

The Crichton Trust
**DEVELOPMENT FRAMEWORK
AND MASTERPLAN**



Contents

	Page
Introduction	3
1.0 Vision	4
2.0 Statement of Process Undertaken	5
3.0 Site Appraisal Overview	6
4.0 Constraints and Opportunities	10
5.0 Objects of the Masterplan	12
6.0 Masterplan Proposals	13
7.0 Implementation, Delivery and Next Steps	18

List of figures

Fig. 1 - Linking the Crichton Estate to Dumfries	3
Fig. 2 - Crichton Estate masterplan	3
Fig. 3 - The Crichton Estate within Dumfries	6
Fig. 4 - Existing character areas	7
Fig. 5 - Urban design analysis	8
Fig. 6 - Existing circulation and parking	9
Fig. 7 - Built form constraints	10
Fig. 8 - Built form opportunities	10
Fig. 9 - Landscape opportunities	11
Fig. 10 - Wider context - Crichton cluster	13
Fig. 11 - Masterplan Concept Diagram	14
Fig. 12 - Potential landscape development	17
Fig. 13 - Potential bus route	18
Fig. 114 - Potential pedestrian and cycle network	18

Introduction

This study marks a significant point in the long history of the Crichton Estate. The recently revitalised Trust has a new, creative relationship with Dumfries and Galloway Council and is ready to take the Crichton Estate to the next stage in its development. The relocation of the Dumfries and Galloway Royal Infirmary (DGRI) to new premises in 2018 will herald significant change within the wider Crichton Estate area with the relocation of its associated employment and traffic but, at the same time, will create new opportunities. This study focuses on the Crichton Estate (to the south of the DGRI) which is already subject to significant inward investment and development interest.

The Ryder team were appointed in March 2015 to prepare this development framework and masterplan and this work has been carried out in three main phases:

1. Background research / information gathering and analysis by the project team of the current condition and physical strengths and weaknesses of the Crichton Estate, as well as a series of fact finding meetings with the key stakeholders.
2. A workshop involving the key stakeholders and other interested parties.
3. A period for the development of the masterplan framework, including feedback meetings with key stakeholders and the final development of the masterplan.

The overwhelming conclusion from this study is that the Crichton Estate has huge development potential waiting to be unlocked, with a total development area of over 15 hectares.

This development could start as soon as the necessary permissions are in place, though the larger developments would have surmountable implications for the site infrastructure. The masterplan does not prescribe the order of any development but suggests a flexible framework for the next five years and beyond 2020.

The unique quality of the Crichton Estate is the result of the interaction between high quality buildings set in a high quality mature landscape creating a series of interlinked spaces. Development within this should recognise and respect the retention of key open spaces

particularly around the Crichton Memorial Church and spaces forming part of the proposed green link which connects the Dumfries and Galloway College through the Crichton site, through the DGRI site once vacated, to Dumfries town centre.

Whilst the report represents the spatial plan and makes several recommendations with respect to changes to the physical environment, these strategic locations are contingent on a network of partnerships and mutually supportive and beneficial uses. For example, further and higher education opportunities are more likely to succeed if they have a relationship with existing facilities and where students can find appropriate accommodation and recreational activity.

The key links to forge and strengthen include: Dumfries and Galloway College; Midpark Hospital; linkages to Kingholm Quay and the Ladyfield site as it develops with particular attention perhaps given to the provision of student accommodation; the Crichton Golf Club and other recreational facilities through the promotion public footpath and cycle paths and through opening up the Crichton Estate by removing sections of boundary treatment; the NHS Dumfries and Galloway DGRI site when it is vacated and other associated facilities within the Crichton Quarter (including Nithbank); Allanbank Care Home; and the various schools and other facilities along the spine as it reaches out to the centre of Dumfries.

Future development should ensure that the fundamental characteristics of buildings set within landscape and generous spaces are retained.

The Master Plan has identified a clear potential for development in a number of areas within the Crichton Estate. Any proposed development must ensure that the fundamental characteristics of quality buildings set within landscape and generous spaces are retained and strengthened.

There are, however, many opportunities to enhance the whole area both with the development and extension of existing buildings, and the introduction of iconic new buildings set in their own spaces. The quality of the existing buildings and landscape is not a constraint, but a guide and encouragement towards an enhanced Crichton Estate which will both honour the past and provide a worthy setting for the vibrant multi-purpose campus of today and tomorrow.



Fig. 1 - Linking the Crichton Estate to Dumfries

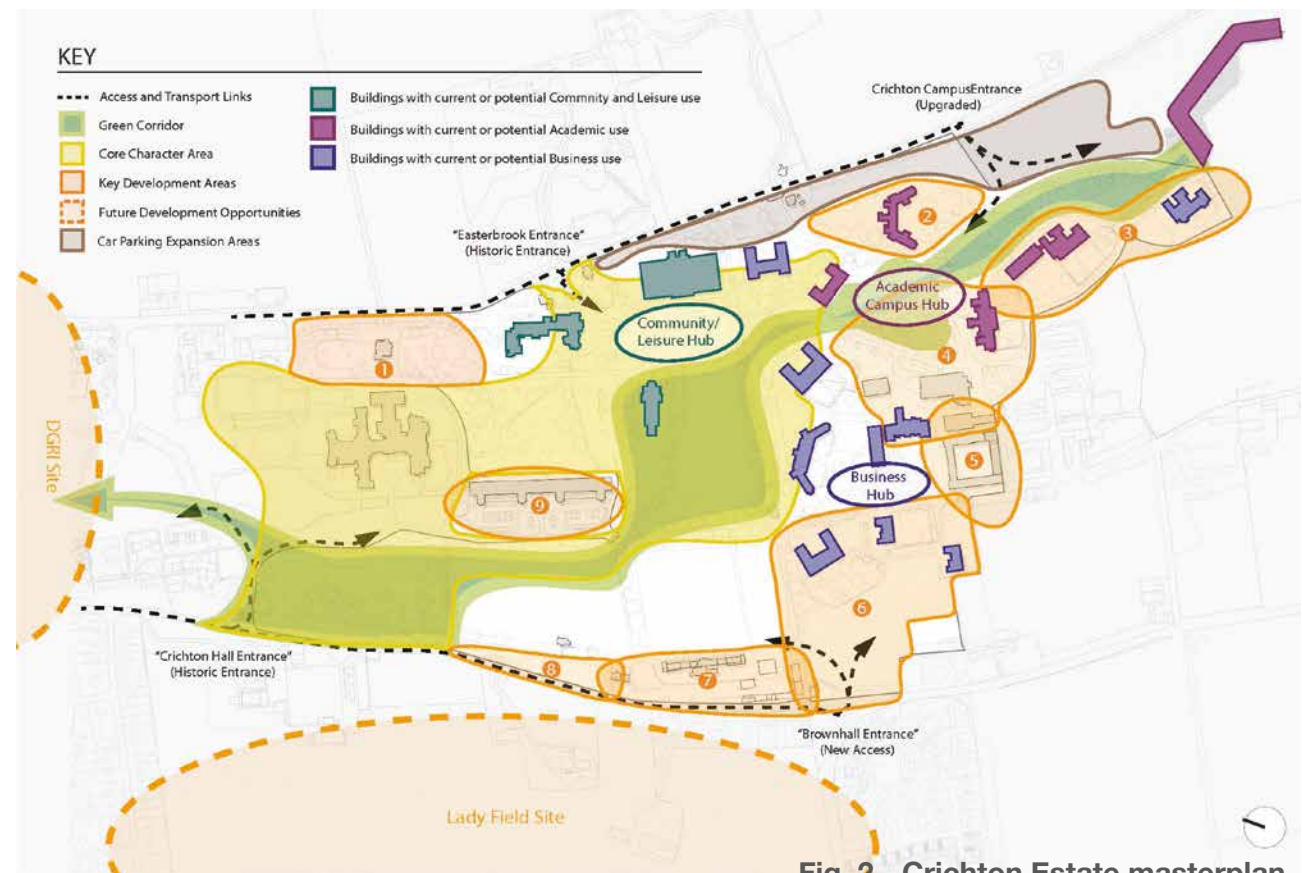


Fig. 2 - Crichton Estate masterplan

1.0 - Vision

Through this master planning exercise we have seen the stakeholders and community in and around the Crichton Estate come together with a shared vision for the future.

It was agreed while there is a clear need to be sensitive to the historic context of the site the need for, and scale of development that is being proposed, for both academic and commercial development, can readily be accommodated in and around the Crichton Estate.

Through the master planning process we have earmarked designated areas for development that will enable the Crichton Trust to deliver transformational social and economic outcomes, not just for the Estate but the Town of Dumfries and the Region beyond.

Achieving the current and future aspirations for development will ensure Dumfries and Galloway becomes a place of economic growth and academic excellence in FE and HE education and research and a place that people will aspire to live and work in.



Crichton Memorial Church and Easterbrook Hall



2.0 - Statement of Process Undertaken

2.1 - Design process

The design process has involved the following stages:

- Briefing
- Analysis and assessment
- In depth stakeholder engagement
- Stakeholder workshop
- Identification of constraints and opportunities
- Initial concept and options based on this
- Further stakeholder engagement and public consultation, testing the initial ideas
- Refinement of concept and production of final framework drawings and design guide

2.2 - Stakeholders Engagement and Requirements

Stakeholders and Requirements:

Dumfries and Galloway Council (DGC), Crichton Trust (Trust), Crichton Campus Leadership Group (CCLG), University of Glasgow (UG), University of the West of Scotland (UWS), Dumfries and Galloway College (DGCollege) and Scotland's Rural College (SRUC).

Requirements

Key requirements from these stakeholders are:

- Additional SRUC operations including 3,700sqm new educational space, 1,200sqm engineering facility and 750sqm animal care facility
- Additional UWS operations consisting of a 4,000sqm new building
- 2,000sqm student accommodation for up to 500 student residences.
- Access and interpretation facilities for future enjoyment of the site.

The first round of stakeholder interviews was conducted during April and the beginning of May 2015. Stakeholders were asked about what they viewed as the key strengths, weaknesses, opportunities and threats at the Crichton Estate, as well as discussing their vision for the site and any spatial requirements they may have. 22 stakeholder interviews were held and the reports were issued to all stakeholders to review.

The overall response from stakeholders was positive and they were keen to engage with the Crichton Estate Masterplan process. Some key themes emerged during the first round of stakeholder meetings, including:

- What is the vision?
- The Crichton Estate is a great space and has

the necessary capacity and scope for a strategic masterplan

- The site needs a core reason and a clear purpose, something to attract people there
- Increase 'the buzz'
- The Crichton must be considered as a university campus, therefore there must be a critical mass of students and it should look like a university
- Skills, training, and care provision are vital to future development
- The masterplan needs to ensure that the Crichton becomes a more accessible estate for the communities and families of Dumfries and Galloway by providing events and services for children, young people and families
- Ensure that the student experience is as good as it can be and if there is to be growth at the Crichton, ensure that growth is sustainable

A huge range of opportunities for the future of the Crichton Estate were identified during conversations with stakeholders. The results of these meetings have informed the development of the masterplan.

A second round of stakeholder interviews were held with key stakeholders during the end of May and beginning of June 2015. Stakeholders were presented with the analysis to date and initial concepts for the framework. The feedback received shaped the development of the masterplan.

2.3 - Stakeholder workshop

A stakeholder workshop was held at Easterbrook Hall on 13 May, with over 40 participants. The findings from the first round of stakeholder interviews formed the basis for an analysis of the strengths, weaknesses, opportunities and threats identified by the stakeholders in relation to the Crichton Estate.

