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# Marine Licence Application for Construction Projects

Version 1.0

## Marine (Scotland) Act 2010

Marine Scotland, 375 Victoria Road, Aberdeen, AB11 9DB
http://www.gov.scot/Topics/marine/Licensing/marine

## Acronyms

Please note the following acronyms referred to in this application form:

| | |
|---|---|
| **BPEO** | Best Practicable Environmental Option |
| **EIA** | Environmental Impact Assessment |
| **ES** | Environmental Statement |
| **MHWS** | Mean High Water Springs |
| **MMO** | Marine Mammal Observer |
| **MPA** | Marine Protected Area |
| **MS-LOT** | Marine Scotland – Licensing Operations Team |
| **PAM** | Passive Acoustic Monitoring |
| **SAC** | Special Area of Conservation |
| **SNH** | Scottish Natural Heritage |
| **SPA** | Special Protection Area |
| **SSSI** | Site of Special Scientific Interest |
| **WGS84** | World Geodetic System 1984 |

## Explanatory Notes

The following numbered paragraphs correspond to the questions on the application form and are intended to assist in completing the form. These explanatory notes are specific to this application and so you are advised to read these in conjunction with the Marine Scotland Guidance for Marine Licence Applicants document.

### 1. Applicant Details

The person making the application who will be named as the licensee.

### 2. Agent Details

Any person acting under contract (or other agreement) on behalf of any party listed as the applicant and having responsibility for the control, management or physical deposit or removal of any substance(s) or object(s).

### 3. Payment

Indicate payment method. Cheques must be made payable to: The Scottish Government.

**Marine licence applications will not be accepted unless accompanied by a cheque for the correct application fee, or if an invoice is requested, until that invoice is settled. Target timelines for determining applications do not begin until the application fee is paid.**

### 4. Application Type

Indicate if the application is for a new construction site or an existing construction site. Provide the existing or previous consent/licence number and expiry date if applicable.

### 5. Project Details

(a) Give a brief description of the project (e.g. construction of a new sea outfall).

(b) Provide the total area of proposed works in square metres.

(c) Provide the proposed start date of the project. The start date will not be backdated, since to commence a project for which a licence has not been obtained will constitute an offence, which may result in appropriate legal action. A licence is normally valid for the duration of the project but not exceeding 3 years. If a project will not be completed before a marine licence lapses, it will be necessary for licence holders to re-apply for a further licence to continue any ongoing work at least 14 weeks prior to the expiry date of the licence. **Target duration for determination of a marine licence application is 14 weeks.**

(d) Provide the proposed completion date of the project.

(e) Provide the cost of the works seawards of the tidal limit of MHWS. This estimate should only cover

work taking place below the tidal level of MHWS and must take into consideration the cost of materials, labour fees etc.

(f) Describe the location of the proposed works. Include a list of the latitude and longitude co-ordinates (WGS84) of the boundary points of the proposed project. WGS84 is the World Geodetic System 1984 and the reference co-ordinate system used for marine licence applications. Co-ordinates taken from GPS equipment should be set to WGS84. Coordinates taken from recent admiralty charts will be on a WGS84 compatible datum. Ordnance survey maps do not use WGS84. In a few cases, (e.g. laying of long pipelines) it may only be practicable to supply co-ordinates for the start and end points.

**Example:** For positions read from charts the format should be as in the example: 55°55.555'N 002°22.222'W (WGS84). The decimal point specifies that decimals of minutes are used and the datum is stated explicitly. If seconds are used then the format should be as in the example: 55°55'44''N 2°22'11''W (WGS84).

**It is important that the correct positions, in the correct format, are included with this application, as any errors will result in the application being refused or delayed.**

To supplement your application, please provide photographs of the project location and submit these with your application. Please also provide a suitably scaled extract of an Ordnance Survey Map (1:2,500 scale but not more than 1:10,000) or Admiralty Chart which must be marked to indicate:

- the full extent of the works in relation to the surrounding area;
- latitude and longitude co-ordinates defining the location of the works;
- the level of MHWS;
- any adjacent SAC, SPA, SSSI, MPA, Ramsar or similar conservation area boundary.

Drawings and plans will be consulted upon. If they are subject to copyright, **it is the responsibility of the applicant to obtain necessary approvals to reproduce the documents and to submit suitably annotated copies with the application.**

**Sewer outfalls, discharge pipes for industrial waste etc.** The size and description of the pipe must be shown on the longitudinal sections and also details of its supports, foundations, methods of jointing and details of any tidal flaps.

**Bridges over tidal waters:** An elevation with longitudinal and cross-sections of the bridge to a suitable scale must show the dimensions of the spans and width of piers, etc. above and below MHWS and the maximum and minimum heights of the undersides of the superstructures above MHWS. The headroom above MHWS and the width of span of the nearest bridges, if any, above and below the site must be stated.

**Tunnels under tidal waters:** The longitudinal section of the tunnel must show the distances between the bed of the river or estuary and the top of the tunnels. Cross-sections must show the internal and external dimensions of the tunnel and particulars of construction. When a proposed future dredging level is known this must also be shown on all sections.

**Overhead cables:** Catenary must be supplied in addition to the site plan showing the minimum clearance of the cable at MHWS and the electrical clearance allowed.

(g) Indicate if the project is located within the jurisdiction of a statutory harbour authority and provide details of the statutory harbour authority where relevant.

(h) Provide a full method statement, including schedule of works and the ultimate fate of the structure.

(i) Provide assessment of the potential impacts the works may have, including interference with other uses of the sea. Please include details of areas of concern e.g designated conservation areas, such as a SAC, SPA, SSSI, MPA or Ramsar site and shellfish harvesting areas. Further guidance on designated conservation areas can be obtained from SNH at this website:

http://gateway.snh.gov.uk/sitelink/index.jsp and guidance on shellfish harvesting areas can be obtained from http://www.foodstandards.gov.scot/ with regards to the Shellfish Waters Directive (2006/113/EC) which has parameters set to protect the water quality in which edible shellfish are grown.

Applicants should also be aware of the need to pay due regard to coastal and marine archaeological matters and attention is drawn to Historic Scotland's Operational Policy Paper HP6, "Conserving the Underwater Heritage".

Any application for beach replenishment works must be cross checked as to whether the proposed site is a designated bathing water site. If so, all physical works should ideally be done outwith the Bathing Water Season (1st June to 15th September). Further guidance on the Bathing Waters Directive (2006/7/EC) can be obtained from http://apps.sepa.org.uk/bathingwaters/.

Where there are potential impacts from the works, please provide details of proposed mitigation, such as use of MMOs or PAM, in response to potential impacts.

## 6. Deposits and/or Removals

(a) Complete the table to indicate all permanent substances or objects to be deposited and/or removed from below MHWS. If you propose using types of substances or objects for which a specific box is not provided in the table, please describe the nature of such substances or objects in the box marked "other".

(b) Please indicate the method of delivery of any substance(s) or object(s) to be placed below MHWS.

(c) Where the proposed work involves salt marsh feeding, beach replenishment or land reclamation the description of the substances or objects must include details of its chemical quality. Where the substances or objects have not been chemically analysed, MS-LOT may request representative samples for analysis or require the applicant to arrange for analyses to be undertaken before the marine licence application can be determined.

(d) If temporary deposits are required, please provide details as with the permanent deposits above. The temporary deposit location details (Latitude and Longitude WGS84) must be added to the form, and the period of time the site will be used must be provided. If granting a licence, MS-LOT will include on the document details of any area that has been approved as a temporary deposit site.

## 7. Disposal of Dredged Substance(s) or Object(s) at Sea

(a) If you are proposing to dispose of any excess substance(s) or object(s) arising from the project at sea, a separate marine licence will be required (see Dredging and Sea Disposal application form). The granting of a marine licence for construction projects does not imply that a marine licence for sea disposal will also be granted as different assessment criteria are used to determine each type of application. If a separate application is being submitted for dredging and sea disposal then this must be accompanied with a BPEO report.

(b) Provide the quantity of dredged substance(s) or object(s) for sea disposal in wet tonnes.

## 8. Noise Monitoring

Under the Marine Strategy Regulations (2010), there is now a requirement to monitor loud, low to mid frequency (10Hz to 10kHz) impulsive noise. Activities where this type of noise is produced include seismic airguns, other geophysical surveys (<10kHz), pile driving, explosives and certain acoustic deterrent devices. Where noisy activity is being undertaken, you must complete an initial registration form for the noise registry which allows you to provide details on the proposed work. Completion of a 'close-out' form, which allows licensees to provide details of the actual dates and locations where the activities occurred, is also required within 12 weeks of the completion of the 'noisy' activity or, in the case of prolonged activities such as piling for harbour construction or wind farms, at quarterly intervals or after each phase of foundation installation.

These forms can be downloaded from:
http://www.scotland.gov.uk/Topics/marine/science/MSInteractive/Themes/noise-reduction

**Marine licence applications will not be accepted until this form has been completed and submitted.**

## 9. Statutory Consenting Powers

Please describe in the answer to this question what (if any) statutory responsibilities you (or your client) have to consent any aspect of the project.

## 10. Scotland's National Marine Plan

Scotland's National Marine Plan has been prepared in accordance with the EU Directive 2014/89/EU, which came into force in July 2014. The Directive introduces a framework for maritime spatial planning and aims to promote the sustainable development of marine areas and the sustainable use of marine resources. It also sets out a number of minimum requirements all of which have been addressed in this plan. In doing so, and in accordance with article 5(3) of the Directive, Marine Scotland have considered a wide range of sectoral uses and activities and have determined how these different objectives are reflected and weighted in the marine plan. Land-sea interactions have also been taken into account as part of the marine planning process. Any applicant for a marine licence should consider their proposals with reference to Scotland's National Marine Plan. A copy of Scotland's National Marine Plan can be found at: http://www.gov.scot/Publications/2015/03/6517/0

Indicate whether you have considered the project with reference to Scotland's National Marine Plan and provide details of considerations made with reference to the policies, including but not limited to General Policies 7 and 13 (GEN 7 and GEN 13), that have been considered. If you have not considered the project with reference to Scotland's National Marine Plan please provide an explanation.

## 11. Pre-Application Consultation

Certain activities will be subject to public pre-application consultation. Activities affected will be large projects with the potential for significant impacts on the environment, local communities and other legitimate uses of the sea. The new requirement will allow those local communities, environmental groups and other interested parties to comment on a proposed development in its early stages – before an application for a marine licence is submitted. Further information can be obtained from: http://www.scotland.gov.uk/Resource/0043/00439649.pdf

If applicable, please provide your pre-application consultation report with your application.

## 12. Consultation (other than carried out under pre-application consultation)

Provide details of all bodies consulted and give details of any consents issued including date of issue.

## 13. Environmental Assessment

(a) Under the Marine Works Environmental Impact Assessment (EIA) Regulations 2007, there may be a requirement for certain projects to undergo an EIA and produce an ES. If EIA is required, MS-LOT will not determine a marine licence application until the EIA consent decision in respect of the marine licence application has been reached. Please confirm if the project falls under Annex I or II of Directive 85/337/EEC: http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32011L0092&from=EN in relation to the Marine Works (EIA) Regulations 2007.

**Marine licence applications for proposals which fall under the regulations will not be accepted unless a screening opinion has been issued in relation to this.**

(b) Please indicate if an EIA has been undertaken and whether it was for the marine licence application to which this application relates or for any other EIA regulator (e.g local authority). Please attach any previous ES to the application.

**MS-LOT will not determine a marine licence application until the EIA consent decision in respect of any regulated activity associated with the marine licence application has been reached.**

## 14. Associated Works

Indicate whether the application is associated with any other marine projects (e.g. land reclamation, marine/harbour construction works, dredging and sea disposal etc). If this is the case, provide reference/licence number for the related marine projects.

# Marine Licence Application for Construction Projects

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## Marine (Scotland) Act 2010

**It is the responsibility of the applicant to obtain any other consents or authorisations that may be required.**

**Under Section 54 of the Marine (Scotland) Act 2010, all information contained within and provided in support of this application will be placed on a Public Register. There are no national security grounds for application information not going on the Register under the 2010 Act.**

**Public Register**

Do you consider that any of the information contained within or provided in support of this application should not be disclosed:

(a) for reasons of national security; YES ☐ NO ■

(b) for reasons of confidentiality of commercial or industrial information where such confidentiality is provided by law to protect a legitimate commercial interest? YES ☐ NO ■

If **YES**, to either (a) or (b), please provide full justification as to why all or part of the information you have provided should be withheld.

## WARNING

**It is an offence under the Act under which this application is made to fail to disclose information or to provide false or misleading information.**

**Target duration for determination is 14 weeks. Please note that missing or erroneous information in your application and complications resulting from consultation may result in the application being refused or delayed.**

**Marine licence applications will not be accepted unless accompanied by a cheque for the correct application fee, or if an invoice is requested, until that invoice is settled. Target timelines for determining applications do not begin until the application fee is paid.**

**Declaration**

I declare to the best of my knowledge and belief that the information given in this form and related papers is true.

[redacted]

**Application Check List**

**Please check that you provide all relevant information in support of your application, including but not limited to the following:**

- Completed and signed application form ☑
- Project Drawings ☑
- Maps/Charts ☑
- Co-ordinates of the boundary points of the area of harbour jurisdiction (if you are a statutory harbour authority) ☐
- Method Statement ☑
- Photographs of the location of the project ☑
- Additional information e.g. consultation correspondence (if applicable) ☑
- Noise Registry – Initial Registration Form (if applicable) ☑
- Pre-application Report (if applicable) ☑
- Environmental Statement (if applicable) ☐
- Payment (if paying by cheque) ☐

**1. Applicant Details**

Title: Mr Initials: W Surname: Burnish

Trading Title (if appropriate): The Moray Council

Address: PO Box 6760
Elgin
Moray, IV30 9BX

Name of contact (if different):

[redacted]

Email: Will.Burnish@moray.gov.uk

Statutory Harbour Authority? YES ☐ NO ■

If **YES**, please provide a list of the latitude and longitude co-ordinates (WGS84) of the boundary points of the area of harbour jurisdiction using Appendix 01 Additional Co-ordinates form if necessary.

**2. Agent Details (if any)**

Title: Mr Initials: L Surname: Jenkins

Trading Title (if appropriate): Beaver Bridges Limited

Address: 5 Knights Court, Archers Way,
Battlefield Enterprise Park,
Shrewsbury SY1 3GA

Name of contact (if different):

[redacted]

Email: luke@beaverbridges.co.uk

**3. Payment**

Enclosed Cheque ☐ Invoice ■

Contact and address to send invoice to:

Applicant ■ Agent ☐ Other ☐

If **OTHER**, please provide contact details:

Title: Initials: Surname:

Address:

Email:

**4. Application Type**

Is this application for a new construction site or an existing construction site:

New Site ☒ Existing Site ☐

If an **EXISTING SITE**, please provide the consent/licence number and expiry date:

| **Consent/Licence Number** | **Expiry Date** |
|---|---|
| | |

**5. Project Details**

(a) Brief description of the project (e.g. construction of a new sea outfall):

Erection of a new footbridge over the River Lossie between the Esplanade and East Beach to replace the existing footbridge between Seatown and East Beach. See appendix A for further details and appendix G for the general arrangement drawing.

(b) Total area of the proposed works (in square metres):

204 $m^2$

(c) Proposed start date **(Target duration for determination of a marine licence application is 14 weeks):**

January 2022

(d) Proposed completion date:

July 2022

(e) Cost of the works seawards of the tidal limit of MHWS:

£500,000

(f) Location:

The proposed bridge is located at the projection of the esplanade off Clifton Road, opposite 17c Clifton Road, IV31 6DJ

Latitude and Longitude co-ordinates (WGS84) defining the extent of the project (continue on Appendix 01 Additional Co-ordinates form if necessary):

| **Latitude** | | | | | | | | | | | **Longitude** | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5 | 7 | ° | 4 | 3 | . | 8 | .2 | 3 | ' N | | | | 3 | ° | 1 | 6 | . | 5 | 5 | .1 | ' W |
| 5 | 7 | ° | 4 | 3 | . | 8 | .3 | 2 | ' N | | | | 3 | ° | 1 | 6 | . | 5 | 4 | .9 | ' W |
| 5 | 7 | ° | 4 | 3 | . | 7 | .1 | 7 | ' N | | | | 3 | ° | 1 | 6 | . | 5 | 2 | .3 | ' W |
| 5 | 7 | ° | 4 | 3 | . | 7 | .1 | 1 | ' N | | | | 3 | ° | 1 | 6 | . | 5 | 2 | .5 | ' W |
| | | ° | | | . | | | | ' N | | | | | ° | | | . | | | | ' W |
| | | ° | | | . | | | | ' N | | | | | ° | | | . | | | | ' W |
| | | ° | | | . | | | | ' N | | | | | ° | | | . | | | | ' W |
| | | ° | | | . | | | | ' N | | | | | ° | | | . | | | | ' W |
| | | ° | | | . | | | | ' N | | | | | ° | | | . | | | | ' W |
| | | ° | | | . | | | | ' N | | | | | ° | | | . | | | | ' W |

(g) Is the project located within the jurisdiction of a statutory harbour authority?

YES ☐ NO ■

If **YES**, please specify statutory harbour authority:

(h) Method statement including schedule of work (continue on separate sheet if necessary):

See appendix A

(i) Potential impacts the works may have (including details of areas of concern e.g designated conservation and shellfish harvesting areas) and proposed mitigation in response to potential impacts (continue on separate sheet if necessary):

See appendix A

## 6. Deposits and/or Removals

(a) **Permanent** substance(s) or object(s) to be deposited and/or removed from below MHWS (continue on a separate sheet if necessary):

| | Deposits | | Removals | |
|---|---|---|---|---|
| **Type of Deposit/Removal** | Description | Quantity & Dimensions (metric) | Description | Quantity & Dimensions (metric) |
| Steel/Iron | Bridge Superstructure and pile casings | Multiple No.<br>Dimensions Various<br>75 Weight (~~kg~~/tonnes) | | No.<br>Dimensions<br>Weight (kg/tonnes) |
| Timber | | No.<br>Dimensions<br>Weight (kg/tonnes) | | No.<br>Dimensions<br>Weight (kg/tonnes) |
| Concrete | Reinforced concrete pile infill | Multiple No.<br>Dimensions Various<br>50 Weight (~~kg~~/tonnes) | | No.<br>Dimensions<br>Weight (kg/tonnes) |
| Plastic/Synthetic | FRP Deck Boards | 200 $m^2$ | | $m^2$ |
| Clay (< 0.004 mm) | | Volume ($m^3$)<br>Weight (kg/tonnes) | | Volume ($m^3$)<br>Weight (kg/tonnes) |
| Silt (0.004 ≤ Silt < 0.063 mm) | | Volume ($m^3$)<br>Weight (kg/tonnes) | | Volume ($m^3$)<br>Weight (kg/tonnes) |
| Sand (0.063 ≤ Sand < 2.0 mm) | | Volume ($m^3$)<br>Weight (kg/tonnes) | Drilling of piles within MHWS and excavation for southeast abutment | 50 Volume ($m^3$)<br>Weight (kg/tonnes) |
| Gravel (2.00 ≤ Gravel < 64.0 mm) | | Volume ($m^3$)<br>Weight (kg/tonnes) | | Volume ($m^3$)<br>Weight (kg/tonnes) |
| Cobbles (64.0 ≤ Cobbles < 256.0 mm) | | Volume ($m^3$)<br>Weight (kg/tonnes) | | Volume ($m^3$)<br>Weight (kg/tonnes) |
| Boulders (≥ 256.0 mm) | Rock revetment | 150 Volume ($m^3$)<br>Weight (kg/tonnes) | | Volume ($m^3$)<br>Weight (kg/tonnes) |

| Pipe | | Length (m)<br>External Diameter (cm/m) | | Length (m)<br>External Diameter (cm/m) |
|---|---|---|---|---|
| Other (please describe below): | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

(b) Method of delivery of substance(s) or object(s):

All materials will be transported to the site compound via road. Movement of materials within the water will be facilitated by the use of barge and pontoons with all relevant environmental precautions observed.

(c) For work involving salt marsh feeding, beach replenishment or land reclamation please provide the following information relating to the substance(s) or object(s) to be deposited:

Quantity (tonnes):

N/A tonnes

Nature of substance(s) or object(s) (e.g. sand, silt, gravel etc.):

Source (if sea dredged state location of origin)

Particle size:

**Have the substance(s) or object(s) been chemically analysed?** **YES** ☐ **NO** ☐
**If YES, please include the analysis data with your application**

(d) **Temporary** substance(s) or object(s) to be deposited below MHWS (continue on a separate sheet if necessary):

| **Type of Deposit** | **Description** | **Quantity & Dimensions** (metric) |
|---|---|---|
| Steel/Iron | Temporary sheet piling for construction of south abutment | No. |
| | | 25 linear metres Dimensions |
| | | Weight (kg/tonnes) |
| Timber | | No. |
| | | Dimensions |
| | | Weight (kg/tonnes) |

| | | |
|---|---|---|
| Concrete | | No. |
| | | Dimensions |
| | | Weight (kg/tonnes) |
| Plastic/Synthetic | | $m^2$ |
| Clay (< 0.004 mm) | | Volume ($m^3$) |
| | | Weight (kg/tonnes) |
| Silt (0.004 ≤ Silt < 0.063 mm) | | Volume ($m^3$) |
| | | Weight (kg/tonnes) |
| Sand (0.063 ≤ Sand < 2.0 mm) | | Volume ($m^3$) |
| | | Weight (kg/tonnes) |
| Gravel (2.00 ≤ Gravel < 64.0 mm) | | Volume ($m^3$) |
| | | Weight (kg/tonnes) |
| Cobbles (64.0 ≤ Cobbles < 256.0 mm) | | Volume ($m^3$) |
| | | Weight (kg/tonnes) |
| Boulders (≥ 256.0 mm) | | Volume ($m^3$) |
| | | Weight (kg/tonnes) |
| Pipe | | Length (m) |
| | | External Diameter (cm/m) |
| Other (please describe below): | | |
| | | |
| | | |
| | | |
| | | |

**7. Disposal of Dredged Substance(s) or Object(s) at Sea**

(a) Do you intend to apply for a marine licence for sea disposal of dredged substance(s) or object(s) as part of the project? YES ☐ NO ■

If **YES**, please specify nature of substance(s) or object(s) (e.g sand, gravel, silt, clay, rock etc.):

(b) Quantity of substance(s) or object(s) (wet tonnes):

wet tonnes

**A separate marine licence application will be required to be submitted for sea disposal.**

## 8. Noise Monitoring

Will loud, low to mid frequency (10Hz to 10kHz) impulsive noise be produced by the project? YES ■ NO ☐

If **YES**, which please indicate the noise generating activities and sound frequencies:

| Noise Generating Activity | Sound Frequency (Hertz) |
|---|---|
| Use of Explosives | NA |
| Use of Accoustic Deterrent Devices | NA |
| Piling | 20-40 Hz |
| Other (please describe below): | |
| | |
| | |

If you have ticked **YES**, please complete the Noise Registry – Initial Registration form located at: http://www.scotland.gov.uk/Topics/marine/science/MSInteractive/Themes/noise-reduction

**Marine licence applications will not be accepted until this form has been completed and submitted.**

## 9. Statutory Consenting Powers

Do you, or (if appropriate) your client, have statutory powers to consent any aspect of this project?

The Moray Council is a local government council and hence has the statutory power to consent on a number of aspects. Persons within the council who are to be responsible for granting or recommending consent have not been directly involved with the project to avoid any potential bias.

## 10. Scotland's National Marine Plan

Have you considered the application with reference to Scotland's National Marine Plan? YES ■ NO ☐

If **YES**, provide details of considerations made with reference to the policies, including but not limited to General Policies 7 and 13 (GEN 7 and GEN 13), that have been considered:

See appendix A

If **NO**, please provide an explanation of why you haven't considered the National Marine Plan?

## 11. Pre-Application Consultation

Is the application subject to pre-application consultation, under The Marine Licensing (Pre-application Consultation) (Scotland) Regulations 2013? YES ■ NO ☐

If **YES,** please indicate the date of the public notice for the pre-application consultation event and the type of consultation event held (a copy of the public notice must be supplied with this application):

| Event Type | Date |
|---|---|
| Public Notice<br>Virtual Public Consultation (Covid 19)<br>See appendix H for PAC report inc. copy of notice and event material. | 30th July 2021<br>6th - 7th September 2021 |

## 12. Consultation

List all bodies you have consulted and provide copies of correspondence:

See appendix A

## 13. Environmental Assessment

(a) Does the project fall under Annex I or II of the EIA Directive?

Annex I ☐ Annex II ☐ Neither ■

If **ANNEX I or ANNEX II**, please provide the screening opinion issued to you in relation to the project.

(b) Has an EIA been undertaken:

for the marine licence application to which this application relates YES ☐ NO ■
for any other EIA regulator (e.g local authority) YES ☐ NO ■

## 14. Associated Works

Provide details of other related marine projects, including reference/licence numbers (if applicable):

# Appendix A – Continuation from standard license form

## 5. Project Details

### (a) Brief description of the project

The proposed structure is intended to reinstate pedestrian access to Lossiemouth East Beach following the 2019 closure of the existing footbridge due to structural safety concerns.

The existing bridge was constructed in circa 1918 at its current position (grid ref. NJ 23775 70453) and has been in operation up until its closure in 2019. The bridge is a multi-span steel through truss, supported on timber piled piers. The deck consists of timber planks spanning the narrow width of the bridge and the parapet is of simple mesh infill. Between 1913 and 1915 access to the beach was served by a bridge located at the projection of the Esplanade. This bridge was subsequently relocated to its current position, and it is believed to contain elements of the 1913 structure as can be evidenced by comparison of historic photography. There are plans to demolish the existing structure, but this will be covered under a separate submission.

The proposed bridge is to project from an increased level at the Esplanade in a similar position to the historic 1913 structure, crossing over to the beach in 4 spans totaling 75m in length. The approach spans would rise at 1 in 20 to meet an arched span over the main river channel, clearing the proposed flood soffit heigh of 4.15mAOD. The bridge deck will have a minimum clear width of 3.5m to accommodate a multitude of users. The parapet will be 1.4m high to offer an increased sense of security over the water. A handrail will not be provided as the proposed gradients do not warrant the inclusion.

In accordance with the Design Manual for Roads and Bridges document CD350 the design working life of the proposed bridge will be 120 years.

The superstructure will consist of continuous span steel beams/plate girders, braced together in plan with a Fibre Reinforced Plastic decking system above forming the walkway surface.

The superstructure will be supported on piled reinforced concrete abutments with integral approach ramps. Intermediate support will be provided by piled piers with integral crossheads.

All steel superstructure elements will be coated in a Fluoropolymer Type II (Marine difficult access) approved paint system to the Specification for Highway Works Series 1900. Topcoat colour is to be confirmed. Steel piers within the water will not be coated, instead they will be designed with a sacrificial corrosion thickness.

As of 4th August 2021, Moray Council has awarded the project a grant of planning permission (application ref: 21/00809/APP). See appendix I for Decision Notice.

Extent of proposed structure within Mean Water High Springs:

| | | |
|---|---|---|
| 323729.973E, 870631.034N | 57° 43' 8.237"N | 3° 16' 55.133"W |
| 323732.522E, 870633.723N | 57° 43' 8.326"N | 3° 16' 54.982"W |
| 323774.939E, 870597.167N | 57° 43' 7.170"N | 3° 16' 52.378"W |
| 323771.247E, 870595.464N | 57° 43' 7.113"N | 3° 16' 52.599"W |

**(h) Method statement including schedule of work:**

- Clear and level existing Esplanade public space and fence off to create a works/laydown area. Place additional barriers a suitable distance away from the sea wall to prevent it being subject to construction load surcharge. Install environmental barriers where appropriate. Construct crane pad.
- Drive steel tubular piles for the northwest (Esplanade) abutment utilising a Movax type hammer rig.
- Locally reconstruct sea wall in front of the northeast abutment to create revetment.
- Mobilise piling rig onto the beach utilising a barge to transport. Drive sheet piles to extents of abutment to form a coffer dam. Drive piles for southeast (beach) abutment.
- Pile foundations within water from a pontoon, firstly driving the column/casing to refusal then continuing with a rotary rig to form a socket into the rock. Piles to be concrete filled upon completion of drilling.
- Both abutments to be cast in-situ. Concrete for the southeast abutment is to be transported from the Esplanade wall by concrete hopper on a barge. Pre-cast elements to be investigated to reduce amount of wet concrete works.
- Place rock revetment around the southeast abutment utilising excavator within the water.
- Mobilise circa 1000 tonne crane and rig within works area on preconstructed crane pad.
- Lift in and fix prefabricated cross heads to intermediate piers.
- Deliver completed bridge to site in 4 number sections, lift into position and splice together main beams.
- Demobilise crane.
- Complete finishes and tying in works to the public realm.
- Open bridge.

**(i) Potential impacts the works may have and proposed mitigation in response to potential impacts:**

As identified in the Preliminary Ecological Appraisal, the Moray Firth is home to a population of bottlenose dolphins and also to harbour porpoises (Phocoena phocoena). Marine mammals can be disturbed by the underwater sounds created by pile driving; therefore, a risk assessment will be completed, taking into account the timing, location and extent of pile driving required. Any proposed mitigation measures noted in the risk assessment will be strictly adhered to.

The seas around Lossiemouth form part of the following protected areas:
• Moray Firth Special Area of Conservation (SAC)
• Moray Firth Special Protection Area (SPA)

Following consultation with NatureScot it is noted that no qualifying interest of the SAC or SPA will be affected either directly or indirectly and so an appropriate assessment is therefore not required.

The proposed works are in an area which has significant human disturbance. The dune and saltmarsh grasslands are an important habitat, and damage to these areas will be kept to a minimum. A range of bird species use the area but are relatively unlikely to nest close to the bridge. However, any disturbance of breeding will be avoided by either timing the works out of the breeding season or checking the ground prior to commencing work.

Following consultation with Aberdeenshire Council Archaeology Service, it is noted the project lies within and affects the archaeology site NJ27SW0011. An archaeological Written Scheme of Investigation (WSI) has been produced and will be strictly adhered to.

## 10. Scotland's National Marine Plan

### GEN 2 – Economic Benefit

The town of Lossiemouth is a popular destination for tourist and day trippers throughout the year but particularly in the spring and summer months. The town's East Beach is one of the main features that attracts visitors to the town. A significant percentage of the local economy is dependent on trade from tourism, which to a large extent is influenced by access to East Beach.

Since the closure of the footbridge to East Beach in 2019 a number of businesses in Lossiemouth have experienced a negative impact on trade. An economic impact assessment has found that visitor spend in Lossiemouth is increased by £1,500,000 per annum with a bridge connecting the town to East Beach. This level of increased spend would equate to an additional 30 Full-Time Equivalent jobs. The bridge would also encourage investment in existing businesses and sporting activities.

The difference in annual visitor spend at £1,500,000 in an average year between constructing a new bridge and not having bridge access to the East Beach is considered very good value for money. After 5 years, for example, additional visitor spend in Lossiemouth totaling at least £7,500,000 compares favorably with the approximate whole life cost of the bridge at £1,540,000.

The closure of the bridge and the effect it has had on the town's businesses and economy in general has been assessed in an Economic Impact Assessment. Full details of the Economic Impact Assessment are provided in appendix B.

### GEN 3 – Social Benefit

The existing bridge was constructed in circa 1918 serving as the only direct pedestrian access to East Beach from the town of Lossiemouth. It was operation up until its closure in 2019 and since then access to East Beach has been severely restricted.

Without access to the East Beach, many local residents, particularly those living in close proximity to the beach, have lost a part of their daily life and routine through loss of access to activities which improve health and wellbeing. These include but are not limited to, walking and running along the beach, dog walking, water sports, and wildlife spotting.

The proposed bridge is to be compliant with current equalities requirements with the view to increase accessibility of the beach for all. The proposed bridge deck is also considerably wider than existing, allowing a multitude of users to cross and interact without conflict.

### GEN 4 – Co-existence

The proposed bridge replaces an existing structure hence the current regime in relation to local integration remains mostly unchanged. The relocation of the bridge to the Esplanade area will allow better integration with local amenities. Minor local infrastructure works are proposed to improve local connectivity and alleviate any potential pedestrian traffic conflict. A Transport and Pedestrian Assessment has been conducted to inform these proposals, this can be found in appendix C.

**GEN 5 – Climate Change**

A Flood Risk Assessment (appendix D) has been completed to inform the design of the proposed footbridge. The FRA provides a maximum flood level of 4.24m Above Ordnance Datum (mAOD) which is attributed to the '200-year Return Period tidal/storm Still Water Level plus climate uplift' flood condition, see figure 1 for extents. The advice within the report is that the soffit of the bridge should be above this level plus the SEPA recommended freeboard of 600mm, this equates to a clear height of 4.84mAOD. To position the soffit above this level would require the use of long approach ramps to maintain accessibility, increasing cost and the overall footprint of the bridge. In addition, this specific event would flood the whole low level lying area of Lossiemouth, hence the structure would be an insignificant factor overall, and is highly unlikely to hinder any receding flow. For robustness, the bridge and its supports will be designed to resist this event, but for the purpose of clearance to the soffit of the main river channel, it is proposed to adopt a more pragmatic approach. The '200-year Return Period fluvial plus 37% climate change plus High Astronomical Tide plus climate change' flood condition will be proposed in this instance as the 2nd highest but more likely flood event. This gives a level of 3.55mAOD as a worst case at the existing location, and with a 600mm freeboard gives a soffit clearance of 4.15mAOD. For reference, the soffit of height of the existing bridge over the main channel is approximately 4.00mAOD. This approach has been agreed with The Moray Council Flood Risk Management team and they are content that the proposed bridge will not increase flood risk to the surrounding area.

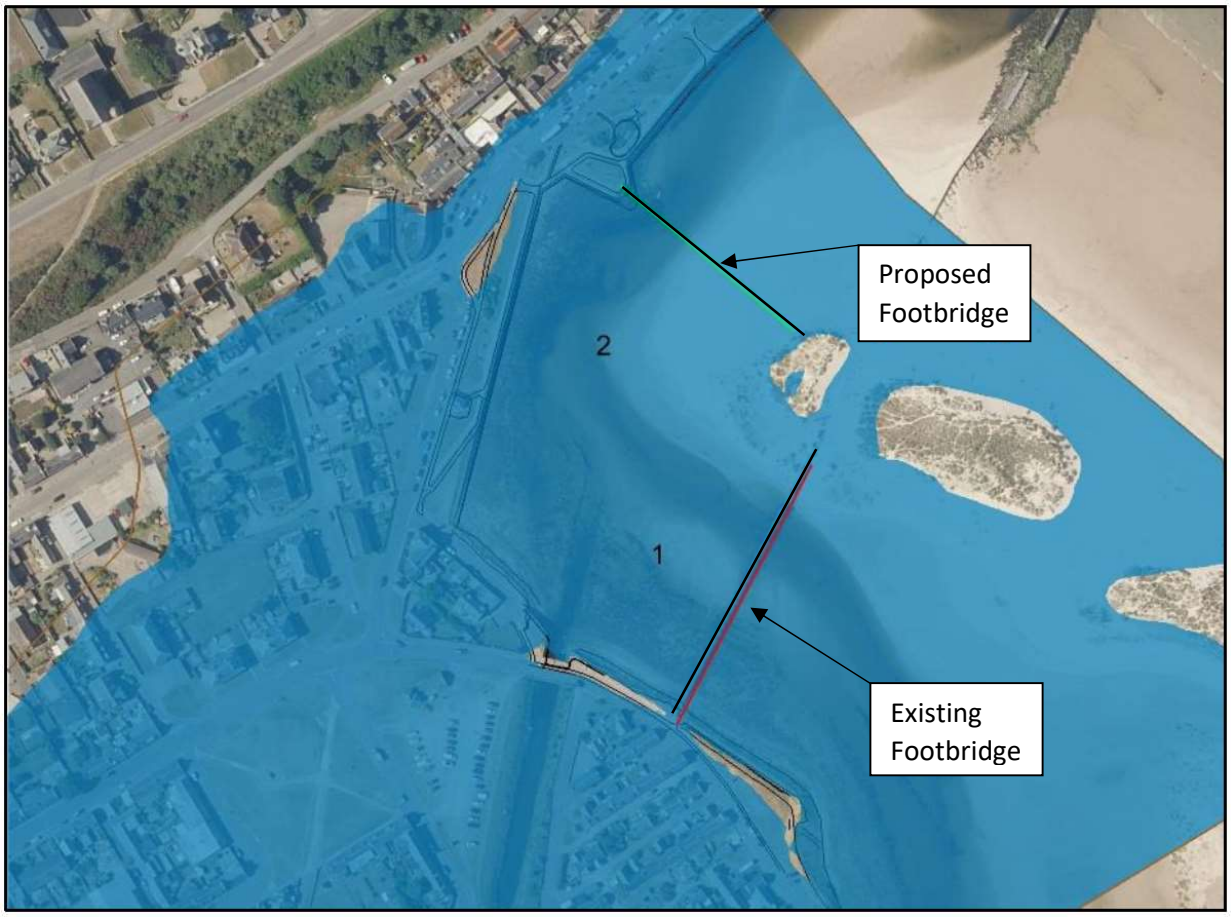



Figure 1 - 200-year Return Period tidal/storm Still Water Level plus climate uplift' flood condition (4.24mAOD)

**GEN 6 – Historic Environment**

Consultation of PastMAP reveals the area local to the scheme has a Historic Environment Record reference NJ27SW0011, relating to Lossiemouth Old Harbour. There are also Canmore records relating to the Promenade, Quay, existing footbridge, and a maritime listing documenting shipwrecks. There are several listed buildings in the locality including the masonry bridge crossing the outfall of the Spynie Canal.

Lossiemouth is not a Conservation Area and the coastal waters where the works will take place is not a Historic Marine Protected Area.

Aberdeenshire Council Archaeology Service have noted the above Historic Environment Record and have requested that a Written Scheme of Investigation (WSI) is produced. This has been actioned and issued.

**GEN 7 – Landscape/Seascape**

The proposed bridge has been designed to be as unobtrusive as possible on the existing landscape. The Moray Council have been consulted throughout concept and design stage to ensure the proposal fits within the local development plan.

**GEN 8 - Coastal process and flooding**

This has been covered under the GEN 5 heading. Addition information can be found within the appended FRA.

**GEN 9 – Natural Heritage**

A Preliminary Ecological Appraisal (PEA) survey has been conducted and can be found in appendix E. The report concludes as follows:

The proposed works are in an area which has significant human disturbance. The dune and saltmarsh grasslands are an important habitat, and damage to these areas should be kept to a minimum. A range of bird species use the area but are relatively unlikely to nest close to the bridge. However, any disturbance of breeding should be avoided by either timing the works out with the breeding season or checking the ground prior to commencing work.

Constraints culminating from the PEA:

- Efforts should be made to limit the footprint of the proposed footbridge works within the saltmarsh and dune habitats.
- To avoid disturbance to traveling Otter, works local to the river should not take place during the hours of darkness.
- Any works that could cause entrapment (trenches, pipes etc.) should be covered or have an allowance for escape.
- Construction should avoid the main bird breeding season (Feb – July). However, if this is not possible, the site should be checked for the presence of nesting birds before works commence.
- If piling is to be conducted a risk assessment should be undertaken to understand the potential disturbance to fish and marine mammals.

- During construction, work should stop if seals come close to the site or start to use it to haul out. Work should only resume once the seal has left the area, to avoid any risk of accidental injury.

A Habitats Regulations Appraisal (HRA) should be conducted for any projects which affect Natura sites, such as Special Areas of Conservation (SAC), or Special Protection Areas (SPA). The project is not within a Natura site but is local to both the Moray Firth SAC and SPA. The Moray Firth SAC is designated for its subtidal sandbanks and bottlenose dolphins and the SPA for its bird species hence it is unlikely that a link can be formed between the proposal and those specific features. Therefore, it is assumed a HRA is not required but this could change should a piling assessment show there is potential for disturbing any dolphins in the area.

To summarise, the environmental constraints do not appear overly onerous particularly because of historic human presence within the area.

**GEN 10 – Invasive non-native species.**

Invasive non-native species have not been noted within the construction area and it is not the intention to introduce any.

**GEN 11 – Marine Litter**

As the proposed bridge replaces an existing structure the potential for additional littering should not increase. Litter bins are already present on the esplanade and the public will be encouraged to use these rather than situating any on the beach.

**GEN 12 – Water Quality and Resource**

Construction will be planned to mitigate any potential water contamination. Materials used to construct the bridge and protect it will not impact on the quality of the waters.

**GEN 13 – Noise**

As the bridge replaces an existing structure noise levels through public use should not increase beyond current levels. Construction noise levels will be monitored as not to cause nuisance to the local population or disturb species sensitive to noise and vibration. Particular attention will be payed to the piling processes to ensure levels are maintained within acceptable limits.

**GEN 14 - Air Quality**

Air quality shall not be affected by the project.

**GEN 15 – Planning Alignment A**

Lossiemouth falls within the Moray Firth marine region and currently does not have a Regional Marine Plan. At present it appears that a precursor to the Regional Marine Plan is adopted, the Highland Coastal Development Strategy produced by The Highland Council. This document does not make any reference to Lossiemouth, but similar tourist coastal towns are mentioned. The proposed bridge appears to align with the current local marine strategy by maintaining and improving tourism and recreation facilities, whilst not creating additional conflict between visitors and the natural heritage.

The proposed footbridge scheme has been assessed against and is supported by the local development plan as implemented by The Moray Council. Confirmation of this support can be seen in the consultation response in appendix F.

**GEN 16 – Planning Alignment B**

All relevant statutory and non-statutory plans are to be adhered to. Applicable parties have been consulted through the local planning process with recommendations actioned accordingly.

**GEN 17 – Fairness**

It is considered that this application treats all interested parties with equal fairness.

**GEN 18 – Engagement**

There has been and will continue to be consultation with all interested parties including constant engagement with the local community.

**GEN 19 – Sound Evidence**

All design and studies have been conducted with reference to the latest standard and verified guidance.

**GEN 20 – Adaptive Management**

The Moray Council who are to be the owners of the proposed bridge regularly review and update their development plans to ensure compliance with the latest requirements. The bridge itself will be a substantial static element, so any proposed material amendment due differing future demands would be difficult and costly to implement. To account for this the bridge will be delivered with a design life of 120 years, accounting for predicted change over the prescribed period in accordance with current design standards and guidance.

**GEN 21 – Cumulative Impacts**

The proposed footbridge is replacing an existing structure hence it is highly unlikely that the marine environment will see any additional impact. On the contrary, the proposal has less of a footprint within the Marine area being nearly 40% shorter and with considerably less supports positioned within the water.

## 11. Pre-Application Consultation

The proposed footbridge exceeds 50 metres in length MS-LOT hence are of the opinion that the marine activity requires Pre-Application Consultation (PAC). The PAC was conducted in line with the Marine Licensing (Pre-application Consultation) (Scotland) Regulations 2013 amended by The Marine Works and Marine Licensing (Miscellaneous Temporary Modifications) (Coronavirus) (Scotland) Regulations 2020 and the Marine (Scotland) Act 2010.

The PAC Report and corresponding notification can be found in appendix H.

Note: A PAC was not formally required as part of the planning application to the local authority (The Moray Council). Notwithstanding this, a virtual consultation event was held on 1st March 2021 to inform the local community of the proposals prior to submission of the planning application. The event was advertised in the local press and through social media and as a result uptake was high, with 9545 attendances. Attendees of the virtual event were encouraged to provide feedback and 394 people did so, this can be found in appendix F.

## 12. Consultation

The project has been subject to an application for planning permission under the Town & Country Planning (Scotland) Act 1997, as amended and hence has undergone rigorous consultation with all relevant bodies.

