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Orkney WHS Gateway Project

An Orkney Islands Council, Historic Environment Scotland, and Highlands & Islands Enterprise Project

Supplementary Information for

Public Consultation, September 2021

Contents

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1 Introduction

Orkney's tourism economy is founded on the remarkable history and landscape of the islands. At the core of the offer is the Heart of Neolithic Orkney World Heritage Site (WHS), a globally important and utterly remarkable collection of ancient monuments and settlements, including the world famous settlement of Skara Brae and the outstanding Ring of Brodgar, Stones of Stenness and Maeshowe chambered tomb. Every first-time visitor to Orkney makes the pilgrimage to these sites and their experience of them can shape their entire experience of Orkney, Scotland and even the UK.

1.1 The Case for Change

Despite its remarkable significance and beauty, visitors (tourists and local communities) to the Brodgar and Stenness part of the World Heritage Site are not currently well served and the site itself is subject to a degree of harm. Key factors driving this include:

- A largely unmanaged, poorly guided visitor experience. This typically leads to visitor confusion, and to short visits involving limited engagement with the landscape and heritage of the sites.
- Few footpaths or cycle routes in and around the World Heritage Site, forcing visitors and residents to rely on their cars, infrequent public transport, or risk walking along A-road verges.
- Physical threats to the conservation of the sites themselves, including path erosion and environmental damage.
- Most visitors to Orkney focus only on the major heritage sites, limiting the broader, positive impact that tourism can have across the islands. While the Ring of Brodgar, the Stones of Stenness, and Maeshowe are undoubtably major attractions for first-time visitors, they should also serve to promote the rest of the islands' heritage at the same time.
- Traffic congestion and parking issues, especially at peak-times in summer, causing tension and risking injury and damage to the surrounding landscape. This is exacerbated by the unrestricted number of coaches that can arrive in the WHS at present.
- The desire to encourage a wider range of people to visit Orkney, and the ambition for them to stay longer, to spend more, and to be more engaged with the islands' stories and people.

The importance of change has been recognised by the project partners – Orkney Islands Council, Historic Environment Scotland, and Highlands and Islands Enterprise. The Scottish and UK Governments have also allocated £6.5 million of 'in principle' funding to the project, through the £335m Islands Growth Deal.

1.2 Project Objectives

Based on these issues and the need for change, the Gateway project has been developed over the last 3 years, to:

- Raise the standard of the visitor offer and experience on Orkney by ensuring that all guests and local communities have a positive experience of the islands and the World Heritage Site more specifically. With nearly all trade and 1st time independent tourists to the islands visiting the WHS it is vital that the visitor experience is of the highest standard, exceeds expectations and reflects Orkney's strategic move towards a "slow tourism" offer.
- Safeguard the World Heritage Site, addressing critical conservation issues and ensuring that OIC, Scottish Government and, ultimately, the UK Government meet their obligations under the 1972 UNESCO Convention Concerning the Protection of the World Cultural and Natural Heritage.
- Establish an international benchmark for high quality, low impact tourism that embodies a commitment to sustainability and a net zero world; supporting Orkney's transition to carbon neutrality by 2030.
- Provide appropriately sized facilities that remain flexible, scalable, and adaptable in uncertain markets, enabling the management of the WHS and associated facilities to move into a long-term financially viable model that is capable of flexing in response to future market trends and volatility.
- Support the post-Covid recovery of Orkney's critical tourism markets.
- Re-connect local communities to their history and landscape in a sustainable manner that improves health and well-being by creating a network of high-quality Active Travel routes and options.
- Encourage, facilitate, and promote the dispersal of tourists across the islands leading to enhanced social and economic tourism benefits for all communities across Orkney driving inclusive growth in a sustainable manner.
- Release the historic and listed Tormiston Mill for new uses to support tourism on the islands and safeguard the building's future. The mill previously served as a visitor facility for Maeshowe but was closed in Q4 2016 due to access and traffic issues. It has been mothballed by HES since then in case options for its re-use as a new visitor facility were bought forward.

These aspirations have guided the project team in its thinking and options development.

1.3 Project Partners

The Orkney WHS Gateway Project is being delivered through a formal partnership between Orkney Islands Council (OIC), Historic Environment Scotland (HES) and Highlands and Islands Enterprises (HIE). The Partnership was formed in response to the requirement for change at the World Heritage Site. The partners ae the following:

- OIC is the local authority for the islands, established in 1975 under the Local Government (Scotland) Act 1973.

- HES is the lead public body charged with caring for, protecting, and promoting the historic environment in Scotland. It is an executive non-departmental public body established under the Historic Environment Scotland Act 2014 and a registered charity (SC045925).
- HIE is the economic and community development agency for the north and west of Scotland, it was established by the Enterprise and New Towns (Scotland) Act 1990.

The three parties have an agreed and signed Memorandum of Understanding (dated June 2019) relating to the development and delivery of this project and other associated works. The MOU provides a clear governance structure for the project.

1.4 Project History

The Gateway project began in 2018, through the completion of the Orkney Gateway Exploration Study by Chris Blandford Associates (CBA), one of the leading multi-disciplinary landscape design and environmental planning consultancies in the UK. Fourth Street consultants were involved for the first time in 2019, working with CBA to deliver an initial feasibility assessment for the project (the Strategic Outline Case). The same members of the consultant team have been involved since, ensuring a depth of knowledge and consistency of approach.

Since 2018, several milestones have been achieved related to the project:

- 2018 - Orkney Gateway Recommendations and Initial Feasibility Study (Chris Blandford Associates)
- 2019 – Draft Active Travel Plan for OIC (Chris Blandford Associates)
- 2019 – Memorandum of Understanding between three core partners signed
- 2020 – Stones of Stenness Car Park changes delivered
- 2020 - Strategic Outline Case (Chris Blandford Associates and Fourth Street)
- 2021 - £6.5m “in principle” funding secured through the Scottish Government’s Islands Deal

In June 2021, Fourth Street and Chris Blandford Associates were commissioned by the project partners to complete the Outline Business Case for the project – the next phase of business planning that will help to provide more detail on how the project will be delivered. This will be submitted as part of the Islands Deal programme by the end of 2021.

1.5 Project Context

2018’s *Orkney Gateway Recommendations and Initial Feasibility Study* described necessary changes to the World Heritage Site at Stenness and Brodgar, which became the Gateway project, the subject of this paper. However, it also considered and suggested wider improvements to the way visitors and residents interact with the heritage of the islands. This included:

- An improved visitor experience at Skara Brae, featuring:
  - Refreshed basic visitor facilities
  - A new café and retail offer
  - A new trade entrance for coach traffic, to manage peak visitor flows
  - A new interpretation gallery exploring the wider stories relating to domestic life in Orkney through the ages
- A new, rejuvenated *Museum of the Islands,* a European class museum celebrating the history and heritage of Orkney as a whole. The museum would likely be in Kirkwall, a world-class facility with space to exhibit a range of objects and collections on a temporary and permanent basis.

These projects do not form part of the Orkney WHS Gateway Project and will be developed and progressed separately as funding and other constraints are addressed.

1.6 The purpose of this consultation

The project partners and consultants have already completed a significant body of work as part of this project, allowing the team to prioritise certain interventions and discount others (see below).

It is critical that the project delivers the change that Orkney residents would like to see, as well as improving the experience of visitors to the islands. The Outline Business Case for this project will be submitted this year, by which time its main components must be agreed and described in some detail. Following this, the proposals will be subject to the normal planning cycle. It is an opportune moment, therefore, for the project partners to consult with the residents of Orkney.