Across the groups there was a general consensus that the physical environment and setting of the site is its most attractive quality. A key weakness identified was the lack of awareness, both within and outside the estate boundary, of the richness and variety of activity at the Crichton. The most significant opportunities to emerge from the group discussions were the capacity for growth, collaboration, and a mix of academic, cultural, social and economic development, which would bring a new vibrancy to the estate and increase its connectivity to the wider area.

Each group of stakeholders was given a different scenario for the future of the Crichton Estate in order to draw out consistencies between stakeholders

in response to different hypothetical situations. The imagined scenarios covered a spectrum from 'fast growth', 'slow but steady growth', through 'no change to policies and plans', to 'slow decline'. Several priorities emerged from the workshop, including:

- The need to protect the core attributes of the estate, including quality, open space and aspect in and out of the site
- Sustainable mixed development across the estate
- Enhancing and developing the recognised education campus in the south east, close to Dumfries and Galloway College
- Provide student accommodation onsite
- Consider more concentrated focal points for car parks, perhaps multistorey and making use of the level changes within the site
- Rationalise circulation
- Enhance green corridor links to Dock Park and the River Nith
- Reduce barriers - walls, fences and perceptions - and improve signage and wayfinding

2.4 - Communication

Throughout the masterplan process there has been regular communication with all stakeholders and interested parties - regular newsletters have been issued. The public consultation event was communicated via advertisements in the local press.

2.5 - Public consultation

The all day public consultation event was held on Friday 19 June and attracted just under 100 people. A summary of the analysis and initial concept was presented and people were encouraged to leave feedback on questionnaires provided, or to give their views which were noted down. The views of the local community have informed the development of the masterplan. People were asked:

1. Do you use the Crichton Estate? If so for what, and if not why not?
2. How do you perceive the Crichton Estate? (Is it accessible and open to the public or is it private? Do you feel welcome or unwelcome?)
3. What uses do you think would be appropriate on the site?
4. What needs further investigation?
5. How do you travel to the Crichton Estate?

A healthy response was received during the session. The majority of responses were very positive. Some interesting comments were noted -

"Positive about future development at the Crichton Estate. Dumfries needs investment. Lots of directions it could take - it needs to be education linked to business development."

"Grow the Universities and College to create a critical size for research and development spin off and economic development opportunities. Need for critical mass of University Campus".

"Public access is key. Perceives the University Campus as not public land. Bring activity and vibrancy to the site."



Stakeholder workshop



Public consultation



Public consultation

3.0 - Site Appraisal Overview

3.1 - Introduction

This section is intended as a brief overview of the site appraisal and extensive analysis carried out.

3.2 - Local area

Dumfries and Galloway has a population of approximately 148,000 and Dumfries is the largest town in the region with a population of 31,600. The population density of Dumfries and Galloway is approximately 60 people per square mile, compared with the Scottish average of 168.

The local economy is primarily based on agriculture and forestry with a range of light industries and tourism making significant contributions. There are numerous small art and craft enterprises which thrive across the region. Dumfries and Galloway has the lowest average wage in Scotland.

Dumfries is a market town, near the mouth of the River Nith into the Solway Firth. Over time Dumfries has expanded south to meet the estate. The northern edge of the Crichton Estate is approximately 2 km south of Dumfries town centre (refer to Fig. 3). Crichton Royal Farm to the south of the Crichton Estate has an area of 252 ha. Dumfries and Galloway Royal Infirmary (DGRI) is located immediately north of the Crichton Estate and is a large employer in the area. In 2018 the existing DGRI and associated health facilities will be moving to a new site. The Ladyfield site is allocated for residential development (beyond 2024) and lies between the Crichton Estate and the recreation area at the River Nith.

There are a variety of building typologies surrounding the Crichton Estate, ranging from the large mass of the DGRI hospital building to the north, and the Dumfries and Galloway College building in the south east, to the more domestic scale of surrounding residential developments to the east and west, eg Kingholm Quay, Mountainhall Cottages and Ladyfield East and West. Towards the town centre the built form becomes more dense.

3.3 - Site description

The natural fall of the land from Maidenbower in the east down to the River Nith, coupled with re-profiling within the estate to provide building platforms, has created spectacular views out from the site. The Crichton Estate sits within the Crichton Conservation Area which includes 27 individually listed buildings or structures, many of which are within the Crichton Estate.

Within the Crichton Estate are located Crichton Business Park, Easterbrook Hall, Crichton Memorial Church, the University of the West of Scotland and University of Glasgow's Dumfries Campuses, along with the Scottish Rural University College's Research Unit. Dumfries and Galloway College, the region's further and higher education provider, is situated at the south eastern boundary of the Crichton Estate.

The on site infrastructure including the roads and street lighting are largely private and maintained by the Crichton Trust. Since 1996 the Trust has undertaken major upgrading of the onsite infrastructure.



Fig. 3 - The Crichton Estate within Dumfries

3.0 - Site Appraisal Overview

3.4 - Identity

A detailed history of the Crichton Estate is included within the Crichton Conservation Area Appraisal. The following distinct character areas, as shown in Fig. 4 have been identified:

1. Arboretum and Rock Garden

This area of the Crichton Estate is generally very enclosed, has no buildings within it and limited views in and out. It is designed and managed as a tree collection (arboretum) and features at its centre a naturalistic rockery. This area was first developed as the orchard of the Crichton Hall and was accessed from the north west by Main Gate. Historically this zone was linked, both visually and in terms of its use, to Crichton Hall. However, this area is now largely severed from Crichton Hall.

2. Crichton Hall

This zone is centred on Crichton Hall and characterised by the historic and architectural significance of the hall and defined by the planting around it that comprises its essential setting. It includes Church Gate off Glencaple Road. The zone is relatively small and dominated by the building surrounded by mature trees, many of which are over 140 years old and include limes and evergreen trees (False Cypress, Thuja, Cedar and Fir).

3. Church

This zone comprises Crichton Memorial Church and the open space around it, and forms the core of the Crichton parkland. It is characterised by tree avenues surrounding both the church and the open parkland. Long views to the south west are important features of this area.

Likewise, the church forms a landmark focal point in views from the countryside to the south west. Virtually no other buildings of the Crichton are visible above the trees when in leaf from the south west. An important feature of this zone are the formal avenues of trees comprising Maple, Sweet Chestnut, Horse Chestnut, Ash and Lime. Virtually all of these trees are in excess of 100 years old and many gaps are appearing.

4. Glencaple Road

This zone comprises the western edge including the heavily engineered sports fields, the former glasshouses complex, and other peripheral developments. The very tall boundary fence is a distinctive feature of this zone.

5. The Business Park

This relatively small area is the most densely developed part of the site comprising a large grouping of varied buildings which were originally enclosed by dense planting. Within this zone there are significant changes in level and limited views out or in.

6. The Campus

This zone runs from the south side of Easterbrook Hall, incorporating the south eastern part of the Crichton and includes the new college building outside the Crichton boundary. It is characterised by pavilion style buildings, long curving 'carriage' drives lined by trees. With reference to historic landscape drawings, for example the Ordnance Survey third edition of 1931 (refer to page 16 in this report), it can be seen that the distinction between open space and enclosing features has been eroded since the 1930s with many trees planted in the central open spaces. As a result this zone lacks spatial definition.

7. Bankend Road

This zone comprises the edge development along Bankend Road, groupings of buildings bounded by the railings to the east. Located at the apex of the broad ridge on which the Crichton Estate is located, the buildings, most notably Easterbrook Hall itself, benefit from extensive views to the west and south west. However, there are no views in from the east or out to the east as the Bankend Road boundary is a real visual and physical barrier.

A particular feature of the Crichton Estate is its boundary railing and wall which both contribute to providing a distinctive delineation of the character of the Crichton whilst at the same time severing the Crichton from its neighbouring areas. This perception of the estate is therefore of an enclosed nature signalling privacy and exclusivity.

This analysis concludes that the core character area of the estate is centred on Crichton Hall, the arboretum and rock garden, and the central lawns at Crichton Memorial Church and Easterbrook Hall because of the setting of these listed buildings, the importance of the historic landscape and key views out. It also includes the elevations of Johnston, Grierson, Maxwell, Kindar and Galloway which front on to the core character area.

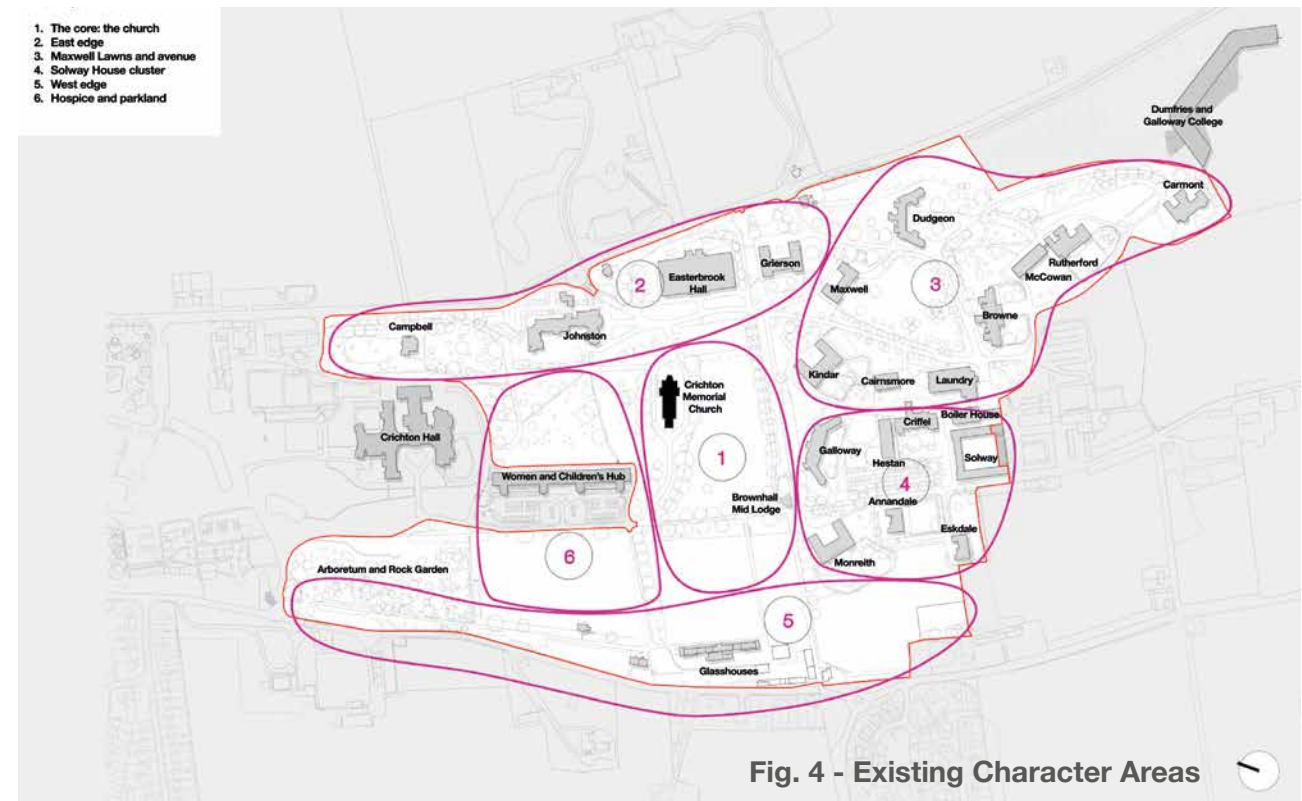


Fig. 4 - Existing Character Areas



3.0 - Site Appraisal Overview

3.5 - Urban design

Although approaching the Crichton Estate, the railings and dense planting limit views into the estate, once on the site there are spectacular views out, notably west and south west towards the Galloway Hills and the Solway. Several views within the site, however, are compromised by areas of surface car parking and unmanaged car parking along roads, around buildings and between trees which impacts on the setting of listed buildings as well as obstructing routes for people and vehicles.