A list of all consultees can be seen in the following tables:

| **Departments of The Moray Council as statutory consultees:** | **Consultation Appended?** |
|---|---|
| Transportations Manager | Yes |
| Flood Risk Management | Yes |
| Strategic Planning and Development | Yes |
| Moray Access Manager | Yes |
| Environmental Health | Yes |
| Contaminated Land | Yes |
| Aberdeenshire Archaeology Service | Yes |
| Lossiemouth Community Council | No – Not received; regular communication has been made through the local steering group with support throughout. |

| **Other Consultees:** | **Consultation Appended?** |
|---|---|
| SEPA | Yes |
| Marine Scotland | Yes |
| NatureScot | Yes |
| Maritime and Coastguard Agency | Yes |
| Crown Estate Scotland | No – Not received; communications made regards licensing etc. |
| Northern Lighthouse Board | Yes |
| The Findhorn, Nairn and Lossie Fisheries Trust | No – Not received. |
| Initial Public Consultation prior to planning application (Virtual Event) | Yes |

Consultation correspondence can be found in appendix F.

# Appendix B – Economic Impact Assessment

2021

# Lossiemouth East Beach Footbridge Business Case Replacement

LOSSIEMOUTH EAST BEACH FOOTBRIDGE REPLACEMENT

BUSINESS CASE

# Lossiemouth East Beach Footbridge

## Document Control

# Contents

# Executive Summary

The loss of the footbridge connecting Lossiemouth to East Beach has had a negative impact on the town and it is anticipated that if the bridge is not replaced the significance of this impact will increase over time.

The replacement of the bridge provides a strategic fit both locally and nationally, which is demonstrated in Section 3 of this report.

An Option Appraisal has been undertaken to identify the best value option, which is the shortest crossing located at the Esplanade. The total capital cost of the preferred option is **£1,375,000** and the whole life cost is **£1,540,00**0.

A robust procurement process has been followed in line with national procurement guidelines, which is demonstrated in Section 5 of this report.

An Economic Impact Assessment has been undertaken, which demonstrates the value of replacing the bridge in both economic terms and potential employment opportunities. The estimated visitor spend associated with having a crossing from the town to the beach is **£1,500,000** which equates to **30 FTE jobs**. This demonstrates excellent value for money as even after a short period of 5 years, additional visitor spend in Lossiemouth totalling **£7,500,000** is significantly more than the whole life cost of the bridge at **£1,540,000**.

The design and build of the replacement bridge will be managed by Moray Council under the NEC3 Design and Build Contract. A risk register has been developed and the risks quantified. The risk allowance estimated for this project is **£365,000**. Once construction is complete and the bridge is fully operational Moray Council will take ownership of the bridge and be responsible for all future maintenance.

Community engagement events have been undertaken throughout the development of this project. A Steering Group has been set up with community representatives and the project team to ensure community expectations are taken into consideration and to facilitate communication with the wider community.

To progress to the second stage of this project, design and build of the bridge, grant funding of **£1,800,000** is required. This cost includes the capital cost of £1,375,000, risk £365,000 and site supervision £60,000**.**

# 1 Introduction

This report provides details of the business case developed to support the replacement crossing from the town of Lossiemouth to East Beach. The business case has been developed by Moray Council on behalf of the Lossiemouth community and is informed by an Option Appraisal and Economic Impact Assessment funded by the Lossiemouth Community Development Trust, Highlands and Islands Enterprise and Scottish Government.

# 2 Background

The original bridge linking the town of Lossiemouth to East Beach was constructed by the Railhead in 1906 by Lossiemouth Town Council. In 1918 the bridge was relocated to its current position by the Old Harbour Commission, to make it easier for boats to come in and out of the old harbour. The Lossiemouth Old Harbour Commission ceased to exist when the harbour closed, at which point the bridge became ownerless. This was confirmed in 2016 by the "Queens And Lord Treasurers Remembrance" Crown.

In August 2019 a central span of the bridge failed. The bridge was then classed as a dangerous structure and closed by Moray Council under Section 29 of The Building (Scotland) Act 2003. Since this time there has been no direct crossing from the town to East Beach.

In September 2019 The Scottish Government's Culture Secretary committed to funding the work required to reinstate a crossing to the beach.

In December 2019, Moray Council agreed to manage the design and build of the replacement bridge and take ownership of the bridge once completed.

In September 2020, Moray Council awarded the contract to replace the bridge on a Design and Build basis to Beaver Bridges. This contract has been split into two stages, Stage 1 is the development of an Option Appraisal and Economic Impact Assessment, which will inform the Business Case required by Scottish Government to secure funding. Stage 2 is the detailed design and construction of the replacement bridge.

# 3 Strategic Case

## 3.1 Business as Usual

The footbridge from the town of Lossiemouth to East Beach was closed in August 2019. Business as usual is considered the current situation, which is no direct access from the town to East Beach.

The impact of not having access to the bridge has been assessed in an Economic Impact Assessment (refer Appendix A). This assessment estimates that the difference in visitor spend, without direct access to the beach, would be £1,500,000 each year. Based on this spend it is estimated that at least 30 FTE jobs could be lost if the bridge is not replaced.

A survey undertaken as part of the Economic Impact Assessment indicates that 72% of the local businesses that responded have experienced a loss in trade since the closure of the bridge. The survey also indicates that the closer a business is to the existing East Beach bridge, the greater their anticipated risk should there be no replacement bridge. 19 of the 21 businesses within 5 minutes' walk of the bridge expected risk of closure, reduction in staffing, and/or reduction in opening hours or season.

Without access to the east beach, many local residents, particularly those living in close proximity to the beach, have lost a part of their daily life and routine and access to activities which improve health and wellbeing, including: walking or running along the beach, dog walking, water sports, wildlife, and birdwatching from the beach and dunes.

## 3.2 Moray Local Development Plan – Moray Council

The Local Development Plan 2020 vision is for Moray to be a place where people want to live, work, and invest because of the outstanding quality of life and environment. Easy, safe and inclusive access to Moray's landscape and environment and supporting tourism are key aspects of the placemaking approach taken within the Local Development Plan. A replacement bridge at Lossiemouth East Beach would improve access, which would support healthier lifestyles and support mental wellbeing by providing a place to relax and unwind. Tourism is identified as a target sector in the Moray Economic Strategy with LDP 2020 policy PP2 supporting sustainable economic growth and policy DP8 Tourism Facilities and Accommodation specifically supporting proposals that contribute to Moray's tourism. Much of Moray's attraction is its environment with scenery and outdoor activities being key features. The replacement bridge is likely to increase footfall at the Esplanade, which will have positive benefits for local shops, cafes, restaurants and other tourist facilities.

The LDP policies support proposals that are well designed, support good physical and mental health, improve wellbeing and support sustainable economic development, whilst ensuring that the environment is safeguarded (PP1 Placemaking). The preferred option for the replacement bridge is located within the ENV1 Old Station Park and Promenade designation. Policy EP5 Open Space would not support proposals that change the use of the ENV to anything other than open space. The proposed replacement bridge will enhance the function of the ENV as an open space and provide opportunities to improve the quality and accessibility of the wider open space.

## 3.3 Moray Council 10 Year Plan – Local Outcomes Improvement Plan

The reinstatement of a crossing from Lossiemouth to East Beach is consistent with the Moray Council Local Outcome Improvement Plan Priorities listed below.

1. “Building a better future for our children and young people in Moray” – access to the beach would improve the mental and physical wellbeing of children helping them to get the healthiest start in life.
2. “Growing, diverse and sustainable economy” – replacing the bridge will reduce the risk of business closures with associated job losses. Increased confidence through sustainable visitor numbers to the town would encourage expansion of existing businesses as well as new start-up businesses, such as the proposed surf therapy centre identified in the Economic Impact Assessment.

## 3.4 Scottish Tourism Strategy – Scotland Outlook 2030

The benefits that could be achieved by reinstating the bridge at Lossiemouth are consistent with the key priorities set out in the Scotland Outlook 2030.

1. “Our Passionate People” – There is strong community support for the replacement of the bridge to East Beach, along with a desire to undertake complementary projects in the future that will improve facilities in the town for both locals and visitors. The community’s commitment to replacing the bridge is evident from the funding provided to develop an Options Appraisal and Economic Impact Assessment to demonstrate the value of a replacement bridge. Community representatives also sit on a Steering Group with Moray Council to advise on local public opinion and expectations and communicate progress of this project to the wider community.
2. “Our Thriving Places” – replacement of the bridge will result in increased visitor numbers and an estimated increase in visitor spend of £1,500,000. Local businesses have also indicated that they are likely to expand if the increase in visitor numbers can be sustained, which is likely if the bridge is replaced.
3. “Our Diverse Businesses” – In addition to the potential expansion of existing businesses, the replacement bridge is likely to encourage new start-up businesses, such as the proposed surf therapy centre.
4. “Our Memorable Experiences” – this very popular holiday destination relies on access to the beach as part of the holiday experience that brings visitors back to this location every year. With a DDA compliant bridge, activities and memorable experiences on the East Beach will be accessible for people of all ages and abilities.

## 3.5 National Performance Framework – National Outcomes

The reinstatement of the bridge connecting Lossiemouth to East Beach would contribute to achieving the national outcomes listed below.

1. Value, enjoy and enhance their environment.
2. Have thriving and innovative businesses, with quality jobs and fair work for everyone.
3. Are healthy and active.

## 3.6 Conclusion

Not having direct access from the town to East Beach, i.e. Business as Usual, would have a negative impact on the local economy and the wellbeing of local residents. The replacement of the bridge provides a strategic fit both locally and nationally.

# 4 Economic Case

An Option Appraisal to establish the best value option for reinstating the bridge was commissioned by Moray Council in September 2020. This work was joint funded by the Lossiemouth Community Development Trust, Highlands and Islands Enterprise and Scottish Government. The appraisal assessed five options including "Do nothing" and "Do minimum". Full details of the Option Appraisal are provided in Appendix B.

## 4.1 Option Appraisal

Five options were assessed as part of this appraisal and these are listed below.

- Option 1 – Do Nothing
- Option 2 – Do Minimum
- Option 3 – New bridge local to existing
- Option 4 – New bridge at Esplanade
- Option 5 – New bridge at Seatown Road

The location of Options 3 – 5 are provided on the plan below.


Location Plan

### 4.1.1 Methodology

The criteria used in selecting an option focuses primarily on whole life cost, providing that the economically favourable solution delivers the desired outcome. As defined in clause 1.3 of DMRB document CD 355 'The lowest whole life cost option shall become the recommended solution in an options report, except where other factors override that selection".

Other criteria considered during the assessment of each option are environmental impact, geology and hydraulic impact. Details of the surveys undertaken into each of these criteria is provided in Appendix B.

### 4.1.2 Option Description

**Option 1 – Do Nothing**

The Do Nothing option would involve leaving the bridge in its current condition. As the current condition of the bridge is considered dangerous it would remain closed and there would be no direct link from the town to the beach. The condition of the bridge would further deteriorate over time and progressively collapse. There would be no capital cost associated with this option.

**Option 2 – Do Minimum**

Refurbishing the existing superstructure is not feasible. The majority of steel members have significant section loss and there are several areas where sections are missing. The condition of the existing wooden piled piers is not known. The option for their use to support a new superstructure could be considered. A key consideration for the reuse of the existing piles is that the proposed replacement superstructure should not impose loadings that the substructure and its foundations were not originally designed for. To achieve this, the replacement superstructure would be limited to the footprint and self-weight of the existing structure. The existing bridge is approximately 1.2 metres wide between parapets and 120 metres long, which is not compliant with current design standards and would exclude wheelchair access to the beach.

The 100-year plus age of the substructure does raise concern as it is likely the remaining working life is shorter than would be achieved by replacing the whole bridge. Taking this into account it would be prudent to design the superstructure with consideration to the reconstruction of the substructure at a later date. This would require the temporary removal of the superstructure, demolition of the existing substructure and subsequent reconstruction to allow replacement of the bridge.

The cost of replacing the superstructure is estimated at £900,000 and the work required to replace the substructure at a later date would be £1,800,000, therefore the total capital cost of this option is estimated at £2,700,000.

**Option 3 – New bridge local to existing**

A number of positions have been investigated on Church Street and it is proposed to land the structure local to the Spynie Canal Bridge (grid ref. NJ 23721 70424) to take advantage of the current public paved area and shorter distance to the East Beach carpark, this is approximately 30m to the west of the existing bridge. Between these points the proposed bridge would approximately be made up of 5 separate 29m spans equating to a total length of 145m.

Considering the length of the individual spans it would be wise to adopt half through truss forms similar to that of the existing bridge, owing to their inherent structural efficiency. Above 20 metres in span a simple underslung steel beam arrangement starts to become uneconomical and presents issues with clearance given the increasing depth of beams required to support the loading. A half through truss allows the user to traverse in between the main structural elements as opposed to above, this results in a shallow overall deck depth meaning less elevation is required to clear obstacles. Using a truss form would provide a replacement bridge that is aesthetically similar to the existing bridge.

Option 3 viewed from Church Street

The capital cost of this option is estimated at £2,225,000.

**Option 4 – New bridge at the Esplanade**

The projection from the sea wall at the Esplanade provides a good location to cross from the mainland to East Beach as the river channel is at its narrowest point. The bridge would project from an increased level at the Esplanade over to the beach in 4 spans totalling an approximate 75m length. The approach spans would rise at 1 in 20 to meet an arched span over the main river channel, clearing the required flood soffit height as required.

At this location it is considered that a steel beam/plate girder type bridge would be suitable for a number of reasons. Firstly, the distance to the proposed supports allows for an economic solution to this style of bridge, particularly if designed as continuous across the supports. The underslung superstructure allows for a clean looking deck, on which an aesthetic parapet can be incorporated. To expand upon the parapets design, it is proposed to adopt a backward raking post (to prevent climbing) and horizontal tension wire system to allow flood water to flow through during extreme tidal events.

Option 4 viewed from the esplanade

The estimated capital cost of this option is £1,375,000.

### Option 5 – New bridge at Seatown Road

The proposed alignment from this location starts 25m to the northeast of the public conveniences on Seatown Road, just above the sea wall and continues to the beach over an approximate total distance of 100m, made up of 3 separate spans. This location is 90m southeast of the Esplanade option and 140m to the northwest of the existing option.

Given the length of the individual spans it is proposed to adopt truss forms as this is a more economical design. Although this location is some distance away from the existing bridge, its alignment and appearance would be similar. The reduced overall span may also make more costly durable material options more economically viable in comparison to Option 3. A beam bridge similar to that proposed for Option 4 could be constructed but this would require additional supports within the channel, increasing cost.

Option 5 viewed from Seatown Road

The estimated capital cost of this option is £1,750,000.

#### 4.1.3 Option Assessment

Each option was assessed against the criteria listed below.

1. Cost
2. Environmental Impact
3. Geology
4. Hydrology

**Cost**

The cost of each option is provided in the table below

| Options | Capital Cost | Whole Life Cost |
|---|---|---|
| Do Nothing | £0 | £0 |
| Do Minimum | £2,900,000 | £2,700,000 |
| Option 3 – New bridge local to existing | £2,225,000. | £2,700,000 |
| Option 4 – New bridge at the Esplanade | £1,375,000. | £1,695,000 |
| Option 5 – New bridge at Seatown Road | £1,750,000. | £2,100,000 |

## Environmental impact

A Preliminary Ecological Appraisal (PEA) survey has been undertaken. The PEA report concluded the proposed works are in an area which has significant human disturbance. The dune and saltmarsh grasslands are an important habitat, and damage to these areas should be kept to a minimum. A range of bird species use the area but are unlikely to nest close to the bridge. However, any disturbance of breeding birds should be avoided by either timing the works out with the breeding season or checking the ground prior to commencing works.

The environmental impact of constructing a new bridge would be the same for all of the options considered.

### Geology

The exploratory excavations undertaken as part of the site investigation encountered the following geological profile, in order of superposition:

- Made Ground (Land side only) to depths of 0.8m to 0.9m from ground level.
- Marine Beach Deposits (Beach side only) from ground level to termination depth of 5.1m.
- Storm Beach Deposits (Land side only) from underside of made ground to 6.50m at the Esplanade position and 9.65m to the south of the existing bridge.
- Burghead Sandstone Formation (Land side only) from 6.5m at the Esplanade position.

The naturally deposited Marine Beach Deposits and Storm Beach Deposits are theoretically capable of supporting the proposed bridge structures on ground bearing foundations at a reasonably shallow depth. However, forming excavations on the beach and within the river channel would involve significant temporary works to keep out the tidal waters. Additionally, a large mass of concrete within the flow of water presents a heightened scour risk, something that would require significant consideration at detailed design. To alleviate these risks a piled solution that also incorporates the role of the in-channel piers would be more practical and beneficial, particularly for long term stability.

These ground conditions would be the same for each of the options considered.

### Hydrology

The preliminary flood risk assessment demonstrates a range of events which could be used to assess flood risk to the proposed bridges. These water levels combine both fluvial and coastal flooding for a number of events with differing likelihood. A fully comprehensive FRA would be needed to identify which values are to be used at detailed design stage, however, it is believed that the existing bridge location would be the preferential location when considering flood risk. As the design is for a footbridge there will be no change to flood risk from surface or ground water and although the bridge will cross the River Lossie, due to the location of the design and the fact there is an existing bridge in its location, it is not expected to have any differing effects on fluvial or coastal flood risk.

This conclusion offers the theoretical best location for the bridge with reference to two key points, these being the effects of wave action and water velocities. The Esplanade location is more exposed to the sea and is positioned over a narrower section of the river so inherently will see the worst of these two factors. For example, the maximum velocity at low tide and 200 year + climate change fluvial event (critical condition) is 1.10 m/s at the existing bridge and 2.50 m/s at the proposed Esplanade bridge location. The difference in these velocities should not draw particular favour to one option as the upper value can be suitably accommodated with considered design.

### 4.1.4 Assessment Matrix

Each option has been assessed against this criteria and the results are provided in the table below.

| Option | Geology | Hydrology | Environment | Capital Cost | Whole life Cost | Total |
|---|---|---|---|---|---|---|
| 1 | 1 | 3 | 3 | 1 | 1 | 9 |
| 2 | 1 | 1 | 1 | 2 | 4 | 9 |
| 3 | 1 | 1 | 1 | 5 | 3 | 11 |
| 4 | 1 | 2 | 1 | 3 | 1 | 8 |
| 5 | 1 | 2 | 1 | 4 | 2 | 10 |

Key: 1 = No impact / lowest figure 5 = Greatest impact / highest figure

## 4.2 Conclusion

The preferred option is Option 4, as this provides the best value option. The capital cost of the preferred option is £1,375,000 and a whole life cost of £1,695,000.

# 5 Commercial Case

Following the closure of the footbridge at East Beach, Scottish Government's Culture Secretary committed to funding the work required to reinstate it. Moray Council was asked to project manage the work required to reinstate the bridge on behalf of Scottish Government and the community. The Lossiemouth Community Development Trust agreed to fund the development of the business case required to secure funding for the design and build of the bridge. This funding included a contribution from Highlands & Islands Enterprise.

Two main items of work are required to inform the business case, an Option Appraisal to identify the best value option for replacing the bridge; and an Economic Impact Assessment to assess the economic impact of replacing the bridge.

Traditionally the Option Appraisal and outline design would be procured separately from the Design and Build of the bridge. Moray Council's project management team considered a different approach that would facilitate early contractor involvement in the option appraisal and outline design. By adopting this approach it was considered that we could reduce risk and increase cost certainty at the outline design / funding application stage of this project. As funding for the replacement bridge is dependent on the business case the contract would be split into two stages. Stage 1 would be the development of the option appraisal, which would inform the business case. Stage 2 would be the design and build of the bridge, however, Stage 2 will only be progressed if funding is secured.

This work was procured through Public Contract Scotland and the procurement was undertaken in two stages. Before starting the procurement process a Prior Information Notice was published to identify what interest there would be for this project in the market place. A total of 49 notes of interest were received.

The first stage of the procurement process was pre-qualification. This involved a number of questions that would assess how suitable a contractor or consultant would be to take on a project of this nature. A total of 11 responses were submitted and the top 5 bidders were taken forward to the second stage of the process.

The second stage of the tender process was evaluated through a gateway process to ensure consistency and fairness.

- Gateway 1: Technical Evaluation of Written Submissions – this was done based on 13 technical issues relating to the key processes of the Project.
- Gateway 2: Technical Evaluation of Oral Submission – this was a 30 minute presentation on challenges you may face during the construction of the footbridge and the measures you will implement to overcome these challenges. The presentation was followed by clarification questions on Technical Elements.
- Gateway 3 Commercial Evaluation – this was done using the NEC Model Assessment, which looks at both submitted prices as well as submitted fees and creates a Nominal Tender Value, based on an example footbridge of similar size to that required for Lossiemouth.

Only 4 of the top 5 bidders submitted a tender and the results of the tender assessment are provided in the table below.

| Contractor | **TECH SCORE 70%** | **Comm Score 30%** | **Total** |
|---|---|---|---|
| **AMCO** | 58.25 | 64.21 | 60.04 |
| **BEAVER** | 56 | 100 | **69.2** |
| **PAT MUNRO** | 65.083 | 70.47 | 66.7 |
| **STORY** | 77.167 | 47.64 | 68.31 |

Full details of the tender evaluation are provided in Appendix C.

### 5.1 Conclusion

Moray Council has followed a robust procurement process in line with national procurement guidelines. The outcome of this process is contract award to Beaver Bridges whose tender provided best value in terms of both quality and cost.

## 6 Financial Case

The town of Lossiemouth is a popular destination for tourist and day trippers throughout the year but particularly in the spring and summer months. The town's East Beach is one of the main features that attracts visitors to the town. A significant percentage of the local economy is dependent on trade from tourism, which to a large extent is influenced by access to East Beach. The impact closure of the bridge has had on the town's businesses and the economic impact the town derives from having access to the bridge has been assessed in an Economic Impact Assessment. A brief description and the findings of this assessment are provided below. Full details of the Economic Impact Assessment are provided in Appendix A.

## 6.1 Economic Impact Assessment

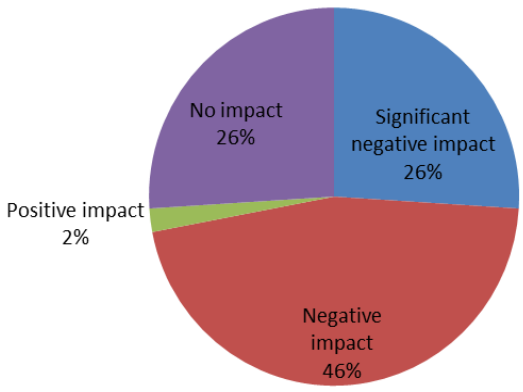
### 6.1.1 Methodology

Initial research was undertaken and this included:

a. Online research into accommodation providers and other key tourism related businesses and activities in Lossiemouth, supplemented by information provided by the Lossiemouth Business Association on its members and other local businesses
b. 2019 bridge count statistics compiled by Lossiemouth Community Development Trust (LCDT)
c. VisitScotland Accommodation Occupancy Survey, 2018 and 2019
d. STEAM Final Trend Report for Visit Moray Speyside, 2009-2019 – Global Tourism Solutions (UK) Ltd

Following the initial research a consultation was carried out using an online survey, which was sent to 180 local businesses of which 50 were completed. The survey was followed up with telephone interviews with 17 key local businesses.

It is appreciated that there will have been a tendency for negatively affected businesses to respond to the survey, and this has been considered in the quantification. The diagram below shows that 72% of businesses reported that the closure of the East Beach bridge has had a negative or significant negative impact on their business trade, whilst just 2% have experienced a positive impact (due to their location and some people using the West Beach rather than the East Beach).




The economic impact with and without replacing the bridge to the East Beach, was estimated using two methods, both of which showed similar impacts:

(i) Estimating the number of East Beach users in a typical year attributable to the access provided by the bridge; estimating the breakdown of this total across local residents, overnight stay visitors in Lossiemouth, and day trippers (from elsewhere in Moray and further afield, including tourists); estimating the average spend in Lossiemouth by overnight stay and day trippers attributable to their East Beach visit; and estimating the employment impact from this in Full Time Equivalent (FTE) jobs.

This FTE employment impact measure includes “direct” jobs in Lossiemouth businesses supported by visitor spending (including proprietors and employees), “indirect” jobs in Lossiemouth generated

through the local supply chains of these businesses that benefit from direct spending; and "induced" jobs in Lossiemouth generated by the spending of direct plus indirect proprietors and employees from their additional income.

(ii) Drawing on information and estimates provided to us by Lossiemouth businesses who benefit from visitor spending on the difference in spend that they would expect between 2018 (the last full year with an operational bridge, which was broadly typical of recent years), and the first full year should there not be a replacement bridge and without Covid-related impacts. Also, based on our consultation and assumptions of spend on related development and marketing, the potential impacts in a medium term typical year with a replacement bridge were also considered.

### 6.1.2 Visitor Spend

Bridge count data, taken in early 2019 before the bridge was closed, indicates that on average 200,000 people visit East Beach every year. Based on anecdotal evidence, it is estimated that 50,000 of these 200,000 annual visits are by local residents – including people living beyond Lossiemouth who use the beach (e.g. for dog walking) without spending any money in the town before or after their visit.

Based on the available data, of the remaining 150,000 assumed East Beach visitors, it is estimated that 30,000 will stay overnight in Lossiemouth and 120,000 will be day trippers.

Conservatively, an average spend of £5 per person per day visit is attributed below to day trippers (including children), and £30 to overnight stay visitors.

VisitScotland data gives average spend from day trips of all kinds in 2019 in Scotland of £43; and in the North of Scotland of £54. Visit England data shows an average spend by day trippers to seaside destinations of £33, an average spend of £23 for day trippers who undertook an outdoor leisure activity (including walking and cycling), and £37 for day trippers on general days out/to explore an area.

VisitScotland data for the Highlands for 2019, based on the International Passenger Survey and the Great Britain Tourism Survey, shows an average spend of £67 per 24 hours by overnight stay visitors. Figures for Moray are not available, but STEAM data indicate average spend by overnight visitors to Moray Speyside averaging £42 in 2019 (as calculated from its summary data).

| **Estimate of Visitor Spend Attributable to the East Beach in a Typical Year** | | | |
|---|---|---|---|
| | **Approximate numbers per year** | **Estimated average spend per day** | **Total spend per year (including VAT)** |
| Day trippers | 120,000 | £5 | £600,000 |
| Overnight visitors | 30,000 | £30 | £900,000 |
| **Total** | **150,000** | | **£1,500,000** |

### 6.1.3 Employment Impact

From other impact studies using actual visitor spend and employment data, we estimate that an appropriate ratio of FTE employment (direct, indirect plus induced) to visitor spend for the Lossiemouth economy (with a number of small and family businesses) would be 1 FTE to £50,000 of visitor spend (inclusive of VAT where applicable). This would give an annual total of **30 FTEs** (full time equivalent jobs, including proprietors) generated in Lossiemouth from visitor spend of **£1,500,000.**

The difference in annual visitor spend at £1,500,000 in an average year between constructing a new bridge and not having bridge access to the East Beach is considered very good value for money. After

5 years, for example, additional visitor spend in Lossiemouth totalling at least **£7,500,000** compares with the whole life cost of the bridge at **£1,540,000**.

## 6.2 Longer Term Economic Impact

Annual impacts with a new bridge in place could significantly increase from the 200,000 annual visits, £1,500,000 attributable visitor spend, and 30 additional FTE jobs estimated above through a combination of the following factors:

- Business investment, particularly across the accommodation sector through providing additional bed spaces – encouraged by the confidence that a new bridge will provide in the sustainability of future visits to Lossiemouth.

- Visits by people who move to live in the new housing to be built to the north of Elgin related to the increased employment and activity at RAF Lossiemouth.

- Activities on the East Beach and in the sea for people of all ages (including those with disabilities) that Friendly Access with its proposed surf therapy centre, H20 Watersports Instruction, Outfit Moray and others will be able to develop with improved bridge access – helping to establish Lossiemouth East Beach as a regional centre for beach and sea-related activities.

- The post-Covid surge in "staycations" that is expected; with people spending more time away to compensate for being inactive in 2020 (and probably for much of 2021) and with money to spend that they have saved during the period of reduced holiday, day-trip, and retail spend.

## 6.3 Physical and Social Outcomes

Positive aspects of the physical and social environment in which we live that can nurture health and wellbeing include:

- contact with nature in everyday life
- feelings of safety
- the ability to move around places easily and safely on foot or by bike
- a sense of belonging and a sense of control
- thriving communities with an abundance of local businesses and good access to job opportunities

Without access to the East Beach, many local residents, particularly those living in close proximity to the beach, have lost a part of their daily life and routine and access to activities which improve health and wellbeing, including: walking or running along the beach, dog walking, water sports, wildlife, and birdwatching from the beach and the dunes.

A bridge compliant with current equalities requirements would increase the accessibility of the beach to those in wheelchairs and could enable easier transfer of water sports equipment.

## 6.4 Health and Safety

There is currently no safe and reliable access to the beach for local residents and visitors. Since the bridge closed in 2019 there have been a number of incidents where families and young people have become stranded on the beach after crossing the river at low tide.

Without a bridge, there is no land based emergency access to the beach.

## 6.5 Potential Projects Complementary to Replacing the Bridge

The Economic Impact Assessment also looked at potential projects that are complementary to the bridge that would be taken forward by the community. The table below provides a summary of the project/action ideas obtained from the survey telephone interviews. More detail on these potential projects is provided in Section 3 of Appendix A.

| **Ref** | **Project** | **Funding Cost** | | | **Impact (High,Medium or Low)** | | | **Support Expressed** | | **Potential Funding Sources** |
|---|---|---|---|---|---|---|---|---|---|---|
| | | H | M | L | H | M | L | LBA | LCDT | |
| 1 | Signage and information | ✓ | | | ✓ | | | ✓ | ✓ | |
| 2 | Development of surrounding area and heritage trails | ✓ | | | ✓ | | | | ✓ | EB Scotland (Landfill) |
| 3 | Accessible changing facilities | ✓ | | | | ✓ | | | | National Lottery Awards for All |
| 4 | Additional 'seaside' attractions and equipment | ✓ | | | ✓ | | | | ✓ | HIE |
| 5 | Traffic management and parking | ✓ | | | ✓ | | | | | Moray Council |
| 6 | Marketing and promotion | | | ✓ | ✓ | | | ✓ | ✓ | Visit Moray Speyside |
| 7 | Events | | ✓ | | | ✓ | | | | |
| 8 | Support for businesses | | ✓ | | | | ✓ | | | |
| 9 | More take-away dining options | | | ✓ | | | ✓ | | | |

## 6.6 Conclusion

Since the closure of the footbridge to East Beach in 2019 a number of businesses in Lossiemouth have experienced a negative impact on trade. This assessment has found that visitor spend in Lossiemouth is increased by **£1,500,000** with a bridge connecting the town to East Beach. This level of increased spend would equate to an additional **30 FTE jobs**. The bridge would also encourage investment in existing businesses and sporting activities. Access to the beach provides additional benefits for the town in terms of health and wellbeing.

# 7 Management Case

Moray Council was asked to project manage the replacement bridge on behalf of Scottish Government and the community. Moray Council awarded a design and build contract to Beaver Bridges under the New Civil Engineering Contract (NEC3). This contract was split into two stages. The first stage is the development of an option appraisal to identify the best values option for replacing the bridge and the second stage is the design and build of the bridge. The first stage is required to inform the business

case, which will be used to secure funding for the second stage. If funding is not secured then the second stage will not be progressed.

A number of actions were required during the option appraisal stage to reduce risk to the project. A list of these risks and the mitigation measures applied are provided below.

1. **Ground conditions** – detailed ground investigations are normally undertaken at the detailed design stage of a project. However, this increases the risk of design changes that could significantly increase costs. As such it was agreed that Scottish Government would fund this work at the option appraisal stage of the project to reduce risk and increase cost certainty.
2. **Statutory consents** – a number of statutory consents must be obtained before the replacement bridge can be constructed. Early consultation with statutory bodies has been undertaken to reduce the risk of delay in obtaining these consents during the design and build stage of the project.
3. **Land ownership** – ownership of the land on which the bridge abutments will be constructed is unknown. Initial research undertaken indicates that the land originally belonged to the Old Harbour Commission and when it ceased trading the land became ownerless, however, there is some uncertainty over the Old Harbour Commission's Title. To reduce the risk of any delays the land required will be acquired through a Compulsory Purchase Order (CPO). This process is currently being progressed and when funding is secured the CPO will be finalised.

## 7.1 Contract

Using the NEC3 contract allows for effective contract and change management, with key points highlighted below.

1. **Early Warning** – The use of early warnings allows both Beaver Bridges and Moray Council to actively manage risk and ensure that robust mitigation processes are in place, should risk events occur. Early warning is the basis of the contract risk register.
2. **Defined Reply periods** – Using the NEC contract means that clearly defined time periods are in place, with regard to change and cost, which allows the client to be aware of what the potential final out turn cost is at all stages of the project. These defined time periods ensure that changes are actively dealt with and resolved timeously, ensuring effective payments to the contractor and limiting financial exposure to the client due to unresolved variation.
3. **Management of change** – The process for compensation events provides clarity to both parties on why change has happened and allows for proposed change to be assessed but not acted upon.

To assist with the effective application of the contract, Moray Council will be using an online contract management tool called CEMAR. By using this tool a number of advantages are achieved to ensure effective management of the project:-

1. All correspondence is done in line with the appropriate clauses of the contract.
2. All time bound items are marked and identified if they are due or late.
3. Early warnings and risk reduction meetings are recorded.
4. All Instruction, payments, approvals and compensation events are managed through the system.
5. Complete project administration is logged and archived at the end of the project.
6. Only authorised people can approve and agree contractual matters.

## 7.2 Risk

The contract risk register has been built up from a number of pre-identified risks and risks identified through early warnings issued during Stage 1. Prior to Stage 2 award a risk mitigation meeting will be held with the contractor to identify possible mitigation measures to reduce the impact of the identified risks. During the contract any early warnings raised will be dealt with through a risk mitigation meeting. At the progress meetings, the risk register will be reviewed and updated accordingly. The current estimated risk for this project is **£365,000**. The risk register is provided in Appendix D.

## 7.3 Operation and Maintenance

On completion of construction of the bridge, Moray Council will take ownership of the bridge and be responsible for future inspection and maintenance requirements. This maintenance work will be funded from Moray Council's bridge maintenance budget.

## 7.4 Conclusion

Management of the design and build of this project will be undertaken by Moray Council, under the NEC3 contract. On completion of construction Moray Council will take ownership of the bridge and will undertake all future maintenance requirements.

# 8 Community Engagement

Engagement with the local community has been actively undertaken throughout the development of this project. A number of engagement events have been undertaken, as well as setting up a Steering Group consisting of community representatives and members of the project team.

## 8.1 Lossiemouth Connects – Design Priorities Workshop

In November 2019 Architect Design Scotland facilitated a workshop on the future of the recently closed footbridge from the town of Lossiemouth to East Beach. The workshop was attended by local people and organisations, Scottish Government and Moray Council.

The workshop explored the Place, Parts, Process approach to priorities. Participants were asked to share their views on the current situation and discuss actions that would maximise the benefits of reinstating the bridge.

The main finding from the workshop is that access to East Beach is considered a valuable asset to the community that has a significant impact on the local economy and wellbeing of the local community. There was also a lot of enthusiasm for projects that could be taken forward by the community to maximise the benefits of a reinstated bridge. Full details of the workshop are provided in Appendix E.

## 8.2 Lossiemouth Footbridge Replacement Steering Group

A Steering Group consisting of Moray Council, Beaver Bridges and community representatives was set up by Moray Council. The purpose of this group is to make sure the expectations of the community are considered during the development of the project and to facilitate communication with the wider community. The organisations representing the community on this group are Lossiemouth Community Development Trust, Lossiemouth Community Council and Lossiemouth Business Association.

## 8.3 Community Survey

One of the main issues raised by the community representatives on the Steering Group was the location of the replacement bridge. A survey was undertaken both online and in paper asking people

to indicate where they would prefer the bridge to be located. Participants were also asked to provide comments on why they had made that choice.

A total of 1348 people responded to the survey, which is approximately 17% of the population of Lossiemouth. Approximately 63% of the people who responded expressed a preference for a bridge at Seatown, where the current bridge is located.

Concerns about changing the location of the bridge predominantly focused on increased traffic congestion, parking issues associated with having a bridge located at the Esplanade and the heritage value of having a bridge at the existing location. The issues raised about increase traffic congestion and any associated safety issues would be addressed through the planning process, with mitigation measures being a condition of obtaining planning approval to construct the bridge. With regard to the heritage value of the existing bridge, this would not change as the existing bridge would not be removed as part of this project.

Support for the location at the Esplanade focused on easy access to local amenities.

Details of the feedback is provided in Appendix E.

## 8.4 Virtual Exhibition

Details of the Option Appraisal and Economic Impact Assessment were made available for the public to view at a virtual exhibition that ran from 1 March 2021 to 7 March 2021. People who attended the exhibition were encouraged to provide feedback.

A total of 9545 visits were made to the exhibition and 394 visitors provided feedback. Visitors were asked to "Please provide your comments on the preferred option". As with the survey undertaken in 2020 the responses were mixed.

The main concerns raised in the feedback were similar to those raised in the survey. These concerns focused mainly on parking issues and the potential for increased traffic congestion. Concern was also raised with regard to exposure to weather and tides at the Esplanade. The issue of the bridges "iconic" status was also raised.

The advantages of the preferred option in relation to access to the town and local amenities was raised.

Details of the feedback is provided in Appendix E.

## 8.5 Conclusion

Community engagement has been undertaken throughout the development of this project and it is clear from this engagement that there is a strong desire to reinstate access from the town to East Beach. The response has been mixed, with a number of people expressing a desire to have a new bridge that is similar to the existing bridge both in style and location. Some of the concerns raised about locating the bridge to the Esplanade can be mitigated through design and traffic management, however, this will not address the concerns over the loss of what is considered the iconic status of the existing bridge. When undertaking the assessment of the options the desire for a bridge similar to the existing bridge has been considered. However, this desire had to be assessed against the need to provide best value and the significant difference in cost means that Option 4, a new bridge at the Esplanade has been recommended.

# 9 Funding Requirements

At the request of Scottish Government and the local community, Moray Council agreed to progress the development of this project to replace the footbridge between Lossiemouth and East Beach. To achieve this goal, grant funding of £1,800,000 will be required from Scottish Government. A breakdown of this funding is provided below.

| | |
|---|---|
| Capital cost | £1,375,000 |
| Risk | £365,000 |
| Site supervision | £60.000 |
| **Total** | **£1,800,000** |

As stated above Moray Council will take ownership of the bridge and be responsible for all future maintenance costs.

# Appendix C – Transport and Pedestrian Assessment

# Proposed Pedestrian Bridge, East Beach, Lossiemouth

## Transport & Pedestrian Assessment

## A784-B028570

**Issue**

**Beaver Bridges & Moray Council**

**21-05-2021**

**Prepared on Behalf of Tetra Tech Group Limited. Registered in England number: 6595608**



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# Proposed Pedestrian Bridge, East Beach, Lossiemouth

TETRA TECH

## DOCUMENT CONTROL

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# Proposed Pedestrian Bridge, East Beach, Lossiemouth

TETRA TECH

## TABLE OF CONTENTS

# 1. INTRODUCTION

## Report Purpose

1.1 This Report has been prepared by Tetra Tech Ltd to accompany a Detailed Planning Application for a footbridge to connect Lossiemouth Esplanade with East Beach. Improvements to the public realm will also be delivered where the bridge lands on Lossiemouth Esplanade at Clifton Road.

1.2 The existing footbridge connecting the town of Lossiemouth (population 7,700) to East Beach is accessed from Church Street, located in a quiet residential area. The bridge has been closed since August 2019 due to safety and structural concerns and Moray Council has agreed to deliver a new crossing for the town and its communities.

1.3 Under the proposals, the new bridge would be located on the Esplanade at Clifton Road, opposite and in close proximity to 2no ice cream shops and 2no pubs. The area in general experiences high levels of pedestrian activity, especially in the summer months. This has led to some concerns that providing a new bridge in this location would focus a large amount of activity into one area of Lossiemouth, creating traffic and pedestrian safety issues. Moray Council traffic engineering team have been contacted for advice on how best to facilitate the bridge at this position and their recommendations have been included in the design.

1.4 The purpose of this report is to present a Transport and Pedestrian Assessment of the proposals, to identify areas where additional supporting infrastructure is required and to provide an assessment of the critical area where the bridge joins the Esplanade.

1.5 Moray Council has been consulted regarding the scope of this study, with relevant correspondence included as Appendix A. Their input is gratefully acknowledged.

# 2. PROPOSALS

## Background

2.1 The existing wooden footbridge was constructed in 1906. In July 2019, a central span of the bridge failed, and it was closed in the interest of public safety.

2.2 An Economic Impact Assessment (EIA) dated 2 Mar 21 was produced by Steve Westbrook, Economist, and Fiona Hepburn to assess the economic case for a new footbridge to once again connect Lossiemouth with its East Beach.

2.3 The EIA estimated the bridge was responsible for 120,000 day and 30,000 overnight visitors per year, along with 50,000 East Beach visits per year by locals including people living beyond Lossiemouth but who use the beach e.g. for dog walking.

2.4 This gives an annual estimated usage of 200,000 people per year.

2.5 Based on bridge usage statistics, survey data and other research, the EIA estimated the following attributable visitor spend in a typical year with a replacement bridge (Figure 2-1 below). The spending of local residents (50,000 estimated East Beach visits per year) is not included in the impacts below.

| Estimate of Visitor Spend Attributable to the East Beach in a Typical Year | | | |
|---|---|---|---|
| | **Approximate numbers per year** | **Estimated average spend per day** | **Total spend per year (including VAT)** |
| Day trippers | 120,000 | £5 | £600,000 |
| Overnight visitors | 30,000 | £30 | £900,000 |
| **Total** | **150,000** | | **£1,500,000** |

**Figure 2-1: Estimate of Visitor Spend Attributable to East Beach**

2.6 Health and wellbeing benefits of the East Beach are also recognized and include walking or running along the beach, dog walking, watersports, and wildlife and bird watching from the beach and the dunes behind.

2.7 A wider footbridge would increase the accessibility of the East Beach to those in wheelchairs and could enable easier transfer of watersports equipment.

2.8 The current bridge is located close to a public car park (Gregory Place) which was the principal parking area for visitors to the beach, particularly those undertaking water sports. The new location will mean that users will park at either the Gregory Place Public car park (signposted as East Beach Car Park) or the Station Park car park (signposted as Esplanade Car Park).

2.9 The road signage currently directs people entering Lossiemouth from the A941 to parking for East Beach (Gregory Place), Esplanade (Station) and West Beach.

## Proposals

2.10 The proposed footbridge will be designed for unsegregated combined use by pedestrians and cyclists in accordance with the DMRB document CD 353, providing a 3.5m wide clear footway and 1.4m high parapets. Although the route is not particularly suited to cycling, the width prescribed will offer ample space for a multitude of users to cross without conflict. The wide consistent width will also allow users to seek refuge at any point along the bridge without impeding those around them.

2.11 Design proposals, prepared by Beaver Bridges, are provided in Appendix B.

2.12 The proposals will also deliver additional supporting infrastructure including:

- Replace the existing Zebra Crossing on Clifton Road with a controlled Puffin Crossing, with a broader 4.5m wide cross section to maximise pedestrian flow during each crossing stage;
- New footway provision and dropped kerbs at key locations;
- New pedestrian directional signage from both the East Beach and Esplanade Car Parks;
- Widening of existing footpaths on the esplanade; and
- Enhancements to cycling infrastructure.

2.13 Details of the various improvements are provided in Chapter 3.

# 3. TRANSPORT NETWORK

## Introduction

3.1 This section of the report examines the existing transport network serving the site.

3.2 It is recognised that the new bridge will serve a wide variety of user groups wishing to access the beach for water sports who will have associated equipment e.g. paddle boards, surf boards, kayaks etc. along with families spending a day at the beach with picnics, cyclists, people with impaired mobility.

3.3 The concentration of all these users at the end of the bridge on Clifton Road at the Esplanade will require an area sufficient for circulation and a degree of congregation for groups meeting before crossing the bridge.