This process will begin at the start of September 2021 and run for six weeks. Material, including this paper, will be made available throughout this period, culminating in a series of public, in person events in Orkney in early October.

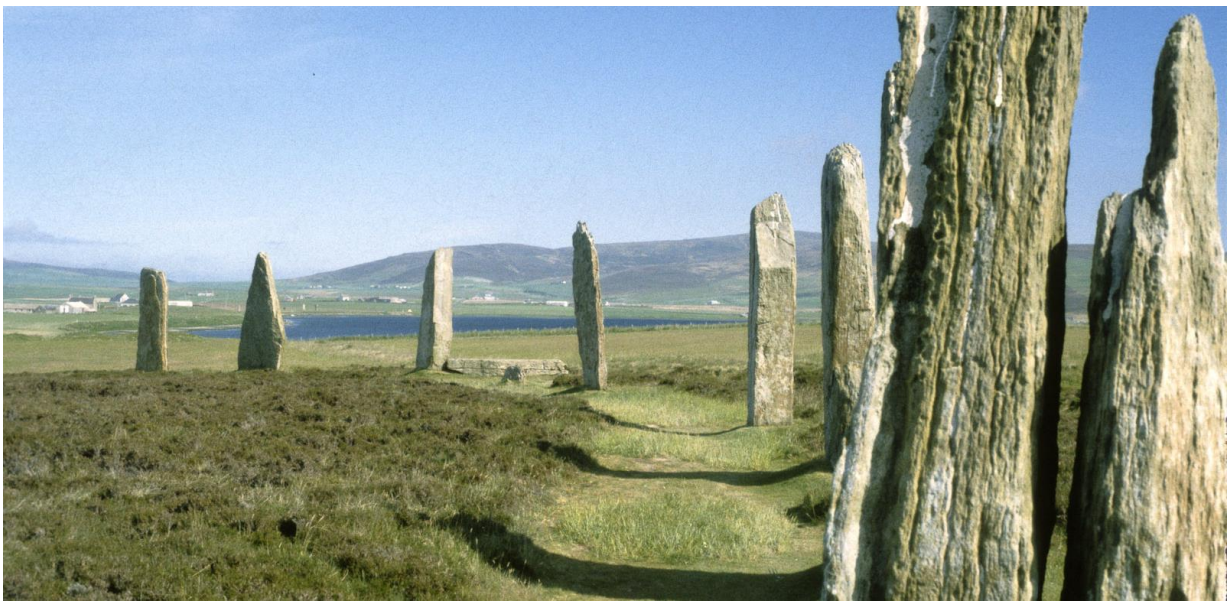
As part of the process, we will also be presenting the Strategic Environmental Assessment (SEA) for the project, so that residents can understand the environmental implications, risks, and mitigation measures of the proposals.

In this way, we can ensure that Orkney residents can have their say on the proposals, and that their feedback can inform the project as we further develop its Outline Business Case.

2 Orkney WHS Gateway Project

The Orkney World Heritage Site Gateway project has been designed to respond to the objectives and project drivers described above. These interventions will connect residents and visitors to the globally significant Neolithic heritage within the World Heritage Site, as well as the stunning natural landscape in which this heritage sits. But importantly, the project's impact will be felt across the islands – independent visitors will be encouraged, through accurate, real-time information, to explore other sites and attractions beyond the WHS boundary, while arrivals by coach will be better managed to improve the visitor experience for all.

Figure 1: The Ring of Brodgar



As travel and tourism begin to recover following the COVID-19 pandemic, Orkney intends to reposition itself in the market, moving towards an offer with strong themes around slow tourism, wellness, escapism, active travel, and green and sustainable travel. This will encourage a broader range of visitors to the islands, facilitating longer, more engaged visits. The WHS Gateway project can help stimulate this transition, functioning as an exemplar for how attractions can maximise the benefits of tourism to local people while minimising negative impacts.

In this context, a **"small is beautiful"** approach has been recommended for this project:

- An approach that focuses the attention of visitors and communities on the landscape and place, rather than a major building or facility.
- An approach that delivers smaller-scale facilities sensitively in the landscape around the WHS, while embracing new digital innovation and technologies

- An approach that responds to emerging trends for slow tourism, with a flexibility to meet uncertain demand and need for long-term operational viability.
- An approach that reconnects communities to the WHS physically, emotionally, and intellectually.
- An approach that drives the use of low carbon technologies and materials, and indigenous materials, while supporting local employment

The rest of this section describes the proposals in more detail.

2.1 Project Detail

The project includes several fundamental elements, which are described here in summary and below in more detail:

Figure 2: Core project components

Component	Description	Impact
Active Travel Network	Network of pathways, bike trails, and related infrastructure linking parts of the WHS. Interpretation, signage, and lighting as appropriate to guide the visitor Brodgar Path Management system to reduce damage and erosion	➢ Greater dwell time on site ➢ Engagement with the natural and built heritage of the site increases ➢ Healthier, more active lives ➢ Connection to local communities in Stenness village and elsewhere ➢ Safer pedestrian and vehicular routes
Visitor information and management app	Monitor activity at the sites to provide real-time information to the visitor. App will suggest alternative things to see and do when sites are congested	➢ Reduction in congestion at key sites at peak times ➢ Visitor dispersal across islands and attractions
Coach management infrastructure	Timed, permit-based system for all coach traffic intending to stop at the WHS. Maximum coach capacity per day/hour within the WHS	➢ Reduction in congestion at key sites at peak times ➢ Visitor dispersal across islands and attractions ➢ Permit revenue to fund site conservation
Brodgar Destination Management Hub	Basic visitor facilities including toilets and signage to orientate the visitor. Cycle racks and e-bike charging points to encourage active travel and exploration	➢ Greater dwell time on site ➢ Protection of sensitive environment and ecology of Loch of Harray and Stenness ➢ Healthier, more active lives
Digital and physical interpretation improvements	A range of digital and physical interpretation to improve the visitor experience allow remote access to the site.	➢ Greater dwell time on site ➢ Improved visitor experience, deeper heritage engagement ➢ Promotion and marketing benefit

It is agreed by all project partners that the importance of the sites to residents precludes them becoming charged-for attractions. All parts of the World Heritage Site (except Skara Brae and the Maeshowe chambered tomb, which are already ticketed) will remain free to access for all.

However, to help raise additional revenue for the ongoing care and maintenance of the site, as well as to encourage use of sustainable methods of transport around the islands, it is proposed to introduce a charge to use the car parks at Brodgar and the Stones of Stenness. This would likely involve a daily charge for visitors choosing to drive and park at the site, with suitable exemptions for local residents who would be able to obtain an annual resident's pass or similar.

As well as providing an ongoing source of income for the project, helping to ensure it remains in a condition commensurate with its value and importance, this income could help fund a "hop-on, hop-off" visitor shuttle (depending on location / nature of any visitor facilities. This shuttle could move visitors to and from the various parts of the area, limiting traffic movement along the A965, and particularly along the restricted B9055 to Brodgar. The vehicles involved would be innovative and environmentally sustainable, in line with Orkney's Net Zero aspirations.

Finally, the project includes an Orientation Facility for visitors to begin their experience. This facility would provide the visitor with information about the site and the different ways in which it can be explored. The facility will include:

- Simple interpretation and information about the visit
- Car parking and basic infrastructure (toilets, bike racks etc.)
- Alighting points for the visitor shuttle
- A seasonal refreshment offer

Options for this facility are discussed more in Section 3 below.

We discuss the key project components outlined in Figure 2 in the following pages.

