Technical Assessment

Path Maintenance and Improvement Works to Castle Loch Walk, Lochmaben

Produced by:
Paths for All Partnership
Kintail House,
Forthside Way,
Stirling, FK8 1QZ

Produced on: January 2020

Disclaimer

This technical route assessment is based on circumstances present at the time of the survey on 5th October 2020.

Paths for All do not accept liability for any loss or damage of any kind arising from, or in connection with, the use of the information and recommendations contained within this study.

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Drawings: (Standard Detail and/or Detailed) Drawings)
CL/UPU/CLLCT/001-**Unbound Surface Path (Upgrade of Existing Path)**
CL/UPHT/CLLCT/002-**Unbound Surface Path (Half Tray Excavation)**
CL/LLW/CLLCT/002-**Low Level Walkway**
SD/PC/01-**Piped Culvert (Twinwall Pipe)**

1.0 Introduction

The surveyed path is located around the Castle Loch, Lochmaben, Dumfries and Galloway (see **Map 1 –** General location plan). The route is readily accessed from numerous points arounds the Loch with the survey being started and completed from the carparking area at the Visitor Centre.

'Paths for All' were invited to assess the existing route, develop improvement proposals (see **Map 3** - Indicative line of proposed improvements to path/route infrastructure with key distances/features noted) and prepare a technical appraisal / cost analysis to upgrade this section of path; making the route more accessible to a broader range of path users where possible. Particular focus was to be given to the general improvement, and raising, of existing boardwalk sections between chainages 1578 and 1724 linm, and including the link path to a bird hide at grid reference NY090811, where rising water levels can render these sections impassable throughout the year.

2.0 Initial route assessment / survey methodology

The aim of this Technical Assessment is to assess current general condition, including access barriers, notable gradients, signage and the like with a view to understand what works may be required to improve the route for current users whilst further seeking to better accommodate the broadest type of path user wherever possible (e.g. recreational runners, cyclists, pushchairs, less able, etc.).

The objectives of the survey were to:

- Measure and record the current length and condition of the path route
- Identify key points and specific issues along the route which are liable to detrimentally affect users and the improvement works needed to rectify these issues
- Identify initial outline design ideas for the improvement works
- Provide cost estimates for the proposed improvement works
- Provide Standard Detail or Detailed Drawings for suggested works

The survey involved walking the route and recording the current condition along its full length. The route surface and features were photographed and referenced in linear metres (linm). The notes and photographs within this survey serve to provide the reader with a general impression of the current condition (route surface and features), identify any specific issues and propose initial outline design ideas for the suggested route improvement works.

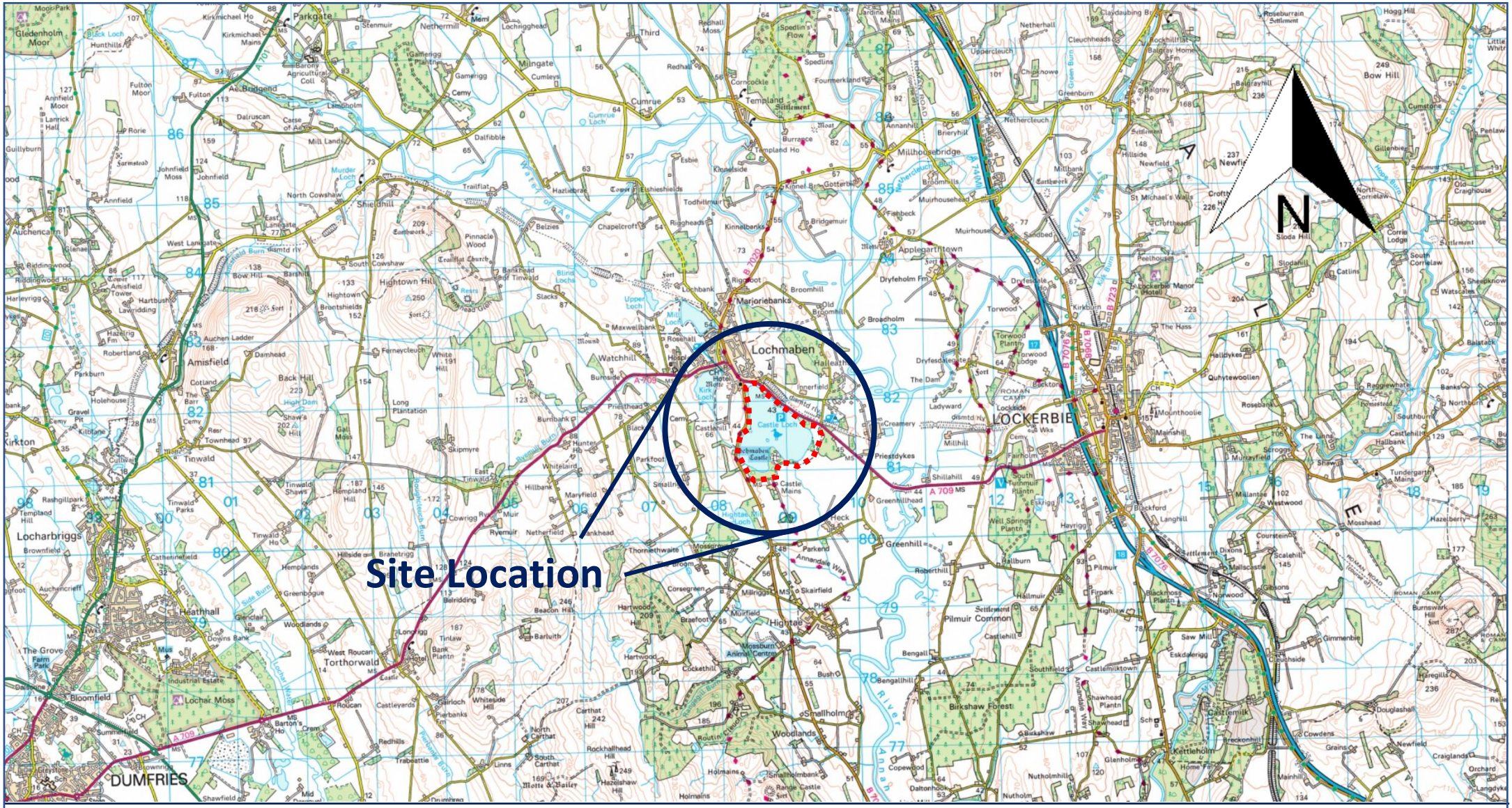
The surveyed paths extend to approx. 4595 linear metres (linm) in total and forms a complete circular route around the loch. The survey commenced from the Castle Loch carparking, off the A709 to the north east of the lochside (Grid Ref NY089819) and progressed in a clockwise direction. The route is further detailed within this document.

3.0 Route description

Principle access to the Lochside walk is from the Castle Loch car park to the north east of the Castle Loch and off the A709 carriageway (Grid Reference NY089819). Additional access points are located around the full site and include informal links off roadside lay-bys existing farm access roads.

The majority of the route is through mixed deciduous woodland and much of the route has been surfaced with Type 1/whin dust; with evidence that this has been done, or re-done, over the years and has included a number of access infrastructure works e.g. ditching and culverts plus seating. interpretation panels and interpretation features. Within the route there is approx. 226 linm of timber boardwalk, typically 1000mm wide but with a short section at 1.4m width, 89 linm section across amenity grass and approx. 1104 linm of existing farm/field access track.

Map 1 – General location plan



Castle Loch Walk, Lochmaben - Path Improvement Project

General Location Plan

Map No. CLL001.01 Project ID: CLL.11/20

Scale: Not to be scaled.

Legend:

Line of existing Path

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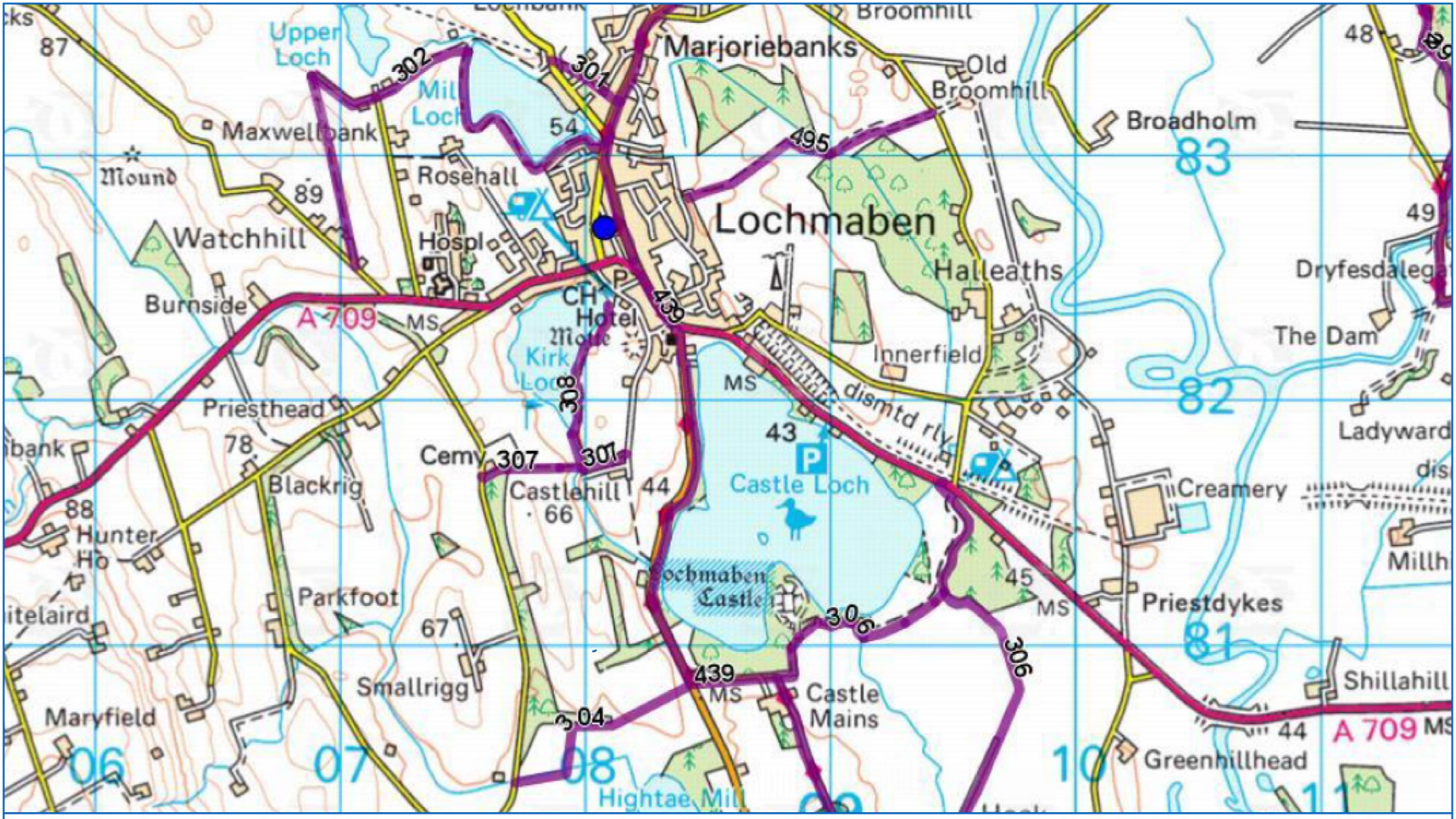
Map 2 – Location of designated local Core Paths around Lochmaben



Castle Loch Walk, Lochmaben Path Improvement Plan
Core Path Plan

Legend: Core Paths

Map No. CLL001.02T001.02 Project ID: CLL.11/20

Scale: Not to be scaled

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FOR A HAPPIER, HEALTHIER SCOTLAND

Map 3 – Indicative line of route and proposed improvements to path/route infrastructure with key distances/features noted

paths for all

Kintail House
The Barracks
Forthside Way
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01786 641851

Title

Indicative line of route and proposed improvements to path/route infrastructure with key features noted

Rev	Description	By	Date	Checked	Approved	Purpose of Issue
	Rural Location Plan	PFA	Dec 2020			Concept Design

Project: Castle Loch Path Improvements	Date: Dec 2020
	Scale: As shown @ A3
Client: Castle Loch Lochmaben Community Trust	Drawn By: G.D.A.
	Drawing No.: CL/RLP/101

4.0 Route assessment survey

Path Survey and Specification Sheet							Sheet No.	1
Location:	**Castle Loch, Lochmaben, Dumfries and Galloway**				**Weather:**	Dry, sunny intervals	**Surveyor:**	G Anderson
Path:	**Castle Loch Circular Route**				**Date:**	**05.10.20**	**Section:**	**Chainage (0 – 165 linm)**

Chainage (linm)	Slope Dir	Grad. (%/deg)	Width (m)	Current Path Condition	Description of Proposed Path Works
0	/	/	/	Start of path by southern edge of carparking.	**Vegetation Management:** Clear any overhanging vegetation, along length of route, to a height of not less than 3.5m from finished path surface (preferred height 3.7m) and any smaller encroaching vegetation not less than 1m from path edges and to a height of 50mm, unless otherwise noted within this technical assessment. All woody vegetation to be cut into manageable lengths and distributed across site within agreed locations. **Barriers/Other features:** No works required. **Path construction and surfacing:** **Option 1:** Carefully scrape back all encroaching verge vegetation to expose full width of previously installed path (estimated to be a minimum of 1.5m) and upgrade surface to Drawing CL/UPU/CLLCT/001. Construct path levels to max 1:40 camber throughout to allow any surface water run-off to be discharged off the path and into verge area on either side. All verge scrape arisings to be utilised to reform path verges, ensuring finished verge levels remain below path surface levels to allow surface water run-off. **Option 2**: Assumes no upgrade works, as detailed within Option 1. Maintain usable path surface width by regularly cutting back verge vegetation to a width of 1m on either side. Consideration to be given to undertaking a phased programme of maintenance works aimed at carefully scraping back existing verge to expose original path width. Alternative is to apply appropriate herbicide to encroaching ground vegetation and to a width not exceeding original path base width (requires PA1/PA6a certification). Occasional compaction of surface. **Drainage:** For path construction options 1 and 2: Install drainage letts along the verge to better enable surface water run-off and to alleviate any possible ponding along the edges of the path surface. Locate as required and to a min width of 200mm. **Signage:** No works required.
0 - 44	◄►	/	2.5	Access road ends at 44 linm. Surface composed of 6mm bitmac. Route becomes narrow Type 1 surfaced path.	
44	/	/	/	 Photo 1: chainage 44 linm - general photo looking back (north) toward car park with visitor centre to right Access road ends at 44 linm and aggregate path begins. General photo looking back toward car park.	
44 – 165	◄►	/	0.6	 Photo 2: chainage 44 linm - general photo looking forward (south) Route clearly defined with surface composed of compacted Type 1 aggregate to approx. 600mm width and with encroaching verges which have narrowed finished path width over time.	

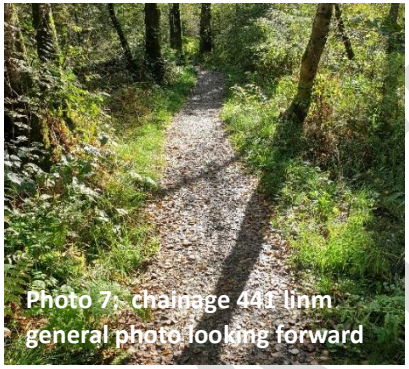
Path Survey and Specification Sheet						Sheet No.	2
Location:	**Castle Loch, Lochmaben, Dumfries and Galloway**			**Weather:**	**Dry, sunny intervals**	**Surveyor:**	G Anderson
Path:	**Castle Loch Circular Route**			**Date:**	**05.10.20**	**Section:**	**Chainage (165 – 218 linm)**

Chainage (linm)	Slope Dir	Grad. (%/deg)	Width (m)	Current Path Condition	Description of Proposed Path Works
165	/	/	/	 Photo 3: chainage 165 linm - general photo looking forward  Photo 3a: chainage 165 linm - general photo looking forward General photos at Chainage 165linm. Path remains well defined and formed from compacted Type 1 aggregate.	**Vegetation Management:** Clear any overhanging vegetation, along length of route, to a height of not less than 3.5m from finished path surface (preferred height 3.7m) and any smaller encroaching vegetation not less than 1m from path edges and to a height of 50mm, unless otherwise noted within this technical assessment. All woody vegetation to be cut into manageable lengths and distributed across site within agreed locations. **Barriers/Other features:** No works required. **Path construction and surfacing:** **Option 1:** Carefully scrape back all encroaching verge vegetation to expose full width of previously installed path (estimated to be a minimum of 1.5m) and upgrade surface to Drawing CL/UPU/CLLCT/001. Construct path levels to max 1:40 camber throughout to allow any surface water run-off to be discharged off the path and into verge area on either side. All verge scrape arisings to be utilised to reform path verges, ensuring finished verge levels remain below path surface levels to allow surface water run-off. **Option 2**: Assumes no upgrade works, as detailed within Option 1. Maintain usable path surface width by regularly cutting back verge vegetation to a width of 1m on either side. Consideration to be given to undertaking a phased programme of maintenance works aimed at carefully scraping back existing verge to expose original path width. Alternative is to apply appropriate herbicide to encroaching ground vegetation and to a width not exceeding original path base width (requires PA1/PA6a certification). Occasional compaction of surface. **Drainage:** For path construction options 1 and 2: Install drainage letts along the verge to better enable surface water run-off and to alleviate any possible ponding along the edges of the path surface. Locate as required and to a min width of 200mm. **Signage:** Incorporate sign cleaning into annual maintenance schedule.
165 - 218	◄►	/	0.6	Route remains clearly defined with surface composed of compacted Type 1 aggregate to approx. 600mm width and with encroaching verges. Path continues to be narrow and composed of compacted earth or overgrown grass sward. As noted at Chainage 53, this section is generally wet underfoot and would benefit from side drainage on upper (left) side.	
218	/	/	/	 Photo 4: chainage 218 linm General photo of environmental interpretation to right of path.	

Path Survey and Specification Sheet					Sheet No.	3
Location:	**Castle Loch, Lochmaben, Dumfries and Galloway**			**Weather:**	**Dry, sunny intervals**	**Surveyor:**	G Anderson
Path:	**Castle Loch Circular Route**			**Date:**	**05.10.20**	**Section:**	**Chainage (218 – 388 linm)**

Chainage (linm)	Slope Dir	Grad. (%/deg)	Width (m)	Current Path Condition	Description of Proposed Path Works
218 - 260	←→	/	<1.0m	Path remains reasonably well defined and widens due to reduced vegetation growth under tree canopy (see Photo 5). Surface composed of leaf litter over Type 1 surfaced path.	**Vegetation Management:** Clear any overhanging vegetation, along length of route, to a height of not less than 3.5m from finished path surface (preferred height 3.7m) and any smaller encroaching vegetation not less than 1m from path edges and to a height of 50mm, unless otherwise noted within this technical assessment. All woody vegetation to be cut into manageable lengths and distributed across site within agreed locations. **Barriers/Other features:** No works required. **Path construction and surfacing:** **Option 1:** Carefully scrape back all encroaching verge vegetation to expose full width of previously installed path (estimated to be a minimum of 1.5m) and upgrade surface to Drawing CL/UPU/CLLCT/001. Construct path levels to max 1:40 camber throughout to allow any surface water run-off to be discharged off the path and into verge area on either side. All verge scrape arisings to be utilised to reform path verges, ensuring finished verge levels remain below path surface levels to allow surface water run-off. **Option 2**: Assumes no upgrade works, as detailed within Option 1. Maintain usable path surface width by regularly cutting back verge vegetation to a width of 1m on either side. Consideration to be given to undertaking a phased programme of maintenance works aimed at carefully scraping back existing verge to expose original path width. Alternative is to apply appropriate herbicide to encroaching ground vegetation and to a width not exceeding original path base width (requires PA1/PA6a certification). Occasional compaction of surface. **Option 3**: Consider constructing new path (to Drawing CL/UPHT/CLLCT/002) to formalise desire line. Care to be taken to avoid root damage when passing through beech tree (estimated 30linm). **Drainage:** For path construction options 1 and 2: Install drainage letts along the verge to better enable surface water run-off and to alleviate any possible ponding along the edges of the path surface. Locate as required and to a min width of 200mm. **Signage:** Incorporate sign cleaning into annual maintenance schedule.
260	/	/	/	 Photo 5: chainage 218 linm - general photo looking backward General photo of desire line shortcut looking back.	
260 - 388	←→	/	<1.0m	Path remains well defined but narrow slightly to 1.0m.	
388	/	/	/	 Photo 6: chainage 388linm - general photo of interpretation sign General photo of environmental interpretation to right of path.	