3.4 Along with consideration of wayfinding, an assessment of the suitability of walking routes from both car parks, taking into account the user groups and their associated equipment in terms of width, surface and obstructions, has been undertaken.

3.5 Figure 3-1 shows the location of the proposed footbridge in the context of the East Beach and Esplanade car parks.

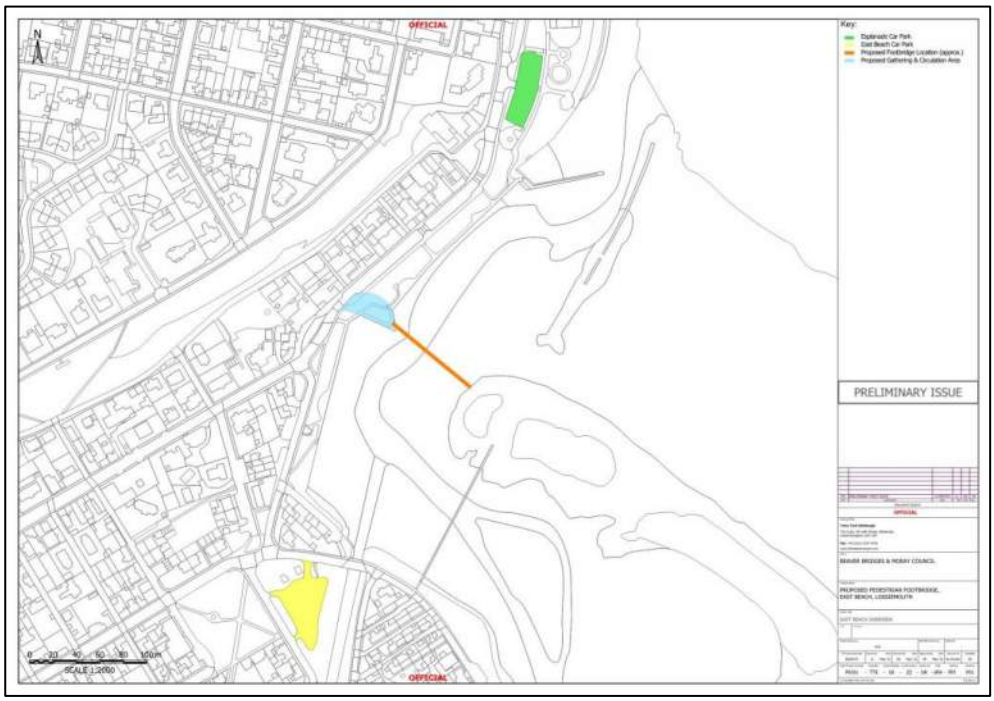



**Figure 3-1: Proposed Location of East Beach Footbridge**

3.6 The following assessment identifies where widening of pedestrian routes is required and where missing sections of surfaced routes will be provided.

## Walking – East Beach Car Park (Gregory Place)

3.7 Figure 3-2 below shows the proposed walking route from East Beach car park to the proposed bridge.

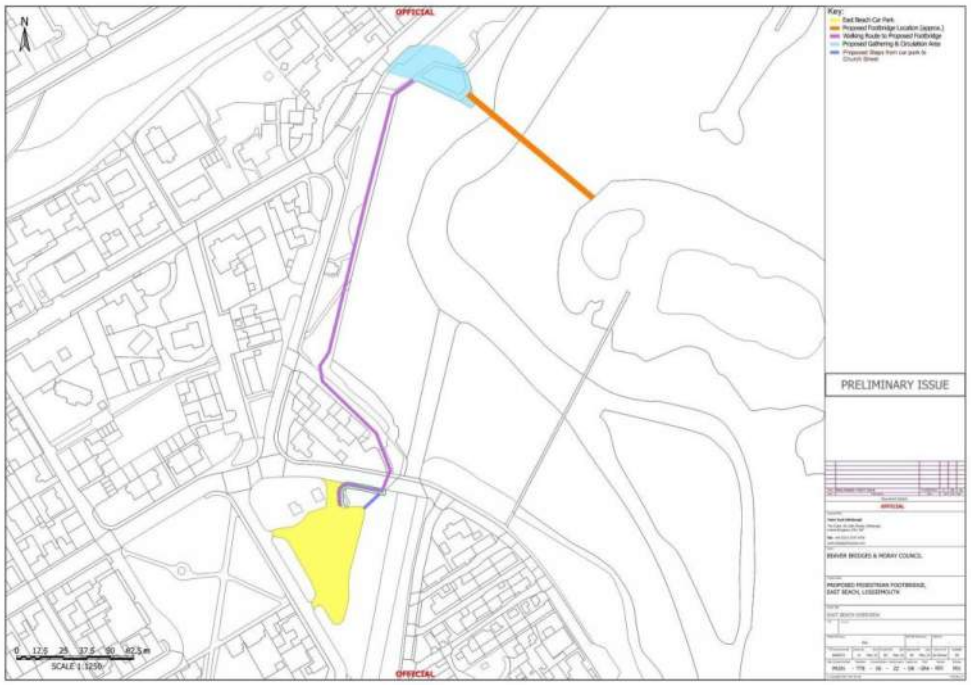



**Figure 3-2: Walking Route from East Beach Car Park to Proposed Bridge**

3.8 The improvements required to deliver a suitable route are set out below. In each case, photographs are presented followed by a plan that shows where the various interventions will be delivered.

**Provide Footway on Car Park Access Road to Church Street**

3.9 A 2m wide footway will be provided from the East Beach car park to Church Street, and along Church Street to the proposed crossing point to Seatown Road. Figure 3-3 shows the location of the proposed footway from East Beach car park to Church Street.

**Figure 3-3: Location of Proposed 2m wide Footway from East Beach Car Park to Church Street**

3.10 Figure 3-4 shows the location of the proposed footway along Church Street.


**Figure 3-4: Location of Proposed 2m wide Footway along Church Street**

3.11 Steps would also be provided on the alignment of the obvious desire line between the car park and Church Street worn into the grass embankment, shown in Figure 3-5.

**Figure 3-5: Location and Alignment of Proposed Stepped Access from Car Park to Church Street**

3.12 Dropped kerbs would be provided to deliver a crossing over Church Street to connect with Seatown Road. The location is shown in Figure 3-6.

**Figure 3-6: Location of Proposed Dropped Kerb Crossing on Church Street**

3.13 Figure 3-7 shows the connection from Church Street to Seatown Road, and the existing kerb that would be replaced with dropped kerbs.

**Figure 3-7: Connection from Church Street to Seatown Road**

3.14 A new 2m footpath connection will be provided from Seatown Road to connect to the existing footpath along the seafront. The location is shown in Figure 3-8.

**Figure 3-8: Area of Proposed 2m Footpath to Connect Seatown Road with Existing Footpath along Seafront**

3.15 The existing footpath along the seafront, which is shown in Figure 3-9, will be widened to 3m.

**Figure 3-9: Existing Footpath to be Widened to 3m along Seafront**

3.16 Figure 3-10 shows a drawing prepared by Beaver Bridges of the proposed infrastructure that will be delivered along the route from East Beach car park to the Bridge.

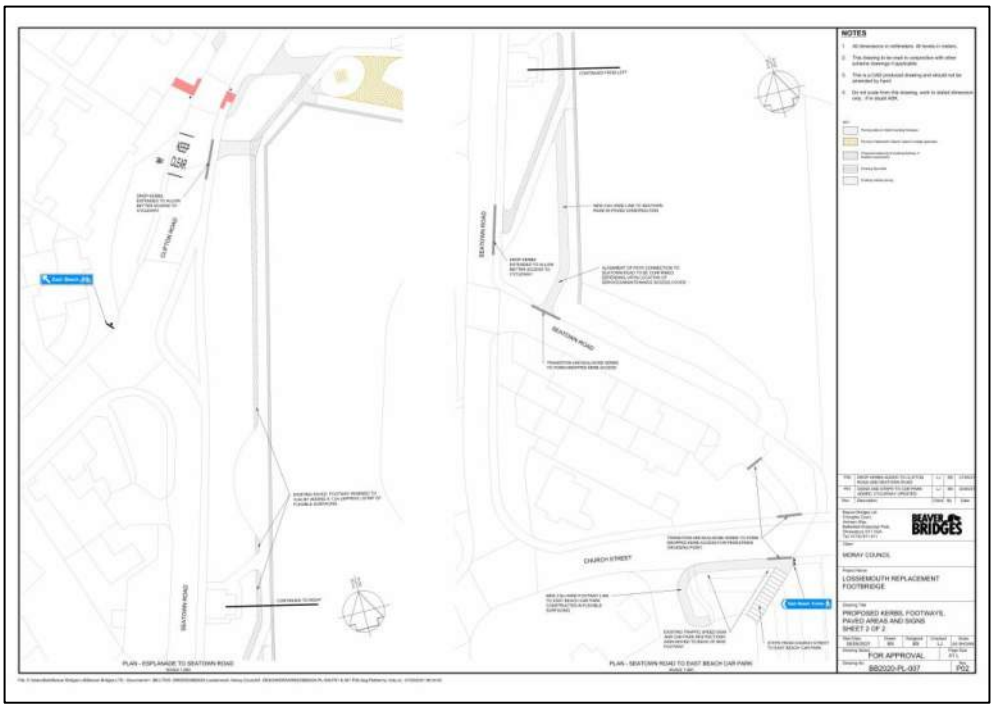



**Figure 3-10: Proposed Infrastructure on Walking Route from East beach Car Park to the Proposed Bridge**

3.17 The proposed improvements will provide a suitable, mostly traffic free, route for the various users of East Beach.

## Walking – Esplanade Car Park

3.18 Figure 3-11 below shows the proposed walking routes from Esplanade car park to the proposed bridge.

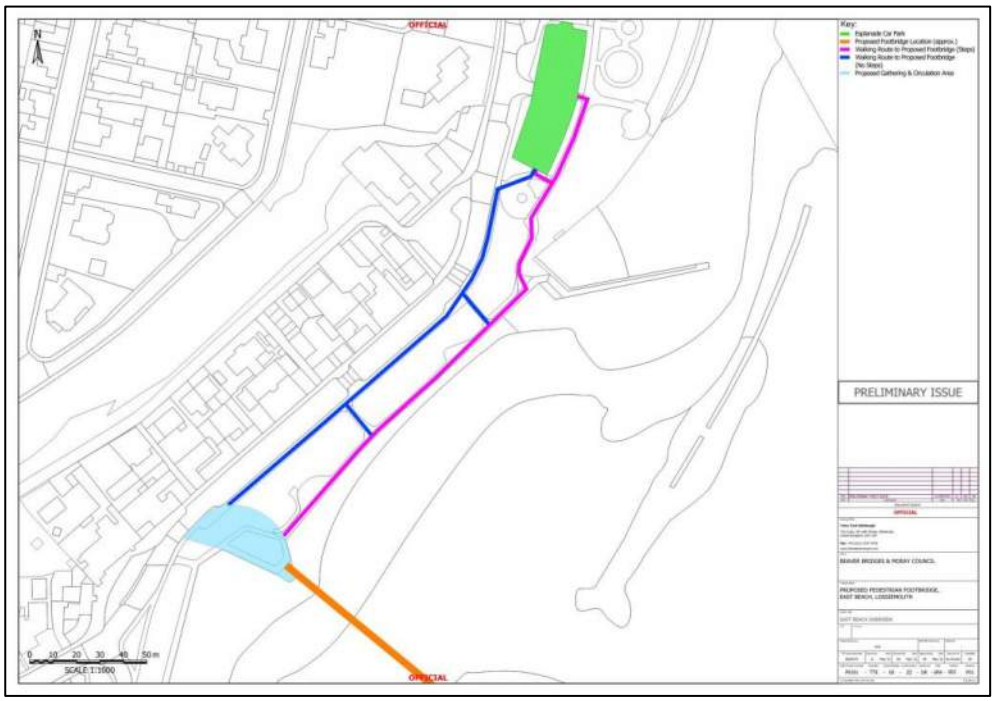



**Figure 3-11: Walking Routes from Esplanade Car Park to Proposed Bridge**

3.19 Improvements to the footpath from the esplanade car park are not required as cyclists are not likely to travel to the bridge from this direction while no requirement for improvements have been identified for the route via the footway along Clifton Road.

3.20 The route via Clifton Road will be signposted for accessible, step free access.

## Walking – Proposed Signage

3.21 The proposals will be supported with additional signing, as shown in Figure 3-12 and 3-13 for the East Beach and Esplanade Car Parks respectively.

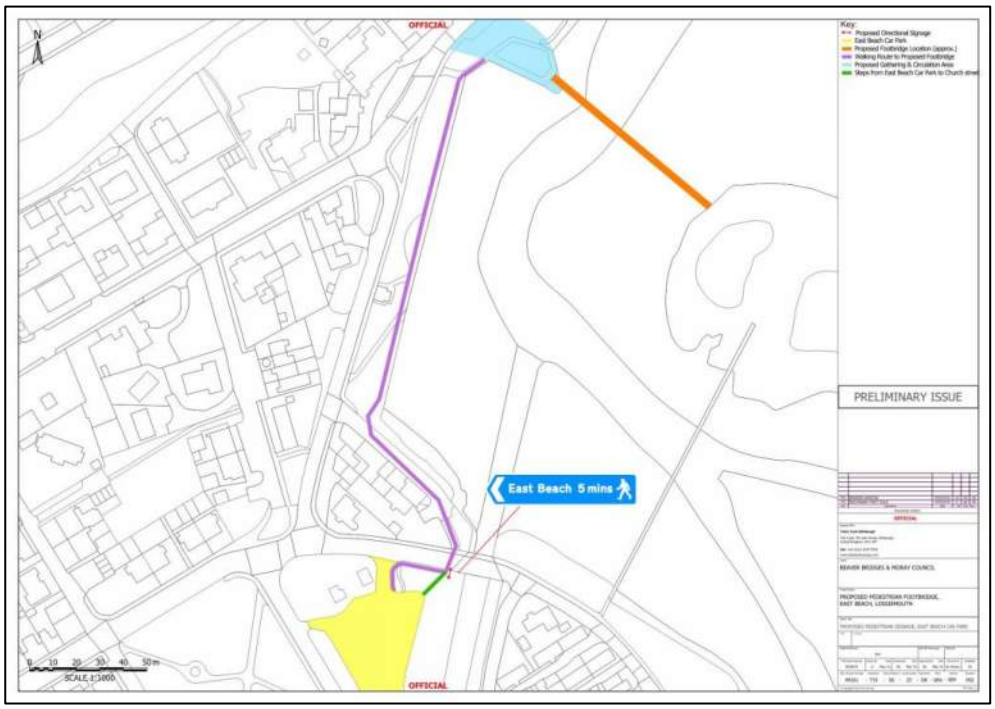



**Figure 3-12: Proposed Pedestrian Signage from East Beach Car Park**

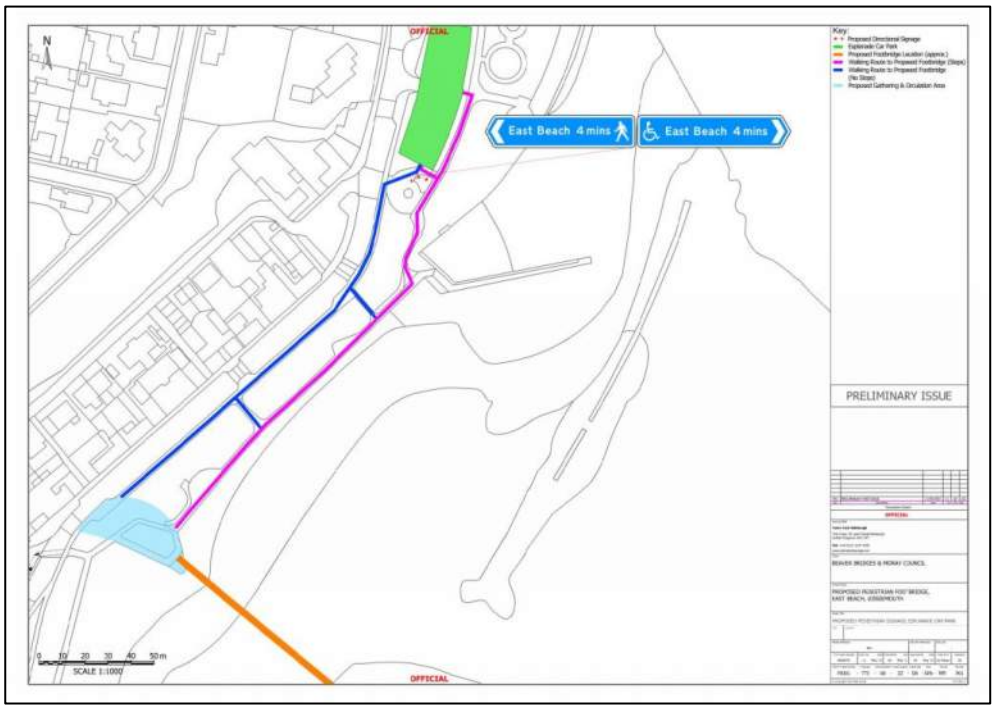



**Figure 3-13: Proposed Pedestrian Signage from Esplanade Car Park**

3.22 In time, a wider signage strategy will be developed as part of the Lossiemouth Mini Masterplan but this will not be ready before the construction of the bridge is complete. These signage proposals therefore represent an interim measure until the wider signage strategy is finalised.

## Cycling

3.23 A number of proposals were considered to accommodate cyclists approaching from the west via Clifton Road and the south west via Seatown Road.

3.24 The approach from Clifton Road is a continuation of the signposted route from Eglin that approaches Lossiemouth on a segregated path adjacent to the B9135. The route joins Clifton Road via the recently installed Toucan Crossing across Elgin Road, to connect to Coulardbank Road.

3.25 The approach from Seatown Road ties into the general route from Core Path LM27 that runs along the historic alignment of the Lossiemouth to Elgin railway line.

3.26 Cycling proposals for Clifton Road are shown in Figure 3-14.

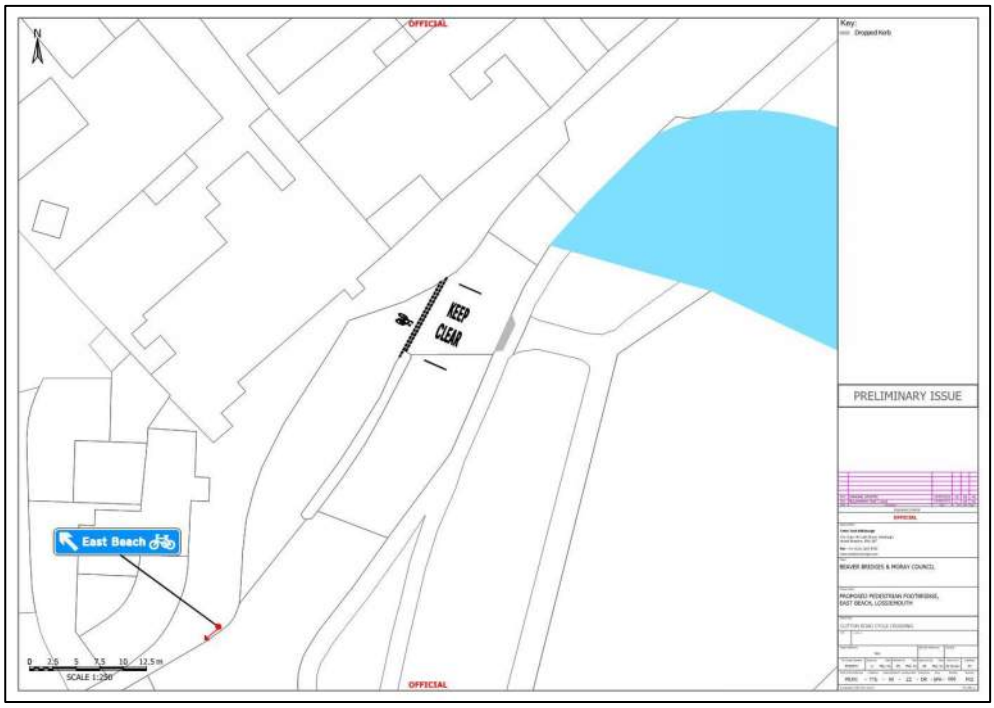



**Figure 3-14: Proposed Improvements to Cycle Infrastructure**

3.27 Cyclists approaching from the west via Clifton Road will be signposted towards the existing layby. There, they will be able to align themselves perpendicular to traffic on Clifton Road and will have opportunities to cross when the proposed Puffin Crossing, located in close proximity to the north east, is running its pedestrian stage. This facility is aimed at inexperienced cyclists and will allow them to make the right turn without having to align themselves in the middle of the road.

3.28 The new path on Seatown Road will tie into the general route from Core Path LM27 on the approach from the south west.

3.29 The proposed location and alignment are included in Figure 3-10.

## Road Network

3.30 Moray Council confirmed during scoping that no additional signage was required for vehicular traffic. An example of existing directional signage, located at the east end of Coulardbank Road, is shown in Figure 3-15 below.


**Figure 3-15: Existing Road Signs at Coulardbank Road**

3.31 This shows clear signage for both East Beach and Esplanade Car Parks.

3.32 Moray Council also confirmed that no improvements are required at either East Beach or Esplanade car parks.

3.33 The proposals will result in the loss of one on street space on Clifton Road, on its north west kerbside adjacent to the proposed upgraded pedestrian crossing facility.

3.34 There are no proposals to alter or amend on street parking controls.

## Personal Injury Accident Data

3.35 The online source www.crashmap.co.uk was used to investigate the personal injury accident (PIA) history of the area for the five year period 2016-2020. The results are shown in Figure 3-16 below.

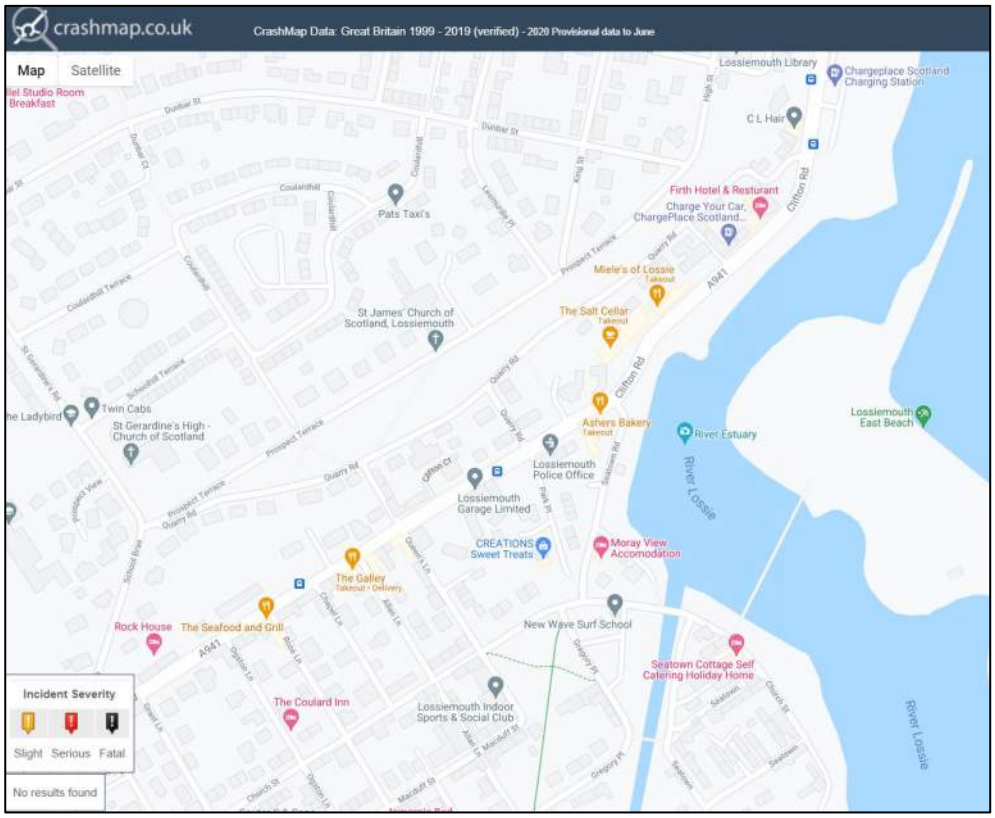



**Figure 3-16: Personal Injury Accident Data 2016-2020**

3.36 No PIAs occurred in the area around the existing bridge, or along any of the walking routes identified in this assessment.

3.37 These data show there are no apparent road safety issues on the Lossiemouth road network in the study area.

# 4. OPERATIONAL CONSIDERATIONS

## Introduction

4.1 Moray Council requested that the level of pedestrian movements was estimated to ensure that the area where the bridge lands adjacent to Clifton Road has sufficient space for all the different user groups to circulate and congregate safely.

4.2 The methodology and results of that assessment are set out in the remainder of this chapter.

## Survey Data – Existing Bridge

4.3 The EIA presents data related to daily average footfall across the bridge for various dates from March to June 2019, prior to the bridge's closure. Those findings are replicated in Table 4-1 below.

**Table 4-1: Bridge Crossing Data Mar – Jun 2019 (from EIA)**

| Bridge Count Dates 2019 | Daily Ave Crossings to the Beach |
|---|---|
| 24 - 25 Mar | 425 |
| 1 - 30 Apr | 590 |
| 1 - 31 May | 346 |
| 17-Jun | 704 |
| Daily Average | 516 |

4.4 The April figures included Good Friday with 2,116 visitors.

4.5 Grossing-up pro rata would give an annual total of 188,340 visits. Given, however, that peak season East Beach usage on a typical day will be much higher than these averages, it is considered that an annual average for a typical year would be c200,000 visits (including multiple visits by many people).

4.6 Moray Council provided pedestrian count data relating to the existing bridge for various periods.

4.7 The data was incomplete and not consistent, so the following methodology was used to determine a profiled flow across a busy weekend.

- The data for Saturday 15 June 2019 provided hourly data across the day. It recorded a total of 829 pedestrian movements, with a peak of 100 movements between 1400-1500.
- No comparable Sunday data was profiled, but there was a 24hr total recorded for Sunday 23 June of 1,026 movements. **The Saturday profile was therefore used as a proxy for the Sunday movements**.

4.8 The resulting profiles are shown in Figures 4-1 and 4-2 for the Saturday and Sunday respectively.

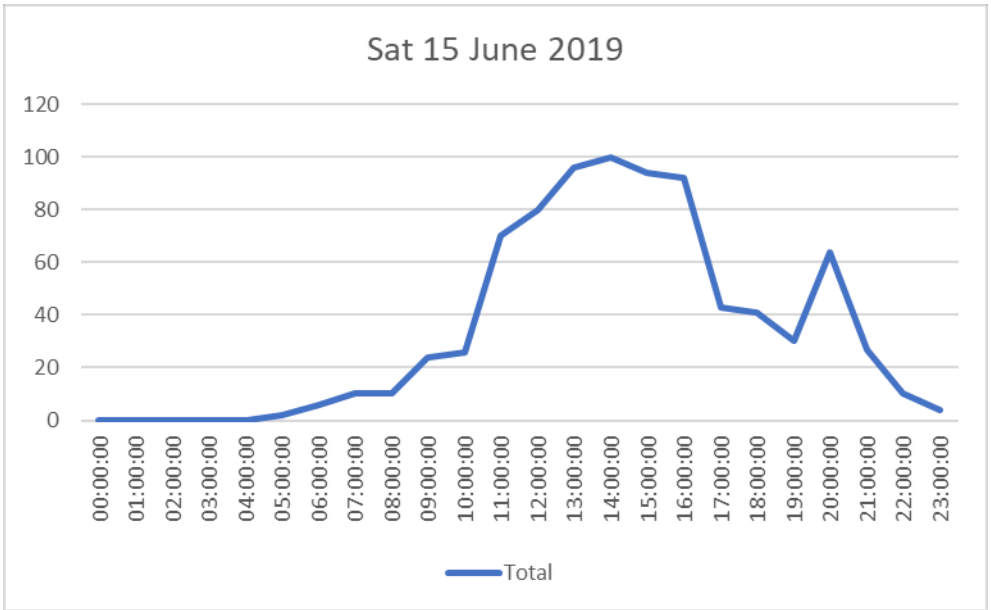



**Figure 4-1: East Beach Bridge Recorded Pedestrian Footfall Saturday 15 Jun 2019**

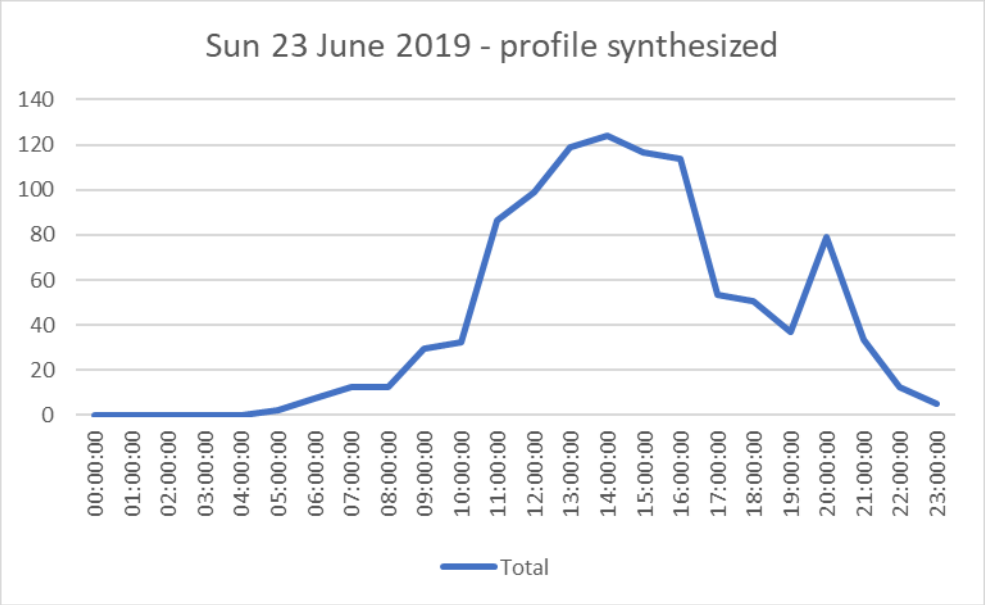



**Figure 4-2: East Beach Bridge Recorded Pedestrian Footfall (profile synthesized) Sunday 23 Jun 2019**

4.9 The profile shows a steady increase in pedestrian footfall across the day, from 0500 with a peak between 1400-1500. Thereafter it drops until a sudden rise between 2100-2200 after which time it drops again.

## Survey Data – Clifton Road Esplanade

4.10 Wilderness Sensors were appointed by Moray Council to undertake pedestrian surveys at a number of locations in Lossiemouth, including 2no on Clifton Road;

- outside Miele's café; and
- at the corner of Clifton Road / Seatown Road

4.11 The counter at the corner of Clifton Road / Seatown Road is on the seafront side of Clifton Road and so was used as a proxy for typical footfall that would pass the bridge. (NB as the counter did not cover the footpath along the seafront, the recorded survey values were doubled in the calculation relating to the bridge landing area to ensure a robust assessment was undertaken).

4.12 The weekend of 15 & 16 August 2020 recorded the highest footfall and so was used in the assessment.

4.13 The counts for Saturday 15 and Sunday 16 August 2020 are shown in Figures 4-3 and 4-4 respectively.

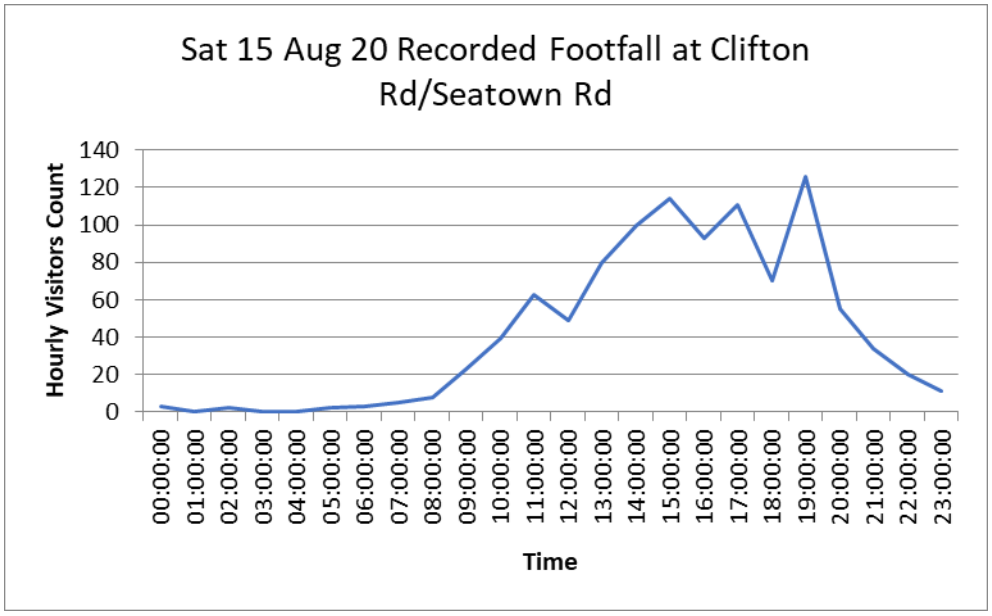



**Figure 4-3: Sat 15 August 2020 Recorded Footfall Clifton Road / Seatown Road**

4.14 The Saturday daytime peak occurred 1500-1600 with a footfall of 114. The peak hour for the day occurred from 1900-2000 with 126 movements. A total footfall of 1,011 was recorded across the 24hr period.


**Figure 4-4: Sun 16 August 2020 Recorded Footfall Clifton Road / Seatown Road**

4.15 The Sunday peak hour occurred from 1400-1500 with a footfall of 161. A total footfall of 1,056 was recorded across the 24hr period.

4.16 A comparison of the relative pedestrian flows, and the totals, are given in Figures 4-5 and 4-6 for the Saturday and Sunday respectively.

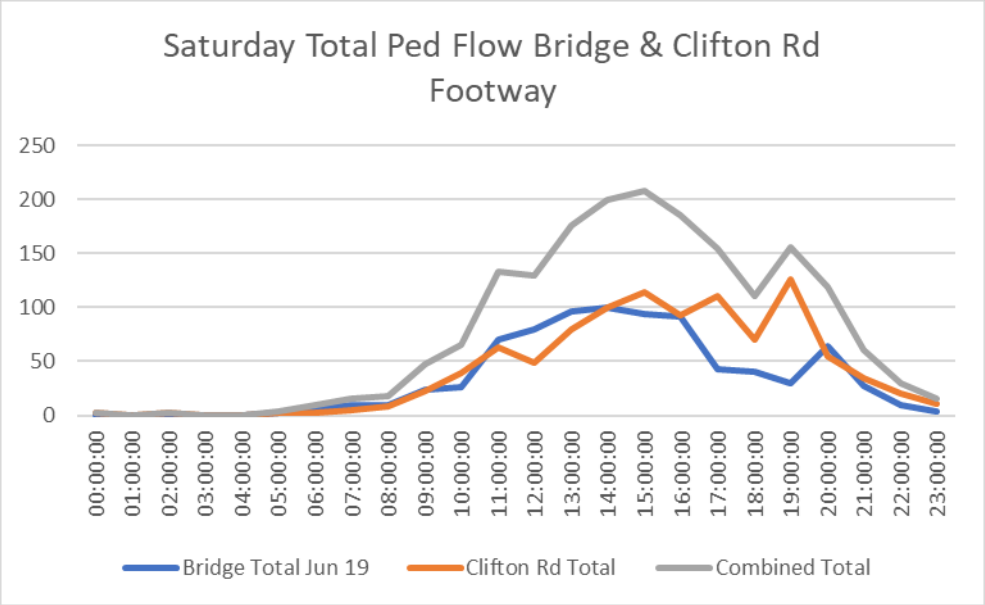



**Figure 4-5: Saturday Footfall Bridge & Clifton Road Combined**

4.17 The data in Figure 4-5 shows a similar pattern of demand across the day for both the bridge (2019) and on Clifton Road (2020). The combined peak hour occurs from 1500-1600 with 208 movements.

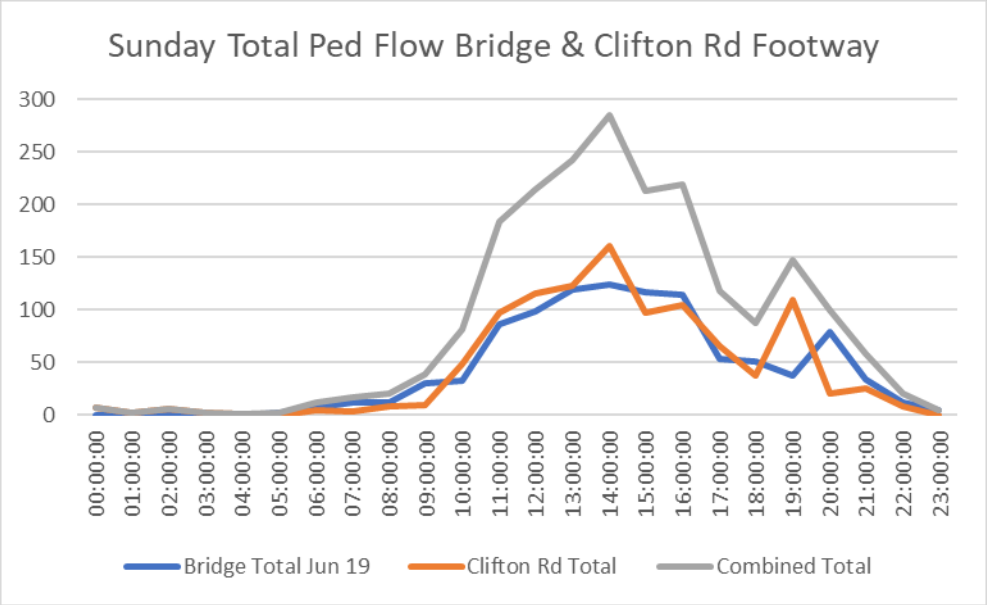



**Figure 4-6: Sunday Footfall Bridge & Clifton Road Combined**

4.18 As with the Saturday, the data in Figure 4-6 for the Sunday shows a similar pattern of demand across the day for both the bridge (2019) and on Clifton Road (2020). The combined peak hour occurs from 1400-1500 with 285 movements.

4.19 These combined peak hours were used as the basis for undertaking the calculations to gauge the capacity of landing area of the bridge on the esplanade.

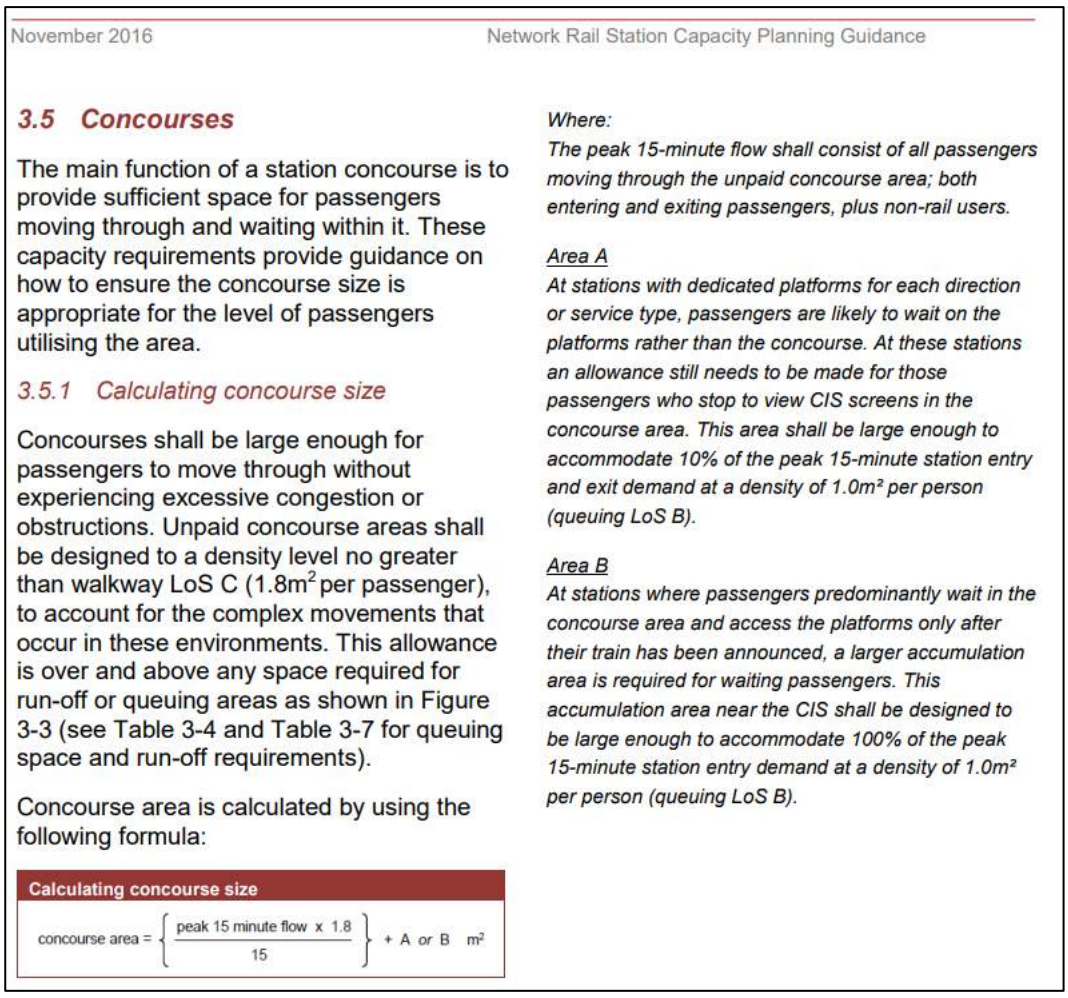
## Methodology & Calculations

4.20 The document *Station Capacity Planning Guidance, Network Rail, November 2016* was used as a basis for calculating the required capacity of the landing area where the bridge connects to the seafront at Clifton Road (https://www.networkrail.co.uk/wp-content/uploads/2019/03/Station-capacity-planning-guidance.pdf).

4.21 The document uses the Fruin Level of Service (LoS) index in order to provide public areas that have sufficient capacity to provide an adequate level of comfort for pedestrians, without making stations uneconomically large.

4.22 The methodology for a station concourse was used as this was considered as a good representation of the pedestrian activity that would be expected, in terms of movements to and from the bridge, perpendicular movements on the footpath along the seafront and groups of stationary people congregating in the area.

4.23 An extract from the Network Rail document is provided below in Figure 4-7 for reference.



November 2016 Network Rail Station Capacity Planning Guidance

### 3.5 Concourses

The main function of a station concourse is to provide sufficient space for passengers moving through and waiting within it. These capacity requirements provide guidance on how to ensure the concourse size is appropriate for the level of passengers utilising the area.

#### 3.5.1 Calculating concourse size

Concourses shall be large enough for passengers to move through without experiencing excessive congestion or obstructions. Unpaid concourse areas shall be designed to a density level no greater than walkway LoS C (1.8m$^2$ per passenger), to account for the complex movements that occur in these environments. This allowance is over and above any space required for run-off or queuing areas as shown in Figure 3-3 (see Table 3-4 and Table 3-7 for queuing space and run-off requirements).

Concourse area is calculated by using the following formula:

**Calculating concourse size**

$$\text{concourse area} = \left\{ \frac{\text{peak 15 minute flow} \times 1.8}{15} \right\} + A \text{ or } B \quad m^2$$

*Where:*
*The peak 15-minute flow shall consist of all passengers moving through the unpaid concourse area; both entering and exiting passengers, plus non-rail users.*

*Area A*
*At stations with dedicated platforms for each direction or service type, passengers are likely to wait on the platforms rather than the concourse. At these stations an allowance still needs to be made for those passengers who stop to view CIS screens in the concourse area. This area shall be large enough to accommodate 10% of the peak 15-minute station entry and exit demand at a density of 1.0m² per person (queuing LoS B).*

*Area B*
*At stations where passengers predominantly wait in the concourse area and access the platforms only after their train has been announced, a larger accumulation area is required for waiting passengers. This accumulation area near the CIS shall be designed to be large enough to accommodate 100% of the peak 15-minute station entry demand at a density of 1.0m² per person (queuing LoS B).*

**Figure 4-7: Section 3.5 from Station Capacity Planning Guidance, Network Rail, November 2016**

4.24 In this case, Area B was considered to be most appropriate as it takes account of passengers waiting on the concourse.