2.1.1 Active Travel Network

Active Travel Provision - connections to local area

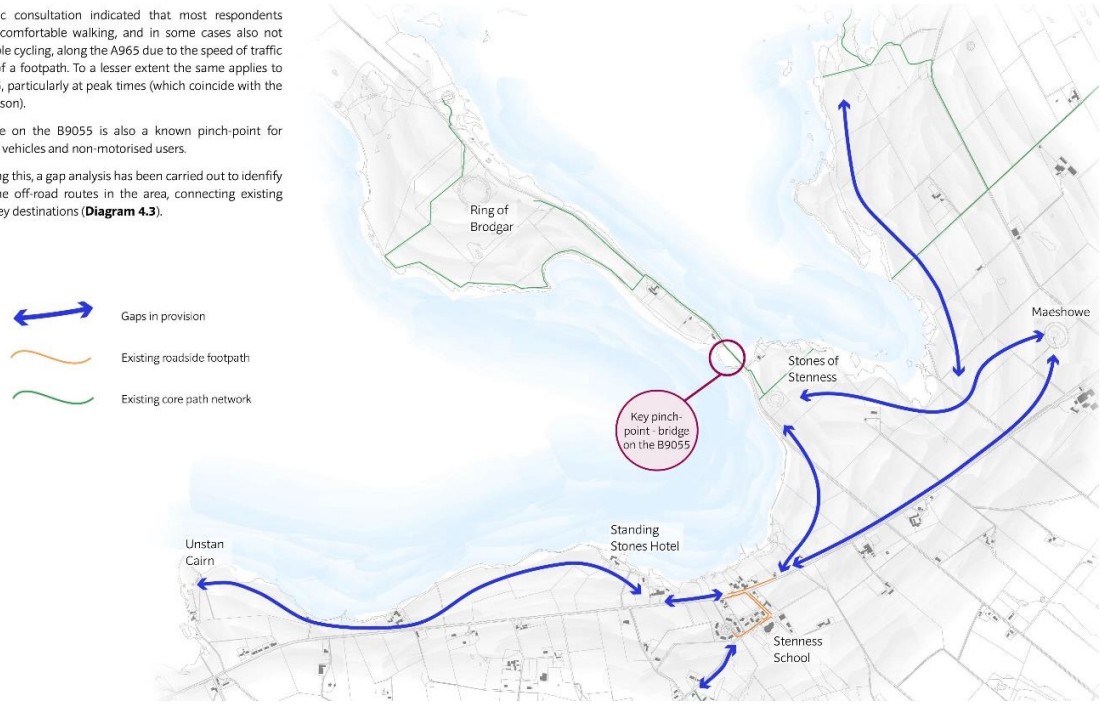
The May 2019 Active Travel Plan (ATP) identified key barriers and gaps in provision for local community access to the various areas of the WHS.

Figure 3: Gap Analysis (taken from May 2019 Active Travel Planning. P.11)

4.2.1 The public consultation indicated that most respondents were not comfortable walking, and in some cases also not comfortable cycling, along the A965 due to the speed of traffic and lack of a footpath. To a lesser extent the same applies to the B9055, particularly at peak times (which coincide with the tourist season).

4.2.2 The bridge on the B9055 is also a known pinch-point for motorised vehicles and non-motorised users.

4.2.3 Considering this, a gap analysis has been carried out to idenfify gaps in the off-road routes in the area, connecting existing paths to key destinations (**Diagram 4.3**).



Key interventions to address these gaps were identified and are described below:

Figure 4: Active Travel Network components

Element	Description
Standing Stones	(a) Segregated non-motorised multi-user path on west side of B9055 road between A965 junction and Standing Stones of Stenness (Stones), viewing platform and crossing to Stones. (b) Segregated non-motorised multi-user path between north end of bridge and existing path network (leading to Ring of Brodgar) along west side of Harray Loch. (c) Parking upgrades at Stones to cater for cyclists, e-bikes, and pedestrian throughways; and (d) Bus stop on west side of road at B9055/A965 junction.
Bridge Crossing	Improved non-motorised multi-user route (3 options) across bridge on B9055, completing network along B9055, between Brodgar and A965 junction.
Stenness Village	(a) Extended footway and lighting from the end of existing footway (to the west of the bus stop on the north side of the A965) to the Standing Stones Hotel (Hotel). (b) Segregated non-motorised multi-user path between Stenness village on the A965 and the B9055 junction.
Stenness Loch	Footpath/ multi-user path (feasibility to be determined) along the edge Stenness Loch, connecting the end of the current footway in Stenness Village on the A965 to the Standing Stones path.
Maeshowe	Footpath from Barnhouse Village Neolithic Village to Maeshowe.
Harray Loch	Footpath connection from Maeshowe footpath to the car park/picnic area off Stoneyhill Road near Baa Holm, along the edge of Harray Loch.
Unstan Tomb	Footpath/cycleway from hotel, westwards along the edge of Stenness Loch to Unstan Cairn, with connections to A965.

Delivering these active travel upgrades and infrastructure proposed would transform the visitor and community experience of the WHS. It would provide a "slow tourism" experience that would contribute to both the 2030 net zero target for Orkney and the desire to create a "net zero WHS". It would connect the site to local residents, providing health and well-being benefits for communities. The connection would also potentially deliver economic benefits for Stenness as it would enable visitors to move easily to and from the village hence providing potential income for local businesses.

Costs involved in delivering the infrastructure are proportionate and the gains to visitor experience and community benefits would be substantial. On balance it is considered that provision of the active travel infrastructure is a high desirable outcome for the scheme to enable it to connect with the emerging wider active travel network on Orkney and contribute to the 2030 net zero target for Orkney.

New footbridge

A new footbridge over the breakwater to the south of the B9055 road bridge creating a safe and desirable route for pedestrians away from the traffic. The bridge would be of high architectural quality and interpretation would be provided at its widened midpoint to encourage visitors to use it. The exact location and design for the footbridge would be determined later in the planning process.

Brodgar Path Management System

The project allows for the development of an improved path network at the Ring of Brodgar to help manage numbers, improve experience, and mitigate against peak season erosion. This network would allow site managers to close and open different interconnected segments of path over the course of a day/week/month depending on visitor pressure. Access to the circle itself would be restricted in peak season, but in the off-peak season access to the circle should be achievable with minimal erosion risk.

2.1.2 Visitor information and management app

A key element of the project allows for the development of a visitor management app to monitor activity at the sites and to provide visitors with information on the relative busyness of different locations across the islands and suggest alternatives based on their preferences. Uses a combination of "big data" (e.g. google analytics) and onsite real-time measurements and predictions.

This would reduce peak-time loading at the WHS and encourage dispersal across the islands particularly at peak periods. Development of the app would be undertaken with ongoing digital initiatives, and suitable data sharing protocols between the software solutions would be developed and implemented. The approach would support active and sustainable travel providing an outdoor experience connected to the wider area and islands.

2.1.3 Coach management infrastructure

To manage the surge of coach visitors, a timed permit-based system would limit the use of overuse of the coach bays and the subsequent crowding at the sites. Individual coach tours would purchase or be provided with a timed permit for the use of parking bays. The registration number would be picked up by

number plate recognition cameras at the entrance to the car park would then record coaches arriving. Coaches without permits could then be subject to a fine.

2.1.4 Brodgar Destination Management Hub

Upgrade of the car park at Brodgar to create a *Destination Management Hub*, including the installation of a suite of new permanent facilities including toilets and a small welcome point. The welcome point would provide a small, covered space in which interpretive and orientation information would be provided, including access to hi-speed wi-fi to download digital content. This would not be a "building" but some form of structure – perhaps built into the existing bund. The refresh would also include electric bike charging points and cycle racks.