Path Survey and Specification Sheet						Sheet No.	4
Location:	**Castle Loch, Lochmaben, Dumfries and Galloway**			**Weather:**	**Dry, sunny intervals**	**Surveyor:**	G Anderson
Path:	**Castle Loch Circular Route**			**Date:**	**05.10.20**	**Section:**	**Chainage (318 – 456 linm)**

Chainage (linm)	Slope Dir	Grad. (%/deg)	Width (m)	Current Path Condition	Description of Proposed Path Works
388 – 441	◄►	/	0.6	Path continues through shaded woodland area. Path surface remains composed of compacted Type 1 aggregate.	**Vegetation Management:** Clear any overhanging vegetation, along length of route, to a height of not less than 3.5m from finished path surface (preferred height 3.7m) and any smaller encroaching vegetation not less than 1m from path edges and to a height of 50mm, unless otherwise noted within this technical assessment. All woody vegetation to be cut into manageable lengths and distributed across site within agreed locations. **Barriers/Other features:** No works required. **Path construction and surfacing:** **Option 1:** Carefully scrape back all encroaching verge vegetation to expose full width of previously installed path (estimated to be a minimum of 1.5m) and upgrade surface to Drawing CL/UPU/CLLCT/001. Construct path levels to max 1:40 camber throughout to allow any surface water run-off to be discharged off the path and into verge area on either side. All verge scrape arisings to be utilised to reform path verges, ensuring finished verge levels remain below path surface levels to allow surface water run-off. **Option 2**: Assumes no upgrade works, as detailed within Option 1. Maintain usable path surface width by regularly cutting back verge vegetation to a width of 1m on either side. Consideration to be given to undertaking a phased programme of maintenance works aimed at carefully scraping back existing verge to expose original path width. Alternative is to apply appropriate herbicide to encroaching ground vegetation and to a width not exceeding original path base width (requires PA1/PA6a certification). Occasional compaction of surface. **Drainage:** For path construction options 1 and 2: Install drainage letts along the verge to better enable surface water run-off and to alleviate any possible ponding along the edges of the path surface. Locate as required and to a min width of 200mm. **Signage:** Incorporate sign cleaning into annual maintenance schedule.
441	/	/	/	 Photo 7: chainage 441 linm general photo looking forward	
441 - 456	◄►	/	/	Path continues through shaded woodland area. Path surface remains composed of compacted Type 1 aggregate and undulates gently throughout this section.	
456	/	/	/	 Photo 8: chainage 456 linm general photo of environmental interpretation	General photo of environmental interpretation to right of path.

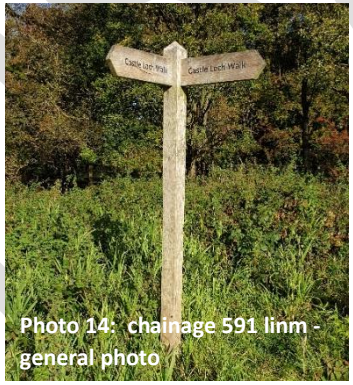
Path Survey and Specification Sheet							Sheet No.	5
Location:	**Castle Loch, Lochmaben, Dumfries and Galloway**			**Weather:**	**Dry, sunny intervals**	**Surveyor:**	G Anderson	
Path:	**Castle Loch Circular Route**			**Date:**	**05.10.20**	**Section:**	**Chainage (456 – 536 linm)**	

Chainage (linm)	Slope Dir	Grad. (%/deg)	Width (m)	Current Path Condition	Description of Proposed Path Works
456 - 536	◄►	/	0.6	 Photo 9: chainage 472 linm - general photo looking forward Path continues through shaded woodland area. Path surface remains composed of compacted Type 1 aggregate. Small puddle formed at chainage 482 linm. No side drainage present and limited option for water to get off path.	**Vegetation Management:** Clear any overhanging vegetation, along length of route, to a height of not less than 3.5m from finished path surface (preferred height 3.7m) and any smaller encroaching vegetation not less than 1m from path edges and to a height of 50mm, unless otherwise noted within this technical assessment. All woody vegetation to be cut into manageable lengths and distributed across site within agreed locations. **Barriers/Other features:** No works required. **Path construction and surfacing:** **Option 1:** Carefully scrape back all encroaching verge vegetation to expose full width of previously installed path (estimated to be a minimum of 1.5m) and upgrade surface to Drawing CL/UPU/CLLCT/001. Construct path levels to max 1:40 camber throughout to allow any surface water run-off to be discharged off the path and into verge area on either side. All verge scrape arisings to be utilised to reform path verges, ensuring finished verge levels remain below path surface levels to allow surface water run-off. **Option 2**: Assumes no upgrade works, as detailed within Option 1. Maintain usable path surface width by regularly cutting back verge vegetation to a width of 1m on either side. Consideration to be given to undertaking a phased programme of maintenance works aimed at carefully scraping back existing verge to expose original path width. Alternative is to apply appropriate herbicide to encroaching ground vegetation and to a width not exceeding original path base width (requires PA1/PA6a certification). Occasional compaction of surface. **Drainage:** For path construction options 1 and 2: Install drainage letts along the verge to better enable surface water run-off and to alleviate any possible ponding along the edges of the path surface. Locate as required and to a min width of 200mm. **Signage:** Incorporate sign cleaning into annual maintenance schedule.
536	/	/	/	 Photo 10: chainage 536 linm - general photo of environmental interpretation General photo of environmental interpretation to right of path.	

Path Survey and Specification Sheet						Sheet No.	6
Location:	**Castle Loch, Lochmaben, Dumfries and Galloway**			**Weather:**	**Dry, sunny intervals**	**Surveyor:**	G Anderson
Path:	**Castle Loch Circular Route**			**Date:**	**05.10.20**	**Section:**	**Chainage (536 – 545 linm)**

Chainage (linm)	Slope Dir	Grad. (%/deg)	Width (m)	Current Path Condition	Description of Proposed Path Works
536 - 545	◄►	/	0.6	 Photo 11: chainage 537 - 542 linm - general photo of bridge (approx. 5m span General photo taken looking forward to timber bridge (1400mm wide with parapets at 840mm height). Path continues through shaded woodland area. Path surface remains composed of compacted Type 1 aggregate.	**Vegetation Management:** Clear any overhanging vegetation, along length of route, to a height of not less than 3.5m from finished path surface (preferred height 3.7m) and any smaller encroaching vegetation not less than 1m from path edges and to a height of 50mm, unless otherwise noted within this technical assessment. All woody vegetation to be cut into manageable lengths and distributed across site within agreed locations. **Barriers/Other features:** Incorporate bridge condition inspection and seat cleaning into annual maintenance schedule. Remove all vegetation growing on or adjacent to bridge structure. Upfill path surface approaches to bridge to remove any stepped level variances. **Path construction and surfacing:** **Option 1:** Carefully scrape back all encroaching verge vegetation to expose full width of previously installed path (estimated to be a minimum of 1.5m) and upgrade surface to Drawing CL/UPU/CLLCT/001. Construct path levels to max 1:40 camber throughout to allow any surface water run-off to be discharged off the path and into verge area on either side. All verge scrape arisings to be utilised to reform path verges, ensuring finished verge levels remain below path surface levels to allow surface water run-off. **Option 2**: Assumes no upgrade works, as detailed within Option 1. Maintain usable path surface width by regularly cutting back verge vegetation to a width of 1m on either side. Consideration to be given to undertaking a phased programme of maintenance works aimed at carefully scraping back existing verge to expose original path width. Alternative is to apply appropriate herbicide to encroaching ground vegetation and to a width not exceeding original path base width (requires PA1/PA6a certification). Occasional compaction of surface. **Drainage:** For path construction options 1 and 2: Install drainage letts along the verge to better enable surface water run-off and to alleviate any possible ponding along the edges of the path surface. Locate as required and to a min width of 200mm. **Signage:** No works required.
545	/	/	/	 Photo 12: chainage 545 linm - general photo of timber seat General photo of timber bench.	

Path Survey and Specification Sheet					Sheet No.	7
Location:	**Castle Loch, Lochmaben, Dumfries and Galloway**			**Weather:**	**Dry, sunny intervals**	**Surveyor:**	G Anderson
Path:	**Castle Loch Circular Route**			**Date:**	**05.10.20**	**Section:**	**Chainage (545 – 591 linm)**

Chainage (linm)	Slope Dir	Grad. (%/deg)	Width (m)	Current Path Condition	Description of Proposed Path Works
545 - 571	◄►	/	0.6	Path remains level with surface composed of compacted Type 1 aggregate.	**Vegetation Management:** Clear any overhanging vegetation, along length of route, to a height of not less than 3.5m from finished path surface (preferred height 3.7m) and any smaller encroaching vegetation not less than 1m from path edges and to a height of 50mm, unless otherwise noted within this technical assessment. All woody vegetation to be cut into manageable lengths and distributed across site within agreed locations. **Barriers/Other features:** No works required. **Path construction and surfacing:** **Option 1:** Carefully scrape back all encroaching verge vegetation to expose full width of previously installed path (estimated to be a minimum of 1.5m) and upgrade surface to Drawing CL/UPU/CLLCT/001. Construct path levels to max 1:40 camber throughout to allow any surface water run-off to be discharged off the path and into verge area on either side. All verge scrape arisings to be utilised to reform path verges, ensuring finished verge levels remain below path surface levels to allow surface water run-off. **Option 2**: Assumes no upgrade works, as detailed within Option 1. Maintain usable path surface width by regularly cutting back verge vegetation to a width of 1m on either side. Consideration to be given to undertaking a phased programme of maintenance works aimed at carefully scraping back existing verge to expose original path width. Alternative is to apply appropriate herbicide to encroaching ground vegetation and to a width not exceeding original path base width (requires PA1/PA6a certification). Occasional compaction of surface. **Drainage:** For path construction options 1 and 2: Install drainage letts along the verge to better enable surface water run-off and to alleviate any possible ponding along the edges of the path surface. Locate as required and to a min width of 200mm. **Signage:** Incorporate sign condition inspection and clearance of ground vegetation around post base into annual maintenance schedule.
571 - 591	◄►	/	0.4	 Photo 13: chainage 571 linm - general photo looking forward General photo taken looking forward and toward muddy section of path between chainages 571 – 574 linm. Path surface generally composed of compacted Type 1 aggregate. Build-up of verge levels are limiting any surface water run-off.	
591	/	/	/	 Photo 14: chainage 591 linm - general photo General photo of timber fingerpost at chainage 591 linm.	

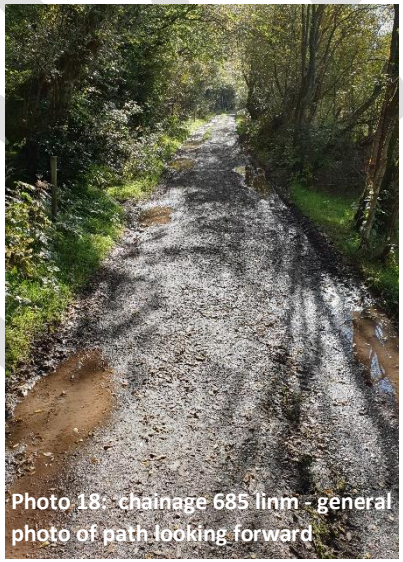
Path Survey and Specification Sheet							Sheet No.	8
Location:	**Castle Loch, Lochmaben, Dumfries and Galloway**			**Weather:**	**Dry, sunny intervals**	**Surveyor:**	G Anderson	
Path:	**Castle Loch Circular Route**			**Date:**	**05.10.20**	**Section:**	**Chainage (591 linm)**	

Chainage (linm)	Slope Dir	Grad. (%/deg)	Width (m)	Current Path Condition	Description of Proposed Path Works
591	/	/	/	 Photo 14a: chainage 591 linm - general photo looking forward General photo taken looking forward along route as it drops down gentle gradient toward Board Burn.	**Vegetation Management:** Clear encroaching vegetation not less than 1m from finished track edges and to a height of 50mm, unless otherwise noted within this technical assessment. Maintain all vegetation around 1-way opening gate to ensure easy opening at all times. **Barriers/Other features:** Maintain gate in a good and safe working order. **Path construction and surfacing:** **Option 1:** Infill potholes and/or wheel ruts to maintain a reasonably dry and level walking/wheeling surface along this section of the circular route. Additional consideration to be given to surfacing short link path through side gate and back onto farm track (estimated at 5 linm) **Drainage:** Install drainage letts along the verge to better enable surface water run-off and to alleviate any possible ponding along the track surface. Locate as required and to a min width of 200mm. **Signage:** Incorporate sign condition inspection and clearance of ground vegetation around post base into annual maintenance schedule.
591	/	/	/	 Photo 14b: chainage 591 linm - general photo of access point off A709 General photo taken looking north and showing pedestrian gate to right of field gate.	

Path Survey and Specification Sheet						Sheet No.	9
Location:	**Castle Loch, Lochmaben, Dumfries and Galloway**			**Weather:**	**Dry, sunny intervals**	**Surveyor:**	G Anderson
Path:	**Castle Loch Circular Route**			**Date:**	**05.10.20**	**Section:**	**Chainage (591 – 660 linm)**

Chainage (linm)	Slope Dir	Grad. (%/deg)	Width (m)	Current Path Condition	Description of Proposed Path Works
591 - 630	↔	/	3.0	Route exists onto farm track at chainage 591 linm. Track composed of compacted aggregate with loose stones across surface. Track width typically 3m but wider at entrance gate.	**Vegetation Management:** Clear encroaching vegetation not less than 1m from finished track edges and to a height of 50mm, unless otherwise noted within this technical assessment. Maintain all vegetation around 1-way opening gate to ensure easy opening at all times. **Barriers/Other features:** No works required. **Path construction and surfacing:** **Option 1:** Infill potholes and/or wheel ruts to maintain a reasonably dry and level walking/wheeling surface along this section of the circular route. **Drainage:** Install drainage letts along the verge to better enable surface water run-off and to alleviate any possible ponding along the track surface. Locate as required and to a min width of 200mm. **Signage:** No works required.
630	/	/	/	 Photo 15: chainage 630 linm - general photo looking forward General photo taken looking forward and showing notable puddles formed in wheel ruts on track.	
630 - 660	↔	/	3.0	Route continues along line of farm track.	
660	/	/	/	 Photo 16: chainage 660 linm - general photo left to side route (closed) General photo taken looking to left of track and showing woodland path (closed at time of survey).	

Path Survey and Specification Sheet						Sheet No.	10
Location:	**Castle Loch, Lochmaben, Dumfries and Galloway**			**Weather:**	**Dry, sunny intervals**	**Surveyor:**	G Anderson
Path:	**Castle Loch Circular Route**			**Date:**	**05.10.20**	**Section:**	**Chainage (660 – 685 linm)**

Chainage (linm)	Slope Dir	Grad. (%/deg)	Width (m)	Current Path Condition	Description of Proposed Path Works
660 - 670	◄►	/	3.0	Route continues along line of farm track.	**Vegetation Management:** Clear encroaching vegetation not less than 1m from finished track edges and to a height of 50mm, unless otherwise noted within this technical assessment. Maintain all vegetation around 1-way opening gate to ensure easy opening at all times. **Barriers/Other features:** Incorporate data collection from counters into annual maintenance schedule or as required. Replace batteries, as recommended by manufacturer. **Path construction and surfacing:** **Option 1:** Infill potholes and/or wheel ruts to maintain a reasonably dry and level walking/wheeling surface along this section of the circular route. **Drainage:** Install drainage letts along the verge to better enable surface water run-off and to alleviate any possible ponding along the track surface. Locate as required and to a min width of 200mm. **Signage:** No works required.
670	/	/	/	 Photo 17: chainage 670 linm - general photo of counter General photo taken at chainage 670 linm of counter mechanism on post and rail fence post to right of track. Not known if operational.	
670 - 685	◄►	/	3.0	Route continues along line of farm track. Track in generally good condition with isolated puddles in ruts along outer edges.	
685	/	/	/	 Photo 18: chainage 685 linm - general photo of path looking forward General photo taken looking forward.	

Path Survey and Specification Sheet						Sheet No.	11
Location:	**Castle Loch, Lochmaben, Dumfries and Galloway**			**Weather:**	**Dry, sunny intervals**	**Surveyor:**	G Anderson
Path:	**Castle Loch Circular Route**			**Date:**	**05.10.20**	**Section:**	**Chainage (685 – 1100 linm)**

Chainage (linm)	Slope Dir	Grad. (%/deg)	Width (m)	Current Path Condition	Description of Proposed Path Works
685 – 1085	◄►	/	3.0	Route continues south along line of farm track. Track in generally good condition with isolated puddles in ruts along outer edges	**Vegetation Management:** Clear any overhanging vegetation, along length of route, to a height of not less than 3.5m from finished path surface (preferred height 3.7m) and any smaller encroaching vegetation not less than 1m from path edges and to a height of 50mm, unless otherwise noted within this technical assessment. All woody vegetation to be cut into manageable lengths and distributed across site within agreed locations. **Barriers/Other features:** Incorporate seat cleaning into annual maintenance schedule. Regularly cut all vegetation growing around and under bench seat. Option: install Type 1/whin dust hardstanding under seating area and to form link path to farm track. **Path construction and surfacing:** **Option 1:** Infill potholes and/or wheel ruts to maintain a reasonably dry and level walking/wheeling surface along this section of the circular route. **Drainage:** Install drainage letts along the verge to better enable surface water run-off and to alleviate any possible ponding along the track surface. Locate as required and to a min width of 200mm **Signage:** Incorporate sign condition inspection and clearance of ground vegetation around post base into annual maintenance schedule.
1085	/	/	/	 Photo 19 chainage 1085 linm - general photo of timber boardwalk and fingerpost General photo showing southern end of woodland path noted at chainage 660 linm.	
1085 - 1091	/	/	/	 Photo 20: chainage 1091 linm - general photo of recycled plastic bench General photo showing recycled plastic bench facing west.	
1091 - 1100	/	/	3.0	Route continues south along line of farm track. Track in generally good condition.	

Path Survey and Specification Sheet						Sheet No.	12
Location:	**Castle Loch, Lochmaben, Dumfries and Galloway**			**Weather:**	**Dry, sunny intervals**	**Surveyor:**	G Anderson
Path:	**Castle Loch Circular Route**			**Date:**	**05.10.20**	**Section:**	**Chainage (1100 – 1167 linm)**

Chainage (linm)	Slope Dir	Grad. (%/deg)	Width (m)	Current Path Condition	Description of Proposed Path Works
1100	/	/	/	 Photo 21: chainage 1100 linm - general photo looking south  Photo 21a: chainage 1100 linm looking north General photo showing path junction where Core Path 306 continues west through side pedestrian gate to 'Heck' and the Castle Loch Path turns off farm track heading north.	**Vegetation Management:** Clear any overhanging vegetation, along length of route, to a height of not less than 3.5m from finished path surface (preferred height 3.7m) and any smaller encroaching vegetation not less than 1m from path edges and to a height of 50mm, unless otherwise noted within this technical assessment. All woody vegetation to be cut into manageable lengths and distributed across site within agreed locations. **Barriers/Other features:** Maintain gate in a good and safe working order. **Path construction and surfacing:** **Option 1:** Infill potholes and/or wheel ruts to maintain a reasonably dry and level walking/wheeling surface along this section of the circular route. Additional consideration to be given to surfacing short link path through side gate and back onto farm track (estimated at 5 linm) **Drainage:** Install drainage letts along the verge to better enable surface water run-off and to alleviate any possible ponding along the track surface. Locate as required and to a min width of 200mm **Signage:** Incorporate sign condition inspection and clearance of ground vegetation around post base into annual maintenance schedule.
1100 - 1167	◄►	/	0.4	Route turns off farm track to north and follows field edge to left. Path surface returns to compacted Type 1 aggregate and narrows to approx. 0.3 – 0.4m width with encroaching grass verges	
1167	/	/	/	 Photo 22: chainage 1167 linm - general photo looking forward  Photo 22a: chainage 1167 linm - general photo looking back General photos looking forward (north) and back (south) along path; showing narrowed surface width and exposed aggregate surface.	

