assessment Sites* against the following 14 questions:

- *Does the site fit within an area identified as a strategic development area?*
- *Does the site support travel by foot to identified convenience services?*
- *Does the site support travel by foot to identified employment clusters?*
- *Does the site have access to the wider cycle network?*
- *Can the site support active travel overall through appropriate intervention?*
- *Does the site support travel by public transport through existing public transport network accessibility and capacity?*
- *Is the site potentially served by an identified public transport intervention project which is deliverable in the plan period to serve and accommodate development?*
- *Does the site have sufficient primary school infrastructure capacity to accommodate the development without further intervention?*
- *Does the site have sufficient secondary school infrastructure capacity to accommodate the development without further intervention?*
- *If either do not, can capacity be improved by an appropriate intervention deliverable in the plan period?*
- *Would development of the site maintain the identity, character and landscape setting of settlements and prevent coalescence?*
- *Would development of the site avoid significant loss of landscape-scale land identified as being of existing or potential value for the strategic green network?*
- *Would development of the site avoid identified areas of 'medium-high flood risk; (fluvial) or areas of importance for flood management?*
- *Is the site suitable for development?*

1.20 The Council assessed each *Assessment Site* against each of the 14 questions using the following ratings:

Yes	
Partially	
No	

- 1.21 The Council has also provided commentary on why it has attributed a rating against each of the 14 questions.
- 1.22 The Council's approach does not consider how a proposal for a site will impact upon the rating for each of the questions. The Council's approach is therefore limited in scope but can be considered further to improve its use as a validation tool for use as a site selection tool for future development.
- 1.23 For example, one of the questions posed by the Council assesses whether the development of a site would support the existing public transport network. The Council's assessment does not consider in this case, the significant opportunity in locating development at this location. The development of the site will provide substantially improved public transport links incorporating an existing rail station. The proposal for this site will link to Curriehill Railway Station with upgrades to the facilities at Curriehill Railway Station along with the delivery of a new Transport Hub (including Park & Ride facility) at *South of Riccarton*.
- 1.24 This is the only greenfield site assessed by the Council which offers the sustainability benefits provided by direct access to an existing station.
- 1.25 The Council's assessment also does not take into account the proposal for the delivery of a village centre (8 ha). This village centre will provide offices, retail space, a school and a health centre amongst other facilities and serve demand from Heriot Watt campus and serve new and existing communities such as Currie. The Council's assessment should also take into account the delivery of a significant area of parkland as part of this proposal (over 20ha site).
- 1.26 The Council's assessment simply considers a site in isolation, with no consideration of potential mitigation measures or potential added benefits through site development.
- 1.27 The Council's Draft *City Mobility Plan* (January 2020) states that the Council *...need to redesign public transport services and active travel routes to ensure that they serve the needs of residents and visitors to give them effective, accessible, affordable and safe options for travel which reduce dependency on car ownership.*
- 1.28 The Draft *City Mobility Plan* also states that planning for new development *...needs to ensure they help reduce the dominance of motor vehicles and help to make walking, cycling and public transport the obvious travel choices for the people in them.*
- 1.29 The Draft *City Mobility Plan* is clear that the Council is focused on the provision of an enhanced public transport network. This public transport network should make public transport *...the obvious travel choices for the people in them.*
- 1.30 The development proposal at *South of Riccarton Phase 1* will deliver a new Transport Hub at Curriehill Railway Station. This will enhance modal share in favour of public transport. It delivers a transport interchange between bus and rail services that is currently lacking within the City. The Transport Hub will provide a direct interchange between train and bus services via potential route extensions from Heriot Watt Campus and Curriehill Railway Station. This will allow buses to terminate at the Transport Hub instead of the University.
- 1.31 The Transport Hub will also include for the provision of a new Park & Ride facility. The Park & Ride facility will provide 400 car parking spaces and a number of electric vehicle charging points. The Park & Ride facility will be accessible to residents within *South of Riccarton Phase 1* and traffic from the A70.

- 1.32 The proposal will also deliver improvements to the existing Curriehill Railway Station. This will include the provision of ticket machines, additional seating on platforms and a covered access from the Transport Hub.
- 1.33 All new homes within the *South of Riccarton Phase 1* proposal will be within 400m of the bus route. Around 1,500 of the proposed homes will be within 800m walking distance of Curriehill Railway Station.
- 1.34 In summary, the proposal *South of Riccarton Phase 1* will provide a significant new addition to sustainable transport services in west Edinburgh. The Transport Hub is in accord with the draft *City Mobility Plan*. This Transport Hub will provide:
- A transport interchange for bus and rail services between Heriot Watt Campus, the Heriot Watt Research Park and Curriehill Railway Station as well as the proposal. This linkage to a rail station is unique feature of this proposal in comparison with the other sites under consideration in Edinburgh.
 - Improvements to the existing facilities at Curriehill Railway Station will include ticket machines, additional seating on platforms, along with covered access from the Transport Hub.
 - A new Park & Ride facility. This facility will include the provision of 400 car parking spaces and a number of electric vehicle charging points.
- 1.35 Further details on the proposed Transport Hub are provided within the *Riccarton Sustainable Transport Strategy* which is submitted as part of this Representation. The *Riccarton Sustainable Transport Strategy* has been prepared by Modus Transport Solutions Ltd and Markides Associates. The Transport Strategy details the transportation benefits that will be delivered as part of the proposal for *South of Riccarton*.
- 1.36 The proposal will also deliver a new mixed-use village centre. The village centre is similar in size (8 hectares) to the Quatermile development in the City. The village centre will provide offices, retail space, a school and a health centre amongst other facilities. The village centre will create a welcoming gateway from the adjacent University campus.
- 1.37 The village centre will offer new residents excellent scope for access to local services within an easy walk of their home. The village centre will also supplement existing services within the local area, including for students living at Heriot Wat Campus, many of whom will not have access to a car.
- 1.38 The proposal also includes the creation of a significant area of parkland (20.7 ha site). This will serve as a regional leisure destination. The parkland will be accessible to existing communities and new residents. The creation of the parkland will also maintain the settlement of Currie's identity as a separate village.
- 1.39 *South of Riccarton Phase 1* is identified within Sector 5. The Council has assessed over 40 greenfield sites within the Sector 5 area. The Council's *Greenfield Site Assessment* for the site *South of Riccarton* is presented in page 165 of the Council's *Housing Study*.
- 1.40 The Council's assessment for the wider *South of Riccarton site* concludes that the site **...is not suitable for development due to its poor public transport accessibility, and community infrastructure capacity as although there be school capacity provision through a redeveloped WHEC this capacity is already taken by scope for development in the East of Riccarton Site** [our emphasis].

1.41 The Council's criticism of the wider *South of Riccarton* site's location and proposal (for *South of Riccarton Phase 1*) is reviewed as follows:

Issue	Council's Comment	Wallace Land Investment's Response
Poor Public Transport Accessibility	<p><i>The site does not support travel by public transport based on existing or incrementally improved provision.</i></p> <p><i>The site may support travel by public transport based on an identified intervention, but this intervention is not deliverable within the plan period.</i></p>	<p>Riccarton village already benefits from 11 bus routes in the area and direct access to Curriehill Train Station (service every 30min in peak hours)</p> <p>The proposal will deliver the following public transport interventions within the plan period:</p> <ul style="list-style-type: none"> Extend existing bus routes serving Heriot Watt through new/upgraded roads in Riccarton Village to a new Curriehill Station Transport Hub (transport interchange linking bus and rail); and Increased demand from the Village will support the introduction of Bus Rapid Transit from Curriehill into Edinburgh City and a more frequent train service (every 15 minutes in the peak hours) <p>This proposal is transit led and a sustainable public transport service already exists in the area and will be enhanced in accord with the Council's <i>Draft City Mobility Plan</i>.</p>
Poor Community Infrastructure Capacity	<p><i>The site does not have sufficient community infrastructure capacity to support development and no appropriate intervention has been identified to address this.</i></p>	<p>The proposal will provide a serviced site and funding for a new primary school in the village centre. Given the scale of the development proposed, it is likely that the new primary school will be a two stream school.</p> <p>The school catchment area for this new school can include the whole development area and other areas proposed by the Council. This option requires the Council to modify WHEC's current catchment area. The modification of school catchment areas is a normal function of the Council's education authority.</p> <p>Financial contributions for secondary schooling will be provided along with a bus service to extend WHEC as required by the Council. Alternatively, an extension could be provided to the catchment secondary school at Currie High.</p> <p>Should the Council require, a site for a new high school or a combined school campus can be provided on site.</p>

1.42 The Council's commentary for the wider *South of Riccarton* site is predicated on the impact that the potential delivery of *East of Riccarton* (Site Ref: 42) will have on education capacity within West Edinburgh. The site *East of Riccarton* is only a site identified as having potential for development at this stage in the emerging plan process. There is no guarantee that the Council will propose to allocate the *East of Riccarton* within the emerging *City Plan 2030*.

1.43 If the *East of Riccarton* site does not progress, this will provide additional education capacity for the *South of Riccarton Phase 1* proposal. The Council should consider the impact of the proposal for *South of Riccarton Phase 1* in isolation.

1.44 For the reasons set out above, this *Greenfield Site Assessment* for *South of Riccarton* by the Council has been reviewed and updated by Geddes. The Council's assessment has also been

updated by Geddes to focus on the development of *South of Riccarton Phase 1* only. This review is set out in Appendix 1 of this Assessment.

- 1.45 This review undertaken by Geddes has reassessed the proposal for *South of Riccarton* presented in the IDF and DFR) against the 14 questions listed above. The purpose of this review has been to demonstrate that the site *South of Riccarton Phase 1* can be considered as a potential option for development within the emerging *City Plan 2030*.
- 1.46 This review has allowed matters to be taken into account such as the opportunity to deliver the Transport Hub at Curriehill Railway Station and the provision of a significant new mixed use village centre within this exciting proposal.
- 1.47 The re-evaluation undertaken by Geddes (Appendix 1) concludes that the site with its proposal should be considered more favourably in sustainability terms against the 14 questions for the following reasons:
- The proposal set out in the DFR addresses all of the placemaking principles required by the Council and Scottish Ministers. The Council's requirements for *Design and Green/Blue Infrastructure, Transport Infrastructure, Education Infrastructure and Grey Infrastructure* for sites in Sector 5 have also been taken into account in the proposal.
 - The proposal will deliver a Transport Hub at Curriehill Railway Station delivering an exemplar integrated bus and rail service. This will provide significant benefits to the existing communities of Currie and Balerno as well as the future residents of *South of Riccarton Phase 1*.
 - The proposal will deliver a mixed-use village centre which will be within easy walking distance (20 minutes) from all existing communities including students, workers and businesses in the University campus.
 - The proposal will deliver a significant new area of parkland which will serve as a regional leisure destination. This will be accessible to existing communities and new residents. This greenspace feature is approximately the size of the Meadows.

Site Assessment Review

- 1.48 In addition to the *Greenfield Site Assessment* above, the Council has also undertaken a Site Assessment for all greenfield sites identified as potential options for development within the MIR. These assessments are contained with the *Environmental Report* which is a Background Report to the MIR.
- 1.49 As noted above, the Council has not identified *South of Riccarton* (Site Ref: 44) as a potential option for development. Based on the re-evaluation of the Council's *Greenfield Site Assessment* undertaken by Geddes, *South of Riccarton Phase 1* should be identified as a potential option for development. The following section provides a Site Assessment of *South of Riccarton Phase 1* against the environmental indicators set out in the *Environmental Report*.
- 1.50 The Council assessed all potential option sites against the following eight environmental indicators:
- **Biodiversity, Fauna and Flora**
 - **Population and human health**
 - **Soil**
 - **Water**
 - **Air and Climatic factors**
 - **Material Assets**

- **Cultural Heritage**
- **Landscape and Townscape**

1.51 These eight indicators were then split into 28 questions which are set out in Table 5: *Methodology for Assessing Sites* of the Council's *Environmental Report*.

√	A significant positive environmental effect
X	A significant negative environmental effect
?	Uncertain as to whether any significant positive or negative effects would be likely
-	Neutral or no significant effect is likely

1.52 The Council's *Site Assessment* is limited in its use as it ignores the benefits which are delivered by the proposal on the site. The Council's approach is only focused on the environmental and other characteristics of the site and not how a potential proposal can mitigate or avoid impacts on the site's intrinsic characteristics. The Council's approach can be improved to assist its use as a validation tool for selecting a site for future development.

1.53 The Council's current rating system does not account for the beneficial impacts that the development of a site may deliver through mitigation or improvements. For example, the Council's Site Assessment does not consider a site's proposal and how it can address the requirements set by the Council in terms of its master planning principles. The proposal is shown in the *Indicative Development Framework* (IDF) and explained in a *Development Framework Report* (DFR). Considering a site's proposal will provide information about the scale and accessibility of areas of open space as part of the proposals. It could potentially address any deficiencies in the wider area.

1.54 The Council's rating system also does not allow a comparison to be made against other sites being considered for potential development. It is therefore unclear how the Council will confidently identify which sites should be brought forward for allocation within the emerging *City Plan 2030*.

1.55 To assist the Council in its approach, Geddes has undertaken a comparison of each of the potential sites identified in Sector 5 against the site *South of Riccarton Phase 1* based on the Site Assessment undertaken by Geddes set out in Appendix 2. In order for this comparison exercise to be undertaken, Geddes has applied a score-based system to enable a simple comparison of each potential option site against the site *South of Riccarton Phase 1*. No weighting is given to the scores applied to maintain objectivity.

1.56 By applying a simple score-based system, based on the benefits or mitigation being delivered by potential development proposals, it is possible to undertake a more detailed analysis and understanding of a site's future sustainability credentials.

1.57 By using this approach, the Council can be confident about identifying the right sites to be allocated for residential development within the emerging *City Plan 2030*. The simple points-based system applied by Geddes is detailed below. This scoring system (based on a points-based approach) has been attributed to each of the four impact outcomes identified by the Council.

Ranking	Impact	Scoring
√	A significant positive environmental effect	1
-	Neutral or no significant effect is likely	0
X	A significant negative environmental effect	-1
?	Uncertain as to whether any significant positive or negative effects would be likely	N/A ¹

¹ No scoring has been attributed to this impact as no effects (positive or negative) are known at this time.

1.58 Sites with proposals which are more sustainable will score higher. For example, a site with a score of 13 is more sustainable than a site with a score of -7.

1.59 By applying this approach to the Council's Site Assessment criteria, it is possible to attribute a score to the site *South of Riccarton Phase 1* based on the assessment undertaken by Geddes (Appendix 2). This scoring system has also been applied to the other two sites identified as potential options for development within the Sector 5 Area. This scoring system uses the same ratings applied by the Council to the sites at *East of Riccarton* and *Calderwood*. This comparative scoring is presented in the table below.

CEC SEA Assessments		
Site	Overall Score	Average score per outcome
East of Riccarton	-6	-0.21
Calderwood	-7	-0.25

1.60 The findings from this analysis presented in the table confirms that the negative scores arise for each site because the Council has focused on identifying environmental risks associated with the site based characteristics and issues rather than the site's attributes which can be realised through future development.

1.61 For the reasons set out above, Geddes has undertaken a Site Assessment of the site *South of Riccarton Phase 1* against the 28 indicators identified within the *Environmental Report*.

1.62 This Site Assessment by Geddes takes into account the mitigation measures presented as part of the indicative proposal in the IDF submitted in support of this Representation. This includes the delivery of the transport hub linked to the existing Curriehill Railway Station. Mitigation measures also include the delivery of a new mixed use village centre suitably located to promote active travel for residents. The delivery will deliver a significant new area of greenspace. This greenspace feature is approximately the size of the Meadows.

1.63 The Site Assessment undertaken by Geddes concludes that the proposal for the site scores favourably against the 28 questions for the following reasons:

- The proposal set out in the DFR addresses all of the placemaking principles required by the Council and Scottish Ministers. The Council's requirements for *Design and Green/Blue Infrastructure, Transport Infrastructure, Education Infrastructure and Grey Infrastructure* for sites in Sector 5 have also been taken into account in the proposal.
- The proposal will deliver a Transport Hub at Curriehill Railway Station which will be an exemplar integrated bus and rail services.
- The proposal will deliver a mixed-use village centre which will be within easy walking distance (20 minutes) from all existing communities as well as future residents.
- The development of the site will provide an area of parkland which will create a regional leisure destination (equivalent to the size of the Meadows). This will be accessible to existing communities and new residents.

1.64 The comparison table for all sites within Sector 2 is presented in the following table. This also includes the results of the scoring attributed by Geddes to the site *South of Riccarton Phase 1*.

CEC SEA Assessments		
Site	Overall Score	Average score per outcome
East of Riccarton	-6	-0.21
Calderwood	-7	-0.25
Geddes Site Assessment		
South of Riccarton Phase 1	13	0.46

1.65 These findings demonstrate that the site *South of Riccarton Phase 1* can be considered a much more sustainable location for future development. This takes into account the benefits and the mitigation measures that will be delivered by a proposal located adjacent to an existing rail station. This site assessment has not been applied to the other sites as the respective mitigation for each site is not known.

Conclusion

1.66 The Council's *Greenfield Site Assessment* has been updated to assist the Council in its consideration of the site and proposal at *South of Riccarton Phase 1*. A Site Assessment against SEA objectives has also been undertaken for the site.

1.67 This will help ensure that only those sites with strong SEA credentials and site-specific sustainability credentials are selected as part of the emerging Proposed Plan.

1.68 The examination of the Council's *Greenfield Site Assessment* concludes that the site can be scored more favourably than as presented in the Council's current assessment. The Site Assessment against the Council's SEA objectives also demonstrates that the site scores favourably against potential option sites within Sector 5 of the MIR.

1.69 These assessments have been undertaken using the mitigation and improvements set out in the proposal in the supporting IDF. A DFR has also been produced which explains the proposal for the site and confirms these sustainable measures.

1.70 Based on the findings of these revised assessments, the site *South of Riccarton Phase 1* is a sustainable development proposal. The assessments undertaken by Geddes demonstrate that the site scores favourably when assessed against other identified sites within the Sector 5 area.

1.71 The proposal at *South of Riccarton Phase 1* is an example of sustainable development as demonstrated by the Site Assessment undertaken by Geddes. Page 3 of the MIR states that to meet the Council's objectives the *...future growth of our city must meet our ambitions to be a sustainable city with the right types and quality of new homes and neighbourhoods, in the right locations, with the right infrastructure.*

1.72 The development of *South of Riccarton Phase 1* will contribute to this objective.

1.73 The proposal at *South of Riccarton Phase 1* will deliver the following benefits:

- The delivery of an integrated Transport Hub linked directly to Curriehill Railway Station. This will deliver an exemplar integrated bus and rail services in accord with the Draft *City Mobility Plan*.
- The proposal will deliver a mixed-use village centre (the size of Quartermile) which will be within easy walking distance (20 minutes) from all existing communities and future residents.

- The delivery of an area of parkland which will create a regional leisure destination (equivalent to the size of the Meadows). This will be accessible to existing communities and new residents.

1.74 There are no planning or environmental reasons why land *South of Riccarton Phase 1* should not be allocated for housing in the emerging City Plan 2030.

Appendix 1 Revised Greenfield Site Assessment

Geddes Consulting Re-Evaluation of South of Riccarton Phase 1

Question	Geddes Consulting Commentary	Council's Scoring	Alternative Scoring
SDP1 SDA Areas			
<i>Does the site fit within an area identified as a strategic development area?</i>	The site is not identified as a <i>Strategic Development Area</i> .	No	No
Active Travel			
<i>Does the site support travel by foot to identified convenience services?</i>	<p>The proposal includes for the creation of a mixed use village centre. This will include the provision of a full range of convenience services. All of these facilities will be within 20 minute walking distance of the future residents as well the students, university staff and employees at the Heriot Watt Research Park.</p> <p>The Council's scoring should be amended to reflect the above.</p>	No	Yes
<i>Does the site support travel by foot to identified employment clusters?</i>	<p>As recognised by the Council, the site is within walking distance of the employment cluster at Heriot Watt. The proposal includes the provision of new footpaths from the site into the Heriot Watt University campus.</p> <p>The provision of new footpaths along Curriehill Road will enable the proposal to be fully integrated with the facilities in the adjacent University Campus and Heriot Watt Research Park.</p> <p>The Council's scoring should be amended to reflect the above.</p>	Partially	Yes
<i>Does the site have access to the wider cycle network?</i>	<p>The site benefits from existing access to the wider cycle network via the NCN75 cycle route which runs along the western boundary of the site (along Long Dalmahoy Road). This connects into the Water of Leith Cycle Path to the south east via Ravelrig Road.</p> <p>The proposal also includes for Curriehill Road to revert to a cycle path between the proposed transport hub and new gateway to be formed between the site and the Heriot Watt University campus.</p> <p>The Council's scoring should be amended to reflect the above.</p>	No	Yes
<i>Can the site support active travel overall through appropriate intervention?</i>	<p>As show in the IDF and explained within the DFR, the proposal includes for the creation of footpaths and cycle links throughout the site. These cycle links will connect into the wider cycle network which can also be upgraded as part of the proposal for the site.</p> <p>The proposal will support active travel through the establishment of a comprehensive path and cycle network within the site which is safe to use without traffic conflict.</p> <p>The Council's scoring should be amended to reflect the above.</p>	No	Yes
Public Transport			
<i>Does the site support travel by public transport</i>	Curriehill Railway Station is within walking distance of a large part of the site. The Train Station provides existing	No	Partially

<p><i>through existing public transport network accessibility and capacity?</i></p>	<p>services into the City centre and also to Glasgow. The proposal provides the prospect of the delivery of enhanced services. Direct access to the Train Station therefore encourages travel by public transport via the existing rail network.</p> <p>The nearest bus stops to the site are located within the Heriot Watt University Campus. These bus stops provide a regular service to the city centre via the number 25 and 35 bus routes. These bus routes will be extended from the University to the new Park & Ride Facility.</p> <p>As noted below, it is proposed that the amenities at Curriehill Railway Station will be enhanced, along with the delivery of an integrated transport network, including the provision of a new Park & Ride Facility.</p> <p>The Council's scoring should be amended to reflect the above.</p>		
<p><i>If the site potentially served by an identified public transport intervention project which is deliverable in the plan period to serve and accommodate development?</i></p>	<p>The proposal <i>South of Riccarton Phase 1</i> will provide a significant new Transport Hub in accord with the Council's Draft <i>City Mobility Plan</i>. This Transport Hub will provide:</p> <ul style="list-style-type: none"> • A transport interchange for bus and rail services between Heriot Watt Campus and Curriehill Railway Station. This will deliver a transport interchange between bus and rail services that is currently lacking in west Edinburgh. • Improvements to the existing facilities at Curriehill Railway Station. This will include the provision of ticket machines, additional seating on the platforms and covered access from the Transport Hub. • A new Park & Ride facility. This facility will include the provision of 400 car parking spaces and a number of electric vehicle charging points. <p>The Council's scoring should be amended to reflect the above.</p>	No	Yes
Community Infrastructure			
<p><i>Does the site have sufficient primary school infrastructure capacity to accommodate the development without further intervention?</i></p>	<p>The site is located within the Currie Primary School catchment area. It is accepted that due to the scale of the proposal, there is a requirement to provide additional infrastructure capacity.</p> <p>A new two stream primary school is proposed which is extendable to three streams. This will have a working capacity of 630 pupils.</p>	No	No
<p><i>Does the site have sufficient secondary school infrastructure capacity to accommodate the development without further intervention?</i></p>	<p>The site is located within the catchment area of Currie Community High School. It is known that the existing Currie Community High School is to be replaced. The capacity of the replacement school will be 1,000 pupils, an increase in capacity of 100 pupils from the existing school. The school is programmed to be open by 2023.</p> <p>It is accepted that due to the scale of the proposal, there is a requirement to provide additional infrastructure capacity.</p>	No	No
<p><i>If either do not, can capacity be improved by an appropriate intervention deliverable in the plan period?</i></p>	<p>The proposal will provide a serviced site and funding for a new primary school. Given the scale of the development proposed, it is likely that the new primary school will be a two stream school.</p> <p>Regarding secondary school infrastructure, there is a possibility that pupils can attend another local secondary school (rather than a replacement Currie Community High School). Wester Hailes Education Centre (WHEC) is understood to be operating significantly below its overall capacity of 750 pupils. As recognised within the Council's</p>		