The toilets would be installed within the existing bund. A section of the bund would be removed, the toilets constructed, and the bund replaced over them, masking them in views from Brodgar. These would be supported by an appropriate sewage treatment facility given the sensitive environmental context. The implementation of new toilets would be entirely dependent on an appropriate technological solution for sewage treatment and management being installed.

Disabled parking bays at Brodgar are currently being used by as pick-up/drop-off points by coaches and minibuses. To address this, the three bays would be reconfigured with low raised kerbs and/or bollards between them to prevent larger vehicles parking across one or more bays.

2.1.5 Digital interpretation and orientation, inc. some fixed interpretation

Physical

All physical orientation, wayfinding and interpretation interventions would be developed and installed based on the following to ensure the character of the site and local landscape is conserved.

Integrated - all interventions would be integrated into the environment and limited to key points, hubs, and gateways (i.e. paths and cycleways, car park and drop-offs, and limited at the monument sites). Presented in discreet ways physical interventions would blend in with the landscape and be made up of materials such as carved stone/wood and where possible, local materials. All interventions would be 'grounded' (presented at low level) minimising interruptions to the landscape and views. Larger interventions such as seating and shelter at pause points would be placed strategically to influence visitor flow and would incorporate wayfinding and interpretation material within their design to reduce the amount of visual clutter across the site. All physical installations would be limited to those that do not require foundations or installation that will damage the ground as the protection of archaeology is a primary concern.

Exploration – Interventions developed to encourage exploration of the wider landscape, not just the key monuments. Any physical interventions can present information that introduces the landscape as the focus, aiming to increase awareness of the site and its nature to encourage safe and respectful exploration.

Support digital – physical interventions would be fairly limited in their content, as to not intrude on the nature of the site. They would primarily act as anchors for visitor flow, as wayfinding and to support much more detailed digital content. The physical interventions will include essential information such as location, mapping, route lengths, as well as some limited information about what a visitor is viewing. It would also include a link to digital content e.g. by using QR codes. The code would be integrated within the intervention and could be of carved stone, mosaic tiles, engraved/embossed/cut out metal, 3d printed. QR codes can be highly stylised and designed to become part of the overall design rather than a stand-alone element incohesive with the design.

Digital

Long before visitors arrive, they should be inspired and informed through rich website content and downloadable content such as site maps, routes, and leaflets. This needs to be supported by ongoing marketing purposes and social media activity generating new content e.g. video interviews with archaeologists and artists; vlogs or even inspirational introductory films capturing the essence of the place. Public portals such as Wikipedia should also be updated – these are often a first port of call.

Digital media access whilst onsite (also made available off site) would include essential wayfinding information such as location, mapping, routes, and route distances, as well as more detailed interpretation not available physically on site. Information would be accessed by scanning the QR codes on the physical interventions onsite such as route markers, shelters and pause points.

There is potential to include sophisticated AR for both wayfinding and interpretation. This may include the display of overlayed map routes/navigation arrows and destinations through a smartphone camera and/or the display of augmented scenes at key interpretation points across the site. Visitors could download the app prior to visit to support QR code so they are not solely relying on mobile data signal.

Remote Access

The approach would allow remote visitors to experience the site from afar through the same digital content available on site being accessed online. It would increase the reach to wider audiences, encourage future visits and excite interest in Orkney.

Visitor Journey

We are not prescribing single journey for a single mythical visitor – instead the following sets out elements of the visitor experience at different areas of the site – different visitors will map and connect the journey to suit their own needs. The initial topics identified for interpretation have been mapped against each location (see following section for more on these themes). These will be dialled up or down and may only be a touch point at some nodes or the main focus at others.

Orientation Centre 1

External welcome area with orientation signage for local sites/trails and for the whole WHS.

Internal hub that offers introduction to the sites and their interconnectedness

Primary function to facilitate exploration of sites rather than attraction in its own right

Respite from weather and a base for groups and guides to gather

Promotion of wider WHS and aligned sites island wide.

Topics: Ritual and Cultural Landscape, Domestic Life, Technology of Creation, Location, Art, The Discovery and Care of Monuments, Norse and Viking Heritage, World Heritage Status, Living Monuments, Natural Heritage

Walk to Maeshowe 2

Interpretation on the landscape recreation. What would shrubby, wet landscape/Carr woodland be like? Why is it no longer here? Link to domestic and technology topics with wood as a resource.

Crossing point or boardwalk over the Muckle Burn of Stenness with built-in interpretation in deck.

Teaser interpretation, wayfinding and seating.

Highlight sight lines and placement of Maeshowe in the ritual and cultural landscape.

Topics: Ritual and Cultural Landscape, Domestic Life, Technology of Creation, Location, Living Monuments, Natural Heritage

Maeshowe Experience 3

Develop a storytelling led Guided tour experience which brings the site to life. Staff to have a bag of props to offer talking points and objects that can be passed around the group to help illustrate points.

3D digital recreations of the tomb made available to download and available onsite via a device with the staff. The use of the 3D scans as a tool for conservation should be highlighted.

Specialist tours to be developed for solstice or with visiting expert guides. Tours could also be themed to focus on certain elements of the story i.e. Viking heritage.

Topics: Ritual and Cultural Landscape, Technology of Creation, Art, The Discovery and Care of Monuments, Norse and Viking Heritage

Lochside Viewpoint 5

Interpret the wider cultural landscape – why are the sites placed here?

View interpretation incorporated sculpturally into landscape, with associated panels

Seating and hardstanding

Audio interpretation

Topics: Ritual and Cultural Landscape, Location, Natural Heritage

Route to Lochside Viewpoint 4

External interpretation node providing linkage to wider landscape forms and monuments

Seating/shelter

Audio interpretation

Topics: Ritual and Cultural Landscape, Location, Natural Heritage

Route to Barnhouse Settlement 6

Teaser interpretation, wayfinding and seating.

Topics: Ritual and Cultural Landscape, Location, The Discovery and Care of Monuments, Natural Heritage

Barnhouse Settlement 7

Domestic life and links to the ritual landscape; comparison with the "Ness"

Interpret how the site has been used over time/changes

Links to Skara Brae and other domestic sites such as Broch of Gurness

Revitalised interpretation, possible augmented views of settlement

Topics: Ritual and Cultural Landscape, Domestic Life, Location, The Discovery and Care of Monuments

Route to Ness of Brodgar 11

Teaser interpretation with wayfinding and seating overlooking loch – quiet contemplation away from traffic.

Topics: Ritual and Cultural Landscape, Location, Art

Ness of Brodgar 12

Changeable interpretation depending on whether site is active or not.

Active and even participatory experiences - talk to archaeologist, view the days finds.

Viewing scaffold for visitors with interpretation media such as audio interviews, printed panels, flexible panels to interpret 'find of the day'

Specialist tours with experts directly funding dig/sponsorship

Illustration/recreation of site

Topics: Ritual and Cultural Landscape, Domestic Life, Technology of Creation, Location, Art, The Discovery and Care of Monuments, Living Monuments

Route to Brodgar 13

Node with seating

Interpret how people may have moved through the landscape

Topics: Ritual and Cultural Landscape, Location, Art, Living Monuments

Ring of Brodgar 14

Fixed welcome points with interpretation panels and possibly seating

Changeable interpretation depending on flexible elliptical path network

Audio interpretation

Guided tours and/or floating interpretation staff at peak times

Printed literature to take around the site or as memento

Specialist tours with experts

Dawn/dusk tours for paid and invited groups

Engagement with artists, photographers/ poets to add creative layer to interpretation that could be updated.