Path Survey and Specification Sheet					Sheet No.	13
Location:	**Castle Loch, Lochmaben, Dumfries and Galloway**			**Weather:**	**Dry, sunny intervals**	**Surveyor:**	G Anderson
Path:	**Castle Loch Circular Route**			**Date:**	**05.10.20**	**Section:**	**Chainage (1167 – 1205 linm)**

Chainage (linm)	Slope Dir	Grad. (%/deg)	Width (m)	Current Path Condition	Description of Proposed Path Works
1167 - 1205	◄►	/	0.4	Path continues north along field edge with unchanged surface width and surface composition	**Vegetation Management:** Clear any overhanging vegetation, along length of route, to a height of not less than 3.5m from finished path surface (preferred height 3.7m) and any smaller encroaching vegetation not less than 1m from path edges and to a height of 50mm, unless otherwise noted within this technical assessment. All woody vegetation to be cut into manageable lengths and distributed across site within agreed locations. **Barriers/Other features:** No works required. **Path construction and surfacing:** **Option 1:** Carefully scrape back all encroaching verge vegetation to expose full width of previously installed path (estimated to be a minimum of 1.5m) and upgrade surface to Drawing CL/UPU/CLLCT/001. Construct path levels to max 1:40 camber throughout to allow any surface water run-off to be discharged off the path and into verge area on either side. All verge scrape arisings to be utilised to reform path verges, ensuring finished verge levels remain below path surface levels to allow surface water run-off. **Option 2**: Assumes no upgrade works, as detailed within Option 1. Maintain usable path surface width by regularly cutting back verge vegetation to a width of 1m on either side. Consideration to be given to undertaking a phased programme of maintenance works aimed at carefully scraping back existing verge to expose original path width. Alternative is to apply appropriate herbicide to encroaching ground vegetation and to a width not exceeding original path base width (requires PA1/PA6a certification). Occasional compaction of surface. **Drainage:** For path construction options 1 and 2: Install drainage letts along the verge to better enable surface water run-off and to alleviate any possible ponding along the edges of the path surface. Locate as required and to a min width of 200mm. **Signage:** No works required.
1205	/	/	/	 **Photo 23: chainage 1205 linm - general photo looking back** General photo taken looking forward and showing limited widening of path width to 1.0m between chainage 1207 and 1219 linm. Surface slightly more exposed at this section, possible dure to water dripping off overhanging branches.	
1205 - 1473	◄►	/	0.4	Path continues north along field edge with unchanged surface composition. Width narrows back to 0.4m from chainage 1219 linm. Path undulates (3no.) between chainages 1382 – 1403 linm.	
1473	/	/	/	 Photo showing short 12 linm unsurfaced path that turns left off main route and ends at bank of Valison Burn	

Path Survey and Specification Sheet					Sheet No.	14
Location:	**Castle Loch, Lochmaben, Dumfries and Galloway**			**Weather:**	**Dry, sunny intervals**	**Surveyor:**	G Anderson
Path:	**Castle Loch Circular Route**			**Date:**	**05.10.20**	**Section:**	**Chainage (1473 – 1565 linm)**

Chainage (linm)	Slope Dir	Grad. (%/deg)	Width (m)	Current Path Condition	Description of Proposed Path Works
1473	/	/	/	 Photo 24a: chainage 1473 linm - general photo looking forward General photo taken looking forward	**Vegetation Management:** Clear any overhanging vegetation, along length of route, to a height of not less than 3.5m from finished path surface (preferred height 3.7m) and any smaller encroaching vegetation not less than 1m from path edges and to a height of 50mm, unless otherwise noted within this technical assessment. All woody vegetation to be cut into manageable lengths and distributed across site within agreed locations. **Barriers/Other features:** Incorporate bridge and ramp condition inspection into annual maintenance schedule. Remove all vegetation growing on or adjacent to bridge structure and access ramps. Upfill path surface approaches to bridge to remove any stepped level variances. Option: to replace full structure to enhance accessibility (typically 1.5m width with reduced access ramps) **Path construction and surfacing:** **Option 1:** Carefully scrape back all encroaching verge vegetation to expose full width of previously installed path (estimated to be a minimum of 1.5m) and upgrade surface to Drawing CL/UPU/CLLCT/001. Construct path levels to max 1:40 camber throughout to allow any surface water run-off to be discharged off the path and into verge area on either side. All verge scrape arisings to be utilised to reform path verges, ensuring finished verge levels remain below path surface levels to allow surface water run-off. **Option 2**: Assumes no upgrade works, as detailed within Option 1. Maintain usable path surface width by regularly cutting back verge vegetation to a width of 1m on either side. Consideration to be given to undertaking a phased programme of maintenance works aimed at carefully scraping back existing verge to expose original path width. Alternative is to apply appropriate herbicide to encroaching ground vegetation and to a width not exceeding original path base width (requires PA1/PA6a certification). Occasional compaction of surface. **Drainage:** For path construction options 1 and 2: Install drainage letts along the verge to better enable surface water run-off and to alleviate any possible ponding along the edges of the path surface. Locate as required and to a min width of 200mm. **Signage:** No works required.
1473 - 1557	◄►	/	0.3	Path continues north along eastern side of Valison Burn with slightly narrowed surface width and unchanged surface composition of compacted aggregate. Timber bench located to right of path (east) at chainage 1529 linm.	
1557 - 1565	▲	/	/	 Photo 25: chainage 1557 linm - general photo looking forward General photo showing where path meets timber ramp leading up to bridge over Valison Burn. Ramp decking has aftermarket anti-slip strips applied. Gradient not measured.	

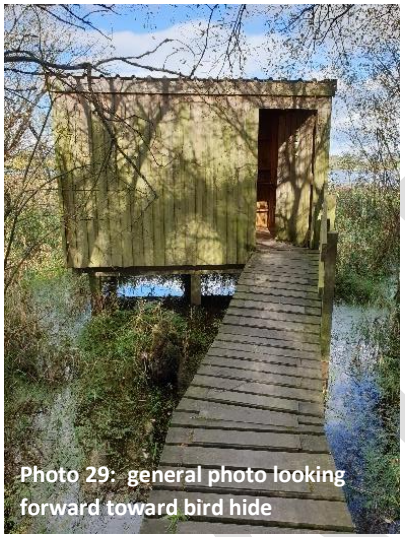
Path Survey and Specification Sheet						Sheet No.	15
Location:	**Castle Loch, Lochmaben, Dumfries and Galloway**			**Weather:**	**Dry, sunny intervals**	**Surveyor:**	G Anderson
Path:	**Castle Loch Circular Route**			**Date:**	**05.10.20**	**Section:**	**Chainage (1665 – 1590 linm)**

Chainage (linm)	Slope Dir	Grad. (%/deg)	Width (m)	Current Path Condition	Description of Proposed Path Works
1665 - 1575	↔	/	1.0	 Photo 26: chainage 1575 linm - general photo looking forward  Photo 26a: chainage 1575 linm - general photo looking back General photos showing bridge over Valison Burn (note: sign attached to bridge states "Vallison Burn"). Bridge measured at 1000mm wide, metal parapets at 1120 height, decking gaps at 40mm. Bridge in generally reasonable condition but not subjected to a thorough inspection.	**Vegetation Management:** Clear any overhanging vegetation, along length of route, to a height of not less than 3.5m from finished deck surface (preferred height 3.7m) and any smaller encroaching vegetation not less than 1m from boardwalk edges, unless otherwise noted within this technical assessment. All woody vegetation to be cut into manageable lengths and distributed across site within agreed locations. **Barriers/Other features:** Incorporate bridge and ramp condition inspection into annual maintenance schedule. Remove all vegetation growing on or adjacent to bridge structure and access ramps. Upfill path surface approaches to bridge to remove any stepped level variances. Option: to replace full structure to enhance accessibility (typically 1.5m width with reduced access ramps) **Path construction and surfacing:** **Boardwalk:** Remove existing raised walkway and replace with new; to a width not less than 1600mm and to Drawing No. CL/LLW/CLLCT/002. Construct new raised walkway at a finished height greater than existing and to accommodate maximum anticipated water levels (to be agreed). Consideration to be given to incorporating regular passing places (not exceeding 50m apart) along route of raised walkway. Passing places to be constructed to general detail shown within Drawing No. CL/LLW/CLLCT/002 Detail C. **Drainage:** No works required. **Signage:** No works required.
1575 - 1578	↓	/	1.0	Short timber ramp leading down from bridge to start of boardwalk. Decking timbers have aftermarket anti-slip strips applied. Gradient not measured.	
1578 - 1590	↔	/	1.0	Timber boardwalk with 660mm wide aftermarket anti-slip strips applied to decking. Boardwalk structure and decking (150 x 50mm boards) remains sound. No edge rails to decking and gaps between decking boards measured at 35 – 40mm.	
1590	/	/	/	 Photo 27: chainage 1590 linm - general photo looking forward  Photo 27a: chainage 1590 linm - general photo looking back General photo looking forward & back along boardwalk, showing location of side link to bird hide (chainage 1620 linm)	

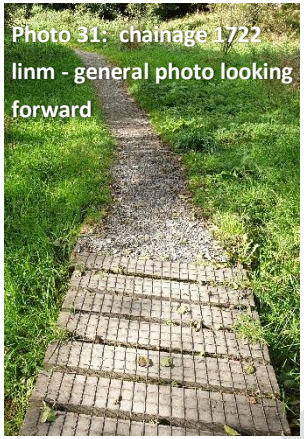
Path Survey and Specification Sheet						Sheet No.	16
Location:	**Castle Loch, Lochmaben, Dumfries and Galloway**			**Weather:**	**Dry, sunny intervals**	**Surveyor:**	G Anderson
Path:	**Castle Loch Circular Route**			**Date:**	**05.10.20**	**Section:**	**Chainage (1590 – 1620 linm)**

Chainage (linm)	Slope Dir	Grad. (%/deg)	Width (m)	Current Path Condition	Description of Proposed Path Works
1590 - 1620	◄►	/	1.0	Route continues as timber boardwalk with 660mm wide aftermarket anti-slip strips applied to decking. Boardwalk height above water level is variable and, at the time of the survey, was measured at 470mm at chainage 1598 linm.  Photo 28: chainage 1620 linm - general photo looking forward toward bird hide Boardwalk splits with a side branch to right leading to bird hide. This section measures approx. 48 linm and ramps upward to end at bird hide which sits 900mm above water level at time of survey. Boardwalk decking is covered with steel mesh (see photo 30), as an anti-slip measure, over first 23 linm and then changes to aftermarket anti-slip strips as noted before. These are applied in a 'hit and miss' manner.	**Vegetation Management:** Clear any overhanging vegetation, along length of route, to a height of not less than 3.5m from finished deck surface (preferred height 3.7m) and any smaller encroaching vegetation not less than 1m from boardwalk edges, unless otherwise noted within this technical assessment. All woody vegetation to be cut into manageable lengths and distributed across site within agreed locations. **Barriers/Other features:** No works required. **Path construction and surfacing:** **Boardwalk:** Remove existing raised walkway and replace with new; to a width not less than 1600mm and to Drawing No. CL/LLW/CLLCT/002. Construct new raised walkway at a finished height greater than existing and to accommodate maximum anticipated water levels (to be agreed). Consideration to be given to incorporating regular passing places (not exceeding 50m apart) along route of raised walkway. Passing places to be constructed to general detail shown within Drawing No. CL/LLW/CLLCT/002 Detail C. **Drainage:** No works required. **Signage:** No works required.
1620	/	/	/		

Path Survey and Specification Sheet						Sheet No.	17
Location:	**Castle Loch, Lochmaben, Dumfries and Galloway**			**Weather:**	**Dry, sunny intervals**	**Surveyor:**	G Anderson
Path:	**Castle Loch Circular Route**			**Date:**	**05.10.20**	**Section:**	**Chainage (1620 – 1724 linm)**

Chainage (linm)	Slope Dir	Grad. (%/deg)	Width (m)	Current Path Condition	Description of Proposed Path Works
/	/	/	/	 Photo 29: general photo looking forward toward bird hide General photo of bird hide looking forward and noting short ramp up to entrance plus 'hit and miss' anti-slip strips applied to alternate decking boards.	**Vegetation Management:** Clear any overhanging vegetation, along length of route, to a height of not less than 3.5m from finished deck surface (preferred height 3.7m) and any smaller encroaching vegetation not less than 1m from boardwalk edges, unless otherwise noted within this technical assessment. All woody vegetation to be cut into manageable lengths and distributed across site within agreed locations. **Barriers/Other features:** Structure and ongoing maintenance of bird hide not included within the scope of this study. **Path construction and surfacing:** **Boardwalk:** Remove existing raised walkway and replace with new; to a width not less than 1600mm and to Drawing No. CL/LLW/CLLCT/002. Construct new raised walkway at a finished height greater than existing and to accommodate maximum anticipated water levels (to be agreed). Consideration to be given to incorporating regular passing places (not exceeding 50m apart) along route of raised walkway. Passing places to be constructed to general detail shown within Drawing No. CL/LLW/CLLCT/002 Detail C. **Drainage:** No works required. **Signage:** No works required.
1620 - 1724	◄►	/	1.0	 Photo 30: chainage 1620 linm - general photo looking forward toward bird hide General photo of main route taken looking forward and showing mesh covered (from chainage 1620 linm) timber boardwalk. Surface height above water level was generally measured at 400mm at time of survey and reduces to 250mm near end of boardwalk at chainage 1682 linm.	

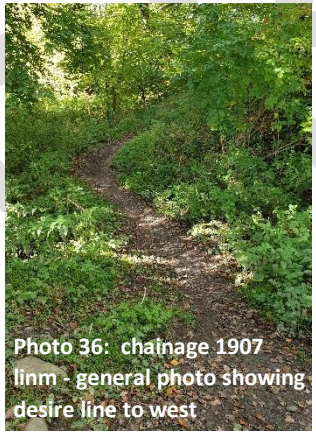
Path Survey and Specification Sheet							Sheet No.	18
Location:	**Castle Loch, Lochmaben, Dumfries and Galloway**			**Weather:**	**Dry, sunny intervals**	**Surveyor:**	G Anderson	
Path:	**Castle Loch Circular Route**			**Date:**	**05.10.20**	**Section:**	**Chainage (1724 – 1770 linm)**	

Chainage (linm)	Slope Dir	Grad. (%/deg)	Width (m)	Current Path Condition	Description of Proposed Path Works
1724	/	/	/	  General photo showing end of boardwalk looking forward (Photo 31) and looking back (Photo 31a). Timber boardwalk transitions to compacted aggregate path at chainage 1724 linm.	**Vegetation Management:** Clear any overhanging vegetation, along length of route, to a height of not less than 3.5m from finished path surface (preferred height 3.7m) and any smaller encroaching vegetation not less than 1m from path edges and to a height of 50mm, unless otherwise noted within this technical assessment. All woody vegetation to be cut into manageable lengths and distributed across site within agreed locations.
1724 - 1749	←→	/	0.8	Route continues west. Surface composed of compacted aggregate and to a width of approx. 800mm.	**Barriers/Other features:** No works required.
1749 - 1770	↑	12%/7deg	0.6	 Route ramps steeply upward by large Beech tree to right. Gradient measured at 12%/7deg. Surface remains as compacted aggregate and to a width or approx. 0.6m. Possible link to right of path would allow creation of a reduced gradient ramp for less able users. Top of ramp at chainage 1770 linm.	**Path construction and surfacing:** **Option 1:** Carefully scrape back all encroaching verge vegetation to expose full width of previously installed path (estimated to be a minimum of 1.5m) and upgrade surface to Drawing CL/UPU/CLLCT/001. Construct path levels to max 1:40 camber throughout to allow any surface water run-off to be discharged off the path and into verge area on either side. All verge scrape arisings to be utilised to reform path verges, ensuring finished verge levels remain below path surface levels to allow surface water run-off. **Option 1a**: Construct additional side link path to provide users with a more gradient friendly alternative. Alternative route extends to approx. 40linm and passes under mature beech trees to right of existing path, as viewed looking forward, before reconnecting with existing path at top of slope. **Option 2**: Assumes no upgrade works, as detailed within Option 1. Maintain usable path surface width by regularly cutting back verge vegetation to a width of 1m on either side. Consideration to be given to undertaking a phased programme of maintenance works aimed at carefully scraping back existing verge to expose original path width. Alternative is to apply appropriate herbicide to encroaching ground vegetation and to a width not exceeding original path base width (requires PA1/PA6a certification). Occasional compaction of surface. **Drainage:** No works required. **Signage:** No works required.

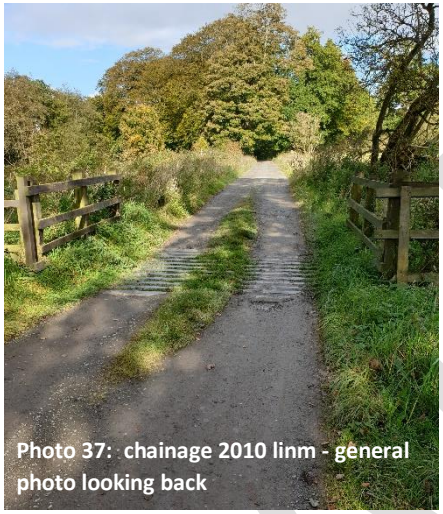
Path Survey and Specification Sheet						Sheet No.	19
Location:	**Castle Loch, Lochmaben, Dumfries and Galloway**			**Weather:**	**Dry, sunny intervals**	**Surveyor:**	G Anderson
Path:	**Castle Loch Circular Route**			**Date:**	**05.10.20**	**Section:**	**Chainage (1770 – 1804 linm)**

Chainage (linm)	Slope Dir	Grad. (%/deg)	Width (m)	Current Path Condition	Description of Proposed Path Works
1770 - 1804	◄►	/	0.6	 Photo 33: chainage 1770 linm - general photo looking forward Route continues from top of ramp, at chainage 1770 linm, to end of path section at chainage 1804 linm. Path surface continues as compacted aggregate to a width of approx. 0.6m.	**Vegetation Management:** Clear any overhanging vegetation, along length of route, to a height of not less than 3.5m from finished path surface (preferred height 3.7m) and any smaller encroaching vegetation not less than 1m from finished boardwalk/path edges and to a height of 50mm, unless otherwise noted within this technical assessment. All woody vegetation to be cut into manageable lengths and distributed across site within agreed locations. **Barriers/Other features:** No works required. **Path construction and surfacing:** **Option 1:** Carefully scrape back all encroaching verge vegetation to expose full width of previously installed path (estimated to be a minimum of 1.5m) and upgrade surface to Drawing CL/UPU/CLLCT/001. Construct path levels to max 1:40 camber throughout to allow any surface water run-off to be discharged off the path and into verge area on either side. All verge scrape arisings to be utilised to reform path verges, ensuring finished verge levels remain below path surface levels to allow surface water run-off. **Option 2**: Assumes no upgrade works, as detailed within Option 1. Maintain usable path surface width by regularly cutting back verge vegetation to a width of 1m on either side. Consideration to be given to undertaking a phased programme of maintenance works aimed at carefully scraping back existing verge to expose original path width. Alternative is to apply appropriate herbicide to encroaching ground vegetation and to a width not exceeding original path base width (requires PA1/PA6a certification). Occasional compaction of surface. **Drainage:** No works required. **Signage:** No works required.
1804	/	/	/	 Photo 34: chainage 1804 linm - general photo looking back General photo looking back from path section end.	

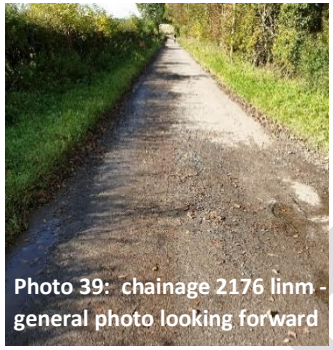
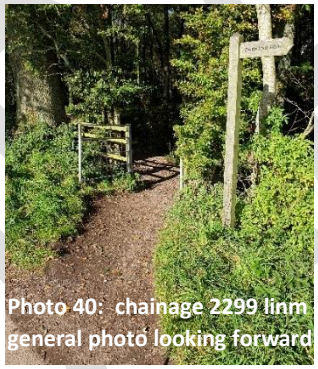
Path Survey and Specification Sheet						Sheet No.	20
Location:	**Castle Loch, Lochmaben, Dumfries and Galloway**			**Weather:**	**Dry, sunny intervals**	**Surveyor:**	G Anderson
Path:	**Castle Loch Circular Route**			**Date:**	**05.10.20**	**Section:**	**Chainage (1804 – 1907 linm)**

Chainage (linm)	Slope Dir	Grad. (%/deg)	Width (m)	Current Path Condition	Description of Proposed Path Works
1804	/	/	/	 Photo 35: chainage 1804 linm - general photo of interpretation and timber fingerpost  Photo 35a: chainage 1804 linm general photo of interpretation and timber fingerpost General photos showing interpretation panel and timber fingerpost by Lochmaben Castle carparking area.	**Vegetation Management:** Clear any overhanging vegetation, along length of route, to a height of not less than 3.5m from track surface (preferred height 3.7m). All woody vegetation to be cut into manageable lengths and distributed within site within agreed locations. **Barriers/Other features:** No works required. **Path construction and surfacing:** No works required. **Drainage:** No works required. **Signage:** Incorporate sign condition inspection and clearance of ground vegetation around post base into annual maintenance schedule. Incorporate interpretation sign cleaning into annual maintenance schedule.
1804 - 1907	◄►	/	2.4	Route proceeds along Lochmaben Castle access track and is composed of heavily compacted aggregate. Track measured at approx. 2.4m width at chainage 1827 linm.	
1907	/	/	/	 Photo 36: chainage 1907 linm - general photo showing desire line to west  Photo 36a: chainage 1907 linm - general photo showing timber waymarker (circled) General photos showing well used desire line to right (west). Some evidence that this route has been surfaced in the path with areas of exposed aggregate to start. Route not included within this survey.	

Path Survey and Specification Sheet						Sheet No.	21
Location:	**Castle Loch, Lochmaben, Dumfries and Galloway**			**Weather:**	**Dry, sunny intervals**	**Surveyor:**	G Anderson
Path:	**Castle Loch Circular Route**			**Date:**	**05.10.20**	**Section:**	**Chainage (2010 – 2176 linm)**

Chainage (linm)	Slope Dir	Grad. (%/deg)	Width (m)	Current Path Condition	Description of Proposed Path Works
2010	◄►	/	2.4	 Photo 37: chainage 2010 linm - general photo looking back General photo showing Lochmaben Castle access road and cattle grid which was largely infilled with silt/debris at the time of survey.	**Vegetation Management:** Clear any overhanging vegetation, along length of route, to a height of not less than 3.5m from track surface (preferred height 3.7m). All woody vegetation to be cut into manageable lengths and distributed within site within agreed locations. **Barriers/Other features:** No works required. **Path construction and surfacing:** Consider filling in of cattle grid to remove obstacle. Idf this is not possible, consideration might be given to establish a surfaced and gated by-pass to left as viewed on photo **Drainage:** No works required. **Signage:** Incorporate sign condition inspection and clearance of ground vegetation around post base into annual maintenance schedule.
2010 - 2020					
2020	/	/	/	 Photo 38: chainage 2080 linm - general photo showing metal fingerpost	
2020 - 2176				General photo showing metal fingerpost to right of route and opposite farm access road to south. Post showing age but is in an acceptable condition.	