	<p>assessment, there is the potential for a replacement WHEC to provide additional capacity to support proposed housing growth within the wider area.</p> <p>The proposal could help to subsidise a bus service from the site to WHEC to provide a safe route to school for pupils.</p> <p>Should the Council require, a site for a new high school or a combined school campus can be provided on site.</p> <p>It is submitted that capacity can be improved by appropriate interventions which are deliverable within the emerging <i>City Plan 2030</i> period.</p> <p>The Council's scoring should be amended to reflect the above.</p>	No	Yes
Landscape Character			
<p><i>Would development of the site maintain the identity, character and landscape setting of settlements and prevent coalescence?</i></p>	<p>The proposal includes for the provision of proposed planting along southern and western boundaries of the site. The southern part of the site will contain an extensive area of parkland and recreational space. This will provide an appropriate green buffer to prevent the perceived coalescence with the settlement of Currie to the south.</p> <p>The existing woodland and landform will also enable the creation of a robust and defensible Green Belt boundary at this location. The existing woodland and tree belts will help to screen any impacts associated with the proposal. The overhead power lines on the site will be retained with any development located outwith the appropriate stand-off area.</p> <p>The Council's scoring should be amended to reflect the above.</p>	Partially	Yes
Green Network			
<p><i>Would development of the site avoid significant loss of landscape-scale land identified as being of existing or potential value for the strategic green network?</i></p>	<p>The proposal includes for the delivery of an area of new parkland which will serve as a regional leisure destination. This parkland will be accessible to existing communities and new residents. It will also maintain the settlement of Currie's identity as a separate settlement.</p> <p>The proposal also incorporates areas of interconnected green network spaces and green network corridors that will connect into the wider green network.</p> <p>The proposal will deliver significant improvements to the existing green network.</p> <p>The Council's scoring should be amended to reflect the above.</p>	Partially	Yes
Flood Risk			
<p><i>Would development of the site avoid identified areas of 'medium-high flood risk; (fluvial) or areas of importance for flood management?</i></p>	<p>A review of the online SEPA flood mapping tool identifies that part of the south (within the southern area) is at risk of both fluvial (river) and pluvial (surface water) flooding.</p> <p>Floodplain Modelling has been undertaken to support this Representation. This modelling is detailed within the <i>Riccarton Flood Risk Technical Note</i> produced by Kaya Consulting. This <i>Technical Note</i> has been submitted along with this Representation.</p> <p>The design of the proposal (as set out within the IDF) has been influenced by the findings of the <i>Riccarton Flood</i></p>	Partially	Yes

	<p><i>Risk Technical Note.</i> The IDF confirms that the proposal will not include housing development within the flood management area.</p> <p>The Council's scoring should be amended to reflect the above.</p>		
Summary Comments			
<p><i>Is the site suitable for development?</i></p>	<p>The IDF and DFR prepared in support of this representation demonstrate that the site is suitable for development. The proposal will deliver a transport hub linking to and with improvements to Curriehill Railway Station. This will encourage public use from existing and future residents. The proposal also encourages active travel through the provision of a cycle and path network within the site and linking beyond to Core Paths.</p> <p>The proposal will also deliver a new community primary school. Regarding secondary school infrastructure, there is the potential for a replacement Wester Hailes Education Centre (WHEC) to provide additional capacity to support the proposal. The proposal could help to subsidise a bus service from the site to WHEC to provide a safe route to school for pupils. Alternatively, the proposal could provide a safe site for a new high school should this be required.</p> <p>The proposal will also deliver a new village centre. The village centre will provide convenience retail and other services within 20 minute walking distance of all new residential development.</p> <p>The proposal will incorporate a significant area of parkland that will serve as a regional leisure destination. This area of greenspace equates to the Meadows.</p> <p>The proposal will ensure that any development is located outwith any areas identified at medium – high flood risk.</p> <p>The proposal will be an exemplar for sustainable development with its own identity, and community. It provides additional facilities as well as jobs which will be accessible to the local community.</p> <p>The Council's scoring should be amended to reflect the above.</p>	No	Yes

Appendix 2 Site Assessment (against SEA objectives)

Site Ref	Site Name	Promoter	Biodiversity					Population				Soil	Water		Air & Climate				Material Assets		Heritage						Landscape			
			B1	B2	B3	B4	B5	P1	P2	P3	P4	S1	W1	W2	A1	A2	A3	A4	M1	M2	H1	H2	H3	H4	H5	H6	L1	L2	L3	L4
44	South of Riccarton Phase 1	Wallace Land Investments	-	√	√	√	-	-	-	√	√	X	√	√	√	√	-	√	√	√	-	-	-	-	-	-	-	√	-	√

Scoring Justification for South of Riccarton Phase 1 against SEA Objectives

Biodiversity	Population	Soil	Water	Air & Climate	Material Assets	Heritage	Landscape
<p>B1 – Would the site protect and or enhance the integrity of a European and/or National designated biodiversity site?</p> <p>A review of SNH's online mapping tool <i>Site Link</i> confirms that there are no European or National designated biodiversity sites within the site.</p> <p>B2 – Would the site protect and or enhance the integrity of local biodiversity sites and wildlife sites?</p> <p>The proposal will create robust biodiversity corridors across the site, linking to the adjacent existing <i>Local Nature Conservation Site</i> at Riccarton Campus.</p> <p>B3 – Would the site protect and or enhance the integrity of existing habitat networks and other wildlife corridors?</p> <p>The proposal will greatly improve the integrity of the Murray Burn riparian corridor and connect isolated pockets of habitat across the site to enhance biodiversity.</p> <p>B4 – Would the site protect and or enhance wildlife species?</p> <p>There are no known wildlife species within the site. A Phase 1 Ecological Assessment will be undertaken at the appropriate time (in support of a Planning Application). This will identify the presence or otherwise of protected species on site.</p> <p>The proposal for the site will provide improved habitat for a range of protected species.</p> <p>B5 – Would the site protect and or enhance ancient woodland?</p> <p>The site contains an area of woodland classified as <i>Ancient Woodland – Long Established Woodland</i>.</p> <p>A small amount of this <i>Ancient Woodland – Long Established</i></p>	<p>P1 – Would the site be located away from the regulated site which would increase the population affected by nuisance (odour, noise), poor air quality or regulated major hazard?</p> <p>The site will be located away from any regulated sites which would increase the population affected by nuisance or a regulated major hazard.</p> <p>The site is not located within an <i>Air Quality Management Area</i></p> <p>P2 – Would the site have an impact on designated quiet areas or noise management areas?</p> <p>The site is not located within a designated quiet area or noise management area.</p> <p>P3 – Would the site provide opportunities for active travel or recreation?</p> <p>The site benefits from existing access to the wider cycle network via the NCN75 cycle route which runs along the western boundary of the site (along Long Dalmahoy Road). This connects into the Water of Leith Cycle Path to the south east via Ravelrig Road.</p> <p>The proposal also includes for Curriehill Road to revert to a cycle path between the proposed transport hub and new gateway to be formed between the site and the Heriot Watt University campus.</p> <p>The proposal includes for the provision of a significant area of recreational open space.</p> <p>The proposal also incorporates a significant new green network.</p> <p>P4 – Would the site provide opportunities for social interaction and inclusion?</p> <p>The proposal will deliver a new</p>	<p>S1 – Would the site be located on brownfield land?</p> <p>The land <i>South of Riccarton Phase 1</i> is not a brownfield site.</p>	<p>W1 – Does the site protect and enhance the water status of major water bodies?</p> <p>There will be two levels of SuDS treatment before surface water is discharged from the site. This will protect any nearby water bodies and ensure there is no degradation of the existing water quality.</p> <p>W2 – Does the site add to flood risk or reduce flood storage capacity?</p> <p>A <i>Flood Risk Technical Note</i> has been undertaken in support of this Representation.</p> <p>This <i>Technical Note</i> includes Flood Modelling Maps which are based on the 200 year and 200 year+30% flood flows.</p> <p>The proposal will avoid any built development on areas identified to be at risk of flooding.</p> <p>The proposal will incorporate a SuDS strategy which will ensure that the proposal is in accord with SEPA guidance.</p> <p>The final details of the SuDS strategy will be agreed with all relevant consultees.</p>	<p>A1 – Does the site provide good accessibility to public transport?</p> <p>Curriehill Railway Station is within walking distance of a large part of the site. The Train Station provides an existing service into the city centre and also to Glasgow. The Train Station therefore is available for travel by public transport via the existing network. It is anticipated that the proposal will lead to greater demand for enhanced services.</p> <p>The nearest bus stops to the site are located within the Heriot Watt University Campus. These bus stops provide a regular service to the city centre via the number 25 and 35 bus routes. These services terminating in the University campus will be extended to the Transport Hub.</p> <p>The proposal will deliver an integrated Transport Hub. This will link existing bus services with Curriehill Railway Station. This will deliver an exemplar integrated bus and rail service in accord with the <i>Draft City Mobility Plan</i>.</p> <p>A2 – Does the site provide good accessibility to active travel networks?</p> <p>The site benefits from existing access to the wider cycle network via the NCN75 cycle route which runs along the western boundary of the site (along Long Dalmahoy Road). This connects into the Water of Leith Cycle Path to the south east via Ravelrig Road.</p> <p>The proposal also includes for Curriehill Road to revert to a cycle path between the proposed transport hub and new gateway to be formed between the site and the Heriot Watt University campus.</p>	<p>M1 – Does the site result in the loss of/have adverse effects on open space?</p> <p>The creation of areas of open space and green space, along with tree planting will enhance the biodiversity of the site.</p> <p>M2 – Does the site provide access to open space, greenspace/recreational provision?</p> <p>The proposal also incorporates a significant new area of green network.</p> <p>This green network will contain a comprehensive path and cycle network. This path network will link a series of play areas and informal kickabout areas.</p> <p>The proposal also includes the delivery of deliver a new regional leisure destination. This will be accessible to existing communities and new residents within the proposal.</p> <p>This will also create a wide landscape buffer between Currie and the new development.</p>	<p>H1 – Does the site have significant effects on Listed buildings and their settings?</p> <p>A review of the online mapping tool <i>Pastmap</i> has confirmed that there are no Listed buildings within the site.</p> <p><i>Warriston House and Boundary Wall</i> is a Category B Listed building located adjacent to the north west corner of the site.</p> <p>As demonstrated within the IDF and explained within the DFR, the proposal will incorporate appropriate landscaping to screen these buildings from the development.</p> <p>The development of the site will therefore have no significant effects on a Listed building or its setting.</p> <p>H2 – Does the site have significant effects on scheduled monuments and their settings?</p> <p>A review of the online mapping tool <i>Pastmap</i> has confirmed that there are no scheduled monuments within or nearby the site. The development of the site will therefore have no significant effects on a scheduled monument or its setting.</p> <p>H3 – Does the site have significant effects on conservation areas?</p> <p>The site is not located within or in nearby a conservation area. The development of the site will therefore have no significant effects on a conservation area.</p> <p>H4 – Does the site have significant effects on the outstanding value of the World Heritage Sites?</p> <p>The site is not located within or nearby a World Heritage Site. The development of the site will therefore have no significant</p>	<p>L1 – Does the site have significant effects on the landscape setting of the city or its townscape?</p> <p>The proposal will deliver an extensive area of landscaping. This will create an appropriate setting to both the existing settlement of Currie and the proposed new village at Riccarton.</p> <p>L2 – Does the site enable clear and defensible green belt boundaries to be formed?</p> <p>The proposal will provide a clear and defensible Green Belt boundary. The proposed Green Belt boundary will comprise the enhanced boundary of the Dalmahoy designed landscape to the north, a road and tree belt to the southwest, and a regional scale green space and railway to the south.</p> <p>L3 – Does the site have significant effects on the designated landscape areas?</p> <p>The adjacent Dalmahoy Designed Landscape is no longer designated as being of national importance. The proposals have taken into account the importance of this adjacent designation and with mitigation, will not adversely affect the integrity of this designed landscape.</p> <p>L4 – Does the site support the delivery of the green network?</p> <p>The site enables extensive green infrastructure including pedestrian routes and biodiversity corridors both within the proposed urban area and the regional scale park.</p>

<p>Woodland will need to be cleared to enable the south eastern access to the site</p> <p>The area of Woodland to be cleared amounts to 0.7 hectares out of a total 16.5 hectare tree belt. The trees to be removed are generally less than around 40 years old. There is potential for replacement trees to be planted once the access works have been undertaken.</p> <p>The adverse effect of this loss will be offset by the significant planting buffers delivered as part of the proposal. This includes connecting existing pockets of – <i>Long Established</i> with additional woodland planting.</p>	<p>regional leisure destination for the City. This will be accessible to existing communities and new residents within the proposal.</p> <p>This will encourage social interaction between residents of the site and the wider community of Currie and Balerno.</p> <p>The proposals will also incorporate the required level of affordable housing which is currently proposed (within the MIR) as 35% of the total number of units.</p>			<p>A3 – Does the site affect existing AQMAs?</p> <p>The site at land <i>South of Riccarton Phase 1</i> is not within an existing Air Quality Management Area (AQMA). The scoring for criterion A2 should be amended to reflect this lack of impact.</p> <p>A4 – Does the site prevent increased flooding or instability as a result of climate change?</p> <p>The proposal will incorporate a SuDS strategy which will ensure that the proposal is in accord with SEPA guidance.</p> <p>The final details of the SuDS strategy will be agreed with all relevant consultees.</p>		<p>effects on a World Heritage Site.</p> <p>H5 – Does the site have significant effects on Historic Gardens and Designed Landscapes?</p> <p>The site is not located within or nearby a Historic Garden or a Designed Landscape. The development of the site will therefore have no significant effects on either of these designations.</p> <p>H6 – Does the site have significant effects on non-designated heritage assets?</p> <p>A review of the online mapping tool <i>Pastmap</i> has confirmed that there are a number of Canmore records on the site. Any proposal will ensure that any non-designated features will be preserved as part of the development of the site.</p>	
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South of Riccarton Phase 1 Site Effectiveness Statement

Introduction

Scottish Government requires local authorities to ensure that housing sites allocated in the development plan are effective and can contribute completions during the development plan period. An effective housing land supply is essential to delivering a viable development plan.

The overall level of programmed annual completions from all sites in the effective land supply needs to be sufficient to maintain a five year effective land supply at all times and meet the identified housing requirement in the approved development plan in full, as well as meeting any identified shortfall. These policy requirements are set by Scottish Government in *Scottish Planning Policy* (SPP).

A council needs to be satisfied through its own appraisal, that any site to be allocated in the development plan is effective. This appraisal should follow the guidelines set out in PAN 2/2010 *Affordable Housing and Housing Land Audits*, which includes a series of criteria to test whether a site is effective.

Where a five year effective housing land supply is not maintained at all times, SPP states that development plan policies in relation to the housing supply will be considered out of date and there will be a presumption in favour of sustainable development. Where a five year effective land supply is not maintained, additional housing sites will need to be brought forward to address the identified shortfall. Any additional sites should demonstrate that they are effective and capable of delivering completions within a five year period.

For effective sites, a conclusion should also be reached as to the overall construction period (taking account of the developer's or house builder's lead-in period). This construction timeframe will then define the annual rate of completions expected across the local authority and housing sub-market area. Currently, most house builders will expect to deliver a house sale rate of at least 3 homes per month (or 36 sales per annum) on average. Any affordable housing requirements would be in addition to this.

Outcome

Based on an appraisal of the criteria in PAN 2/2010, the allocation of *South of Riccarton Phase 1* for around 1,700 homes is an effective site. The proposal is based on a density of 40 homes per net developable hectare. This is based on the Council's data about historic densities for greenfield developments.

It is envisaged that the site will be developed by at least two housebuilders and an affordable housing provider. Based on two housebuilders developing the site, with affordable housing being built in proportion annually, the development would be built over a ten year period based on this building rate with a two year lead-in period.

The indicative programme for development is set out in the table below:

Development Year	Lead-in Period	1	2	3	4	5	6	7	8	9	10	Total
Total	-	180	180	180	180	180	180	180	180	180	80	1,700

This Statement demonstrates how the proposal is an effective site in accord with the tests of PAN 2/2010.

Appraisal

This conclusion is based on the following analysis.

Criteria	Response	Comment
<p>Ownership: <i>the site is in the ownership or control of a party which can be expected to develop it or to release it for development. Where a site is in the ownership of a local authority or other public body, it should be included only where it is part of a programme of land disposal.</i></p>	<p>The site is being promoted by Wallace Land Investments, an experienced land promoter and willing seller with a proven track record for delivering completions on consented sites within short timeframes. The site is therefore in the control of ...a party which can be expected to develop it or to release it for development... and is in accord with PAN2/2010 in this respect.</p>	<p>Complies</p>
<p>Physical: <i>the site, or relevant part of it, is free from constraints related to slope, aspect, flood risk, ground stability or vehicular access which would preclude its development. Where there is a solid commitment to removing the constraints in time to allow development in the period under consideration, or the market is strong enough to fund the remedial work required, the site should be included in the effective land supply.</i></p>	<p>Adverse development factors give rise to abnormal development costs which can affect the viability of a site and hence its effectiveness.</p> <p>The site's topography slopes gently northward from the southern boundary of the site. The high point of the site is located along a ridgeline adjacent to Long Dalmahoy Road. The site falls gently to the north of Long Dalmahoy Road.</p> <p>The gradients across the site do not give rise to cut and fill requirements which would have a significant adverse impact on the site's abnormal costs.</p> <p>A review of SEPA's online mapping tool confirms that the southern part of the site is at medium-high risk of flooding. This area of flood risk is caused by the Murray Burn which runs through the site.</p> <p>Floodplain Modelling has been undertaken to support this Representation. This modelling is detailed within the <i>Riccarton Flood Risk Technical Note</i> produced by Kaya Consulting. This <i>Technical Note</i> has been submitted along with this Representation.</p> <p>A Flood Risk Assessment will be carried out at the appropriate time to clarify the scale of mitigation required to meet SEPA's current guidelines. This includes guidance on accommodating the potential blockage of the two culverts in the site.</p>	<p>Complies</p>

	<p>The design of the proposal (as set out within the <i>Indicative Development Framework</i> (IDF)) has been influenced by the findings of the <i>Riccarton Flood Risk Technical Note</i>. The IDF confirms that the proposal will not include built development within the flood management area.</p> <p>The site is primarily in agricultural use, which is not anticipated to give rise to abnormal levels of contamination.</p> <p>A review of The Coal Authority's online <i>Interactive Map</i> identifies that the site is not within a <i>Development High Risk Area</i>. A review of The Coal Authority's <i>Interactive Map</i> also confirms there are no mine entries or other mining features located on the site.</p> <p>Surface and underground workings will be fully investigated as part of the site investigations and full mitigation provided. An intrusive site investigation will be undertaken to confirm whether or not any mitigation will be required in relation to ground contamination.</p> <p>Four accesses to the site can be provided: from the north via the A71, from the east via a new connection to Riccarton Mains Road, from the south via Curriehill Road and from the west via Long Dalmahoy Road. All land required to take access into the proposal is under the control of Wallace Land Investments.</p> <p>There are no areas with an ecological designation on the site. An <i>Ecological Report</i> will be provided as part of a planning application for the proposal, which will set out any required mitigation measures in relation to protected species.</p> <p>There are no physical constraints which would inhibit the delivery of all utilities on the site.</p> <p>There are no physical constraints or engineering works on this site that would generate un-viable abnormal costs or prevent development in accordance with the proposed <i>Indicative Development Framework</i>.</p>	
<p>Contamination: <i>previous use has not resulted in contamination of the site or, if it has, commitments have been made which would allow it to be developed to provide marketable housing.</i></p>	<p>A review of historic mapping confirms that the site has been in agricultural or natural use. It is unlikely that any contamination will be found on site.</p> <p>An intrusive site investigation will be undertaken prior to development and in consultation with the Council. Any remediation will be undertaken prior to development or occupation, depending on the nature and extent of any contamination.</p> <p>It is, however, not expected that there is any significant contamination present on the site that will inhibit the development on this site. The proposal therefore complies with PAN 2/2010 in this respect.</p>	<p>Complies</p>

<p>Deficit Funding: <i>any public funding required to make residential development economically viable is committed by the public bodies concerned;</i></p>	<p>Wallace Land Investments is promoting the development of this site for new homes as the main use of a wider mixed use development. The proposal will largely be funded privately, with the possible exception of the provision of affordable homes. These affordable homes can be grant-funded through SHIP funding. The level of funding will be determined by the Council at the appropriate time.</p> <p>Developer contributions from the proposal will be made available to fund any proportionate share of upgrades to local and community infrastructure, along with financial contributions from any other sites allocated in the surrounding area to deliver any shared infrastructure upgrades such as <i>East Of Riccarton (West)</i> (Site Ref: 42).</p> <p>Developer contributions will be in accord with the tests set out in Planning Circular 3/2012: <i>Planning Obligations and Good Neighbour Agreements</i>.</p>	<p>Complies</p>
<p>Marketability: <i>the site, or a relevant part of it, can be developed in the period under consideration;</i></p>	<p>The area is a marketable location with significant demand for both market and affordable homes. The proposal will deliver an integrated transport hub, a new mixed-use village centre and a major area of recreational open space. The provision of these facilities will help deliver a sustainable development that will attract interest from first-time buyers and existing homeowners, as well as the Council and housing associations for affordable housing.</p> <p>There is considerable interest from house builders to develop in this location as this is a prime location for private housing.</p> <p>The site would be marketed, and development substantially progressed on site, within the period of the emerging <i>City Plan 2030</i>.</p>	<p>Complies</p>
<p>Infrastructure: <i>the site is either free of infrastructure constraints, or any required infrastructure can be provided realistically by the developer or another party to allow development;</i></p>	<p>The site benefits from access to gas, electricity, water supply and sewage which can be upgraded to meet the needs of the development. There are no known infrastructure constraints that would render the development undeliverable.</p> <p>The proposal is therefore in accordance with the infrastructure criteria of PAN2/2010.</p>	<p>Complies</p>

<p>Land Use: <i>housing is the sole preferred use of the land in planning terms, or if housing is one of a range of possible uses other factors such as ownership and marketability point to housing being a realistic option.</i></p>	<p>Wallace Land Investments is committed to delivering new homes as part of a wider mixed use development on the site. The proposal includes a full range of housing tenures to create a socially inclusive community, including the percentage of affordable homes in line with the Council's requirements, in a sustainable location.</p>	<p>Complies</p>
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RICCARTON VILLAGE, EDINBURGH

Sustainable Transport Strategy

January 2020



COMMISSIONED BY



Sustainable Transport Strategy

EXECUTIVE SUMMARY

INTRODUCTION

Riccarton Village is a major mixed-use neighbourhood proposed on land west of Edinburgh. Wallace Land Investment's vision for Riccarton Village is to deliver a sustainable solution to Edinburgh's growing demand for housing and employment, which would be delivered over the next 20 years (2021-41) and aligns with the City of Edinburgh Council's 2030 Transport Vision and the City Mobility Plan.

This report by Modus Transport Solutions Limited and Markides Associates Limited sets out the Sustainable Transport Strategy for Riccarton Village and is based on research undertaken by Modus/Markides commissioned by Wallace Land Investments.

Riccarton Village benefits from a unique location for existing public transport infrastructure and its proximity to an existing centre of employment.

- It is the only major development proposal in West Edinburgh that can boast direct access for pedestrians/cyclists to a main line electrified train station – Curriehill Station;
- 11 bus routes serve the Riccarton/Currie area, which includes Hermiston Park and Ride;
- It is immediately adjacent to Heriot-Watt University and Research Park (which currently employs nearly 4,000 people and is expected to grow). Together with Riccarton Village's centre, there is a real opportunity to promote walking/cycling to work within and from Riccarton Village; and
- Cyclists can link with network routes 75 and 754 for sustainable travel into the City.

For Scotland to transition to a low carbon economy, major new developments should be mixed-use in nature, located next to centres of employment and where existing public transport infrastructure exists with spare capacity and room for improvement. Riccarton Village displays all these attributes.