The scale and massing of the buildings ranges from small, single storey lodges associated with gateways into the site, to large, three storey plus buildings such as Crichton Hall and Dumfries and Galloway College (both outside the site boundary, although there is no physical separation).

Key activity nodes have been identified on Fig. 5 adjacent. Other areas of the site feel strangely empty, despite the activity within buildings at the business park and education campus. There is a lack of useable, overlooked 'gathering space and several large open spaces are currently underused. Maxwell Lawns, for example, should be a key connecting space between the business park, education campus, and cultural and leisure hub around Church Gate, but it suffers from a lack of spatial definition.

This lack of legibility continues throughout the site, with many buildings incorporating several access points, many of which do not front onto the main routes, but are accessed via car parks or the gardens historically associated with the buildings.

The majority of the buildings on the site are fine examples of functional architecture, provided to deliver the clinical needs perceived by each medical superintendent at each phase of the hospital's development. Some buildings, however, are of limited architectural note or have declined to state of disrepair, such as the glasshouses. Future proposals will require assessment against a detailed understanding of the significance of heritage assets.

3.6 - Landscape

The quality of the landscape of the Crichton Estate is given by inclusion in the register of Non-Inventory Gardens and Designed Landscapes. The description refers to its association with the 19th century Crichton Royal Hospital.

The soft landscape is mature and, in conjunction with the historic buildings, creates the key quality of the Crichton Estate. The large number of majestic, mature

trees both along avenues, old field boundaries and the single specimens, in conjunction with shrub and hedge planting, create generally a fairly cohesive landscape structure. However, this is increasingly being eroded through the loss of old trees and through inappropriate specimen planting within the last 50 years which creates a lack of spatial definition.

Although the soft landscape is generally very well maintained, even perhaps over maintained, hard landscape features are of more variable quality with a mixture of traditional bitumen roads following the line of the original carriage drives, modern concrete block paving and concrete slab footpath links. The many roads and paths still present today cause confusion and destroy the continuity of the landscape.

It is important that future landscape planting and the choice of species continues the important themes of the designed landscape. A landscape management and maintenance plan will be required to establish the scope for change and set out principles for future planting.

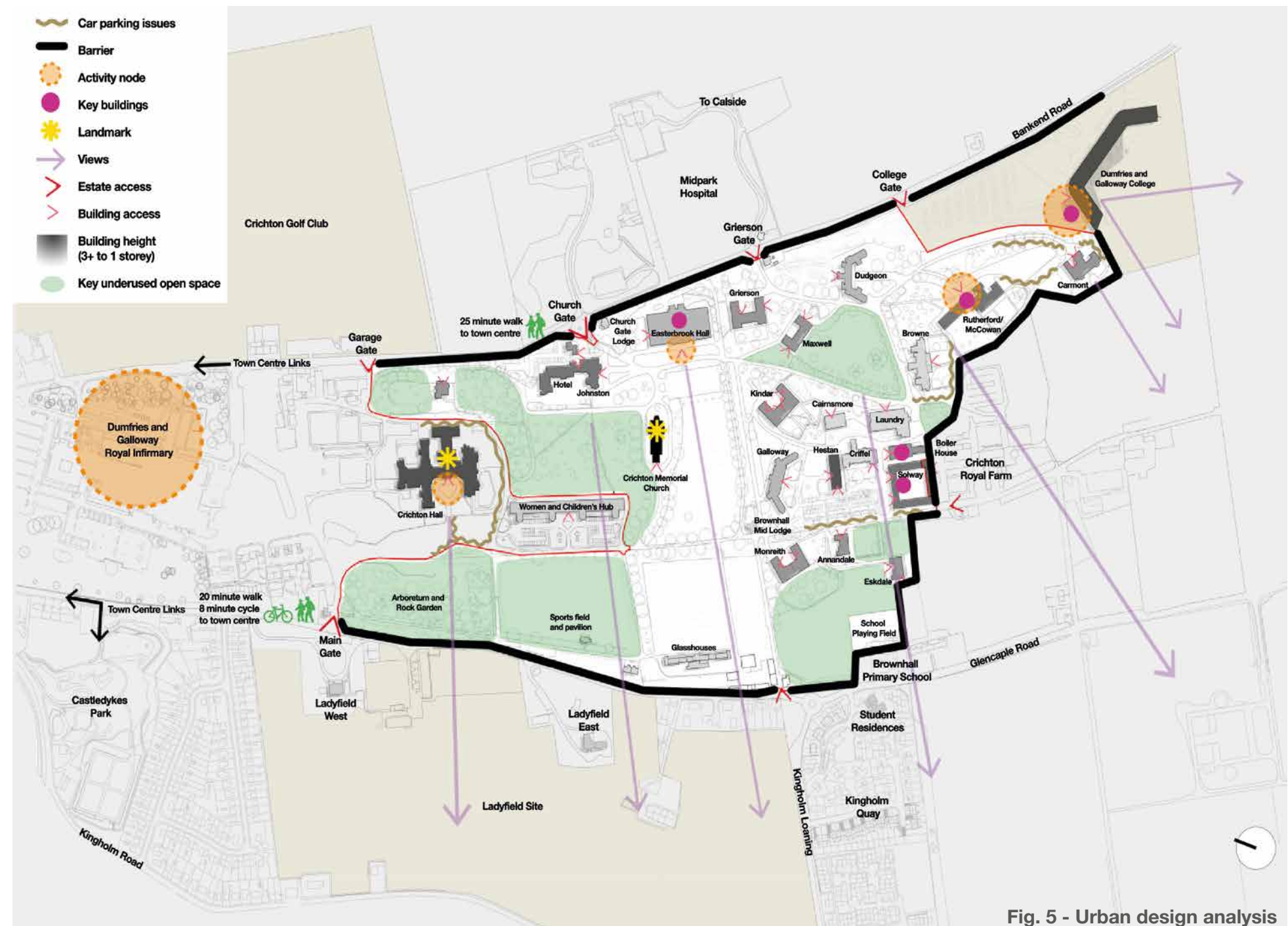


Fig. 5 - Urban design analysis

3.0 - Site Appraisal Overview

3.7 - Connectivity

The Crichton Estate is located approximately 2km to the south of Dumfries town centre bounded by Glencaple Road (B725) to the west and Bankend Road (C12) to the east. The key findings of the Transportation and Access Statement prepared by Waterman Infrastructure and Environment (June 2015) are summarised below.

In Dumfries the road network is managed by a traffic management system which includes the provision of right turn lanes. The system is further enhanced by a partial SCOOT (Split Cycle Offset Optimisation Technique) Urban Traffic Control system. The current system experiences operational issues at various locations during peak periods, particularly at the Whitesands and south towards the Crichton. During peak periods significant congestion and operational issues are experienced at St Michael's Bridge/ St Michael's Street junction, B725 St Michael Street/Nith Bank/ Craigs Road/ Glebe Street roundabout junction and the 3 Road Ends junction at the B726 Kingholm Road/Glencaple Road/Bankend Road. The 3 Road Ends junction experiences higher north-south flows during the morning peak period which is mirrored during the afternoon peak periods. It is recommended that the operation of these junctions are reviewed together with the further implementation of the SCOOT system.

In 2010 the Dumfries South Access Strategy investigated a series of public transport, traffic management and road construction opportunities in order to alleviate the town's traffic problems. As a first phase some junction capacity improvements took place. There would be scope to review this exercise and projects outstanding in order to increase junction capacity.

The Dumfries South Bypass remains a Council aspiration, but is not currently in any funding programme. There may be scope to investigate a new road link from the A75 to the west and bridge across the River Nith to the Crichton Estate.

As a consequence of the proposed relocation of Dumfries and Galloway Royal Infirmary (DGRI) there is a forecast significant reduction in peak hour traffic movements in south Dumfries. Based on operations likely to remain at the DGRI site the trip generation assessment calculates that only 48 and 42 vehicle trips would be associated with the existing site for the AM and PM peak periods.

DGRI Trip Reassignment

	AM Trips		PM Trips	
	In	Out	In	Out
Total	580	193	197	492

Source: Dumfries and Galloway Royal Infirmary Transport Assessment, 2013

Dependent on the proposed use and scale of development at the DGRI site there will be a resultant negative or positive impact on existing traffic flows and their redistribution to and from south Dumfries.

Although the Kirkpatrick MacMillan pedestrian and cycling bridge and cycle routes through Castledykes Park and Dock Park have improved connectivity, there is still an overwhelming need to improve the pedestrian and cycle links. There is a 20 minute bus service from the town centre through the Crichton Estate with real time bus information. The existing bus route (red route) is considered the principle access route through the site.

From Bankend Road existing vehicular access to the Crichton Estate is at Garage Gate (priority junction), Church Gate (mini-roundabout) and Grierson Gate (priority junction). College Gate provides access to the College. From Glencaple Road Crichton Hall and the Estate is accessed at Main Gate and a secondary one-way access is provided further south at "Brownhall Loaning".

The Transportation and Access Study found that the existing junction at Grierson Gate has limited visibility and there is capacity at College Gate. There is scope for an upgraded Crichton Campus entrance to serve future development and an increase in College operations. From Glencaple Road a new access is proposed from the existing roundabout at Brownhall.

The Transport and Access Statement assesses the level of trip generation rates for future development at the Crichton Estate and provides an indicative level of increased traffic generation as follows.

	8:00 - 9:00am		
	Arrivals	Departures	Total
Total New Trip Generation	182	61	243

	17:00 - 18:00am		
	Arrivals	Departures	Total
Total New Trip Generation	51	164	215

This equates to approximately three to four additional vehicles per minute over both peak periods.

The Transport and Access Statement assesses existing car parking based on existing operations. When an event takes place at Easterbrook Hall and the Crichton Memorial Church it is estimated there is an under provision of 192 parking spaces. When events are excluded on site provision shows an over provision of 33 spaces. There is currently an under provision of spaces at Crichton Hall and at the College and with projected intensity of use at these locations the parking pressure will increase. Future development options would require in the order of 420 additional parking spaces.

Dumfries and Galloway College reviewed its Travel Plan in 2014 which demonstrated a modal shift towards reducing single-occupancy car trips and demonstrated the benefits of free bus travel for students. The University of Glasgow are currently reviewing its strategic Travel Plan for all campuses. It is recommended that an Umbrella Travel Plan is developed for the Crichton Estate.

Recommendations

It is recommended that the following are reviewed:

- Operation of the junctions at St Michael's Bridge/ St Michael's Street, B725 St Michael Street/Nith Bank/ Craigs Road/ Glebe Street roundabout junction and the 3 Road Ends junction at the B726 Kingholm Road/Glencaple Road/Bankend Road and the further implementation of the SCOOT system.
- Findings of the Dumfries South Access Strategy 2010
- New road link from the A75 to the west and bridge across the River Nith
- Development of an Umbrella Travel Plan for the Estate.