Path Survey and Specification Sheet						Sheet No.	22
Location:	**Castle Loch, Lochmaben, Dumfries and Galloway**			**Weather:**	**Dry, sunny intervals**	**Surveyor:**	G Anderson
Path:	**Castle Loch Circular Route**			**Date:**	**05.10.20**	**Section:**	**Chainage (2176 – 2299 linm)**

Chainage (linm)	Slope Dir	Grad. (%/deg)	Width (m)	Current Path Condition	Description of Proposed Path Works
2176	◄►	/	3.0	 Photo 39: chainage 2176 linm - general photo looking forward General photo looking forward and showing farm access road/track. Surface transitions from compacted aggregate to bound bitmac at this point.	**Vegetation Management:** Clear any overhanging vegetation, along length of route, to a height of not less than 3.5m from track surface (preferred height 3.7m). All woody vegetation to be cut into manageable lengths and distributed within site within agreed locations. **Barriers/Other features:** Consideration to be given to removing existing gate. Option to leave frame in place to allow possible future reinstatement, if desired. **Path construction and surfacing:** No works required. **Drainage:** No works required. **Signage:** Incorporate sign condition inspection and clearance of ground vegetation around post base into annual maintenance schedule.
2176 - 2299	◄►	/	3.0	Route continues on farm access road with bitmac surface.	
2299	◄►	/	1.0	 Photo 40: chainage 2299 linm general photo looking forward General photo looking north at point route departs from farm access road and heads into woodland area via gentle downhill ramp before levelling out past gate. 1-way steel self-closing access gate installed at entrance to wood (chainage 2305) and was propped open at time of survey. Route surface returns to compacted Type 1 aggregate, with some loose surface stones, at approx. 1.0m in width.	
2299 - 2305	◄►	/	1.0	Route surface continues through woodland. Path surface continues as compacted aggregate at approx. 1.0m width.	

Path Survey and Specification Sheet						Sheet No.	23
Location:	**Castle Loch, Lochmaben, Dumfries and Galloway**			**Weather:**	**Dry, sunny intervals**	**Surveyor:**	G Anderson
Path:	**Castle Loch Circular Route**			**Date:**	**05.10.20**	**Section:**	**Chainage (2305 – 1431 linm)**

Chainage (linm)	Slope Dir	Grad. (%/deg)	Width (m)	Current Path Condition	Description of Proposed Path Works
2305	↔	/	1.0	 Photo 41: chainage 2305 linm - general photo looking forward General photo taken looking forward.	**Vegetation Management:** Clear any overhanging vegetation, along length of route, to a height of not less than 3.5m from finished path surface (preferred height 3.7m) and any smaller encroaching vegetation not less than 1m from path edges and to a height of 50mm, unless otherwise noted within this technical assessment. All woody vegetation to be cut into manageable lengths and distributed across site within agreed locations. **Barriers/Other features:** No works required. **Path construction and surfacing:** **Option 1:** Carefully scrape back all encroaching verge vegetation to expose full width of previously installed path (estimated to be a minimum of 1.5m) and upgrade surface to Drawing CL/UPU/CLLCT/001. Construct path levels to max 1:40 camber throughout to allow any surface water run-off to be discharged off the path and into verge area on either side. All verge scrape arisings to be utilised to reform path verges, ensuring finished verge levels remain below path surface levels to allow surface water run-off. **Option 2**: Assumes no upgrade works, as detailed within Option 1. Maintain usable path surface width by regularly cutting back verge vegetation to a width of 1m on either side. Consideration to be given to undertaking a phased programme of maintenance works aimed at carefully scraping back existing verge to expose original path width. Alternative is to apply appropriate herbicide to encroaching ground vegetation and to a width not exceeding original path base width (requires PA1/PA6a certification). Occasional compaction of surface. **Drainage:** For path construction options 1 and 2: Install drainage letts along the verge to better enable surface water run-off and to alleviate any possible ponding along the edges of the path surface. Locate as required and to a min width of 200mm. **Signage:** Incorporate sign condition inspection and clearance of ground vegetation around post base into annual maintenance schedule.
2305 - 2431	↔	/	1.0	Route continues through woodland to north. Surface remains consistent with compacted Type 1 aggregate. Width varies due to encroaching side vegetation but generally measured at 1.0m.	
2431	/	/	/	 Photo 42: chainage 2431 linm - general photo looking forward and showing timber boardwalk General photo looking forward and showing transition from compacted aggregate path to timber boardwalk with steel mesh anti-slip measures applied. Transition between path and boardwalk has 10-20mm step. Boardwalk measured at 1400mm wide with gaps between decking boards of 30mm. Measured height above ground was 250-300mm.	

Path Survey and Specification Sheet						Sheet No.	24
Location:	**Castle Loch, Lochmaben, Dumfries and Galloway**			**Weather:**	**Dry, sunny intervals**	**Surveyor:**	G Anderson
Path:	**Castle Loch Circular Route**			**Date:**	**05.10.20**	**Section:**	**Chainage (2431 – 2460 linm)**

Chainage (linm)	Slope Dir	Grad. (%/deg)	Width (m)	Current Path Condition	Description of Proposed Path Works
2431 - 2460	◄►	/	1.4	Route continues along boardwalk measured at 1.4m width with steel mesh applied to surface as anti-slip measure.  Photo 43: chainage 2460 linm - general photo looking back at end of boardwalk General photo taken at end of boardwalk section looking back. Route transitions back to compacted granular aggregate.	**Vegetation Management:** Clear any overhanging vegetation, along length of route, to a height of not less than 3.5m from finished deck surface (preferred height 3.7m) and any smaller encroaching vegetation not less than 1m from boardwalk edges, unless otherwise noted within this technical assessment. All woody vegetation to be cut into manageable lengths and distributed across site within agreed locations. **Barriers/Other features:** Structure and ongoing maintenance of bird hide not included within the scope of this study. **Path construction and surfacing:** **Boardwalk:** Retain existing boardwalk structure. Remove existing steel mesh and replace with new GRP anti-slip strips (50mm wide x 1200mm long). Option A: install toe boards to either edge of existing structure and as detailed within Drawing No. CL/LLW/CLLCT/002. Option B: Install a single passing place to general detail shown within Drawing No. CL/LLW/CLLCT/002 Detail C. Option C: Remove existing raised walkway and replace with new; to a width not less than 1600mm and to Drawing No. CL/LLW/CLLCT/002. **Drainage:** No works required. **Signage:** No works required.
2460	/	/	/		

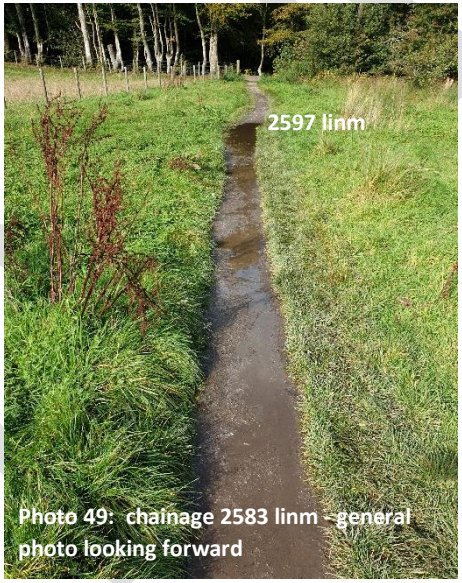
Path Survey and Specification Sheet					Sheet No.	25
Location:	**Castle Loch, Lochmaben, Dumfries and Galloway**			**Weather:**	**Dry, sunny intervals**	**Surveyor:**	G Anderson
Path:	**Castle Loch Circular Route**			**Date:**	**05.10.20**	**Section:**	**Chainage (2460 – 2502 linm)**

Chainage (linm)	Slope Dir	Grad. (%/deg)	Width (m)	Current Path Condition	Description of Proposed Path Works
2460 - 2502	↔	/	1.2	 Photo 44: chainage 2463 linm - general photo looking forward Route continues north through deciduous woodland. Path surface composed of compacted aggregate (smaller stone size than previous sections) to a measured width of 1.2m. General photo taken at chainage 2463 linm looking forward.	**Vegetation Management:** Clear any overhanging vegetation, along length of route, to a height of not less than 3.5m from finished path surface (preferred height 3.7m) and any smaller encroaching vegetation not less than 1m from path edges and to a height of 50mm, unless otherwise noted within this technical assessment. All woody vegetation to be cut into manageable lengths and distributed across site within agreed locations. **Barriers/Other features:** No works required. **Path construction and surfacing:** **Option 1:** Carefully scrape back all encroaching verge vegetation to expose full width of previously installed path (estimated to be a minimum of 1.5m) and upgrade surface to Drawing CL/UPU/CLLCT/001. Construct path levels to max 1:40 camber throughout to allow any surface water run-off to be discharged off the path and into verge area on either side. All verge scrape arisings to be utilised to reform path verges, ensuring finished verge levels remain below path surface levels to allow surface water run-off. **Option 2**: Assumes no upgrade works, as detailed within Option 1. Maintain usable path surface width by regularly cutting back verge vegetation to a width of 1m on either side. Consideration to be given to undertaking a phased programme of maintenance works aimed at carefully scraping back existing verge to expose original path width. Alternative is to apply appropriate herbicide to encroaching ground vegetation and to a width not exceeding original path base width (requires PA1/PA6a certification). Occasional compaction of surface. **Drainage:** For path construction options 1 and 2: Install drainage letts along the verge to better enable surface water run-off and to alleviate any possible ponding along the edges of the path surface. Locate as required and to a min width of 200mm. **Signage:** No works required.
2502	/	/	/	 Photo 45: chainage 2502 linm - general photo looking forward General photo showing birch tree leaning over into open route corridor at chainage 2502 linm.	

Path Survey and Specification Sheet							Sheet No.	26
Location:	**Castle Loch, Lochmaben, Dumfries and Galloway**			**Weather:**	**Dry, sunny intervals**	**Surveyor:**	G Anderson	
Path:	**Castle Loch Circular Route**			**Date:**	**05.10.20**	**Section:**	**Chainage (2502 – 2560 linm)**	

Chainage (linm)	Slope Dir	Grad. (%/deg)	Width (m)	Current Path Condition	Description of Proposed Path Works
2502 - 2511	◄►	/	1.2	Route continues north through woodland. Route meanders gently through wooded area. Surface remains as compacted aggregate to a width of 1.2m.	**Vegetation Management:** Clear any overhanging vegetation, along length of route, to a height of not less than 3.5m from finished path surface (preferred height 3.7m) and any smaller encroaching vegetation not less than 1m from path edges and to a height of 50mm, unless otherwise noted within this technical assessment. All woody vegetation to be cut into manageable lengths and distributed across site within agreed locations. **Barriers/Other features:** No works required. **Path construction and surfacing:** **Option 1:** Carefully scrape back all encroaching verge vegetation to expose full width of previously installed path (estimated to be a minimum of 1.5m) and upgrade surface to Drawing CL/UPU/CLLCT/001. Construct path levels to max 1:40 camber throughout to allow any surface water run-off to be discharged off the path and into verge area on either side. All verge scrape arisings to be utilised to reform path verges, ensuring finished verge levels remain below path surface levels to allow surface water run-off. **Option 2**: Assumes no upgrade works, as detailed within Option 1. Maintain usable path surface width by regularly cutting back verge vegetation to a width of 1m on either side. Consideration to be given to undertaking a phased programme of maintenance works aimed at carefully scraping back existing verge to expose original path width. Alternative is to apply appropriate herbicide to encroaching ground vegetation and to a width not exceeding original path base width (requires PA1/PA6a certification). Occasional compaction of surface. **Drainage:** For path construction options 1 and 2: Install drainage letts along the verge to better enable surface water run-off and to alleviate any possible ponding along the edges of the path surface. Locate as required and to a min width of 200mm. **Signage:** No works required
2511	/	/	/	 Photo 46: chainage 2503 linm - general photo of path surface General photo showing exposed Terram geotextile in centre of path surface.	
2511 - 2530	◄►	/	1.2	Route continues north through woodland and meanders gently through wooded area. Surface remains as compacted aggregate to a width of 1.2m	
2530	/	/	/	 Photo 47: chainage 2530 linm - general photo of path surface General photo looking forward at point route exists woodland into open ground.	
2530 - 2560	◄►	/	0.6	Route exists into open grassland area and narrows to 0.6mm in width. Surface remains as compacted aggregate throughout. Verges have built up above surface level of path.	

Path Survey and Specification Sheet							Sheet No.	27
Location:	**Castle Loch, Lochmaben, Dumfries and Galloway**			**Weather:**	**Dry, sunny intervals**	**Surveyor:**	G Anderson	
Path:	**Castle Loch Circular Route**			**Date:**	**05.10.20**	**Section:**	**Chainage (2560 – 2597 linm)**	

Chainage (linm)	Slope Dir	Grad. (%/deg)	Width (m)	Current Path Condition	Description of Proposed Path Works
2560	/	/	/	 Photo 48: chainage 2560 linm - general photo of timber bench General photo showing simple timber bench to right of route.	**Vegetation Management:** Clear any overhanging vegetation, along length of route, to a height of not less than 3.5m from finished path surface (preferred height 3.7m) and any smaller encroaching vegetation not less than 1m from path edges and to a height of 50mm, unless otherwise noted within this technical assessment. All woody vegetation to be cut into manageable lengths and distributed across site within agreed locations. **Barriers/Other features:** Regularly remove all vegetation growing around and under bench seat. **Path construction and surfacing:** **Option 1:** Carefully scrape back all encroaching verge vegetation to expose full width of previously installed path (estimated to be a minimum of 1.5m) and upgrade surface to Drawing CL/UPU/CLLCT/001. Construct path levels to max 1:40 camber throughout to allow any surface water run-off to be discharged off the path and into verge area on either side. All verge scrape arisings to be utilised to reform path verges, ensuring finished verge levels remain below path surface levels to allow surface water run-off. **Option 2**: Assumes no upgrade works, as detailed within Option 1. Maintain usable path surface width by regularly cutting back verge vegetation to a width of 1m on either side. Consideration to be given to undertaking a phased programme of maintenance works aimed at carefully scraping back existing verge to expose original path width. Alternative is to apply appropriate herbicide to encroaching ground vegetation and to a width not exceeding original path base width (requires PA1/PA6a certification). Occasional compaction of surface. **Drainage:** For path construction options 1 and 2: Install drainage letts along the verge to better enable surface water run-off and to alleviate any possible ponding along the edges of the path surface. Locate as required and to a min width of 200mm. **Signage:** No works required.
2560 - 2583	◄►	/	0.6	Route continues north across open grassland. Surface remains compacted aggregate, to a width of approx. 0.6m, and grass verge levels remain above that of the path surface.	
2583 - 2597	◄►	/	0.6	 2597 linm Photo 49: chainage 2583 linm - general photo looking forward General photo looking forward and showing water retention between chainage 2583 and 2597 linm. Path surface remains as compacted aggregate with verges built higher than path surface and little opportunity for surface water to get off path.	

Path Survey and Specification Sheet						Sheet No.	28
Location:	**Castle Loch, Lochmaben, Dumfries and Galloway**			**Weather:**	**Dry, sunny intervals**	**Surveyor:**	G Anderson
Path:	**Castle Loch Circular Route**			**Date:**	**05.10.20**	**Section:**	**Chainage (2597 – 2655 linm)**

Chainage (linm)	Slope Dir	Grad. (%/deg)	Width (m)	Current Path Condition	Description of Proposed Path Works
2597 - 2619	◄►	/	0.6	Route continues north toward corner of open grassland. Ponding no longer present and surface remains as compacted aggregate. Surface width approx. 0.6m and grass verges remain above that of path surface.	**Vegetation Management:** Clear any overhanging vegetation, along length of route, to a height of not less than 3.5m from finished path surface (preferred height 3.7m) and any smaller encroaching vegetation not less than 1m from path edges and to a height of 50mm, unless otherwise noted within this technical assessment. All woody vegetation to be cut into manageable lengths and distributed across site within agreed locations. **Barriers/Other features:** Regularly remove all vegetation growing around and under bench seat. **Path construction and surfacing:** **Option 1:** Carefully scrape back all encroaching verge vegetation to expose full width of previously installed path (estimated to be a minimum of 1.5m) and upgrade surface to Drawing No. CL/UPU/CLLCT/001. Construct path levels to max 1:40 camber throughout to allow any surface water run-off to be discharged off the path and into verge area on either side. All verge scrape arisings to be utilised to reform path verges, ensuring finished verge levels remain below path surface levels to allow surface water run-off. **Option 2**: Assumes no upgrade works, as detailed within Option 1. Maintain usable path surface width by regularly cutting back verge vegetation to a width of 1m on either side. Consideration to be given to undertaking a phased programme of maintenance works aimed at carefully scraping back existing verge to expose original path width. Alternative is to apply appropriate herbicide to encroaching ground vegetation and to a width not exceeding original path base width (requires PA1/PA6a certification). Occasional compaction of surface. **Boardwalk**: Remove existing 'humped' boardwalk structure and install new path to general detail contained within Drawing No. CL/UPU/CLLCT/001, ensuring min 100mm depth of base material over top of piped culvert. **Drainage:** Install min. 225mm dia. piped culvert at corner of field to Drawing No. SD/PC/01 **Signage:** No works required.
2619	/	/	/	 **Photo 50: chainage 2619 linm - general photo of timber boardwalk looking forward** General photo looking forward showing short section of 'humped' boardwalk that elevates route over wet section of ground at corner of adjacent land.	
2619 - 2625	◄►	/	1.2	Wooden boardwalk section. 1.2m wide with steel mesh applied as anti-slip measure. Stepped transitions between boardwalk and aggregate path where aggregate has worn away.	
2625 - 2655	◄►	/	1.0	Route re-enters woodland and continues north between western boundary of Castle Loch and B7020 carriageway. Path surface remains as compacted aggregate.	

Path Survey and Specification Sheet							Sheet No.	29
Location:	**Castle Loch, Lochmaben, Dumfries and Galloway**			**Weather:**	**Dry, sunny intervals**	**Surveyor:**	G Anderson	
Path:	**Castle Loch Circular Route**			**Date:**	**05.10.20**	**Section:**	**Chainage (2655 – 2749 linm)**	

Chainage (linm)	Slope Dir	Grad. (%/deg)	Width (m)	Current Path Condition	Description of Proposed Path Works
2655	/	/	/	 Photo 51: chainage 2655 linm - general photo looking forward  Photo 51a: chainage 2655 linm - general photo of roadside access link to west General photo showing route looking forward (photo 51) and side link to left which connects path to roadside lay-by (51a).	**Vegetation Management:** Clear any overhanging vegetation, along length of route, to a height of not less than 3.5m from finished path surface (preferred height 3.7m) and any smaller encroaching vegetation not less than 1m from path edges and to a height of 50mm, unless otherwise noted within this technical assessment. All woody vegetation to be cut into manageable lengths and distributed across site within agreed locations. **Barriers/Other features:** Regularly remove all vegetation growing around and under bench seat. **Path construction and surfacing:** **Option 1:** Carefully scrape back all encroaching verge vegetation to expose full width of previously installed path (estimated to be a minimum of 1.5m) and upgrade surface to Drawing CL/UPU/CLLCT/001. Construct path levels to max 1:40 camber throughout to allow any surface water run-off to be discharged off the path and into verge area on either side. All verge scrape arisings to be utilised to reform path verges, ensuring finished verge levels remain below path surface levels to allow surface water run-off. **Option 2**: Assumes no upgrade works, as detailed within Option 1. Maintain usable path surface width by regularly cutting back verge vegetation to a width of 1m on either side. Consideration to be given to undertaking a phased programme of maintenance works aimed at carefully scraping back existing verge to expose original path width. Alternative is to apply appropriate herbicide to encroaching ground vegetation and to a width not exceeding original path base width (requires PA1/PA6a certification). Occasional compaction of surface. **Drainage:** For path construction options 1 and 2: Install drainage letts along the verge to better enable surface water run-off and to alleviate any possible ponding along the edges of the path surface. Locate as required and to a min width of 200mm. Clear inlet and outlet channels to piped culvert and rod out accumulated material within pipe to re-establish full functionality. Incorporate culvert and associated ditch condition inspection and clearance into annual maintenance schedule. **Signage:** No works required.
2655 - 2749	◄►	/	<1.5	Route continues north through wooded area and parallel to Castle Loch on right and B7020 on left. Surface composed of compacted aggregate and is wider at up to 1.5m due to reduced verge build up under canopy.	
2749	/	/	/	 Photo 52: chainage 2655 linm - general photo looking forward General photo showing twin wall piped culvert taking water from left to right under path. Culvert almost totally blocked with silt and leaf litter but some very limited flow still remains and stops water overflowing onto path.	