Through joint working with public transport providers, Edinburgh Council and Transport Scotland, Riccarton Village seeks to achieve quicker and more frequent bus and train services to and from Riccarton/Curriehill and the City centre for the benefit of new and existing communities (Currie, Balerno and Juniper Green). This sustainable transport strategy sets out how Riccarton Village will increase walking, cycling and the use of public transport, whilst reducing reliance on the private vehicle. The proposed public transport improvements will not only support the delivery of Riccarton Village, but also benefit the existing communities.

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OUTCOMES

Initial estimates by Modus/Markides suggest that upon completion of Riccarton Village:

- travel by walking/cycling will increase to 30% of all day trips;
- rail patronage at Curriehill Station will increase from 70,000 trips up to 300,000 trips per annum (over 400% increase);
- all day trips made by bus/coach/rail could increase to 13%, a 20% increase on the estimated local baseline;
- 30% of all trips will be within Riccarton Village; and
- the proportion of car use will be reduced to 36% of all day trips.

Working with key stakeholders such as Lothian Buses and ScotRail, Riccarton Village would seek to improve the frequency and journey time of bus, and frequency of train services into and out of the City at peak times for the benefit of the new and existing communities.

As the provision of public transport is demand led, any significant improvements to the network and provision of services in Riccarton/Currie/Balerno/Juniper Green will require a critical mass of development to provide new passengers. Riccarton Village will provide this critical mass and catalyst to encourage public transport improvements.

DELIVERY OF THE VISION

WALKING/CYCLING

A primary objective of Riccarton Village is to create a connected community where residents can walk and cycle easily and safely to employment at the Village Centre and Heriot-Watt, and transport nodes for onward connections. Residents of Riccarton Village will enjoy:

- A maximum 12-minute walk to the Village Centre and primary school with most of Riccarton Village being well below this; and

- A maximum 10-20 minute walk or 10 minute cycle to the Curriehill Station Transport Hub, and Heriot-Watt.

Riccarton Village will achieve this through:

- The formation of dedicated walking and cycling routes within an extensive green network of paths and open spaces;
- Enhancements of routes between Curriehill Station and Heriot-Watt; and
- Cycle hire, including electric cycles, will be made available from Curriehill Station.

NEW CURRIEHILL STATION TRANSPORT HUB – INTEGRATING BUS AND RAIL

Riccarton Village will provide a new road connecting Riccarton Mains Road with Curriehill Station to facilitate the development of a new Transport Hub at Curriehill Station. The Transport Hub's vision is to:

- Extend city bus services from Heriot-Watt to a new terminus at Curriehill Station - bringing more bus services that benefit from a bus lane into/out of the City in closer proximity to the new and existing communities;
- Increase car parking (currently only 39 spaces) for Park and Ride and cycle parking provision – allowing residents of the new and existing communities to access city bound bus and train services if walking/cycling is not an option for those users;
- Integrate bus and rail services – Buses will terminate at the Transport Hub which will free up The Avenue through Heriot-Watt and provide the missing public transport link for connecting rail and bus users at Curriehill Station; and
- Increase electric vehicle charging, provide secure cycle storage and introduce cycle hire that will include electric bikes.

TRAINS

A primary objective of Riccarton Village is to increase train passenger numbers and lobby the service providers to facilitate a service every 15 minutes in the peak hours (currently 2 services per hour in peak hours). Delivery of Riccarton Village will contribute significantly to the increase in demand that is required to support a more frequent train service at Curriehill Station.

Initial passenger surveys undertaken at Curriehill Station show that even at peak times, trains are not running at full capacity (up to 81%). This spare capacity can be utilised by the first residents of Riccarton Village and over time, increased passengers could facilitate a more frequent service at Curriehill Station.

BUSES

A primary objective is to reduce bus journey times at peak times to and from Edinburgh City centre through the establishment of express city services to benefit the new and existing communities.

A further objective of Riccarton Village is to extend city bus services along a new road within Riccarton Village to connect to the new Curriehill Station Transport Hub, thus bringing more bus services that benefit from a dedicated bus lane into the city centre to the heart of Riccarton Village and within walking/cycling/short car journey of existing communities.

Initial passenger surveys undertaken at The Avenue through Heriot-Watt show that there is significant spare capacity for both boarding and alighting passengers: even on the busiest buses occupancy was less than 50%. Residents of both Riccarton Village and existing communities could utilise this capacity to make better use of these services.

Increased utilisation may enable a faster express bus service to be provided into the city centre to cut peak journey times for new and existing residents.

There may be the potential to enable a shuttle bus to operate between

Riccarton Village and Edinburgh Park and other transport modes such as the tram.

An extended bus route will bring all residents of Riccarton Village within an approximate 400m (5 minute) walking distance of a bus stop.

SUSTAINABLE VEHICLE USE

Riccarton Village will encourage efficient and responsible use of the motor vehicle, and at the same time encourage ultra-low emission vehicles. At present Riccarton's baseline for private car use is 40% of all day trips. Riccarton Village will add trips to the network as it is developed over a 20 year timeline. It will, however, be designed to facilitate and encourage the use of public transport. High density housing positioned in the Village Centre and closest to Curriehill Station and Heriot-Watt will seek to maximise internal trips, encourage public transport use and reduce the need for vehicle use for everyday journeys to work.

Car use and technology is changing rapidly and the delivery of Riccarton Village shall align with the Scottish Government's and Edinburgh Council's transition to a low carbon economy. Riccarton Village will encourage efficient and responsible vehicle use by:

- Incorporating electric vehicle charging points and infrastructure for the future;
- Providing car club locations within Riccarton Village;
- Promoting car sharing – through the Riccarton Village Travel Plan; and
- Assisting logistics and freight management – the Village Centre will include facilities such as 'click & collect'.

The sustainable transport strategy for Riccarton Village will be developed in close conjunction with Edinburgh City Council, Heriot-Watt University, local community groups and public transport operators.

1. RICCARTON VILLAGE

This report firstly describes the location and outline of the Riccarton Village proposals. It then assesses the existing situation and the future proposals for Riccarton Village for the different modes of transport – starting with walking and cycling, and then covering buses, rail and the car.

LOCATION

Riccarton Village is proposed in a unique and strategic location adjacent to the Heriot-Watt University and Research Park and the existing residential area of Currie. Riccarton Village also benefits from its proximity to Curriehill Station, nearby high-frequency bus services and the Hermiston Park and Ride facility. The location also has excellent local and strategic highway connections. The development location is shown in Figure 1.1.

DEVELOPMENT

It is intended that Riccarton Village will be developed over a 20 year time period with estimated completion by 2041. It is expected to deliver more than £1 billion of construction investment over 20 years through the provision of some 3,600 new homes (including affordable homes); the major new Curriehill Station Transport Hub; a new mixed-use Village Centre; a new primary school; and a large new greenspace called Riccarton Parklands.

An indicative timeline for the Riccarton Village Centre development is provided in Figure 1.2 (Appendix).

LOCAL FACILITIES

The new Riccarton Village Centre will be located in the approximate centre of the site and adjacent to Heriot-Watt campus. The Village Centre will comprise retail/commercial property and community uses such as a Primary School, together with high density housing, including affordable.

The Village Centre will offer new residents excellent scope for access to local services within an easy walk of their home, and supplement existing services within the local area, including for students living at Heriot-Watt campus, many of whom will not have access to a car.



Figure 1.1: Riccarton Village

2. MASTERPLAN



3. THE WALKING AND CYCLING VISION

One of the main objectives is to make active transport more convenient and safer for users, as these factors have a large impact on the mobility choices made by communities. For short journeys, active modes are already key - travel data for Scotland suggests that some 52% of all trips under 2km are undertaken on foot, with a further 2% undertaken by bicycle .

Active modes promote healthy 'whole-life' practices and support the environment by limiting pollution at its source and increasing road capacity. Moreover, places with excellent walking and cycling infrastructure benefit economically. Not only is it cheaper for the user, and reduces costs of maintenance, healthcare and repairing environmental damage, it also encourages local economic activity. In addition, there is a social and psychological benefit - having access to public spaces and green areas where people can meet and mingle reduces social loneliness, limits anti-social behaviour and has been shown to positively affect our mental and emotional health.

EXISTING WALKING AND CYCLING PROVISION

There is an existing network of pedestrian and cycle routes which could benefit from more connections and enhancements. These provide north-south routes between the Heriot-Watt campus and Currie; east-west between Balerno and Currie on the banks of the Water of Leith; north-south from the western edge of Riccarton to Balerno; and west from Riccarton towards Kirknewton. The National Cycle Network routes (NCN 754/75) are situated just to the north and

south of Riccarton, enabling leisure or commuting traffic-free cycling into the heart of Edinburgh. These are shown in Figure 3.1 (Appendix).

Many sections of these routes are on-street or are surfaced; however, other sections, such as some of the core paths, are simply local roads, and do not have infrastructure such as signage, footways, or cycle lanes. These include Curriehill Road, which is on the main desire line between Heriot-Watt and Currie, but is an unlit, long, straight road subject to the national speed limit of 60mph.

Figure 3.2 (p.9) provides a view of Curriehill Road both during the day and at night, showing the narrow footway and absence of lighting.

Whilst the existing level of traffic along Curriehill Road is low, it is nevertheless not ideal for pedestrians or cyclists, particularly in the hours of darkness. The length of the straight section encourages speeding, and whilst forward visibility is good, pedestrians and cyclists are forced to travel in the carriageway.

The accessibility by cycle on the existing road network has been mapped at a high level to give an indication of the possible reach from the site by this mode. The results are included in Figure 3.3 (Appendix), and shows that Curriehill Station, all of the Heriot-Watt campus, and most of Currie are all within a 15 minute cycle.

RICCARTON VILLAGE'S HEALTHY & ACTIVE TRAVEL OBJECTIVES

- Primary objective to create a connected community where residents can walk and cycle easily and safely to employment at the Village Centre and Heriot-Watt, and transport nodes for onward connections.
- A Village that is walkable, with safer routes to and from public transport nodes and Heriot-Watt.
- A Village that enhances West Edinburgh's Green Network with off-road routes and paths to encourage active travel and recreation.
- Enhancing secure parking for cycles at the Village Centre and Curriehill Station.
- Provision of of bike hire, including electric, at the new Curriehill Station Transport Hub.

3. THE WALKING AND CYCLING VISION CONT.

POTENTIAL WALKING AND CYCLING IMPROVEMENTS

There are several proposed new pedestrian and/or cycle paths proposed as part of the Local Plan allocations and which are shown in red on Figure 3.1 (Appendix). These are intended to link the new developments at Balerno with the existing cycle network, and additionally create a new diagonal link between two sections of NCN 75 and provide a more direct off-road route between Balerno and Kirknewton.

The exact design and specification of these new routes, and the timescale for their delivery, has not yet been determined. Crucially, however, it includes a new segregated link along the northernmost part of Curriehill Road, and part of the A71, which will improve cycle and foot access on the western side of Heriot-Watt, and also between Riccarton Village and the Hermiston Park & Ride.

Riccarton Village will focus on making walking and cycling attractive and easy.

All new roads through the site will have an appropriate speed limit for its village character, thus reducing vehicle speeds in the area making it safer for pedestrians and cyclists to move around in and through the village.

There will be a core network of segregated walk/cycle facilities linking the different parts of Riccarton Village and its centre, Curriehill Station, Heriot-Watt, and the adjacent communities of Currie, Balerno, and Juniper Green and an attractive recreational cycle network through Riccarton Parklands, as shown in Figure 3.4 (Appendix).

Edinburgh Cycle Hire could be made available from Curriehill Station, allowing residents and visitors to the area to easily move around the extensive open space and green network that the site offers including Riccarton Parklands. Electric cycle hire would also be provided subject to the appropriate charging infrastructure being provided and a hire partnership being set up with City of Edinburgh Council.

The Village Centre and the new Curriehill Station Transport Hub will also increase the provision of secure cycle storage.

The initial Riccarton Village masterplan on p.6 shows an indicative internal transport link network within Riccarton Village. It will include new internal roads which will be designed for buses, new walk and cycle facilities, and a new Curriehill Station Transport Hub to facilitate interchange between rail and bus, with enhanced drop-off facilities for rail users.

The commonly used average walking speed is 80m per minute, meaning it takes 5 minutes to walk 400m and 10 minutes to walk 800m. Average cycling speed is normally some 15 kilometres per hour, meaning that in 10 minutes some 2.4 km can be covered.

There are various guidelines for acceptable walking distances – one useful set of research used is the National Travel Survey data (including Scotland) to determine the average and 85th percentile distances walked for various trip purposes. For locations outside London, these are shown in Table 3.1 :

Purpose	Mean	85 th Percentile
Walking as main mode	1,150m	1,950m
Walking to a bus	580m	800m
Walking to a railway station 3	1,010m	1,610m
Shopping, Education, Personal business	1,000m	1,600m

Table 3.1 - Guideline Walking Distances

Based on these estimates, Figure 3.5 (Appendix) shows an approximate 1 km (12 minutes) and 1.6km (24 minutes) walking catchments from the centre of Riccarton Village. A 15-minute cycling catchment (2400m) is shown on Figure 3.3 (Appendix).

This shows that:

- Nearly all of the residents of Riccarton Village will be within an approximate 12-minute walk of each other, the Village Centre, and the primary school – a bus route will be within an approximate 400m (5 minutes' walk) for all residents;

3. THE WALKING AND CYCLING VISION CONT.

- Curriehill Station will be well within a 20-minute walk and 10-minute cycle for all residents – most residents would be within a 10-minute walk;
- Heriot-Watt University will be within a 20-minute walk and it, and Heriot-Watt Research Park, will be within a 10-minute cycle; and
- Much of Currie will be within a 20-minute walk and 10-minute cycle of Riccarton Village.

These catchments are approximate and show that the new neighbourhood will be highly accessible on foot and by bicycle. This will mean more local journeys will be possible, particularly to Curriehill Station, and Heriot-Watt University and Research Park. This will not only reduce the need to travel but encourage much of it by walking, cycling and bus services.



Figure 3.2: Curriehill Road – narrow footway, unlit, poor pedestrian/cycle links to Curriehill Station and Currie

4. CURRIEHILL STATION

THE NEW TRANSPORT HUB

Riccarton Village will include a new Transport Hub at Curriehill Station, creating a transport interchange between bus and rail that is currently lacking. Figure 4.1 below provides an artist's impression of the Transport Hub located to the north west of Curriehill Station, showing the pedestrian, cycling, bus and train connections/linkages. The Transport Hub seeks to provide a direct interchange between train and city bus services via potential route extensions from Heriot-Watt and Curriehill Station. This will allow buses to terminate at the Transport Hub, which will reduce bus stacking at The Avenue through Heriot-Watt. This would also bring more city bus services that benefit from a bus lane into/out of the City centre within closer proximity to the new residents at Riccarton Village and the existing communities. The Transport Hub could also increase car parking at Curriehill Station, which would include electric vehicle charging facilities. This would allow more travellers from the new and existing communities to park and ride at Curriehill Station to encourage greater use of sustainable transport modes (cycle/bus/train) into the City. The Transport Hub will have enhanced cycle parking and cycle hire facility with electric bikes. It will therefore establish a node where residents and visitors are encouraged to use bikes to explore the new and enhanced green spaces that will be established at Riccarton Village.

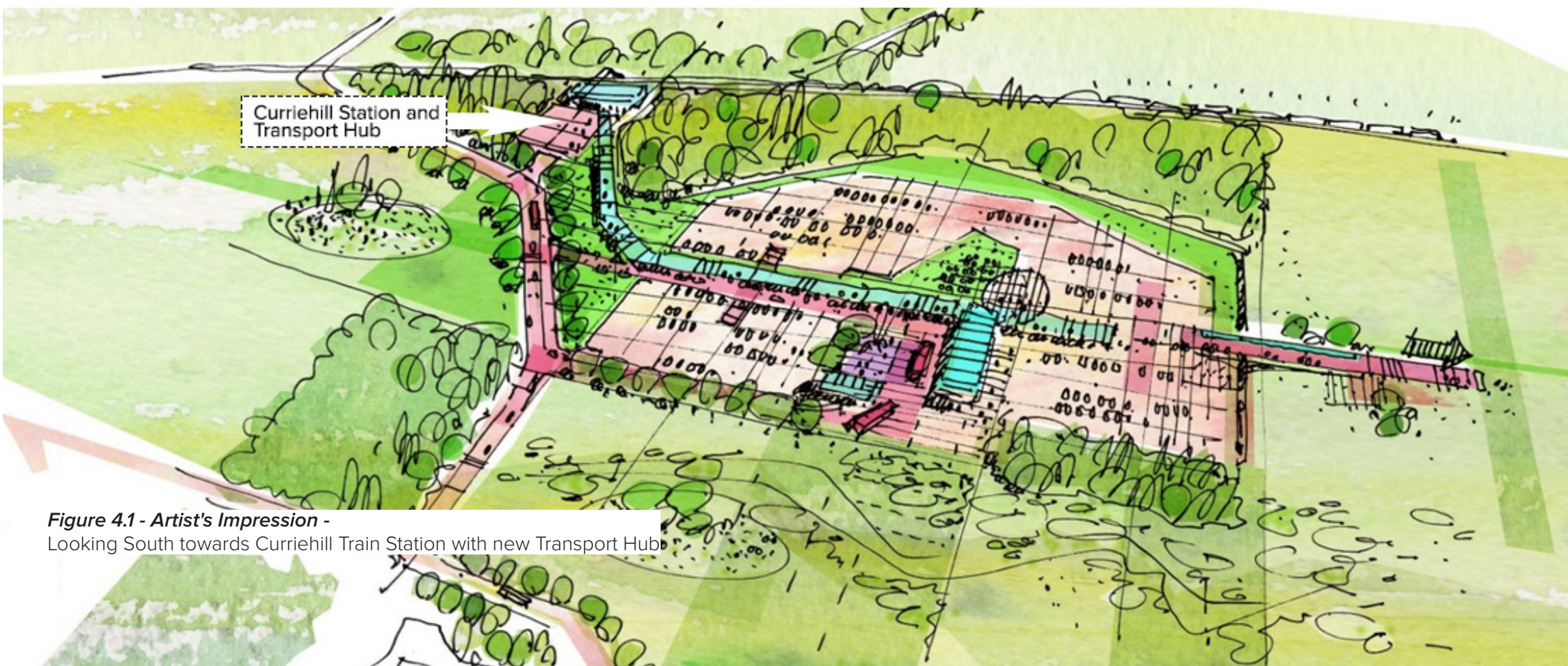


Figure 4.1 - Artist's Impression -
Looking South towards Curriehill Train Station with new Transport Hub

5. THE BUS VISION

RICCARTON VILLAGE'S OBJECTIVE FOR EXCELLENT BUS SERVICES

- Primary objective to reduce bus journey times at peak times to and from Edinburgh City centre through the establishment of express city services to benefit the new and existing communities.
- Extend existing bus routes into Riccarton Village via new and upgraded roads, providing residents easy access and bringing more frequent services closer to Currie, Balerno and Juniper Green residents.
- A new Curriehill Station Transport Hub would provide the missing public transport link between Curriehill Station and Heriot-Watt.
- A new road from the Curriehill Station Transport Hub to Riccarton Mains Road will provide a quick bus connection between the Curriehill Station, Heriot-Watt and Hermiston Park and Ride.
- Internal spine roads in Riccarton Village would bring a bus route within easy walking distance of all residents in the village.
- The scale of new development at Riccarton Village will provide many more passengers to support more frequent services and new services. These will probably require early subsidy from Riccarton Village before they become commercially viable.
- Potential for a shuttle bus between Curriehill Station Transport Hub and Edinburgh Park to enable a connection with the Edinburgh tram for connections to the City centre and Edinburgh Airport.
- Management of the bus routes and roads into the City centre.

EXISTING BUS SERVICES (TABLE 5.1 ON P. 12)

Current bus services in the surrounding area are in three main groups as follows:

Routes serving the A71 Calder Road

This group includes “country” routes which link Edinburgh and Livingston. All routes serve Hermiston Walk for Heriot-Watt, but the majority do not serve Hermiston Park and Ride. Main services are operated by Lothian Country Buses and First West Lothian, with additional less frequent services provided by Blue Bus and E&M Horsburgh.

Routes serving and terminating on Heriot-Watt campus

This group includes four “city” routes which cross Edinburgh City centre (25, 34, 35, 45), plus a route to Queensferry (63) (Figure 5.1 on p. 14). Two routes (45, 63) serve the Heriot-Watt Research Park on the north side of the campus, and all routes serve Hermiston Park and Ride. Route 45 runs past the eastern end of Riccarton Village along Riccarton Mains Road and then continues to Edinburgh City centre via the southern end of Curriehill Road and Lanark Road.

All routes are operated by Lothian Buses.

Routes serving the A70 Lanark Road

The main service along the Lanark Road is “city” route 44 which serves Balerno and crosses Edinburgh City centre. Route 45 joins Lanark Road at Curriehill Road.

NIGHT SERVICES

Additional night services are also available, with the N25 operating every 30 minutes between Heriot-Watt and the City centre, the N34 running late night and early morning services, the N23 offering two nightly journeys at weekends and the N44 offering hourly services also at weekends, whilst the N28 offers hourly journeys until approximately 03:30.

EXISTING BUS USAGE

Initial surveys of bus boarders, alighters and passengers on departing buses were carried out at The Avenue, Heriot-Watt on Thursday 19th September 2019 between 07:00 and 19:00- the results are summarised in Table 5.2 (p 12). Service 25 (to/from City centre/Restalrig) at a 10-minute frequency carries some 70% of passengers, followed by services 34 (13%) and 35 (14%).

5. THE BUS VISION CONT.

No.	Route	Frequency		
		Weekday	Saturday	Sunday
Routes serving and terminating on the Heriot-Watt University Campus				
25	HWU Campus – City Centre - Restalrig	Every 10 mins ☉ Every 15 mins ☺	Every 12 mins ☉ Every 15 mins ☺	Every 12 mins ☉ Every 15 mins ☺
34	Riccarton – City Centre – Ocean Terminal	Every 15 mins ☉ Every 30 mins ☺	Every 15 mins ☉ Every 30 mins ☺	Every 20 mins ☉ Every 30 mins ☺
35	Riccarton – Holyrood – Ocean Terminal	Every 15 mins ☉ Every 30 mins ☺	Every 15 mins ☉ Every 30 mins ☺	Every 30 mins ☉ Every 30 mins ☺
45	Riccarton – Tollcross – Queen Margaret University	Every 30 mins ☉ Last bus 20:19	No service at weekend	No service at weekend
63	Riccarton – Queensferry	Every 40 mins ☉ Last bus 19:00	Hourly ☉ Last bus 19:00	Hourly ☉ Last bus 19:00
Routes serving the A71 Calder Road				
23	Deans – Livingstone-Hermiston – Edinburgh	Every 30 mins ☉ Every 30 mins ☺	Every 30 mins ☉ Every 30 mins ☺	Every 30 mins ☉ Every 30 mins ☺
X23	Broxburn – Livingstone – Hermiston – Edinburgh	Every 30 mins ☉ No service ☺	Every 30 mins ☉ No service ☺	No Service
27	Livingstone – Hermiston – Edinburgh	One return journey ☉	No Service	No Service
X27/X28	Bathgate – Livingstone – Hermiston – Edinburgh	Every 30 mins ☉ Every 30 mins ☺	Every 30 mins ☉ Every 30 mins ☺	Every 30 mins ☉ Every 30 mins ☺
40/X40	St. Johns Hospital – Hermiston P&R – Edinburgh Royal Infirmary	Hourly ☉ Hourly – last service 20:00 ☺	No Service	No Service
Routes serving the A70 Lanark Road				
44	Balerno – Currie – City Centre – Whitecraig	Every 10 mins ☉ Every 30 mins ☺	Every 12 mins ☉ Every 30 mins ☺	Every 20 mins ☉ Every 30 mins ☺

Service	25	34	35	45	Grand Total
Passengers Getting Off Daily	367	48	58	7	480
Passengers Getting On Daily	123	45	39	14	221
Total Daily	490	93	97	21	701
% of total passengers	70%	13%	14%	3%	100%

Table 5.2 - Bus Survey Results

In respect of other information from the survey:

- In the morning peak (data from 07:00-10:00), the majority of bus users were alighting from arriving buses; alighting passengers peaked between 08:30 and 09:15; the busiest bus arrived at 09:00 with 30 passengers alighting; and many buses departed empty, with the busiest at 0830 with 10 passengers boarding. The average bus occupancy on departure over the period was 1 passenger;
- In the evening peak (data from 16:00 -19:00, the majority of bus users were boarding departing buses; boarding passengers were more evenly spread than in the morning; the busiest bus departed at 17:13 with 16 passengers boarding and several buses arrived empty, with the busiest at 16:50 with 10 passengers alighting. The average bus occupancy on departure over the period was 4 passengers; and
- During both morning and evening peaks, the observed layover times were relatively short, with some buses departing as soon as passengers had alighted and boarded

The conclusion from the surveys was that there is significant spare capacity for both boarding and alighting passengers on buses arriving and departing at Heriot-Watt. Even on the busiest buses occupancy was less than 50% and on many it was far below this. This provides significant opportunities to utilise these services better and to link Riccarton Village with extensions of these services. The services clearly have capacity to cater for departing passengers from Riccarton Village in the morning and returning passengers in the evening.