4.25 The results of the assessment are given in Table 4-2.

**Table 4-2: Assessment of Concourse Area Requirements**

| Day | Peak Hour | Pedestrian Flow | | | | | Concourse Area (m2) |
|---|---|---|---|---|---|---|---|
| | | Bridge | Clifton Rd | Clifton Rd * 2 | Total | 15min | |
| Sat | 1500-1600 | 94 | 114 | 228 | 322 | 81 | 90 |
| Sun | 1400-1500 | 124 | 161 | 322 | 446 | 111 | 125 |

4.26 This assessment suggests an area of 125m$^2$ would be sufficient to provide a LoS B.

4.27 It is estimated the landing area will deliver a circulation area of 233m$^2$. On the basis of the calculations, this will provide a significant level of spare capacity, and a high LoS under everyday conditions.

# 5. SUMMARY AND CONCLUSIONS

## Summary & Conclusions

5.1 This Report has been prepared to accompany a Detailed Planning Application for a footbridge to connect Lossiemouth Esplanade with East Beach. Improvements to the public realm will also be delivered where the bridge lands on Lossiemouth Esplanade at Clifton Road.

5.2 The existing footbridge is accessed from Church Street, located in a quiet residential area. The bridge has been closed since August 2019 due to safety and structural concerns and Moray Council has agreed to deliver a new crossing for the town and its communities.

5.3 An EIA dated 2 Mar 21 was produced to assess the economic case for the proposals. It estimated the bridge was responsible for 120,000 day and 30,000 overnight visitors per year, along with 50,000 East Beach visits per year by locals including people living beyond Lossiemouth but who use the beach e.g. for dog walking.

5.4 This gives an annual estimated usage of 200,000 people per year.

5.5 The current bridge is located close to a public car park (Gregory Place); this car park was the principal parking area for visitors to the beach, particularly those undertaking water sports. The new location will mean that users will park at either the Gregory Place Public car park (signposted as East Beach Car Park) or the Station Park car park (signposted as Esplanade Car Park).

5.6 The proposed footbridge will be designed for unsegregated combined use by pedestrians and cyclists, providing a 3.5m wide clear footway and 1.4m high parapets. Although the route is not particularly suited to cycling, the width prescribed will offer ample space for the multitude of users that are expected to use the footbridge, to cross without conflict.

5.7 The proposals will also deliver additional supporting infrastructure including:

- Replace the existing Zebra Crossing on Clifton Road with a controlled Puffin Crossing, with a broader 4.5m wide cross section to maximise pedestrian flow during each crossing stage;
- New footway provision and dropped kerbs at key locations;
- New pedestrian directional signage from both the East Beach and Esplanade Car Parks;
- Widening of existing footpaths on the esplanade; and
- Enhancements to cycling infrastructure.

5.8 The concentration of users at the end of the bridge on Clifton Road at the Esplanade will require an area sufficient for circulation and a degree of congregation for groups meeting before crossing the bridge.

5.9 Moray Council provided pedestrian count data relating to the existing bridge (2019) and footways along Clifton Road in the vicinity of the bridge (2020). These data were used, in conjunction with the document *Station Capacity Planning Guidance, Network Rail, November 2016* as a basis for calculating the required capacity.

5.10 The document uses the Fruin Level of Service (LoS) index to provide public areas that have sufficient capacity to provide an adequate level of comfort for pedestrians.

5.11 The methodology for a station concourse was used as this was considered as a good representation of the pedestrian activity that would be expected, in terms of movements to and from the bridge, perpendicular movements on the footpath along the seafront and groups of stationary people congregating in the area.

5.12 This assessment suggests an area of 125m$^2$ would be sufficient to provide a Level of Service B.

**5.13 It is estimated the landing area will deliver a circulation area of 233m$^2$. On the basis of the calculations, this will provide a significant level of spare capacity, and a high LoS under everyday conditions.**

## APPENDICES

### A. Scoping Moray Council

**From:** Transport Develop <Transport.Develop@moray.gov.uk>
**Sent:** 30 March 2021 18:34
**To:** Spence, Allan <Allan.Spence@tetratech.com>
**Subject:** 210324 FAO Diane Anderson & Elaine Penny - Lossiemouth East Beach Proposed Footbridge

Dear Allan

Please accept my apologies for the delay in getting back to you. Elaine and I have discussed the requirements for the supporting information. The new bridge will serve a wide variety of user groups wishing to access the beach for water sports (with associated equipment e.g paddle boards, surf boards, kayaks), families spending a day at the beach with picnics, cyclists, people with impaired mobility etc. The concentration of all these users at the end of the bridge on Clifton Road will require an area sufficient for circulation and a degree of congregation for groups meeting before crossing the bridge.

The current bridge is located close to a public car park (Gregory Place), which is mainly used by those accessing the beach. In particular those undertaking water sports. The new location will mean that users will park at either the Gregory Place Public car park or the Station Park car park (which is a community asset not a Council one). The road signage currently directs people entering Lossiemouth from the A941 to parking for the East Beach and to parking for the West Beach. This road signage is sufficient. However it is the wayfinding signage from the Gregory Place and Station Park car parks which requires a review. The current blue 'fingerpost' signage is not obvious and bespoke wayfinding signage from the car parks to the bridge is sought.

Along with consideration of wayfinding, an assessment of the suitability of walking routes from both car parks, taking into account the user groups and their associated equipment in terms of width, surface and obstructions is required. The area at the end of the bridge where all of the routes converge will be a particular pressure point, coupled with the need for pedestrians to cross Clifton Road at this location as well. The assessment must identify where widening of pedestrian routes is required and where missing sections of surfaced routes will be provided.

The estimates of pedestrian movements are required to ensure that the area where the bridge lands adjacent to Clifton Road has sufficient space for all the different user groups to circulate and congregate safely. I have attached pedestrian count information collected last year on Clifton Road. It is my understanding that there is also count information available for the old bridge. However we do not have a copy of these data.

Finally with respect to parking there will be a need to undertake works to provide a controlled crossing point and widen the existing footway on Clifton Road as cyclists will be leaving the carriageway at this point to travel over the bridge. The provision of widened footways and cycle facilities will have an impact on the available parking bays. The amount of parking lost to improvements needs to be identified.

I trust that above provides the clarity you are seeking. If you wish to send us a copy of your reporting structure then we can provide comment on this before you go too far in preparing the assessment.

Kind Regards

Diane Anderson | Senior Engineer (Transportation)

**From:** Spence, Allan <Allan.Spence@tetratech.com>
**Sent:** 24 March 2021 15:19
**To:** Transport Develop <Transport.Develop@moray.gov.uk>
**Subject:** 210324 FAO Diane Anderson & Elaine Penny - Lossiemouth East Beach Proposed Footbridge

Good afternoon Diane / Elaine

We have been approached by Beaver Bridges regarding these proposals, and understand Moray Council requires a Transport and Pedestrian Assessment to be undertaken to support the planning application.

I have read the Footbridge Option Report Rev 2 which has provided useful background information.

I'd be grateful if you could call me to discuss the content of these report(s) as this is not a standard, off the shelf study. My current thinking is along the following lines:

- Review the signage for the existing east beach car park
- Review walking route and propose signage for the walking route from the east beach car park to the proposed bridge location
- Undertake assessment on the best available data as it won't be possible to conduct any meaningful survey exercise in the current circumstances
- Make comment on the impact on parking along the Esplanade and footways in the general area

I look forward to hearing from you.

Best regards

Allan

**Allan Spence** **BEng CEng MCIHT CMgr MCMI**
Associate

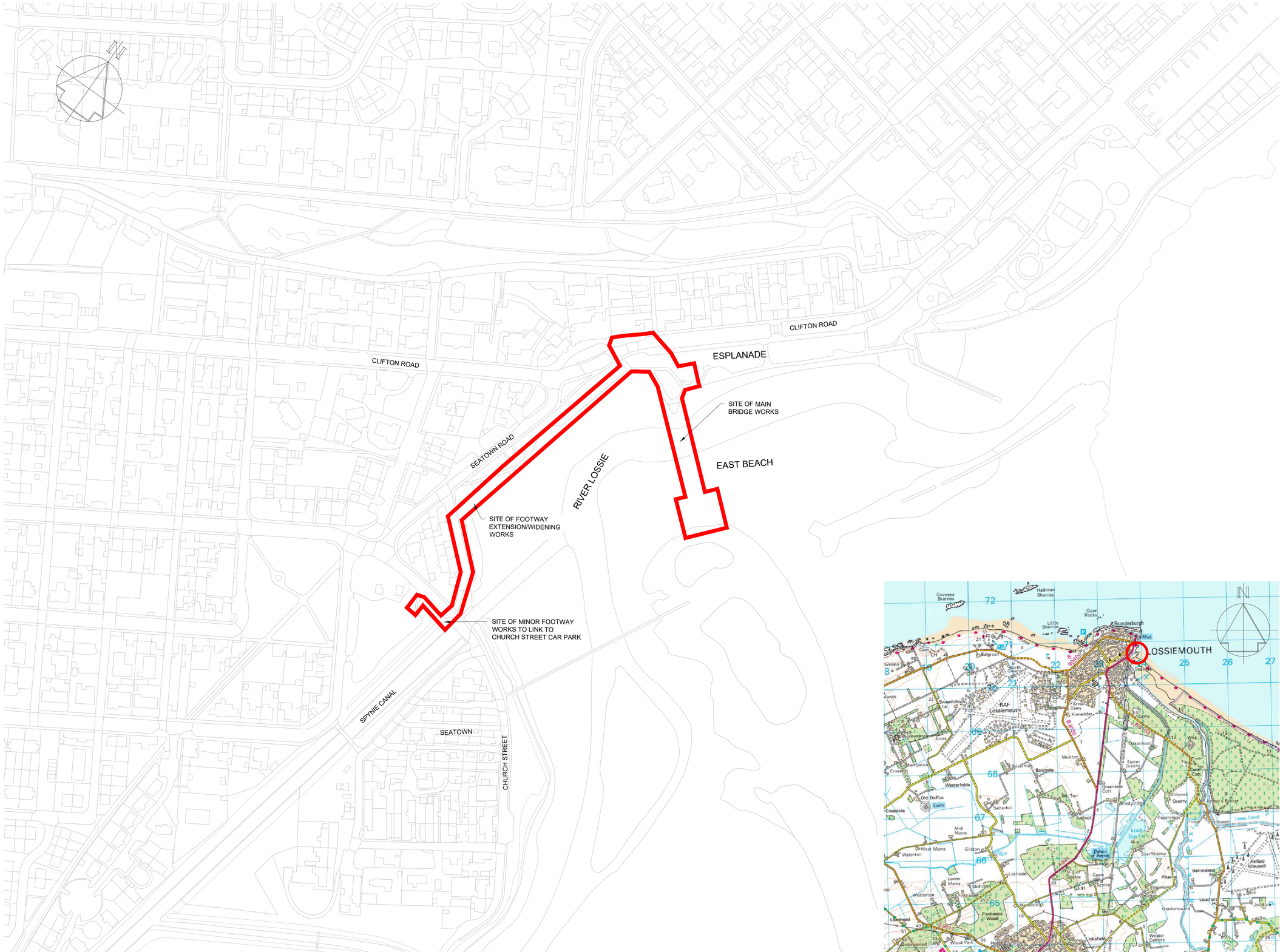
**Tetra Tech**
The Cube, 45 Leith Street, Edinburgh,EH1 3AT

[redacted]
**tetratecheurope.com**



TETRA TECH

# B. Proposal Drawings




SITE LOCATION PLAN
SCALE 1:1250



Scale 1:1250
10m 0m 10m 30m 50m 70m 90m




SITE LOCATION PLAN
SCALE 1:5000

## NOTES

1. All dimensions in millimeters. All levels in meters.
2. This drawing to be read in conjunction with other scheme drawings if applicable
3. This is a CAD produced drawing and should not be amended by hand
4. Do not scale from this drawing, work to stated dimension only. If in doubt ASK.

| Rev | Description | Chkd | By | Date |
|---|---|---|---|---|

Beaver Bridges Ltd
5 Knights Court,
Archers Way,
Battlefield Enterprise Park,
Shrewsbury SY1 3GA
Tel: 01743 811 811

BEAVER BRIDGES

Client
MORAY COUNCIL

Project Name
LOSSIEMOUTH REPLACEMENT FOOTBRIDGE

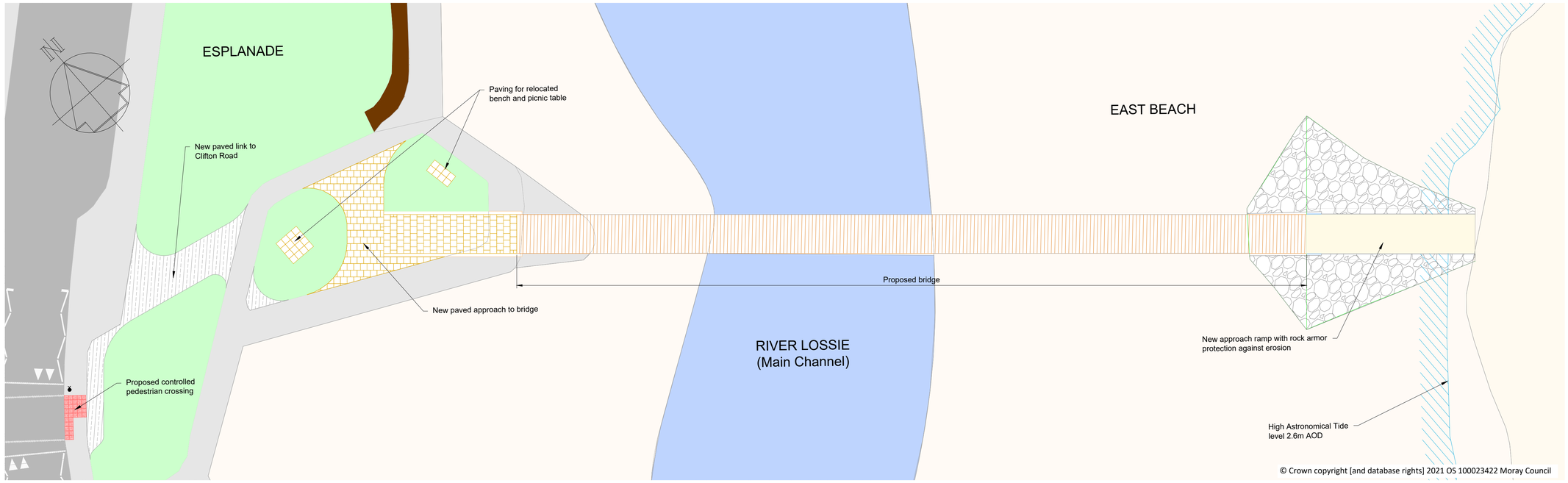
Drawing Title
LOCATION PLAN & SITE BOUNDARY

| Start Date | Drawn | Designed | Checked | Scale |
|---|---|---|---|---|
| 15/03/2021 | BS | BS | LJ | AS SHOWN |

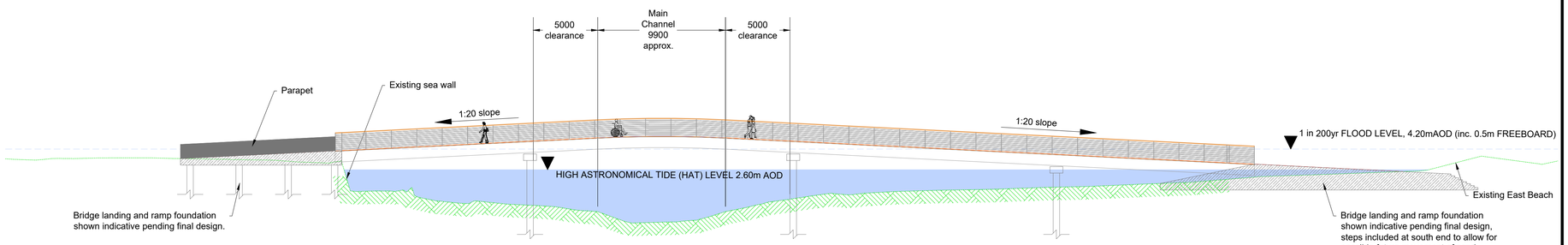
| Drawing Status | Page Size |
|---|---|
| FOR APPROVAL | A1 L |

| Drawing No | Rev |
|---|---|
| BB2020-PL-001 | 00 |

File: C:\Users\Bob\Beaver Bridges Ltd\Beaver Bridges LTD - Documents\1. BB LTD\9. ORDERS\BB2020 Lossiemouth, Moray Council\4. DESIGN\DRAWINGS\BB2020-PL-001 0.dwg,Plotted by: bob,on; 14/05/2021 12:21:52



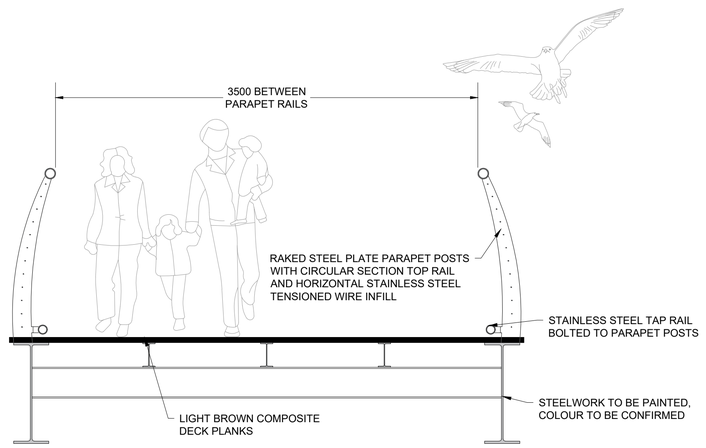

PLAN VIEW OF PROPOSED BRIDGE
SCALE 1:200




SOUTH-WEST ELEVATION
SCALE 1:200

PROPOSED BRIDGE - VIEW FROM NORTH EAST

PROPOSED BRIDGE - VIEW FROM SOUTH EAST




TYPICAL BRIDGE SECTION
SCALE 1:25

## NOTES

1. All dimensions in millimeters. All levels in meters.
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KEY:

- Paving slabs to match existing footways
- Paving in Marshall's 'Saxon' slabs to bridge approach
- Proposed bridge deck
- Rock armor erosion protection

| Rev | Description | Chkd | By | Date |
|---|---|---|---|---|

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BEAVER BRIDGES

Client
MORAY COUNCIL

Project Name
LOSSIEMOUTH REPLACEMENT FOOTBRIDGE

Drawing Title
PROPOSED FOOTBRIDGE GENERAL ARRANGEMENT

| Start Date | Drawn | Designed | Checked | Scale |
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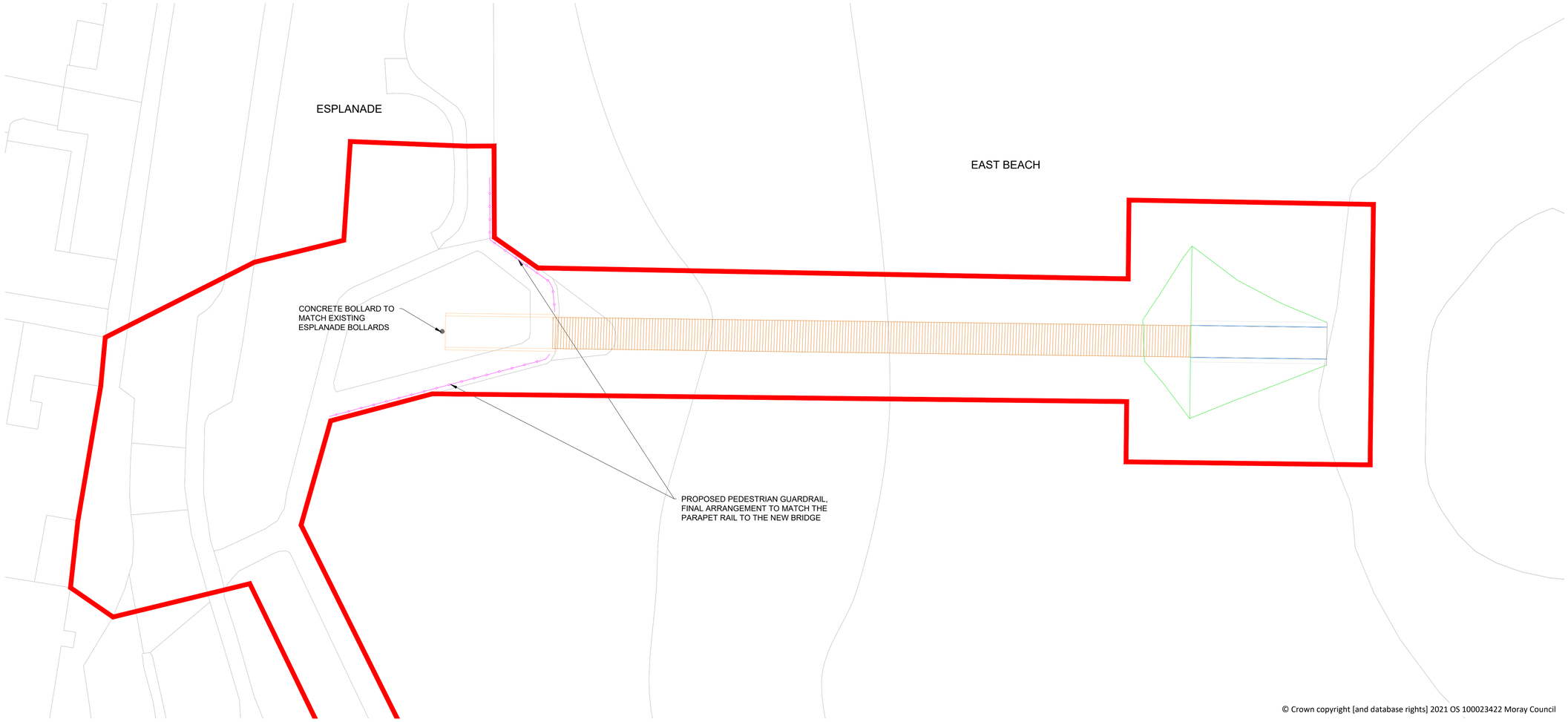




## NOTES

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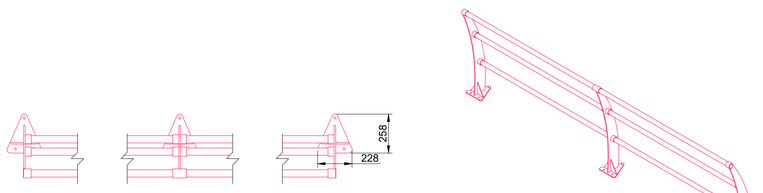
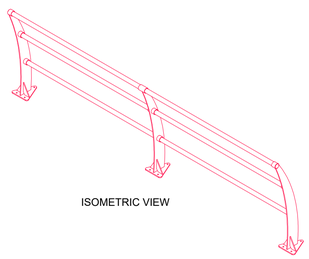
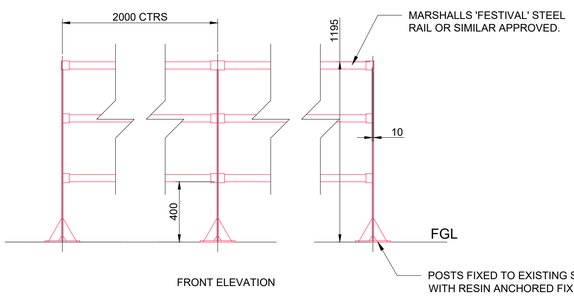
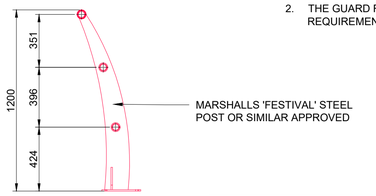


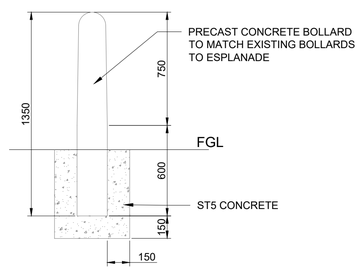




NOTES:

1. ALL DIMENSIONS IN MILLIMETRES UNLESS STATED OTHERWISE.
2. THE GUARD RAIL SHALL MEET THE REQUIREMENTS OF BS EN 1317 & BS 7818.

NOTE:
GUARDRAIL DETAIL MAY CHANGE DEPENDING UPON THE FINAL PARAPET RAIL TO THE NEW BRIDGE

FESTIVAL GUARD RAIL
SCALE 1:20




PRECAST CONCRETE BOLLARD
SCALE 1:20

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Client
MORAY COUNCIL

Project Name
LOSSIEMOUTH REPLACEMENT FOOTBRIDGE

Drawing Title
PROPOSED FENCING

| Start Date | Drawn | Designed | Checked | Scale |
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| BB2020-PL-004 | 00 |

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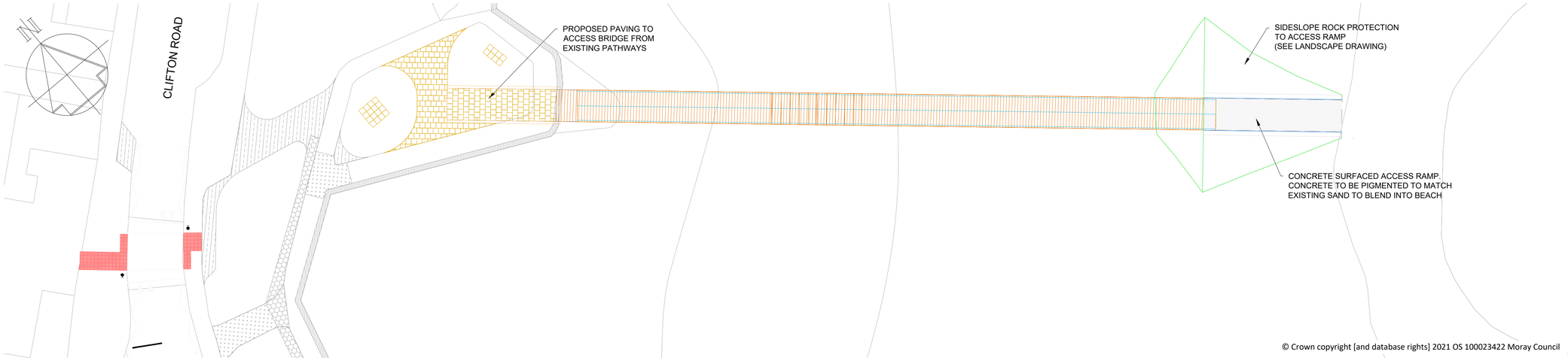
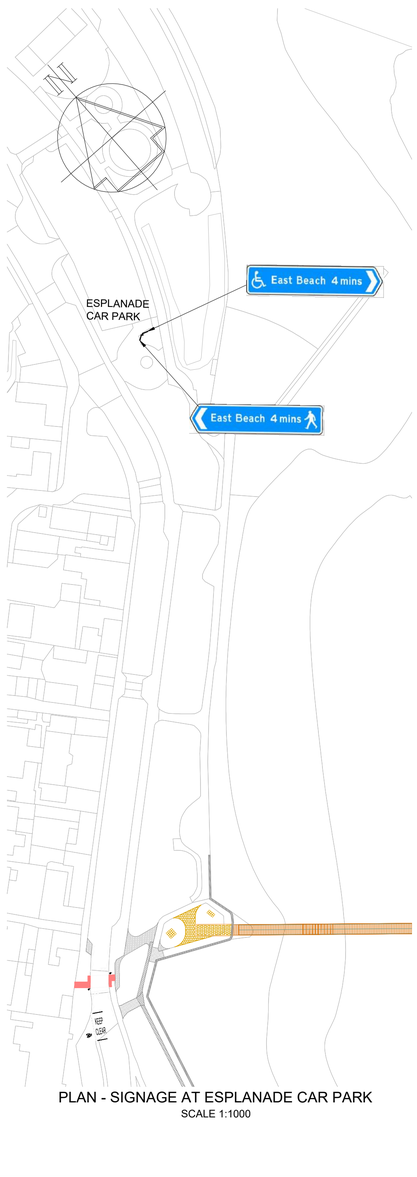
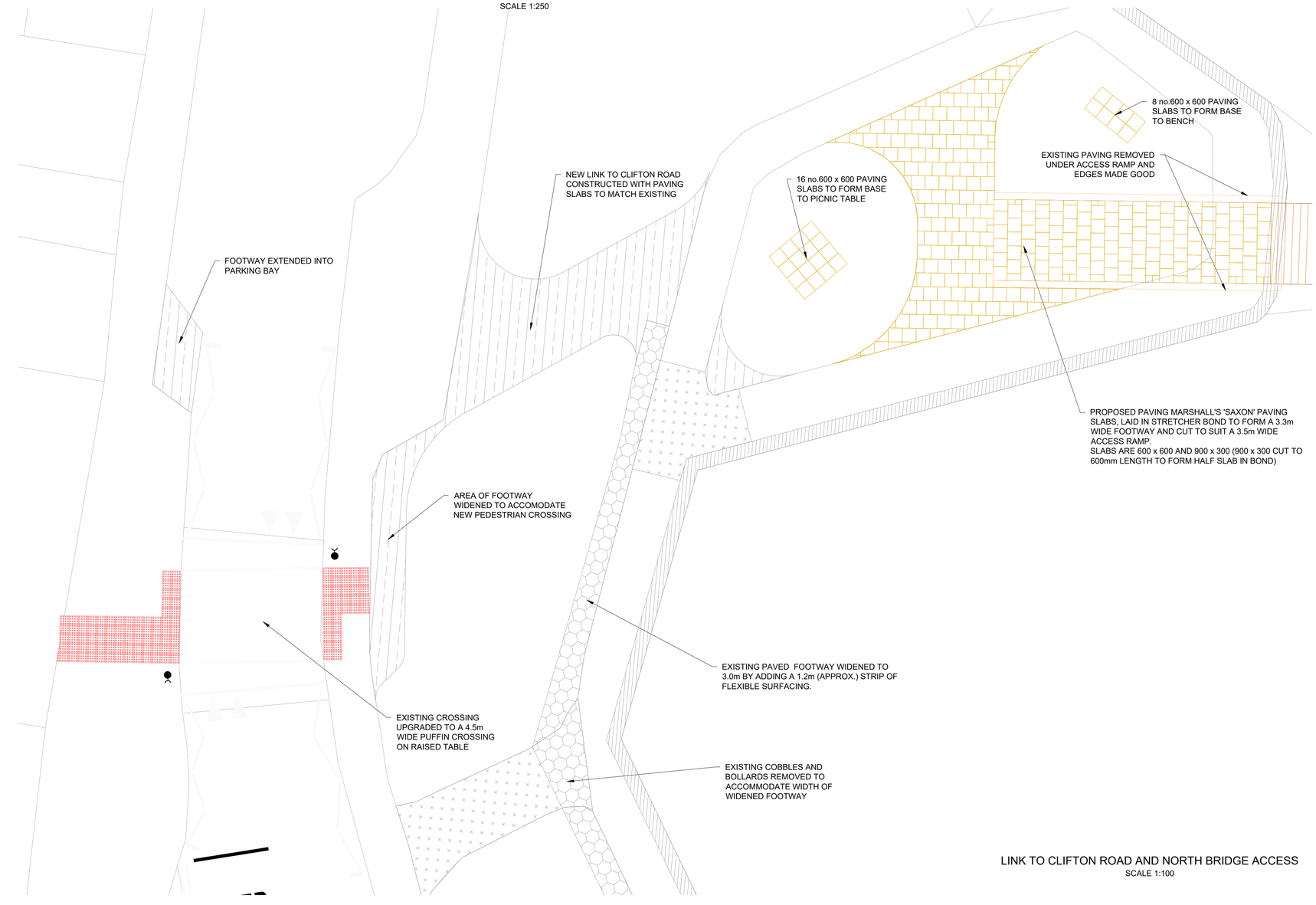





PLAN
SCALE 1:250




PLAN - SIGNAGE AT ESPLANADE CAR PARK
SCALE 1:1000




LINK TO CLIFTON ROAD AND NORTH BRIDGE ACCESS
SCALE 1:100

## NOTES

1. All dimensions in millimeters. All levels in meters.
2. This drawing to be read in conjunction with other scheme drawings if applicable
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KEY:

- Paving slabs to match existing footways
- Paving in Marshall's 'Saxon' slabs to bridge approach
- Proposed widening of existing footway in flexible construction
- Existing Sea Wall
- Existing cobble paving

| Rev | Description | Chkd | By | Date |
|---|---|---|---|---|

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BEAVER BRIDGES

Client
MORAY COUNCIL

Project Name
LOSSIEMOUTH REPLACEMENT FOOTBRIDGE

Drawing Title
PROPOSED KERBS, FOOTWAYS, PAVED AREAS AND SIGNS
SHEET 1 OF 2

| Start Date | Drawn | Designed | Checked | Scale |
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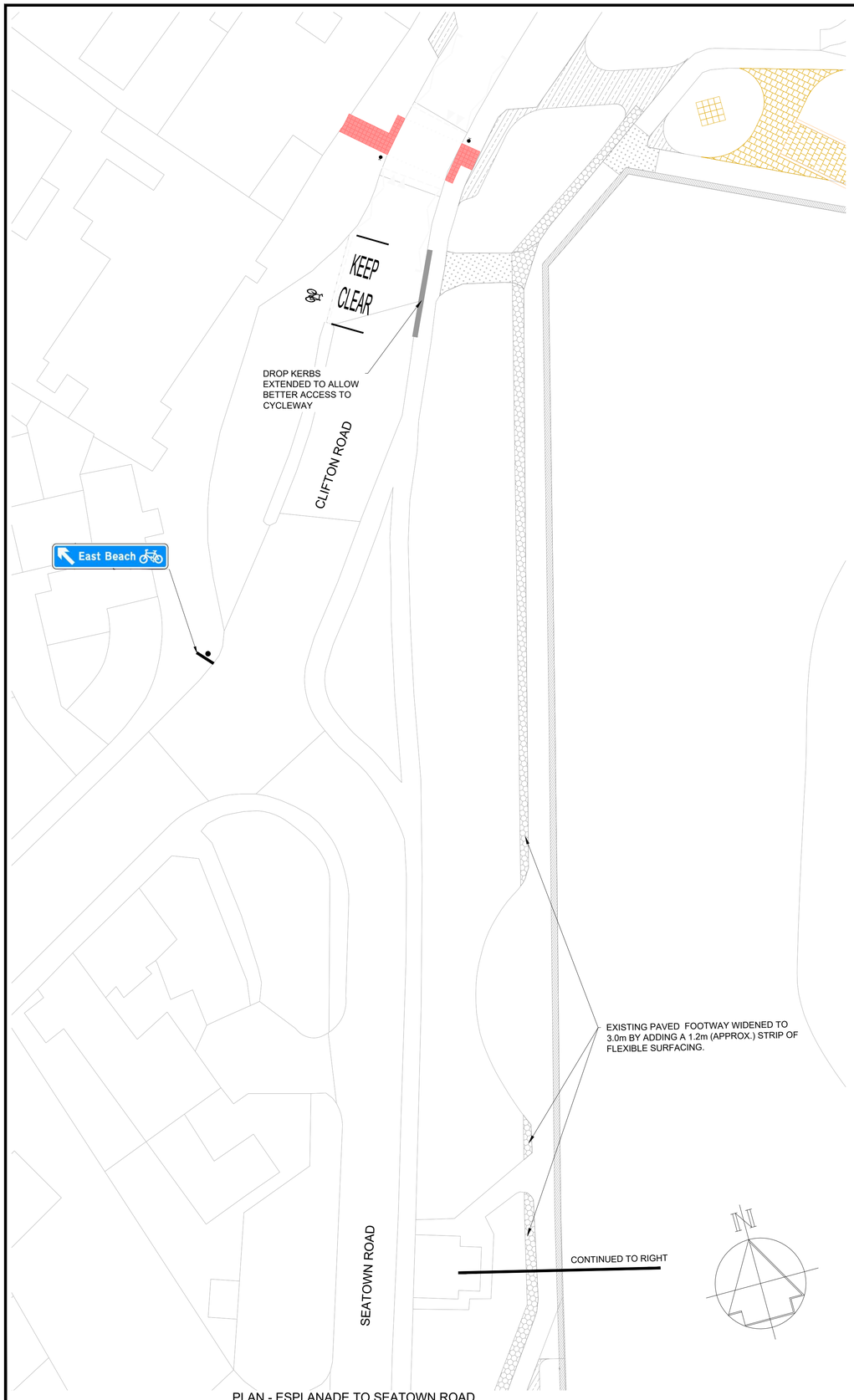
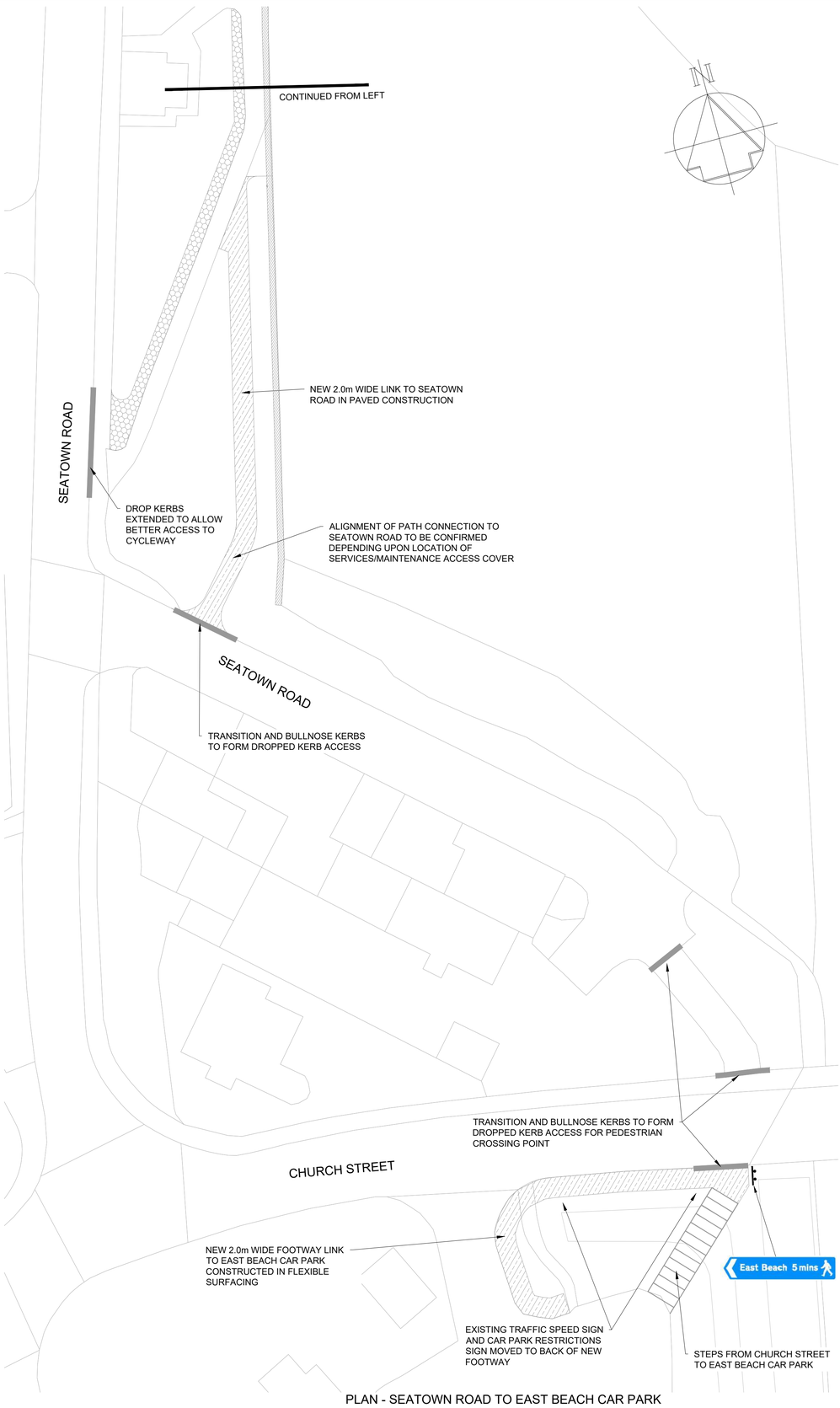



PLAN - ESPLANADE TO SEATOWN ROAD
SCALE 1:250




PLAN - SEATOWN ROAD TO EAST BEACH CAR PARK
SCALE 1:250

## NOTES

1. All dimensions in millimeters. All levels in meters.
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KEY:

- Paving slabs to match existing footways
- Paving in Marshall's 'Saxon' slabs to bridge approach
- Proposed widening of existing footway in flexible construction
- Existing Sea Wall
- Existing cobble paving

| Rev | Description | Chkd | By | Date |
|---|---|---|---|---|
| P02 | DROP KERBS ADDED TO CLIFTON ROAD AND SEATOWN ROAD | LJ | BS | 21/05/21 |
| P01 | SIGNS AND STEPS TO CAR PARK ADDED, CYCLEWAY UPDATED | LJ | BS | 20/05/21 |

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Client

MORAY COUNCIL

Project Name

LOSSIEMOUTH REPLACEMENT FOOTBRIDGE

Drawing Title

PROPOSED KERBS, FOOTWAYS, PAVED AREAS AND SIGNS
SHEET 2 OF 2

| Start Date | Drawn | Designed | Checked | Scale |
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# Appendix D – Flood Risk Assessment

| | | | |
|---|---|---|---|
| **Date:** | 15th December 2020 | **Version:** | 1.0 |
| **To:** | David Mitchell, Beaver Bridges Ltd. | | |
| **From:** | Gordon Falconer, cbec eco-engineering UK Ltd | | |
| **Project:** | Lossiemouth East Beach Footbridge Replacement | | |
| **Subject:** | Hydrological and Flood Risk Assessments | | |

## 1. INTRODUCTION

### 1.1 SITE DESCRIPTION

The town of Lossiemouth in Moray has several beaches, popular for tourism and recreation. One of the main beaches, adjacent to shops and restaurants, is Lossiemouth East Beach. Access to this beach is over the River Lossie, and has been difficult for pedestrians for over a year, since the existing footbridge was deemed unsafe as a result of flood damage/aging.

There are two proposed locations for the replacement footbridge to East Beach, shown in Figure 1.1.

1) The location of the existing footbridge (323748E, 870409N)
2) From opposite shops on Seatown Road at a historic bridge abutment (323724E, 870636N)


**Figure 1.1: Aerial view of Lossiemouth showing the River Lossie, East beach and the two proposed access bridges.**

The following sections contain a hydrological assessment of still water levels (tide level plus storm surge) and fluvial flows/levels in the River Lossie and a flood risk assessment (FRA). These analyses are based on topographic/bathymetric survey and tide tables, SEPA guidance and hydraulic modelling.

## 1.2 APPROACH

The proposed bridge may be subjected to high tide and storm surge from the Moray Firth and high fluvial flood levels from the River Lossie at either location. This assessment will look at a combined tidal and fluvial event for a range of coastal events and both the 200 year and 200 year + climate change fluvial events. Both fluvial and tidal climate change allowances were taken from SEPA technical guidance[1]. Fluvial flows were computed using UK industry standard FEH approaches (section 2.1) and Tidal still water levels (SWL) were taken from the SEPA and EA Flood and Coastal Erosion Risk Management Programme document[2]. To aid the analysis, a topographic/bathymetric survey of the site was conducted by cbec in October 2020 and a Digital Elevation Model (DEM) was generated in AutoCAD civil 3D 2019 (Figure 1.2). This data along with LiDAR was used as the basis for all analysis carried out in this study.