Topics: Ritual and Cultural Landscape, Technology of Creation, Location, Art, The Discovery and Care of Monuments, Living Monuments, Norse and Viking Heritage

Stenness Road Crossing Point 9

Simple wayfinding

Interpretation of the Stenness watch stone

Topics: Ritual and Cultural Landscape

Route to/from Parking 15

Simple wayfinding and seating
Welcome node with interpretation panel/audio
Gathering area

Topics: Ritual and Cultural Landscape, Location, The Discovery and Care of Monuments, World Heritage Status, Living Monuments

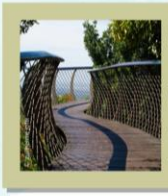
Stones of Stenness 8

Fixed welcome area with main interpretation panel tours associated with lay-by

Guided tours at fixed times

Audio interpretation

Topics: Ritual and Cultural Landscape, Technology of Creation, Location, The Discovery and Care of Monuments, Living Monuments



New Link Bridge at Stenness 10

Integrated typographical treatment such as poetry presented in cut metal in balustrade. Design should be artistic, but low key.

Draws the eye to Hoy – links the site with the wider bowl

Topics: Ritual and Cultural Landscape, Art, Living Monuments, Natural Heritage

Route to Ring of Bookan 16

Simple wayfinding and distance info.
Interpretation overview and links to Stenness.
Interpret role of earthworks/ditches
Unexcavated site - opportunity to talk about what might be there and wealth of other sites across the islands.

Topics: Ritual and Cultural Landscape, Location, The Discovery and Care of Monuments

3 Visitor Orientation Facilities

Alongside the core project components described in Section 2.1 above, the Gateway Project includes a set of visitor orientation facilities to provide welcome and direction to visitors on arrival. This could include the provision of information (digital and physical), limited heritage interpretation, additional car parking capacity, and other related visitor facilities.

These facilities could be delivered in several ways. These options are discussed and assessed below.

3.1 Rejected Options

In the course of our work, it has been agreed by the project partners that several options for facilities should be discarded:

- Do Nothing – not a tenable option due to the project's strong case for change
- Major or large scale development – rejected on viability and environmental grounds
- Out of area centre – rejected due to risk of visitor bypass, and limited impact on visitor behaviour and engagement
- Development on the Brodgar peninsula – rejected due to environmental and archaeological sensitivities
- Development at the Orphir and Stenness Church – rejected due to potential conflict between actively used community asset and tourism uses
- Development at Tormiston – rejected due to significant highways and road safety constraints; and potential viability issues

3.2 Shortlisted Options

Four options were shortlisted for more in-depth analysis:

- Option 1 – Do Minimum
- Option 2 – Digital and Infrastructure
- Option 3 – Local Centre at Stenness Village
- Option 4 – Adjacent Centre

3.2.1 Option 1: Do Minimum

This option includes a minor upgrade and refresh of existing facilities and network. There are limited active travel upgrades and some focused additional interpretation. The current centre continues to operate with no significant operational changes. No additional parking is proposed as current patterns of visitation and limited dwell times are assumed to continue. Limited decrease in conservation management costs due to improvements at Brodgar.

Note – this option does not include the core elements listed in Section 2.1 above.

Key Components

- Local path upgrades, no new connection to Stenness. Brodgar path management scheme
- Visitor Centre Refresh (limited). Fixed Interpretation
- Cycle signage, car park refresh at Brodgar
- Parking charges introduced. Stenness Car Park upgraded (outside of scope of project)
- No change to operational approach

Figure 5: Option 1 - Performance against objectives

Objective	Remarks
Safeguard the WHS and local environment	Limited improvement to state of conservation, ongoing problems likely to be lessened but not significantly improved
Enhance Islander quality of life	Proposals would not improve connectivity between the Stenness community and the site, a slight improvement in experience of site
Optimise economic benefits of tourism in a sustainable manner	Limited if any impact beyond current situation
Disperse socio-economic tourism benefits across the islands	Limited if any impact beyond current situation
Improve visitor experience for all audiences	Improvements to path networks and some new interpretation would enhance the visitor experience to a limited degree but would not address key issues
Provide sustainable access to and around the WHS	Limited improvements through new cycle infrastructure at the Brodgar car park. Slight accessibility improvements with redesign of disabled parking at Brodgar

Viability

Income from parking has the potential to address the financial viability issues associated with the operation of the Maeshowe Shuttle. Additionally, most visitors to the WHS do not visit the current facility, which limits its ability to attract secondary spend.

The lack of facilities to guide, educate and disperse visitors in the WHS is also resulting in overcrowding and inappropriate visitor behaviour leading to increased management costs (e.g. extensive path, grass and monument repairs every season at Brodgar). The Do Minimum approach would partially address this through path works etc but would not resolve the issue. This lessens the viability of the option.

Deliverability

Given limited nature of works no significant deliverability issues are anticipated, although permissions will still be required for new paths.

Affordability

Lowest cost option, likely to be affordable.

3.2.2 Option 2: Digital and Infrastructure

Significant local infrastructure upgrades supported by full digital orientation and interpretation. An outdoors and pre-trip experience blending Augmented Reality (AR), QR code triggered content, GPS enabled interpretation and other technology to reveal the landscape to guests. Supports local communities through extensive active travel connectivity.

There would be no visitor centre. Instead, transit hubs, drop-offs, cycleways, and paths would act as gateways and orientation points for guests. Some physical orientation, wayfinding and interpretation would be installed across the site to act as anchors for a wider digital experience using app-based content and/or content accessed through QR codes. This would include Welcome Points at the key parking areas. These would comprise simple open sided shelters / covered areas with fixed and digital interpretation inside to orientate guests around the site. The option exists to require guests to purchase the “digital guidebook” to access this information.