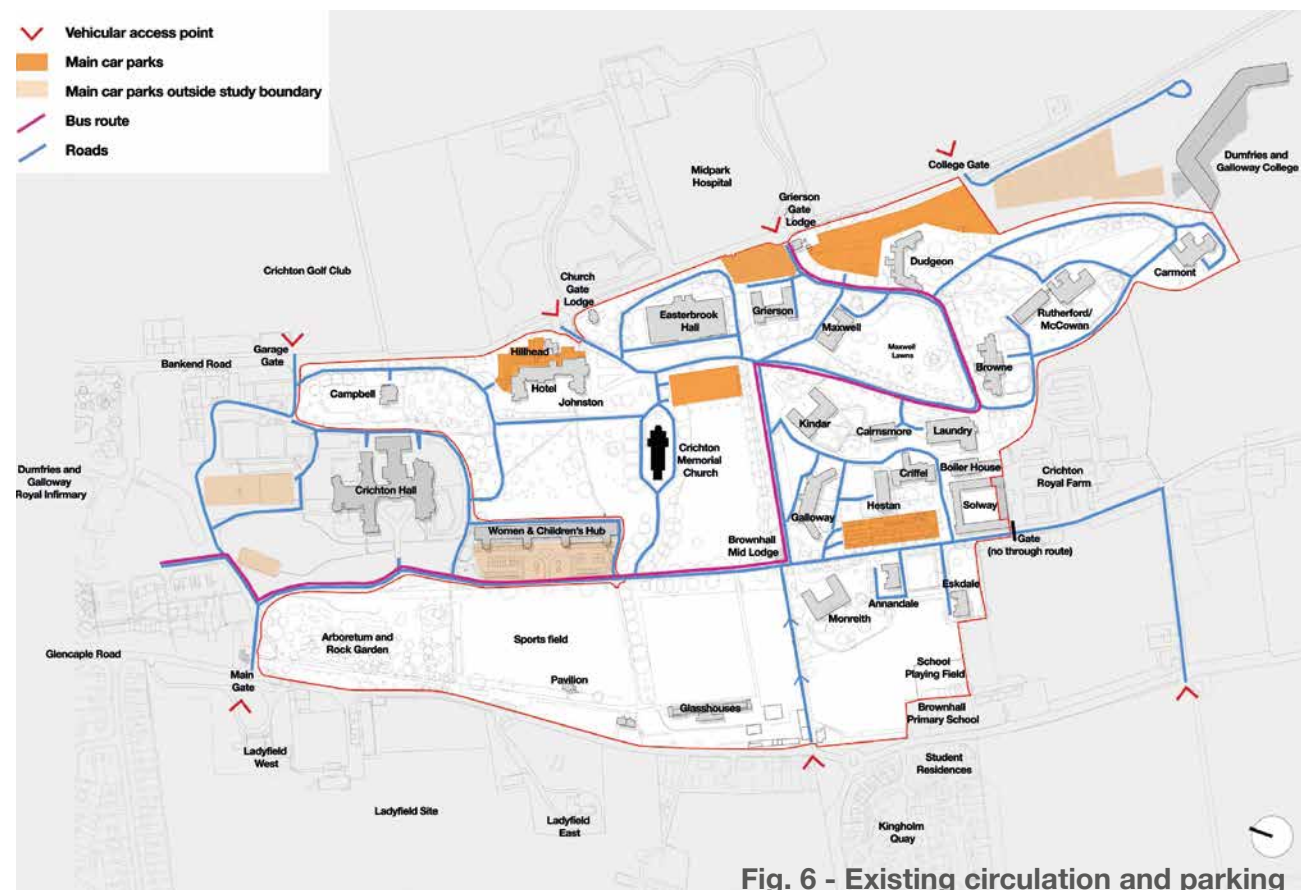


Fig. 6 - Existing circulation and parking

4.0 - Constraints and Opportunities

4.1 - Built form constraints

Dumfries and Galloway's Crichton Conservation Area Appraisal, currently at final draft stage, sets out the conservation constraints which protect the listed buildings, their setting and the character of the conservation area as a whole. It also provides criteria by which positive development opportunities can be identified. In addition, there is the potential for enhancement of the conservation value of the site which will complement these development opportunities and strengthen the value of the site for heritage interest, high amenity and recreational value.

Within the estate there are four buildings which have current and long term uses: the church, the hotel (which only occupies the ground floor of Johnston House), Easterbrook and Rutherford McCowan (which have been recently and successfully altered and linked with a new building to provide accommodation for the University of Glasgow). One building, the B listed glasshouses, is derelict and on the basis of previous attempts has no prospect of an economic future as glasshouses. The remainder of the buildings are mostly fully occupied, some are partially occupied and a very few are vacant. With the exception of Solway and Criffel, the Boiler House, the Laundry and Cairnsmore these buildings have benefited from minor internal alteration and various levels of refurbishment to make them useful buildings for a wide a variety of uses but ideally suited to none.

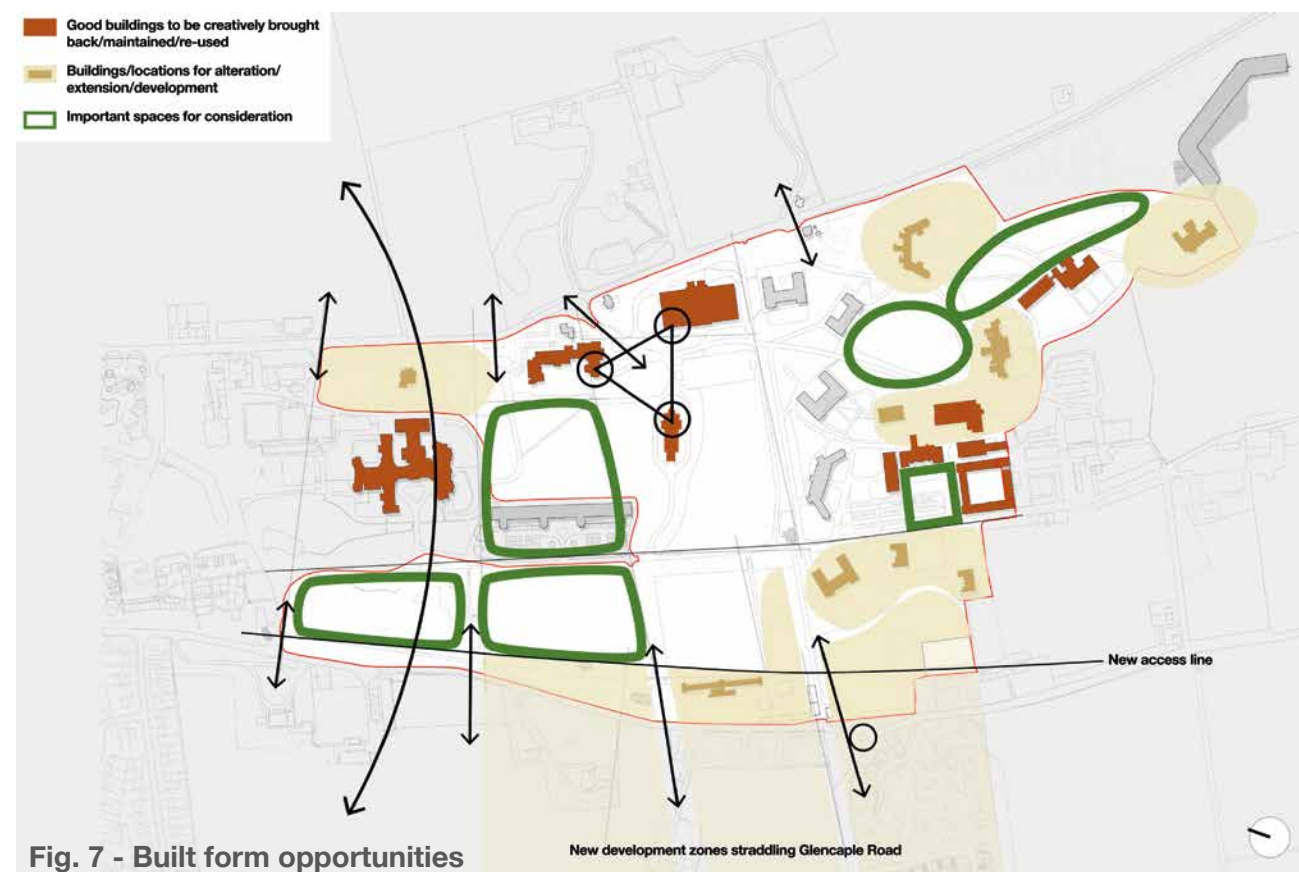
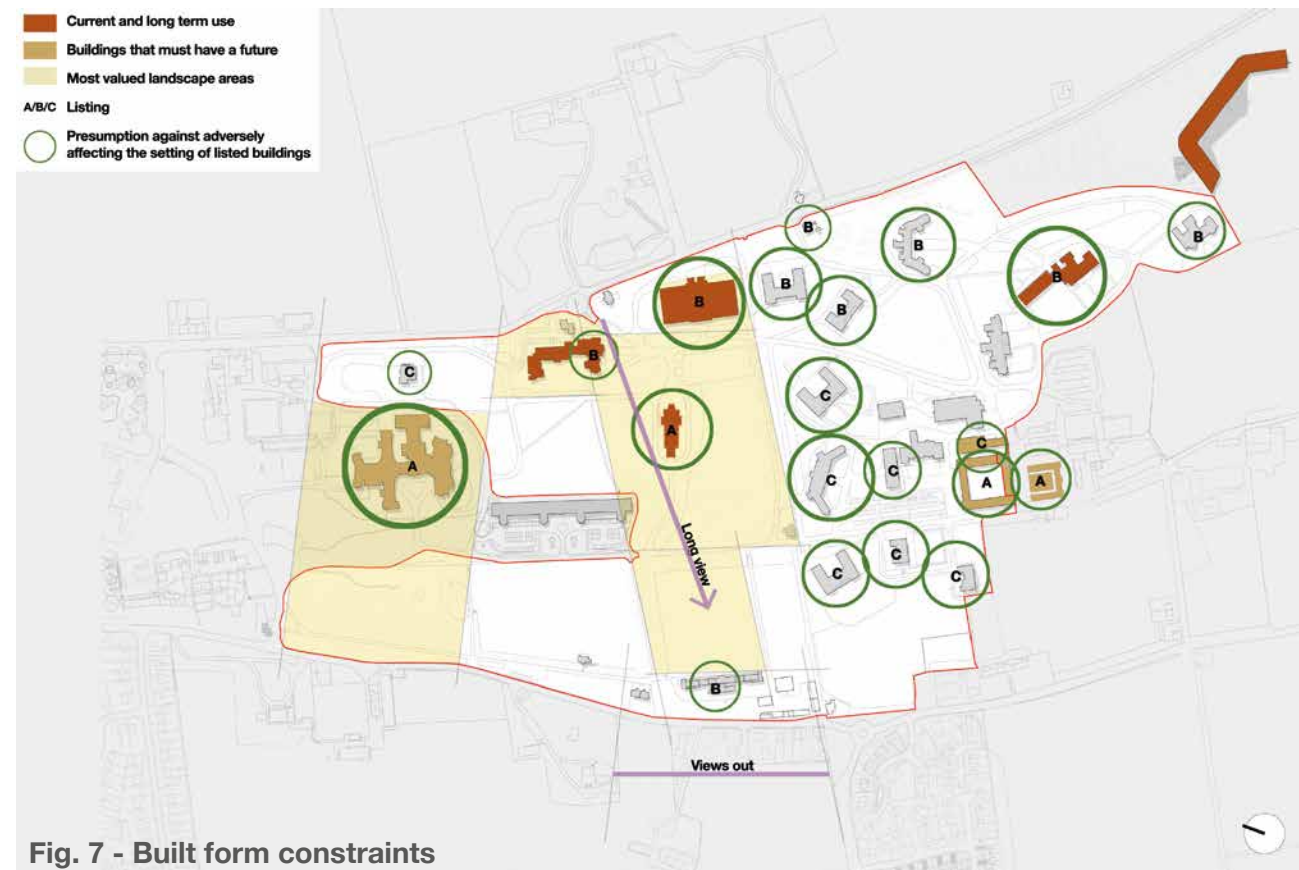
The siting of many of the buildings on the estate has been driven by the desire for open long views to the west and south. This has in part been achieved by significant land engineering to create level platforms for the individual buildings to sit on. Maintaining the open outlook from the central space around the church is critical. Respecting the south west outlook of many of the listed buildings is also important.