Left: Table 5.1 Local Bus Services

5. THE BUS VISION CONT.

POTENTIAL BUS ENHANCEMENTS

The future road network within the development will retain road access via Curriehill Road and provide a new access from Riccarton Mains Road, both of which would link to a new spine road within Riccarton Village capable of supporting buses.

Furthermore, to provide improved bus connectivity, two new possible connections have been considered as follows:

- A connection from Curriehill Road to the Heriot-Watt campus via Boundary Road North. This connection is currently gated and unavailable for through traffic, but could be upgraded and used for bus access; and
- A connection from Curriehill Road to the Heriot-Watt campus via the link road adjacent to Christina Miller Hall. This connection is currently restricted to traffic entering the campus, but could be upgraded and made available for bus access in both directions.

Within Riccarton Village itself, indicative bus routes are planned to ensure the Village Centre is well served by buses, and all residents are within approximately 400m (5 minutes walk) of a bus-stop. There are also proposed bus links to Curriehill Station via the new Curriehill Station Transport Hub.

There are three broad ways in which buses can serve Riccarton Village:

1. New local and feeder services – these may be useful to connect with key local destinations such as Heriot-Watt and Curriehill Station but may also require interchange; they are likely to be of limited applicability to achieve the desired bus provision at Riccarton Village.

2. New through services – there is some potential for these given the scale of new development proposed, and this can be considered further, but given that the nearby bus service network has been in place for a considerable periods of time, and is part of the wider integrated network developed over many years by Lothian Buses, it seems more appropriate to build on this existing network rather than introduce completely new longer-distance services.

3. Extension of existing services – given the number of services currently terminating nearby at Heriot-Watt, and the spare capacity on these services, this option appears to offer the best potential for future bus services.

There will be a core network of bus routes within Riccarton Village, providing bus access for all new residents and workers. Two potential route extension options are shown in Figure 5.2 (p. 15) and described below.

Option 1 relates to the opportunity to extending routes 25 (every 10 minutes) and 35 (every 15 minutes) using the proposed new link road between Riccarton Mains Road and Curriehill Road, just to the south of Heriot-Watt. Services would continue to serve Heriot-Watt but not terminate there, instead using Riccarton Mains Road and the new link road to reach Curriehill Station and Riccarton Village, terminating there instead.

Alternatively, **Option 2** could extend routes 25 and 35 via the western connections from Heriot-Watt to Curriehill Road.

An extension would potentially add between 1 and 4 buses to the Peak Vehicle Requirement (PVR -The number of vehicles required to operate the highest frequency service on a route), depending on:

- Which service was extended;
- Whether all or some (e.g. every alternate bus) of the service frequency was extended; and
- The length of the extension.

The extension of Route 25 and Route 35 is the preferred option for the Riccarton Village in the medium to long-term, as it provides links to Curriehill Station, Heriot-Watt and wider Edinburgh. The extension of these routes, which benefit from a bus lane into and out of the City centre, would serve the new community at Riccarton Village. Furthermore, these city services would be brought closer to the existing communities to provide more route options beyond the 45 which does not benefit from a bus lane.

5. THE BUS VISION CONT.

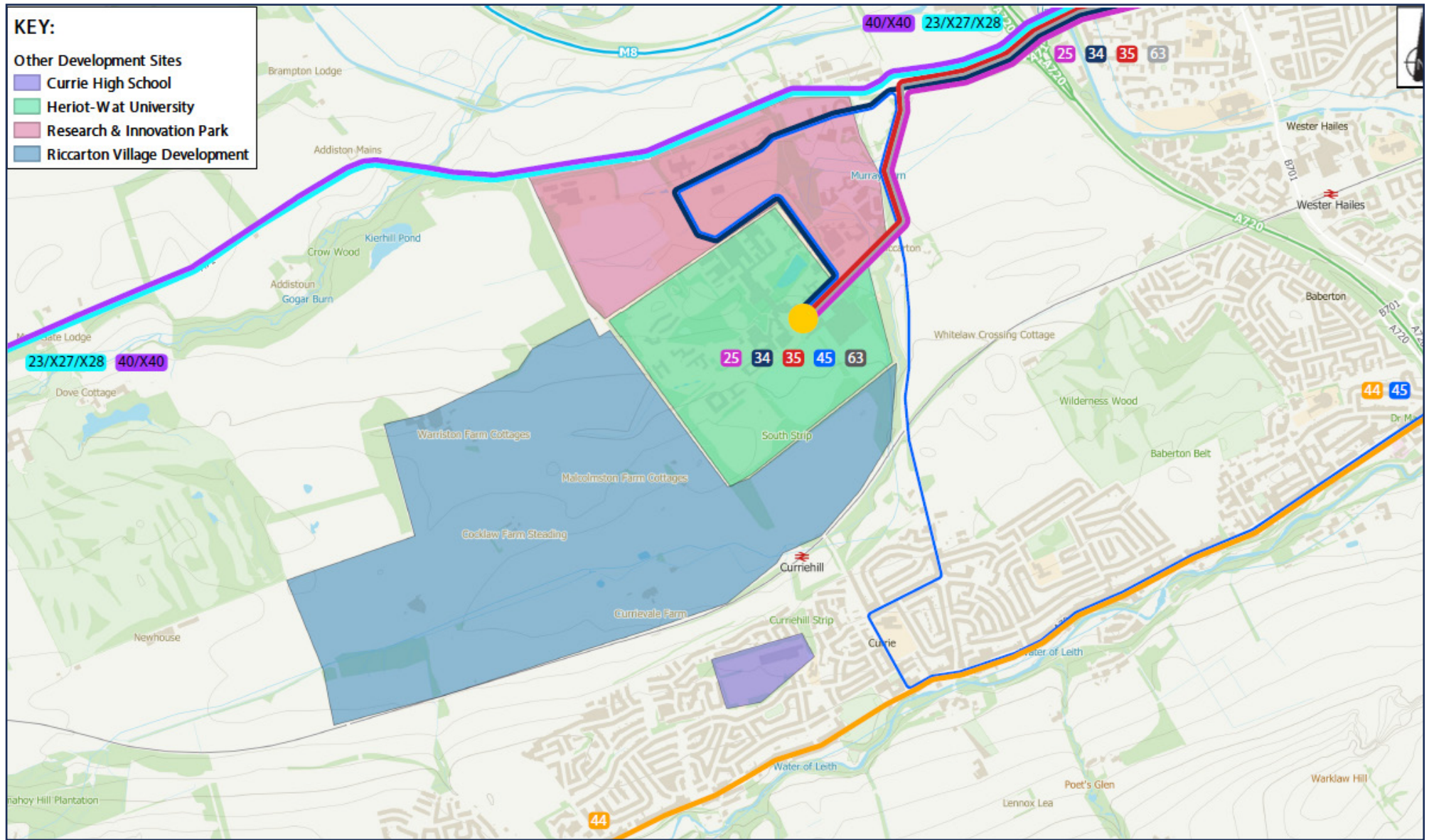


Figure 5.1: Existing Bus Services

5. THE BUS VISION CONT.

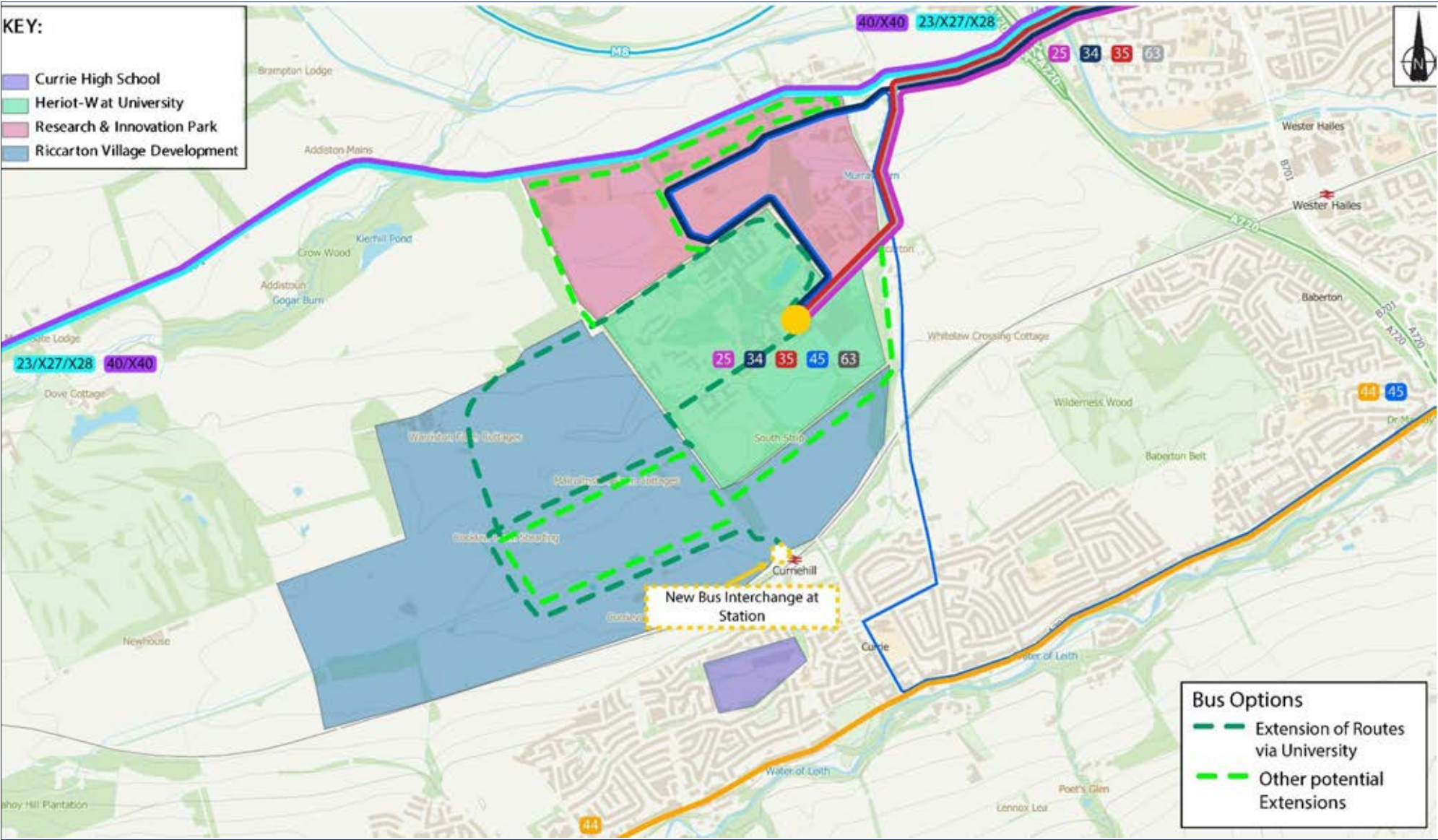


Figure 5.2: Potential Bus Options

5. THE BUS VISION CONT.

In addition, a shuttle bus could operate between the Curriehill Station Transport Hub and Edinburgh Park and other transport modes such as the tram.

The bus proposals are likely to require subsidy, particularly in the early years. However, on an annual basis, initial forecasts are that Riccarton Village could generate up to 1 million bus trips annually, which should make it commercially viable to support the addition of between four and six buses to the overall route network in the vicinity of Riccarton Village.

Based on passenger loadings at the current terminus on the Heriot-Watt campus, there would appear to be ample capacity for forecast peak hour demand to and from Riccarton Village either by interchange or extension of existing services; particularly as this would predominantly be in the opposite direction to current peak flows. Further analysis will be required at a later stage of the bus flows at the Hermiston Park and Ride, but given that additional buses will be provided, capacity should be available between the different services.

It is unlikely that any significant improvements to the bus network and provision of services in Riccarton/Currie will occur without a critical mass of development to provide new passengers. Riccarton Village will provide this critical mass and catalyst to encourage public transport improvements. Working with key stakeholders such as Lothian Buses, Riccarton Village would seek to improve the frequency, and potentially journey times (e.g. express services), of bus services into and out of Edinburgh City at peak times for the benefit of the new and existing communities.

Riccarton Village is uniquely positioned in the West of Edinburgh to be able to take advantage of an existing bus network serving the area, and to improve on this, adding bus capacity and routes to serve Riccarton Village while at the same time providing much better links between Curriehill Station and Heriot-Watt. These new bus routes would also increase the bus services available to existing communities.

SUMMARY -

Riccarton Village is uniquely positioned in the West of Edinburgh to take advantage of an extensive bus network, which has existing capacity to serve the new development. However, improvements could be made to better serve the new and existing communities.

Through development of a new spine road at Riccarton to link with the new Curriehill Station Transport Hub, Edinburgh City bus services could be extended to terminate at Curriehill Station. This would diversify the bus services available to the existing communities and further car parking at the station would allow people not able to walk/cycle to park and ride.

With additional demand brought about by the development and infrastructure improvements, the objective is to establish express bus services to speed up journey times into Edinburgh.

6. THE RAIL VISION

THE POTENTIAL FOR RAIL

Riccarton Village is located immediately adjacent to Curriehill Station on a key line between Edinburgh and Glasgow. This provides a unique opportunity in the west of Edinburgh for pedestrians, cyclists and car users to access a main line train station at the heart of a proposed development.

The Edinburgh to Glasgow train line has been electrified, which increases its efficiency and reliability, and existing patronage shows year-on-year increases that already suggests that services to Curriehill Station could be reviewed with an aspiration to increase them. Riccarton Village will add significantly to rail patronage at Curriehill Station and improve connections between Curriehill Station and Heriot-Watt. At an appropriate stage in the development of Riccarton Village, Wallace Land Investments will engage with Network Rail and ScotRail to ensure that future rail investment and timetable changes take into account the development proposals at Riccarton Village and ensure that future demand can be met in an appropriate and sustainable manner.

Finally, there is the potential for increased rail services to and from Curriehill Station, and over time to increase its overall capacity.

EXISTING RAIL FACILITIES/SERVICES

Curriehill Station is located on the Shotts Line, which forms part of Network Rail's (NwR's) Edinburgh, Haymarket East Junction to Carstairs South Junction (via Shotts) Route (Route Code ECM2). The Up direction is towards Carstairs South Junction, and the Down direction is towards Edinburgh. Figure 6.1 (p. 18) shows Curriehill Station in the context of the wider passenger rail network.

Curriehill Station consists of two platforms, linked by a ramped footbridge. A small glazed waiting shelter and seating is provided on each platform, and in addition there is a station car park marked with 39 car park spaces, including two dedicated disabled parking spaces. The station is unstaffed, but passenger information systems, help points, and CCTV are provided.

The platforms are sufficient for trains formed of four 23 metre carriages. The line is also electrified, which is a significant benefit, being the most efficient system, and allows for increased capacity with 203 seats per train.

Trains are scheduled to take between 16 and 30 minutes to reach Edinburgh in the morning peak hour, and most take between 70 and 75 minutes to reach Glasgow Central. The service is hourly, but with extra peak services, providing two trains per hour to Edinburgh in the AM peak and to Curriehill Station in the PM peak. The journey time to central Edinburgh by rail from Curriehill Station to Edinburgh is an average of 21 minutes in the morning peak between 7am and 9am; while the 25 bus service from Heriot-Watt takes some 42 minutes- this comparison is only the public transport journey time, and there will be walk and interchange time as well, but it shows clearly that the rail journey time makes this very attractive as a travel option.

MAXIMISING RAIL USE AT CURRIEHILL STATION

- Primary objective to increase passenger demand at Curriehill Station to enable a more frequent service stopping every 15 minutes at Curriehill Station during peak times to benefit the new and existing communities.
- As a significant new development in West Edinburgh, Riccarton Village uniquely benefits from direct walk, cycle and road access to an immediately adjacent main line train station – Curriehill Station.
- Develop high density homes near to Curriehill Station to create a mass transit oriented development.
- Create Curriehill Station Transport Hub to provide a well-connected and high-quality car, bus and rail interchange within easy walk or cycle of Riccarton Village and adjacent communities.
- Provide an enhanced park and ride facility at Curriehill Station Transport Hub to encourage more users to take the train into Edinburgh/Glasgow.
- Provide new safe routes to Curriehill Station for pedestrian and cyclists to and from Riccarton Village and Heriot-Watt.

6. THE RAIL VISION CONT.

INFORMATION OBTAINED FROM SCOTRAIL SERVICE TIMES

The first Glasgow train departs at 06:11h (07:29h arrival at Glasgow Central), and the first Edinburgh train departs at 06:57h. The last departure from Edinburgh is at 23:13h, and from Glasgow Central 23:03h. In the opposing direction it is possible to arrive at Curriehill Station at 06:11h from Edinburgh, and at 07:28h from Glasgow Central. ScotRail have recently announced the December 2019 timetables changes which will see additional carriages provided on the 07:54 from Curriehill Station to Edinburgh. This will improve capacity for this service and mean additional seats from Curriehill Station.

All trains using Curriehill Station are operated by Scotrail, although numerous other trains operated by other franchisees pass through the station: these are operated by (amongst others) Cross Country, Avanti West Coast, and the TransPennine Express (FirstGroup).

Office of Road and Rail data for station usage (combined total of those boarding and those alighting at Curriehill Station) have been extracted along with the percentage change year on year, and the results are shown in Figure 6.2. The Figure clearly shows that the current trend is one of increasing year-on-year traffic growth from the station, averaging 1.7% per annum over the past five years.

In terms of the type of passenger, the data for 2015-2016 indicates the split as shown in Figure 6.3 (Appendix).

The statistics indicate that around a quarter of all users are commuters, and there are a high proportion of full-fare passengers, which is likely to increase the attractiveness of stopping at Curriehill Station for operators. It is probable that the presence of Heriot-Watt is at least partly responsible for the high number of full-fare ticket sales.

All of the above statistics suggest that the significant increase in use of Curriehill Station over the past ten years warrants re-examination of the service levels offered, even without the proposed Riccarton Village development.

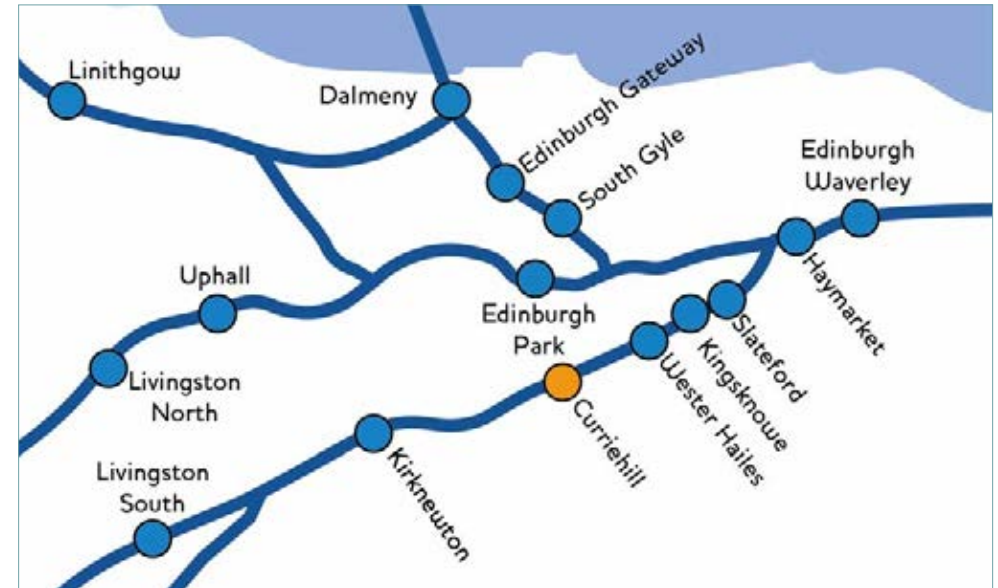


Figure 6.1 - Curriehill Station Location on Edinburgh's Passenger Rail Network



Figure 6.2 - Rail Patronage – Curriehill Station

6. THE RAIL VISION CONT.

EXISTING CURRIEHILL STATION USAGE

A passenger survey was also undertaken of boarders and alighters at Curriehill Station on Tuesday 17th September 2019. The results showed that:

- There was a total of 69 boarders on the trains heading into Edinburgh between 7am and 9am, with 23 alighters;
- There was a total of 19 boarders on trains heading in the Glasgow/Carstairs direction between 7am and 9am, with no alighters;
- For evening peak trains, there were a total of 6 boarders heading in the Edinburgh direction between 5pm and 7pm with 54 alighters from this direction;
- There was a total of 9 boarders in the Glasgow/Carstairs direction between 5pm and 7pm, with no alighters from this direction; and
- Estimates of train occupancy passing through the station were between 24% and 81% (the latter being the 08:29 to Edinburgh).

The indications are therefore that there is enough capacity on the trains passing through Curriehill Station to accommodate initial demand from Riccarton Village; more detailed analysis of loads elsewhere on the network will be needed at a later stage.

POTENTIAL RAIL ENHANCEMENTS

The primary objective of Riccarton Village is to increase train passenger numbers and lobby the service provider to facilitate a service every 15 minutes in the peak hours. Initial estimates indicate that rail patronage could increase from some 70,000 to some 140,000 to 300,000 (over 400% increase) per annum as a result of Riccarton Village. There should also be some additional patronage that can be attracted to Heriot-Watt with better walk and cycle facilities, a new bus connection to Heriot-Watt and an improved rail service. Therefore, the delivery of Riccarton Village will contribute significantly to the increase in demand that is required to facilitate the consideration of a more frequent train service at Curriehill Station by the service providers.

Furthermore, outside of peak hours there is one train an hour stopping at Curriehill Station, generally the slower stopping service. There is clear potential to increase the service from one to two per hour stopping at Curriehill Station for the whole day.

In addition, stopping more semi-fast services would reduce some 25 mins off the journey to Glasgow, which should generate further demand – reducing a 70-75 min journey down to 45-50 mins is a significant change. Markides Associates initial analysis has indicated that, subject to providing a satisfactory business case, there should be few technical changes required to achieve this improvement in service.

Demand driven by Riccarton Village, together with increased demand from existing communities due to a better service at Curriehill Station would lead to station enhancements such as:

- Further integrating the Curriehill Station Transport Hub with Curriehill Station, including covered access between the two;
- More cycle parking;
- An Edinburgh Cycle Hire facility;
- Increasing the size of the car park (Park and Ride) with electric vehicle charging points;
- Installation of ticket machines (none provided at present); and
- Provision of additional seating on platforms.

In the longer term, if required, there is potential to extend the platform length, but this is not required for the currently envisaged service.

There will be significant opportunities to market rail use to Riccarton Village residents and encourage new users to/from Currie and Heriot-Watt, for both peak and off-peak journeys. It is increasingly difficult to travel by car to central Edinburgh and the train offers a fast, sustainable alternative. Riccarton Village would develop high density homes near to Curriehill Station to encourage a transit-oriented development, utilising and enhancing existing infrastructure.

7. SUSTAINABLE VEHICLE USE

Encourage efficient and responsible use of the motor vehicle, and at the same time encourage ultra-low emission vehicles.

This is an initial vision document and the transport proposals will be the subject of further study, stakeholder and public consultation.

BACKGROUND

Car use is changing. There is growing evidence that car ownership amongst the younger generation (and in particular those with access to good public transport, walking and cycling), is reducing. New technology and approaches to car use are enabling many more ride sharing and car sharing options. Given that a car is parked for 95% of its time, there are economic reasons why flexible rental or sharing is becoming more popular, particularly for some market segments. Vehicles are also becoming more efficient: there is a rapid trend towards Ultra-Low Emission Vehicles (ULEVs). Riccarton Village aims to encourage sustainable use of the private car and highlight the potential of ULEVs.