[1] SEPA, *Climate change allowances for flood risk assessment in land use planning, April 2019.*
[2] DEFRA, SEPA, EA *Coastal Flood Boundary Conditions for UK Mainland and Island, SC060064/TR2: Design Sea Levels*

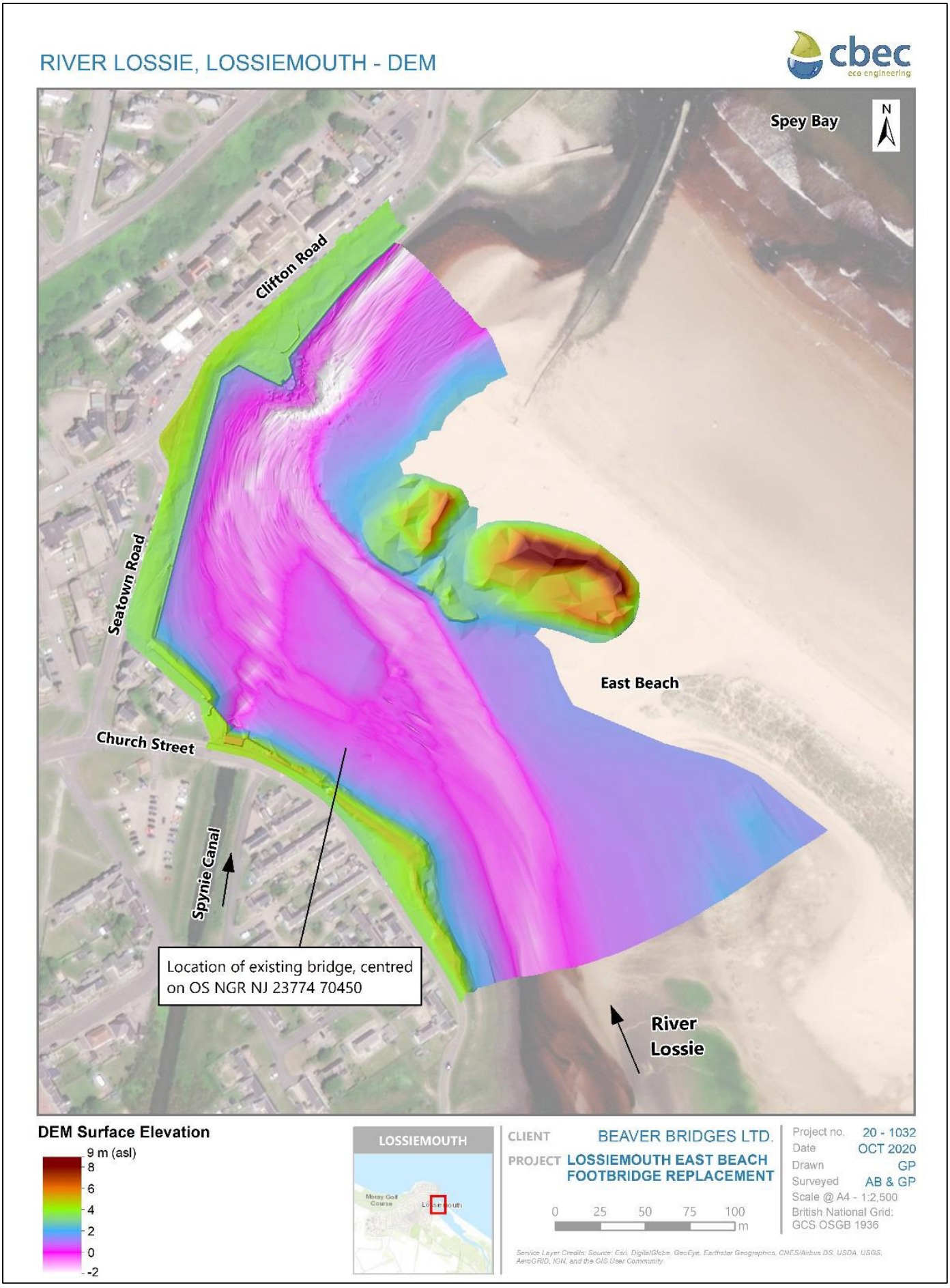


**Figure 1.2: Topographic survey carried out by cbec in October 2020**

## 2. ANALYSIS

### 2.1 HYDROLOGICAL ASSESSMENT

The River Lossie flows through hydrometric area 7 (Findhorn group) before entering the Moray Firth at Lossiemouth. There is a gauge (7003 – Lossie at Sherrifmills) located on the River Lossie upstream of Elgin and a hydrological assessment point (HAP) was chosen to generate catchment descriptors at the tidal limit where the River Lossie flows under the B9103 (Table 2.1).

**Table 2.1 Catchment description**

| Source | Reach Name | OS grid reference | Description | HAP Catchment area (km²) |
|---|---|---|---|---|
| FEH web portal (HAP1) | River Lossie | NJ 25300 67200 | Tidal boundary under the B9103 | 270.55 |
| Gauge 7003 Lossie at Sherrifmills | River Lossie | NJ 194 626 | Upstream of Elgin | 216 |

Hydrology was computed using UK standard methodologies as recommended by SEPA and the EA, following FEH guidelines. Final design flows used in this analysis are shown in Table 2.2 with all methods used and hydrolical audit sheets found in Appendix A.

**Table 2.2 Final design peak flows**

| Return period (years) | Annual Exceedance Probability (AEP) | River Lossie Tidal Boundary ($m^3s$) |
|---|---|---|
| 200 | 0.5 | 168.83 |
| 200 (+37%CC) | 0.5 (+37%CC) | 231.30 |

### 2.2 EXPECTED WATER LEVELS AND VELOCITIES

As discussed, the proposed bridge may be subjected to high tide and storm surge from the Moray Firth and fluvial flood flows from the River Lossie at either Location. For bridge proposal 1) the ground level on the Seatown side is a gap in the embankment at 3.70 mAOD; for bridge proposal 2) the ground level at the Lossiemouth side is at 3.38 mAOD.

The relevant current high tide levels according to Admiralty Tide Charts at Burghead (8 miles West of Lossiemouth) are tabulated below (Table 2.3):

**Table 2.3: High tide levels – Admiralty Tide Charts at Burghead**

| Tide | Level [mAOD] |
|---|---|
| Highest astronomical tide (HAT) | 2.6 |
| Mean High Water Spring tide (MHWS) | 2.0 |

However, extreme sea levels occur when adverse weather conditions combine with high tides, so the effects of weather are combined with tide levels to give still water levels (SWL) for flood design purposes. The SEPA and EA Flood and Coastal Erosion Risk Management Programme document[3]: suggests a SWL (combined tide and storm surge) of 3.35 m AOD for the Moray Firth.

In addition, SEPA guidance[1] suggests that tide levels in the area may rise as a result of climate change by 0.89 m.

Fluvial flows is the Lossie, were computed using UK industry standard FEH approaches as 168.83 $m^3/s$ for the 200 year return period flood and the expected fluvial uplift as a result of climate change is 37%. Channel slope over the topographic survey extent is 0.0013 and the substrate is sand and boulders (Manning n = 0.025). A 2D shallow water equation hydraulic model was developed using surveyed bathymetry and fluvial boundary conditions at the upstream end, and tidal boundary conditions at the downstream end to investigate the effect of high fluvial flows combined with the effects of tide.

A joint probability study of fluvial, tidal and storm levels is not scoped for as part of this study. A joint 200 year return period storm surge, high tide and 200 year fluvial event is a much rarer occurrence than a 200 year event and so we include in the analysis a 200 year fluvial flood plus highest astronomical tide, and a 200 year plus climate change fluvial event and highest astronomical tide plus climate change uplift. The return period of this event was not computed in this study, but the coincidence of the 200 year fluvial event peak and HAT is likely to be higher than a 200 year return period.

Table 2.1 details the following key expected water levels:

- 200 year tidal/storm still water level (SWL)
- 200 year tidal/storm SWL plus allowance of tidal uplift as a result of climate change
- 200 year fluvial flow in the River Lossie combined with highest astronomical tide (HAT)
- 200 year fluvial flow in the Lossie plus 37% allowance for fluvial climate change combined with HAT with allowance for tidal climate change (+0.89 m)

Wave analysis is not part of the scope of this study.

**Table 2.4: Tabulated results**

| Condition | Level at existing bridge [mAOD] | Level at proposed alternative bridge [mAOD] |
|---|---|---|
| 200 year RP tidal/storm SWL | 3.35 | 3.35 |
| 200 year RP tidal/storm SWL+climate uplift | 4.24 | 4.24 |
| 200 year RP fluvial + HAT | 2.69 | 2.64 |
| 200 year RP fluvial + 37% cc + HAT + cc | 3.55 | 3.52 |

[3] *DEFRA, SEPA*, EA Coastal Flood Boundary Conditions for UK Mainland and Islands, *SC060064/TR2: Design Sea Levels*

In addition, for bridge scour and safety assessments, the fluvial flow velocities for the 200 year fluvial flood were computed with hydraulic modelling. At HAT, these are around 0.54 m/s for the existing bridge location (1) and 0.80 m/s for the proposed alternative bridge location (2). The critical condition for high velocity in the Lossie is low tide but high discharge because this condition increases water surface slope. These critical velocities were computed using normal depth assumptions in the channel. Maximum velocity at low tide and 200 year + climate change fluvial event is 1.10 m/s at the existing bridge (1) and 2.50 m/s at the proposed alternative bridge location (2).

Extents under water are shown in Figure 2.1 to Figure 2.4.

In these figures the brown polygon is the hydraulic model extent, red and green lines mark the two bridge positions, and black lines indicate survey breaklines such as channel toe, walls etc. The blue shading is the area within the topographic survey extent/combined LiDAR that is predicted to be underwater at each condition and hydraulically connected to the channel.

Figure 2.5 shows the computed velocities in the channel for the 200 year + climate change fluvial flood occurring at low tide.


**Figure 2.1: Water level at 200 year tidal/surge SWL**


**Figure 2.2: Water level at 200 year plus climate change tidal/surge SWL**


**Figure 2.3: Water level at 200 year fluvial flood in Lossie combined with HAT**

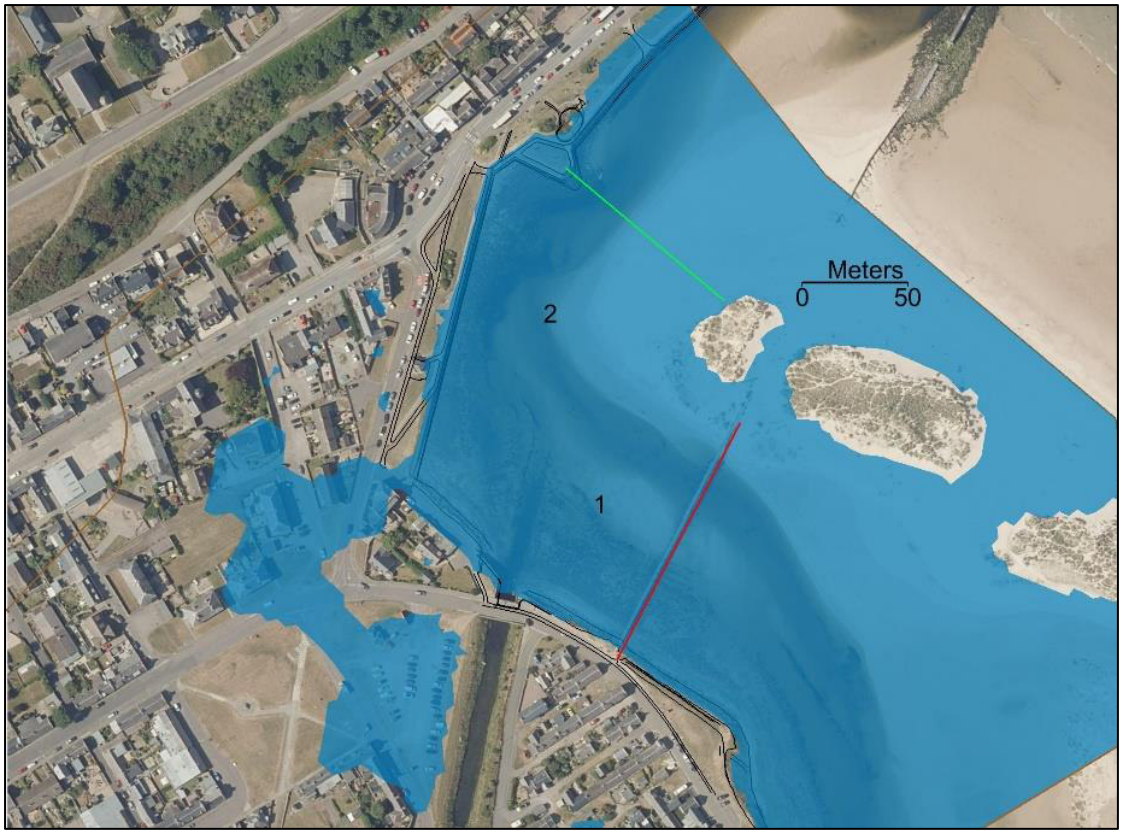


**Figure 2.4: Water level at 200 year + climate change fluvial flood in Lossie combined with HAT adjusted for climate change**

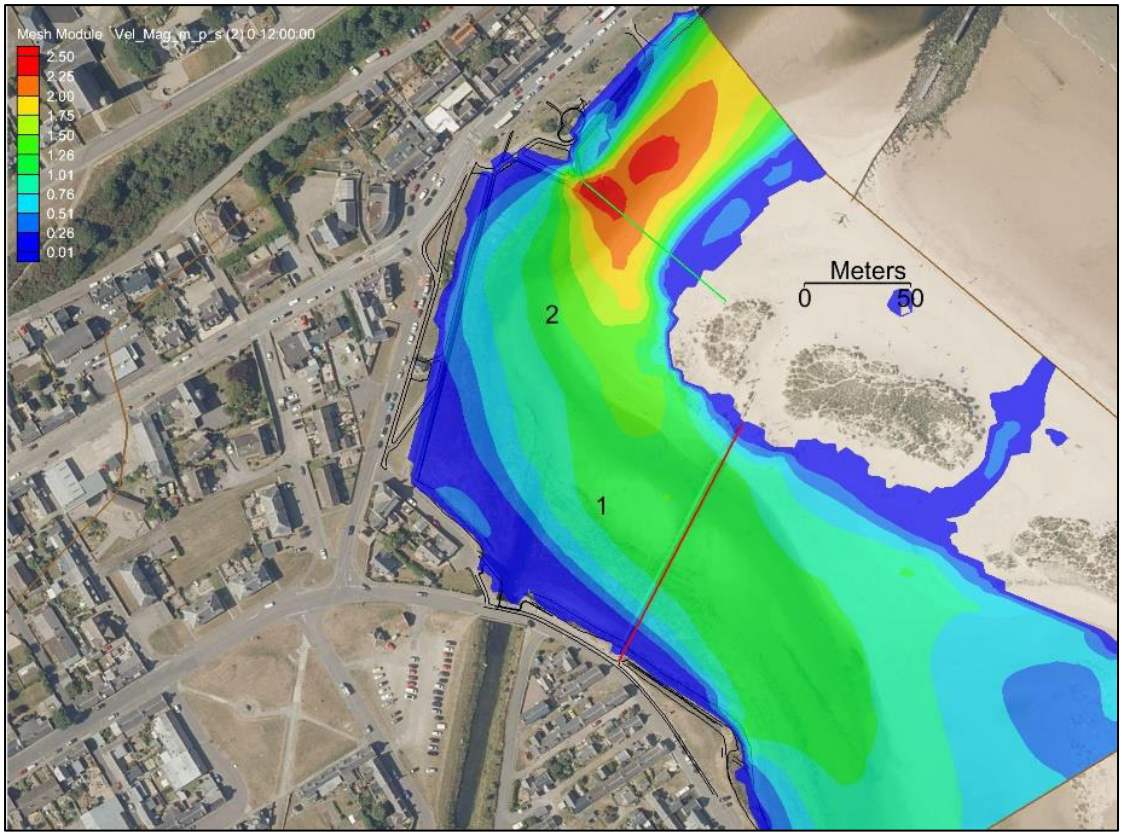


**Figure 2.5: Critical velocity condition of 200 year plus climate change fluvial flood in Lossie combined with low tide (normal depth). Peak at existing bridge location (red line) is 1.10 m/s; peak at second bridge location (green line) is 2.50 m/s.**

## 2.3 FLOOD RISK ASSESSMENT

### 2.3.1. Introduction

As part of this study, a preliminary Flood Risk Assessment (FRA) has been completed, assessing any flood risk concerns raised by the proposed bridge development with Scottish Planning Policy.

This assessment is a comprehensive risk based assessment of potential flooding from both fluvial and coastal flood risk. The assessment also identifies and examines residual risk to the site and any neighbouring properties. The aim of this report is primarily to consider flood risk and satisfy requirements under SPP.

Data and information have been obtained from the following sources:

- Scottish Environment Protection Agency (SEPA),
- Findhorn, Nairn and Speyside: Flood Risk Management Strategy 2015;
- Findhorn, Nairn and Speyside: Local Flood Risk Management Plan (2016);
- Moray Council Strategic Flood Risk Assessment: Proposed Plan;
- Hydraulic model results.

### 2.3.2. Development proposals

There are two proposed locations for the East Beach footbridge as shown in Figure 2.6.


**Figure 2.6: Aerial view of Lossiemouth showing the River Lossie, East beach and the two proposed access bridges.**

1) The location of the existing bridge (323748E, 870409N)
2) From opposite shops on Seatown Road at a historic bridge abutment (323724E, 870636N)

### 2.3.3. Planning policy

FINDHORN, NAIRN AND SPEYSIDE: FLOOD RISK MANAGEMENT STRATEGY 2015;

SEPA's Flood Risk Management Strategy for the Findhorn, Nairn and Speyside districts, the first encompassing the River Lossie, was published in December 2015. Lossiemouth is identified as a Potentially vulnerable Area (PVA) under PVA 05/01 which includes Burghead to Lossiemouth. Flooding is mainly limited to seafront properties in this document however it is expected to be underestimated as wave action is not included. The current number of properties at risk of coastal flooding in Lossiemouth is 70 (30 residential and 40 non-residential). A list of flood events effecting Lossiemouth can be found below, demonstrating its vulnerability to both coastal and fluvial flooding;

- **1829** – Great Muckle spate of August,
- **1852** – Combined fluvial and coastal event resulted flooding along the river Lossie along with harbour flooding at Lossiemouth due to high waves,
- **1983** – Coastal flooding on shore street,
- **2012 and 2013** – Coastal flooding leading to the evacuation of homes in Lossiemouth.

The River Lossie most recently flooded in 2002 however there was no flooding in Lossiemouth and partially built flood defences in Elgin protected the town.

FINDHORN, NAIRN AND SPEYSIDE: LOCAL FLOOD RISK MANAGEMENT PLAN (LFRMP)(INTERIM REPORT) 2019;

Moray Council released their LFRMP in June 2016 in response to SEPA's Strategies outlined the previous year (Section 4.1) and produced an interim report in 2019. The documents lay out the Council's general objectives concerning flood risk to Lossiemouth which includes strategic mapping and modelling of coastal environments. At the time this interim report was written the modelling was not complete however it was due to be completed in 2019.

MORAY COUNCIL STRATEGIC FLOOD RISK ASSESSMENT – MORAY LOCAL DEVELOPMENT PLAN

Moray Council produced this report in December 2018 and is in the process of preparing its MLDP for 2020. The plan states that Lossiemouth is at risk from both coastal and fluvial flooding and areas in close proximity to the coast are at risk from inundation from the sea and will require to incorporate adequate protection measures.

SCOTTISH PLANNING POLICY

Scottish Planning Policy (SPP) seeks to reduce the impact of flooding on new developments, by expecting developers and planning authorities to err on the side of caution in decision making whenever flooding in an issue.

Although the site of interest lies within the functional floodplain (Medium – High risk of flooding), the nature of the design means it cannot be relocated to an area of lower flood risk. The policy states that a precautionary approach to flood risk from all sources must be used, considering the predicted effects of climate change.

### 2.3.4. Assessment of flood risk

The nature of this bridge development, connecting Lossiemouth to East Beach, means the bridge has to be built in an area of high flood risk. Following the guidelines stated in section 2.3.3, a precautionary approach has been adopted when reviewing flood risk to the proposed bridge locations.

Assessing SEPA flood maps in **Figure 2.7** it is evident that both proposed bridge locations are at risk from both fluvial and coastal flooding with neither being at a lower risk to the other. A JBA assessment into the Lossiemouth Breakwater[4] looked further into wave action and coastal flooding around Lossiemouth however this report did not include any fluvial flood risk information. Similarly, Jacobs carried out a Lossiemouth Coastal Flood Study[5] however this focused on coastal flooding to Lossiemouth and did not look at the combined effects of flooding from the River Lossie.


**Figure 2.7: SEPA flood map, ©Crown Copyright. SEPA License Number 100016991.**

The analysis carried out provided water levels at both proposed bridge locations (Table 2.5). The data shows that there are minimal differences in water levels between the two locations for the range of events modelled. However, this analysis does not take into consideration wave action and while location 1 (existing bridge) may exhibit marginally higher water levels, it's orientation may protect it from waves more when compared with Location 2 (opposite shops on Seatown Road). Similarly, the analysis showed that velocities around bridge location 1 were lower than those at location 2 as discussed in Section 2.2.

The entrance elevation to bridge location 1 is approximately 3.7 mAOD and location 2 is approximated 3.38 mAOD, however, location 1 has the potentially to extend the bridge further onto the bank where the path varies between 3.7 – 3.9 mAOD, adding safer levels for access.

[4] JBA, Lossiemouth Breakwater Assessment, January 2015
[5] Jacobs, Lossiemouth Coastal Flood Study, October 2018

**Table 2.5: Tabulated results**

| Condition | Level at existing bridge [mAOD] | Level at proposed alternative bridge [mAOD] |
|---|---|---|
| 200 year RP tidal/storm SWL | 3.35 | 3.35 |
| 200 year RP tidal/storm SWL+climate uplift | 4.24 | 4.24 |
| 200 year RP fluvial + HAT | 2.69 | 2.64 |
| 200 year RP fluvial + 37% cc + HAT + cc | 3.55 | 3.52 |

### 2.3.5. Mitigation options and future analysis

This preliminary flood risk assessment assesses still water levels from a range of flood events. It is not possible to produce a full, comprehensive flood risk assessment until final locations/ designs are agreed and developed, however, at this stage there are further analysis/considerations which may benefit the subsequent design phase of works;

- Wave analysis was not taken into consideration during this analysis. We would recommend that this is undertaken for the final proposed design. Data is available from the Moray Firth Directional Waverider buoy[6] which was first deployed in August 2008 and is due to end in 2023.
- SEPA recommends a freeboard of 600 mm added to the still water levels when considering mitigation against a coastal flood event. Using our model results this would produce a deck level of 4.84 mAOD which is approximately 1m higher than the entrance path to the bridge at location 1 (existing bridge).
- SEPA guidance[7] recommends that, where a development is a replacement for an existing development of the same type, opportunities for betterment should be explored.
- Investigate any flood risk modelling and mapping provided under the LFRMP

### 2.3.6. Conclusions

This preliminary flood risk assessment has demonstrated a range of events which could be used to assess flood risk to the proposed footbridges. These water levels combine both fluvial and coastal flooding for a number of events with differing likelihood. A fully comprehensive FRA would be needed to identify which values are to be used at detailed design stage, however, it is believed that location 1 (existing bridge location) would be the preferential bridge location when considering flood risk. As the design is for a footbridge there will be no change to flood risk from surface or ground water and although the bridge will cross the River Lossie, due to the location of the design and fact there is an existing bridge in its location, it is not expected to have any differing effects on fluvial or coastal flood risk.

[6] http://wavenet.cefas.co.uk/Map
[7] SEPA. SEPA Flood Risk Standing Advice for Planning Authorities and Developers, November 2020.

**APPENDIX A**

HYDROLOGICAL ASSESSMENT AUDIT

The River Lossie flows through hydrometric area 7 (Findhorn group) before entering the Moray Firth at Lossiemouth. There is a gauge (7003 – Lossie at Sherrifmills) located on the River Lossie upstream of Elgin and a hydrological assessment point (HAP) was generated at the tidal limit where the River Lossie flows under the B9103 (Table 2.1).

**Table 2.6 Catchment description**

| Source | Reach Name | OS grid reference | Description | HAP Catchment area ($km^2$) |
|---|---|---|---|---|
| FEH web portal (HAP1) | River Lossie | NJ 25300 67200 | Tidal boundary under the B9103 | 270.55 |
| Gauge 7003 Lossie at Sherrifmills | River Lossie | NJ 194 626 | Upstream of Elgin | 216 |

*FEH Statistical method*

FEH statistical method is considered a reliable assessment method for ungauged catchments. It is a feature of Flood Modeller Pro and is based solely on catchment descriptors. After an initial storm duration is input, the software creates a critical storm duration which can then be used to find the critical flood flows. For the River Lossie this critical storm duration was 21.5 hrs and this value was used to generate the tabulated flows.

*Revitalised Flood Hydrograph 2 (ReFH 2.3)*

ReFH 2.3 uses solely catchment descriptors for input and produces peak flows and hydrographs. It is understood that the robustness of flow estimates using this method are limited due to issues with the underlying rainfall depth-duration- frequency (DDF) model in certain parts of Scotland such as Moray. For this reason, a precautionary approach was taken when considering the results from this method. Similar to the FEH statistical approach, the critical storm duration of 21.5 hrs was used to generate flow estimates.

*Single Site analysis*

A single site analysis was carried out on the River Lossie gauge (7003 Lossie at Sherrifmills). This method uses gauged data to produce flow estimates for a range or return intervals and station fittings. For this analysis, the Generalised Logistic L-Median fitting method was used as is recommended in the FEH handbook for UK flood data. As the gauge is located upstream of Elgin, flows were linearly scaled from the gauge to the HAP (The tidal boundary where the Lossie flows under the B9103) using catchment area.

Results from the methods discussed are tabulated in Table 2.7 and audit forms from each method are provided in Appendix C:

**Table 2.7 Design peak flows – Pooling group and ReFH 2**

| Return period (years) | Annual Exceedance Probability (AEP) | River Lossie Tidal Boundary ($m^3s$) ReFH 2.3 | River Lossie Tidal Boundary ($m^3s$) FEH statistical approach | River Lossie Tidal Boundary ($m^3s$) Single Site analysis |
|---|---|---|---|---|
| 200 | 0.5 | 85.95 | 168.83 | 222.99 |
| 200 (+37%CC) | 0.5 (+37%CC) | 117.75 | 231.30 | 305.50 |

The different methods offer a wide range of flow estimates, it is therefore crucial to review each method for site suitability before choosing the final design flows.

*Revitalised Flood Hydrograph 2 (ReFH 2.3)*

The ReFH 2.3 methodology is recommended for producing peak flows at ungauged catchments throughout the UK. There are, however, limitations in its reliability across parts of Scotland, particularly the North East of Scotland including Moray. For this reason, it is not deemed as suitable for use in this study and was discounted.

*Single Site analysis*

Gauged data is often regarded as the most reliable method of calculated flow estimates across the UK however there are significant limitations in this when looking at peak flood flows such as the 200 year return period. Although the Sherrifmills gauge has a reasonable length of record, it experiences '*significant bypassing'* at higher flows (4 times in 10 years). Flow gauging has been carried out at the site using both Current meter and ADCP however these are only up to 64 $m^3s$ (approximately 1.3 times QMED). Flows above this have been estimated using modelled floodplain flows. The flows shown in Table 2.7 are extremely high and it is therefore down to professional judgement to discount these flows in this study.

*FEH Statistical method*

The FEH statistical method is often regarded as the most suitable method for hydrological estimation in Scotland for ungauged catchments. It tends to provide conservative flood estimations, especially when the critical storm duration is applied as is the case in this study. As the gauge was deemed as unsuitable, the catchment was treated as ungauged and the FEH statistical method was adopted for flow estimation in the River Lossie catchment. The final design peak flows are tabulated in Table 2.8.

**Table 2.8 Final design peak flows**

| Return period (years) | Annual Exceedance Probability (AEP) | River Lossie ($m^3/s$) |
|---|---|---|
| 200 | 0.5 | 168.83 |
| 200 (+37% CC) | 0.5 (+CC) | 231.30 |

**APPENDIX B**

HYDRAULIC MODEL SETUP

There was only a short stretch of bathymetry data available for the study, and so only an approximate hydraulic model could be created to estimate fluvial water levels and velocities. No other appropriate flood model for the mouth of the Lossie could be found in the literature. A fully 2D model was created at 5 m resolution from the bathymetry and tied into 5 m LiDAR made available by Moray Council. This model used a steady tidal boundary condition (estimated SWL or SWL+climate uplift) or normal depth assumptions (only for the low tide, high fluvial flow case) at the beach end of the model. Model inlet conditions on the Lossie were the peak 200 year and 200 year plus climate change flows. Model runs were steady state. Channel toe and embankments were breaklined in AutoCAD Civil 3D and a hydraulic mesh created in Aquaveo SMS v11.1. This hydraulic mesh can be solved using either TUFLOW FV, or SRH-2D. Both solvers have been shown to be equivalent for this type of study. SRH-2D v3.2 is a free solver, benchmarked against many similar cases worldwide, and was chosen for this study to keep costs to a minimum. Frictions in the model were set at n = 0.025 (appropriate for sand with some cobbles/boulders), n = 0.02 for paved surfaces and n = 0.5 for buildings. No structures were modelled (i.e. neither of the two proposed bridges were modelled because details of their designs were not available at time of writing).

**APPENDIX C**

HYDROLOGICAL AUDIT SHEETS

**FEH Statistical approach**

**********

Flood Modeller

**********

HYDROLOGICAL DATA

Catchment: Lossie

**********

Catchment Characteristics

**********

Easting : 325300 Northing : 867200

Area : 270.547 km2

DPLBAR : 30.980 km

DPSBAR : 74.400 m/km

PROPWET : 0.420

SAAR : 813.000 mm

Urban Extent : 0.007

c : -0.017

d1 : 0.440

d2 : 0.409

d3 : 0.295

e : 0.253

f : 2.306

SPR : 32.500 %

**********

Summary of estimate using Flood Estimation Handbook rainfall-runoff method

**********

Estimation of T-year flood

==========

Unit hydrograph time to peak : 11.851 hours

Instantaneous UH time to peak : 11.601 hours

Data interval : 0.500 hours

Design storm duration : 21.500 hours

Critical storm duration : 21.485 hours

Return period for design flood : 200.000 years

requires rain return period : 246.667 years

ARF : 0.923

Design storm depth : 105.947 mm

CWI : 117.300

Standard Percentage Runoff : 32.500 %

Percentage runoff : 39.154 %

Snowmelt rate : 0.000 mm/day

Unit hydrograph peak : 5.023 (m3/s/mm)

Quick response hydrograph peak : 162.903 m3/s

Baseflow : 5.926 m3/s

Baseflow adjustment : 0.000 m3/s

Hydrograph peak : 168.829 m3/s

Hydrograph adjustment factor : 1.000

Flags

=====

Unit hydrograph flag : FSRUH

Tp flag : FEHTP

Event rainfall flag : FEHER

Rainfall profile flag : WINRP

Percentage Runoff flag : FEHPR

Baseflow flag : F16BF

CWI flag : FSRCW

**********

## Single site analysis

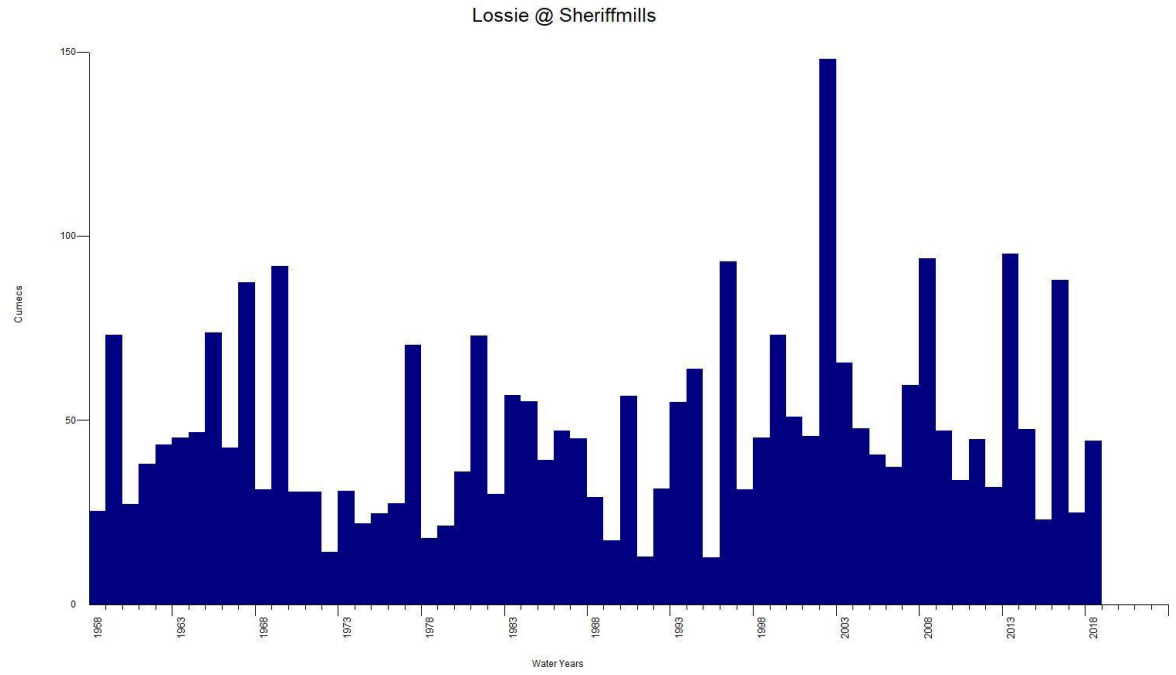


**Figure 2.8: AMAX data from the Sherrifmills gauge.**

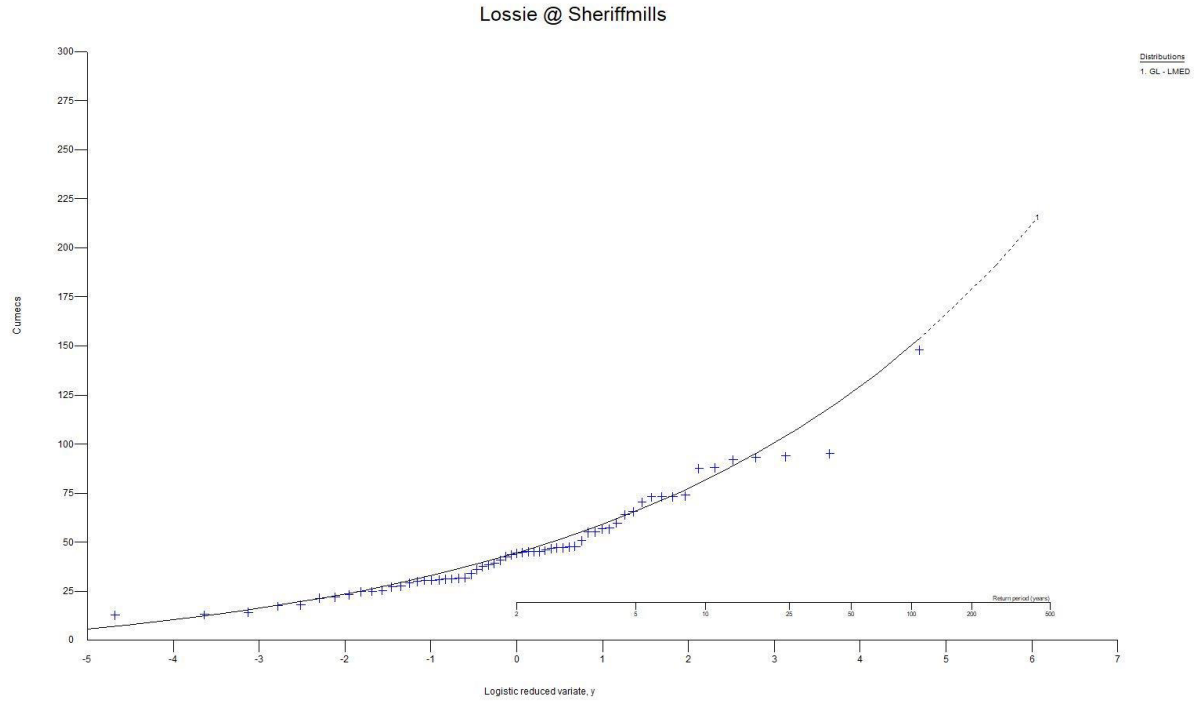


**Figure 2.9: Flood frequency curve from single site analysis of the Sherrifmills gauge.**

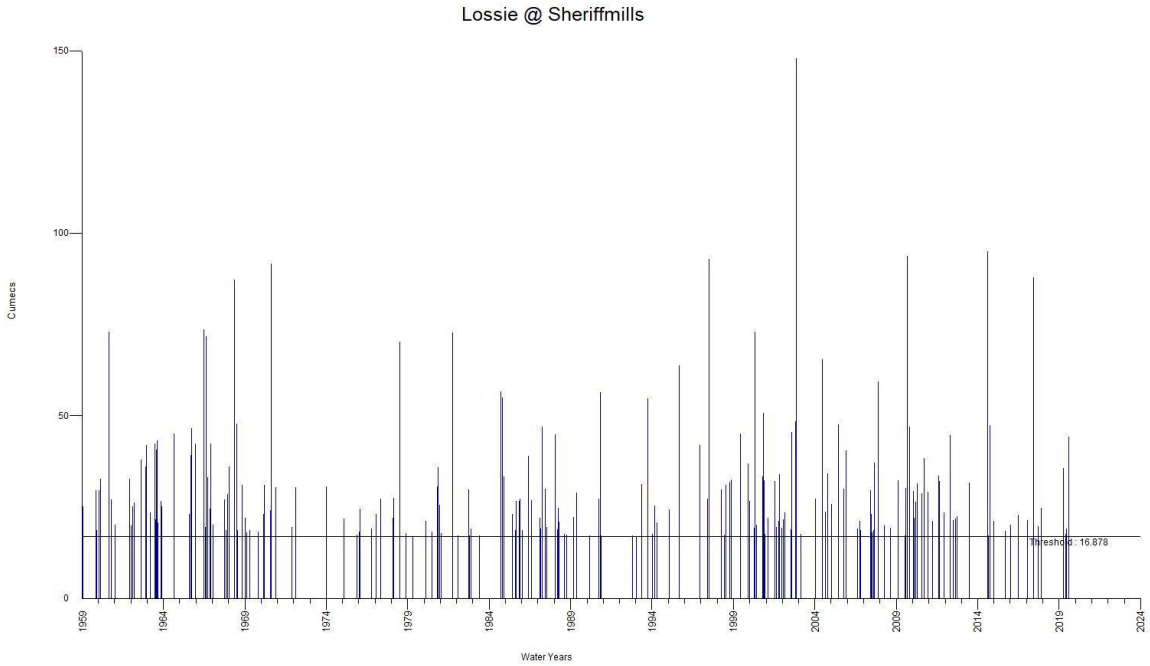


**Figure 2.10: POT data from the Sherrifmills gauge.**

# UK Design Flood Estimation

Generated on Tuesday, December 15, 2020 6:38:11 PM by gordon
Printed from the ReFH2 Flood Modelling software package, version 3.0.7275.28566

## Summary of estimate using the Flood Estimation Handbook revitalised flood hydrograph method (ReFH2)

**Site details** Checksum: 3054-CDAF

Site name: River Lossie

Easting: 325300

Northing: 867200

Country: Scotland

Catchment Area (km²): 270.55

Using plot scale calculations: No

Model: ReFH2.3

Site description: None

# Model run: 200 year

## Summary of results

| | | | |
|---|---|---|---|
| Rainfall - FEH 2013 model (mm): | 104.61 | Total runoff (ML): | 4030.10 |
| Total Rainfall (mm): | 72.68 | Total flow (ML): | 10511.37 |
| Peak Rainfall (mm): | 4.45 | Peak flow (m³/s): | 87.56 |

## Parameters

*Where the user has overriden a system-generated value, this original value is shown in square brackets after the value used.*
** Indicates that the user locked the duration/timestep*

### Rainfall parameters (Rainfall - FEH 2013 model)

| Name | Value | User-defined? |
|---|---|---|
| Duration (hh:mm:ss) | 21:30:00 [11:00:00] | Yes |
| Timestep (hh:mm:ss) | 00:30:00 [01:00:00] | Yes |
| SCF (Seasonal correction factor) | 0.75 | No |
| ARF (Areal reduction factor) | 0.92 | No |
| Seasonality | Winter | No |

### Loss model parameters

| Name | Value | User-defined? |
|---|---|---|
| Cini (mm) | 76.87 | No |
| Cmax (mm) | 564.2 | No |
| Use alpha correction factor | No | No |
| Alpha correction factor | n/a | No |

### Routing model parameters

| Name | Value | User-defined? |
|---|---|---|

| | | |
|---|---|---|
| Tp (hr) | 6.32 | No |
| Up | 0.65 | No |
| Uk | 0.8 | No |

**Baseflow model parameters**

| Name | Value | User-defined? |
|---|---|---|
| BF0 ($m^3/s$) | 2.76 | No |
| BL (hr) | 62.93 | No |
| BR | 1.66 | No |

**Urbanisation parameters**

| Name | Value | User-defined? |
|---|---|---|
| Urban area ($km^2$) | 5.68 | No |
| Urbext 2000 | 0.01 | No |
| Impervious runoff factor | 0.7 | No |
| Imperviousness factor | 0.4 | No |
| Tp scaling factor | 0.75 | No |
| Depression storage depth (mm) | 0.5 | No |
| Exporting drained area ($km^2$) | 0.00 | Yes |
| Sewer capacity ($m^3/s$) | 0.00 | Yes |