4.2 - Built form opportunities

The study aims to identify two headline opportunities: to break out from the straight jacket created by the estate boundaries and form links with the surrounding areas and to the centre of Dumfries; and to unlock the development potential within the site to enable the vision for the estate to be fulfilled.

Forming the links with the surrounding areas and to the centre of Dumfries are of necessity a long term ambition, dependent on the cooperation and action by others. However, by careful consideration of the issues the masterplan for the estate will facilitate these links. There is an opportunity to utilise the existing destinations both within the site and surrounding it, along with the potential to create new 'pearls' to complement these. Key opportunities include:

- Integration with the future Ladyfield development across Glencaple Road
- Visually open up the boundaries in relevant locations
- Improved links to the north of the estate - to be realised by NHS Dumfries and Galloway
- Enhance the relationship between the church, the hotel and Easterbrook and develop the sense of arrival at Church Gate
- Create a public space as a focus for development around Solway House
- Identify a number of development zones to reinforce Maxwell Lawns
- Potential large development zones around Crichton Hall and the Hospice
- Creation of a new site access off the Kingholm roundabout opening up the glasshouses area and the land behind Monreith and Annandale House
- Reunite Solway House with the other listed farm buildings



4.0 - Constraints and Opportunities

The Dumfries and Galloway Local Development Plan (September 2015) sets out the policy framework. Policies of particular relevance to the Master Plan include:

- Policy OP1:** Development Considerations
- Policy OP2:** Design Quality of New Development
- Policy ED3:** The Crichton Quarter
- Policy HE1:** Listed Buildings
- Policy HE2:** Conservation Areas
- Policy HE6:** Gardens and Designed Landscapes
- Policy CF3:** Open Space

Policy ED3: The Council will encourage development proposals in the Crichton Quarter which sustain and grow the existing economic and community benefits provided by the houses, offices, business park, education, leisure and cultural uses which currently occupy the site. This will be achieved by protecting, maintaining and enhancing the quality of the setting, the environment and buildings of the Crichton whilst encouraging new investment.

Policy HE1: Listed Buildings The Council will support development that makes effective, efficient and sustainable use of listed buildings. In considering development that impacts on the character or appearance of a listed building or its setting the Council will need to be satisfied that:

- proposals to extend or alter a listed building respect the appearance, character and architectural features which contribute to its listing and do not seek to overwhelm or otherwise damage its original character and appearance: and
- the layout, design, materials, scale, siting and the future use shown in any development proposals are appropriate to the character and appearance of the listed building and its setting: and
- proposals for a change of use will not result in loss of character or special architectural or historical features.

Policy HE2: Conservation Areas The Council will support development within or adjacent to a conservation area that preserves or enhances the character and appearance of the area and is consistent with any relevant conservation appraisal. The following tests need to be satisfied:

- new development as well as alterations or other redevelopment of buildings preserves or enhances the character, appearance or setting of the conservation area through the appropriate design, use of materials, detailing, scale and general massing and arrangement of such development;

- the quality of views within, from and into the conservation area will be maintained or enhanced;
- in the case of the proposed demolition of any building in the conservation area, it can be shown that the demolition will not detract from the character of the conservation area and it can be clearly demonstrated that any redevelopment of the site will preserve or enhance the character of the area.

The Crichton Conservation Area Character Appraisal (September 2015) has now been produced by the Council and is subject to statutory consultation.

Policy HE6: Gardens and Designed Landscapes supports development that protects or enhances the significant elements, specific qualities, character, integrity and setting, including key views to and from, gardens and designed landscapes included in the Inventory of Gardens and Designed Landscapes or the Non-Inventory List.

Recognition of the quality of the landscape of Crichton Conservation Area is given by inclusion in the register of Non-Inventory Gardens and Designed Landscapes.

Policy CF3 recognises important open spaces and many of the spaces within the Crichton Estate are subject to this policy which sets out a presumption against development, unless a number of criteria are met.

4.3 - Landscape constraints

A key constraint to future development of the estate is the need to ensure that ground work activities do not adversely impact on mature tree avenues or specimens which are identified as key features of the estate. Maintaining the long views to the west and south west may also constrain some potential development sites.

4.4 - Landscape opportunities

The landscape and physical infrastructure of the Crichton Estate provides great opportunities for new development and enhancing the existing environment. Several areas have been identified where there is a lack of spatial definition. Opportunities exist to improve this through the removal of inappropriate, more recent tree planting and by reinforcing spaces through a new landscape strategy which relates directly to the routes which are used currently and a strengthened pedestrian and cycle network.

For example, there is an opportunity to consolidate the currently disjointed network of open spaces between the education campus, Maxwell Lawns and the area north of Church Lawns and around Campbell House. This would also strengthen the continuous green network through

Church Lawns, the sports field and the arboretum and rock garden. By introducing a new green space at the heart of the business park, defined by the surrounding buildings, there is the opportunity for useable, overlooked gathering space in close proximity to the building entrances.

There are also opportunities to increase the visual permeability between the site and the surroundings, by thinning out some of the areas of dense planting around the edges. For instance, at key points alongside the railings on Bankend Road this would give glimpsed significant views into the estate, towards the church, for example. Along Glencaple Road longer term opportunities exist to use landscaping to help to link developments on both sides of the road.

4.5 - Access and circulation constraints

The access points at Grierson Gate, Garage Gate and Main Gate (outwith the estate boundary) also suffer from visibility restrictions due to the listed railings, walls, trees and shrubbery, raising safety issues. Internally, the estate is supported by numerous roads, attributed to the historic phased development which has resulted in an undefined and confusing internal road network.

In terms of existing parking provision, the site is characterised by numerous small areas of dispersed

parking at buildings, together with additional provision over three main car parks: Campus (192 spaces), Business Park (126 spaces), Easterbrook Hall (128 spaces). This has resulted in sporadic, undesignated parking within the Crichton's various access roads and around buildings creating visual impact on the estate and restricting bus and emergency vehicle access.

4.6 - Access and circulation opportunities

There are opportunities to:

- Improve the junctions on Bankhead Road and Glencaple Road into the estate
- Create a new access to the estate at the Kingholm roundabout
- Rationalise the internal roads to create a legible and logical layout that minimises the intrusion into the landscape
- Rationalise and relocate parking areas to achieve a logical and minimally intrusive parking provision that still meets the needs of people with mobility issues
- Redesign the detail of the roads and footpaths to tip the balance in favour of cyclists and pedestrians and give priority to buses
- Develop circulation layout and design that supports sustainable ecologically sound travel habits in all of the estate's users
- Develop new signage that is clear, understandable and obvious without being visually intrusive

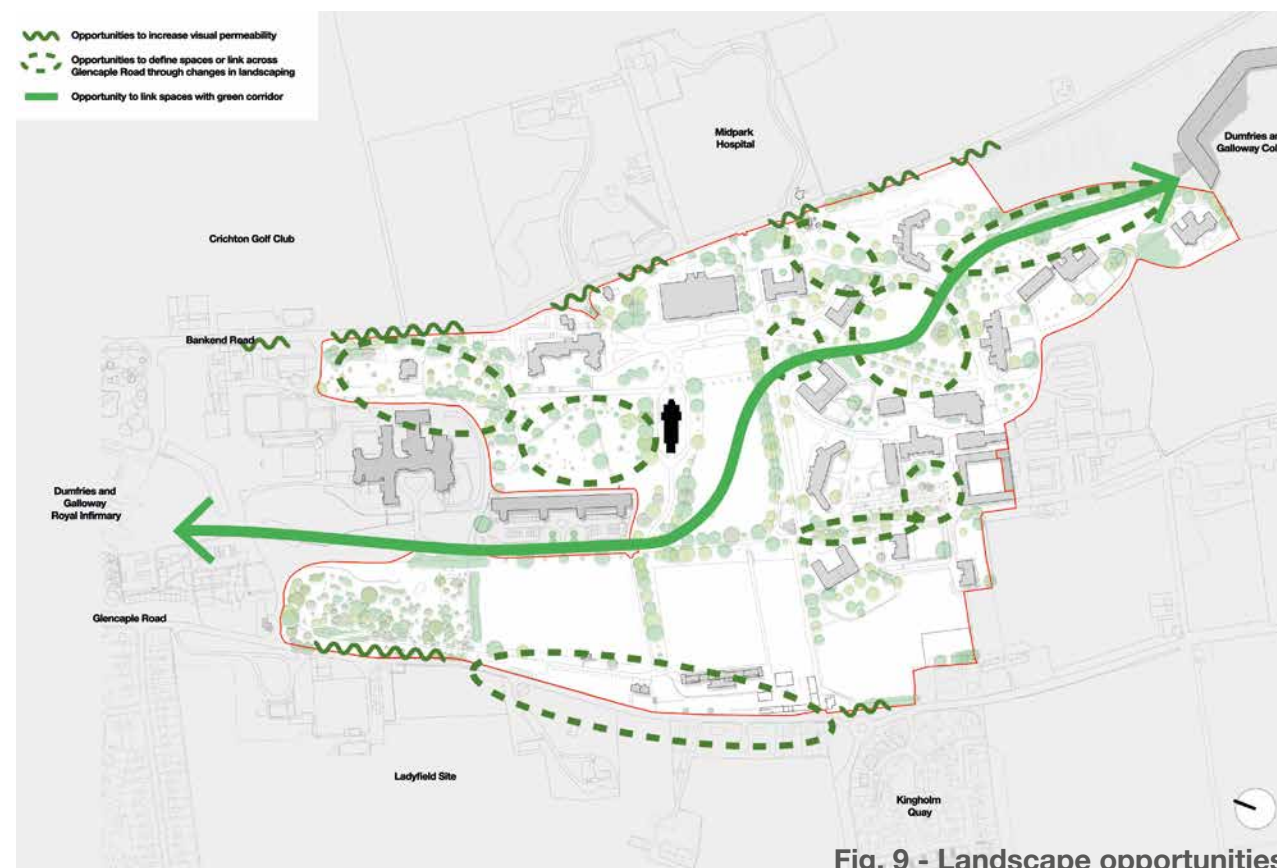


Fig. 9 - Landscape opportunities

5.0 - Objectives of the Masterplan

5.1 – Introduction

The objectives for the masterplan have been drawn from the foregoing analysis and stakeholder responses, taking into account the requirements of the brief and such guidance as the Scottish Government's Planning Advice Note 83 on Masterplanning.

The overall aim is to support the Vision as set out in section 1 of this report with a concept for the future development of the estate which is clearly supported by the Crichton stakeholders.