ELECTRIC VEHICLE CHARGING

New development provides the best opportunity to accelerate the scale of provision for electric vehicles. Riccarton Village will meet the Edinburgh Design Guidance (amended October 2017) to provide one of every six spaces with a fully connected and ready to use electric vehicle charging point (where there are 10 or more spaces) and for individual dwellings with a driveway or garage, provision will be made for infrastructure to enable simple installation and activation of a charge point. Technology is advancing rapidly, and this will need to be reviewed over time.

CAR CLUB

Edinburgh has an established car club operation (Enterprise is the current operator) which lets motorists in Edinburgh hire vehicles in the short term on a pay as you go basis. There is a network of more than 130 vehicles across the City which range from small city cars and estate cars to 7 seat cars, vans and electric vehicles. Use of the cars also allows free parking in most on-street parking bays in Edinburgh.

There are currently car club locations in Currie and Juniper Green close to Riccarton, and this will be extended to the new Riccarton Village neighbourhood.

CAR SHARING

Car sharing is another increasingly popular way of reducing unnecessary car travel. Organisations such as Tripshare Edinburgh help motorists share journeys and reduce travel costs. Locations or employers such as Heriot-Watt, Edinburgh Park, the University of Edinburgh, and City of Edinburgh Council have hundreds of members, with thousands in total.

The Riccarton Village Travel Plan will encourage residents and employees to participate in car sharing.

LOGISTICS AND FREIGHT MANAGEMENT

Riccarton Village is residential led, but there will be opportunities to reduce freight and logistics trips at all land uses.

For residential uses, there will be opportunities to install 'click and collect' equipment at convenient locations, enabling logistics providers to leave parcels in one location for residents. The Travel Plan will also investigate opportunities to involve local retailers in measures to amalgamate local deliveries such as on-line food shops.

For the commercial elements of Riccarton Village, particularly in the Village Centre, the Travel Plan will work with businesses to investigate freight management and consolidation opportunities.

8. FUTURE TRAVEL BEHAVIOUR

GENERAL

Estimates have been derived of existing travel modal share in the Currie area through analysis of various data sources, including personal travel by time period and for different journey purposes. These have then been adjusted for a fully developed Riccarton Village based on estimates of change due to the nature and type of development and the transport measures proposed.

BASELINE MODAL SHARE BASED ON CURRENT TRAVEL BEHAVIOUR

In order to estimate the likely mode share at Riccarton Village, a starting point is the baseline mode share for Currie from the 2011 census for the journey to work, information on journeys for education in Edinburgh and national trip database (TEMPro) information on all day mode shares for the area. The baseline mode share in Currie (EH14 5) for different journey purposes and all day is shown in Table 8.1.

Mode	Journey to work only	Educational journeys only ⁵	All day, all journey purposes(TEMPro)
Walk	6%	49%	24%
Cycle	4%	12%	2%
Car driver	64%	0%	40%
Car passenger	4%	30%	22%
Bus/coach/rail	21%	8%	11%
Other	1%	1%	1%
Total	100%	100%	100%

Table 8.1 - Mode share baselines – Currie/Edinburgh

To estimate the baseline mode share for the different time periods, the information for individual journey purposes in that time period needs to be combined. To assist this, the TEMPro data also provides estimates of the proportion of trips for different journey purposes at different times of day, as shown in Table 8.2. In the morning peak, around 32% of all journeys are made for work, with 41% for education and the rest for other purposes. Making a simplifying assumption that 50% of morning peak journeys will have the same mode share as work trips with the other 50% the same as education, an overall estimate of morning peak travel mode share can be derived. These 'baseline mode shares' for trips to/from Currie are shown in Table 8.3.

Mode	AM peak	PM Peak	All day
Home to work	32%	29%	21%
Education	41%	12%	20%
Shopping	10%	18%	20%
Personal business	6%	7%	8%
Other	11%	34%	31%
Total	100%	100%	100%

Table 8.2 - TEMPro journey purposes by time period

Mode	AM peak	PM Peak	All day
Walk	34%	15%	24%
Cycle	6%	3%	2%
Car driver	41%	52%	40%
Car passenger	7%	13%	22%
Bus/coach/rail	13%	16%	11%
Other	1%	1%	1%
Total	100%	100%	100%

Table 8.3 - Currie - estimated baseline mode share

EDINBURGH'S 2030 TRANSPORT VISION

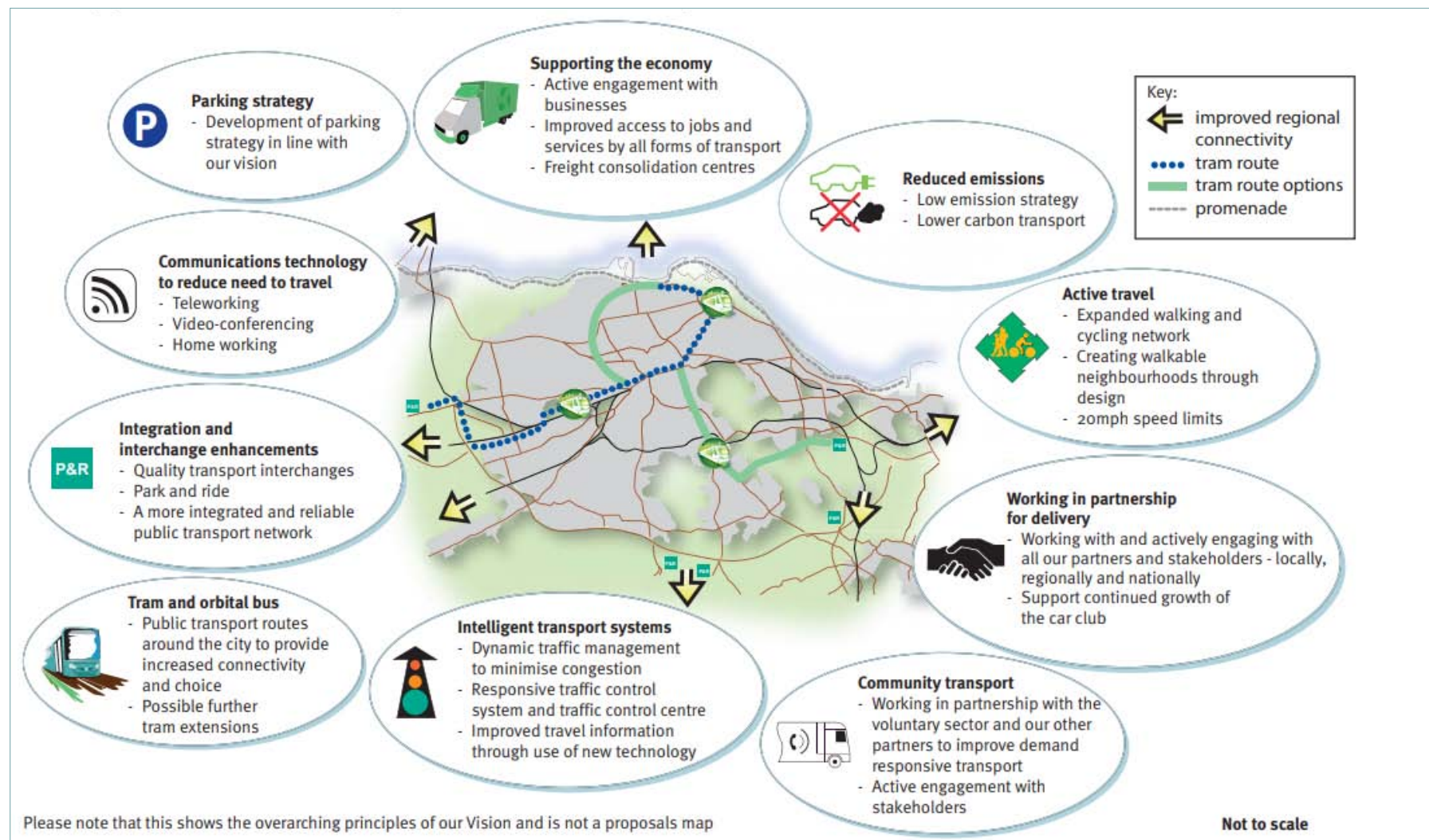
Edinburgh City Council's 2030 Transport Vision is summarised in the graphic opposite. The Riccarton Village proposals seek to help achieve these aspirations.

COMPLIANCE WITH CITY OF EDINBURGH COUNCIL'S CITY MOBILITY PLAN

City of Edinburgh Council (CEC) is currently consulting on their City Mobility Plan (CMP) which will replace the Council's current Local Transport Strategy. It has been informed by various technical studies including the Edinburgh Strategic Sustainable Transport Study (ESSTS). Riccarton Village is situated within the West of Hermiston Transport Corridor which has been selected for further investigation in part 2 of the study which is now being progressed.

8. FUTURE TRAVEL BEHAVIOR CONT.

Riccarton Village's future travel behaviour aligns with the Council's City Mobility Plan (CMP). Specifically, the Riccarton Village sustainable transport objectives – which include the delivery of a transport hub at Curriehill Train Station – are consistent with the vision of the CMP which seeks to create four 'interchanges' in the West of Edinburgh by 2030. The Riccarton Village proposals will improve access to and frequency of public transport services and will be planned as a new mixed use place to reduce the need to travel and the dominance of motor vehicles. These are entirely consistent with the strategic priorities proposals set out within CEC's CMP.



8. FUTURE TRAVEL BEHAVIOR CONT.

RICCARTON VILLAGE TARGETED MODE SHARE

The Edinburgh Transport Vision includes indicators seeking to, year on year:

- Increase the proportion of journeys to school by walking and cycling;
- Increase the proportion of pedestrian, cyclists and public transport peak person trips to the City centre; and
- Increase the proportion of work and education trips by pedestrians, cyclists and bus and rail.

The Edinburgh Local Transport Strategy (2014-2019) has targets to increase the mode share (all journeys) of walk from the 35% baseline (2009/10) to 36% in 2020; cycling from 2% to 10% and public transport from 17% to 21%. It targets car use to decrease from 43% to 31%.

The Riccarton Village proposals will help to achieve all of these indicators and the targeted mode shifts are generally in line with the Local Transport Strategy expectations, given that different parts of the City have different travel characteristics and opportunities. Riccarton Village is sustainably located adjacent to an economic and educational hub – Heriot-Watt, which will encourage walk/cycle to work. Riccarton Village will be designed to be a transit-oriented development. High density homes will be in close proximity to the Village Centre and existing Curriehill Station. Furthermore, the proposed Curriehill Station Transport Hub will provide a rail/bus interchange, served by new roads through Riccarton Village to bring bus stops within walkable distance of people’s homes. With such attributes, the completed Riccarton Village's vision is to achieve an optimum modal share on sustainable transport modes. Targeted mode shares by completion of the development (2041) have been estimated as shown in Table 8.4. The key findings shown in the Table are:

- Walk / Cycle - increase from 26% to 30%;
- Bus / Rail - increase from 11% to 13%; and
- Car - reduction from 40% to 36% - a 10% proportionate reduction in car use, close to the City of Edinburgh targets described above.

It is estimated that upon completion, 13% of trips associated with Riccarton Village will be by bus and train, **which equates to a 20% increase on the local baseline estimate.**

Mode	AM peak		PM Peak		All day	
	Baseline	Riccarton Village	Baseline	Riccarton Village	Baseline	Riccarton Village
Walk	34%	37%	15%	17%	24%	27%
Cycle	6%	6%	3%	5%	2%	3%
Car driver	41%	34%	52%	45%	40%	36%
Car passenger	7%	5%	13%	11%	22%	20%
Bus/coach/rail	13%	17%	16%	21%	11%	13%
Other	1%	1%	1%	1%	1%	1%
Total	100%	100%	100%	100%	100%	100%

Table 8.4 - Riccarton Village - targeted mode share on completion

Final travel generation estimates will be based on analysis of local facilities and the journey purposes of travel, with a significant amount of travel likely to be locally based rather than ‘external’ – initial estimates are that some 31% of all travel for Riccarton Village is likely to be for ‘internal’ trips.

Riccarton Village, by virtue of its location, is uniquely situated in the west of Edinburgh to take advantage of existing public transport (bus and rail) infrastructure and services, and to enhance these.

In addition, its location adjacent to the many jobs and educational opportunities at Heriot-Watt offers unique opportunities to encourage walking and cycling links and reduce the need to travel. The development will be designed from inception around walking, cycling and bus and rail access to maximise these opportunities – a unique opportunity to develop a sustainable new community in the west of Edinburgh.

9. CONCLUSIONS

This report sets out the Sustainable Transport Strategy for Riccarton Village, a major mixed-use neighbourhood proposed on land west of Edinburgh. The proposed development has an indicative development timescale from start to completion of 2021-2041.

Riccarton Village will be a sustainable development with a vision to deliver a solution to Edinburgh's growing demand for housing and employment. It is well placed to take advantage of existing public transport networks which will be enhanced in the short and long term as the development progresses.

This report has therefore considered the existing and proposed transport situation having regards to accessibility by foot, cycle, bus, train and sustainable use of private vehicles.

Riccarton Village's unique location in the west of Edinburgh and proposals for enhanced public transport facilities/services will enable a modal shift to sustainable travel, which in our opinion, no other major development proposal in the west of Edinburgh can provide.

WALKING / CYCLING

A primary objective of Riccarton Village is to create a connected community where residents can walk and cycle easily and safely to employment at the Village Centre and Heriot-Watt, and transport nodes for onward connections.

This report estimates that 30% of travel will be by walking / cycling upon completion of the development.

TRAIN

Delivery of Riccarton Village will contribute significantly to the increase in demand that is required to support a more frequent train service at Curriehill Station.

Curriehill Station would also be improved through the development of the Curriehill Station Transport Hub to connect bus and rail services, and increased park and ride offering, which will not only benefit Riccarton Village but also users and residents of Heriot-Watt and existing communities.

BUSES

Delivery of Riccarton Village should provide additional demand to support:

- Reduced bus journey times at peak times to and from Edinburgh City centre through the establishment of express city services to benefit the new and existing communities;
- The extension of existing bus services to Riccarton Village; and
- Increased frequency of existing bus services to Riccarton Village and the neighbouring communities.

SUSTAINABLE VEHICLE USE

Finally, Riccarton Village will be a forward looking development in terms of how future residents and users are encouraged to use motor vehicles efficiently and responsibly. This will also align with the Government and Council's initiatives in respect of ultra-low emission vehicles and associated sustainable infrastructure as such technology advances. Such initiatives include electric vehicle charging, car clubs and efficiencies in freight management.

Upon completion of Riccarton Village and as a result of the implementation of the sustainable transport strategy, it is estimated that transport trips by car will reduce from 40% to 36%. Furthermore, due to the mixed-use nature of the development and the proximity of nearby employment opportunities, both existing and potential, initial estimates are that some 30% of all travel for Riccarton Village is likely to be for 'internal' trips.



Artist's Impression -
The Village Centre Looking East

OVERALL SUMMARY

The sustainable transport strategy for Riccarton Village recognises that this location is unique in the west of Edinburgh for existing public transport infrastructure with existing capacity, which could be enhanced to encourage and facilitate greater use if demand for those services increases.

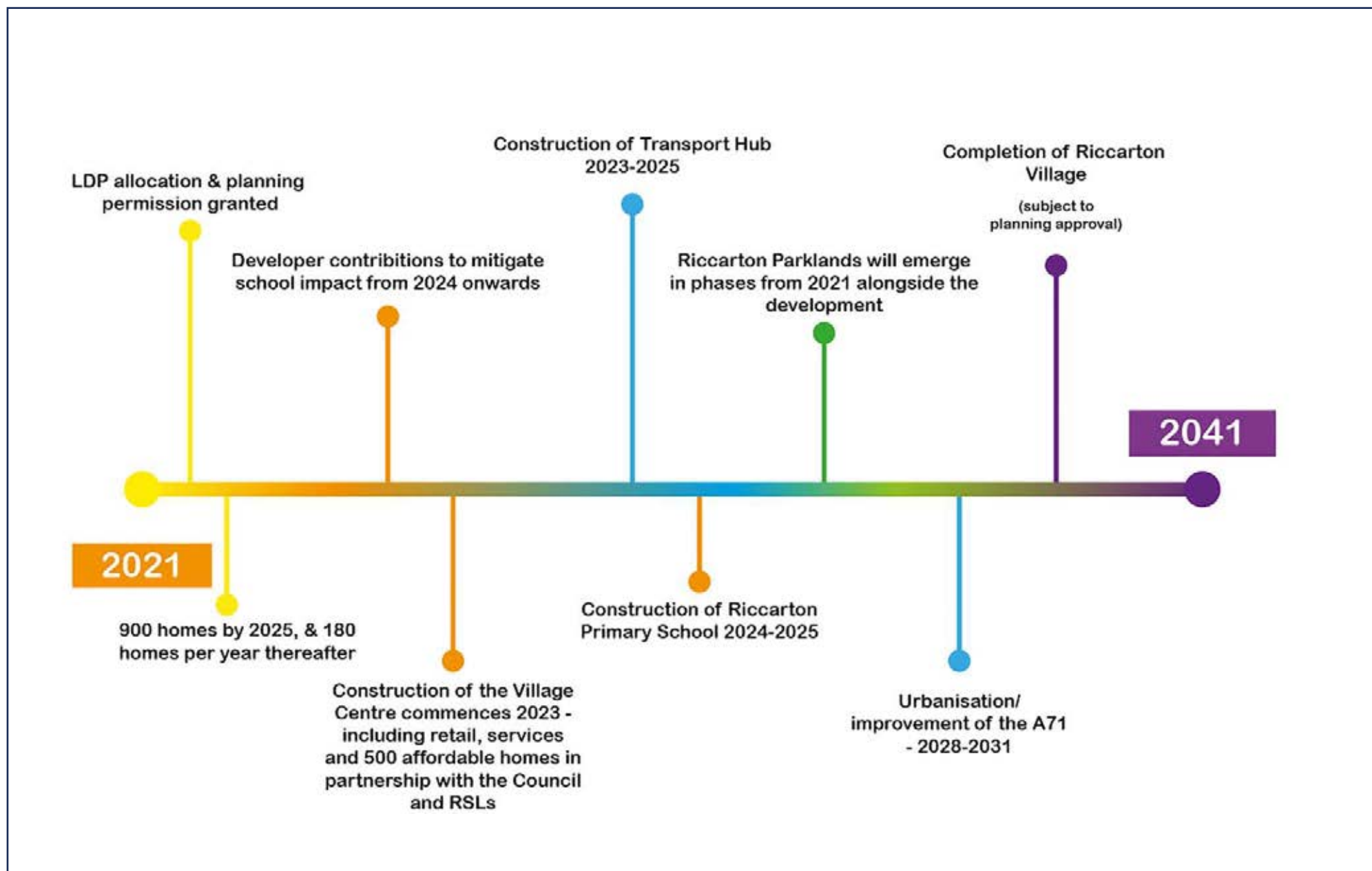
The development of Riccarton Village will drive that demand and the sustainable transport strategy demonstrates at Table 8.4 that the completed Riccarton Village with proposed transport enhancements will increase the healthy, active travel options of walking and cycling due to the development of an extensive green network, cycle lanes/pedestrian paths and the proximity of homes to places of work. It will also increase the use of sustainable transport modes - bus/coach/rail through the development of the Curriehill Station Transport Hub to integrate these services and potentially extend bus routes, improve journey times and increase train services to benefit the new and existing communities.

The cumulative proposals, including delivery of infrastructure for electric cars, will reduce car use in line with Scottish government policy for transport and contribute to a low carbon future. The mixed use proposal of Riccarton Village will encourage shorter, less and more sustainable travel.

The sustainable transport strategy for the site will be developed in close conjunction with Edinburgh City Council, Heriot-Watt University, local community groups and public transport operators, to deliver this Riccarton Village vision.