## Time series data

| Time (hh:mm:ss) | Rain (mm) | Sewer Loss (mm) | Net Rain (mm) | Runoff ($m^3/s$) | Baseflow ($m^3/s$) | Total Flow ($m^3/s$) |
|---|---|---|---|---|---|---|
| 00:00:00 | 0.333 | 0.000 | 0.047 | 0.000 | 2.741 | 2.741 |
| 00:30:00 | 0.380 | 0.000 | 0.054 | 0.015 | 2.719 | 2.734 |
| 01:00:00 | 0.434 | 0.000 | 0.062 | 0.062 | 2.698 | 2.761 |
| 01:30:00 | 0.496 | 0.000 | 0.071 | 0.146 | 2.678 | 2.825 |
| 02:00:00 | 0.566 | 0.000 | 0.082 | 0.273 | 2.660 | 2.933 |
| 02:30:00 | 0.645 | 0.000 | 0.094 | 0.449 | 2.643 | 3.092 |
| 03:00:00 | 0.736 | 0.000 | 0.108 | 0.680 | 2.629 | 3.309 |
| 03:30:00 | 0.839 | 0.000 | 0.125 | 0.977 | 2.618 | 3.595 |
| 04:00:00 | 0.956 | 0.000 | 0.143 | 1.347 | 2.611 | 3.958 |
| 04:30:00 | 1.089 | 0.000 | 0.165 | 1.803 | 2.610 | 4.412 |
| 05:00:00 | 1.241 | 0.000 | 0.191 | 2.356 | 2.614 | 4.970 |
| 05:30:00 | 1.412 | 0.000 | 0.220 | 3.019 | 2.626 | 5.645 |
| 06:00:00 | 1.606 | 0.000 | 0.255 | 3.807 | 2.646 | 6.454 |
| 06:30:00 | 1.825 | 0.000 | 0.295 | 4.738 | 2.677 | 7.416 |
| 07:00:00 | 2.072 | 0.000 | 0.342 | 5.803 | 2.720 | 8.523 |
| 07:30:00 | 2.351 | 0.000 | 0.398 | 7.013 | 2.777 | 9.790 |
| 08:00:00 | 2.663 | 0.000 | 0.462 | 8.394 | 2.849 | 11.243 |
| 08:30:00 | 3.012 | 0.000 | 0.538 | 9.973 | 2.939 | 12.912 |
| 09:00:00 | 3.398 | 0.000 | 0.626 | 11.784 | 3.049 | 14.834 |
| 09:30:00 | 3.816 | 0.000 | 0.727 | 13.866 | 3.183 | 17.049 |
| 10:00:00 | 4.243 | 0.000 | 0.839 | 16.264 | 3.343 | 19.607 |
| 10:30:00 | 4.454 | 0.000 | 0.915 | 19.029 | 3.534 | 22.563 |
| 11:00:00 | 4.243 | 0.000 | 0.904 | 22.200 | 3.760 | 25.960 |
| 11:30:00 | 3.816 | 0.000 | 0.836 | 25.775 | 4.027 | 29.802 |
| 12:00:00 | 3.398 | 0.000 | 0.766 | 29.703 | 4.338 | 34.041 |
| 12:30:00 | 3.012 | 0.000 | 0.696 | 33.909 | 4.697 | 38.607 |
| 13:00:00 | 2.663 | 0.000 | 0.629 | 38.317 | 5.108 | 43.425 |
| 13:30:00 | 2.351 | 0.000 | 0.566 | 42.847 | 5.572 | 48.419 |
| 14:00:00 | 2.072 | 0.000 | 0.507 | 47.413 | 6.089 | 53.502 |
| 14:30:00 | 1.825 | 0.000 | 0.452 | 51.922 | 6.660 | 58.582 |
| 15:00:00 | 1.606 | 0.000 | 0.403 | 56.274 | 7.283 | 63.557 |
| 15:30:00 | 1.412 | 0.000 | 0.358 | 60.363 | 7.955 | 68.318 |
| 16:00:00 | 1.241 | 0.000 | 0.317 | 64.080 | 8.672 | 72.752 |
| 16:30:00 | 1.089 | 0.000 | 0.281 | 67.310 | 9.429 | 76.739 |
| 17:00:00 | 0.956 | 0.000 | 0.248 | 69.938 | 10.219 | 80.157 |
| 17:30:00 | 0.839 | 0.000 | 0.219 | 71.881 | 11.033 | 82.914 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 18:00:00 | 0.736 | 0.000 | 0.193 | 73.126 | 11.863 | 84.989 |
| 18:30:00 | 0.645 | 0.000 | 0.170 | 73.720 | 12.699 | 86.419 |
| 19:00:00 | 0.566 | 0.000 | 0.150 | 73.722 | 13.535 | 87.257 |
| 19:30:00 | 0.496 | 0.000 | 0.132 | 73.197 | 14.361 | 87.558 |
| 20:00:00 | 0.434 | 0.000 | 0.116 | 72.207 | 15.174 | 87.381 |
| 20:30:00 | 0.380 | 0.000 | 0.102 | 70.816 | 15.965 | 86.781 |
| 21:00:00 | 0.333 | 0.000 | 0.089 | 69.083 | 16.732 | 85.815 |
| 21:30:00 | 0.000 | 0.000 | 0.000 | 67.067 | 17.470 | 84.537 |
| 22:00:00 | 0.000 | 0.000 | 0.000 | 64.797 | 18.175 | 82.973 |
| 22:30:00 | 0.000 | 0.000 | 0.000 | 62.308 | 18.846 | 81.154 |
| 23:00:00 | 0.000 | 0.000 | 0.000 | 59.660 | 19.479 | 79.138 |
| 23:30:00 | 0.000 | 0.000 | 0.000 | 56.912 | 20.073 | 76.985 |
| 24:00:00 | 0.000 | 0.000 | 0.000 | 54.109 | 20.628 | 74.738 |
| 24:30:00 | 0.000 | 0.000 | 0.000 | 51.278 | 21.144 | 72.422 |
| 25:00:00 | 0.000 | 0.000 | 0.000 | 48.433 | 21.619 | 70.052 |
| 25:30:00 | 0.000 | 0.000 | 0.000 | 45.584 | 22.055 | 67.639 |
| 26:00:00 | 0.000 | 0.000 | 0.000 | 42.742 | 22.452 | 65.194 |
| 26:30:00 | 0.000 | 0.000 | 0.000 | 39.915 | 22.810 | 62.725 |
| 27:00:00 | 0.000 | 0.000 | 0.000 | 37.114 | 23.130 | 60.243 |
| 27:30:00 | 0.000 | 0.000 | 0.000 | 34.345 | 23.411 | 57.756 |
| 28:00:00 | 0.000 | 0.000 | 0.000 | 31.618 | 23.656 | 55.274 |
| 28:30:00 | 0.000 | 0.000 | 0.000 | 28.992 | 23.864 | 52.856 |
| 29:00:00 | 0.000 | 0.000 | 0.000 | 26.479 | 24.038 | 50.517 |
| 29:30:00 | 0.000 | 0.000 | 0.000 | 24.076 | 24.178 | 48.254 |
| 30:00:00 | 0.000 | 0.000 | 0.000 | 21.779 | 24.287 | 46.067 |
| 30:30:00 | 0.000 | 0.000 | 0.000 | 19.590 | 24.366 | 43.957 |
| 31:00:00 | 0.000 | 0.000 | 0.000 | 17.511 | 24.417 | 41.928 |
| 31:30:00 | 0.000 | 0.000 | 0.000 | 15.545 | 24.441 | 39.986 |
| 32:00:00 | 0.000 | 0.000 | 0.000 | 13.698 | 24.440 | 38.138 |
| 32:30:00 | 0.000 | 0.000 | 0.000 | 11.979 | 24.416 | 36.395 |
| 33:00:00 | 0.000 | 0.000 | 0.000 | 10.401 | 24.370 | 34.771 |
| 33:30:00 | 0.000 | 0.000 | 0.000 | 8.975 | 24.305 | 33.279 |
| 34:00:00 | 0.000 | 0.000 | 0.000 | 7.708 | 24.222 | 31.931 |
| 34:30:00 | 0.000 | 0.000 | 0.000 | 6.594 | 24.125 | 30.719 |
| 35:00:00 | 0.000 | 0.000 | 0.000 | 5.609 | 24.015 | 29.624 |
| 35:30:00 | 0.000 | 0.000 | 0.000 | 4.743 | 23.893 | 28.636 |
| 36:00:00 | 0.000 | 0.000 | 0.000 | 3.985 | 23.762 | 27.747 |
| 36:30:00 | 0.000 | 0.000 | 0.000 | 3.324 | 23.622 | 26.946 |
| 37:00:00 | 0.000 | 0.000 | 0.000 | 2.751 | 23.476 | 26.226 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 37:30:00 | 0.000 | 0.000 | 0.000 | 2.256 | 23.323 | 25.579 |
| 38:00:00 | 0.000 | 0.000 | 0.000 | 1.831 | 23.166 | 24.996 |
| 38:30:00 | 0.000 | 0.000 | 0.000 | 1.468 | 23.004 | 24.472 |
| 39:00:00 | 0.000 | 0.000 | 0.000 | 1.161 | 22.840 | 24.000 |
| 39:30:00 | 0.000 | 0.000 | 0.000 | 0.901 | 22.673 | 23.574 |
| 40:00:00 | 0.000 | 0.000 | 0.000 | 0.685 | 22.504 | 23.189 |
| 40:30:00 | 0.000 | 0.000 | 0.000 | 0.507 | 22.334 | 22.840 |
| 41:00:00 | 0.000 | 0.000 | 0.000 | 0.362 | 22.163 | 22.524 |
| 41:30:00 | 0.000 | 0.000 | 0.000 | 0.246 | 21.991 | 22.237 |
| 42:00:00 | 0.000 | 0.000 | 0.000 | 0.157 | 21.820 | 21.977 |
| 42:30:00 | 0.000 | 0.000 | 0.000 | 0.090 | 21.649 | 21.739 |
| 43:00:00 | 0.000 | 0.000 | 0.000 | 0.044 | 21.478 | 21.522 |
| 43:30:00 | 0.000 | 0.000 | 0.000 | 0.015 | 21.309 | 21.323 |
| 44:00:00 | 0.000 | 0.000 | 0.000 | 0.001 | 21.140 | 21.142 |
| 44:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 20.973 | 20.973 |
| 45:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 20.807 | 20.807 |
| 45:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 20.642 | 20.642 |
| 46:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 20.479 | 20.479 |
| 46:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 20.317 | 20.317 |
| 47:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 20.156 | 20.156 |
| 47:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 19.996 | 19.996 |
| 48:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 19.838 | 19.838 |
| 48:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 19.681 | 19.681 |
| 49:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 19.525 | 19.525 |
| 49:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 19.371 | 19.371 |
| 50:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 19.218 | 19.218 |
| 50:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 19.065 | 19.065 |
| 51:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 18.915 | 18.915 |
| 51:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 18.765 | 18.765 |
| 52:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 18.616 | 18.616 |
| 52:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 18.469 | 18.469 |
| 53:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 18.323 | 18.323 |
| 53:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 18.178 | 18.178 |
| 54:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 18.034 | 18.034 |
| 54:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 17.891 | 17.891 |
| 55:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 17.750 | 17.750 |
| 55:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 17.609 | 17.609 |
| 56:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 17.470 | 17.470 |
| 56:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 17.332 | 17.332 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 57:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 17.194 | 17.194 |
| 57:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 17.058 | 17.058 |
| 58:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 16.923 | 16.923 |
| 58:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 16.789 | 16.789 |
| 59:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 16.657 | 16.657 |
| 59:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 16.525 | 16.525 |
| 60:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 16.394 | 16.394 |
| 60:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 16.264 | 16.264 |
| 61:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 16.135 | 16.135 |
| 61:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 16.008 | 16.008 |
| 62:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 15.881 | 15.881 |
| 62:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 15.755 | 15.755 |
| 63:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 15.631 | 15.631 |
| 63:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 15.507 | 15.507 |
| 64:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 15.384 | 15.384 |
| 64:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 15.262 | 15.262 |
| 65:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 15.142 | 15.142 |
| 65:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 15.022 | 15.022 |
| 66:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 14.903 | 14.903 |
| 66:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 14.785 | 14.785 |
| 67:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 14.668 | 14.668 |
| 67:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 14.552 | 14.552 |
| 68:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 14.437 | 14.437 |
| 68:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 14.323 | 14.323 |
| 69:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 14.209 | 14.209 |
| 69:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 14.097 | 14.097 |
| 70:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 13.985 | 13.985 |
| 70:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 13.874 | 13.874 |
| 71:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 13.765 | 13.765 |
| 71:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 13.656 | 13.656 |
| 72:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 13.548 | 13.548 |
| 72:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 13.440 | 13.440 |
| 73:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 13.334 | 13.334 |
| 73:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 13.229 | 13.229 |
| 74:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 13.124 | 13.124 |
| 74:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 13.020 | 13.020 |
| 75:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 12.917 | 12.917 |
| 75:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 12.815 | 12.815 |
| 76:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 12.713 | 12.713 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 76:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 12.613 | 12.613 |
| 77:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 12.513 | 12.513 |
| 77:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 12.414 | 12.414 |
| 78:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 12.316 | 12.316 |
| 78:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 12.218 | 12.218 |
| 79:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 12.121 | 12.121 |
| 79:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 12.025 | 12.025 |
| 80:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 11.930 | 11.930 |
| 80:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 11.836 | 11.836 |
| 81:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 11.742 | 11.742 |
| 81:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 11.649 | 11.649 |
| 82:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 11.557 | 11.557 |
| 82:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 11.466 | 11.466 |
| 83:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 11.375 | 11.375 |
| 83:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 11.285 | 11.285 |
| 84:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 11.196 | 11.196 |
| 84:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 11.107 | 11.107 |
| 85:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 11.019 | 11.019 |
| 85:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 10.932 | 10.932 |
| 86:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 10.845 | 10.845 |
| 86:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 10.759 | 10.759 |
| 87:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 10.674 | 10.674 |
| 87:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 10.590 | 10.590 |
| 88:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 10.506 | 10.506 |
| 88:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 10.423 | 10.423 |
| 89:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 10.340 | 10.340 |
| 89:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 10.259 | 10.259 |
| 90:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 10.177 | 10.177 |
| 90:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 10.097 | 10.097 |
| 91:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 10.017 | 10.017 |
| 91:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 9.938 | 9.938 |
| 92:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 9.859 | 9.859 |
| 92:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 9.781 | 9.781 |
| 93:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 9.704 | 9.704 |
| 93:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 9.627 | 9.627 |
| 94:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 9.551 | 9.551 |
| 94:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 9.475 | 9.475 |
| 95:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 9.400 | 9.400 |
| 95:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 9.326 | 9.326 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 96:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 9.252 | 9.252 |
| 96:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 9.179 | 9.179 |
| 97:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 9.106 | 9.106 |
| 97:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 9.034 | 9.034 |
| 98:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 8.962 | 8.962 |
| 98:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 8.891 | 8.891 |
| 99:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 8.821 | 8.821 |
| 99:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 8.751 | 8.751 |
| 100:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 8.682 | 8.682 |
| 100:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 8.613 | 8.613 |
| 101:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 8.545 | 8.545 |
| 101:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 8.477 | 8.477 |
| 102:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 8.410 | 8.410 |
| 102:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 8.344 | 8.344 |
| 103:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 8.278 | 8.278 |
| 103:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 8.212 | 8.212 |
| 104:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 8.147 | 8.147 |
| 104:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 8.083 | 8.083 |
| 105:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 8.019 | 8.019 |
| 105:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 7.955 | 7.955 |
| 106:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 7.892 | 7.892 |
| 106:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 7.830 | 7.830 |
| 107:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 7.768 | 7.768 |
| 107:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 7.706 | 7.706 |
| 108:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 7.645 | 7.645 |
| 108:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 7.585 | 7.585 |
| 109:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 7.525 | 7.525 |
| 109:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 7.465 | 7.465 |
| 110:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 7.406 | 7.406 |
| 110:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 7.348 | 7.348 |
| 111:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 7.290 | 7.290 |
| 111:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 7.232 | 7.232 |
| 112:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 7.175 | 7.175 |
| 112:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 7.118 | 7.118 |
| 113:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 7.062 | 7.062 |
| 113:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 7.006 | 7.006 |
| 114:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 6.950 | 6.950 |
| 114:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 6.895 | 6.895 |
| 115:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 6.841 | 6.841 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 115:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 6.786 | 6.786 |
| 116:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 6.733 | 6.733 |
| 116:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 6.679 | 6.679 |
| 117:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 6.627 | 6.627 |
| 117:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 6.574 | 6.574 |
| 118:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 6.522 | 6.522 |
| 118:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 6.471 | 6.471 |
| 119:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 6.419 | 6.419 |
| 119:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 6.368 | 6.368 |
| 120:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 6.318 | 6.318 |
| 120:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 6.268 | 6.268 |
| 121:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 6.218 | 6.218 |
| 121:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 6.169 | 6.169 |
| 122:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 6.120 | 6.120 |
| 122:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 6.072 | 6.072 |
| 123:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 6.024 | 6.024 |
| 123:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 5.976 | 5.976 |
| 124:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 5.929 | 5.929 |
| 124:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 5.882 | 5.882 |
| 125:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 5.835 | 5.835 |
| 125:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 5.789 | 5.789 |
| 126:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 5.743 | 5.743 |
| 126:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 5.698 | 5.698 |
| 127:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 5.653 | 5.653 |
| 127:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 5.608 | 5.608 |
| 128:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 5.564 | 5.564 |
| 128:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 5.520 | 5.520 |
| 129:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 5.476 | 5.476 |
| 129:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 5.433 | 5.433 |
| 130:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 5.390 | 5.390 |
| 130:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 5.347 | 5.347 |
| 131:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 5.305 | 5.305 |
| 131:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 5.263 | 5.263 |
| 132:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 5.221 | 5.221 |
| 132:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 5.180 | 5.180 |
| 133:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 5.139 | 5.139 |
| 133:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 5.098 | 5.098 |
| 134:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 5.058 | 5.058 |
| 134:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 5.018 | 5.018 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 135:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 4.978 | 4.978 |
| 135:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 4.939 | 4.939 |
| 136:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 4.900 | 4.900 |
| 136:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 4.861 | 4.861 |
| 137:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 4.822 | 4.822 |
| 137:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 4.784 | 4.784 |
| 138:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 4.746 | 4.746 |
| 138:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 4.709 | 4.709 |
| 139:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 4.671 | 4.671 |
| 139:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 4.635 | 4.635 |
| 140:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 4.598 | 4.598 |
| 140:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 4.561 | 4.561 |
| 141:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 4.525 | 4.525 |
| 141:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 4.490 | 4.490 |
| 142:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 4.454 | 4.454 |
| 142:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 4.419 | 4.419 |
| 143:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 4.384 | 4.384 |
| 143:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 4.349 | 4.349 |
| 144:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 4.315 | 4.315 |
| 144:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 4.281 | 4.281 |
| 145:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 4.247 | 4.247 |
| 145:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 4.213 | 4.213 |
| 146:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 4.180 | 4.180 |
| 146:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 4.147 | 4.147 |
| 147:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 4.114 | 4.114 |
| 147:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 4.081 | 4.081 |
| 148:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 4.049 | 4.049 |
| 148:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 4.017 | 4.017 |
| 149:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 3.985 | 3.985 |
| 149:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 3.954 | 3.954 |
| 150:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 3.922 | 3.922 |
| 150:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 3.891 | 3.891 |
| 151:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 3.860 | 3.860 |
| 151:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 3.830 | 3.830 |
| 152:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 3.800 | 3.800 |
| 152:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 3.769 | 3.769 |
| 153:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 3.740 | 3.740 |
| 153:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 3.710 | 3.710 |
| 154:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 3.681 | 3.681 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 154:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 3.652 | 3.652 |
| 155:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 3.623 | 3.623 |
| 155:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 3.594 | 3.594 |
| 156:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 3.566 | 3.566 |
| 156:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 3.537 | 3.537 |
| 157:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 3.509 | 3.509 |
| 157:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 3.482 | 3.482 |
| 158:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 3.454 | 3.454 |
| 158:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 3.427 | 3.427 |
| 159:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 3.400 | 3.400 |
| 159:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 3.373 | 3.373 |
| 160:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 3.346 | 3.346 |
| 160:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 3.319 | 3.319 |
| 161:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 3.293 | 3.293 |
| 161:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 3.267 | 3.267 |
| 162:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 3.241 | 3.241 |
| 162:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 3.216 | 3.216 |
| 163:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 3.190 | 3.190 |
| 163:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 3.165 | 3.165 |
| 164:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 3.140 | 3.140 |
| 164:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 3.115 | 3.115 |
| 165:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 3.090 | 3.090 |
| 165:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 3.066 | 3.066 |
| 166:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 3.042 | 3.042 |
| 166:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 3.018 | 3.018 |
| 167:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 2.994 | 2.994 |
| 167:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 2.970 | 2.970 |
| 168:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 2.947 | 2.947 |
| 168:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 2.923 | 2.923 |
| 169:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 2.900 | 2.900 |
| 169:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 2.877 | 2.877 |
| 170:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 2.854 | 2.854 |
| 170:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 2.832 | 2.832 |
| 171:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 2.809 | 2.809 |
| 171:30:00 | 0.000 | 0.000 | 0.000 | 0.000 | 2.787 | 2.787 |
| 172:00:00 | 0.000 | 0.000 | 0.000 | 0.000 | 2.765 | 2.765 |

# Appendix

## Catchment descriptors

| Name | Value | User-defined value used? |
|---|---|---|
| Area (km²) | 270.55 | No |
| ALTBAR | 169 | No |
| ASPBAR | 2 | No |
| ASPVAR | 0.34 | No |
| BFIHOST | 0.62 | No |
| BFIHOST19 | 0.63 | No |
| DPLBAR (km) | 30.98 | No |
| DPSBAR (mkm-¹) | 74.4 | No |
| FARL | 0.98 | No |
| LDP | 56.2 | No |
| PROPWET (mm) | 0.42 | No |
| RMED1H | 9 | No |
| RMED1D | 37.1 | No |
| RMED2D | 47.5 | No |
| SAAR (mm) | 813 | No |
| SAAR4170 (mm) | 871 | No |
| SPRHOST | 32.5 | No |
| Urbext2000 | 0.01 | No |
| Urbext1990 | 0.01 | No |
| URBCONC | 0.86 | No |
| URBLOC | 0.41 | No |
| DDF parameter C | -0.02 | No |
| DDF parameter D1 | 0.44 | No |
| DDF parameter D2 | 0.41 | No |
| DDF parameter D3 | 0.3 | No |
| DDF parameter E | 0.25 | No |
| DDF parameter F | 2.31 | No |
| DDF parameter C (1km grid value) | -0.01 | No |
| DDF parameter D1 (1km grid value) | 0.41 | No |
| DDF parameter D2 (1km grid value) | 0.35 | No |
| DDF parameter D3 (1km grid value) | 0.28 | No |
| DDF parameter E (1km grid value) | 0.25 | No |
| DDF parameter F (1km grid value) | 2.25 | No |

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# Appendix E – Preliminary Ecological Appraisal

# East beach footbridge, Lossiemouth

# Preliminary ecological appraisal – survey report

**Prepared by:**

**Tamsin Morris** MSc, CEcol, CEnv, MCIEEM, **Walking-the-Talk**

**Commissioned by:**

**Beaver bridges**

Partners: Chris York & Tamsin Morris

www.walking-the-talk.co.uk

Produced: October 21st, 2020

Reference number: WTTPEA20-07

# Contents

# Summary

A replacement footbridge is required between Lossiemouth town and the east beach. A preliminary ecological appraisal of the site was carried out in October 2020.

The bridge will replace an existing footbridge and will link an urban area to an area of sand dune habitat. The bridge will cross the River Lossie, which is tidal at this point. There are areas of sand dune with marram grass and small patches of salt marsh habitat in the immediate vicinity of the bridge. These are two habitats which are included on the Scottish Biodiversity List and therefore damage to the habitats should be avoided if possible and the site footprint kept as small as possible.

Otter have been sighted within the river and are likely to pass through. However, there is no suitable resting place habitat for them close to the bridge. Work should be undertaken in a manner which avoids disturbance to otter passing through the site.

The bridge itself provides no bat roost habitat as it is very open, with no crevices or cracks which could be used for roosting.

A wide range of bird species are present in the surrounding area, but the area closest to the bridge is unlikely to be suitable for nesting. However, if possible, works should avoid the bird nesting season and if this is not possible, a check for nesting birds should be undertaken prior to works commencing.

If pile driving is likely to be required, then an additional assessment should be undertaken to establish likely impacts on migratory fish and marine mammals in the adjacent area. .

# 1 Introduction

The client, Beaver bridges, has been commissioned to design a replacement footbridge at this site. The work proposed will involve removing the existing bridge and installing a replacement. The site location is at the centre of the map in Appendix 1.

A walkover survey of the site was undertaken on October 14th, 2020 by Tamsin Morris, Chartered Ecologist. The survey included an extended Phase 1 survey to assess the type and condition of wildlife habitats in the surrounding area and a search for signs of any relevant protected species.

## 1.1 Objectives

The survey aimed to assess the habitats present in the area surrounding the proposed new bridge and whether they would be impacted by the development. It also aimed to establish whether the area contained any protected species which may be affected by the development. The survey also aimed to establish any ecological constraints which may need to be mitigated as part of an Ecological Impact Assessment process.

## 1.2 Relevant legislation

There are several relevant pieces of legislation which could affect this development. These include:

- The Wildlife and Countryside Act 1981 (as amended) was the main source of wildlife law in the UK. It has since been amended by the Nature Conservation (Scotland) Act 2004 and the Wildlife and Natural Environment (Scotland) Act 2011. This legislation provides protection to a range of species, including birds, plants and animals.
- The Nature Conservation (Scotland) Act 2004 sets out the requirement to produce a Scotland list of Biodiversity Action Plan habitats of principal importance.
- The EU Habitats and Birds Directives provide protection to a range of species and areas. They are translated into Scottish law via the Conservation (Natural Habitats etc) Regulations 2004 and the Wildlife and Countryside Act 1981 (as amended). This legislation provides protection to specific species such as otter and specific sites, such as Spey Bay and the Moray Firth.

# 2 Site assessment

## 2.1 Methods – habitat assessment

An area surrounding the bridge of approximately 250m in all directions was surveyed on foot. This involved walking upstream and downstream from the bridge and crossing the remaining area in a zig zag manner to assess habitats, where this did not involve accessing private land. The bridge itself was also examined to see if it provided potential bat roost habitat. The bridge was not crossed, but both pillars / banks were walked. The survey took

place on a sunny day, starting at high tide and working through until just before low tide. Habitats were recorded according to the JNCC Phase 1 system (JNCC, 2010).

## 2.2 Methods – desk based assessment

Nature Scot's SiteLink website (https://sitelink.nature.scot/home) was used to check for protected areas within the vicinity of the site and the National Biodiversity Network Atlas website (https://nbnatlas.org/) was used to check for records of some species in the local area.

A search was also commissioned by the local biological records centre (NESBReC) for records within a 500metre radius of the current bridge location. The results of that search are included as Appendix 2 of this report.

## 2.3 Constraints

The bridge itself was not crossed as it is not longer safe for pedestrian access. The central part of the structure was examined using binoculars from both banks and it appears to have a similar construction throughout. A number of private houses are present within the adjacent area and the gardens of these houses were not entered or surveyed.

# 3 Baseline ecological conditions

## 3.1 Site context

The site is located between an urban area and open dunes. The bridge spans the River Lossie where it joins the sea and the river is tidal within this section. The left bank contains houses, car parks etc and is heavily modified, whilst the right bank is unmodified, but very mobile sand dune habitat.

## 3.2 Designated sites

The following designated sites are located within a 5 kilometre radius of the bridge:

The Moray Firth Special Area of Conservation (SAC) has its western boundary adjacent to the left bank of the River Lossie as it enters the sea, so is located approximately 850 metres to the north of the bridge. The Moray Firth is designated for its subtidal sand banks and bottlenose dolphin (*Tursiops truncates*) population. The Lossiemouth East Quarry Site of Special Scientific Interest (SSSI) is located approximately 200 metres to the north-west of the bridge. The quarry area is designated for its geological and palaeontological features. The Lossiemouth shore SSSI is located approximately 1 kilometre to the north-west of the bridge and is designated for its geological features. The Loch Spynie Special Protection Area (SPA) and SSSI is located approximately 3.5km to the south of the site and is designated for its freshwater habitats, woodland, breeding bird assemblage and greylag goose (*Anser anser*) population. The Spey Bay SAC and SSSI is located approximately 3km to the south-east of the site. The SAC is designated for its floodplain alder woodland and coastal shingle habitats, whilst the SSSI is designated for its geomorphology, its fen, shingle, saltmarsh and wet woodland habitats, its plant assemblage and the presence of the small blue (*Cupido minimus*) and dingy skipper (*Erynnis tages*) butterflies.

The NESBReC search highlighted that the Lossiemouth and Spey Bay area are included on a list known as the Study of Environmentally Sensitive Areas for ornithology and

geomorphology. This is a list of locally important sites, which was compiled in the 1980s by the former Grampian Regional Council.

## 3.3 Phase 1 habitats present on the site

The following habitats were recorded. These are shown on the map in Appendix 1.

### 3.3.1 Improved grassland

There are areas of improved grassland between the river and the road on the left bank and in amongst the buildings within the town. These are predominantly areas for recreational / amenity use and contain very little plant diversity.

Within the the areas of improved grassland on the left bank, there are some patches of ornamental shrubs. This have been planted for visual / amenity value and contain a mix of non-native 'garden' species, such as Escalonia, Cotoneaster, Rosa rugosa and palms.

### 3.3.2 Dune grassland

Immediately adjacent to the river, along the left bank where building work has 'stabilised' the dune system, a narrow strip of dune grassland has developed. This contains a diverse mix of species, including lyme grass (*Leymus arenarius*) frosted orache (*Atriplex lacinata*), sea plantain (*Plantago maritima*), sea aster (*Aster tripolium*) and dwarf mallow (*Malva neglecta*).

### 3.3.3 Open water and saltmarsh / dune interface

The river is tidal at this point and during high tide extends across a large area, including beneath the bridge. Areas which are exposed except at high tides contain swards of common saltmarsh grass (*Puccinellia maritima*) which grade into open dune and dune grassland areas on the right bank.

### 3.3.4 Open dune

On the right bank, there is an area of open dune between the river's edge and the sea. This is a reasonably narrow strip of yellow open dune, which is dominated by marram grass (*Ammophila arenaria*), although lyme grass, catsear (*Hypochaeris radicata*), sea rocket (*Cakile maritima*) and occasional Scots pine seedlings (*Pinus sylvestris*) are also present.

### 3.3.5 Broad leaved semi natural woodland

Adjacent to Prospect Terrace, to the north-east of the bridge, within the area of the Lossiemouth East Quarry SSSI there is a strip of broad-leaved woodland. This is dominated by mature sycamore (*Acer pseudoplatanus*) trees, but also contains gorse (*Ulex europaeus*), ivy (*Hedera helix*) and stands of rosebay willowherb (*Chamerion angustifolium*).

There is also a short section of woodland at the upstream end of the Spynie canal, where ash (*Fraxinus excelsior*) and sycamore trees have grown up, interspersed with ivy and gorse scrub and some garden escapees such as Leylandii trees.

### 3.3.6 Unimproved neutral grassland

Adjacent to the Spynie canal, on the left bank there is a narrow strip of grassland which is reasonably diverse and has probably never been agriculturally improved (although the nutrient loading within the canal waters may be quite high). It includes species such as yarrow (*Achillea millefolium*), ribwort plantain (*Plantago lanceolata*), cocksfoot (*Dactylis glomerata*), nettles (*Urtica dioica*) and ragwort (*Senecio jacobaea*).

### 3.3.7 Broad-leaved plantation

On the right bank of the Spynie canal, a number of small trees have been planted. These included alder (*Alnus glutinsoa*), holly (*Ilex aquifolium*) and birch (*Betula pendula*) as well as some more garden type species such as cotoneaster, buddleia and snowberry (*Symphoricarpus albus*).

### 3.3.8 Dense scrub

Further upstream on the left bank of the Spynie canal there is an area of dense gorse. It was not possible to enter into this area due to the dense cover and steep slopes.

## 3.4 Species

The site has the potential to provide habitat for a range of protected species, including bats, otter, badgers and birds.

### 3.4.1 Bats

The bridge does not provide suitable bat roost habitat due to its construction and the extent of deterioration. There are no enclosed holes or crevices within the structure – whilst there are narrow gaps between slats and supporting beams, none of these gaps have a 'back', so they do not provide suitable shelter in the same way as a crevice or hole could. The deterioration of the bridge also means that many of these gaps are now wider than when originally constructed and so light can be clearly seen through the gaps. The extent of movement on the bridge when it was in use would also deter bats.

The bridge is considered to have negligible bat roost potential and therefore further bat surveys are not required.

### 3.4.2 Other mammals

The river does not provide suitable habitat for watervole (*Arvicola amphibius*) as it is reasonably fast flowing and tidal in this section. The left bank has extensive human activity and the right bank is mobile sand dune, which would not be suitable for creating burrows. No field signs of watervole were detected.

The river is likely to be used by otter and there are anecdotal otter sightings in the water at this site. No field signs of otter were found within the survey area and there is no suitable habitat within the survey area for otter resting places, due to the mobility of the sediment.

Otter should be expected to be passing through but are unlikely to use either bank for resting.

Red squirrel (*Sciurus vulgaris*) will occur within the large coniferous woodland area to the east of the site. The search on NBN Atlas and the NESBReC search highlighted sightings of squirrel close to the caravan park and amongst the houses and they will be likely to pass through the area closer to the bridge occasionally. However, there are no suitable trees for use as dreys close to the bridge site.

Pine marten (*Martes martes*) are also likely to use the woodland area, though no field signs were found and they would not be expected to use this area due to the mobile sand dunes, high water levels and extent of human disturbance.

No field signs of badger (*Meles meles*) were found and they would not be able to create a sett within the mobile sand ground conditions. A brown hare (*Lepus europaeus)* record from within the town was included within the NESBReC search data, but this was from 1970 and it is unlikely that brown hare would use such an urban habitat area.

### 3.4.3 Amphibians

There are no ponds close to the site. Great crested newts (*Triturus cristatus*) have not been recorded from the Lossiemouth area (the nearest records are currently from Fife and Nairn), therefore they would not be expected to be found at this site.

### 3.4.4 Birds

The small areas of shrubs will provide some habitat for perching birds, but the extent of human disturbance means they are unlikely to be used for nesting. The large gorse area near the caravan park will also be used by perching birds and will be suitable for some nesting.

The salt marsh / sand dune areas will provide habitat for a wide range of freshwater, wading and coastal birds. Widgeon (*Anas penelope*), heron (*Ardea cinerea*), ringed plover (*Charadrius hiatula*), redshank (*Tringa tetanus*) oystercatcher (*Haematopus ostralegus*), mallard (*Anas platyrhynchos*), herring (*Larus argentatus*) and black backed gulls (*Larus marinus*) were all seen during the survey. The NESBReC search also highlighted sightings of dunlin (*Calidris alpina*) and bar-tailed godwit (*Limosa lapponica*).

Most of these species are unlikely to nest or breed close to the footprint of the bridge as the left bank is too heavily disturbed and the right bank is too mobile and at risk of inundation. However, nesting is a possibility in these areas and so ideally any development works should take place outwith the bird breeding season.

### 3.4.5 Plants

No nationally rare plants were noted on the site. However, coastal salt marsh and coastal sand dunes are habitats listed in the Scottish Biodiversity List, therefore public authorities should try to protect and enhance this habitat.

### 3.4.6 Invertebrates

The substrate within the river is unsuitable for pearl mussel as it is very mobile and dominated by sand.

The intertidal areas are likely to contain a range of mud-dwelling invertebrates which provide a food source for wading birds such as redshank.

The flowering plants within the grassland areas will also provide a nectar source for a number of invertebrate species, including butterflies such as the dingy skipper.

### 3.4.7 Fish

The Lossie river system provides habitat for a range of freshwater fish species, including salmon (*Salmo salar*) and trout (*Salmo trutta*). The substrate around the bridge is too sand dominated and mobile to be used for spawning, however, fish can be expected to be passing through and around the area by the bridge.

### 3.4.8 Seals

There have been anecdotal sightings of grey (*Halichoerus grypus)* and common (*Phoca vitulina vitulina*) seals at and around Lossiemouth beach, although only one sighting has been recorded with NESBReC – however this is likely to be due to a lack of sightings being reported, rather than an absence of sightings. The site is not a designated seal haul out under the Protection of Seals (Designation of Haul-out Sites) (Scotland) Order 2014.

### 3.4.9 Invasive species

No invasive species were recorded at the site, although there are a number of non-native garden species planted within the amenity / urban areas.

# 4 Ecological constraints and opportunities - habitats

## 4.1 Potential constraints

The surrounding salt marsh and dune grassland areas are habitats which the Scottish Biodiversity List identifies as requiring conservation action and / or where negative impacts should be avoided.

There are a number of designated sites in the surrounding area. The works are not considered to have an impact on the sites designated for their geological features. There is potential for the work to have an indirect impact on Spey Bay SAC through the increase in foot traffic accessing this area. However, as a bridge has been in place at this site for a number of years, and has only recently been removed from use, it is not considered that replacing the bridge will increase this disturbance beyond historic levels. Spey Bay SAC is also accessible from a number of other pedestrian routes, therefore access via this footbridge is not the only potential source of disturbance.

The bridge site is outwith the Moray Firth SAC sub tidal sandbank areas and the work should not have an impact on the distribution or movement of these features within the firth.

The habitats at Spynie Loch should not be affected by the work as it is upstream of the proposed work site.

## 4.2 Mitigation measures

The proposed works to replace the bridge will have an impact on their immediate footprint which encompasses the saltmarsh and dune habitat. Efforts should therefore be made to limit the footprint of the work area as much as possible. For example, if a site compound is required, it should be established on the existing hard standing areas, not on the grassland areas. This will help to minimise any damage to this habitat.

# 5 Ecological constraints and opportunities - species

## 5.1 Otter

### 5.1.1 Potential constraints

The river will be used by otter travelling between feeding sites. There is no suitable resting place habitat within the area surrounding the bridge, therefore the works should have no

impact on otter. However, as otter are likely to be passing through, construction methods should take this into account to avoid any accidental disturbance.

### 5.1.2 Mitigation measures

To avoid any disturbance to otter using the river, the following construction methods should be followed:

Works in the vicinity of the river should not take place during the hours of darkness or within 2 hours after sunrise and 2 hours before sunset. Any exposed pipe systems should be capped when workers are off site, and exit ramps will be provided on any exposed trenches or holes that are left overnight.

All personnel working on the site should be informed about the presence of otter on the site and the mitigation actions that have been taken. This can take the form of a 'toolbox talk' to all personnel.

## 5.2 Birds

### 5.2.1 Potential constraints

The grassland and dune areas have the potential to provide some nesting habitat for birds and the site is also within 5km of a SPA designated for bird populations. There is also potential for some nesting of small bird species in the end of the current bridge where it joins the right bank and is more sheltered. However, the instability of the dune habitat and the extent of human disturbance on the left bank is likely to discourage most birds from nesting in the immediate vicinity of the bridge.

### 5.2.2 Mitigation measures

Ideally, work should avoid the main bird breeding season (Feb – July). However, if this is not possible, the site should be checked for the presence of nesting birds before works commence.

## 5.3 Fish

### 5.3.1 Potential constraints

The river will be used by a range of fish species, but the bridge site does not contain suitable habitat for spawning salmon or trout.

### 5.3.2 Mitigation measures

If pile driving is required, particularly underwater, this has the potential to cause disturbance to migrating fish and a separate risk assessment should be undertaken.

## 5.4 Marine mammals

### 5.4.1 Potential constraints

The Moray Firth is home to a population of bottlenose dolphins and also to harbour porpoises (*Phocoena phocoena*). Marine mammals can be disturbed by the underwater sounds created by pile driving.

Seals are also likely to be sighted in the area and may haul out on the sand banks at the beach.

### 5.4.2 Mitigation measures

If pile driving is required, this has the potential to cause disturbance to marine mammals in the surrounding area and therefore an additional risk assessment should be completed, taking into account the timing, location and extent of pile driving required.

It is an offence to intentionally or recklessly kill, injure or take a seal at any time of year and it is also an offence to harass seals at a designated haul out. Although the Lossiemouth beach is not a designated haul out, the increase in movement of people and dogs as a result of reinstating the bridge could result in increased disturbance of any seals which have hauled out on the beach. As the bridge is a replacement, and as the beach appears to be used by surfers, any seals which do haul out may well be habituated to disturbance. However, the longer the bridge is out of use, the greater the chance that more seals will start to use the beach and could be at risk of disturbance from people using the bridge to access the beach.

During construction, work should stop if seals come close to the site, or start to use it to haul out. Work should only resume once the seal has left the area, to avoid any risk of accidental injury.

# 6 Water environment

In order to avoid any potential pollution of the river, care should be taken to minimise the risk of accidental pollution events. Authorisation from SEPA will be required for the works.

# 7 Additional requirements

The following additional actions should be undertaken prior to works taking place:

- If the work takes place during the bird breeding season, the site footprint should be checked for nesting birds.

# 8 Conclusions

The proposed works are in an area which has significant human disturbance. The dune and saltmarsh grasslands are an important habitat, and damage to these areas should be kept to a minimum. A range of bird species use the area, but are relatively unlikely to nest close to the bridge. However, any disturbance of breeding should be avoided by either timing the works outwith the breeding season or checking the ground prior to commencing work.

## References

Joint Nature Conservation Committee 2010. Handbook for Phase 1 habitat survey.

## Appendix 1 – phase 1 habitat map of site

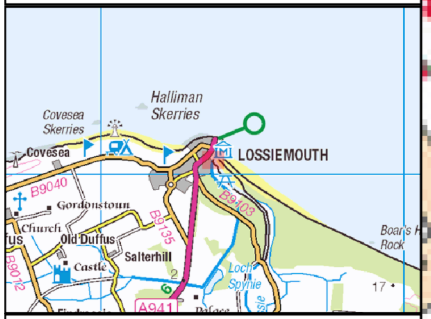
## Appendix 2 – NESBReC search results

# Appendix1 - Phase 1 habitat survey of footbridge site

## Legend

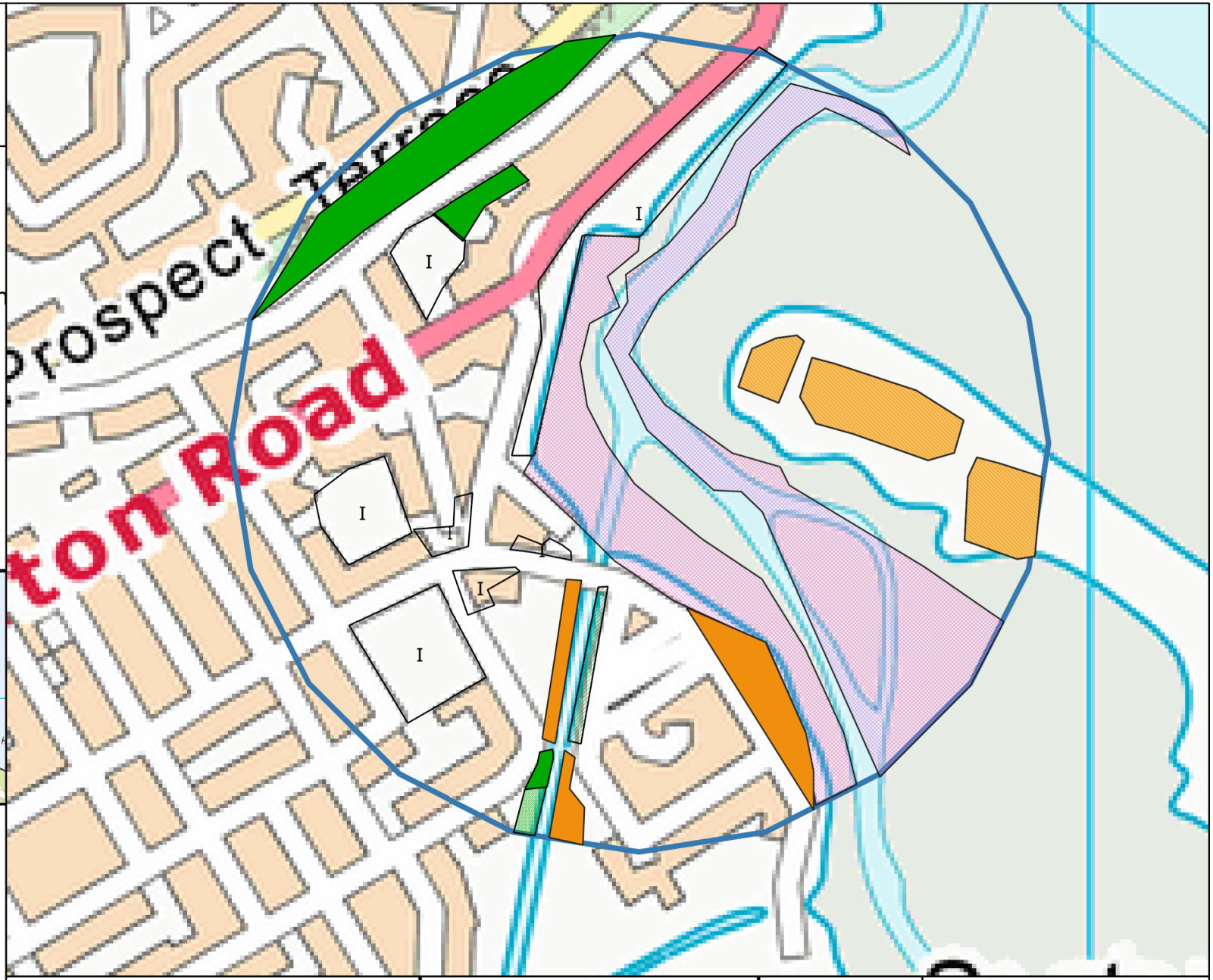
habitats

- Broad-leaved semi-natural
- Broad-leaved plantation
- Dense scrub
- I Improved grassland
- Salt marsh scattered plants
- Dune grassland
- Unimproved neutral grassland
- 250m survey area




Walking the Talk since 2006


Partners: Chris York and Tamsin Morris
www.walking-the-talk.co.uk




Revision number: 1.0

Map produced by Tamsin Morris
Created on 26/10/2020

Our ref: N:\requests\consultants\20201216 TamsinMorris WalkingTheTalk\20201216 Lossiemouth - NESBReC Report.doc

NESBReC
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Tamsin Morris
Walking The Talk
tamsin@walking-the-talk.co.uk

16 December 2020

Dear Tamsin

**NESBReC report – River Lossie, Bridge at Lossimouth**

Please find below the results of the data search you requested from NESBReC.
The search was carried out with a 500m radius from NJ 23780 70462.