The objectives relate to the role of the masterplan in guiding the future physical development of the Crichton estate to meet the business aims of the Crichton Trust and its stakeholders, especially the tenants and users of the estate. They concern the nature of place that the Crichton should be in the foreseeable future and how it will continue to embody the values seen in its heritage and amenity assets as well as create impetus and clarity for new development opportunities.

Key issues emerging from the stakeholder engagement during the preparation of the masterplan revolved around public space, activity and vibrancy, building sustainability for modern requirements, legibility, wayfinding, boundaries and links to the rest of the town.

5.2 – The objectives

The masterplan objectives are summarised as follows.

- A.** To clearly identify the principal existing assets of the estate (historic buildings, designed landscape and outward views) and to indicate how an appropriate balance may be struck between preservation and enhancement of these assets and fulfilling the potential of further development opportunities.
- B.** To identify development opportunities by means of a) maximising the use of existing buildings, b) alteration and extension as appropriate to the historic character of the relevant building and its setting, c) extensions or d) new build which maintain the overall character of the site and meet the foreseeable needs of the key stakeholders.
- C.** To provide an appropriate framework for the continued development and expansion of an academic campus of outstanding quality.

D. To enhance the opportunities for leisure and other support facilities of the estate as a complement to the key academic and business uses and to the promotion of significantly greater community access and enjoyment of the site.

E. To provide an integrated framework for the development of the estate as currently managed by the Crichton Trust along with key adjoining properties such as Crichton Hall belonging to the NHS, Dumfries and Galloway College and the Ladyfield site belonging to Dumfries and Galloway Council and the Crichton Farm belonging to SRUC

F. To identify means by which the estate may be significantly better connected both physically and perceptively to Dumfries town centre using interlinked green spaces as an alternative to the road system for sustainable means of transport for both commuting and recreational use.

G. To provide a framework for managing traffic movement and parking within and around the estate while minimising the impact of vehicular traffic on the high amenity of the pedestrian environment within the estate.

H. To create a sense of welcome at the key entrances and in the routes penetrating the estate to key activity hubs, especially to identify a processional way or similar formal approach into the academic campus.

I. To resolve the sense of exclusivity of the estate created by the enclosure of railings and landscaping originally intended to confine mental patients with the need to turn such features into positive distinguishing features of the estate which provides amenities equally valuable for modern public enjoyment as for the beneficiaries under its historic role.

J. To establish the basis on which a distinctive sense of place may be created around each of the key features and activity hubs in the estate.

K. To provide the basis for conservation, interpretation and landscape enhancement plan for the estate.

5.3 – Concept development principles

The overall concept for the masterplan addresses three main themes:

a. Protect and enhance

The masterplan responds to the need to ensure the unique qualities of the estate are not damaged either by individual, inappropriate but significant intrusions, nor by slow, piecemeal erosion over time.

b. Framework for development

The masterplan acknowledges that to merely preserve the status quo is, in effect, to allow the estate to wither away as the landscape ages and deteriorates and the ability of the buildings to adapt to current needs becomes increasingly problematic. A correctly designed framework for development will stop the estate becoming a museum piece and allow it to continue to do what it has done so well since the inception of the Crichton Royal Institution, which is to develop by being at the forefront of research and development in its chosen field. To be able to deliver this research and development will require the estate's physical infrastructure and buildings to continue to develop and expand.

c. Links to the town

It is beyond the scope of this masterplan to propose alterations to the road network beyond the estate's boundaries. However, the masterplan proposes a framework for development that is tuned in to the ways the roads network could respond to the potential development within the estate and its hinterland. It is, however, within the study's remit to look at how the cycle and pedestrian network can be enhanced so as to improve the links to the centre of Dumfries. It does this with some detail starting within the estate with, of necessity, more conceptual proposals as the uncertainty increases towards the Three Road Ends junction and beyond.

6.0 - Masterplan Proposals

Fig. 10 - Wider Context - Crichton Quarter Concept



6.0 - Masterplan Proposals

Fig. 11 - Masterplan Concept Diagram



6.0 - Masterplan Proposals

6.1 - Introduction

The key to the concept diagram provides a framework for understanding the overall approach to development and enhancement on the site. It includes six key components of a) Green Corridor, b) Core Character Area, c) Key Development Area, d) Future Development Opportunity, e) Car Parking Expansion and three f) Hubs which provide a focus for clusters of buildings related to three different general uses. In addition, the diagram indicates the position of g) four main access points to the site which are intended to perform specific functions in receiving vehicular traffic related to the three hubs shown on the diagram as well as to Crichton Hall. These require greater explanation as set out below.

6.2 The components of the masterplan

a) Green Corridor - The concept of the corridor is a keystone to securing many of the principles behind the plan. In the first place, it consolidates several elements of the heritage landscape which are especially important to the historical development of the site and to the setting provided for its more important architectural features. It is defined by elements of the designed landscape which originally provided an exemplar environment for mental health treatment and similarly can perform a vital role in a stimulating high amenity environment for learning, teaching, working, recreation and healthy living today. Secondly, the corridor provides connectivity for sustainable modes of transport, especially walking and cycling, linking the town centre with destinations within and around the Crichton site. This is of increasing importance not only to the provision of alternative transport to the congested roads of the Quarter but also for creating a major new opportunity for community leisure and heritage based visitor attraction. The Green Corridor provides access to all the major development opportunities, spaces for new recreational uses, potential connections to walking and cycling routes beyond the town.

At the Academic Campus Hub end of the Corridor, there is the opportunity to incorporate it into a more formal processing route for special occasions leading from the academic buildings to the church and Easterbrook Hall. At the town end, the Green Corridor extends beyond the Crichton estate to connect with the town centre via a new route through the adjacent NHS property, Castledykes Park, riverside and Dock Park.

b) Core Character Area - This area consolidates most of the important sensitive parts of the historic environment – three of the four A listed buildings, parts of the Green Corridor with original landscape features, the arboretum and exquisite long views out of the site. The area also represents the three main stages of development of the site in both functional and architectural terms including almost the entirety of Crichton Hall and its setting, Easterbrook Hall and the Crichton Church and the related Crichton lawns and lastly the periphery of the pavilion cluster. The character of the pavilion cluster can be preserved with reference to this periphery thereby releasing greater development opportunity behind the periphery.

The Core Character area includes the two original entrances to the site which were designed as institutional gateways and readily adapt to the welcoming approach required to the new Crichton. It is bounded on the Glencaple Road side by the typical austere institutional railings, and is separated from them on the Bankhead Road side only by narrow potential development sites or car parking. In both cases, removal of scree planting and other measures can greatly enhance the attractiveness of the Core area without affecting its conservation value.

The Core Character Area is also the most suited to the development of heritage interpretation and destination visitor facilities for which the church is already the subject of a related project.

c) Key Development Areas - Nine such areas are identified and more fully explained in detail in the next section. They are largely located around the southern periphery of the Crichton estate, with one or two notable exceptions and thereby relieve pressure from the Core Character Area. They represent opportunities which are appropriate to the circumstances of the sites and buildings concerned. Maximum reuse of existing buildings is preferred not only to respect their status as historic buildings but to support the Trust's sustainability aims. They range from the A listed Solway House to unlisted buildings and from extension opportunities which can respect the existing building to new build sites. The capacity of these buildings sites is expected to meet all demand for the foreseeable future and to offer a wide range of different development types.

Of particular note is the opportunity at site 9 which, despite being in the heart of the Core Character Area, has been identified to restore a building of presence to the site which was originally occupied by the Southern Counties Asylum.

d) Future Development Opportunities - Both Ladyfield and the DGRI site are development sites of significant scale confirmed as being for medium to long term development through the most recent Local Development Plan process. Under emerging strategic partnership arrangements, the future of these sites is likely to be strongly linked to that of the Crichton estate and to be managed by the Trust in accordance with the aims of this masterplan. The charrette held in 2009 for the Ladyfield site continues to form a basis on which future development can be based but other development opportunities are also emerging. Key issues for the Crichton are the linkages between possible developments on these sites and those on the Crichton estate itself. The same principles apply to the DGRI and related sites with the key requirement being the completion of the corridor connection to the town centre as an integral part of any development proposals.

e) Car Parking expansion - The need for expanded car parking comes not only from the expected increase in people visiting and working on the estate but from the need to curtail car parking from certain parts of the site, consistent with the conservation and amenity objectives inherent in the Core Character Area and Green Corridor concepts in particular. However, the masterplanning exercise has not identified means of replacing the existing high visibility parking areas in front of Easterbrook Hall and Solway House. Landscaping measures will therefore be considered to reduce the visual intrusion of these car parks on important heritage settings.

The main principle for vehicular access and parking is to confine it to the eastern and western edges of the site, reducing as far as possible vehicle penetration into the Core Character Area and the Green Corridor, both for movement and for parking. It is likely therefore that the main increase in parking capacity will require to be met along the Bankhead Road side. As the high edge along this side does not affect public perception of inaccessibility of the site, which is more

critical nearer the town end of the site, the hedge can provide a valuable screen for modest multi-level parking to serve the highest trip generating parts of the site.

f) Hubs - The clusters which relate to the three hubs are self-explanatory and already exist in the leisure, academic and business uses. Each of these is expected to grow but it is not considered possible or necessary to adopt a strict zoning approach, rather the hub concept whereby support services and key relationships may be provided within a cluster while certain users of the cluster may locate in other parts of the site. It is for this reason that the Green Corridor and the Trust's plans for providing coordinated infrastructure and services for users generally in the site are so important in providing flexibility and choice of development sites.

g) Main Access Points - The four main access points are Crichton Hall entrance (the original historic entrance), Easterbrook Hall entrance (later historic entrance), Crichton Campus entrance (recently opened to serve Dumfries and Galloway College) and Brownhall entrance (for which only the roundabout has been constructed). While the first two will require some upgrading to provide the impact of welcome and 'drawing in' to the historic part of the site, the main changes foreseen by the masterplan are with the latter two entrances. The Campus entrance is envisaged to be reconstructed to serve the Campus Hub as a whole and to connect to significantly increased parking capacity. The Brownhall entrance will be designed as a new access as appropriate to the development proposals which come forward for the development sites in that area. This will also involve parking capacity and consideration of services required for the users of this part of the site and possibly beyond in the Kingholm Quay and Ladyfield areas. Future traffic management on Glencaple Road will affect the arrangements for this access.

6.0 - Masterplan Proposals

6.3 - Potential Development Areas

1. Campbell Lawns

To the north end of the estate there is the potential to develop the 1.3 hectare Campbell House site in such a way that it engages with Bankend Road as well as the estate. The building sits within a large enclosed plot framed by the landscape and at a higher level than Crichton Hall. A new building or major extension should take its architectural cue from Campbell House.

2. Dudgeon House

Maxwell Lawns is a key connecting space between the Community/Leisure, Academic Campus and Business Hubs, but there is an existing lack of spatial definition. The area needs to be established as a key green space with appropriate pedestrian and cycling routes linking the Community/Leisure Hub to the Academic Campus Hub.

Dudgeon is currently in academic use by UWS, but the existing layout is not fit for purpose. Dudgeon and its surrounding open space (0.67ha) situated within the Academic Campus Hub is identified as a potential development site which would contribute to the sense of space and define the key green space of Maxwell Lawns and green corridor leading southwards to the College.

3. Rutherford/McCowan and Carmont House

There is scope for significant development opportunities in the vicinity of both Rutherford/McCowan and Carmont which could frame and reinforce the green corridor to the College. Development would require to have regard to the key views out of the Estate to the south west. There is potential to link these buildings to the green corridor with appropriate extensions or linked new buildings. Carmont House could be utilised as teaching/learning space given its proximity to the College and Rutherford/McCowan.