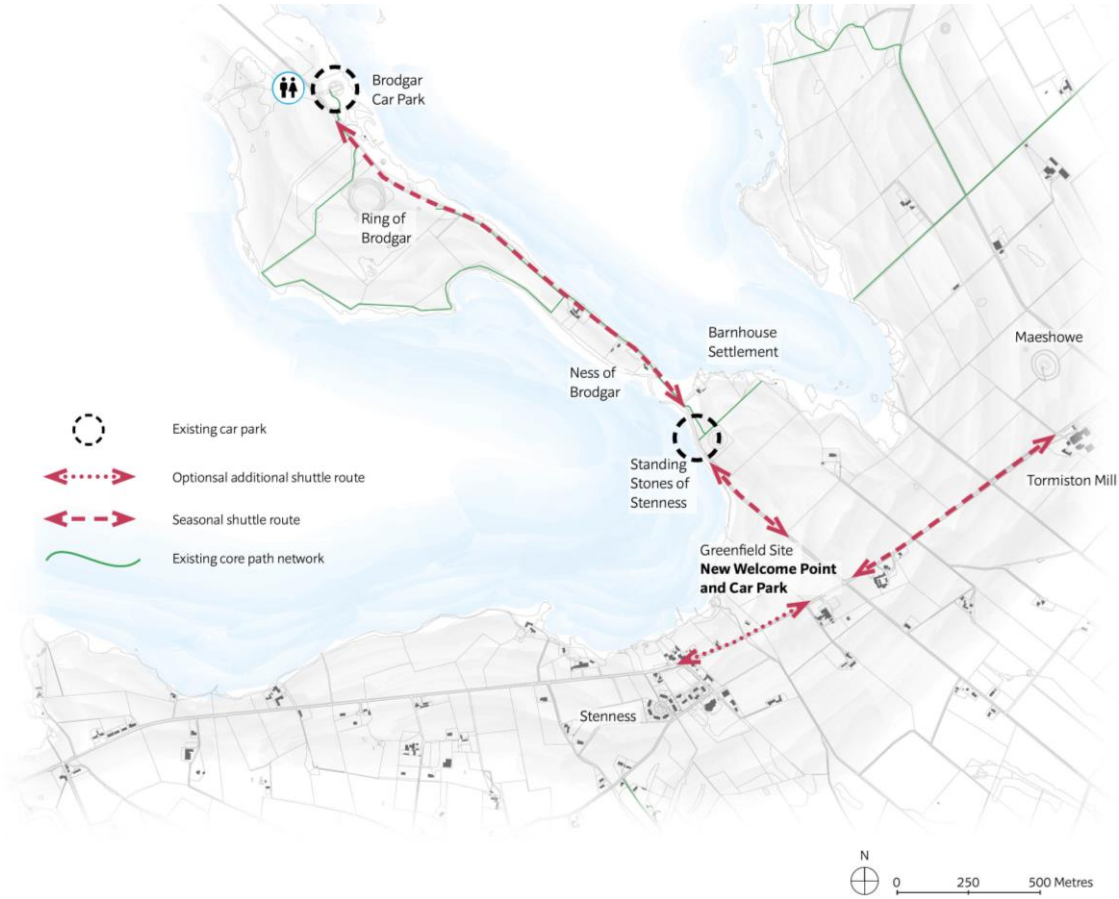
We are not prescribing a single journey for visitors. Different visitors will map and connect the journey to suit their own needs, giving them the time, confidence, and ability to explore the monuments and landscape; in a manner that manages erosion at and around key monuments.

Upgrades and additional routes would target the gaps in provision for walking and cycling, linking up the site and encouraging active travel between monuments as well as exploration of the wider landscape.

Car parks would be fee paying to provide revenue to support the management of the site, future updates to information provision and interpretation, and the running of a shuttle service. Ticketing for Maeshowe would be obtained digitally with the option to collect physical tickets from elsewhere e.g. Skara Brae; or to use mobile phone tickets.

In addition to the Brodgar and Stones of Stenness car parks, additional parking would be required to support the longer dwell times. This would be located at a site close to the WHS. It would involve a small car park with Welcome Point (no toilets), possibly on the greenfield site near to the Stones of Stenness. The location, scale and form of the car park would be developed as part of a standard design and planning process.

Figure 6: Option 2: Digital & Infrastructure



Key Components: Summary

- Active Travel Network connections to local area, including a new footbridge and the Brodgar Path Management System. Site-wide path network and upgrades
- Digital interpretation and orientation, inc. some fixed interpretation
- Car park refresh at Brodgar, Inc. toilets, disabled bays, and electric bike charging points
- Additional vehicle parking / modal change area to enable increased dwell times
- Digital ticketing (no physical centre)
- Coach management infrastructure and visitor management app system

Figure 7: Performance against objectives

Objective	Remarks
Safeguard the WHS and local environment	Provides significant improvement to onsite conservation through works at Brodgar and across path network New physical infrastructure would fit comfortably in landscape Path network enables access and safeguards WHS, Site of Special Scientific Interest (SSSI), Special Area of Conservation (SAC), and RSPB reserve.

Objective	Remarks
	Focus on digital likely sees many guests not accessing full suite of information, leading to continued patterns of visitor behaviour with attendant pressures
Enhance Islander quality of life	Active Travel Plan network connects local communities to WHS and their local area resulting in significant social, health and well-being impact. Improved experience would benefit island communities, but strong focus on digital is likely to reduce impact for some communities
Optimise economic benefits of tourism in a sustainable manner	Would provide an enhanced independent visitor experience suitable for some markets – unlikely to be attractive for all markets. Limited opportunities for income generation or new jobs Absence of centre may encourage spend at other facilities in the local area
Disperse socio-economic tourism benefits across the islands	As a node in the wider network of attractions the orientation information would signpost visitors to other locations, but the focus on digital may see people bypass this material.
Improve visitor experience for all audiences	Option would partially transform the visitor experience, creating further engagement and lengthening dwell time for some independent travellers – some markets would however not naturally adapt to the strong digital focus Trade guests would receive a higher quality experience with less crowding, more structure, and options for longer dwell time Off-site audiences would have access to excellent digital content
Provide sustainable access to and around the WHS	Active Travel Network provides sustainable access across WHS / local area. Improved public transport links would also spread these benefits to wider communities on the islands. Implementation of new cycle routes and e-bike charging points would deliver a sustainable healthy transport option for guests and communities. Focus on digital is likely to mean that many guests do not access the full suite of orientation information, leading to continued patterns of visitor behaviour e.g. drive to car park, walk round Brodgar and drive off again

Viability

Car parking and coach permit charges offer the potential to support shuttle services, parking enforcement, path maintenance and onsite conservation – and provide a basis for financial viability.

Option presents limited opportunities to generate other revenue – there may also be issues with ticketing and managing guests to Maeshowe depending on the location of the additional parking (see above).

There are some potential issues with market demand for significant reliance on digital content provision, given current profile of markets in terms of age, interest etc.

In terms of affordability, the core digital offer would have a much lower cost than physical options, although considerable onsite and active / sustainable travel infrastructure would still be required.

Deliverability

Key deliverability issues that need to be addressed include:

- Land ownership for any required additional parking (further design required to identify location)
- Land ownership / permissions for delivery of new path networks
- Proving of tech for Visitor Management / Information App
- Currently unknown if local 4G / 5G networks could sustain full digital interpretation.
- There are also potential risks with developing and delivering the digital interpretive technology which is relatively unproven at this scale in outdoor environments.

Affordability

Lower cost option, likely to be affordable.

3.2.3 Option 3: Local Hub

New or refreshed centre in Stenness Village, forming hub for new visitor experience with local connectivity improvements and connections. The centre would be capable of anchoring the visitor experience at Stenness village assuming that the experience was largely outside based with some additional core facilities such as toilets away from the centre e.g. Brodgar car park. The centre would provide a hub for the delivery of a high-quality visitor experience that encourages active exploration of the monuments and wider landscape on foot and cycle. Its small scale reflects the intention to make it subservient and complementary to Skara Brae in terms of acting as a hub for the interpretation of the wider WHS.

Facility would be small scale and could potentially be sited in the existing building or using another space in the village. The facility would be connected to the WHS by a seasonal shuttle (off season guest would take their own vehicle to the site), plus the active travel network cycle ways and private vehicles. Car parking at the centre and on the site would be charged, to provide income to support the shuttle, maintain path and improve visitor experience.

The Centre

A small-scale centre would provide core facilities with orientation, ticketing and some interpretation, and possible small-scale refreshment offer. The centre would serve as a key hub from which visitors would be enabled to go out and explore the landscape using a shuttle and path network to access the sites. The centre would provide the following:

- Key visitor facilities including toilets, refreshments, and information.
- General interpretation and orientation material
- Information on options for visitors in terms of their dwell times and types of visits
- Ticketing facilities for Maeshowe
- Vehicle parking, bicycle parking and charge points

Visitors would be encouraged to explore the WHS on foot, cycle or using the new shuttle. Car parking would be charged at the centre and onsite.