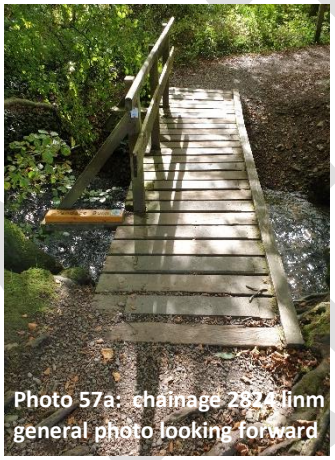
Path Survey and Specification Sheet							Sheet No.	30
Location:	**Castle Loch, Lochmaben, Dumfries and Galloway**			**Weather:**	**Dry, sunny intervals**	**Surveyor:**	G Anderson	
Path:	**Castle Loch Circular Route**			**Date:**	**05.10.20**	**Section:**	**Chainage (2749 – 2810 linm)**	

Chainage (linm)	Slope Dir	Grad. (%/deg)	Width (m)	Current Path Condition	Description of Proposed Path Works
2749 - 2767	◄►	/	<1.5	Route continues north through wooded area and parallel to Castle Loch on right and B7020 on left. Surface composed of compacted aggregate and to a width of up to 1.5m.	**Vegetation Management:** Clear any overhanging vegetation, along length of route, to a height of not less than 3.5m from finished path surface (preferred height 3.7m) and any smaller encroaching vegetation not less than 1m from path edges and to a height of 50mm, unless otherwise noted within this technical assessment. All woody vegetation to be cut into manageable lengths and distributed across site within agreed locations. **Barriers/Other features:** Regularly remove all vegetation growing around and under bench seat. **Path construction and surfacing:** **Option 1:** Carefully scrape back all encroaching verge vegetation to expose full width of previously installed path (estimated to be a minimum of 1.5m) and upgrade surface to Drawing CL/UPU/CLLCT/001. Construct path levels to max 1:40 camber throughout to allow any surface water run-off to be discharged off the path and into verge area on either side. All verge scrape arisings to be utilised to reform path verges, ensuring finished verge levels remain below path surface levels to allow surface water run-off. **Option 2**: Assumes no upgrade works, as detailed within Option 1. Generally scrape accumulated mud from the path surface and dispose of arisings well away from path edges. Maintain usable path surface width by regularly cutting back verge vegetation to a width of 1m on either side. Consideration to be given to undertaking a phased programme of maintenance works aimed at carefully scraping back existing verge to expose original path width. Alternative is to apply appropriate herbicide to encroaching ground vegetation and to a width not exceeding original path base width (requires PA1/PA6a certification). Occasional compaction of surface. **Drainage:** No works required. **Signage:** No works required.
2767	/	/	/	 Photo 53: chainage 2767 linm - general photo looking forward General photo looking forward and showing widened muddy section on path with by-pass route to left, around tree. General wear on by-pass suggests that this is a longer-term issue.	
2767 - 2776	◄►	/	/	Route continues north through shaded woodland edge. Path surface composed of compacted aggregate. Accumulated leaf litter and silt has allowed mud to form over surface.	
2776 - 2797	◄►	/	1.2	Muddy section ends at chainage 2776 linm and path surface returns to exposed compacted aggregate. Path runs close to boundary post and wire fence to left.	
2792 - 2810	◄►	/	1.2	 2812 linm Photo 54: chainage 2797 linm - general photo looking forward General photo looking forward and showing muddy section from chainages 2792 - 2810 linm.	

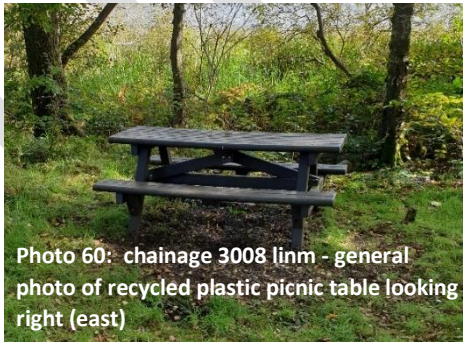
Path Survey and Specification Sheet						Sheet No.	31
Location:	**Castle Loch, Lochmaben, Dumfries and Galloway**			**Weather:**	**Dry, sunny intervals**	**Surveyor:**	G Anderson
Path:	**Castle Loch Circular Route**			**Date:**	**05.10.20**	**Section:**	**Chainage (2810 – 2908 linm)**

Chainage (linm)	Slope Dir	Grad. (%/deg)	Width (m)	Current Path Condition	Description of Proposed Path Works
2810 - 2851	◄►	/	1.2	Route continues through shaded woodland edge, alongside boundary fence and parallel with B7020 to west. Route narrows slightly at pinch point (chainage 2812 linm) between tree to right and boundary fence (see Photo 54). Surface compose of compacted aggregate with layer of compacted leaf litter, and silt/soil migration from embankment to left, creating a slightly muddy walking surface.	**Vegetation Management:** Clear any overhanging vegetation, along length of route, to a height of not less than 3.5m from finished path surface (preferred height 3.7m) and any smaller encroaching vegetation not less than 1m from path edges and to a height of 50mm, unless otherwise noted within this technical assessment. All woody vegetation to be cut into manageable lengths and distributed across site within agreed locations.
2851	/	/	/	 Photo 55: chainage 2851 linm - general photo of dragonfly carving General photo showing dragonfly carving to right of path.	**Barriers/Other features:** Bench in heavily shaded position with no outlook but engraving shows that it is 'position specific' with engraved reference to "Vendace Burn". Option: consider possible relocation to a nearby and more open situation. **Path construction and surfacing:** **Option 1:** Carefully scrape back all encroaching verge vegetation to expose full width of previously installed path (estimated to be a minimum of 1.5m) and upgrade surface to Drawing CL/UPU/CLLCT/001. Construct path levels to max 1:40 camber throughout to allow any surface water run-off to be discharged off the path and into verge area on either side. All verge scrape arisings to be utilised to reform path verges, ensuring finished verge levels remain below path surface levels to allow surface water run-off.
2851 - 2908	◄►	/	1.2	Route continues alongside boundary fence and parallel with B7020 to west. Surface compose of compacted aggregate with surface layer of compacted leaf litter, and silt/soil migration from embankment to left, creating a slightly muddy walking surface.	**Option 2**: Assumes no upgrade works, as detailed within Option 1. Generally scrape accumulated mud from the path surface and dispose of arisings well away from path edges. Maintain usable path surface width by regularly cutting back verge vegetation to a width of 1m on either side. Consideration to be given to undertaking a phased programme of maintenance works aimed at carefully scraping back existing verge to expose original path width. Alternative is to apply appropriate herbicide to encroaching ground vegetation and to a width not exceeding original path base width (requires PA1/PA6a certification). Occasional compaction of surface.
2908	/	/	/	 Photo 56: chainage 2908 linm - general photo of timber bench and table looking left (west) General photo of rustic timber bench and side table at chainage 2908 linm. Furniture located in heavy shade with no outlook/view to east.	**Drainage:** No works required. **Signage:** No works required.

Path Survey and Specification Sheet							Sheet No.	32
Location:	**Castle Loch, Lochmaben, Dumfries and Galloway**			**Weather:**	**Dry, sunny intervals**	**Surveyor:**	G Anderson	
Path:	**Castle Loch Circular Route**			**Date:**	**05.10.20**	**Section:**	**Chainage (2908 – 2924 linm)**	

Chainage (linm)	Slope Dir	Grad. (%/deg)	Width (m)	Current Path Condition	Description of Proposed Path Works
2908 - 2920	↔	/	1.2	Route continues alongside boundary fence and parallel with B7020 to west. Surface compose of compacted aggregate which is cleaner than before as path route moves away from the roadside embankment and into a less shaded woodland area.	**Vegetation Management:** Clear any overhanging vegetation, along length of route, to a height of not less than 3.5m from finished path surface (preferred height 3.7m) and any smaller encroaching vegetation not less than 1m from path edges and to a height of 50mm, unless otherwise noted within this technical assessment. All woody vegetation to be cut into manageable lengths and distributed across site within agreed locations. **Barriers/Other features:** **Bridge**: Incorporate bridge condition inspection into annual maintenance schedule. Remove all vegetation adjacent or overhanging bridge structure. Upfill path surface approaches to bridge to remove any stepped level variances. Option: extend handrail to at least the full length of the bridge or replace full structure. **Gate**: Consideration to be given to removing existing gate a roadside lay-by. Option to leave frame in place to allow possible future reinstatement, if desired. **Path construction and surfacing:** **Option 1:** Carefully scrape back all encroaching verge vegetation to expose full width of previously installed path (estimated to be a minimum of 1.5m) and upgrade surface to Drawing CL/UPU/CLLCT/001. Construct path levels to max 1:40 camber throughout to allow any surface water run-off to be discharged off the path and into verge area on either side. All verge scrape arisings to be utilised to reform path verges, ensuring finished verge levels remain below path surface levels to allow surface water run-off. **Option 2**: Assumes no upgrade works, as detailed within Option 1. Generally scrape accumulated mud from the path surface and dispose of arisings well away from path edges. Maintain usable path surface width by regularly cutting back verge vegetation to a width of 1m on either side. Consideration to be given to undertaking a phased programme of maintenance works aimed at carefully scraping back existing verge to expose original path width. Alternative is to apply appropriate herbicide to encroaching ground vegetation and to a width not exceeding original path base width (requires PA1/PA6a certification). Occasional compaction of surface. **Drainage:** No works required. **Signage:** No works required.
2920 - 2924	↔	/		 Photo 57a: chainage 2820 linm - general photo looking forward  Photo 57a: chainage 2824 linm general photo looking forward General photos showing simple, 4m span timber bridge with partial single handrail over Vendace Burn. Decking has aftermarket anti-slip strips applied.	
2924	↑	/	/	 Photo 58: chainage 2924 linm - general photo looking west to roadside General photo showing 14 linm link path to roadside lay-by on B7020. Steel 1-way self-closing gate installed at lay-by. Gradient not measured at time of survey.	

Path Survey and Specification Sheet						Sheet No.	33
Location:	**Castle Loch, Lochmaben, Dumfries and Galloway**			**Weather:**	**Dry, sunny intervals**	**Surveyor:**	G Anderson
Path:	**Castle Loch Circular Route**			**Date:**	**05.10.20**	**Section:**	**Chainage (2924 – 3008 linm)**

Chainage (linm)	Slope Dir	Grad. (%/deg)	Width (m)	Current Path Condition	Description of Proposed Path Works
2924 - 2998	◄►	/	1.7	Route continues north through woodland and remains parallel to the B7020 carriageway. Surface remains as compacted Type 1 aggregate. Path slightly wider along this section at 1.7m.	**Vegetation Management:** Clear any overhanging vegetation, along length of route, to a height of not less than 3.5m from finished path surface (preferred height 3.7m) and any smaller encroaching vegetation not less than 1m from path edges and to a height of 50mm, unless otherwise noted within this technical assessment. All woody vegetation to be cut into manageable lengths and distributed across site within agreed locations. **Barriers/Other features:** Incorporate general inspection and seat cleaning into annual maintenance schedule Regularly remove all vegetation growing around and under bench seat. **Path construction and surfacing:** **Option 1:** Carefully scrape back all encroaching verge vegetation to expose full width of previously installed path (estimated to be a minimum of 1.5m) and upgrade surface to Drawing CL/UPU/CLLCT/001. Construct path levels to max 1:40 camber throughout to allow any surface water run-off to be discharged off the path and into verge area on either side. All verge scrape arisings to be utilised to reform path verges, ensuring finished verge levels remain below path surface levels to allow surface water run-off. **Option 2**: Assumes no upgrade works, as detailed within Option 1. Maintain usable path surface width by regularly cutting back verge vegetation to a width of 1m on either side. Consideration to be given to undertaking a phased programme of maintenance works aimed at carefully scraping back existing verge to expose original path width. Alternative is to apply appropriate herbicide to encroaching ground vegetation and to a width not exceeding original path base width (requires PA1/PA6a certification). Occasional compaction of surface. **Drainage:** For path construction options 1 and 2: Install drainage letts along the verge to better enable surface water run-off and to alleviate any possible ponding along the edges of the path surface. Locate as required and to a min width of 200mm. Clear inlet and outlet channels to piped culvert and rod out accumulated material within pipe to re-establish full functionality. Incorporate culvert and associated ditch condition inspection and clearance into annual maintenance schedule. **Signage:** No works required.
2998	/	/	/	 **Photo 59: chainage 2998 linm - general photo of blocked culvert** General photo showing twinwall piped culvert, with simple mortared stone headwalls, taking water under path from left to right. Pipe inlet completely blocked with soil.	
2998 - 3008	◄►	/	1.7	Route continues north through woodland and remains parallel to the B7020 carriageway. Surface remains as compacted Type 1 aggregate.	
3008	/	/	/	 **Photo 60: chainage 3008 linm - general photo of recycled plastic picnic table looking right (east)** General photo showing recycled plastic picnic table to right of path. Bench located on open ground with no formal/hard base.	

Path Survey and Specification Sheet						Sheet No.	34
Location:	**Castle Loch, Lochmaben, Dumfries and Galloway**			**Weather:**	**Dry, sunny intervals**	**Surveyor:**	G Anderson
Path:	**Castle Loch Circular Route**			**Date:**	**05.10.20**	**Section:**	**Chainage (3008 – 3026 linm)**

Chainage (linm)	Slope Dir	Grad. (%/deg)	Width (m)	Current Path Condition	Description of Proposed Path Works
3008	/	/	/	 Photo 60a: chainage 3008 linm - general photo looking back General photo looking back at chainage 3008 linm.	**Vegetation Management:** Clear any overhanging vegetation, along length of route, to a height of not less than 3.5m from finished path surface (preferred height 3.7m) and any smaller encroaching vegetation not less than 1m from path edges and to a height of 50mm, unless otherwise noted within this technical assessment. All woody vegetation to be cut into manageable lengths and distributed across site within agreed locations. **Barriers/Other features:** Regularly remove all vegetation growing around and under bench seat. **Path construction and surfacing:** **Option 1:** Carefully scrape back all encroaching verge vegetation to expose full width of previously installed path (estimated to be a minimum of 1.5m) and upgrade surface to Drawing No. CL/UPU/CLLCT/001. Construct path levels to max 1:40 camber throughout to allow any surface water run-off to be discharged off the path and into verge area on either side. All verge scrape arisings to be utilised to reform path verges, ensuring finished verge levels remain below path surface levels to allow surface water run-off. **Option 2**: Assumes no upgrade works, as detailed within Option 1. Maintain usable path surface width by regularly cutting back verge vegetation to a width of 1m on either side. Consideration to be given to undertaking a phased programme of maintenance works aimed at carefully scraping back existing verge to expose original path width. Alternative is to apply appropriate herbicide to encroaching ground vegetation and to a width not exceeding original path base width (requires PA1/PA6a certification). Occasional compaction of surface. **Link Path**: Install new path to general detail contained within Drawing No. CL/UPU/CLLCT/001 but ensuring min 100mm depth of base material. **Drainage:** For path construction options 1 and 2: Install drainage letts along the verge to better enable surface water run-off and to alleviate any possible ponding along the edges of the path surface. Locate as required and to a min width of 200mm. **Signage:** No works required.
3008 - 3026	◄►	/	1.7	Route continues north through woodland and remains parallel to the B7020 carriageway. Surface composed of compacted Type 1 aggregate.	
3026	/	/	/	 Photo 61: chainage 3026 linm - general photo looking west to roadside layby General photo showing 5m long link path to roadside lay-by on B7020. Gap in fence has no access barrier.	

Path Survey and Specification Sheet							Sheet No.	35
Location:	**Castle Loch, Lochmaben, Dumfries and Galloway**			**Weather:**	**Dry, sunny intervals**	**Surveyor:**	G Anderson	
Path:	**Castle Loch Circular Route**			**Date:**	**05.10.20**	**Section:**	**Chainage (3026 – 3032 linm)**	

Chainage (linm)	Slope Dir	Grad. (%/deg)	Width (m)	Current Path Condition	Description of Proposed Path Works
3026	/	/	/	 Photo 61a: general photo from roadside General photo from lay-by toward route path (west) and showing no barrier present.	**Vegetation Management:** Clear any overhanging vegetation, along length of route, to a height of not less than 3.5m from finished path surface (preferred height 3.7m) and any smaller encroaching vegetation not less than 1m from path edges and to a height of 50mm, unless otherwise noted within this technical assessment. All woody vegetation to be cut into manageable lengths and distributed across site within agreed locations. **Barriers/Other features:** **Bridge**: Incorporate bridge condition inspection into annual maintenance schedule. Remove all vegetation adjacent or overhanging bridge structure. Upfill path surface approaches to bridge to remove any stepped level variances. Option: replace full structure ensuring minimum clear width of 1.5m. **Path construction and surfacing:** **Option 1:** Carefully scrape back all encroaching verge vegetation to expose full width of previously installed path (estimated to be a minimum of 1.5m) and upgrade surface to Drawing CL/UPU/CLLCT/001. Construct path levels to max 1:40 camber throughout to allow any surface water run-off to be discharged off the path and into verge area on either side. All verge scrape arisings to be utilised to reform path verges, ensuring finished verge levels remain below path surface levels to allow surface water run-off. **Link Path**: Install new path to general detail contained within Drawing No. CL/UPU/CLLCT/001 but ensuring min 100mm depth of base material. **Option 2**: Assumes no upgrade works, as detailed within Option 1. Maintain usable path surface width by regularly cutting back verge vegetation to a width of 1m on either side. Consideration to be given to undertaking a phased programme of maintenance works aimed at carefully scraping back existing verge to expose original path width. Alternative is to apply appropriate herbicide to encroaching ground vegetation and to a width not exceeding original path base width (requires PA1/PA6a certification). Occasional compaction of surface. **Signage:** Option: Install fingerpost signage indicating access to circular route and picnic/recreation area
3026 - 3039	◄►	/	/	Route continues north through woodland and remains parallel to the B7020 carriageway. Surface composed of compacted Type 1 aggregate.	
3039 - 3032	/	/	/	 Photo 62: chainage 3039 linm - general photo looking forward General photo showing 3.2m span timber bridge with double handrail and anti-slip aftermarkets strips to alternate decoking boards. Bridge 900mm wide with 1170mm high parapets. Limited stepped transition between aggregate path and decking boards where path surface is lower than bridge deck.	

Path Survey and Specification Sheet							Sheet No.	36
Location:	**Castle Loch, Lochmaben, Dumfries and Galloway**			**Weather:**	**Dry, sunny intervals**	**Surveyor:**	G Anderson	
Path:	**Castle Loch Circular Route**			**Date:**	**05.10.20**	**Section:**	**Chainage (3032 – 3043 linm)**	

Chainage (linm)	Slope Dir	Grad. (%/deg)	Width (m)	Current Path Condition	Description of Proposed Path Works
3032 - 3043	↔	/	1.7	Route continues north through woodland and remains parallel to the B7020 carriageway. Surface composed of compacted Type 1 aggregate.	**Vegetation Management:** Clear any overhanging vegetation, along length of route, to a height of not less than 3.5m from finished path surface (preferred height 3.7m) and any smaller encroaching vegetation not less than 1m from path edges and to a height of 50mm, unless otherwise noted within this technical assessment. All woody vegetation to be cut into manageable lengths and distributed across site within agreed locations. **Barriers/Other features:** No works required. **Path construction and surfacing:** Generally maintain path surfaces through cleaning of any accumulated materials. Option to clear surface vegetation at lay-by to make the entrance more obvious and welcoming. **Drainage:** No works required. **Signage:** **Option**: Install fingerpost signage indicating access to circular route and picnic/recreation area
3043	↑	/	1.2	 Photo 63: chainage 3043 linm - general photo of roadside link path to lay-by looking left (west) General photo showing formalised link path (15m in length) to roadside lay-by off B7020. No access barrier installed at lay-by. Link path has raised concrete kerbing and worn bound bitmac surface. Width approx 1.2m.	
3043	↓	/	/	 Photo 63a: general photo of roadside link path from lay-by looking east  Photo 63b: general photo of roadside lay-by on B7020 looking south General photos of link path (photo 63a) and roadside lay-by (photo 63b).	

Path Survey and Specification Sheet							Sheet No.	37
Location:	**Castle Loch, Lochmaben, Dumfries and Galloway**			**Weather:**	**Dry, sunny intervals**	**Surveyor:**	G Anderson	
Path:	**Castle Loch Circular Route**			**Date:**	**05.10.20**	**Section:**	**Chainage (3043 linm)**	

Chainage (linm)	Slope Dir	Grad. (%/deg)	Width (m)	Current Path Condition	Description of Proposed Path Works
3043	/	/	/	 Photo 63c: chainage 3043 linm - general photo of lochside seating area link looking east  Photo 63d: general photo from lochside seating area looking west General photo showing continuation of formalised link path leading to lochside seating/viewing area. Photos are looking east from surveyed lochside route to seating area (photo 63c) and from seating area to surveyed route (63d).	**Vegetation Management:** Clear any overhanging vegetation, along length of route, to a height of not less than 3.5m from finished path surface (preferred height 3.7m) and any smaller encroaching vegetation not less than 1m from path edges and to a height of 50mm, unless otherwise noted within this technical assessment. All woody vegetation to be cut into manageable lengths and distributed across site within agreed locations. **Barriers/Other features:** **Seating**: Regularly maintain grassed seating area to ensure grass does not grow longer than 50mm. Consideration to be given to replace existing timber picnic bench with 2no. new (timber or recycled plastic). **Path construction and surfacing:** Generally maintain path surfaces through cleaning of any accumulated materials. Option to clear surface vegetation at lay-by to make the entrance more obvious and welcoming. **Drainage:** No works required. **Signage:** Incorporate interpretation sign cleaning into annual maintenance schedule.
3043	/	/	/	 Photo 63e: general photo of interpretation by lochside seating area  Photo 63f: general photo of lochside seating area General photos taken at lochside seating/viewing area showing Crannog interpretation panel (photo 63e) and grassed seating/picnic area (photo 63f).	