The new awarded winning link building between Rutherford and McCowan is an interesting intervention that makes a positive contribution to the qualities of both buildings. It makes the two buildings work together as teaching accommodation for the University of Glasgow.

4. Browne, Merrick and Cairnsmore Area

The existing cluster of buildings Browne, Merrick (former laundry) and Cairnsmore frame the Maxwell Lawns area. Browne House is currently in academic use by UWS, but the existing internal layout is not fit for purpose. Merrick House is a utilitarian 1960s building that has a large uninterrupted floor plate. Cairnsmore a 1960s infill building refurbished in 2007 is a good imitation of the established pattern, but its horizontal emphasis is at odds with its surroundings.

All possibilities for the future reuse and reconfiguration of Browne and Merrick should be explored before a case for demolition is considered. This area is identified for potential development which would contribute to the sense of place and help define and frame this key open space area and establish the green corridor to the College. The Master Plan has identified there is scope to develop a new building or major extension in this area.

5. Solway House and Boiler House

Solway House is a substantial four-square courtyard building, but the existing site boundary excludes the southern wing of the building. It is a key and prominent building at the edge of the Business Hub given its scale and height. It presents a significant development opportunity linked to the SRUC Crichton research farm and the listed byres to the south.

The boiler house adjacent is a set piece building of some quality that warrants an appropriate specific use and should remain as a free standing building.

6. South West Edge – Business Hub

At the Business Hub Monreith, Annandale and Eskdale Houses are identified as a potential development opportunity which by appropriate alteration, extension, infill or redevelopment would complete the business hub. The greenfield site (1.61 ha) to the west of Monreith provides an opportunity for new development. It provides a range of opportunities for office/business use, and housing including student residences. There is the opportunity to make the link across Glencaple Road to the housing at Kingholm Quay seeking to create a community and service hub.

The type and scale of development should mirror the pavilions in the landscape and consider the use of building platforms to restrict building heights in order to preserve key views out of the Estate to the south west. New parking provision would be developed in this area to serve increased levels of activity at the Business Hub and to serve new development.

A new road and access at Brownhall from the existing Kingholm roundabout will open up this development site on the south west edge of the Estate together with the adjoining Glasshouses site. It will also improve vehicular access to the Estate.

7. Glasshouses Site

The glasshouses are decayed, beyond economic repair and previous studies have failed to identify a sustainable use for them were they to be restored. The site (0.94ha) is considered appropriate for new development subject to the height and massing respecting the core character area and the views into and out of the estate. Vehicular access would be provided from the new Brownhall entrance.

8. Western Edge

There is a thin strip of land along this edge that the Estate's previous land engineering has left close to the level of Glencaple Road. There are a few underused buildings along this edge which could form the basis for development along this strip, related to the future development of the Ladyfield site across Glencaple Road. The master plan envisages this western edge being linked back into the estate by extending and reinforcing the existing east-west paths and extending them out across Glencaple Road.

The Ladyfield Sustainable Development Concept (2010) envisaged the "Peel Plan" with its retail and neighbourhood centre along a gently curved high street. This development area could be related to this concept.

9. Hospice

The Hospice belongs to NHS Dumfries and Galloway, but it is a building that does not add to the quality of the Estate. The previous building on the site, Southern Counties Asylum was several stories high and had a considerably larger footprint. The site provides a potential development opportunity while respecting the setting of Crichton Memorial Church, Crichton Hall and the green corridor to the west.

Potential Car Parking Expansion Areas

The master plan proposes restricting the majority of the parking to the east and south west edges. The entire focus of the views within the estate are from the east/ Bankend Road edge towards the west. The least prominent visible location for dense and potential two storey parking is along this east edge to the rear of Easterbrook Hall, Grierson House, Dudgeon House and at the College. In addition, the master plan identifies parking areas as along the south west edge related to the south west development site and the glasshouses site. Discreet, well designed areas of parking are also required at each building.

The master plan envisages these parking areas being accessed by shared surfaces from the principle route. The detailed design and location of these parking areas should reinforce the identification of a building's main entrance.

6.0 - Masterplan Proposals

6.4 - Landscape proposals

Overall, the objective for the landscape of the Crichton Estate is to repair and enhance the key features of the historic landscape structure so as to maintain the settings of the historic buildings, while at the same time accommodating new developments.

Many of the tree avenues suffer from erosion of integrity as a result of losing trees due to either wind blow, disease or old age. It is suggested therefore to implement a programme of tree replacement which should initially focus on the main structural landscape features. In parallel with the tree replacement programme, a tree removal program should be implemented. This should focus on taking out those trees which have been planted in the last 50 - 60 years within the open space areas and presently have the effect of diluting spatial distinction and quality.

With respect to landscape maintenance, it is suggested to consider implementing different levels of maintenance without compromising the quality of the current maintenance regime.

Particular attention is required to improve pedestrian movement, cycling and general public access penetrating the estate. The current listed boundary walls and railings, whilst being a valuable feature in historic landscape design terms, also have the effect of making the estate appear very enclosed and private, and discouraging public access. Careful consideration of where sections of railings and walls could be removed and thinning of vegetation inside the boundary should lead to an increased number of access points, and make the estate visually more inviting.

Within the estate it is proposed to develop standard details for vehicular roads, shared surface roads, cycle and footpaths that are appropriate for a campus development and plan for and implement a gradual programme of intersection improvements in accordance with the agreed details. It is also proposed to simplify access and circulation within the estate by removing or closing off sections of roads and paths.

To reinstate some of the integrity of the historic landscape structure and open space it is proposed to relocate some existing parking areas, for example the large car park between Crichton Memorial Church and Easterbrook Hall (referred to as the Lockerbie car park). At the same time, standard screening detail for car park edges should be developed and implemented.

6.5 - Proposed circulation and car parking

The existing three access points to the estate off Bankend Road and the Dumfries and Galloway College access point are all adequate for the current traffic. The masterplan framework

identifies significant development potential to the west of Monreith and Annandale, and around Solway Square and also associated with Browne and Carmont Houses. The masterplan anticipates a new access into the estate from the Kingholm roundabout.

The proposals restrict internal movement to the east edge and the line just west of the Hospice with limited connectivity between east and west. This arrangement will enable the core and high quality landscape spaces to become true focal points for activity and enjoyment.

The proposed road network is designed to be sufficient to service the identified potential development areas / buildings though upgrading of specific lengths of road.

These proposed changes to the internal road network will need to be subject to future detailed analysis in order to understand the detailed implications of the new traffic arrangement. This detailed analysis may conclude that the east-west link to the south of the church should be retained for emergency vehicle access only.



Fig. 12 - Potential landscape development

6.0 - Masterplan Proposals

The masterplan proposes restricting the majority of the parking to the east and south west edges. The entire focus of the views within the estate are from the east / Bankend Road edge towards the west. The least prominent visible location for dense and potential two storey parking is along this east edge. In addition, the masterplan identifies parking areas along the south west edge. Discreet, well designed areas of parking are also required at each building.

The proposed bus route will need to be subject to further assessment in terms of swept path analyses and general suitability. This bus route would also need to be agreed with Dumfries and Galloway Council / bus operators and would require amended infrastructure (bus stops / shelters / real time information).

Campbell House as it exists and as a development site would benefit from direct access from Bankend Road. The linkage and relationship between the estate and Midpark Hospital would be enhanced with better pedestrian and cycle links and perhaps a designated pedestrian crossing at Grierson Gate. The existing landscape form within the estate suggests that new and improved access could be created between the arboretum and the sports field, between the field and the glasshouses and at the Kingholm roundabout.

The masterplan envisages the development over time of a network of paths on appropriate desire lines integrated with the landscape and anchored by a spine path from Dumfries and Galloway College, through Maxwell Lawns, past the church, in front of Crichton Hall and on to the Three Road Ends junction.

6.6 - Impact on the wider movement network

The Transportation and Access Assessment details the likely additional trips likely to be associated with future development at the Crichton (up to 2020) based on:

- Additional SRUC operations, including 3,700sqm new educational space, 1,200sqm engineering facility and 750sqm animal care facility
- Additional UWS operations consisting of a 4,000sqm new building
- 2,000sqm student accommodation, accommodating up to 500 student residences.

The assessment shows that the identified net increase in trips is shown to be in the region of 214 during the AM peak period and 191 during the PM peak period, thus equating to approximately three to four additional vehicles per minute over both peak periods. The assessment provides an indicative level of increased traffic loadings. However, it should be noted that future development may require further detailed assessment as part of a Transport Assessment (TA) in line with future planning applications, which will consider the finalised and exact scale of development, survey data representative of that future time period, consideration of additional impacts on trip generation and committed developments (or closure of currently operational sites / facilities).

Further assessments would also provide detailed operational junction analyses and safety assessments in order to assess the impact of traffic within the Crichton itself, and over the wider highway network. Indicative trip rates are also provided within the Transportation and Access Assessment in the **separate Appendix report**, for various land units which could be developed at the Crichton post 2020.