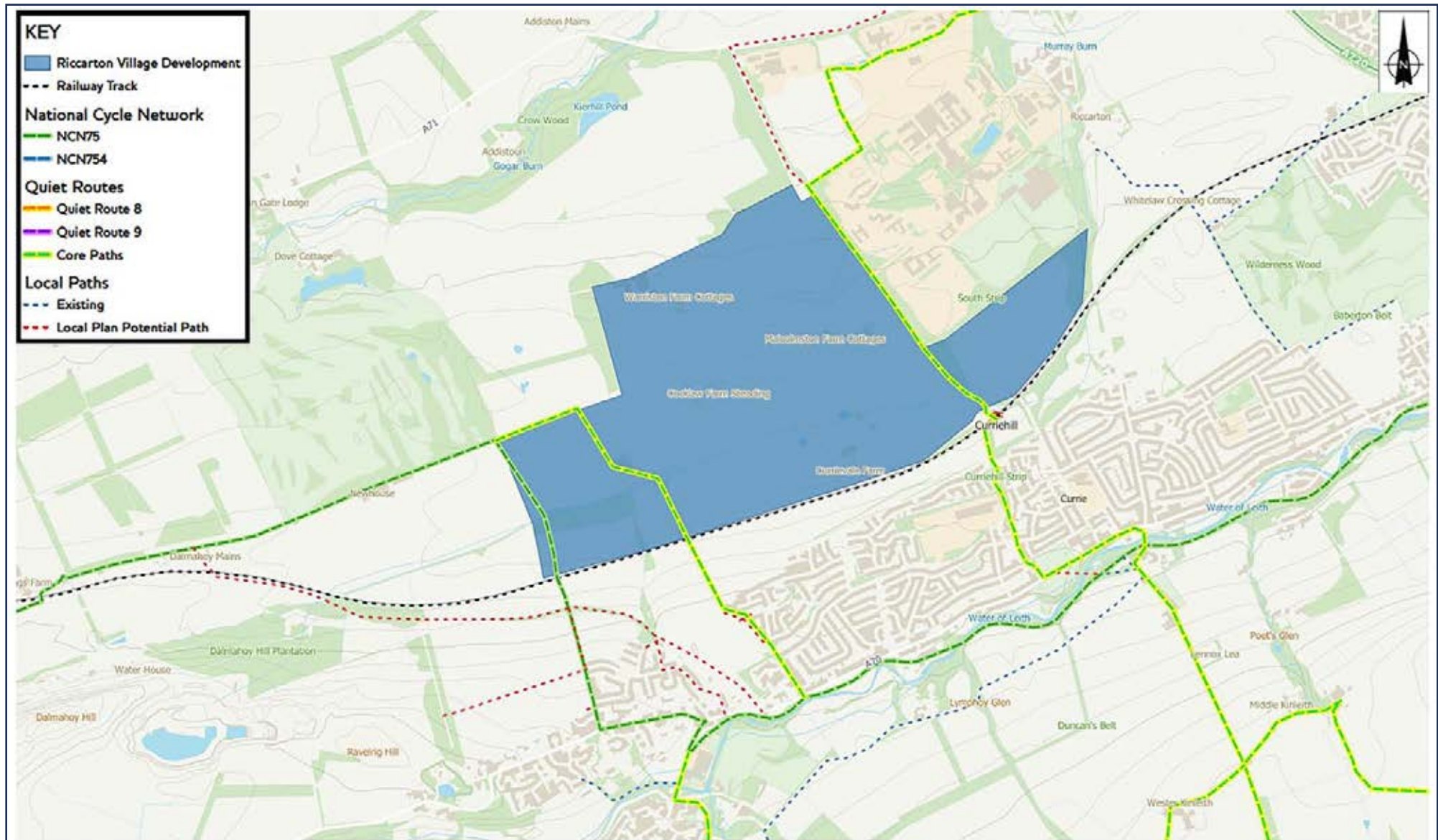
10. APPENDIX

Figure 1.2: Riccarton Village Development Timeline



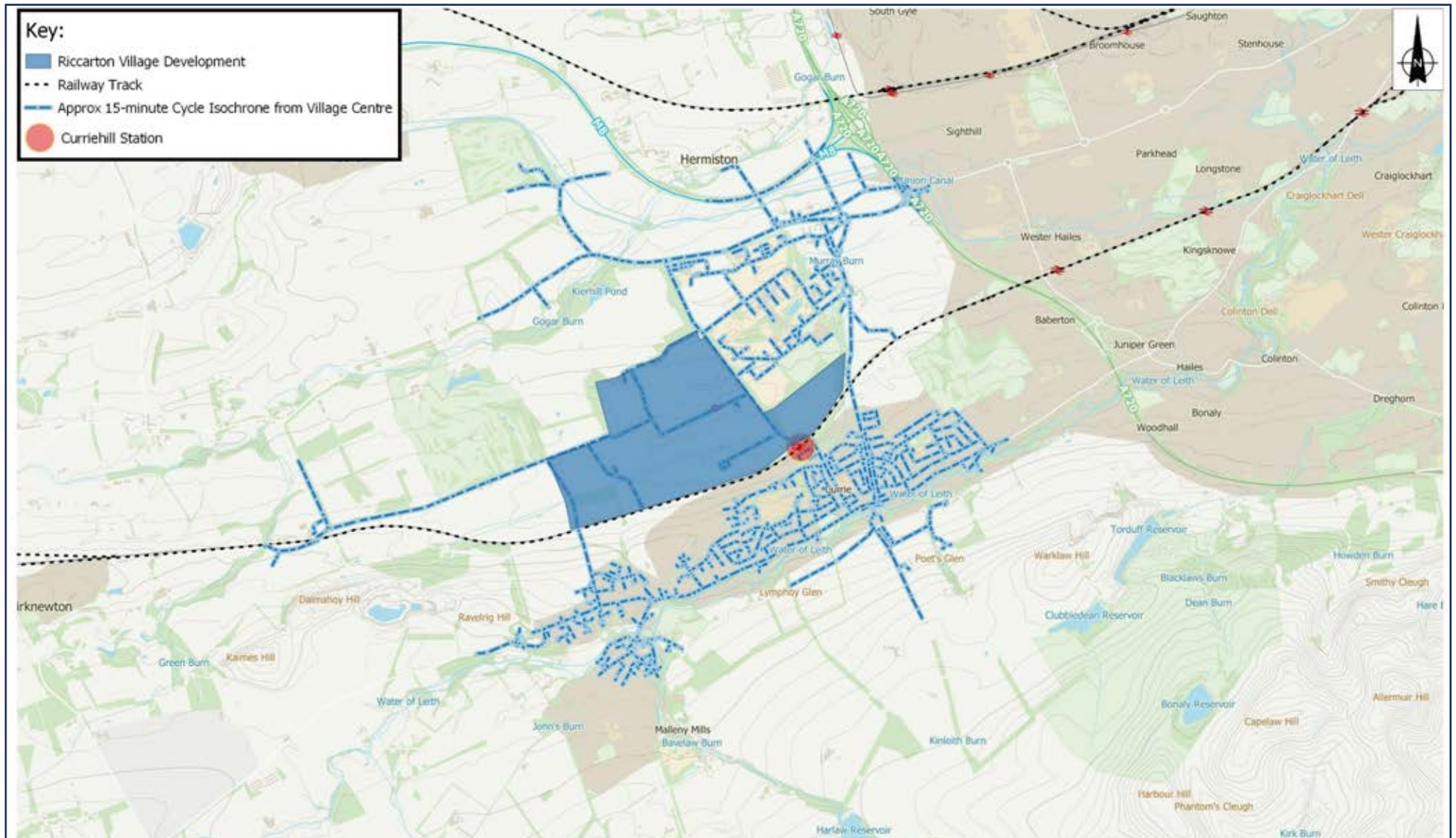
10. APPENDIX

Figure 3.1: Existing Foot and Cycle Network



10. APPENDIX

Figure 3.3: Cycle Isocrones from Riccarton Village



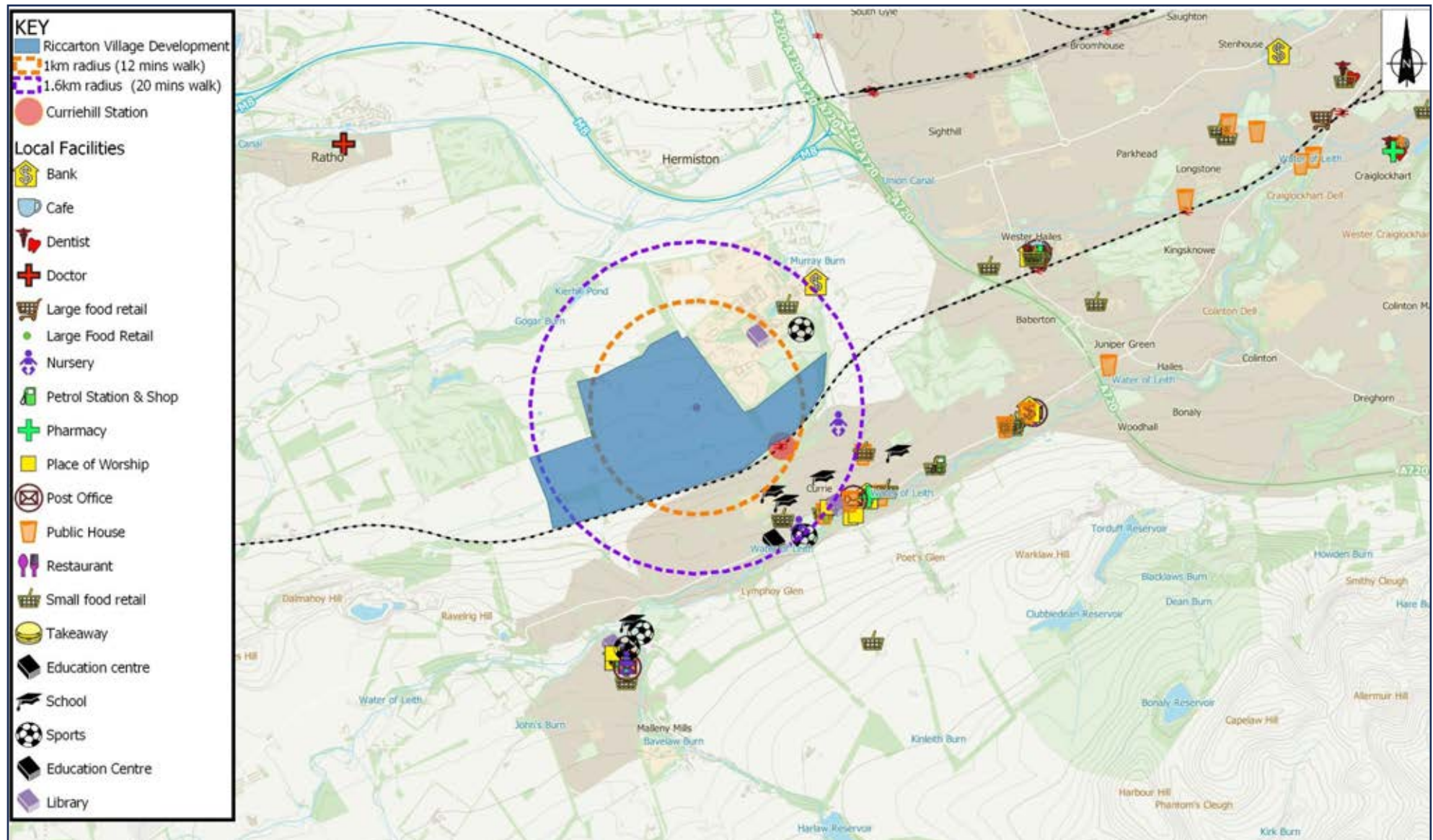
10. APPENDIX

Figure 3.4: Green Network Plan



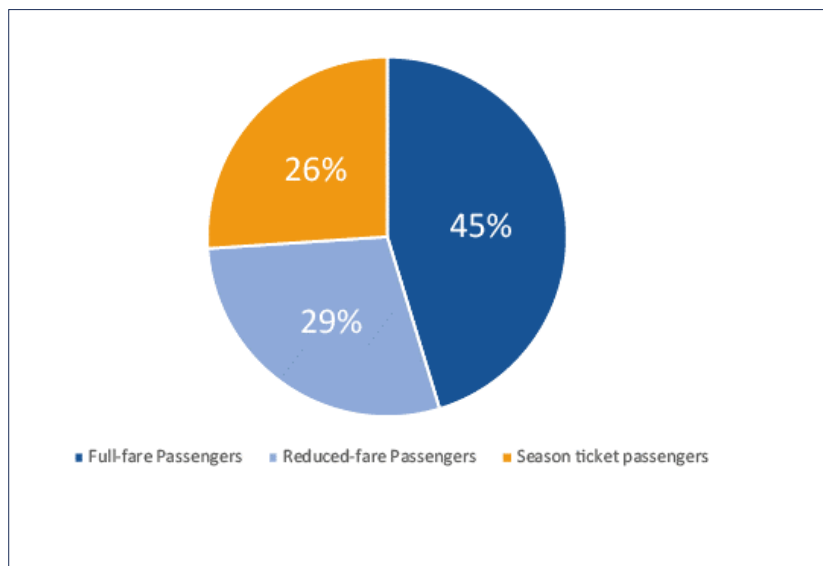
10. APPENDIX

Figure 3.5: Access to Facilities



10. APPENDIX

Figure 6.3: Passenger Types at Curriehill Station



Choice 12 - Building our new homes and infrastructure

12C. Do you have a greenfield site you wish us to consider in the proposed Plan?

Wallace Land Investments is seeking the allocation of land at South of Riccarton - Phase 1 (part of Site Ref: 44) for housing and mixed use development in City Plan 2030.

This representation is supported by the following technical assessments and documents:

- Indicative Development Framework (Geddes Consulting);
- Development Framework Report (Geddes Consulting);
- Flood Risk Technical Note (Kaya Consulting);
- Sustainable Transport Strategy (Modus Transport Solutions);
- Economic Impact Report (4 Consulting);
- Site Assessment Review (Geddes Consulting);
- Site Effectiveness Statement (Geddes Consulting); and
- Preliminary Education Infrastructure Note (Geddes Consulting).

The supporting Development Framework Report, informed by the evidence presented in the Flood Risk Technical Note, Sustainable Transport Strategy and Economic Impact Report, confirms that the proposal for Phase 1 will:

- ensure that the associated infrastructure and community facilities are developed concurrently with new homes. Phase 1 is proposed on the basis that it is entirely deliverable in the plan period. It does not negate the need for the further development anticipated in the full site which would follow in the next plan period.
- deliver 1,700 homes on an all-tenure basis, along with a substantial greenspace network. This will provide a significant recreational buffer between the new village and Currie as well as public open space and structure planting throughout the proposal.
- deliver a new integrated public transport hub close to Curriehill Railway Station. This will include a transport interchange for both bus and rail services with a 400 space park & ride facility currently lacking within the City. The proposal will support Bus Rapid Transit and timetable enhancements to rail services. The proposal is in accord with the Council's Draft City Mobility Plan.
- deliver new mixed use village centre (and at 12 ha, it is the size of Quartermile). The facilities in this village centre will be within the required sustainable walking distance (20 minutes) from both surrounding communities and future residents.
- be in keeping with the character of the surrounding urban and local landscape context. It is suitable for future development, as highlighted by the Council in its Landscape and Visual Assessment of Greenfield Sites.

The supporting Site Assessment Review provides an update to the Council's Greenfield Site Assessment as well as an assessment of the site against the 28 indicators contained within the Council's Environmental Report.

The findings of the Site Assessment Review concludes that the site *South of Riccarton* Phase 1 (part of Site Ref: 44) is a sustainable development proposal. The assessments undertaken demonstrates that the site scores favourably when assessed against other identified sites within the Sector, including the preferred Greenfield options at Calderwood and East of Riccarton.

The site is immediately effective and would be constructed over a 10 year period as demonstrated by the supporting Site Effectiveness Statement. The delivery of the site as a whole will however be appropriately phased to ensure that delivery of other uses and infrastructure is aligned with the delivery of new homes.

The Preliminary Education Infrastructure Note demonstrates that education capacity is not considered to be an insurmountable barrier to the allocation of the site as part of the City Plan 2030 and there is interim capacity solutions to mitigate initial phases of development of the site.

Wallace is committed to the early delivery of affordable housing, infrastructure and community facilities, working in partnership with the Council, communities, infrastructure providers and registered social landlords as well as other stakeholders as required.

It is recommended that the Council amends the existing settlement boundary and allocates *South of Riccarton* Phase 1 (part of Site Ref: 44) for new housing development in City Plan 2030.



South Riccarton (Phase 1)




Drawing No. 14001-MPDF-P104-A
Indicative Development Framework
Phase 1

- Site boundary
- Residential development
- Village centre
inc. new primary school, community facilities, retail and higher density housing
- Transport hub
- Potential development within Heriot Watt Campus
- The Oriam
- Road and street network
- Pedestrian routes
- Vehicular access
- Focal spaces
- Green network and parkland
- Visitor destination
- Access to visitor destination
- Existing trees
- Proposed planting
- Hermiston Park and Ride
- Edinburgh to Glasgow Rail Line
- Curriehill Station

Rev A (23.03.20) Drawn: SB Checked: KT Approved: KT
 Note: Road amended
 Rev - (13.03.20) Drawn: SB - Checked: RM Approved: KT

Status: For Information





South of Riccarton - Phase 1
Development Framework Report
Representation to Choices for City Plan 2030

April 2020



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1. Introduction

This submission has been prepared in response to the publication of the City of Edinburgh Council (the Council's) *Choices for City Plan 2030*.

This *Development Framework Report*, along with the *Site Assessment Review*, sets out the for this site to be allocated as a proposed housing site in the *Choices for City Plan 2030*. Other supporting Reports, as referred to below, have been submitted as part of these Representations

Wallace Land Investments (Wallace) controls, through a legal agreement, 90.07 ha of land west of Edinburgh (see plan opposite). There are no legal burdens which would inhibit development on the site and no further land is required to deliver the proposal.

The site is adjacent to Curriehill Railway Station, in close proximity to Currie and lies to the west of the Heriot-Watt University campus and its Research Park. It represents a logical and sustainable extension to the City in the west of Edinburgh.

Wallace has commissioned a transport study titled *Riccarton Sustainable Transport Strategy (January 2020)* by Modus Transport Solutions and Markides Associates, demonstrating the sustainability of its integrated transport proposals. A report titled, *Riccarton Economic Impact Report (March 2019)*, by 4 Consulting has also been produced highlighting the economic and that the proposal represents a viable development.

Public Transport

The proposal is the only site in the City which can deliver a sustainable transport solution incorporating an existing railway station. It proposes an integrated transport hub, with a large 400 space park & ride to encourage journeys by bus and rail. The proposal will support the introduction of *Bus Rapid Transit* between Riccarton and the City Centre. The proposals accord with the Draft *City Mobility Plan*.

Active Travel

The proposal has been designed to encourage active travel. All future residents will be within 20 minutes of the village amenities. Its path network will connect into the surrounding Core Paths as well as linking Curriehill Station to Heriot-Watt University's campus.

Community Infrastructure

As well as the shopping and other facilities provided in the village core, the proposal includes a 2 ha serviced site for a new primary school. It is envisaged that a site for a secondary school can also be provided if required but Wallace's priority is to support the retention of Wester Hailes Education Centre (WHEC).

Landscape Character

The Council's *Landscape and Visual Assessment of Sites* (April 2019) that there is scope for development in the South of Riccarton Council Assessment Area (CAA). By this assessment conclusion is extremely positive in favour of the site. Wallace's own landscape character appraisal agrees within this conclusion.

Green Network and Flooding

A study titled *Riccarton Flood Risk Technical Note (April 2019)* was commissioned by Wallace. Wallace has given careful consideration to the need to maintain a landscaped between the new village and Currie and avoiding development on the 1:200 year plain. This greenspace (known as Riccarton Parklands) will provide an important area for local biodiversity and covers an area of around 20 ha.

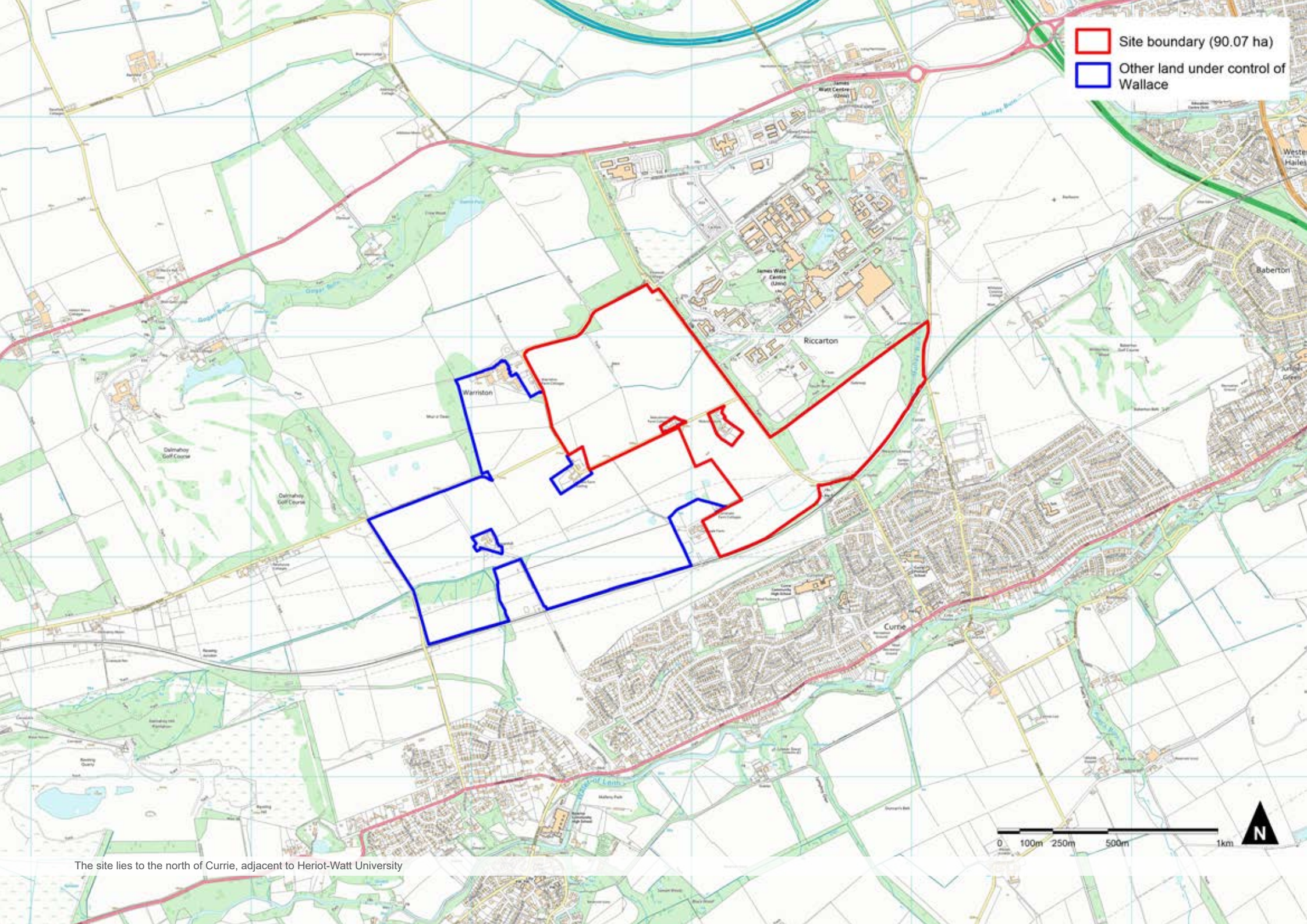
Proposal

South of Riccarton - Phase 1 can act as a standalone site to establish 'Riccarton Village'.

It can accommodate 1,700 all tenure homes. Wallace is committed to early delivery of housing, the village centre, a new transport hub at Curriehill and open space as part of a green network.

Phase 1 of Riccarton Village from a sustainable location adjacent to an employment growth hub and existing public transport infrastructure with residual capacity.

On site enhancements will ensure that new residents and existing communities have local access to services and facilities such as shops and education, plus integrated public transport for sustainable access to the City.



- Site boundary (90.07 ha)
- Other land under control of Wallace

The site lies to the north of Currie, adjacent to Heriot-Watt University

2. Emerging LDP Context

Choices for City Plan 2030

The Council have published their *Choices for City Plan 2030* (Main Issues Report). The *Choices for City Plan 2030* is the stage in the Council's consultation process for the emerging *City Plan 2030*. It is therefore the opportunity for interested parties to contribute to the formulation of the Council's development strategy in the emerging *City Plan 2030*.

The *City Plan 2030* will replace the adopted Local Development Plan (LDP) (2016). The Council's latest *Development Plan Scheme* (January 2020) anticipates that the *City Plan 2030* will be adopted by February 2022.

Choices for *City Plan 2030* 16 Choices, including Choice 12 – *Choices our new homes and infrastructure*. Choice 12 three options for how and where new homes will be delivered within Edinburgh:

- Option 1 *Delivery by the Council and its partners within the Urban Area*
- Option 2 *Delivery through market housing by*
- Option 3 *A Blended Approach*

The Council's preferred option, Option 1, proposes there will be no release of sites within the designated Green Belt for new homes. Options 2 and 3 propose the release of land from the Green Belt.

In order to deliver the required amount of new homes, there is (as set out within the Housing Land Assessment which supports this representation) a requirement to allocate additional sites outwith the Area.

The Council has published supporting document *Housing Study* (January 2020) in support of the *Choices for City Plan 2030*. Part 2b *Site Assessment* of the *Housing Study* provides an assessment of all land deemed to have potential for residential development. These areas of land are split into 134 Assessment Sites, grouped into seven sectors. The site is as *South of Riccarton* and sits within Sector 5.

South of Riccarton - Phase 1 (Site Ref:44)

The site has not been by the Council as a potential option for residential development. The Council's *Site Assessment* for the site *South of Riccarton* (Site Ref: 44) is presented in page 165 of the Council's *Housing Study*.

The Council's assessment concludes that the site *...is not suitable for development due to its poor public transport accessibility, and community infrastructure capacity as although there may be school capacity provision through a redeveloped WHEC this capacity is already taken by scope for development in the East of Riccarton Site.*

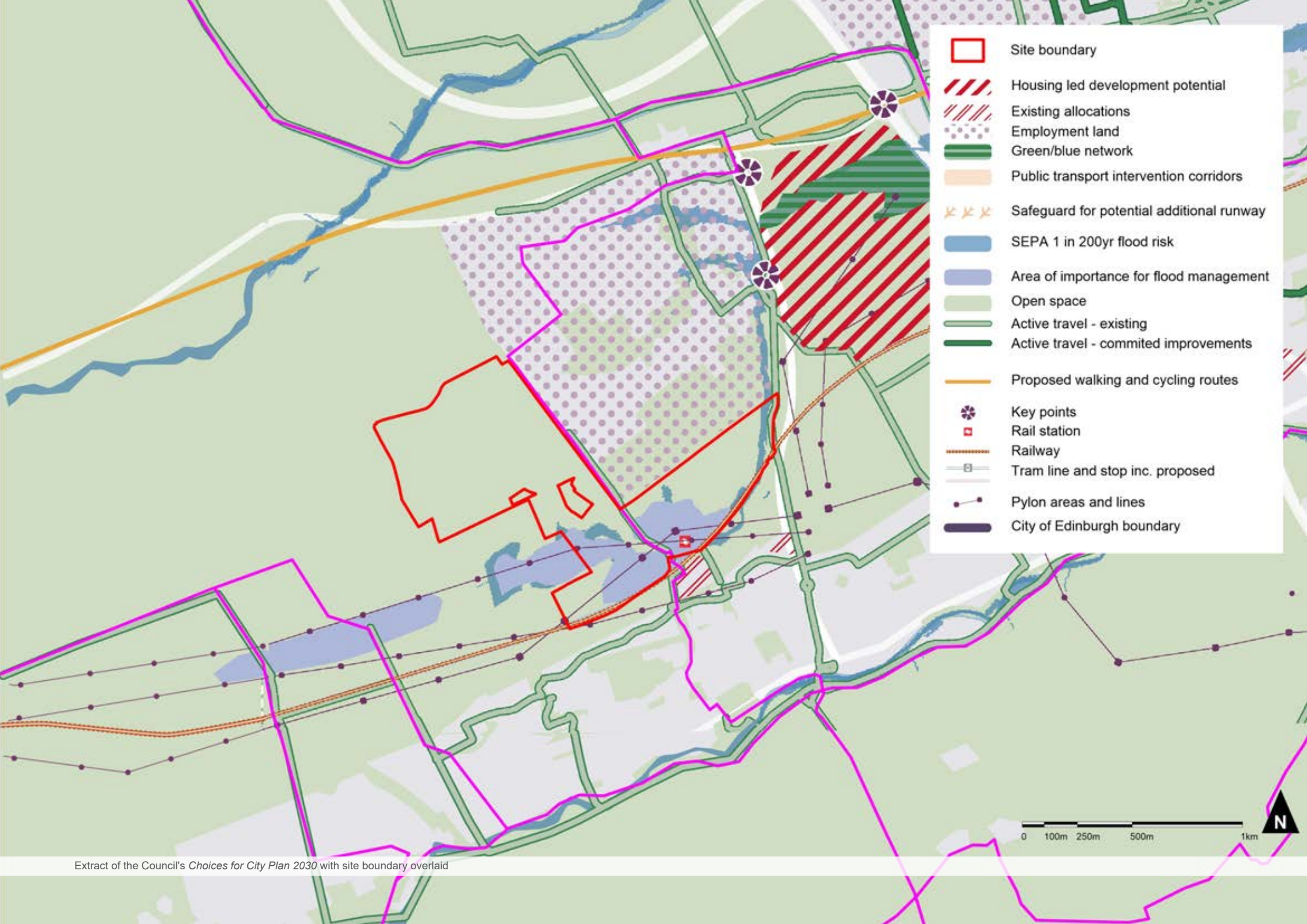
For the reasons set out within the *Site Assessment Review*, the Council's *Assessment Review* has been reviewed and updated by Geddes.