Path Survey and Specification Sheet						Sheet No.	38
Location:	**Castle Loch, Lochmaben, Dumfries and Galloway**			**Weather:**	**Dry, sunny intervals**	**Surveyor:**	G Anderson
Path:	**Castle Loch Circular Route**			**Date:**	**05.10.20**	**Section:**	**Chainage (3043 – 3171 linm)**

Chainage (linm)	Slope Dir	Grad. (%/deg)	Width (m)	Current Path Condition
3043 - 3107	◄►	/	<1.6	Route continues north through woodland and remains parallel to the B7020 carriageway. Surface composed of compacted Type 1 aggregate. Path width varies between 1.2 – 1.6m.
3107 - 3111	◄►	/	<1.6	Route continues north through woodland and remains parallel to the B7020 carriageway. Path base composed of compacted Type 1 aggregate with some accumulation of mud to surface.
3111 - 3171	◄►	/	<1.6	Route continues north through woodland and remains parallel to the B7020 carriageway. Path base composed of compacted Type 1 aggregate.
3171	/	/	/	 Photo 64: chainage 3171 linm – general photo looking forward and showing culvert General photo showing 300mm dia. twinwall piped culvert with mortared stone headwalls. Water flowing freely from left to right (as shown).
3171	/	/	/	 Photo 64a: chainage 3171 linm – general photo of culvert (outlet) General photo of culver outlet.

Vegetation Management:
Clear any overhanging vegetation, along length of route, to a height of not less than 3.5m from finished path surface (preferred height 3.7m) and any smaller encroaching vegetation not less than 1m from path edges and to a height of 50mm, unless otherwise noted within this technical assessment.
All woody vegetation to be cut into manageable lengths and distributed across site within agreed locations.

Barriers/Other features:
No works required.

Path construction and surfacing:
Option 1: Carefully scrape back all encroaching verge vegetation to expose full width of previously installed path (estimated to be a minimum of 1.5m) and upgrade surface to Drawing CL/UPU/CLLCT/001. Construct path levels to max 1:40 camber throughout to allow any surface water run-off to be discharged off the path and into verge area on either side. All verge scrape arisings to be utilised to reform path verges, ensuring finished verge levels remain below path surface levels to allow surface water run-off.

Option 2: Assumes no upgrade works, as detailed within Option 1. Maintain usable path surface width by regularly cutting back verge vegetation to a width of 1m on either side. Consideration to be given to undertaking a phased programme of maintenance works aimed at carefully scraping back existing verge to expose original path width. Alternative is to apply appropriate herbicide to encroaching ground vegetation and to a width not exceeding original path base width (requires PA1/PA6a certification). Occasional compaction of surface.

Drainage:
For path construction options 1 and 2: Install drainage letts along the verge to better enable surface water run-off and to alleviate any possible ponding along the edges of the path surface. Locate as required and to a min width of 200mm. Incorporate culvert and associated ditch condition inspection and clearance into annual maintenance schedule.

Signage:
No works required.

Description of Proposed Path Works

Path Survey and Specification Sheet						Sheet No.	39
Location:	**Castle Loch, Lochmaben, Dumfries and Galloway**			**Weather:**	**Dry, sunny intervals**	**Surveyor:**	G Anderson
Path:	**Castle Loch Circular Route**			**Date:**	**05.10.20**	**Section:**	**Chainage (3171 – 3272 linm)**

Chainage (linm)	Slope Dir	Grad. (%/deg)	Width (m)	Current Path Condition	Description of Proposed Path Works
3171 - 3180	◄►	/	<1.6	Route continues north through woodland and remains parallel to the B7020 carriageway. Surface composed of compacted Type 1 aggregate. Path width varies between 1.2 – 1.6m.	**Vegetation Management:** Clear any overhanging vegetation, along length of route, to a height of not less than 3.5m from finished path surface (preferred height 3.7m) and any smaller encroaching vegetation not less than 1m from path edges and to a height of 50mm, unless otherwise noted within this technical assessment. All woody vegetation to be cut into manageable lengths and distributed across site within agreed locations.
3180	/	/	/	 Photo 65: chainage 3180 linm – general photo looking back General photo taken looking back and showing dip in path level allowing water and mud to accumulate across width of surface.	**Barriers/Other features:** No works required. **Path construction and surfacing:** **Option 1:** Carefully scrape back all encroaching verge vegetation to expose full width of previously installed path (estimated to be a minimum of 1.5m) and upgrade surface to Drawing CL/UPU/CLLCT/001. Construct path levels to max 1:40 camber throughout to allow any surface water run-off to be discharged off the path and into verge area on either side. All verge scrape arisings to be utilised to reform path verges, ensuring finished verge levels remain below path surface levels to allow surface water run-off.
3180 - 3272	◄►	/	<1.6	Route continues north through woodland and remains parallel to the B7020 carriageway. Surface composed of compacted Type 1 aggregate. Path width varies between 1.2 – 1.6m.	**Option 2**: Assumes no upgrade works, as detailed within Option 1. Generally scrape accumulated mud from the path surface and dispose of arisings well away from path edges. Maintain usable path surface width by regularly cutting back verge vegetation to a width of 1m on either side. Consideration to be given to undertaking a phased programme of maintenance works aimed at carefully scraping back existing verge to expose original path width. Alternative is to apply appropriate herbicide to encroaching ground vegetation and to a width not exceeding original path base width (requires PA1/PA6a certification). Occasional compaction of surface.
3272	/	/	/	 Photo 66: chainage 3272 linm – general photo looking back General photo looking back and showing tree roots encroaching into path surface.	**Drainage:** For path construction options 1 and 2: Install drainage letts along the verge to better enable surface water run-off and to alleviate any possible ponding along the edges of the path surface. Locate as required and to a min width of 200mm. **Signage:** No works required.

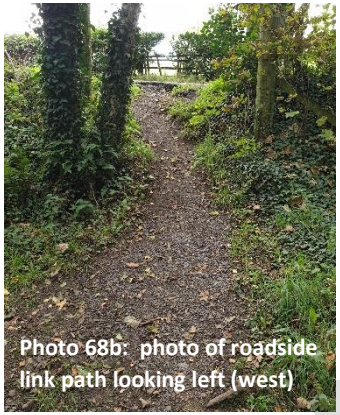
Path Survey and Specification Sheet							Sheet No.	40
Location:	**Castle Loch, Lochmaben, Dumfries and Galloway**			**Weather:**	**Dry, sunny intervals**	**Surveyor:**	G Anderson	
Path:	**Castle Loch Circular Route**			**Date:**	**05.10.20**	**Section:**	**Chainage (3272 – 3285 linm)**	

Chainage (linm)	Slope Dir	Grad. (%/deg)	Width (m)	Current Path Condition	Description of Proposed Path Works
3272 - 3285	◄►	/	<1.6	Route continues north through woodland and remains parallel to the B7020 carriageway. Surface composed of compacted Type 1 aggregate. Path width varies between 1.2 – 1.6m.	**Vegetation Management:** Clear any overhanging vegetation, along length of route, to a height of not less than 3.5m from finished path surface (preferred height 3.7m) and any smaller encroaching vegetation not less than 1m from path edges and to a height of 50mm, unless otherwise noted within this technical assessment. All woody vegetation to be cut into manageable lengths and distributed across site within agreed locations. **Barriers/Other features:** No works required. **Path construction and surfacing:** **Option 1:** Carefully scrape back all encroaching verge vegetation to expose full width of previously installed path (estimated to be a minimum of 1.5m) and upgrade surface to Drawing CL/UPU/CLLCT/001. Construct path levels to max 1:40 camber throughout to allow any surface water run-off to be discharged off the path and into verge area on either side. All verge scrape arisings to be utilised to reform path verges, ensuring finished verge levels remain below path surface levels to allow surface water run-off. **Option 2**: Assumes no upgrade works, as detailed within Option 1. Generally scrape accumulated mud from the path surface and dispose of arisings well away from path edges. Maintain usable path surface width by regularly cutting back verge vegetation to a width of 1m on either side. Consideration to be given to undertaking a phased programme of maintenance works aimed at carefully scraping back existing verge to expose original path width. Alternative is to apply appropriate herbicide to encroaching ground vegetation and to a width not exceeding original path base width (requires PA1/PA6a certification). Occasional compaction of surface. **Drainage:** For path construction options 1 and 2: Install drainage letts along the verge to better enable surface water run-off and to alleviate any possible ponding along the edges of the path surface. Locate as required and to a min width of 200mm. **Signage:** Incorporate sign condition inspection and clearance of ground vegetation around post base into annual maintenance schedule.
3285	/	/	/	 Photo 67: chainage 3285 linm – general photo showing link path to Forest Classroom General photo showing timber sign for 'Forest Classroom' to right of path.	
3285	/	/	/	 Photo 67a: chainage 3285 linm – general photo looking forward General photo looking forward and showing tree situated in middle of path at chainage 3293. Route widens at this point at users circumvent the tree.	

Path Survey and Specification Sheet							Sheet No.	41
Location:	**Castle Loch, Lochmaben, Dumfries and Galloway**			**Weather:**	**Dry, sunny intervals**	**Surveyor:**	G Anderson	
Path:	**Castle Loch Circular Route**			**Date:**	**05.10.20**	**Section:**	**Chainage (3285 – 3371 linm)**	

Chainage (linm)	Slope Dir	Grad. (%/deg)	Width (m)	Current Path Condition	Description of Proposed Path Works
3285 - 3371	◄►	/	<1.6	Route continues north through woodland and remains parallel to the B7020 carriageway. Surface composed of compacted Type 1 aggregate. Path width varies between 1.2 – 1.6m, noting widening around tree as shown in photo 67a.	**Vegetation Management:** Clear any overhanging vegetation, along length of route, to a height of not less than 3.5m from finished path surface (preferred height 3.7m) and any smaller encroaching vegetation not less than 1m from path edges and to a height of 50mm, unless otherwise noted within this technical assessment. All woody vegetation to be cut into manageable lengths and distributed across site within agreed locations. **Barriers/Other features:** No works required. **Path construction and surfacing:** **Option 1:** Carefully scrape back all encroaching verge vegetation to expose full width of previously installed path (estimated to be a minimum of 1.5m) and upgrade surface to Drawing CL/UPU/CLLCT/001. Construct path levels to max 1:40 camber throughout to allow any surface water run-off to be discharged off the path and into verge area on either side. All verge scrape arisings to be utilised to reform path verges, ensuring finished verge levels remain below path surface levels to allow surface water run-off. **Option 2**: Assumes no upgrade works, as detailed within Option 1. Generally scrape accumulated mud from the path surface and dispose of arisings well away from path edges. Maintain usable path surface width by regularly cutting back verge vegetation to a width of 1m on either side. Consideration to be given to undertaking a phased programme of maintenance works aimed at carefully scraping back existing verge to expose original path width. Alternative is to apply appropriate herbicide to encroaching ground vegetation and to a width not exceeding original path base width (requires PA1/PA6a certification). Occasional compaction of surface. **Link Path**: Install new path from road to timber platform; to general detail contained within Drawing No. CL/UPU/CLLCT/001 but ensuring min 150mm depth of base material. **Drainage:** For path construction options 1 and 2: Install drainage letts along the verge to better enable surface water run-off and to alleviate any possible ponding along the edges of the path surface. Locate as required and to a min width of 200mm. **Signage:** No works required.
3371	/	/	/	 **Photo 68: chainage 3371 linm – photo of roadside link path looking left (west)** General photo to right of surveyed route and showing downhill ramp to timber fishing platform. Link path to platform (17 linm) is wholly unsurfaced and muddy underfoot at lower end.	
3371	/	/	/	 **Photo 68a: photo of fishing platform looking right (east)** General photo showing timber platform into the Castle Loch and showing branches laid into mud for clearance.	

Path Survey and Specification Sheet							Sheet No.	42
Location:	**Castle Loch, Lochmaben, Dumfries and Galloway**			**Weather:**	**Dry, sunny intervals**	**Surveyor:**	G Anderson	
Path:	**Castle Loch Circular Route**			**Date:**	**05.10.20**	**Section:**	**Chainage (3371 – 3387 linm)**	

Chainage (linm)	Slope Dir	Grad. (%/deg)	Width (m)	Current Path Condition	Description of Proposed Path Works
3371	/	/	/	 Photo 68b: photo of roadside link path looking left (west)  Photo 68c: photo of link path looking east from lay-by General photos showing 17 linm link between surveyed route and B7020 (photo 68b) and from roadside lay-by looking down to surveyed route (photo 68c).	**Vegetation Management:** Clear any overhanging vegetation, along length of route, to a height of not less than 3.5m from finished path surface (preferred height 3.7m) and any smaller encroaching vegetation not less than 1m from path edges and to a height of 50mm, unless otherwise noted within this technical assessment. All woody vegetation to be cut into manageable lengths and distributed across site within agreed locations. **Barriers/Other features:** No works required. **Path construction and surfacing:** **Option 1:** Carefully scrape back all encroaching verge vegetation to expose full width of previously installed path (estimated to be a minimum of 1.5m) and upgrade surface to Drawing CL/UPU/CLLCT/001. Construct path levels to max 1:40 camber throughout to allow any surface water run-off to be discharged off the path and into verge area on either side. All verge scrape arisings to be utilised to reform path verges, ensuring finished verge levels remain below path surface levels to allow surface water run-off.
3371	/	/	/	 Photo 68d: general photo of lay-by looking south General photo of roadside lay-by off B7020 looking south.	**Option 2**: Assumes no upgrade works, as detailed within Option 1. Generally scrape accumulated mud from the path surface and dispose of arisings well away from path edges. Maintain usable path surface width by regularly cutting back verge vegetation to a width of 1m on either side. Consideration to be given to undertaking a phased programme of maintenance works aimed at carefully scraping back existing verge to expose original path width. Alternative is to apply appropriate herbicide to encroaching ground vegetation and to a width not exceeding original path base width (requires PA1/PA6a certification). Occasional compaction of surface. **Link Path**: Install new path from road to timber platform to general detail contained within Drawing No. CL/UPU/CLLCT/001 but ensuring min 100mm depth of base material.
3371 - 3387	◄►	/	<1.6	Route continues north through woodland and remains parallel to the B7020 carriageway. Surface composed of compacted Type 1 aggregate.	**Drainage:** For path construction options 1 and 2: Install drainage letts along the verge to better enable surface water run-off and to alleviate any possible ponding along the edges of the path surface. Locate as required and to a min width of 200mm. **Signage:** **Option**: Install fingerpost signage indicating access to circular route and picnic/recreation area

Path Survey and Specification Sheet						Sheet No.	43
Location:	**Castle Loch, Lochmaben, Dumfries and Galloway**			**Weather:**	**Dry, sunny intervals**	**Surveyor:**	G Anderson
Path:	**Castle Loch Circular Route**			**Date:**	**05.10.20**	**Section:**	**Chainage (3387 – 3429 linm)**

Chainage (linm)	Slope Dir	Grad. (%/deg)	Width (m)	Current Path Condition	Description of Proposed Path Works
3387	/	/	/	 Photo 69: chainage 3387 linm – photo of exposed culvert looking forward  Photo 69a: general photo of culvert outlet General photo showing twinwall piped culvert exposed through path surface (photo 69) and part blocked outlet to piped culvert (photo 69a). Water flow left to right under path.	**Vegetation Management:** Clear any overhanging vegetation, along length of route, to a height of not less than 3.5m from finished path surface (preferred height 3.7m) and any smaller encroaching vegetation not less than 1m from path edges and to a height of 50mm, unless otherwise noted within this technical assessment. All woody vegetation to be cut into manageable lengths and distributed across site within agreed locations. **Barriers/Other features:** No works required. **Path construction and surfacing:** **Option 1:** Carefully scrape back all encroaching verge vegetation to expose full width of previously installed path (estimated to be a minimum of 1.5m) and upgrade surface to Drawing CL/UPU/CLLCT/001. Construct path levels to max 1:40 camber throughout to allow any surface water run-off to be discharged off the path and into verge area on either side. All verge scrape arisings to be utilised to reform path verges, ensuring finished verge levels remain below path surface levels to allow surface water run-off. **Option 2**: Assumes no upgrade works, as detailed within Option 1. Generally scrape accumulated mud from the path surface and dispose of arisings well away from path edges. Maintain usable path surface width by regularly cutting back verge vegetation to a width of 1m on either side. Consideration to be given to undertaking a phased programme of maintenance works aimed at carefully scraping back existing verge to expose original path width. Alternative is to apply appropriate herbicide to encroaching ground vegetation and to a width not exceeding original path base width (requires PA1/PA6a certification). Occasional compaction of surface. **Drainage:** For path construction options 1 and 2: Install drainage letts along the verge to better enable surface water run-off and to alleviate any possible ponding along the edges of the path surface. Locate as required and to a min width of 200mm. Clear inlet and outlet channels to piped culvert and rod out accumulated material within pipe to re-establish full functionality. Apply additional path surface material over culvert to cover exposed pipe (min 75mm depth). Incorporate culvert and associated ditch condition inspection and clearance into annual maintenance schedule. **Signage:** **Option**: Install fingerpost signage (to match existing) indicating access to circular route and picnic/recreation area
3387 - 3429	◄►	/	<1.6	Route continues north through woodland and remains parallel to the B7020 carriageway. Surface composed of compacted Type 1 aggregate.	
3429	/	/	/	 Photo 70: chainage 3429 linm – general photo looking forward Generla photo looking forward and showing path route split by trees along centre line of path surface.	

Path Survey and Specification Sheet							Sheet No.	44
Location:	**Castle Loch, Lochmaben, Dumfries and Galloway**			**Weather:**	**Dry, sunny intervals**	**Surveyor:**	G Anderson	
Path:	**Castle Loch Circular Route**			**Date:**	**05.10.20**	**Section:**	**Chainage (3429 – 3509 linm)**	

Chainage (linm)	Slope Dir	Grad. (%/deg)	Width (m)	Current Path Condition	Description of Proposed Path Works
3429 - 3509	◄►	/	<1.6	Route continues north through woodland and remains parallel to the B7020 carriageway. Surface composed of compacted Type 1 aggregate.	**Vegetation Management:** Clear any overhanging vegetation, along length of route, to a height of not less than 3.5m from finished path surface (preferred height 3.7m) and any smaller encroaching vegetation not less than 1m from path edges and to a height of 50mm, unless otherwise noted within this technical assessment. All woody vegetation to be cut into manageable lengths and distributed across site within agreed locations. **Barriers/Other features:** No works required. **Path construction and surfacing:** **Option 1:** Carefully scrape back all encroaching verge vegetation to expose full width of previously installed path (estimated to be a minimum of 1.5m) and upgrade surface to Drawing CL/UPU/CLLCT/001. Construct path levels to max 1:40 camber throughout to allow any surface water run-off to be discharged off the path and into verge area on either side. All verge scrape arisings to be utilised to reform path verges, ensuring finished verge levels remain below path surface levels to allow surface water run-off. **Option 2**: Assumes no upgrade works, as detailed within Option 1. Generally scrape accumulated mud from the path surface and dispose of arisings well away from path edges. Maintain usable path surface width by regularly cutting back verge vegetation to a width of 1m on either side. Consideration to be given to undertaking a phased programme of maintenance works aimed at carefully scraping back existing verge to expose original path width. Alternative is to apply appropriate herbicide to encroaching ground vegetation and to a width not exceeding original path base width (requires PA1/PA6a certification). Occasional compaction of surface. **Link Path**: Install new path from road to timber platform to general detail contained within Drawing No. CL/UPU/CLLCT/001 but ensuring min 100mm depth of base material. **Drainage:** For path construction options 1 and 2: Install drainage letts along the verge to better enable surface water run-off and to alleviate any possible ponding along the edges of the path surface. Locate as required and to a min width of 200mm. **Signage:** **Option**: Install fingerpost signage indicating access to circular route and timber fishing platform
3509	/	/	/	 **Photo 71: chainage 3509 linm – general photo of roadside link path looking west** General photo looking left (west) showing unsurfaced and moderately steep link ramp (7 linm) to roadside lay-by on B7020.	
3509	/	/	/	 **Photo 71a: chainage 3509 linm – general photo of path link to timber fishing platform** General photo showing unsurfaced link from surveyed route to timber fishing platform. Link path leads on from link path to lay-by shown in Photo 71.	