Results table:

| Ref no | Data set | Interest | Locality | Grid Ref | Proposal |
|---|---|---|---|---|---|
| 20201216 | Designated Species | **ANNEX 1**<br>Bar-tailed Godwit (Limosa lapponica)<br>**UK BAP**<br>Common Seal (Phoca vitulina)<br>Brown Hare (Lepus europaeus)<br>Eurasian Red Squirrel (Sciurus vulgaris)<br>**SBL S2**<br>Dunlin (Calidris alpina) | Lossiemouth | NJ 23780 70462 | data search |
| | geological conservation review sites | Lossiemouth, East Quarry - Permian-Triassic Reptilia | | | |
| | SSSI | Lossiemouth East Quarry - GEOLOGICAL | | | |
| | *SESA geology | G37:Lossiemouth East Quarry - One of Britain's most important vertebrate fossil sites, yielding Triassic reptiles including early dinosaur. | | | |
| | *SESA geomorphology | GM2:Lossie-Spey Bay - A complex current and geological recent set of shingle bars with intervening swales. Both the Spey and Lossie spits at the respective river moth are of great interest physiographically because of their dynamic nature. | | | |
| | *SESA ornithology | O39:Lossiemouth - Passage and wintering waders and wildfowl. | | | |

*SESA stands for 'Study of Environmentally Sensitive Areas'. These are lists of locally important sites identified during the 1980s by the former Grampian Regional Council.

Maps showing all the search results are included below.

Yours sincerely

D Caffrey
GIS Project Officer

**PLEASE READ THE FOLLOWING NOTES:**

1) **Search was done to within 500 metres of the area of interest. This is indicated on the map by a broken line around the site.**
2) **Search areas or centroids are highlighted in red.**
3) **The dots on any maps depicting the locations of a species are positioned at the centre of a square representing the resolution of the recorded grid reference. Care should be taken over interpretation**
4) **Due to the limits of the map display function, all records may not be visible on the species maps. However, all species are listed in the relevant table above the map and a full list of records can be supplied in Excel format.**
5) **Scientific names are only used to identify species on maps when no common name is in general accepted usage.**
6) **For maps without a key, the relevant information is provided in the table.**
7) **The ownership of the data within this report remains with the original recorder and is subject to the laws defining Intellectual Property Copyright.**
8) **This report and the data held within it are to be used solely for those purposes described under the terms of any agreement between the applicant and NESBReC.**
9) **Some, or all of the data held within this report may be of a sensitive or confidential nature. Such information will be marked as such and if required an appropriate contact for further correspondence will be given (otherwise NESBReC should be contacted).**
10) **Although NESBReC makes every possible effort to ensure that the data it provides is accurate and up to date, this report should only be considered to represent the most recent version of each dataset as available at the time of the search.**
11) **NE LBAP Locally Important Species are species that are not on existing designated species lists but have been identified as important in the local context.**

For designated species, the following abbreviated sub-headings are used to describe different levels of importance:
Protection of Badgers Act (1992)
ANNEX 1, 2.1, 2.2 – EC Birds Directive
UK BAP - UK BAP list of Priority Species
SBL S2 - Scottish Biodiversity List: International Obligations
SBL S3 - Scottish Biodiversity List: Nationally Rare at UK level, found in only 1-15 10km squares
SBL S4 - Scottish Biodiversity List: Present in 5 or fewer 10km squares or sites in Scotland
SBL S5 - Scottish Biodiversity List: Decline of 25% or more in Scotland in last 25 years

Note, a species may be designated under several of these lists, but will only be listed under its highest level designation within this report. The ranking order used here is Protection of Badgers Act (1992), ANNEX 1, ANNEX 2.1, UK BAP, ANNEX 2.2, SBL S2-SBL S5.

| | | | | | |
|---|---|---|---|---|---|
| 20201216 | Designated Species | **ANNEX 1**<br>Bar-tailed Godwit (Limosa lapponica)<br>**UK BAP**<br>Common Seal (Phoca vitulina)<br>Brown Hare (Lepus europaeus)<br>Eurasian Red Squirrel (Sciurus vulgaris)<br>**SBL S2**<br>Dunlin (Calidris alpina) | Lossiemouth | NJ 23780 70462 | data search |

| | | | | | |
|---|---|---|---|---|---|
| 20201216 | geological conservation review sites | Lossiemouth, East Quarry - Permian-Triassic Reptilia | Lossiemouth | NJ 23780 70462 | data search |

| | | | | | |
|---|---|---|---|---|---|
| 20201216 | SSSI | Lossiemouth East Quarry - GEOLOGICAL | Lossiemouth | NJ 23780 70462 | data search |

| | | | | | |
|---|---|---|---|---|---|
| 20201216 | SESA geology | G37:Lossiemouth East Quarry - One of Britain's most important vertebrate fossil sites, yielding Triassic reptiles including early dinosaur. | Lossiemouth | NJ 23780 70462 | data search |

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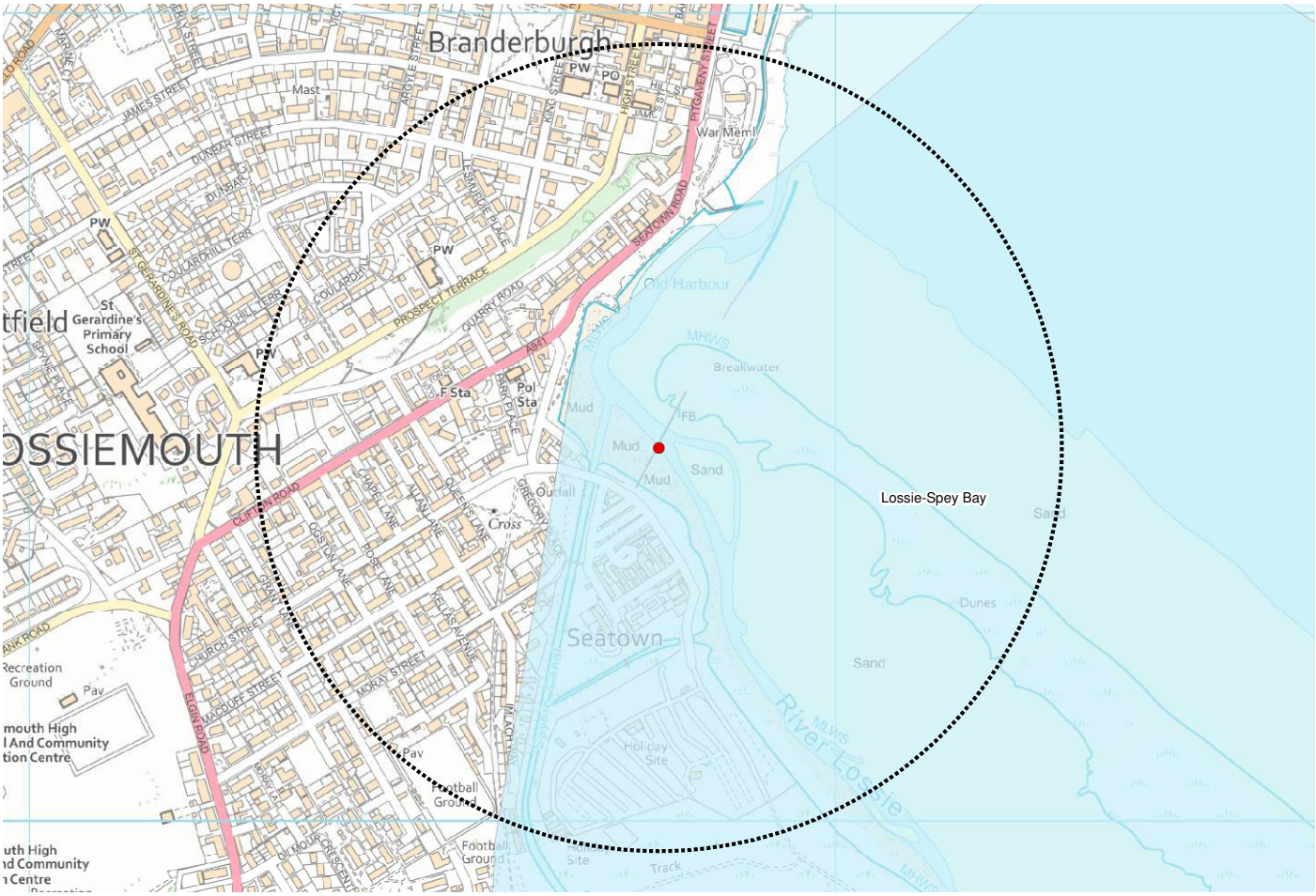
|---|---|---|---|---|---|
| 20201216 | SESA geomorphology | GM2:Lossie-Spey Bay - A complex current and geological recent set of shingle bars with intervening swales. Both the Spey and Lossie spits at the respective river moth are of great interest physiographically because of their dynamic nature. | Lossiemouth | NJ 23780 70462 | data search |



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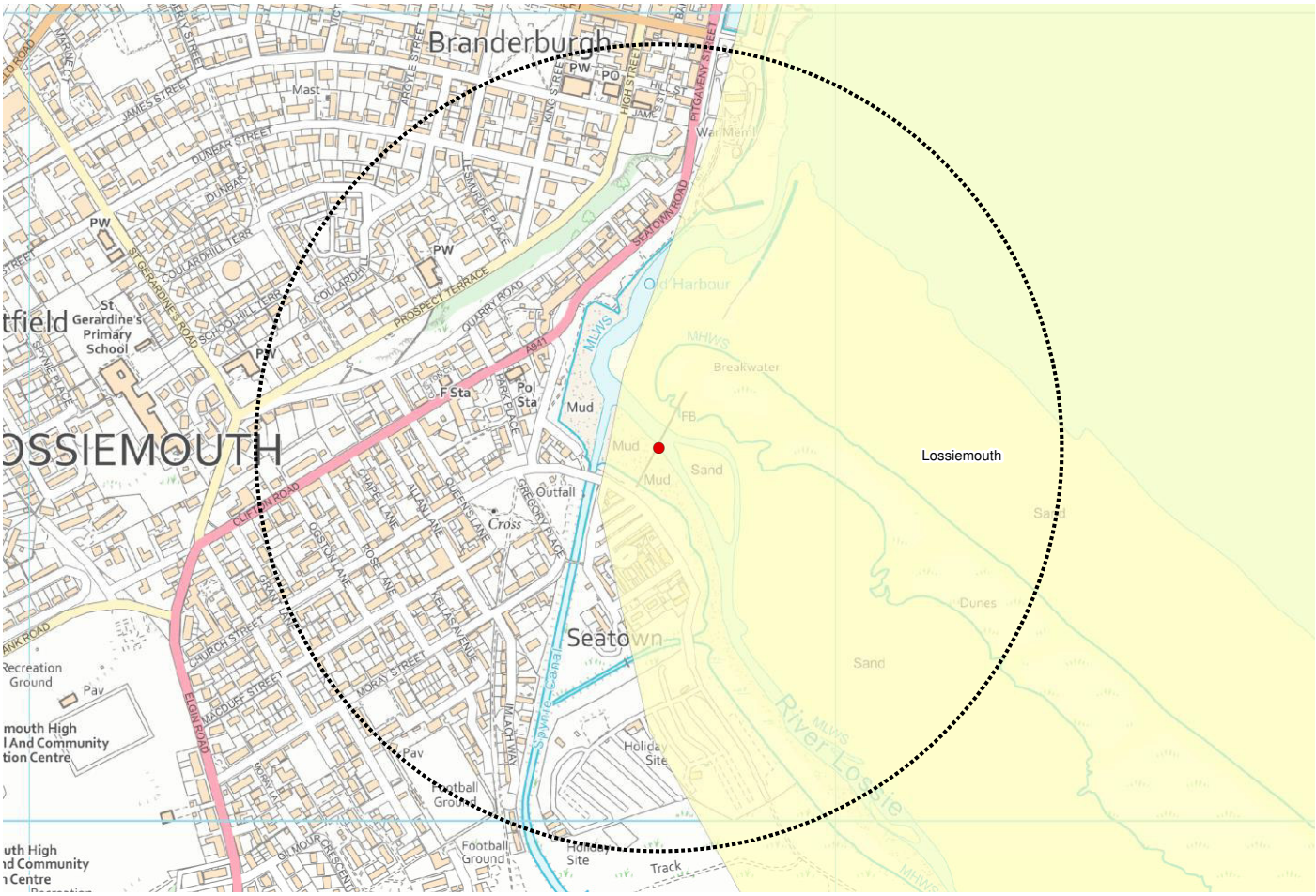
| 20201216 | SESA ornithology | O39:Lossiemouth - Passage and wintering waders and wildfowl. | Lossiemouth | NJ 23780 70462 | data search |



# Appendix F – Consultation Responses

**MORAY COUNCIL**
**PLANNING CONSULTATION RESPONSE**
**From:** The Moray Council, Flood Risk Management
**Planning Application Ref. No:** 21/00809/APP

I have the following comments to make on the application:-

| | | Please x |
|---|---|---|
| (a) | I OBJECT to the application for the reason(s) as stated below | ☐ |
| (b) | I have NO OBJECTIONS to the application and have no condition(s) and/or comment(s) to make on the proposal | ☐ |
| (c) | I have NO OBJECTIONS to the application subject to condition(s) and/or comment(s) about the proposal as set out below | ☒ |
| (d) | Further information is required in order to consider the application as set out below | ☐ |

**Further comments(s) to be passed to applicant**

The Scottish Water sewer next to the proposed site is a combined sewer. Permission should be sought from Scottish Water prior to connection. If permission isn't granted an alternative method of drainage should be designed. Due to the relatively small impermeable area involved this should not cause any issues.

I am content with the outcomes of the Flood Risk Assessment and that the proposed bridge will not increase flood risk to the surrounding area.

Contact: James Ross Date 01/06/2021
email address: James.ross@moray.gov.uk Phone No
**Consultee:** The Moray Council, Flood Risk Management

# Consultation Request Notification – Development Plans

| | |
|---|---|
| **Planning Authority Name** | Moray Council |
| **Response Date** | 18th June 2021 |
| **Planning Authority Reference** | 21/00809/APP |
| **Nature of Proposal (Description)** | Erection of new footbridge over River Lossie between Esplanade and East Beach to replace existing footbridge between Seatown and East Beach on |
| **Site** | Site Opposite 17C Clifton Road<br>Lossiemouth<br>Moray |
| **Site Postcode** | N/A |
| **Site Gazetteer UPRN** | 000133074113 |
| **Proposal Location Easting** | 323730 |
| **Proposal Location Northing** | 870633 |
| **Area of application site ($M^2$)** | 4550 |
| **Additional Comments** | |
| **Development Hierarchy Level** | LOCAL |
| **Supporting Documentation URL** | https://publicaccess.moray.gov.uk/eplanning/centralDistribution.do?caseType=Application&keyVal=QTNFD7BGN4D00 |
| **Previous Application** | 18/01500/PE |
| **Date of Consultation** | 4th June 2021 |
| **Is this a re-consultation of an existing application?** | No |
| **Applicant Name** | Moray Council |
| **Applicant Organisation Name** | |
| **Applicant Address** | PO Box 6760<br>Elgin<br><br>Moray<br>IV30 9BX |
| **Agent Name** | Beaver Bridges Limited |
| **Agent Organisation Name** | |
| **Agent Address** | 5 Knights Court Archers Way<br>Battlefield Enterprise Park<br>Shrewsbury<br>Shropshire<br>SY1 3GA |
| **Agent Phone Number** | |
| **Agent Email Address** | N/A |
| **Case Officer** | Andrew Miller |
| **Case Officer Phone number** | 01343 563274 |
| **Case Officer email address** | andrew.miller@moray.gov.uk |

| | |
|---|---|
| **PA Response To** | consultation.planning@moray.gov.uk |

**NOTE:**
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For full terms please visit http://www.moray.gov.uk/moray_standard/page_121513.html

For full Data Protection policy, information and rights please see http://www.moray.gov.uk/moray_standard/page_119859.html

You can contact our Data Protection Officer at info@moray.gov.uk or 01343 562633 for more information.

Please respond using the attached form:-

**PLEASE COMPLETE AND RETURN WITHIN 48 HOURS**
**to consultation.planning@moray .gov.uk**

# MORAY COUNCIL
# PLANNING CONSULTATION RESPONSE

**From: Development Plans**

**Planning Application Ref. No: 21/00809/APP**
**Erection of new footbridge over River Lossie between Esplanade and East Beach to replace existing footbridge between Seatown and East Beach on Site Opposite 17C Clifton Road Lossiemouth Moray for Moray Council**

**Ward:** 05_17 Heldon And Laich

## DETERMINATION - DEPARTURE FROM DEVELOPMENT PLAN

*(For Structure/Local Plan Comment)*

| | | Page No | Policy No(s) | Yes | No |
|---|---|---|---|---|---|
| 1 | **Departure from Moray Local Development Plan 2015** | | PP1 Placemaking | | X |
| | | | PP2 Sustainable Economic Growth | | X |
| | | | PP3 Infrastructure and Services | | X |
| | | | DP1 Development Principles* | X | |
| | | | EP3 Special Landscape Areas | X | |
| | | | EP5 Open Space | | X |
| | | | EP6 Settlement Boundaries | X | |
| | | | | | |
| 2 | **Further Discussion Required**<br>Further information required in respect of DP1.<br>Proposal is considered to be an acceptable departure from EP3 and EP6 for the reasons set out below. | | | | |

**REASONING FOR THIS DECISION:**

**POLICY COMMENTS**

The applications for a replacement bridge to East Beach is welcomed as this ties in with the Local Development Plan vision of making Moray a place people want to live, work and invest because of the outstanding quality of life and environment. Providing safe and easy access to East Beach allows more people to enjoy the landscape of the Moray coastline as well as encouraging more active lifestyles.

A Placemaking approach is required to all development as stated within *PP1 Placemaking*. Part a) of the policy states that development must be designed to create successful, healthy places that safeguard the environment and support economic development. The beaches at Lossiemouth are key attractions for visitors and local residents and access to East Beach is therefore an important element to the success of Lossiemouth. The Development Strategy for Lossiemouth set out at the start of the LDP Settlement Statement includes "to protect existing and support new tourism opportunities" and the proposal is in line with this. The proposed footbridge will help support active lifestyles by creating easier access to the beach for walking and water sports. Mental wellbeing will also be supported by giving people easier access to space to relax, unwind and be close to nature. The supporting business case submitted identifies the negative impact the closure of the existing bridge has had including the economic impact on businesses. The Economic Impact Assessment estimates the visitor spend associated with the replacement bridge would be in the region of £1,500, 000, equating to 30 full time equivalent jobs (FTE). The proposal would therefore support economic development in the area. It is noted that there are various technical studies submitted in relation to ecology, flood risk etc and these will require to be considered by the appropriate consultees to ensure the environment is safeguarded.

*PP2 Sustainable Economic Growth* supports development proposals that support the Moray Economic Strategy where the quality of the natural and built environment is safeguarded, there is a clear locational need and potential impacts can be satisfactorily mitigated. Tourism is identified as key growth sector in the Moray Economic Strategy with the aim to double tourism spend by 2025. As set out above the replacement bridge is an important link for visitors to one of the key attractions in Lossiemouth and visitors and local businesses will benefit from the replacement bridge. In terms of locational need the Options Appraisal submitted sets out the various options explored and the reasons for the location chosen. It is also noted that this is a replacement bridge and therefore a location within a similar area to the existing bridge is required to address the impacts of the bridge closure.

*PP3 Infrastructure and Services* requires development to be planned to ensure they function properly and are adequately served by infrastructure and services. The nature of the proposals means most of the policy criteria are not relevant however part vi) requires safe access routes linking to existing networks. The submitted Transport and Pedestrian Assessment demonstrates that consideration has been given to this and the proposals include reflecting likely desire lines from car parks, new directional signage, and replacing the existing zebra crossing on Clifton Road with a controlled Puffin Crossing. This ensures there is a safe access to the bridge and links are made to the wider network.

Part a) of *DP1 Development Principles* sets out design criteria parts a), b) and d) are the most relevant to the proposal in respect of the character and sense of place, integration with the landscape, and enhancing the natural and built environment. The proposed bridge will alter the character of the esplanade not only by introducing a new structure but

also through greater activity within this area. It is accepted that the design of the bridge will reflect the most appropriate engineering solution as well as the budget available. Therefore our comments on the design of the bridge itself are limited. The redesign of the area where the bridge "lands" includes relocation of benches which help mitigate impacts resulting from the loss of area. The following comments and recommendations are made in respect of the design.

- The height of the bridge will require ramps for access which will intrude into the current open areas on the esplanade. The initial design proposed showed the parapet on the landward side to be enclosed and this had a solid dark appearance on the visualisations. The design was not attractive and it was queried if the railings used on the bridge itself could be extended down to give a more open appearance. Revised drawings now showing railings down the landward parapet have been submitted. This opens up the esplanade area visually creating a more attractive space. This revision is considered to be more appropriate and will integrate better with the landscape and public realm.
- The materials proposed for the new and widened paths largely reflect the surfaces that they replace or connect with. However, on some paths to be widened the material is described as a strip of "flexible surfacing". It is unclear how this will look and creating the appearance of two paths with different surfacing running side by side must be avoided.
- It is noted that a different paving is proposed around the area the bridge lands. The alternative surface will help to distinguish this area from the wider public realm and help to direct to the bridge entrance. However, the slab colour is not specified and should integrate with the paving that goes around the projection of the sea wall.
- There are several materials being used within the area around the access to bridge e.g. new Marshall's Saxon slabs, existing paving slabs, cobbles and flexible surfacing that could create a confusing and cluttered pattern. To simplify the surfacing materials the cobbled area to the south west of where the bridge lands should be removed and replaced with slabs to reflect the existing surfacing. This will integrate the new bridge and access to this more cohesively with the existing path network and public realm.
- It is noted that some details are still "pending final design" including the full colour pallet.

Updated drawings, additional information or explanation around the design should be submitted to address these points. However, to support delivery of the project it may be acceptable to condition some of these aspects to ensure the colour pallet/materials selected reflect the character of the esplanade and integrates with the landscape, public realm and built environment appropriately.

The bridge structure falls largely within the Lossiemouth to Portgordon Special Landscape Area. *Policy EP3 Special Landscape Areas and Landscape Character* states development within the SLA is only permitted where it does not prejudice the special qualities of the designated area, adopts the highest standards of design and minimises adverse impacts on the landscape and visual qualities and is for one of a set of specific uses outlined within the policy. The proposal does not fall within any of the specific uses however it is noted that this is a replacement structure for an important piece of local infrastructure. As recognised above the bridge is a key visitor asset and therefore linked to the tourism sector (a key growth sector identified in the Moray Economic Strategy). It is plays an important economic role for various businesses within Lossiemouth. Restoring easy access to East Beach is important for health and wellbeing. As set out above for PP2 there is a clear locational need for the bridge at this location and alternative options have been explored. Given the foregoing the bridge is considered to be an important piece of

local infrastructure and therefore is an acceptable departure from the policy. The Moray Local Landscape Designation Review states that Lossiemouth is a key feature that is seen from beaches due to its location on a promontory elevated above the coast. Given the purpose and function of the bridge there are limited means to integrate this within the landscape and it will be visible from many aspects. However, it will be associated with the back drop of built development at Lossiemouth. The projection from the sea wall at this location also reduces the bridge span and therefore impact. The concrete approach on the beach side is to have a pigmented surface that reflects the tone of the sand which will help to integrate this with the beach. It is noted that some details are still "pending final design" including the full colour pallet this. To support delivery of the project these require to be conditioned to ensure the colour pallet selected integrates with the landscape appropriately.

The bridge partly falls ouwith the settlement boundary. *Policy EP6 Settlement Boundaries* does not support development proposals immediately outwith settlement boundaries. The purpose of this policy is to limit the expansion of settlements and maintain the distinction between built up areas and the countryside. The proposal is a replacement bridge and extension of this outwith the settlement is inevitable to achieve the connection between the town and the beach. Whilst the bridge will encourage greater use of the beach for recreation it would not encourage further built expansion outwith the settlement boundary and the distinction between the built up area and countryside would be maintained. The proposal is therefore considered to be an acceptable departure from the policy.

The proposal partly falls within the ENV1 Station Park and Esplanade designation. The proposal is not a departure from policy *EP5 Open Space* as this would not alter the existing function of the area which is primarily for amenity and access. The proposal will potentially widen the use of the ENV.

Consultee responses will require to be considered to assess compliance with policies relating to safeguarding natural heritage and the water environment including policy DP1 Development Principles part iii), EP1 Natural Heritage Designations, EP12 Management and Enhancement of the Water Environment and EP17 Coastal Change.

The principle of development is supported by the Primary Policies of the Local Development Plan. The proposal is considered to be an acceptable departure from policies EP3 Special Landscape Areas and EP6 Settlement Boundaries for the reasons set out above. We have set out some key areas where the proposal could better integrate with the existing public realm safeguarding the character of the area and enhancing the built environment to comply with Policy DP1 Development Principles. Updated drawings or additional information should be provided in respect of these, however to support the delivery of the project conditions may be acceptable in this instance.

**Contact:** Rowena MacDougall **Date**……2406/21……..
**email address:** Rowena.macdougall@moray.gov.uk **Phone No** ……..
**Consultee: Development Plans**

| | |
|---|---|
| **Return response to** | **consultation.planning@moray.gov.uk** |

Please note that information about the application including consultation responses and representations (whether in support or objection) received on the proposal will be published on the Council's website at http://publicaccess.moray.gov.uk/eplanning/ (You can also use this site to track progress of the application and view details of any consultation responses and representations (whether in support or objection) received on the proposal). In order to comply

with the Data Protection Act, personal information including signatures, personal telephone and email details will be removed prior to publication using “redaction” software to avoid (or mask) the display of such information. Where appropriate other “sensitive” information within documents will also be removed prior to publication online.

# Consultation Request Notification

| | |
|---|---|
| **Planning Authority Name** | Moray Council |
| **Response Date** | 10th June 2021 |
| **Planning Authority Reference** | 21/00809/APP |
| **Nature of Proposal (Description)** | Erection of new footbridge over River Lossie between Esplanade and East Beach to replace existing footbridge between Seatown and East Beach on |
| **Site** | Site Opposite 17C Clifton Road<br>Lossiemouth<br>Moray |
| **Site Postcode** | N/A |
| **Site Gazetteer UPRN** | 999999999999 |
| **Proposal Location Easting** | 323725 |
| **Proposal Location Northing** | 870637 |
| **Area of application site ($M^2$)** | 4550 |
| **Additional Comment** | |
| **Development Hierarchy Level** | LOCAL |
| **Supporting Documentation URL** | https://publicaccess.moray.gov.uk/eplanning/centralDistribution.do?caseType=Application&keyVal=QTNFD7BGN4D00 |
| **Previous Application** | 18/01500/PE |
| **Date of Consultation** | 27th May 2021 |
| **Is this a re-consultation of an existing application?** | No |
| **Applicant Name** | Moray Council |
| **Applicant Organisation Name** | |
| **Applicant Address** | PO Box 6760<br>Elgin<br><br>Moray<br>IV30 9BX |
| **Agent Name** | Beaver Bridges Limited |
| **Agent Organisation Name** | |
| **Agent Address** | 5 Knights Court Archers Way<br>Battlefield Enterprise Park<br>Shrewsbury<br>Shropshire<br>SY1 3GA |
| **Agent Phone Number** | |
| **Agent Email Address** | N/A |
| **Case Officer** | Andrew Miller |
| **Case Officer Phone number** | 01343 563274 |
| **Case Officer email address** | andrew.miller@moray.gov.uk |

| | |
|---|---|
| **PA Response To** | consultation.planning@moray.gov.uk |

**NOTE:**
If you do not respond by the response date, it will be assumed that you have no comment to make.

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For full terms please visit http://www.moray.gov.uk/moray_standard/page_121513.html

For full Data Protection policy, information and rights please see http://www.moray.gov.uk/moray_standard/page_119859.html

You can contact our Data Protection Officer at info@moray.gov.uk or 01343 562633 for more information.

Please respond using the attached form:-

**MORAY COUNCIL**

**PLANNING CONSULTATION RESPONSE**

**From:** Moray Access Manager

**Planning Application Ref. No: 21/00809/APP**
**Erection of new footbridge over River Lossie between Esplanade and East Beach to replace existing footbridge between Seatown and East Beach on Site Opposite 17C Clifton Road Lossiemouth Moray for Moray Council**

I have the following comments to make on the application:-

| | | Please x |
|---|---|---|
| (a) | I OBJECT to the application for the reason(s) as stated below | ❑ |
| (b) | I have NO OBJECTIONS to the application and have no condition(s) and/or comment(s) to make on the proposal | ❑ |
| (c) | I have NO OBJECTIONS to the application subject to condition(s) and/or comment(s) about the proposal as set out below | x |
| (d) | Further information is required in order to consider the application as set out below | ❑ |

## Reason(s) for objection

## Condition(s)

The closure of the old bridge severed the Moray Coast Trail which is one of Scotland's Great Trails. The route is an important tourism resource but is currently diverted along a circuitous route which uses part of a busy main road where there is no pavement. This makes the route less attractive to use so the new bridge is most welcome to connect Lossiemouth once more with its iconic beach and to ensure the Moray Coast Trail is properly linked again.
The old bridge is part of a statutory Core Path Core Path so a legal process will be required to divert this across the new bridge. This will be most easily achieved as part of the planning process using Section 208 of the Town and Country Planning (Scotland) Act 1997.

## Further comment(s) to be passed to applicant

**Further information required to consider the application**

**Contact:ian Douglas** **Date27/05/21……..**

**email address:ian.douglas@moray.gov.uk** **Phone No ex 7049 ……..**

**Consultee:** Moray Outdoor Access Manager

| | |
|---|---|
| **Return response to** | **consultation.planning@moray.gov.uk** |

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# Consultee Comments for Planning Application 21/00809/APP

**Application Summary**

Application Number: 21/00809/APP
Address: Site Opposite 17C Clifton Road Lossiemouth Moray
Proposal: Erection of new footbridge over River Lossie between Esplanade and East Beach to replace existing footbridge between Seatown and East Beach on
Case Officer: Andrew Miller

**Consultee Details**

Name: Mr EH Consultations
Address: Environmental Health, Council Offices, High Street Elgin, Moray IV30 1BX
Email: Not Available
On Behalf Of: Environmental Health C12

**Comments**

Approved unconditionally

# Consultee Comments for Planning Application 21/00809/APP

**Application Summary**

Application Number: 21/00809/APP
Address: Site Opposite 17C Clifton Road Lossiemouth Moray
Proposal: Erection of new footbridge over River Lossie between Esplanade and East Beach to replace existing footbridge between Seatown and East Beach on
Case Officer: Andrew Miller

**Consultee Details**

Name: Mr CL Consultations
Address: Environmental Health, Council Offices, High Street Elgin, Moray IV30 1BX
Email: Not Available
On Behalf Of: Contaminated Land

**Comments**

Approved unconditionally

# Consultation Request Notification

| | |
|---|---|
| **Planning Authority Name** | Moray Council |
| **Response Date** | 10th June 2021 |
| **Planning Authority Reference** | 21/00809/APP |
| **Nature of Proposal (Description)** | Erection of new footbridge over River Lossie between Esplanade and East Beach to replace existing footbridge between Seatown and East Beach on |
| **Site** | Site Opposite 17C Clifton Road<br>Lossiemouth<br>Moray |
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| **Additional Comment** | |
| **Development Hierarchy Level** | LOCAL |
| **Supporting Documentation URL** | https://publicaccess.moray.gov.uk/eplanning/centralDistribution.do?caseType=Application&keyVal=QTNFD7BGN4D00 |
| **Previous Application** | 18/01500/PE |
| **Date of Consultation** | 27th May 2021 |
| **Is this a re-consultation of an existing application?** | No |
| **Applicant Name** | Moray Council |
| **Applicant Organisation Name** | |
| **Applicant Address** | PO Box 6760<br>Elgin<br><br>Moray<br>IV30 9BX |
| **Agent Name** | Beaver Bridges Limited |
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| **Agent Address** | 5 Knights Court Archers Way<br>Battlefield Enterprise Park<br>Shrewsbury<br>Shropshire<br>SY1 3GA |
| **Agent Phone Number** | |
| **Agent Email Address** | N/A |
| **Case Officer** | Andrew Miller |
| **Case Officer Phone number** | 01343 563274 |
| **Case Officer email address** | andrew.miller@moray.gov.uk |

| | |
|---|---|
| **PA Response To** | consultation.planning@moray.gov.uk |

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Please respond using the attached form:-

**MORAY COUNCIL**

**PLANNING CONSULTATION RESPONSE**

**From:** Aberdeenshire Council Archaeology Service

**Planning Application Ref. No: 21/00809/APP**
**Erection of new footbridge over River Lossie between Esplanade and East Beach to replace existing footbridge between Seatown and East Beach on Site Opposite 17C Clifton Road Lossiemouth Moray for Moray Council**

I have the following comments to make on the application:-

| | | Please x |
|---|---|---|
| (a) | I OBJECT to the application for the reason(s) as stated below | ❑ |
| (b) | I have NO OBJECTIONS to the application and have no condition(s) and/or comment(s) to make on the proposal | ❑ |
| (c) | I have NO OBJECTIONS to the application subject to condition(s) and/or comment(s) about the proposal as set out below | x |
| (d) | Further information is required in order to consider the application as set out below | ❑ |

## Reason(s) for objection

None

## Condition(s)

The proposed application lies within and affects the archaeology site NJ27SW0011, the remains of the old harbour/port of Lossiemouth which is thought to have its origins in the medieval period. There is also the potential for fragments of wrecked vessels to survive within this area.
I would ask that the following condition is applied should the application be minded for approval:

***Programme of archaeological works***

*No works in connection with the development hereby approved shall commence unless an archaeological written scheme of investigation (WSI) has been submitted to and approved in writing by the planning authority and a programme of archaeological works has been carried out in accordance with the approved WSI. The WSI shall include details of how the recording and recovery of archaeological resources found within the application site shall be undertaken, and how any updates, if required, to the written scheme of investigation will be provided throughout the implementation of the programme of archaeological works. Should the archaeological works reveal the need for post excavation analysis the development hereby approved shall not be brought into use unless a post-excavation research design (PERD) for the analysis, publication and dissemination of results and archive deposition has been submitted to and approved in writing by the planning*

*authority. The PERD shall be carried out in complete accordance with the approved details.*

***Reason: To safeguard and record the archaeological potential of the area.***

The exact specification of mitigation works will be dependent on the construction methodology, but effectively any/all groundbreaking works, above and, potentially, below the water, (including any GI/geotechnical investigation) should be subject to archaeological monitoring.

**Further comment(s) to be passed to applicant**

**Further information required to consider the application**

**Contact: Claire Herbert**
**email address:**
**archaeology@aberdeenshire.gov.uk**
**Consultee: Archaeology service**

**Date…10/06/2021……..**
**Phone No …01467 537717**

| | |
|---|---|
| **Return response to** | **consultation.planning@moray.gov.uk** |

## Luke Jenkins

**To:** Will Burnish
**Subject:** RE: SEPA Response: 21/00809/APP Erection of new footbridge over River Lossie

---

**From:** Planning.North <Planning.North@sepa.org.uk>
**Sent:** 07 June 2021 12:27
**To:** 'Andrew Miller' <andrew.miller@moray.gov.uk>
**Cc:** Planning.North <Planning.North@sepa.org.uk>
**Subject:** SEPA Response: 21/00809/APP Erection of new footbridge over River Lossie

OFFICIAL – BUSINESS

**SEPA Response**
**21/00809/APP**
**Erection of new footbridge over River Lossie between Esplanade and East Beach to replace existing footbridge between Seatown and East Beach**

We consider this to be a replacement of an existing bridge and we have **no objection** on flood risk grounds. Such development is covered under section 9 of SEPA's Flood Risk Standing Advice best practice should be followed as outlined in SEPA's River crossings - good practice guide.

For information and design purposes, as the site is at the downstream end of the River Lossie where the river discharges to the sea, coastal processes are likely to be the dominant flood mechanism in the area. We note that the 200 year flood level quoted in the Flood Risk Assessment (CBEC, 15 December 2020) for the Moray Firth is 3.35mAOD. This is based on the Coastal Flood Boundary method as shown in table 4.2 of the 2018 Technical Summary. Based on the ground levels at both locations 1 and 2, the existing ground levels tie into land above the 200 year level quoted in the FRA.

As best practice, we would expect the bridge to be able to convey the 200 year flood level, plus an additional 0.6m of freeboard without constriction. This would be a bridge deck of at least 3.95mAOD. We would also recommend an additional 0.89m to be added for climate change which would be a level of 4.84mAOD.

Whilst we do not provide comment on coastal erosion or the overall engineering of bridges, the Moray Council should satisfy themselves that the final location and design will not be overly exposed to wave action or erosional processes which may undermine the structural integrity of the bridge.

**Clare Pritchett**

Senior Planning Officer

Planning Service, SEPA, Inverdee House, Baxter Street, Torry, Aberdeen, AB11 9QA

Email: planning.north@sepa.org.uk

Telephone: [redacted]

Part Time: Monday, Wednesday & Thursday

Currently working from home

For our planning guidance, please visit www.sepa.org.uk/environment/land/planning



OFFICIAL – BUSINESS

OFFICIAL – BUSINESS

## Luke Jenkins

**From:** MS.MarineLicensing@gov.scot
**Sent:** 28 May 2021 18:06
**To:** Planning Consultation
**Subject:** RE: Moray Council Planning Application Consultation for 21/00809/APP



Dear Moray Council,

Marine Scotland Licensing Operations Team does not intend to comment on the planning application. If any part of the project is located below Mean High Water Springs, a marine licence may be required under the Marine (Scotland) Act 2010. Please advise the applicant to contact us directly at ms.marinelicensing@gov.scot to seek advice on the marine licensing requirements.

Yours sincerely,

Thomas Inglis

Marine Licensing Casework Officer (He/Him/His)

Marine Scotland - Marine Planning & Policy

Scottish Government | Marine Laboratory | 375 Victoria Road | Aberdeen | AB11 9DB
Email: ms.marinelicensing@gov.scot
Website: http://www.scotland.gov.uk/marinescotland

COVID-19: Marine Scotland - Licensing Operations Team (LOT) is working from home and unable to respond to phone enquiries. Please communicate with LOT via email. Email addresses are MS.MarineRenewables@gov.scot for marine renewables correspondence or MS.MarineLicensing@gov.scot for all licensing queries

-----Original Message-----
From: consultation.planning@moray.gov.uk <consultation.planning@moray.gov.uk>
Sent: 27 May 2021 11:36
To: MS Marine Licensing <MS.MarineLicensing@gov.scot>
Subject: Moray Council Planning Application Consultation for 21/00809/APP

Please find attached notification of consultation

**Luke Jenkins**

**From:** Shirley Reid <Shirley.Reid@nature.scot>
**Sent:** 11 June 2021 14:44
**To:** Andrew Miller; Planning Consultation
**Subject:** RE: 21/00809/APP - Proposed Bridge at Lossiemouth



Hi Andrew,

The seas around Lossiemouth form part of the following protected areas:

- Moray Firth Special Area of Conservation (SAC)
- Moray Firth Special Protection Area (SPA)

The SAC is designated for its bottlenose dolphin population and subtidal sandbanks; the SPA is designated for a number of bird species.

Any bridge works at the proposal site will have to be carried out to the satisfaction of SEPA. This will ensure that there is no adverse impact on water quality. My advice is that no qualifying interest of the SAC or SPA will be affected either directly or indirectly and so an appropriate assessment is therefore not required.

Please let me know if you need any further advice.

Kind regards

Shirley

*The advice/information in this e-mail is provided by NatureScot, the operating name of Scottish Natural Heritage.*
**Shirley Reid** | **Area Officer**
NatureScot | Alexander Fleming House | 8 Southfield Drive | Elgin | IV30 6GR | [redacted]
nature.scot | @nature_scot | *Scotland's Nature Agency* | *Buidheann Nàdair na h-Alba*

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**From:** Andrew Miller
**Sent:** 08 June 2021 15:23
**To:** TAYSIDE_GRAMPIAN
**Subject:** Checking with Shirley - 21/00809/APP - Proposed Bridge at Lossiemouth

Good Afternoon,

We previously sent a consultation to NatureScot for the above planning application on 27 May 2021. We have subsequently received an ecological appraisal and I now attach a copy should you with to review this and provide comment if wished as part of any planning consultation response.

Many thanks

Andrew

**Andrew Miller**| Planning Officer | Economic Growth and Development
andrew.miller@moray.gov.uk |website | facebook | twitter | newsdesk
01343 563274

## Luke Jenkins

**From:** Helen Croxson <Helen.Croxson@mcga.gov.uk>
**Sent:** 30 June 2021 21:25
**To:** Planning Consultation; Andrew Miller
**Cc:** Aberdeen Marine Office
**Subject:** RE: Our ref: 21/00809/APP - Erection of bridge at River Lossie between Esplanade and East Beach, Lossiemouth, Moray - Planning Consultation



Dear Andrew,

Thank you for the opportunity to comment on the Planning Application for the new bridge at the River Lossie.

I note that a Marine Licence is likely to be required under the Marine (Scotland) Act 2010 and the MCA is a statutory consultee and/or primary advisor to the marine licencing regulators from the safety of navigation perspective. We would expect the marine licence application to consider the impact on other marine users / vessels operating in the area, and we note that at this location it is relatively shallow waters and vessels are unlikely to 'navigate' that site, although leisure craft users are expected.

On this occasion we are content that the risk can be mitigated through suitably worded conditions of consent and advisories at the marine licence stage. The air clearance above the MHWL for craft to pass under the bridge should also be considered in the marine licence application, and the methodology for the constructions works.

Kind regards

UK Technical Services Navigation

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**From:** Andrew Miller <Andrew.Miller@moray.gov.uk>
**Sent:** 15 June 2021 12:32
**To:** 'director@fnlft.org.uk' <director@fnlft.org.uk>; 'enquiries@nlb.org.uk' <enquiries@nlb.org.uk>; 'scotland-marine@bidwells.co.uk' <scotland-marine@bidwells.co.uk>; Aberdeen Marine Office <AberdeenMO@mcga.gov.uk>
**Cc:** 'luke@beaverbridges.co.uk' <luke@beaverbridges.co.uk>; Teresa Ruggeri <Teresa.Ruggeri@moray.gov.uk>
**Subject:** Our ref: 21/00809/APP - Erection of bridge at River Lossie between Esplanade and East Beach, Lossiemouth, Moray - Planning Consultation

Planning consultation request to the following bodies: **Findhorn, Nairn and Lossie Fisheries Trust; Northern Lighthouse Board; Crown Estate Scotland; Maritime and Coastguard Agency (Aberdeen)**

Dear All,

A planning application has been submitted to Moray Council Planning by Beaver Bridges, on behalf of Moray Council. The plans can be viewed here:

https://publicaccess.moray.gov.uk/eplanning/applicationDetails.do?activeTab=documents&keyVal=QTNFD7BGN4D00

A separate Marine Licence application is being prepared. In order to inform this (and the planning application), comments are therefore sought from yourselves on the proposed development. Please submit any comments you

may have to consultation.planning@moray.gov.uk and andrew.miller@moray.gov.uk by no later than Wednesday 30 June 2021. If no response is received by this date then it will be assumed you have no comments to make. If you have any queries or this timescale is not suitable, please let me know by email.