Figure 8: Option 3 - Stenness Local Hub

Key Components

- Active Travel Network connections to local area, new footbridge, and the Brodgar Path Management System. Site-wide path network and upgrades
- Digital interpretation and orientation, inc. some fixed interpretation
- Car Park refresh at Brodgar, inc. toilets, disabled bays, and electric bike charging points
- Parking and access for new hub, traffic restriction measures
- Centre refresh, extension, or new site converting an existing building
- Coach management infrastructure and visitor management app system

Figure 9: Performance against objectives

Objective	Remarks
Safeguard the WHS and local environment	Provides significant improvement to onsite conservation through works at Brodgar and across path network. Location of centre in Stenness and new infrastructure would fit comfortably in landscape and safeguard setting of WHS. Path networks would enable access in a manner that helps safeguard WHS, SSSI, SAC and RSPB reserve etc. Likely that guests would bypass centre resulting in continued traffic pressure within WHS, possible requirement for additional peak season parking if guest do bypass.
Enhance Islander quality of life	Active Travel network connects local communities to the WHS, resulting in significant local social, health and well-being impacts. Improved experience would benefit island communities. Risk that additional traffic to Stenness village would degrade quality of life for residents
Optimise economic benefits of tourism in a sustainable manner	Provides an enhanced independent visitor experience aimed at target markets – addressing the current poor quality experience at key asset for islands. However, centre likely to be bypassed by many guests as it would be c. 1 to 1.5km from Stones of Stenness and c. 2.5 to 3km from Brodgar. Small centre with no significant food and beverage (F&B) likely to encourage spend at other facilities / businesses in the local area, particularly for options based in village – although some guests likely to bypass the centre
Disperse socio-economic tourism benefits across the islands	As a node in the wider network of attractions the centre would signpost visitors to other locations.
Improve visitor experience for all audiences	Option should fundamentally transform the visitor experience, creating a deeper engagement and lengthening dwell time for independent travellers. However the distance between the centre and the sites (see above) would likely see many guests continue to use existing car parks and routes, as such the nature of visits is likely to remain "as is" for most guests, albeit with less impact of volume trade visitors due to controls on numbers. Free shuttle may however offset some bypassing. Trade guests may receive a higher quality experience with less crowding, more structure, and options for longer dwell time, if required Offsite audiences would have access to excellent digital content
Provide sustainable access to and around the WHS	Delivery of active travel network would provide sustainable access across WHS and to local area. Improved public transport links would also spread these benefits to wider communities on the islands. Implementation of new cycle routes and e-bike charging points would deliver a sustainable transport option for guests and communities. Distance of potential locations for centres would see continued predominance of private vehicle usage for direct access to sites, although in peak season car parks are likely to fill and guests will by necessity need to park at centre and catch the shuttle

Viability

Revenue from car parking would be central to viability in terms of funding the required shuttle services and supporting the centre in off peak season when footfall is likely to very low. Issues include:

- Requires a shuttle service between Maeshowe and the Centre (likely looping around Brodgar and Stones of Stenness in peak-season), resulting in a high cost per visit for Maeshowe.
- Centre location may see visitors bypass the facility and go direct to the sites, reducing secondary spend and footfall – this is likely to be less of an issue in peak season due to car parks being full.
- Distance between centre and sites may lead to continued high levels of vehicle traffic using existing car parks close to sites even with shuttle service, reducing likelihood of dispersal and hence continuing high visitor pressure on key paths with increased maintenance requirements.

Deliverability

Key deliverability issues that need to be addressed include:

- Land ownership / permissions for delivery of new path networks
- Land / building ownership for proposed centre and access arrangements
- Planning permission for new centre and potential community issues particularly given potential perceived and real conflicts associated with frequency of shuttle transport and additional visitor traffic at the hub site.
- Proving of tech for Visitor Management / Information App

Affordability

Should be noted that estimated costs are for refurbishment of an existing building. A new build or conversion of other building could result in an increase in Cap Ex. Estimated costs likely to be met by available funding.

3.2.4 Option 4: Adjacent Centre

New centre close to WHS forming accessible heart to new visitor experience with local connectivity improvements. This orientation facility would be situated close to the WHS on a possible greenfield site along the B9055.

Onsite improvements in terms of paths, interpretation, and sustainable transport are same as other options. The facility would be small scale, and would offer orientation, ticketing for Maeshowe, access to different transport modes and some retail. F&B would probably be seasonal and external. Toilets would be provided in a separate block as these can service guests even when centre is closed.

As with other options, the facility would be connected to the WHS by the active travel network of routes, local bus services, cycle ways and private vehicles.

Due to the proximity of the Adjacent Centre to the monuments, a shuttle service would not technically be required, however it has been assumed that a seasonal service between the centre, Brodgar, and Maeshowe would operate to encourage exploration by providing an easy return route; would also help encourage people to not take their private vehicle to Brodgar or the Stenness car park. As with other options all car parks would be charged to provide income to support the centre and operate the shuttle.

Given its location, the design of any building close to the core of the WHS is critical to deliverability. Based on design guidance from OIC, a vernacular style reflecting local farmhouses / barns etc would be more favourable, to reduce perceived prominence on the landscape. The car park would be behind the building facing away from the WHS and would be masked when viewed from WHS. Centre would provide bespoke facilities and in an accessible location and would also accommodate coaches, if needed.

The centre would be ideally located within walking distance from Stones of Stenness, Barnhouse Village and Maeshowe, possibly Brodgar. A seasonal shuttle would serve the centre, local bus stops, Maeshowe and Brodgar. Coach based visitors would generally bypass the centre and access the site directly.

Figure 10: Greenfield site Orientation Centre

Key Components

- Active Travel Network connections to local area, new footbridge, and the Brodgar Path Management System.
- Site-wide path network and upgrades.
- Digital interpretation and orientation, inc. some fixed interpretation
- Car Park refresh at Brodgar, inc. toilets
- Parking and access road at centre
- Orientation centre
- Coach management infrastructure and visitor management app system
- Traffic restriction measures

Figure 11: Performance against objectives

Objective	Remarks
Safeguard the WHS and local environment	Provides significant improvement to onsite conservation through works at Brodgar and across path network. New infrastructure would fit comfortably in landscape and safeguard setting of WHS – however there are risks associated with the greenfield development in terms of impact on the setting of the WHS and local environment. Design measure should overcome this. Path networks would enable access in a manner that helps safeguard WHS, SSSI, SAC and RSPB reserve etc.
Enhance Islander quality of life	Delivery of active travel network would connect local communities to the WHS and their local area resulting in significant local social, health and well-being impacts. Improved experience would benefit island communities
Optimise economic benefits of tourism in a sustainable manner	Would provide an enhanced independent visitor experience aimed at target markets – addressing the current poor quality of experience at key asset for the islands. Small centre with no significant F&B likely to encourage spend at other facilities / businesses in the local area.
Disperse socio-economic tourism benefits across the islands	As a node in the wider network of attractions the centre would signpost visitors to other locations.
Improve visitor experience for all audiences	Option would fundamentally transform the visitor experience, creating a deeper engagement and lengthening dwell time for independent travellers. Trade guests would receive a higher quality experience with less crowding, more structure, and options for longer dwell time, if required. Off-site audiences would have access to excellent digital content. Distance from Maeshowe and core sites could be an issue for the visitor experience.

Objective	Remarks
Provide sustainable access to and around the WHS	Delivery of active travel network would provide sustainable access across WHS and to local area. Improved public transport links would also spread these benefits to wider communities on the islands. Implementation of new cycle routes and e-bike charging points would deliver sustainable healthy transport options for guests and communities. Distance from centre to Maeshowe and other sites may affect visitor choices, leading to continued use of private vehicles to access site. Low carbon shuttle service would support sustainable access.