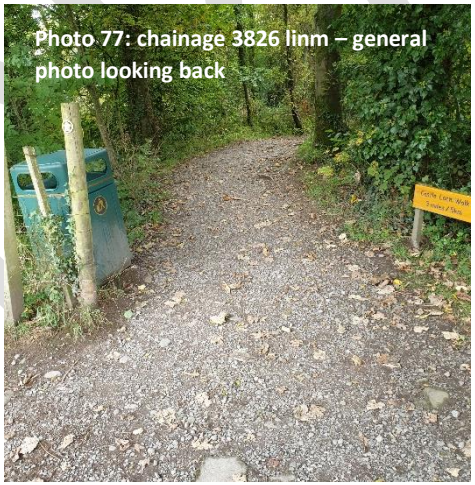
Path Survey and Specification Sheet							Sheet No.	45
Location:	**Castle Loch, Lochmaben, Dumfries and Galloway**			**Weather:**	**Dry, sunny intervals**	**Surveyor:**	G Anderson	
Path:	**Castle Loch Circular Route**			**Date:**	**05.10.20**	**Section:**	**Chainage (3509 – 3748 linm)**	

Chainage (linm)	Slope Dir	Grad. (%/deg)	Width (m)	Current Path Condition	Description of Proposed Path Works
3509 - 3622	←→	/	<1.6	Route continues north through woodland and remains parallel to the B7020 carriageway. Surface composed of compacted Type 1 aggregate.	**Vegetation Management:** Clear any overhanging vegetation, along length of route, to a height of not less than 3.5m from finished path surface (preferred height 3.7m) and any smaller encroaching vegetation not less than 1m from path edges and to a height of 50mm, unless otherwise noted within this technical assessment. All woody vegetation to be cut into manageable lengths and distributed across site within agreed locations. **Barriers/Other features:** No works required. **Path construction and surfacing:** **Option 1:** Carefully scrape back all encroaching verge vegetation to expose full width of previously installed path (estimated to be a minimum of 1.5m) and upgrade surface to Drawing CL/UPU/CLLCT/001. Construct path levels to max 1:40 camber throughout to allow any surface water run-off to be discharged off the path and into verge area on either side. All verge scrape arisings to be utilised to reform path verges, ensuring finished verge levels remain below path surface levels to allow surface water run-off. **Option 2**: Assumes no upgrade works, as detailed within Option 1. Generally scrape accumulated mud from the path surface and dispose of arisings well away from path edges. Maintain usable path surface width by regularly cutting back verge vegetation to a width of 1m on either side. Consideration to be given to undertaking a phased programme of maintenance works aimed at carefully scraping back existing verge to expose original path width. Alternative is to apply appropriate herbicide to encroaching ground vegetation and to a width not exceeding original path base width (requires PA1/PA6a certification). Occasional compaction of surface. **Link Path**: Install new path from road to timber platform to general detail contained within Drawing No. CL/UPU/CLLCT/001 but ensuring min 100mm depth of base material. **Drainage:** For path construction options 1 and 2: Install drainage letts along the verge to better enable surface water run-off and to alleviate any possible ponding along the edges of the path surface. Locate as required and to a min width of 200mm. **Signage:** **Option**: Install fingerpost signage indicating access to circular route and timber fishing platform
3622	/	/	/	 **Photo 72: chainage 3622 linm – general photo of recycled plastic bench path looking right (east)** General photo looking right (east) of recycled plastic picnic table situated on unsurfaced base.	
3622 - 3748	←→	/	/	Route continues north through woodland and remains parallel to the B7020 carriageway. Surface composed of compacted Type 1 aggregate.	
3748	/	/	/	 **Photo 73: chainage 3748 linm – general photo of roadside link path looking west** General photo to left (west) showing unsurfaced link path (10 linm) to roadside lay-by on B7020.	

Path Survey and Specification Sheet						Sheet No.	46
Location:	**Castle Loch, Lochmaben, Dumfries and Galloway**			**Weather:**	**Dry, sunny intervals**	**Surveyor:**	G Anderson
Path:	**Castle Loch Circular Route**			**Date:**	**05.10.20**	**Section:**	**Chainage (3748 – 3808 linm)**

Chainage (linm)	Slope Dir	Grad. (%/deg)	Width (m)	Current Path Condition	Description of Proposed Path Works
3748 - 3781	◄►	/	<1.6	Route continues north through woodland and remains parallel to the B7020 carriageway. Surface composed of compacted Type 1 aggregate.  Photo 74: chainage 3781 linm – general photo of Forest School area looking right (east) General photo to right (east) showing area set aside for 'Kindergarten Forest School' activities.	**Vegetation Management:** Clear any overhanging vegetation, along length of route, to a height of not less than 3.5m from finished path surface (preferred height 3.7m) and any smaller encroaching vegetation not less than 1m from path edges and to a height of 50mm, unless otherwise noted within this technical assessment. All woody vegetation to be cut into manageable lengths and distributed across site within agreed locations. **Barriers/Other features:** No works required. **Path construction and surfacing:** **Option 1:** Carefully scrape back all encroaching verge vegetation to expose full width of previously installed path (estimated to be a minimum of 1.5m) and upgrade surface to Drawing CL/UPU/CLLCT/001. Construct path levels to max 1:40 camber throughout to allow any surface water run-off to be discharged off the path and into verge area on either side. All verge scrape arisings to be utilised to reform path verges, ensuring finished verge levels remain below path surface levels to allow surface water run-off. **Option 2**: Assumes no upgrade works, as detailed within Option 1. Generally scrape accumulated mud from the path surface and dispose of arisings well away from path edges. Maintain usable path surface width by regularly cutting back verge vegetation to a width of 1m on either side. Consideration to be given to undertaking a phased programme of maintenance works aimed at carefully scraping back existing verge to expose original path width. Alternative is to apply appropriate herbicide to encroaching ground vegetation and to a width not exceeding original path base width (requires PA1/PA6a certification). Occasional compaction of surface. **Link Path**: Install new path from road to timber platform to general detail contained within Drawing No. CL/UPU/CLLCT/001 but ensuring min 100mm depth of base material. **Drainage:** For path construction options 1 and 2: Install drainage letts along the verge to better enable surface water run-off and to alleviate any possible ponding along the edges of the path surface. Locate as required and to a min width of 200mm. **Signage:** No works required
3781	/	/	/	 Photo 75: chainage 3781 linm – general photo looking forward General photo looking forward.	
3781 - 3808	◄►	/	<1.6	Route continues north through woodland and remains parallel to the B7020 carriageway. Surface composed of compacted Type 1 aggregate. 300mm twinwall piped culvert located at chainage 3791 linm taking water from left to right under path. Culvert in good operating condition.	

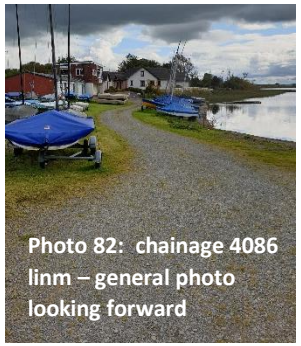
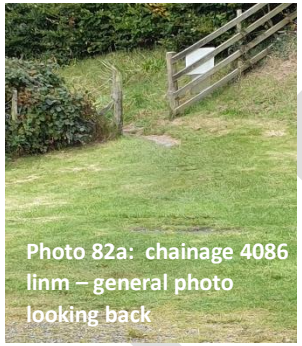
Path Survey and Specification Sheet						Sheet No.	47
Location:	**Castle Loch, Lochmaben, Dumfries and Galloway**			**Weather:**	**Dry, sunny intervals**	**Surveyor:**	G Anderson
Path:	**Castle Loch Circular Route**			**Date:**	**05.10.20**	**Section:**	**Chainage (3803 – 3826 linm)**

Chainage (linm)	Slope Dir	Grad. (%/deg)	Width (m)	Current Path Condition	Description of Proposed Path Works
3808	/	/	/	 Photo 76: Chainage 3808 linm general photo of heron carving looking right (east) General photo showing wooden carved heron to right (east) of path.	**Vegetation Management:** Clear any overhanging vegetation, along length of route, to a height of not less than 3.5m from finished path surface (preferred height 3.7m) and any smaller encroaching vegetation not less than 1m from path edges and to a height of 50mm, unless otherwise noted within this technical assessment. All woody vegetation to be cut into manageable lengths and distributed across site within agreed locations. **Barriers/Other features:** No works required. **Path construction and surfacing:** **Option 1:** Carefully scrape back all encroaching verge vegetation to expose full width of previously installed path (estimated to be a minimum of 1.5m) and upgrade surface to Drawing CL/UPU/CLLCT/001. Construct path levels to max 1:40 camber throughout to allow any surface water run-off to be discharged off the path and into verge area on either side. All verge scrape arisings to be utilised to reform path verges, ensuring finished verge levels remain below path surface levels to allow surface water run-off. **Option 2**: Assumes no upgrade works, as detailed within Option 1. Generally scrape accumulated mud from the path surface and dispose of arisings well away from path edges. Maintain usable path surface width by regularly cutting back verge vegetation to a width of 1m on either side. Consideration to be given to undertaking a phased programme of maintenance works aimed at carefully scraping back existing verge to expose original path width. Alternative is to apply appropriate herbicide to encroaching ground vegetation and to a width not exceeding original path base width (requires PA1/PA6a certification). Occasional compaction of surface. **Link Path**: Install new path from road to timber platform to general detail contained within Drawing No. CL/UPU/CLLCT/001 but ensuring min 100mm depth of base material. **Drainage:** For path construction options 1 and 2: Install drainage letts along the verge to better enable surface water run-off and to alleviate any possible ponding along the edges of the path surface. Locate as required and to a min width of 200mm. **Signage:** **Option**: Install fingerpost signage indicating access to circular route and timber fishing platform
3808 - 3826	◄►	/	<1.6	Route continues north through woodland and remains parallel to the B7020 carriageway. Surface composed of compacted Type 1 aggregate.	
3826	/	/	/	 Photo 77: chainage 3826 linm – general photo looking back Woodland section of the route ends and exists onto access road to Bowling Club.	

Path Survey and Specification Sheet							Sheet No.	48
Location:	**Castle Loch, Lochmaben, Dumfries and Galloway**			**Weather:**	**Dry, sunny intervals**	**Surveyor:**	G Anderson	
Path:	**Castle Loch Circular Route**			**Date:**	**05.10.20**	**Section:**	**Chainage (3826 – 4062 linm)**	

Chainage (linm)	Slope Dir	Grad. (%/deg)	Width (m)	Current Path Condition	Description of Proposed Path Works
3826 - 3913	/	/	/	Route turns right and continues down gentle ramp on surfaced Bowling Club access road before levelling and turning left across carparking area.	**Vegetation Management:** Clear any overhanging vegetation, along length of route, to a height of not less than 3.5m from finished path surface (preferred height 3.7m) and any smaller encroaching vegetation not less than 1m from path edges and to a height of 50mm, unless otherwise noted within this technical assessment. All woody vegetation to be cut into manageable lengths and distributed across site within agreed locations. **Barriers/Other features:** No works required. **Path construction and surfacing:** **Option 1:** Carefully scrape back all encroaching verge vegetation to expose full width of previously installed path (estimated to be a minimum of 1.5m) and upgrade surface to Drawing CL/UPU/CLLCT/001. Construct path levels to max 1:40 camber throughout to allow any surface water run-off to be discharged off the path and into verge area on either side. All verge scrape arisings to be utilised to reform path verges, ensuring finished verge levels remain below path surface levels to allow surface water run-off. **Option 2**: Assumes no upgrade works, as detailed within Option 1. Generally scrape accumulated mud from the path surface and dispose of arisings well away from path edges. Maintain usable path surface width by regularly cutting back verge vegetation to a width of 1m on either side. Consideration to be given to undertaking a phased programme of maintenance works aimed at carefully scraping back existing verge to expose original path width. Alternative is to apply appropriate herbicide to encroaching ground vegetation and to a width not exceeding original path base width (requires PA1/PA6a certification). Occasional compaction of surface. **Drainage:** For path construction options 1 and 2: Install drainage letts along the verge to better enable surface water run-off and to alleviate any possible ponding along the edges of the path surface. Locate as required and to a min width of 200mm. **Signage:** **Option**: Install fingerpost signage indicating access to circular route and timber fishing platform
3913 - 3940	◄►	/	1.0	 Photo 78: chainage 3913 linm – general photo looking forward  Photo 79: chainage 3940linm – general photo looking forward General photo showing edge of carpark and start of timber edged aggregate path at chainage 3913 linm (photo 78). Path measured at 1.0m wide. Timber edged path ends at chainage 3940 linm (photo 79) and enters open amenity grass area with play equipment. Transition between aggregate path and amenity grass area subject to heavy wear and potential waterlogging/mud.	
3940 - 4062	/	/	/	 Photo 80: chainage 4029 linm – general photo looking forward  Photo 81: chainage 4056 linm – general photo looking forward Route traverses open amenity grass area with play equipment to left. Route undefined and contours across slope which falls from left to right. General photos taken at chainage 4029 lin m and 4056 linm looking forward.	

Path Survey and Specification Sheet						Sheet No.	49
Location:	**Castle Loch, Lochmaben, Dumfries and Galloway**			**Weather:**	**Dry, sunny intervals**	**Surveyor:**	G Anderson
Path:	**Castle Loch Circular Route**			**Date:**	**05.10.20**	**Section:**	**Chainage (4062 – 4286 linm)**

Chainage (linm)	Slope Dir	Grad. (%/deg)	Width (m)	Current Path Condition	Description of Proposed Path Works
4062 - 4175	◄►	/	/	 Photo 82: chainage 4086 linm – general photo looking forward  Photo 82a: chainage 4086 linm – general photo looking back Route passes through gap in fence at chainage 4062 linm (shown in photos 81 & 82a). Gap measured at 950mm wide. Route then passes across Annandale Sailing Club hard standing area and to front of clubhouse (general photos taken at chainage 4086 looking forward '82' and back '82a') before rising up short incline road that serves as access road. Route joins pavement off A907 before turning right (South East).	**Vegetation Management:** No works required. **Barriers/Other features:** No works required. **Path construction and surfacing:** No works required. **Drainage:** For path construction options 1 and 2: Install drainage letts along the verge to better enable surface water run-off and to alleviate any possible ponding along the edges of the path surface. Locate as required and to a min width of 200mm. **Signage:** Keep vegetation clear of existing roundels at entrance to woodland edge section of the route
4175 - 4286	◄►	/	/	Route continues south east along pavement of A907.	
4286	/	/	/	 Photo 84: chainage 4286 linm – general photo looking forward General photo looking forward where roadside footway turns right and away from roadside, down gentle ramp and into woodland edge, running parallel to A907 and roadside hedge.	

Path Survey and Specification Sheet							Sheet No.	50
Location:	**Castle Loch, Lochmaben, Dumfries and Galloway**			**Weather:**	**Dry, sunny intervals**	**Surveyor:**	G Anderson	
Path:	**Castle Loch Circular Route**			**Date:**	**05.10.20**	**Section:**	**Chainage (4286 – 4587 linm)**	

Chainage (linm)	Slope Dir	Grad. (%/deg)	Width (m)	Current Path Condition	Description of Proposed Path Works
4286 - 4347	◄►	/	<1.5	Route continues south, running parallel to A907 on left. Path width varies along this section from 0.9 – 1.5m. Path base is composed of compacted Type 1 aggregate with no surface blinding.	**Vegetation Management:** Clear any overhanging vegetation, along length of route, to a height of not less than 3.5m from finished path surface (preferred height 3.7m) and any smaller encroaching vegetation not less than 1m from path edges and to a height of 50mm, unless otherwise noted within this technical assessment. All woody vegetation to be cut into manageable lengths and distributed across site within agreed locations. **Barriers/Other features:** No works required. **Path construction and surfacing:** **Option 1:** Carefully scrape back all encroaching verge vegetation to expose full width of previously installed path (estimated to be a minimum of 1.5m) and upgrade surface to Drawing CL/UPU/CLLCT/001. Construct path levels to max 1:40 camber throughout to allow any surface water run-off to be discharged off the path and into verge area on either side. All verge scrape arisings to be utilised to reform path verges, ensuring finished verge levels remain below path surface levels to allow surface water run-off. **Option 2**: Assumes no upgrade works, as detailed within Option 1. Maintain usable path surface width by regularly cutting back verge vegetation to a width of 1m on either side. Consideration to be given to undertaking a phased programme of maintenance works aimed at carefully scraping back existing verge to expose original path width. Alternative is to apply appropriate herbicide to encroaching ground vegetation and to a width not exceeding original path base width (requires PA1/PA6a certification). Occasional compaction of surface. **Tree stump**: Remove to at least flush with finished path level and preferably below. Infill as required with suitable granular aggregate to match existing. **Drainage:** For path construction options 1 and 2: Install drainage letts along the verge to better enable surface water run-off and to alleviate any possible ponding along the edges of the path surface. Locate as required and to a min width of 200mm. **Signage:** No works required.
4347	/	/	/	 Photo 85: chainage 4347 linm – general photo looking forward General photo looking forward and showing tree stump (circled) encroaching into path and narrowing effective width.	
4347 - 4587	◄►	/	<1.5	Route continues south, running parallel to A907 on left. Path width varies along this section from 0.9 – 1.5m. Path base is composed of compacted Type 1 aggregate with no surface blinding/layer.	

Path Survey and Specification Sheet							Sheet No.	51
Location:	**Castle Loch, Lochmaben, Dumfries and Galloway**			**Weather:**	**Dry, sunny intervals**	**Surveyor:**	G Anderson	
Path:	**Castle Loch Circular Route**			**Date:**	**05.10.20**	**Section:**	**Chainage (4587 – 4595 linm)**	

Chainage (linm)	Slope Dir	Grad. (%/deg)	Width (m)	Current Path Condition	Description of Proposed Path Works
4587 - 4595	↑	/	<1.5	 Photo 86: chainage 4587 linm – general photo looking forward General photo looking forward at chainage 4587 linm and showing moderate to steep ramp leading up to Castle Loch carparking area and end of surveyed route at chainage 4595 linm. Path base remains as compacted Type 1 aggregate with no surface blinding/layer.  Photo 87: chainage 4595 linm – general photo looking back at path end General photo showing end of path looking back.	**Vegetation Management:** Clear any overhanging vegetation, along length of route, to a height of not less than 3.5m from finished path surface (preferred height 3.7m) and any smaller encroaching vegetation not less than 1m from path edges and to a height of 50mm, unless otherwise noted within this technical assessment. All woody vegetation to be cut into manageable lengths and distributed across site within agreed locations. **Barriers/Other features:** **Handrail**: Option to install single handrail on access ramp to circular walk as a general aid to path users. **Path construction and surfacing:** **Option 1:** Carefully scrape back all encroaching verge vegetation to expose full width of previously installed path (estimated to be a minimum of 1.5m) and upgrade surface to Drawing CL/UPU/CLLCT/001. Construct path levels to max 1:40 camber throughout to allow any surface water run-off to be discharged off the path and into verge area on either side. All verge scrape arisings to be utilised to reform path verges, ensuring finished verge levels remain below path surface levels to allow surface water run-off. **Option 2**: Assumes no upgrade works, as detailed within Option 1. Generally scrape accumulated mud from the path surface and dispose of arisings well away from path edges. Maintain usable path surface width by regularly cutting back verge vegetation to a width of 1m on either side. Consideration to be given to undertaking a phased programme of maintenance works aimed at carefully scraping back existing verge to expose original path width. Alternative is to apply appropriate herbicide to encroaching ground vegetation and to a width not exceeding original path base width (requires PA1/PA6a certification). Occasional compaction of surface. **Drainage:** For path construction options 1 and 2: Install drainage letts along the verge to better enable surface water run-off and to alleviate any possible ponding along the edges of the path surface. Locate as required and to a min width of 200mm. **Signage:** **Option**: Install fingerpost signage indicating access to circular route

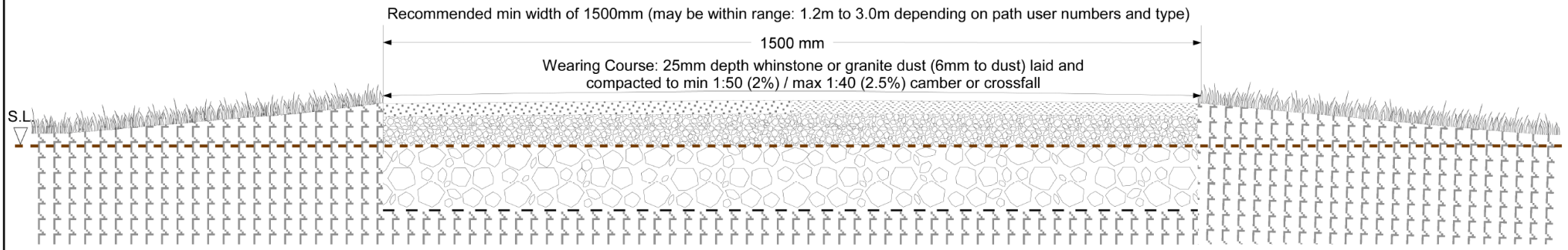
5.0 Cost Estimate

Upgrade Existing Path Surface – Excludes upgrade of access tracks, installation of path across amenity grass park area and access link paths to B7020					
Construct new path of approx. 3071 linm in length. Path to be formed to a min finished surface width of 1.5m	**Description**	**Quantity**	**Unit**	**Rate**	**Total**
	Clearance works: general tree and vegetation removal along line of path to facilitate any and all planned works. General corridor width to be a min of 3.5m, where possible, and height of 3.7m	1	Sum	£3750.00	£3,750.00
	Scrape existing path surface to width of 1.5m and use limited arisings to form verges, as detailed within Drawing No. CL/UPU/CLLCT/001.	4606	m^2	£2.50	£11,515.00
	Supply and install 20mm scalpings; to min. 50mm compacted depth on path section and max 1:40 camber (assumed ave. of 70mm uncompacted depth)	322.4	m^3	£55.00	£17,732.00
	Supply and install whin dust wearing course over prepared path base; to average 25mm compacted depth	4606	m^2	£2.90	£13,357.40
	Sub-total for contract works			£ -	£46,354.40
	Contingency	5	%	£ -	£2,317.72
	ADD **Preliminaries**	7.5	%	£ -	£3,650.41
				TOTAL	£52,322.53
Optional Upgrade Works					
General costs for optional upgrade works. Includes replacement of existing bridges, installation of piped culvert at chainage 2619 linm, recycled picnic benches, new 122 linm x 1.5m wide link path across amenity grass area and new 40 linm x 1.5m wide ramp by-pass path at chainage 1749 linm.	**Description**	**Quantity**	**Unit**	**Rate**	**Total**
	Formalise link paths from circular route to B7020. 4no. 1.5m wide links constructed to general detail in Drawing No. CL/UPHT/CLLCT/002	69	m^2	£22.50	£1,552.50
	Replace existing 3no. timber bridges with new and including timber ramped approaches to Valison Burn bridge. General costs allow for supply and installation of pre-constructed kit style bridges with double handrails. Costs include constructed abutments, where required.	25.8	m^2	£1650.00	£42,570.00
	Supply and install heavy duty recycled plastic picnic benches	2	No.	£770.00	£1,540.00
	Construct 1.5m wide surfaced link path across amenity grass area between chainages 3940 and 4062 linm. Construct to general detail in Drawing No. CL/UPHT/CLLCT/002 with additional allowance for bench works to embankment.	183	m^3	£24.00	£4,392.00
	Installation of piped culvert to Drawing No. SD/PC/01 (300mm dia.). Replaces existing humped timber walkway at chainage 2619 linm.	1	No.	£420.00	£420.00
	Installation of fingerpost signage to match existing	1	No.	£300.00	£300.00
	Sub-total for contract works			£ -	£50,774.50
	Contingency	5	%	£ -	£2,538.72
	ADD **Preliminaries**	7.5	%	£ -	£3,998.49
				TOTAL	£57,311.71
New Build (Timber Walkway)					
Take up and remove from site all existing raised timber walkway and construct new to approx. 226 linm in length. Raised walkway to be formed to a min finished width of 1.6m	**Description**	**Quantity**	**Unit**	**Rate**	**Total**
	Clearance works: removal of existing timber walkways (approx. 226linm) and disposal in licensed recycling centre	1	Sum	£7,500.00	£7,500.00
	Supply and install 1.6m wide timber raised walkway to Drawing No. CL/LLW/CLLCT/002	362	m^2	£140.00	£50,680.00
	Supply and install timber raised walkway passing place to min 3.5sqm	3	No.	£455.00	£1,365.00
	Sub-total for contract works			£ -	£59,545.00
	Contingency	5	%	£ -	£2,977.25
	ADD **Preliminaries**	7.5	%	£ -	£4,689.17
				TOTAL	£67,211.42
All costs noted above exclude VAT at current rates					