In addition to the *Site Assessment* above, the Council has also undertaken a *Site Assessment* for all sites deemed to have potential for development. These assessments are contained within the Council's *Environmental Report*. As noted above, the Council's *Site Assessment* concluded that the site is not suitable for development.

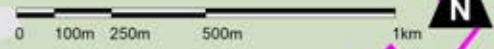
The Council has therefore not undertaken a Site Assessment for *South of Riccarton - Phase 1*. For the reasons set out within the *Site Assessment Review*, Geddes has undertaken an assessment of the site against the 28 indicators within the Council's *Environmental Report*.

This Report, along with the *Site Assessment Review*, sets out the for *South of Riccarton - Phase 1* (Site Ref: 44) to be allocated as a preferred housing site in the emerging *City Plan 2030*.

This proposal at *South of Riccarton - Phase 1*, is an site, as demonstrated by the *Site Statement*. The site can deliver new homes within the year period post adoption of the emerging *City Plan 2030*. As set out within the *Housing Land Assessment*, there is a requirement for the Council to allocate additional sites outwith the Area.



- Site boundary
- Housing led development potential
- Existing allocations
- Employment land
- Green/blue network
- Public transport intervention corridors
- Safeguard for potential additional runway
- SEPA 1 in 200yr flood risk
- Area of importance for flood management
- Open space
- Active travel - existing
- Active travel - committed improvements
- Proposed walking and cycling routes
- Key points
- Rail station
- Railway
- Tram line and stop inc. proposed
- Pylon areas and lines
- City of Edinburgh boundary



Extract of the Council's *Choices for City Plan 2030* with site boundary overlaid

3. Transport and Infrastructure

A Transport Strategy, *Riccarton Sustainable Transport Strategy (January 2020)*, was carried out by Modus Transport and Markides Associates and submitted with this representation to the Council's *Choices for City Plan 2030*. The Transport Strategy highlights the unique location of the site, immediately adjacent to a major employment source and existing railway station.

The Transport Strategy makes reference to the consultation which the Council is undertaking on their *City Mobility Plan (CMP)*. One of the studies which has fed into the CMP is the *Edinburgh Strategic Sustainable Transport Study (ESSTS)*. *South of Riccarton - Phase 1* is situated within the *West of Hermiston Transport Corridor*, selected for further investigation in part 2 of the study.

The Transport Strategy for *South of Riccarton* aligns with the Council's CMP and includes a new transport hub at Curriehill Railway Station. As highlighted in the Transport Strategy, the proposal for *South of Riccarton - Phase 1* will *...improve access to and frequency of public transport services and will be planned as a new mixed use place to reduce the need to travel and the dominance of motor vehicles.*

Active Travel

The site can provide connections to the existing cycle network with new cycle and pedestrian links also created through the site, providing north-south connections and opportunities to create links between NCR 754 to the north and NCR 75 to the south.

By providing homes immediately adjacent to a major employment centre, active travel is immediately made possible. The proposal also includes for the creation of a mixed use village centre, providing a full range of convenience services.

This will all be within a 20 minute walking distance of future residents, students, university and employees at the Heriot-Watt Research Park.

Overall, the site will provide extensive active travel opportunities through existing services and proposed interventions. These interventions will not only be of benefit to the new community but also the existing surrounding community at Riccarton, Currie, Heriot-Watt University and the Research Park.

Public Transport

The site is well connected for existing public transport with Curriehill Railway Station within walking distance and 11 existing bus services already available.

Curriehill Railway Station provides services every 30 minutes at peak times, into the city centre and to Glasgow. It is anticipated that the proposal will lead to greater demand, making it an attractive location for investment through the service providers and improvements to timetables.

The proposal for *South of Riccarton - Phase 1* will provide a *cant* new transport hub in accord with the Council's Draft *City Mobility Plan*.

It will encourage a modal shift in favour of public transport, delivering a transport interchange between bus and rail services, currently lacking within the City.

The proposed Transport Hub has the potential for *Bus Rapid Transit* to the city and electric bike provision to encourage active travel and recreation.

Existing facilities at Curriehill Railway Station could be improved to include things such as ticket machines, more cycle parking, additional platform seating, Edinburgh Cycle Hire facility, additional parking, electric vehicle charging points and a covered walkway to link the station with a new bus terminus.

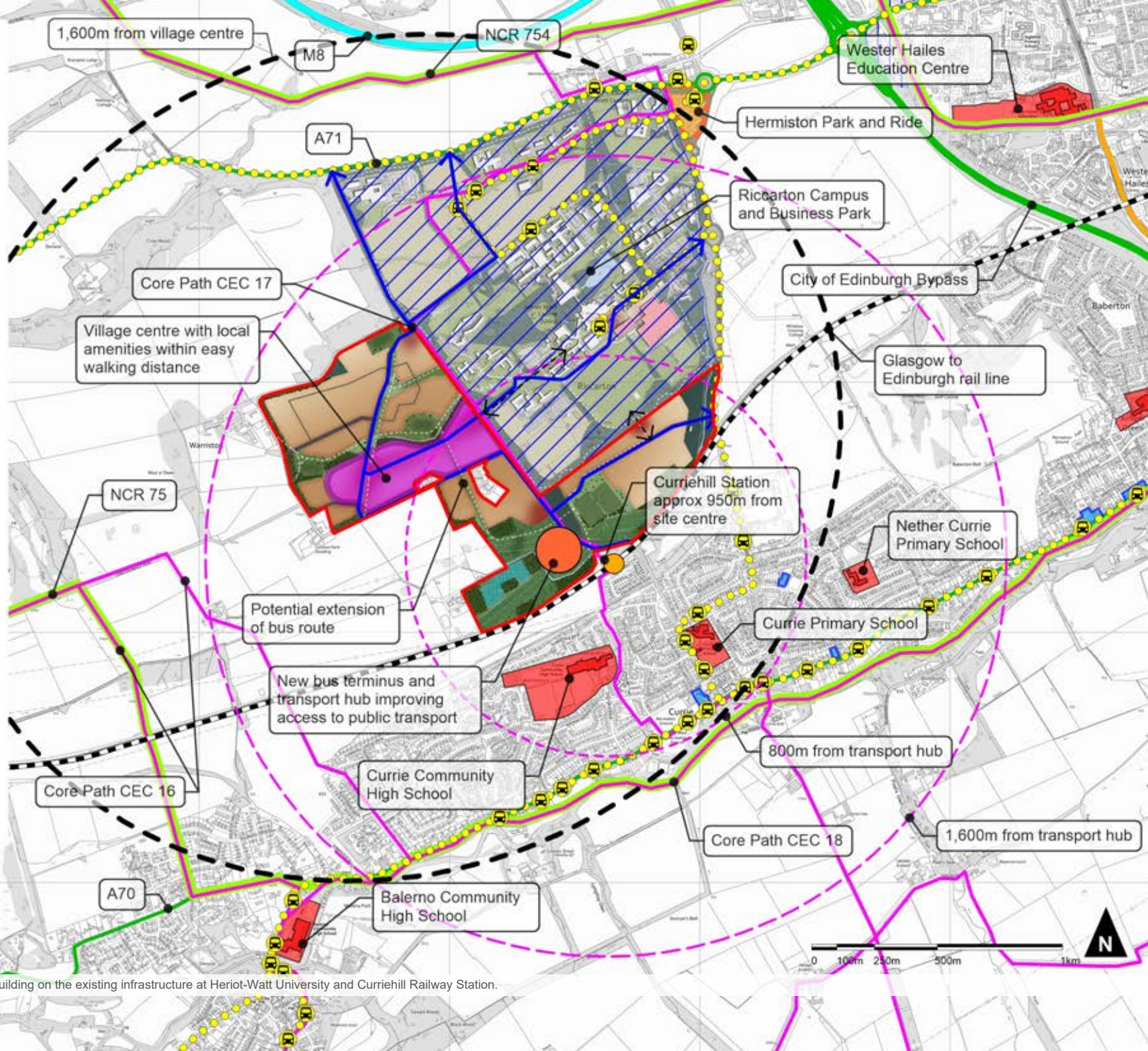
The proposal will also deliver a new Park & Ride facility. This will include electric vehicle charging points and the provision of around 400 car parking spaces.

Community Infrastructure

The proposal includes a serviced site and funding for a new two stream primary school, with the ability to extend to a three stream school. It is envisaged that a site for a secondary school can also be provided if required but Wallace's priority is to support the retention of Wester Hailes Education Centre (WHEC).

Wallace is willing to make a proportionate contribution towards the cost of providing the necessary education infrastructure as a result of the direct and cumulative impact of the development in accord with Circular 3/2012.

-  Site boundary
-  School
-  Local centre as identified in Adopted LDP
-  Special Economic Area as identified in Adopted LDP
-  Business and Industry Area as identified in Adopted LDP
-  Hermiston Park and Ride
-  Bus stop
-  Bus route
-  Rail station
-  Rail line
-  Motorway
-  A road
-  B road
-  Core Path
-  Cycle route
-  Village centre
-  Transport hub
-  Potential extension of bus route
-  800m offset from transport hub
-  1,600m offset from transport hub
-  1,600m offset from village centre



The proposal will provide new infrastructure, building on the existing infrastructure at Heriot-Watt University and Curriehill Railway Station.

4. Site Context

Green Belt

The key functions of the Edinburgh Green Belt are:

- *directing development to the most appropriate locations and supporting regeneration;*
- *protecting and enhancing the character, landscape setting and identity of the settlement; and*
- *protecting and providing access to open space.* (Scottish Planning Policy (SPP), paragraph 49)

These functions, in the context of the site, are considered below.

This Development Framework Report highlights that the proposal is in an appropriate location and that it encourages access to quality open space.

The site does not directly provide a setting to Edinburgh. The setting to Edinburgh is provided by the open landscape between the east of the Heriot-Watt University campus and the City of Edinburgh Bypass.

The site provides more of a setting to Currie, however the *Edinburgh Landscape Character Assessment* by Land Use Consultants in association with Carol Anderson (2010) highlights that *this landscape area is in need of enhancement in its function of providing this setting* (page 209).

The proposal provides the opportunity to enhance the setting to the north of Currie through the provision of a large scale open space. This open space will include public open space, woodlands and wetlands.

The site currently has very limited access to open space due to the agricultural use of the land and the lack of public footpaths. Public access is currently via the informal use of the local road network, which has minimal provision for pedestrians.

The proposal includes access to an extensive 20.7 ha green space (Riccarton Parklands), exceeding the policy aspiration set out in the Council's City Plan, *Choices for 2030*, accessible to a wide range of users. It will also instigate the long term management of this landscape for recreation, sustainable travel, biodiversity and access to nature.

The proposal will therefore alter the Green Belt in accord with SPP, paragraph 49. The site will provide robust inner Green Belt boundaries in accord with the requirements of paragraph 51. To the south the existing railway line provides a strong and defensible boundary further strengthened by the proposed green space (Riccarton Parklands) and associated structure planting. To the east, the site is adjacent to Heriot-Watt University which is a clear and robust boundary. To the north and west, existing tree belts also provide robust Green Belt boundaries and will be further enhanced with additional planting.

Designations

There are no cultural heritage designations on the site. Its contained nature and intervening built form and woodland ensures that there will be no adverse impact of existing designations within the wider area.

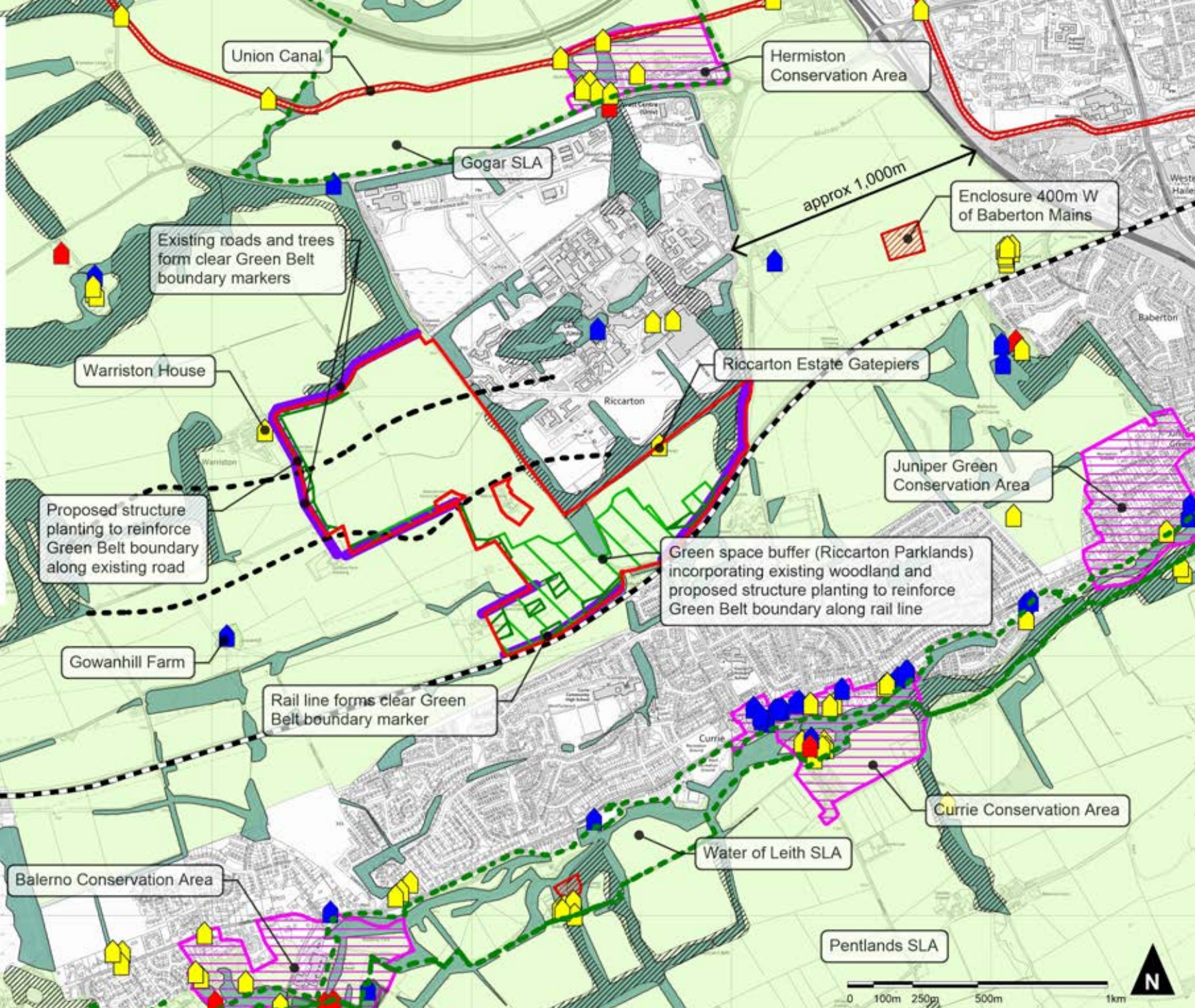
Two Listed buildings, *Gowanhill Farm* and *Warriston House*, are located within close proximity of the site. Both of these farm steadings are relatively well contained by surrounding existing trees and hedgerows, limiting their setting to the immediate context.

Sympathetic building design and appropriate landscape treatment will be incorporated within the proposal to ensure there are no adverse impacts upon the settings of these buildings.

B Listed *Riccarton Estate Gatepiers* are located adjacent to the site. Street alignment within the proposal could make reference to these gatepiers, providing an attractive focal point and potential access to the path network within Heriot-Watt University.

Areas of Ancient Woodland - *Long Established Woodland (AW-LEW)* surround the site along the northern and eastern boundaries. Other than to provide access, these areas of woodland will be protected during construction and appropriate measures from development will be established. There is potential to enhance the green network by providing additional tree planting which ties into these areas of AW-LEW.

-  Site boundary
-  Existing trees
-  Ancient Woodland - Long Established Woodland
-  Scheduled Monument
-  Conservation Area
-  A Listed building
-  B Listed building
-  C Listed building
-  Ridgeline
-  Potential Green Belt boundary defined by clear markers
-  Green Belt
-  Special Landscape Area (SLA)
-  Proposed green space buffer (Riccarton Parklands)
-  Proposed structure planting
-  Rail line



The site is visually contained due to topography and clear Green Belt boundary markers are available along its boundaries



5. Landscape Character

Existing Landscape Character

The site is located within the Gowanhill Farmland Landscape Character Area (LCA) of the Rolling Farmland Landscape Character Type (LCT) according to the Edinburgh Landscape Character Assessment by LUC in association with Carol Anderson in 2010.

This LCA is as being heavily by settlements, high voltage power lines and industry. The landscape is primarily maintained as arable farmland, and is not rare within the wider area. Its condition is assessed as being **Low**, and is therefore less sensitive to development.

The LCA is well contained from the wider landscape, and is generally not visible from main routes or sensitive receptors to the west of Edinburgh. Its prominence is assessed as being **Low**, and therefore development can be accommodated without extensive visual impact to the surrounding landscape.

The Council's Landscape and Visual Assessment of Sites (April 2019) these and states that the area including this site (CAA 45, South of Riccarton) **...is visually contained. There is scope for development to be accommodated on valley sides with opportunities to create a substantial Green Network and SUDs feature along the Murray Burn as a focus for any development** (our emphasis).

The site is also located within the Core Area of the Central Scotland Green Network.

The proposal introduces urban development within the north of the site next to the contained landscapes of Dalmahoy designed landscape and Riccarton campus. This proposed urban area incorporates strong green network links through it and enhances the wooded boundaries to surrounding landscape.

Riccarton Parklands is proposed in the south of the site between Currie and the proposed new village. This 20.7 hectare green space provides multiple

- habitat improvements to the Murray Burn corridor;
- recreation opportunities for residents and visitors;
- a robust, usable landscape and setting to Currie and the proposal for *South of Riccarton - Phase 1*;
- employment opportunities in the maintenance and running of the landscape and facilities; and
- attractive views for surrounding residents.

The existing agricultural landscape character of the southern part of the site will be changed to become more naturalistic, interspersed with public open space and pedestrian routes. This is appropriate within the urban context, and is also in accord with Green Belt principles of providing a setting to settlements and encouraging access to countryside around them.

The following responses are therefore made to the questions raised within Table 5 of the methodology for assessing sites within the Council's Environmental Report:

L1 Does the site have on the landscape setting of the city or townscape?

Neutral. The proposal includes an extensive landscape proposal that will create an appropriate setting to both Currie and the proposal for *South of Riccarton - Phase 1*.

L2 Does the site enable clear and defensible green belt boundaries to be formed?

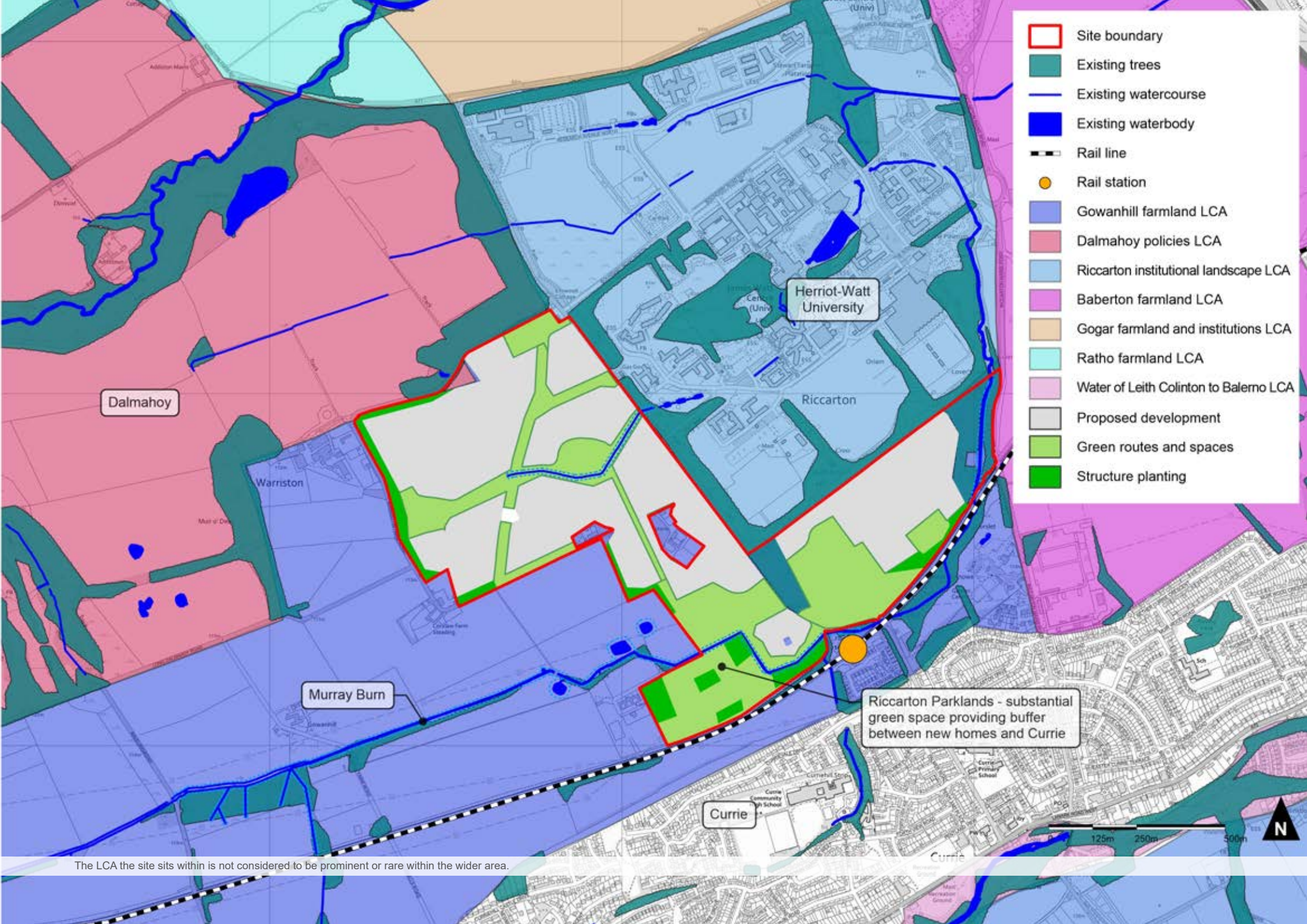
Yes. The proposed Green Belt boundary will comprise the enhanced boundary of the Dalmahoy designed landscape to the north, a road and tree belt to the west, and a regional scale green space and railway to the south.

L3 Does the site have on the designated landscape areas?