Viability

Car parking charges would underpin the financial viability of the option by providing income to support shuttle service and potentially other aspects of operation.

Compared to other options there would be increased footfall at the orientation facility leading to increased secondary spend, particularly if some trade coaches use the centre too (greenfield). Facility likely be crowded at times during peak-season but it would be appropriately scaled for shoulder and off-peak periods. It is possible that with operational management e.g. reduced staffing in winter, the centre may be able to operate without subsidy.

As with other options reduction in significant ground and path repair costs at key monuments due to improved infrastructure and visitor management

Deliverability

Key deliverability issues that need to be addressed include:

- Land / building ownership for proposed centre and access arrangements
- Highly sensitive nature of the landscape and setting of the WHS
- Potential archaeological constraints for greenfield centre – will require design response e.g. floating raft foundation, geotextile etc
- Land ownership / permissions for delivery of new path networks
- Proving of tech for Visitor Management / Information App

Affordability

Significant cap ex cost requiring external funding from agencies and partners.

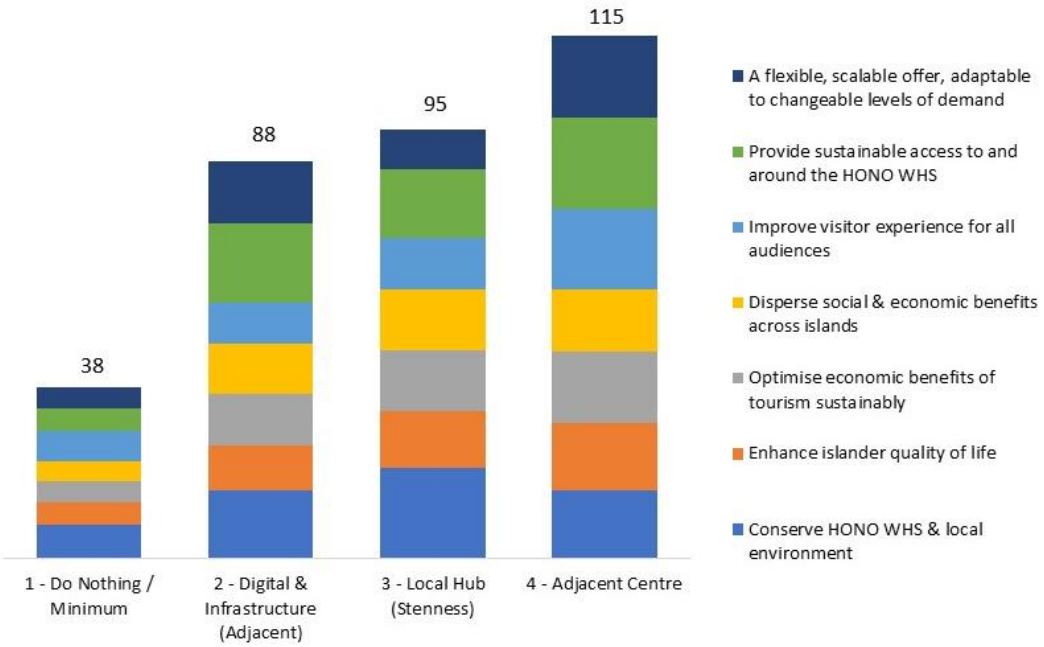
The possibility exists to seek core funding with phased additional funding for individual elements.

3.3 Options Appraisal

Our detailed assessment of options has generated the following overarching conclusions, which can be used to guide discussion and consideration of a preferred option:

- The greatest impact on the visitor experience is had by options closer to the centre of the World Heritage Site (chiefly Option 4). Those further away increase the risk of visitors bypassing the facility, and therefore typically deliver less impact with respect to the project objectives. This appraisal is summarised by Figure 12 below.

Figure 12: Fit with objectives of options



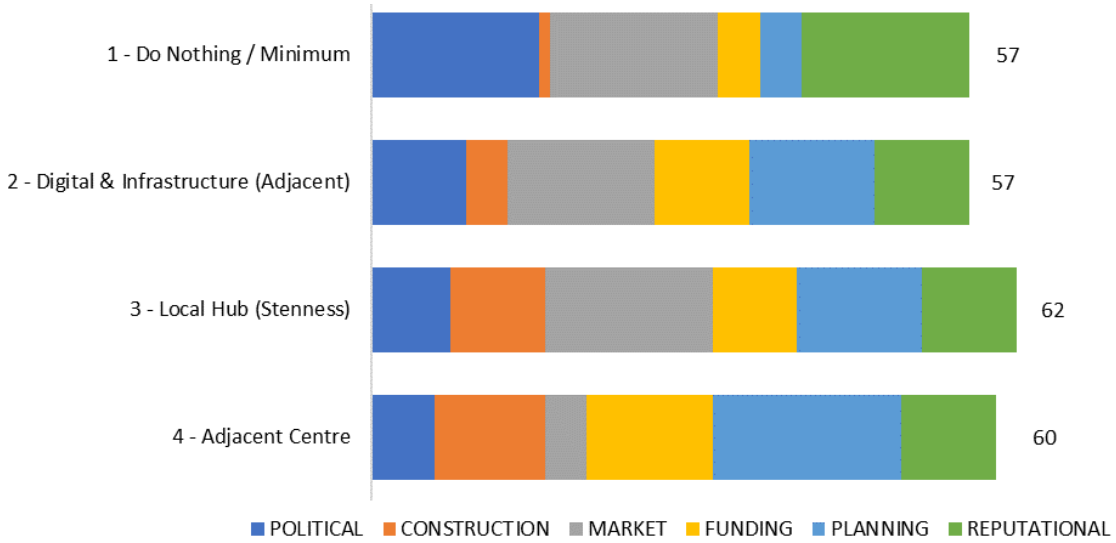
- Conversely, the closer an option is to the centre of the World Heritage Site, the more complex its delivery becomes due to environmental and archaeological sensitivity. It is the view of the consultants, however that these challenges can be overcome through a high quality design and build process.
- All options have been costed to determine the approximate level of capital investment needed for delivery, including allowances for fees, contingencies, and inflation. As mentioned above, the project has received an "in principle" agreement for £6.5m funding secured through the Scottish Government's Islands Deal. The range of capital costs for each option is shown below:
  - Do minimum — c. £750,000 to £825,000
  - Digital and Infrastructure — c. £4,600,000 to £5,100,000
  - Local Hub (Stenness) — c. £5,700,000 to £6,250,000
  - Adjacent Centre — c. £7,550,000 to £8,400,000
- We have also modelled the operational viability of each option. This analysis has suggested that, primarily because of additional revenue generated through car park charging, all options are

financially sustainable and likely to generate income that can be reinvested into the care and ongoing maintenance of the World Heritage Site. Our modelling has included accounting for:

- Income from car parking, ticketing to Maeshowe, and secondary spend (primarily retail income).
- Expenditure on conservation, site maintenance, staffing, the proposed visitor shuttle etc.

➢ All options have a similar risk profile, as demonstrated by the graphic below:

Figure 13: Risk assessment for options



Given the similar risk profiles of all options, the decision on which option to take forward reduces to a trade-off between financial out-turn and ease of delivery (where Options 2 and 3 are marginally stronger than Option 4) and fit with objectives (where Option 4 is the strongest).

We are keen to get the view of Orkney's residents on the positive and negative impacts of the proposals. These discussions will help to inform a decision on the preferred option to take forward.

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