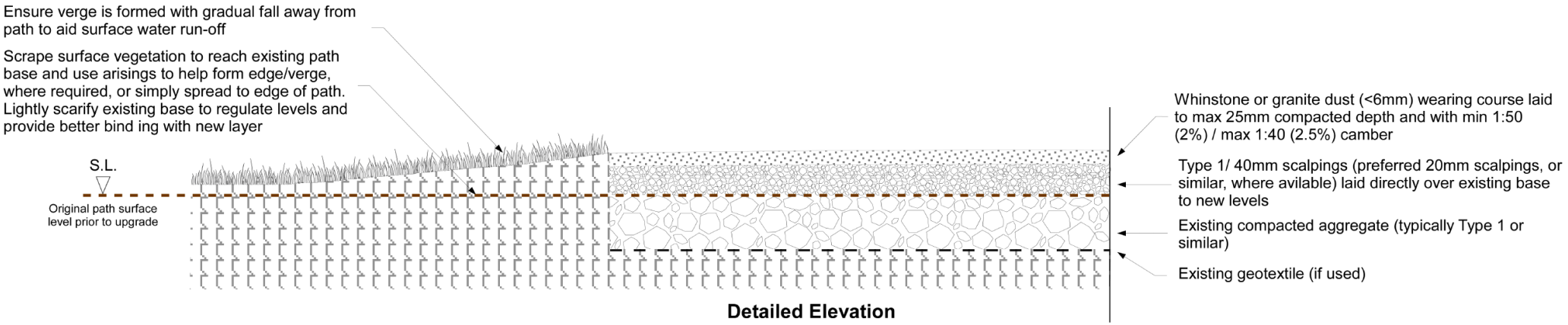
Drawing No: CL/UPU/CLLCT/001 Unbound Surface Path (Upgrade of Existing Path)

Construction notes:

- This type of construction is ideal where an older path base, of reasonable quality, already exists but may now be lower than adjacent ground levels; allowing a new base and surface layer to be added
- Strip off surface vegetation to expose the orginal path base and re-use arisings; forming verges along either side of the path tray and to build path edge.
- Lay DTp Type 1 path base with drag box, if available. (Preferred option: use 20mm scalpings; where available) to minimum 150mm depth and min 1:50 (2%) or max 1:40 (2.5%) camber (as shown). Compact to refusal prior to application of surface wearing course (minimum 120 type roller recommended)
- Lay unbound surfacing (e.g. whinstone or granite dust) to a maximum compacted depth of 30mm. This type of surfacing (wearing course) material can also be laid with a drag box, if available, however it is easily worked by hand to required depths. Where spreading by hand, care should be taken to not lift sub-base material, something that will occur if using the tines of a rake. Instead, spread the wearing course material using only the back edge of a rake or other similar wide, flat edged tool. Compact to refusal (minimum 120 type roller recommended).
- Surface regularity - maximum 10mm gap, under 3.0 metre straight edge placed along centre of base surface, and maximum 5mm gap for surfacing material
- Excavate any soft spots and fill with DTp Type 1 granular sub-base material (or 20mm scaplings, where available).
- Path is shown at a recommended minimum width of 1500 mm. Verges to be min 500mm either side of finished path, wider where space allows.



Elevation



Detailed Elevation

Note: This standard detail is intended to be indicative only and may require some adaptation as works progress. The contractor should always satisfy themselves of site conditions and vary details and dimensions to suit; in agreement with the project manager and keeping within any noted design parameters. Paths for All Partnership accept no liability for any inaccuracies or for any loss, expense, damage, injury or accident arising from the use or application of information contained here-in.

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Kintail House
Forthside Way
Stirling FK8 1QZ
01259 218888

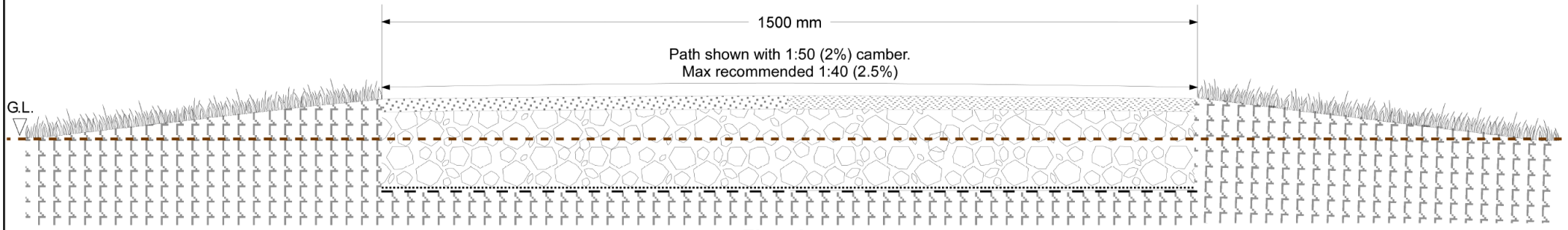
Standard Detail - Unbound Path (Upgrade of Existing Path)

Date:	Jan 2021
Scale:	1:10
Drawn By:	Technical Officer
Drawing No.:	CL/UPU/CLLCT/001

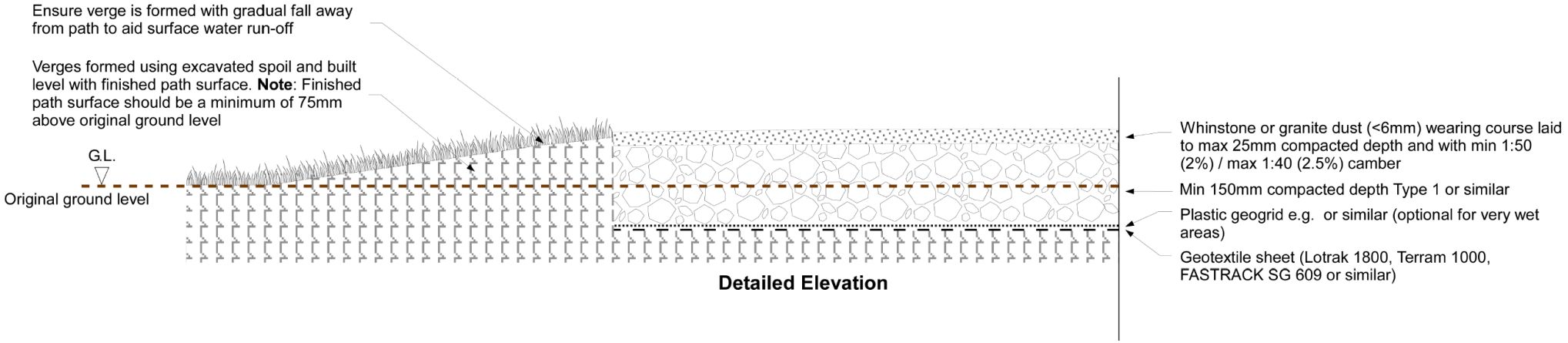
Drawing No: CL/UPHT/CLLCT/002 Unbound Surface Path (Half Tray Excavation)

Construction notes:

- This 'half-tray' type of path construction is preferable where the ground is soft and/or poorly drained
- Strip off surface vegetation and soil to at least 100mm depth below original ground level and re-use arisings; forming verges along either side of the path tray and to build path edge
- Install geotextile membrane (Lotrak 1800, Terram 1000, FASTRACK SG 609 or similar) on exposed path formation layer. Add geogrid (Tensar SS30 or similar) as required.
- Lay DTp Type 1 path base with drag box, if available. (Option to use a lower priced granular sub-base aggregate e.g. 40mm crusher run) to minimum 150 mm depth and min 1:50 (2%) or max 1:40 (2.5%) crossfall or camber (as shown). Compact to refusal prior to application of surface wearing course (minimum 120 type roller recommended or heavy vibrating plate)
- Lay unbound surfacing (e.g. whinstone or granite dust) to a maximum compacted depth of 25mm. This type of surfacing (wearing course) material can also be laid with a drag box, if available, however it is easily worked by hand to required depths. Where spreading by hand, care should be taken to not lift sub-base material, something that will occur if using the tines of a rake. Instead, spread the wearing course material using only the back edge of a rake or other similar wide, flat edged tool. Compact to refusal (minimum 120 type roller recommended).
- Surface regularity - maximum 10mm gap, under 3.0 metre straight edge placed along centre of base surface, and maximum 5mm gap for surfacing material
- Excavate any soft spots and fill with DTp Type 1 granular sub-base material. Option to use a lower priced granular sub-base aggregate e.g. 40mm crusher run if significant quantities are required
- Path is shown at a recommended min width of 1500 mm but this can be further reduced to 1200mm, where space is limited, or extended to 3000mm width where space allows



Elevation



Detailed Elevation

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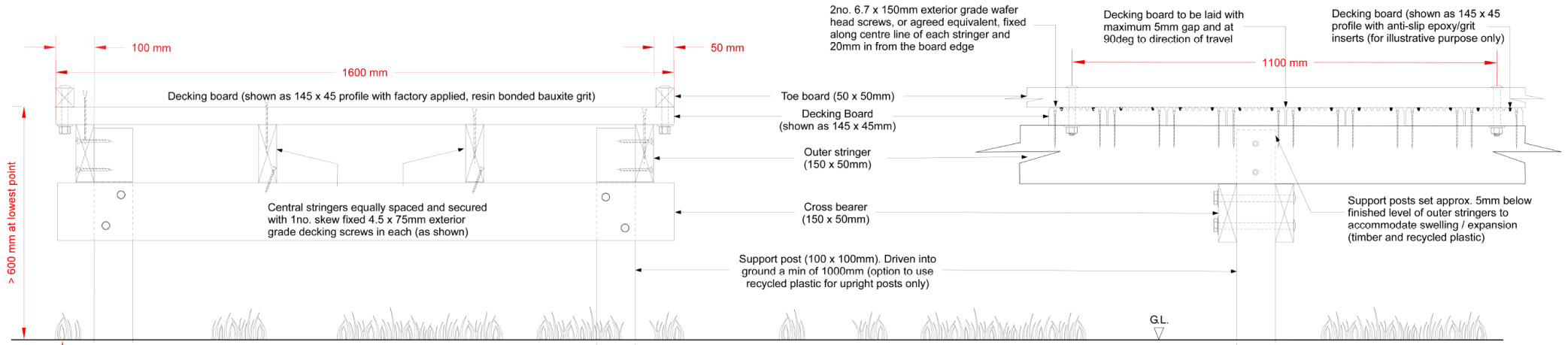
Kintail House
Forthside Way
Stirling FK8 1QZ
01259 218888

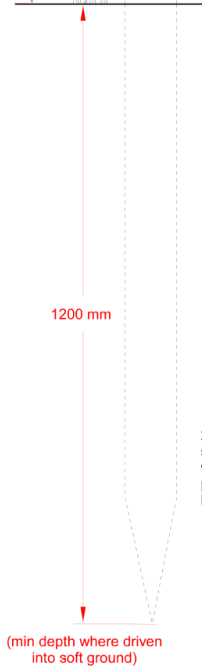
Standard Detail - Unbound Path (Half Tray Excavation)

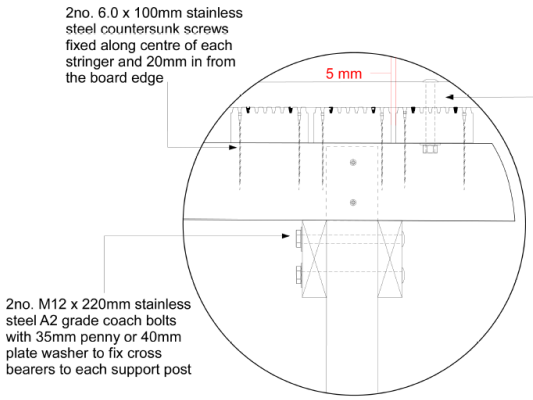
Date:	Jan 2021
Scale:	1:10
Drawn By:	Technical Officer
Drawing No.:	CL/UPHT/CLLCT/002

Drawing No: CL/LLW/CLLCT/002 Low Level Walkway (shown as timber with anti-slip decking)

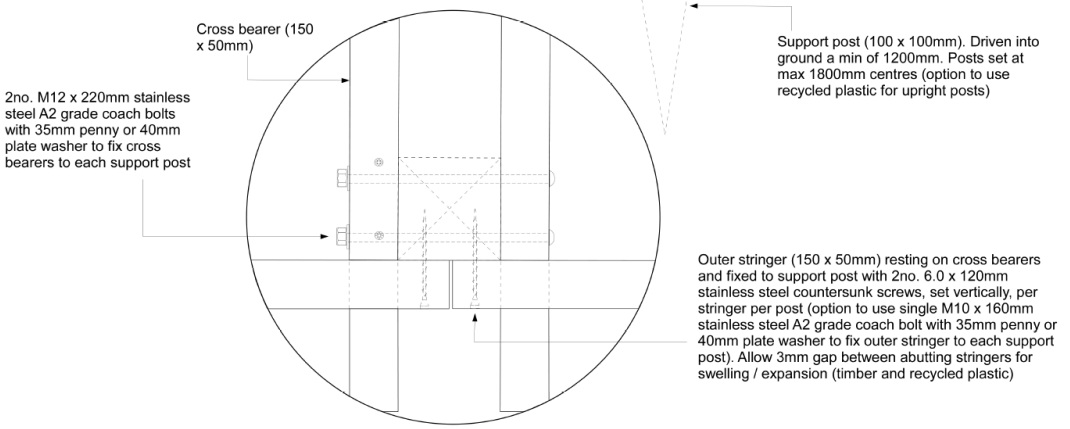


End View

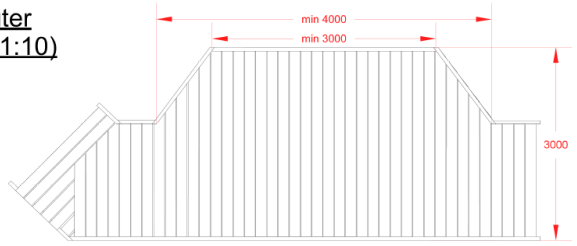




Detail A. General Cross Bearer, Outer Stringer and Decking Fixing Detail (1:10)



Detail B. General Cross Bearer and Outer Stringer Fixing Detail (1:5) - deck not shown for clarity



Detail C. Passing Place (not to scale - indicative only)

Construction Notes:

Timbers: All timbers to be FSC certified kiln dried and untreated to minimum strength Class C16 Standard. All structural timbers to be Scottish or European larch. Decking options include untreated larch or European redwood with factory applied anti-slip coating.

Fixings: All fixings to be minimum A2 stainless steel, unless otherwise noted.

Gradients: Decking to be installed level.

Handrails: Handrails generally not required on low level walkways.

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Title

Drawing Detail - Low Level Walkway (shown as timber with anti-slip decking)

Rev	Description	By	Date	Checked	Approved	Purpose of Issue
	Low Level Walkway	PfA	Jan 2021			Design Detail

Project: Castle Loch Circular Route, Lochmaben

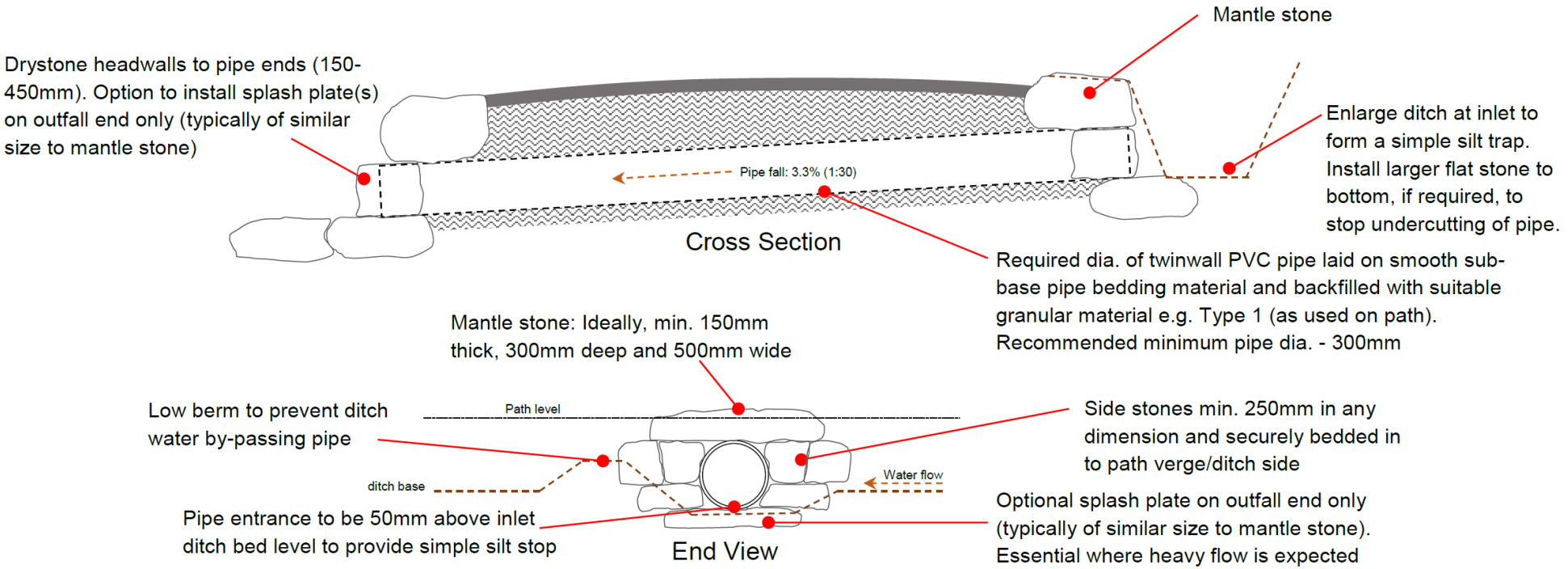
Client: Castle Loch Lochmaben Community Trust

Date:	Dec 2020
Scale:	1:10 or as shown @ A3
Drawn By:	Technical Officer
Drawing No.:	CL/LLW/CLLCT/002

Drawing No: SD/PC/01 Piped Culvert (Twinwall pipe)

Construction notes:

1. Trench for pipe to be excavated using a machine of suitable weight and dimensions for the site conditions. Linear gradient of pipe fall should be a minimum 1:30 (3.3%) to allow water to flow freely along the line of pipe and help avoid silt being deposited within the pipe
2. Trench should be of sufficient depth to fully intercept drainage water and to allow a level finished path surface
3. Excavated spoil should be spread evenly and neatly on the lower side of the path. Care should also be taken to ensure that landscaped spoil does not impeded any surface water run-off from the path; if material is placed on the lower edge
4. Lay suitable granular material to base of trench, as pipe bedding and to required falls. Place twinwall pipe directly on top of granular material and surround/cover pipe with suitable sub-base material (typically Type 1, as applied to path surface, ensuring min. 150mm cover)



Note: This standard detail is indicative only and not intended to be relied upon in all site cases. The designer should satisfy themselves of site conditions and vary details and dimensions to suit but keeping within noted design parameters. Paths for All accept no liability for any inaccuracies or for any loss, expense, damage, injury or accident arising from the use or application of information contained here-in.

paths for all	Standard Detail – Piped Culvert (Twinwall pipe)	Date: 28/08/18 Scale: Not to scale Drawn by: Technical Officer Drawing nr: SD/PC/01

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HEALTHIER SCOTLAND

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