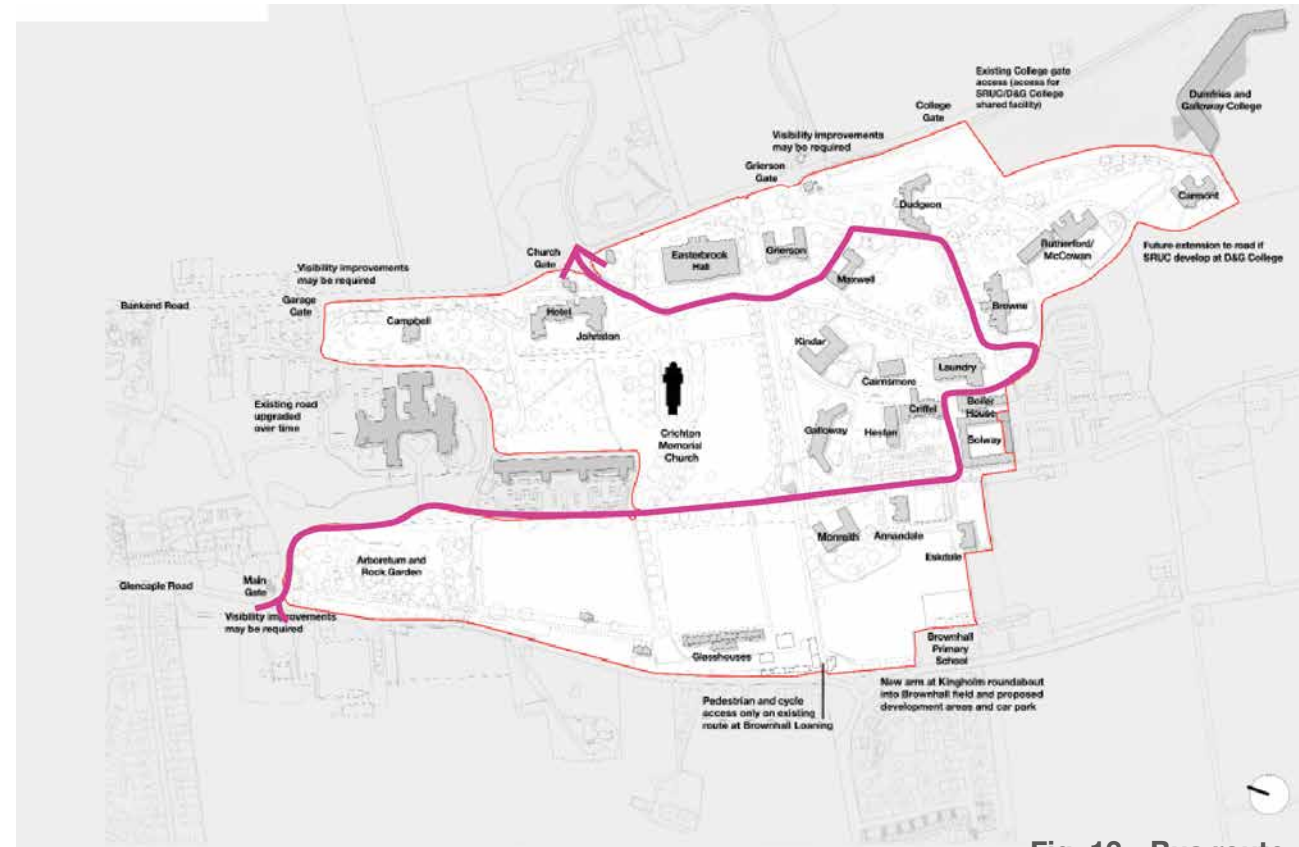


Fig. 13 - Bus route

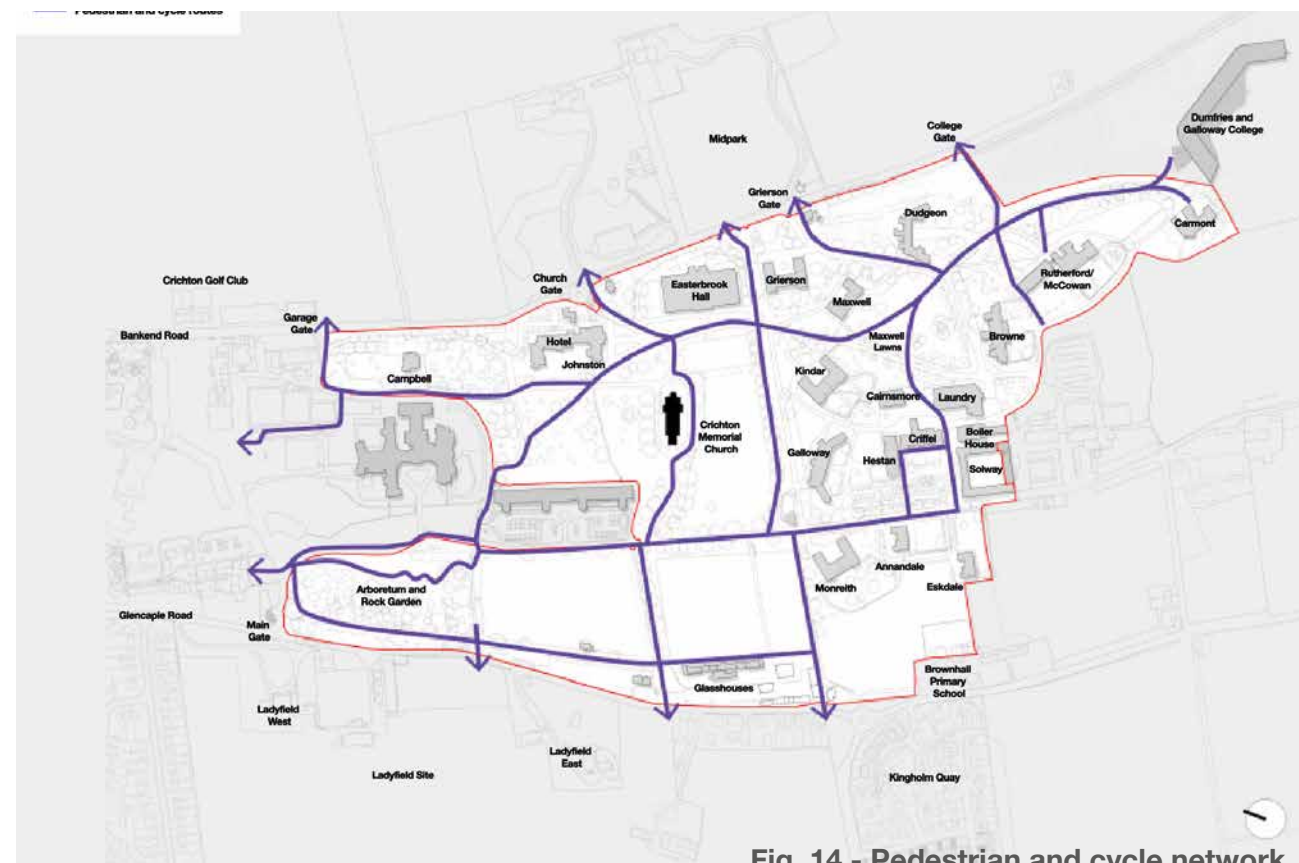


Fig. 14 - Pedestrian and cycle network

7.0 - Implementation, Delivery, and Next Steps

7.1 Implementation

The masterplan is a framework that sets the direction of travel (and perhaps an end point). However, in recognition that the Crichton Estate exists to provide a physical place for education, research and development and related business activities, there is no definitive end point. Change and development are continuous and never ending.

The development on the estate, however, will be demand led and the nature of the demand will determine the best location and physical manifestation for the required accommodation. The framework is dynamic and flexible and the development can start anywhere. Some locations have a low entry threshold and are essentially development ready, others require some roads and other infrastructure development to facilitate them.

The proposals that are estate wide and relate to the landscaping, internal circulation (paths, cycle routes and roads) and that will foster improved connectivity with the immediately surrounding areas and the centre of Dumfries could be progressed straight away. These will have a beneficial impact independent of any development, and would improve the quality of the estate making it a more attractive location for development.

The study does not propose a programme for delivery of the masterplan and it is acknowledged that the timing of all works is dependent upon demand and funding availability.

7.2 Supplementary Guidance for the Local Development Plan

As intended by the Settlement Overview for Dumfries and by Policy ED3 in the Dumfries and Galloway Local Development Plan 2014 (LDP), this masterplan will provide significant input to the development framework for South Dumfries which the Council is preparing as Supplementary Guidance to the LDP. The LDP also recognises that traffic management in the wider network is a critical issue for the future development of the Crichton and South Dumfries generally and as recommended at the end of section 3.7.

It is recommended that this masterplan is submitted to the Council for confirmation of consistency with the LDP and that the Council be requested to proceed with the South Dumfries Development Framework as soon as possible in order to address the issues arising for the management of the transport network and for the better vehicular and non-vehicular linkages required to fulfil the potential development opportunities of the Crichton estate.

7.3 Travel plans

The Dumfries and Galloway LDP is also accompanied by Supplementary Guidance on Travel Plans which may make a significant difference to the sustainability of any development area in terms of emissions reduction, congestion reduction, social inclusion, investment attraction and amenity improvement.

It is recommended that the Crichton Trust and Dumfries and Galloway Council consult with the other key stakeholders with a view to preparation of appropriate travel plans for the Crichton estate.

7.4 The Crichton Conservation Area

Dumfries and Galloway Council is currently in the process of preparing a Conservation area Appraisal for the Crichton conservation area which was designated in 1997 at the time of the initiation of the Crichton project, but covering a wider area than that controlled by the Crichton Trust. In particular, it additionally includes Crichton Hall and related parts of the NHS property around the current Royal Infirmary and the Crichton Farm belonging to the SRUC. It also includes a wider buffer area to the east and west of Bankend and Glencaple Roads respectively. The Appraisal has been prepared in consultation with the authors of the masterplan and will be an essential guide for the conservation principles which it contains.

It is recommended that the masterplan is referred to the Council to confirm its consistency with the Conservation Area Appraisal and to ensure that clear guidance is available in order to expedite future development proposals.

7.5 The Crichton Estate

The masterplan highlights the existence of key historic properties beyond the current boundaries of the estate controlled by the Crichton Trust but which are within the core character area essential to the conservation and coherent interpretation of the area. Crichton hall is a notable example.

It is recommended that the Crichton Trust enters discussion with NHS Dumfries and Galloway to establish a means to secure the future refurbishment of Crichton Hall and its integration into the historic environment of the Crichton estate.

7.6 The Crichton Designed Landscape

The designed landscape of the Crichton estate is a key element of its conservation value as well as its amenity

value. The design that evolved with the development of the former mental hospital over 100 years or so reflected the direct concerns for the needs of patients for a restful but stimulating environment and the same features contribute to the enjoyment of the estate in its various modern uses. Indeed it is essential to the future of the Crichton that the contribution which it makes to the attraction of the estate for investment in a stimulating environment for education, business and recreation is never taken for granted.

It is recommended that the Crichton Trust commissions a report on the conservation value of the designed landscape as input to future initiatives for development and enhancement of the estate.

7.7 A Community Resource and Visitor Destination

The heritage of the Crichton, coupled with its outstanding amenity qualities, has been underexploited in the past. It is understood that the Crichton Trust is finalising plans for the improvement of visitor reception facilities based in the church crypt.

It is recommended that the Trust commissions a report on grant fundable proposals for a heritage and arts based interpretation and visitor management plan for the estate.

7.8 The Green Corridor

The concept of a green corridor linking the Crichton estate with the town centre of Dumfries is key to the strategy behind this masterplan. There is the opportunity at the Crichton to make this a feature in its own right which changes perceptions of the Crichton especially its accessibility and its potential as a major community and visitor amenity as well as an exemplary education campus.

It is recommended that the Crichton Trust forms a project partnership with Dumfries and Galloway Council and the NHS Dumfries and Galloway, as co-landowners, together with possible funding bodies and user interests, to pursue this project as a matter of urgency. It is also suggested that the name and specification for the project should be subject to community and schools consultation.

7.9 Project briefs

A number of the development sites and opportunities identified in the masterplan cannot be undertaken without clear guidance on the design criteria and infrastructure and traffic impact assessment.

It is recommended that the following development and management opportunities should be made the subject of briefs to be prepared and prioritised by the Crichton Trust:-

- Development sites 1 to 9
- The upgraded campus entrance
- The car parking expansion area
- Interpretation and visitor management plan
- Landscape management plan
- The green corridor

7.10 Design guidelines

Design guidelines for future developments are required which reflect the conservation priorities as well as the user requirements and the opportunity for modern interpretation appropriate to this unique setting. In the core character area, the conservation constraints are stricter than in the more peripheral development areas, especially those areas where the buildings are not listed or the settings of listed buildings are less sensitive. A general design guide would not therefore be appropriate. There is, however, an opportunity to continue the development of the Crichton with new and distinctive phases of development for which careful consideration requires to be given to the design approach used.

It is therefore recommended that the Crichton trust prepares design guidance within the brief for each of the development opportunities listed under 7.9 above.

7.11 Other priorities

Low carbon and sustainability. The masterplan team have entered into discussions with the Crichton Carbon Centre with a view to considering a high level review of the estate's carbon footprint and assessing the potential for further investigations to facilitate the development of a detailed sustainability framework for the estate as it develops.

Signage, wayfinding and interpretation. The masterplan has addressed the fundamental design issues associated with wayfinding within the estate. Following the preparation of the heritage interpretation plan as recommended above, the wayfinding and signage strategies will require to be addressed.

IT and infrastructure. The Crichton Trust has carried out a number of studies into the utilities infrastructure sufficient to be confident that the scale of potential developments can be serviced. Detailed assessment of the services and IT infrastructure is essential to the successful delivery of the proposals in this masterplan.

The Crichton Trust

Grierson House
The Crichton Estate
Dumfries
DG1 4ZE
United Kingdom

T: +44(0)1387 247 544

admin@crichton.co.uk
www.crichton.co.uk