Neutral. The adjacent Dalmahoy designed landscape is no longer designated as being of national importance. The proposed site will not adversely

L4 Does the site support the delivery of the green network?

Yes. The site is within the Core Area of the Central Scotland Green Network, and the proposal enables extensive green infrastructure including pedestrian routes and biodiversity corridors both within the proposed urban area and Riccarton Parklands.



- Site boundary
- Existing trees
- Existing watercourse
- Existing waterbody
- Rail line
- Rail station
- Gowanhill farmland LCA
- Dalmahoy policies LCA
- Riccarton institutional landscape LCA
- Baberton farmland LCA
- Gogar farmland and institutions LCA
- Ratho farmland LCA
- Water of Leith Colinton to Balerno LCA
- Proposed development
- Green routes and spaces
- Structure planting

Dalmahoy

Herriot-Watt University

Riccarton

Warriston

Murray Burn

Riccarton Parklands - substantial green space providing buffer between new homes and Currie

Currie

125m 250m 500m



The LCA the site sits within is not considered to be prominent or rare within the wider area.

6. Green Network

Existing Green Network

The site is located within the Core Area of the Central Scotland Green Network. It is currently mostly under arable agricultural management, with gappy hedges and occasional copses of trees generally adjacent to existing properties. The arable nature of the landscape results in a very limited habitat, with pockets limited to the isolated tree copses and sections of hedgerow.

A narrow riparian corridor traverses the southern part of the site in an approximately west to east direction along the Murray Burn. This forms a more connected habitat with trees established along the route of the burn, however the riparian corridor is very narrow due to the adjacent agricultural practices.

An area adjacent to the Murray Burn is susceptible to occasional risk. This is generally under arable agricultural use.

There is a degree of pedestrian connectivity within the site. This is formed by the network of minor roads that connect to the existing properties and the surrounding road network. These roads encompass Core Paths and National Cycle Route 75.

The primary pedestrian use within the site is by students, and visitors connecting between Heriot-Watt University and Research Park and Curriehill Railway Station. This pedestrian link comprises an indirect route on a narrow and unlit footway alongside Curriehill Road.

The proposed urban area is structured around the existing green network links through and around the site. The proposal will enhance these links through the creation of a range of habitats and by linking isolated pockets of tree planting to biodiversity corridors.

An extensive green space is proposed at the southern side of the site, extending across the of the Murray Burn. This green space provides multiple

- extensive habitat improvements to the riparian
- enhancements to the functionality of the through planting, helping to alleviate
- a wide range of recreation opportunities for residents and visitors within a natural setting;
- extensive pedestrian connectivity through and across the site; and
- potential for safer and more direct pedestrian links between Heriot-Watt University and Curriehill Railway Station.

The existing arable will be converted to be more natural, interspersed with public space and pedestrian routes. This will greatly improve the habitat, biodiversity and recreation values of the site.

The following responses are therefore made to the questions raised within Table 5 of the methodology for assessing sites within the Council's Environmental Report:

B1 Would site protect and or enhance the integrity of a European and/or National designated biodiversity site?

Neutral. There are no European or National designated biodiversity sites in the vicinity of the site.

B2 Would the site protect and or enhance the integrity of local designated biodiversity sites and wildlife sites?

Yes. The proposal will create robust biodiversity corridors across the site, linking to the existing Local Nature Conservation Site at Riccarton Campus.

B3 Would the site protect and or enhance the integrity of existing habitat networks and other wildlife corridors?

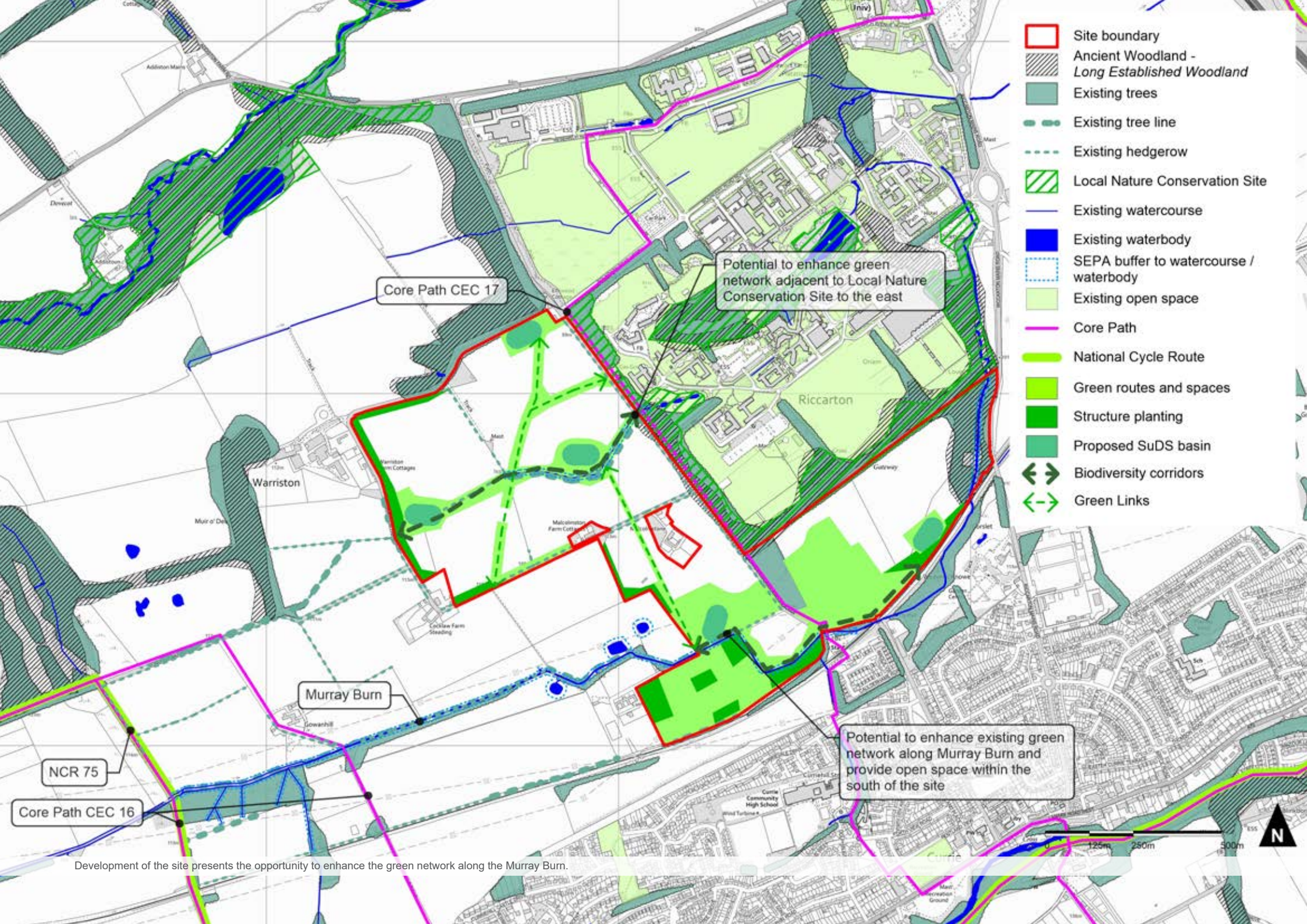
Yes. The proposal for the site would greatly improve the integrity of the Murray Burn riparian corridor and connect isolated pockets of habitat across the site.

B4 Would the site protect and or enhance protected species?

Yes. The proposal for the site would provide improved habitat for a range of protected species.

B5 Would the site protect and or enhance ancient woodland?

Neutral. A small amount of AW-LEW will need to be cleared to enable the southeastern access to the site. However this loss will be by planting around the AW-LEW and connecting existing pockets of AW-LEW with additional woodland planting.



- Site boundary
- Ancient Woodland - Long Established Woodland
- Existing trees
- Existing tree line
- Existing hedgerow
- Local Nature Conservation Site
- Existing watercourse
- Existing waterbody
- SEPA buffer to watercourse / waterbody
- Existing open space
- Core Path
- National Cycle Route
- Green routes and spaces
- Structure planting
- Proposed SuDS basin
- Biodiversity corridors
- Green Links

Core Path CEC 17

Potential to enhance green network adjacent to Local Nature Conservation Site to the east

Murray Burn

NCR 75

Core Path CEC 16

Potential to enhance existing green network along Murray Burn and provide open space within the south of the site

Development of the site presents the opportunity to enhance the green network along the Murray Burn.



7. Flood Risk

The Murray Burn runs west to east through the southern part of the site and an unnamed watercourse originates within the northern part of the site and runs east. There is known **erosion** associated with these watercourses and this has been carefully considered and fully mitigated within the proposal.

Parts of the site are designated as part of an Area of Importance for Flood Management (see plan opposite).

The SEPA **erosion** mapping shows **erosion** along the Murray Burn within the site. The unnamed stream is not included within the SEPA mapping. In addition, the SEPA mapping shows the extent of surface water **erosion** although it should be noted that the information from SEPA is only indicative.

Detailed **erosion** modelling has been undertaken for the site. In accord with Council guidelines, this considered the 1:200 year + 30% **erosion**, to account for future changes in **erosion** due to climate change. The extents of this modelling are shown on the plan opposite.

Flooding of the unnamed watercourse is **erosion** to the valley close to the watercourse. Further detailed modelling will be considered as the project progresses.

A section of existing carriageway along Curriehill Road is currently within the modelled **erosion** envelope. It is proposed that mitigation measures, such as compensatory storage could be implemented to address this. This could be provided along the route of the burn within the extensive proposed area of open space. It would also mitigate the **erosion** risk to the existing railway line within this vicinity.

The proposed extensive areas of open space present opportunities to increase **erosion** storage along the Murray Burn **erosion** corridor, addressing **erosion** risk downstream of the site and within Edinburgh.

There is also the opportunity to re-naturalise the Murray Burn where it runs through the site, further increasing **erosion** storage by linking the channel to

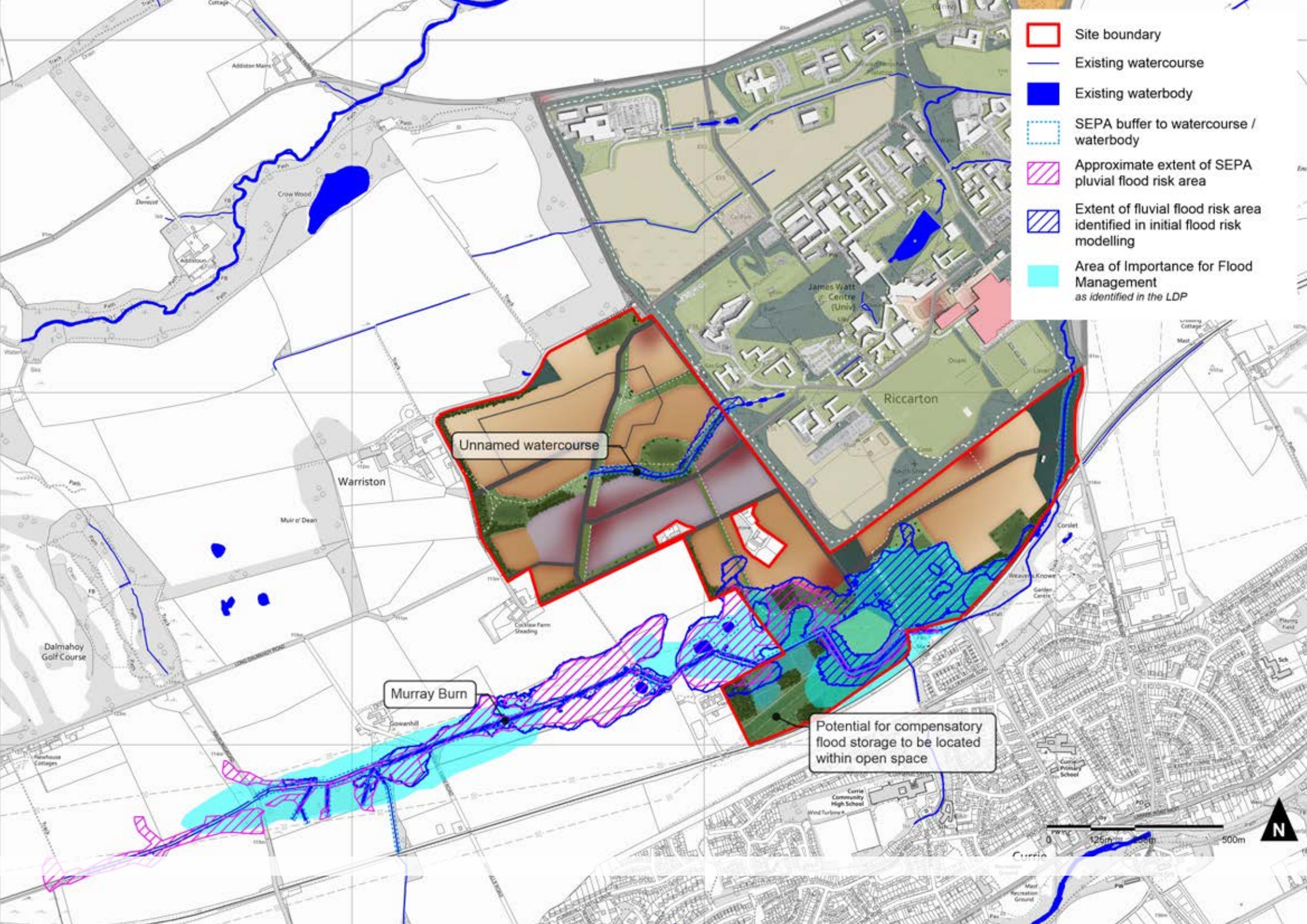
This **erosion** management plan will rationalise the extents of **erosion** plain and provide betterment for those areas downstream of the site. This planning will be carried out in association with the Council and SEPA.

The principles of this **erosion** management strategy are highlighted on the plan opposite. A comprehensive extension to the **erosion** management area is proposed through ground modelling, working with the opportunities presented by the topography of the site.

A comprehensive SuDS strategy will be developed for the site including a system of detention basins

The pluvial **erosion** will be mitigated through the adoption of an appropriate SUDS strategy for the development along with the ground modelling to establish agreed development platforms.

No new homes will be built within areas of **erosion** risk. The **erosion** risk area also enables a substantial area of open space, including large areas outwith the extents, to be developed into a regionally important and attractive amenity space.



- Site boundary
- Existing watercourse
- Existing waterbody
- SEPA buffer to watercourse / waterbody
- Approximate extent of SEPA pluvial flood risk area
- Extent of fluvial flood risk area identified in initial flood risk modelling
- Area of Importance for Flood Management as identified in the LDP

Unnamed watercourse

Murray Burn

Potential for compensatory flood storage to be located within open space



8. Proposal

The proposal for *South of Riccarton - Phase 1* is for a new village. This new village for the City has the full range of supporting services and facilities needed to meet the needs of neighbouring residents in Currie, 800 jobs in the Research and Innovation Park and 10,500 and students within the University campus, as well as new residents.

Research carried out by 4 Consulting highlights that the existing communities in Currie, Balerno, Juniper Green and Baberton have an under-provision of shops and recreational facilities and poor accessibility to services.

The proposal for *South of Riccarton – Phase 1* establish a response to that research and will ensure that the associated infrastructure and community facilities are developed concurrently with new homes.

Phase 1 is proposed on the basis that it is entirely deliverable in the plan period. It does not negate the need for the further development anticipated in the full site. *Phase 1* is proposed on the basis that it can be stand alone and entirely deliverable within the plan period.

The proposal uses the site's topography and grain of the land on an east-west axis to create a road network, with the potential to integrate bus, cycle and pedestrian links from the University along a new high street.

The village centre extends to around 12 ha and, in addition to the new facilities and services in the high street, a new community primary school, community services and community hub are proposed along with accommodation for small start-up businesses.

Village squares are proposed as key features to promote community vitality through their use by markets, outdoor events and concerts.

Riccarton Parklands is an extensive proposed area of green and blue network (around 20.7 ha). This acts as a major landscaped amenity area between Currie and the site at *South of Riccarton - Phase 1*.

The park extends up to around 500m between the existing and new homes. It will also be a destination in its own right by creating Riccarton Parklands as a regional visitor attraction.

The proposal provides a greenspace network comparable in size with the Meadows (22 ha). It will include a range of recreational facilities, such as play areas, kick pitches, informal kickabout areas and a comprehensive path and cycle network.

Character areas, adopting palettes of building materials, will be formed across the village to provide legibility. The master planning of the proposal will comply with the Council's design principles.

South of Riccarton – Phase 1 will accommodate around 1,700 new homes, at approximately 40 dph net. *Phase 1* is and deliverable over the plan period assuming a build rate of approximately 180 homes per annum. Infrastructure capacity is available and will be enhanced as required as the site is constructed over the plan period.

Phasing of construction will be east to west together with the transport hub, village centre and housing which will be established in the early years of the development.

Wallace is committed to the early delivery of the transport hub, village centre and housing and will work in partnership with the Council, the local communities and other stakeholders such as specialist and providers to deliver the proposals in this regard.

There is only a small number of workers on the University Campus who live locally. This scale of housing will provide an opportunity for those working in the University campus to relocate to be closer to their workplace and reduce commuting by car.

Furthermore, with ready accessibility to the adjacent employment hub (Heriot-Watt) and existing public transport, in the form of 11 bus routes, a main line train station with opportunities for this to be enhanced into a new transport hub interchange/park & ride, the proposal can contribute to the City's low carbon transition immediately.



The proposal provides a new village with a full range of supporting services.

9. Recommendation to Council

This Development Framework Report demonstrates that this proposal represents a sustainable development in the terms set out by Scottish Ministers in SPP.

The site *South of Riccarton - Phase 1* is the only site assessed by the Council that the sustainability provided by direct access to an existing railway station.

The proposal will deliver 1,700 homes on an all-tenure basis, along with a substantial greenspace network. This will provide a recreational area between the new village and Currie as well as public open space and structure planting throughout the proposal.

The proposal will deliver a new integrated public transport hub close to Curriehill Railway Station. This will include a transport interchange for both bus and rail services with a 400 space park & ride facility currently lacking within the City. The proposal will support *Bus Rapid Transit* and timetable enhancements to rail services. The proposal is in accord with the Council's Draft *City Mobility Plan*.

The proposal will also deliver a new mixed use village centre (and at 12 ha, it is the size of Quartermile). The facilities in this village centre will be within the required sustainable walking distance (20 minutes) from both surrounding communities and future residents.

The proposal also incorporates Riccarton Parklands. This is an extensive proposed area of green space (around 20.7 ha). This acts as a major landscaped amenity area between Currie and the site at *South of Riccarton - Phase 1*. It will also be a destination in its own right by creating Riccarton Parklands as a regional visitor attraction.

The proposed Riccarton Parklands extends up to 500m between the existing homes at Currie and new homes in Riccarton Village. The proposal accommodates a greenspace network comparable with the Meadows (22 ha).

The allocation of this proposal will be in keeping with the character of the surrounding urban and local landscape context. It is suitable for future development, as highlighted by the Council in its *Landscape and Visual Assessment of Sites* (April 2019).

The Site Assessment Review provides an update to the Council's Site Assessment. The Site Assessment Review also provides an assessment of the site against the 28 indicators contained within the Council's Environmental Report.

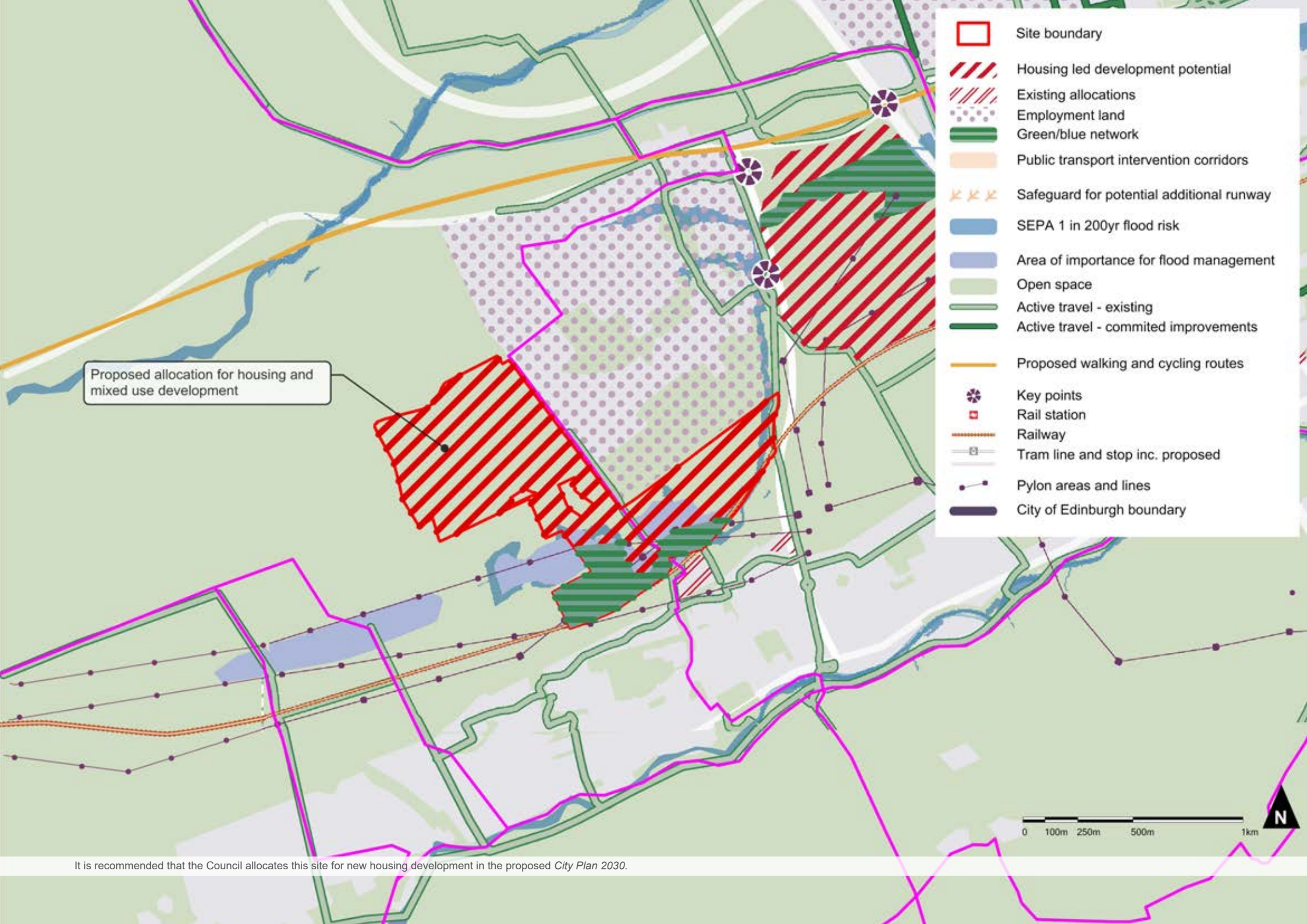
The findings of the Site Assessment Review demonstrate that there are no planning or environmental reasons why this site should not be allocated for housing development in the emerging *City Plan 2030*.

The site is immediately available and would be constructed over a 10 year period as demonstrated by the Council's Site Assessment Review.

The *Site Assessment Review Statement* demonstrates the anticipated delivery rate of new homes at the site. The delivery of the site as a whole will however be appropriately phased to ensure that delivery of other uses and infrastructure is aligned with the delivery of new homes.

Wallace is committed to the early delivery of new housing, infrastructure and community facilities, working in partnership with the Council, communities, infrastructure providers and registered social landlords as well as other stakeholders as required.

It is recommended that the Council amends the existing settlement boundary and allocates this site for new housing development in the proposed *City Plan 2030*.



- Site boundary
- Housing led development potential
- Existing allocations
- Employment land
- Green/blue network
- Public transport intervention corridors
- Safeguard for potential additional runway
- SEPA 1 in 200yr flood risk
- Area of importance for flood management
- Open space
- Active travel - existing
- Active travel - committed improvements
- Proposed walking and cycling routes
- Key points
- Rail station
- Railway
- Tram line and stop inc. proposed
- Pylon areas and lines
- City of Edinburgh boundary

Proposed allocation for housing and mixed use development



It is recommended that the Council allocates this site for new housing development in the proposed *City Plan 2030*.



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