Many Thanks

Andrew

**Andrew Miller**| Planning Officer | Economic Growth and Development
andrew.miller@moray.gov.uk |website | facebook | twitter | newsdesk
01343 563274

Northern Lighthouse Board

84 George Street
Edinburgh EH2 3DA

Tel: 0131 473 3100
Fax: 0131 220 2093

Website: www.nlb.org.uk
Email: enquiries@nlb.org.uk

Your Ref: 21/00809/APP
Our Ref: GB/ML/M13_01_085

Mr Andrew Miller
Planning Officer
Economic Growth and Development
Moray Council

17 June 2021

***TOWN AND COUNTRY PLANNING (SCOTLAND) ACT 1997 (AS AMENDED)***

***Erection of bridge at River Lossie between Esplanade and East Beach, Lossiemouth, Moray***

Thank you for your e-mail correspondence dated 15th June 2021 regarding the planning application submitted by **Beaver Bridges Limited (on behalf of Moray Council)** for consent to erect a new bridge over the River Lossie, Lossiemouth.

Northern Lighthouse Board has no objections to the works, and recommend the following:

- **Moray Council** should issue marine safety information and a local Notice to Mariners prior to and during the works, please copy the LNtM to the Northern Lighthouse Board (navigation@nlb.org.uk).
- On completion of the works **Moray Council** should provide the UK Hydrographic Office with the 'as-built' drawings of the new bridge layout, including any revisions to the existing bridge to ensure charts are updated.

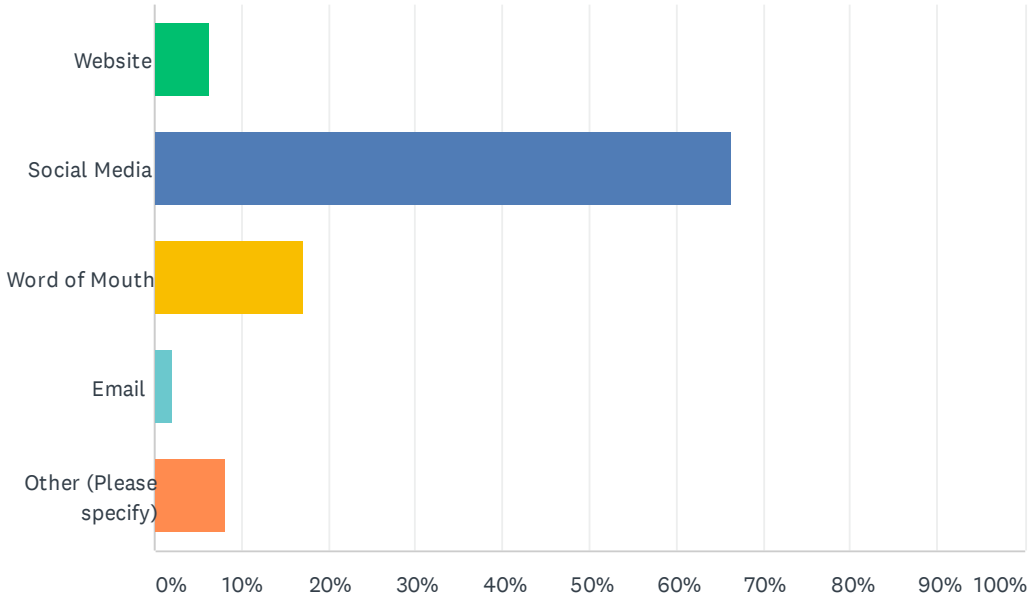
Yours sincerely

[redacted]

Navigation Manager

# Q1 How did you hear about this event?

Answered: 381 Skipped: 0




| ANSWER CHOICES | RESPONSES | |
|---|---|---|
| Website | 6.30% | 24 |
| Social Media | 66.40% | 253 |
| Word of Mouth | 17.06% | 65 |
| Email | 2.10% | 8 |
| Other (Please specify) | 8.14% | 31 |
| TOTAL | | 381 |

| # | OTHER (PLEASE SPECIFY) | DATE |
|---|---|---|
| 1 | Northern scott | 3/9/2021 8:39 AM |
| 2 | Local Co-Op | 3/8/2021 8:32 AM |
| 3 | Local church | 3/7/2021 4:48 PM |
| 4 | Purely by chance !! | 3/7/2021 2:20 PM |
| 5 | Purely by chance, came across it on social media. Not a great deal of info initially around the town for residents. | 3/7/2021 2:08 PM |
| 6 | Newspaper | 3/7/2021 1:26 PM |
| 7 | I | 3/7/2021 12:07 AM |
| 8 | Fsmily | 3/6/2021 5:59 PM |
| 9 | Local newspaper website (The Northern Scot) | 3/6/2021 4:25 PM |
| 10 | Paper copy through door | 3/6/2021 2:27 PM |
| 11 | Live locally | 3/5/2021 5:56 PM |
| 12 | printed copy at CO-OP | 3/5/2021 4:49 PM |
| 13 | Shop window | 3/5/2021 12:29 AM |
| 14 | Northern Scot | 3/4/2021 10:32 AM |
| 15 | Northern Scot | 3/3/2021 11:33 PM |
| 16 | Leaflet in COOP | 3/3/2021 5:10 PM |
| 17 | Leaflet in Coop | 3/3/2021 11:26 AM |
| 18 | leaflet | 3/3/2021 11:23 AM |
| 19 | Leaflet | 3/3/2021 11:21 AM |
| 20 | Unique shop window | 3/3/2021 7:31 AM |
| 21 | local shop | 3/2/2021 5:08 PM |
| 22 | Family resident in Lossiemouth | 3/2/2021 5:04 PM |
| 23 | We own a static caravan for our own use on Lossiemouth bay caravan park and spend all summer here my family also. | 3/2/2021 2:22 PM |
| 24 | Leaflet | 3/2/2021 12:37 PM |
| 25 | Leaflet @ Co-op in Lossie | 3/2/2021 10:24 AM |
| 26 | Press & Journal | 3/2/2021 8:43 AM |
| 27 | I was on LCDT committee | 3/1/2021 11:01 PM |
| 28 | friends | 3/1/2021 8:55 PM |
| 29 | Leaflet in Lossie Coop | 3/1/2021 6:05 PM |
| 30 | Member of the LCDT | 3/1/2021 5:04 PM |
| 31 | Lossiemouth Community Development Trust | 3/1/2021 12:52 PM |

# Q2 Please provide you comments on the preferred option.

Answered: 321 Skipped: 60

| # | RESPONSES | DATE |
|---|---|---|
| 1 | As a life-long resident of Lossiemouth I strongly oppose the ‘preferred option’ for the new bridge to be situated on the esplanade. First of all aesthetically it looks horrendous, completely ruining the open aspect presently enjoyed. The original position is so much more pleasing to the eye, and especially if viewed from Prospect Terrace. It’s an iconic view and along with the Lighthouse and west beach view defines our town. Even more important se the practical considerations. The inevitable additions like volume of traffic on the esplanade to accommodate people accessing the bridge would be intolerable, whereas in tne original location there is a ready made parking area. Also, the esplanade is in a sorry state of decline, and I can only assume the additional costs incurred to accommodate this huge structure would bump up the cost considerably. Opinion in the town definitely favours tne original location, a fact borne out by the most recent survey. In my opinion going with the esplanade choice is a huge mistake in the making. The cheapest choice doesn’t make it the Best choice. Can I also apologise for any errors in my submission, the format of this survey, makes it impossible to review your written submission before sending? | 3/9/2021 10:40 AM |
| 2 | Looks like you have made your choice, so I'll go with it. The one from the esplanade. | 3/9/2021 10:16 AM |
| 3 | Church Street | 3/9/2021 9:09 AM |
| 4 | Option 3. Next to current bridge | 3/9/2021 9:05 AM |
| 5 | Cheap option in the wrong place that will bring lossie to halt in the summer. Relatives from Lossie extremely unhappy with choice | 3/9/2021 8:52 AM |
| 6 | Short sighted. The esplanade will fill with day trippers stopping passing trade to shops and resteraunts. In the too distant future that part of the beach will become an island unless the river is dredged, they moved it originally after 10 years as it became unusable in the weather. | 3/9/2021 8:39 AM |
| 7 | Option 5 - Balance between encouraging use of the local businesses at the promenade carparking facilities. The west beach is a major tourist attraction for Lossiemouth. The regeneration of the promenade requires completion if option 4 or 5 is chosen due to increased used. The path is currently a major trip hazard. | 3/9/2021 5:03 AM |
| 8 | There are no rights or wrongs, but it will be shorter and therefore cheaper, but possibly higher risk because of the river hydraulics and fluvial geomorphology. Access for construction will be tricky and the town side abutment condition is not known. It is not, however, a thing of great beauty - more utility. The graphic shows a pathway continuing eastwards - is that actually in the plan? | 3/8/2021 10:29 PM |
| 9 | I think having it cross from the esplanade makes a lot of sense | 3/8/2021 10:11 PM |
| 10 | Original position | 3/8/2021 9:31 PM |
| 11 | Not very keen have the Clifton road being closed off | 3/8/2021 9:23 PM |
| 12 | The shorter span is a financial choice. The sea wall is eroding and will at some stage need to be rebuilt at great cost which in the end will make this option the most expensive | 3/8/2021 11:20 AM |
| 13 | The bridge is iconic where it is therefore it should be replaced where it currently is Better parking There would be too much congestion where it is proposed by traffic deliveries etc Also the people of Lossiemouth have already spoken & been listened too & the choice was to put new bridge where old bridge is currently | 3/8/2021 11:04 AM |
| 14 | The East Beach is popular for its size, safety and situation and is a valuable asset to Lossiemouth and the area as a whole. For over a century it has been accessed by an iconic footbridge which appears in many publications associated with the Moray coast. This now needs to be replaced. A short term solution is not realistic and careful consideration must be given to the location of a replacement bridge. The lifespan of the breakwater and material state of the foundations to the esplanade make them unsuitable for locating the bridge there, and anyway that would increase traffic and footfall and need for parking in this area. There is a small car park at Station Park suitable for present short term use, and larger ones are at the bottom of Church Street and by Seatown mobile home site. The Church Street park has been the most used for access to the bridge and many users of the bridge stay at the adjacent mobile home site. Option 5 from Seatown Road meets all requirements and is my preference. This option would not overshadow the old structure which could remain as a feature to Lossiemouth. | 3/8/2021 10:39 AM |

| | | |
|---|---|---|
| 15 | I think it should stay where it is | 3/8/2021 10:04 AM |
| 16 | Option 3 seems a better option for longevity and safety for the bridge and the public | 3/8/2021 9:59 AM |
| 17 | Whilst this is the cheapest option I believe it to be the worst of the 3 presented, this is on the basis of congestion and pedestrian safety, | 3/8/2021 9:04 AM |
| 18 | I feel that option 4 would best suit the town, assuming that the esplanade can be fixed up as well as it is in a poor state of disrepair at the moment. It would be great to see a small section of Clifton Road pedestrianised so that a cafe culture could be introduced, also allowing kids and families peace of mind from 'boy' racers. Take a look at the seafront, the blue mural is looking very tired as is a lot of the seafront, not a great welcome to visitors when they are eventually allowed to return.. Option 4 is my preferred choice, however ANY bridge would be just fine for me | 3/8/2021 8:32 AM |
| 19 | Option 3 preferred as better protection against the sea with protection from the sand dunes and strong tides. Many people enjoy sitting by the sea front enjoying the peaceful view. The road is busy and parking will be a problem to get to the shops for Lossie best ice cream shops. Worth asking the local fishermen the history of the tides. | 3/7/2021 10:10 PM |
| 20 | As close to or replace existing bridge | 3/7/2021 10:07 PM |
| 21 | Would love to see the bridge remain where it is. It will cause so much congestion on the esplanade otherwise. Why change something that’s worked well for many years. | 3/7/2021 9:52 PM |
| 22 | Looks good to me | 3/7/2021 8:59 PM |
| 23 | I couldn't use the virtual exhibition so have no idea what the preferred option is | 3/7/2021 6:58 PM |
| 24 | I believe the bridge should be rebuilt in the same position it is currently. It is the safest option, better for roads, traffic and an iconic part of Lossie's tourist industry. | 3/7/2021 6:48 PM |
| 25 | Option 3 the bridge a new one alongside existing | 3/7/2021 5:31 PM |
| 26 | Seatown road version will cause least congestion after its conctruction | 3/7/2021 4:48 PM |
| 27 | Option 3 would be best for Lossiemouth, Esplanade option would be a disaster for that area | 3/7/2021 3:28 PM |
| 28 | I believe the bridge should remain where it is at seatown. i am totally opposed to it being moved to the esplanade. I have lived in Lossiemouth for 83 years and have seen the dangers of this part of the river. The first big gale and tide will make it dangerous and children have jumped off the bridge for all my lifetime. The currents there are dangerous and people have drowned in that particular part of the river. ha. There is also the awful state of our breakwater and the harbour wall. I have watched it disintegrate over the years and the moray council have done nothing.as for parking. where on earth will all the people park, it is bad enough parking at the shops there now.. | 3/7/2021 3:07 PM |
| 29 | Seatown | 3/7/2021 2:52 PM |
| 30 | Option 3 - agree with all positives - similar to existing bridge. | 3/7/2021 2:39 PM |
| 31 | Seaton Road 1st 2nd by original bridge | 3/7/2021 2:20 PM |
| 32 | The current polace is the obvious choice, repair or replace. The esplanade is great for ice creams, but too far away from car parks and public conviences. Although apparently not asked, the Seatown road option is 2nd best, near car parks, near conveniences and near the ice cream shops. Didn't the original esplanade bridge wash away? | 3/7/2021 2:08 PM |
| 33 | I prefer the option 3 | 3/7/2021 1:59 PM |
| 34 | I think the preferred option is the worst option. There is very little parking there and from spring to autumn it is chaos with traffic coming to the 2 ice cream shops and restaurants. Also the preferred option doesn’t seem to take into account high tides as that part of the beach is often cut off from the rest of the beach at very high tides. Also the general condition of the esplanade is poor, with uneven slabs and erosion underneath that I wonder about the lifespan of the current esplanade. | 3/7/2021 1:26 PM |
| 35 | Option 5, I feel would be the preferred option, reason being, it would remove some of the congestion, that would occur at the Esplanade site. | 3/7/2021 12:58 PM |
| 36 | Option 3 is by a country mile the best. And why have you such a small box for feedback - it's | 3/7/2021 12:34 PM |

| | | |
|---|---|---|
| | unhelpful to not see all of my text. | |
| 37 | Concerned about impact on parking on Clifton Road. | 3/7/2021 12:22 PM |
| 38 | Option 3. Some concerns it may be so wide that motor cycles etc can gain access. | 3/7/2021 12:09 PM |
| 39 | Preferred option is bridge should be built in seatown. | 3/7/2021 11:42 AM |
| 40 | We prefer it due to cost and accessibility. | 3/7/2021 11:39 AM |
| 41 | No. It may be cheapest but will have a negative impact in town. Politically its in your interest to get Holyrood to stump up the extra £0.5m fir the next option up. | 3/7/2021 10:44 AM |
| 42 | Option 3. I was under the impression this had already been voted on and agreed. It is the best option by far. A bridge from the Esplanade would be lucky to still be standing in months let alone decades given the current tides and rising water levels. oPYIONO | 3/7/2021 10:39 AM |
| 43 | I don't agree with the preferred option. The bridge is very open to the tides which may cause issues with the bridge. It would be a dangerous place if youngsters were to jump off as it's very near the mouth of the river. The esplanade will become over crowded as most people will try to park there rather than walk to the car park | 3/7/2021 10:36 AM |
| 44 | I like it | 3/7/2021 10:13 AM |
| 45 | Option 5 | 3/7/2021 10:04 AM |
| 46 | Completely disagree with this option, bridge should be located at existing site. After nearly two years of discussions it must be obvious that from a safety,roadway and parking perspective the existing location is the only sensible solution! This is much too important for the future of Lossiemouth to allow only financial criteria to influence a decision. | 3/7/2021 9:59 AM |
| 47 | Option 4, more aesthetically pleasing. | 3/7/2021 9:58 AM |
| 48 | Option 4 is most cost effective and the best fit for economic and social benefit | 3/7/2021 9:58 AM |
| 49 | Option 4 so less distribution to locals on church street. | 3/7/2021 9:46 AM |
| 50 | We like the idea of it being on the front, easily accessible, good for local traders and quite a bit of savings compared to other options. | 3/7/2021 9:34 AM |
| 51 | As a resident of Clifton Road, I live above Rizza's Ice Cream shop, the preferred option would make parking a even bigger nightmare than it is already. Throughout the summer it is almost impossible to park close to my home to unload shopping. I would love to see parking improved, why not take away the pavement along the riverside of the road and have cars parking nose in like the beach boulavard in Aberdeen? That would almost double the parking and people would still have a pavement to walk on the esplanade | 3/7/2021 9:24 AM |
| 52 | Keep bridge where it is now | 3/7/2021 9:10 AM |
| 53 | Should stay where it is nowle | 3/7/2021 8:58 AM |
| 54 | Bridge in existing space, the parking around the esplanade is already dangerous at the first hint of nice weather this will only make it worse. | 3/7/2021 8:34 AM |
| 55 | Option 5 feel its the middle option that would carry the most benefits. Not to far from car park and close to amenities. | 3/7/2021 7:16 AM |
| 56 | 5 seatown | 3/7/2021 7:09 AM |
| 57 | Looks great and seems to be preferable in the 21st century. | 3/7/2021 5:05 AM |
| 58 | The preferred option if it was the first access built to the beach is sensible. However there is a iconic stature to the existing location and an strong emotional connection from the community and wider in Scotland. Time and again when an iconic landmark fails , I feel the selection criteria has not taken two things into account , emotional connection but from a engineering safety perspective this design is not ALARP , you have traded cost and safety. There will be increased likelihood of pedestrians being hurt by the concentration of increased traffic. Not only have you chosen the cheapest but you also have added a commercial aspect of.connecting existing retail. Again you are trading cost/commercial aspects ahead of public safety. | 3/7/2021 12:07 AM |
| 59 | Seatown bridge,bridge from esplanade won't last | 3/6/2021 11:19 PM |

| | | |
|---|---|---|
| 60 | It will only be a good option if something is done to then deal with the traffic on Clifton Road, at the moment on a beautiful summer day it is heaving, people walking everywhere and the road is so busy so if the route to the beach is also there it will greatly increase the traffic. I know there are two car parks which could be used but ultimately many will not use them as they'll want to park as close to their destination as possible | 3/6/2021 10:22 PM |
| 61 | The idea of making that area busier with vehicular traffic is concerning. | 3/6/2021 9:14 PM |
| 62 | I understand cost is important. But I feel next to old one would continue the iconic look it's famous for. | 3/6/2021 9:14 PM |
| 63 | Parking at the esplanade is a nightmare already and too many lazy people won't walk round from car park. Esplanade is falling to bits so will have to be upgraded to cope adding to cost . Breakwater is also in a sorry state and not up to job of protecting bridge in new position. Not to mention the iconic side of the bridge at moment . So I think bridge should be rebuilt where it is now. | 3/6/2021 8:30 PM |
| 64 | Original position with car park nearby | 3/6/2021 8:25 PM |
| 65 | 2 | 3/6/2021 8:15 PM |
| 66 | I think it's the wrong option for the wrong reasons. It will be exposed to all poor weather, making a mockery of the design openness, it concentrates all traffic to one area of the town and it is as far away from the caravan/holiday park as is possible. This will not increase footfall for local business, it'll drive people away | 3/6/2021 7:59 PM |
| 67 | Need one where the existing bridge is. I fear if its moved to where the shops is people will park there and shops will lose custom | 3/6/2021 7:15 PM |
| 68 | Seatown is preferred option as parking is easier as won't cause issues unlike if on the Esplanade. | 3/6/2021 7:03 PM |
| 69 | I have no preferred option, I am happy with what the majority of residents want | 3/6/2021 6:55 PM |
| 70 | New bridge to stay where it is the parking issues will be huge if we move it to the front | 3/6/2021 5:59 PM |
| 71 | where the old bridge is | 3/6/2021 5:39 PM |
| 72 | It should preferably be where the current bridge is. The option to seatown road is a possibility. It should definitely NOT be on to clifton road opposite Mieli's. This would be a disaster for drivers and pedestrians on Clifton road. Also in the 70s a small fortune was spent to put a new breakwater on the beach, in line with the pier. It did not last one year and was washed away in the first big storm. | 3/6/2021 4:43 PM |
| 73 | Preferred by whom? I don't think it's a suitable site, due to lack of sufficient local parking. Station Park car park and Clifton Road at Esplanade are busy enough on a normal summer day without hordes of people accessing the beach. Large parking area at Seatown near canal will be underused because a lot of people simply won't walk any distance. | 3/6/2021 4:25 PM |
| 74 | Option 4 | 3/6/2021 4:15 PM |
| 75 | I would choose the preferred option of a new bridge from The Esplanade. | 3/6/2021 4:05 PM |
| 76 | Bridge at the Esplanade | 3/6/2021 3:26 PM |
| 77 | I do not approve of that location, especially considering the storms we have had in the recent past. | 3/6/2021 2:27 PM |
| 78 | Where the old bridge is at the moment. | 3/6/2021 1:59 PM |
| 79 | Wrong location - wind and tide damage. Esplanade itself is crumbling into the Lossie. Cheapest is not always best – the community deserves a Briggie that will last another 100+ yrs and not one that will be impacted by wind and tide as that location is adversely prone to be. It is also not the location the respondents to your previous survey published in Dec 2020 wanted the bridge to be. Clifton Road cannot cope with further increase in traffic and already has traffic calming measures in place. People are inherently lazy – they already double park to get an ice cream can only imagine what it would be like on a fantastic summer day with 2000+ on the beach. The existing location gives space for thinning out of footfall with no issues on footpath even on the busiest days – the car park being down a bank which allows the slower walkers to fall a bit behind the quicker. What price to the businesses at the Pitgaveny Street | 3/6/2021 1:00 PM |

| | | |
|---|---|---|
| | End of Clifton Road, here will be no avaibale parking for the services they provide to the community with a bridge on the Esplandae - one of whom is the only dentist in the town, we also have hairdressser and physio as well as clothing sales in a hub type location. | |
| 80 | Option 4 - to the Esplanade, could provide easier link between the beach and local shops - increasing footfall and adding to local economy | 3/6/2021 11:20 AM |
| 81 | Option 3. I don't believe that the esplanade is safe and will need extensive work to make it safe. Corner also about the safety and age of the breakwater and potentially a bridge on the esplanade may not survive high tides and break water. Finally traffic on Clifton road would have to be managed and older folk may struggle to get to local shops etc | 3/6/2021 11:06 AM |
| 82 | I think that having the bridge crossing from the promenade will incur alot of congestion on Clifton Road and may be a danger aspect when pubs in the area come out and drunk people decide it might be fun to jump from the bridge.ide to | 3/6/2021 10:59 AM |
| 83 | Disagree with this option. Bridge should be near the old bridge. The view is iconic. | 3/6/2021 10:57 AM |
| 84 | Sad to see you are even considering moving bridge to the esplanade side. Traffic, parking will impact houses and businesses on the front. | 3/6/2021 10:41 AM |
| 85 | Agree with the preferred. Will increase footfall for local shops | 3/6/2021 9:33 AM |
| 86 | bridge needs to go where current bridge is. for all the reasons previously given. parking issues, congestion on clifton road etc | 3/6/2021 8:34 AM |
| 87 | I think either running parallel to the current bridge or the one going from the corner at Seatown are the better options because they're closer to the current car park. If the option closest to the shops was chosen it would create so much congestion with people trying to park there and make it less safe for cyclists and pedestrians. It also has the potential to create more litter onto the beach. Generally, as it was, people have finished their snack by the time they get to the beach and have binned it before crossing the bridge. | 3/6/2021 8:28 AM |
| 88 | On its present place | 3/6/2021 8:25 AM |
| 89 | Good location and good design | 3/6/2021 8:25 AM |
| 90 | I am concerned about the distance from parking facilities and safety because the road is so close. I feel the Seatown option would serve the town better. | 3/6/2021 8:06 AM |
| 91 | To make such a decision based on cost is crazy. The residents of this town know what is best for this town. There are legitimate concerns about the esplanade site. The tides are fast moving and the breakwater has a limited life expectancy. The esplanade is old and also decaying. The bridge must remain in its current place. The congestion in Clifton Road will be unacceptable and have a negative effect on businesses. ll | 3/5/2021 11:18 PM |
| 92 | New Bridge should stay in its current location | 3/5/2021 11:14 PM |
| 93 | Would prefer the option that puts the new bridge next to existing one. Prevents congestion on esplinard by making use of east beach car park. | 3/5/2021 9:42 PM |
| 94 | Replace where bridge is | 3/5/2021 9:13 PM |
| 95 | Option 3 | 3/5/2021 8:24 PM |
| 96 | Would prefer for the bridge to be built alongside the existing one. There is better parking in this area and the previous bridge from the promenade was unsuccessful. | 3/5/2021 8:20 PM |
| 97 | Option 4 preferred | 3/5/2021 5:56 PM |
| 98 | will connect the amenities the cost is good lets go for it | 3/5/2021 4:49 PM |
| 99 | Present position | 3/5/2021 4:01 PM |
| 100 | Option 3 | 3/5/2021 3:59 PM |
| 101 | I prefer the Esplanade option. It will be a real focal point for locals and visitors alike, close to local amenities and services, and attract much needed tourism to the area - not just in summer, but with imaginative marketing, as a year round destination. | 3/5/2021 3:18 PM |
| 102 | Crazy - parking on Clifton Road not easy at best of times, much easier access at current position of bridge. | 3/5/2021 2:28 PM |

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| 103 | My preferred option would be option 2 as I disagree with moray council on there choice as I think it would spoil the look of the beach from the promenade also with the width of the new bridge u are going to get bikers zooming across it as they used to do with the old bridge even though it is narrow the old bridge just needs upgrading and for some firm engaged to maintain it year by year which would work out a lot cheaper than a new bridge as everyone I spoke to who lives in the seatown as I do would be much happier with that option | 3/5/2021 12:43 PM |
| 104 | I do not agree with its location | 3/5/2021 12:26 PM |
| 105 | Option 4 would be a nightmare trying to park, I prefer option 3, although costly it would be nearest to the existing car park, and would not cause any traffic jam. | 3/5/2021 11:01 AM |
| 106 | Seems to be solely based on cost, I would prefer option 5 as a more equitable solution to residents in Clifton Road and the visitors to the caravan site. | 3/5/2021 10:59 AM |
| 107 | Option 2 Seatown Road my preferred option. I needed more info on why 1 was your choice other than cost?? 2 may well be costlier than 1 but by far the most sensible site in terms of pedestrian safety, traffic flow along Clifton Road, it is closer to the large ready made car park, still very close to the promenade amenities and will have less detrimental effect on river flow in the future. | 3/5/2021 9:37 AM |
| 108 | Prefer the minimalist option, just replacing it as it was and keeping the heritage of the area intact. It’s true it will need replacing again sooner than the other options, but I believe it would be possible to find the money again, particularly if an ongoing fund was started. The other options were too much and some were downright ugly. The structure should be composed mainly of wood and have a minimum span and be unobtrusive. | 3/5/2021 8:17 AM |
| 109 | Option 4 | 3/5/2021 7:23 AM |
| 110 | Increased conjestion on Clifton Road, danger of children running across the road for ice cream. It.may be the cheapest option but could work put the most expensive in the end due to the edplanade requiring work.e | 3/5/2021 12:29 AM |
| 111 | Moray council | 3/5/2021 12:17 AM |
| 112 | Option 3 alongside current location | 3/4/2021 10:47 PM |
| 113 | I like the concept but am concerned that having two bridges up would ruin the view. I would be interested to see a concept view from Prospect terrace. | 3/4/2021 9:30 PM |
| 114 | I am worried about the state of the Esplanade, will it hold the weight of the bridge, and of the sea wall which is known to be in very poor condition with a very limited life span. The unknown future of Station Park is also a concern for the preferred location. The limited parking on the esplanade is also a concern. | 3/4/2021 8:53 PM |
| 115 | I am desperate to see a bridge built and weary of the very slow speed of development. I would prefer the sea town option. | 3/4/2021 7:55 PM |
| 116 | This location seems very exposed to the wind and tides compared to the existing location. I think it will feel more risky to cross in bracing weather. It reaches the Esplanade at a point where there is a lot of footfall anyway. I think the location further along would be better. | 3/4/2021 7:11 PM |
| 117 | I'd like to know if there is anything in the plans about removing the old bridge? To leave it to rot would cause an eyesore and a danger. I hope sufficient advance planning is put in place to deal with parking issues, and not just choosing the cheapest option. | 3/4/2021 6:46 PM |
| 118 | I prefer replacing the old bridge in situ | 3/4/2021 6:43 PM |
| 119 | Why move it to a main busy road? It would be much better left where the old one is and keep its its historic picturesque view | 3/4/2021 5:08 PM |
| 120 | Prefer option 4 but think option 3 based on cost | 3/4/2021 4:14 PM |
| 121 | As close to the old bridge seems to make sense. If it really has to go to the the esplanade then something should be put in place to stop beach goers parking on the road | 3/4/2021 3:12 PM |
| 122 | The Bridge should go back where it was, near parking for families carrying things. | 3/4/2021 2:12 PM |
| 123 | Option 4. When I saw the photo it looked so ugly and spoils the whole view. There would be too much congestion, parking problems, dangerous if people wandered around area. Safety of | 3/4/2021 2:08 PM |

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| | the public. The only thing going for it is it is the cheapest option. All the negatives listed. | |
| 124 | I think basing the choice on costing is a poor decision. Buy cheap, buy twice is my experience. I'm not convinced that siting a bridge in a location that has previously proven perilous to the structure is a good idea, especially during an ongoing, and escalating climate emergency with dramatic, unprecedented climatic events. Take heed from the learnings from over 100 years ago, and site the bridge in the existing sheltered area, rather than the area most likely to be battered by winds and waves. Perhaps the cost of this option could be reduced if the foundations of the existing bridge can be used? Not the 'do minimum' approach, where we paint over the cracks, but an option which allows the structurally sound parts of the old bridge to breathe life into the new bridge, saving money, but offering a sheltered location. | 3/4/2021 12:26 PM |
| 125 | *your, the preferred option does not set out what it does with the existing structure | 3/4/2021 10:32 AM |
| 126 | I think the Seatown or the Esplanade would be a good option however I understand that there is a preferred option already in mind which is the Esplanade one. Although I recognise the easy way to reach the amenities and shops located at Clifton Road, I strongly believe this must be reviewed. There is already a big issue in parking at Clifton Road during busy periods, including cars being parked on private car parking without contentment and even worse, cars are parked on pedestrian crossing. Unless there is a VERY GOOD parking planning in place, I would not be in favor of the Esplanade bridge simple because of car parking conditions and nothing else. I think the bridge is viable there and fits the environment from a practical and aesthetical ways. I reside in Clifton Road (in the Promenade area) and I saw how people has not abide the rules and ethics are something unknowing for many of them. Another factor to be considered is that shops are going to be busy with people outside, the number of pedestrian will be massively increased. Again, please highly consider the car parking/pedestrian use of the space and though car parking regulation. | 3/4/2021 9:33 AM |
| 127 | Over 60% of people surveyed preferred the exisiting location. I think people will park on the Esplanade rather than in the car park which will have a negative impact on the shops there as the parking spaces will be filled all day rather than by passing trade. An earlier bridge was washed away from that location! | 3/3/2021 11:33 PM |
| 128 | I like option 5 as close to toilets and closer to car park but cost wise option 4 seems to make more sense | 3/3/2021 10:19 PM |
| 129 | The preferred option I think is a good placement for the bridge. It will make access to the beach and shops alot easier and feel more connected compared with where the old bridge is situated | 3/3/2021 10:14 PM |
| 130 | Stick to original site. Esplanade has potential traffic issues, plus tidal damage etc. | 3/3/2021 8:15 PM |
| 131 | Should be situated where the old bridge is. Parking will be a nightmare | 3/3/2021 6:49 PM |
| 132 | Happy to get back on beach | 3/3/2021 6:25 PM |
| 133 | The original area would be best option | 3/3/2021 6:05 PM |
| 134 | I approve of the option chosen but there must be strict parking controls put in place in front the old granary restaurant in front of Miele's shop, Rizza's etc. | 3/3/2021 5:10 PM |
| 135 | Seems more accessible & a replacement bridge is needed | 3/3/2021 4:41 PM |
| 136 | FB page | 3/3/2021 4:11 PM |
| 137 | Happy to have access to beach reinstated | 3/3/2021 4:05 PM |
| 138 | I would prefer where it is now! | 3/3/2021 2:42 PM |
| 139 | My option would be 3- a new bridge where the old one is. To put a bridge near the esplanade gives rise to traffic and parking problems during times of congestion - this is a busy stretch on non-sunny days. Too easy an access to the beach from the pubs etc will only encourage drinkers to access the bridge/beach late at night risking their safety. The tidal water is unpredictable and the reason it is at Seatown is because previous bridges were destroyed - heed the lesson of history. | 3/3/2021 11:49 AM |
| 140 | Option 4 best one for everyone | 3/3/2021 11:26 AM |
| 141 | Option 4 - cheapest | 3/3/2021 11:25 AM |

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| 142 | Option 4 - cheapest and with maximum visibility | 3/3/2021 11:23 AM |
| 143 | Appears to be most suitable for everyone | 3/3/2021 11:21 AM |
| 144 | I don't think that location is the best option, where the current bridge is is much better due to there being a car park there already, putting the bridge on the esplanade will add massive congestion issues | 3/3/2021 10:34 AM |
| 145 | New bridge at seatown | 3/3/2021 10:28 AM |
| 146 | Replace existing bridge at present location with minimum re-development of the area other than an upgrade of present facilities | 3/3/2021 10:20 AM |
| 147 | Option 4 looks perfect as it is closer to public transport and to public conveniences which is good for out of town visitors to the beach, also the proximity of local shops is good from a business point to possibly generate more income. There is also the historic factor - the original crossing was situated here | 3/3/2021 8:45 AM |
| 148 | Option 5 would be a suitable choice as its a mix of the best attributes of both the other bridge options. | 3/3/2021 7:32 AM |
| 149 | option no. 5 | 3/3/2021 7:31 AM |
| 150 | no.5 best for traffic flow | 3/2/2021 11:33 PM |
| 151 | Least favoured option by myself and local community. Traffic will be a nightmare. Parking will be a nightmare. Infrastructure at promenade will need upgrading has this been factored in? The area of promenade will become too busy - it gets pretty busy as it is danger for kids crossing the road to ice cream shop etc. I like sitting with my family to eat ice cream in the steps at proposed start point - the new bridge will stop us doing that and will ultimately spoil the view. Concerned the end point in east beach is prone to erosion has this been factored in? | 3/2/2021 10:42 PM |
| 152 | Option 3 or option 5. I think 3 is the best option, car parking nearby, close to the iconic old bridge which will fall into disrepair and probably need removed. Sheltered spot so safer to cross at that point. I consider access from esplanade on Clifton Road as a potential nightmare for traffic and pedestrians crossing. Attempts to restrict this would probably impact on residents vehicular access in the area, increase inconsiderate parking in the area and see traders impacted if there is no short stay parking. | 3/2/2021 9:44 PM |
| 153 | Not happy with preferred option. Would much prefer option 3 to replace existing bridge same location | 3/2/2021 9:22 PM |
| 154 | Me personally would love to see the new bridge going up on the front but only if they didn't pedestrianise the road in which will kill the front businesses if there's no option then go back to the remaining bridge and like for like access there with the car park close by ?! We have to think out the box here this is a huge step in Lossiemouth community of people and the well-being of a successful village and holiday town but could be destroyed over night if the correct decision is not made. | 3/2/2021 8:54 PM |
| 155 | Option 3 | 3/2/2021 8:52 PM |
| 156 | Where are customers from surrounding business now going to park? It is already full on most occasions where the beach is not available to access and will be dangerous and overwhelmed to people that enjoy the esplanade because of people parking to get to the beach. My parents are disabled and struggle to walk the short distance from they can park if they get a space are people of Lossiemouth in the same need supposed to just not use this part of town now as for definately they will not get parked at the height of summer. | 3/2/2021 8:11 PM |
| 157 | Keep the bridge in it's current location | 3/2/2021 8:01 PM |
| 158 | Option 3 is my choice | 3/2/2021 7:42 PM |
| 159 | Concerns over rise in vehicles, parking issues and traffic at the preferred new site. Perhaps the road could be blocked off and turned into pedestrians only. Much prefer the option of a new bridge at the existing site despite the additional costs. | 3/2/2021 7:11 PM |
| 160 | Will the old bridge be removed or will it be retained as a feature. Will there not be a cost associated with this. I can not see that costing in the design options. I do think the option on the Esplanade siting is good as it is closer to amenities . I wondered if more parking would be provided , or if you would make do with the existing arrangements. I hope that more facilities | 3/2/2021 6:50 PM |

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| | for visitors will be put in place. Extra dog mess bins are always required. will there be new bins placed on the sandbar now ? | |
| 161 | Absolutely not. It is on a main road with a sea wall in poor condition. A definite no from me. | 3/2/2021 6:41 PM |
| 162 | Terrible it should be were it originally was not where problems will be created at shop end | 3/2/2021 6:34 PM |
| 163 | Want the bridge to stay where it is and keep Clifton road open to traffic as closing it off bad news for business bad news for elderly popping down for an ice cream and bad news for the bus route let’s face it Clifton road brings all Lossiemouth together | 3/2/2021 5:28 PM |
| 164 | The east beach option is the best option for the people and Visitors to Lossiemouth. Great beach access for all users. Lossiemouth is one of the best Surf beaches in Scotland and should be used to morays councils ability to push it forward as a go to town for surfing. Improve the shops and lower rents for Cafes and shops, gift shops, take a visit to Newquay, see how they do it. It could be the best thing Moray council could do. The "Staycation" is going to be big for the next few years as tourism abroad recovers.. time to take a grab at that big chunky wedge that Surfing brings to coastal Resort's. best | 3/2/2021 5:21 PM |
| 165 | Option 3 provides safe access to the beach with nearby parking. The dunes provide shelter from strong winds. The current is not so treacherous at this part of the river. es shelter | 3/2/2021 5:08 PM |
| 166 | Option 3 good position | 3/2/2021 5:04 PM |
| 167 | Good option | 3/2/2021 4:26 PM |
| 168 | Option 4 | 3/2/2021 4:09 PM |
| 169 | Parking will be an issue if the bridge is anywhere else apart from where it was. That road is already a nightmare in the nice weather without adding additional traffic. | 3/2/2021 4:05 PM |
| 170 | Poor. It concerns me that Clifton Road would have to be pedestrianised, and that increased costs would be incurred if the esplanade needed repair in t of a flood | 3/2/2021 4:03 PM |
| 171 | Option 3, local seatown to beach | 3/2/2021 3:48 PM |
| 172 | I don't believe the option of taking the bridge over from the esplanade is a good idea. I can see some benefits but I believe these are outweighed by the problems likely to arise in the future. On the esplanade side the street is very likely to be pedestrianised which will have a serious knock-on effect on the businesses there. Unfortunately, immaterial of any nearby parking provision, many people simply won't park and walk. Pedestrianisation could cause rat-runs to the detriment of people in other parts of the town whereas very few actual dwellings are affected meantime with the bridge where it is. The breakwater is in a very poor state of repair and Moray Council is unlikely to rebuild or even repair it. That could destabilise the area at the other end of a bridge. This is also a fairly dangerous area of water at certain times of the tide and, although safety rails will be adequate, it's very likely that some adventurous youngsters would dive off the bridge into the water with serious consequences. Obviously that could happen at the other site but the currents are less fierce there. A compromise may be taking the bridge across from where the toilet block is but it has worked perfectly well on the current site for all those years does it really need to be moved? | 3/2/2021 3:38 PM |
| 173 | Replace on line of old bridge | 3/2/2021 3:02 PM |
| 174 | This is the cheapest however will require upgrading of the esplanade wall potentially at additional cost. I question the long term viability and protection of the sea side of the bridge as it will be vulnerable to sand, sea and dune movement / erosion and lacks a degree of protection. I understand that this is not the public choice from previous informal surveys. I do not agree with this as the preferred choice and would recommend option 3. There is arguably a logical reason why the bridge has withstood time in its current location. | 3/2/2021 2:38 PM |
| 175 | Would prefer if new bridge was situated nearer the existing bridge | 3/2/2021 2:22 PM |
| 176 | A pdf would have been far easier to look at and more accessible. The souvenir stalls sound completely tacky as does the advertising boards. It’s 2021 not Blackpool in the 80s. No one wants lots of takeaway stands with all the associated litter. There are too many fast food venues already. Why not concentrate on the bridge and the engineering and make it beautiful. Engineering historically made the area affluent and good engineering lasts. | 3/2/2021 2:07 PM |
| 177 | Same as original bridge. | 3/2/2021 1:51 PM |

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| 178 | Preferred would be like for like but this isn't offered so option 3. | 3/2/2021 1:41 PM |
| 179 | Think the Esplanade is wrong location. | 3/2/2021 1:33 PM |
| 180 | Existing position | 3/2/2021 1:09 PM |
| 181 | Looks very good | 3/2/2021 12:51 PM |
| 182 | Option 4 | 3/2/2021 12:37 PM |
| 183 | The preferred option will kill local businesses that are situated on the esplanade as if the road becomes pedestrianised, customers will not have access to parking which can have a huge impact on accessibility. | 3/2/2021 12:09 PM |
| 184 | Bridge looks nice only concern I would have would be if the bridge was thear would be parking and cars going up and down the street looking for a place to park | 3/2/2021 11:53 AM |
| 185 | Please leave new bridge where it is now. | 3/2/2021 11:47 AM |
| 186 | No 2 | 3/2/2021 11:33 AM |
| 187 | That was my favourite option too. It's aesthetically pleasing and easily accessible. | 3/2/2021 11:27 AM |
| 188 | When you are replacing an iconic bridge such as this you need to be ambitious with you design and I d not see this with the preferred option. chosen because of cost rather than suitable position. I worry about the crumbling sea defenses nearby and will we then have to spend extra several million on these just to protect the new bridge. I feel closer to the existing position would be better for the aesthetics of any replacement especially when viewed from further afield. Also much better for parking which is critical to and decision as the majority of users would drive to use the beach access. | 3/2/2021 10:40 AM |
| 189 | The existing bridge should be replaced with a wider footpath as it is in a protected position with good parking facilities nearby. | 3/2/2021 10:33 AM |
| 190 | Option 1 Do-nothing, better for wildlife and reduced littering on the beach | 3/2/2021 10:24 AM |
| 191 | My preferred option would be at the location of the existing bridge - option 3. Appreciate the design has not been fully carried out but the option preferred in the presentation would be unusable at high tides. The end point on the beach is too exposed to the sea and would be subject to the influences of both sea and river. A bridge at the existing location only has to worry about the river. Also the dunes at the beach end are the most dynamic and everchanging. They can almost disappear at times and then reform at the size depicted on the presentation. I am a Lossiemouth resident of 53 years and stayed ate the river mouth area for over 30 years. | 3/2/2021 10:11 AM |
| 192 | Option 3. Otherwise it will create too much 'traffic' | 3/2/2021 9:58 AM |
| 193 | Not keen on this position as it is remote from the carparking | 3/2/2021 9:38 AM |
| 194 | I prefer Option 3 as there is existing parking. | 3/2/2021 9:37 AM |
| 195 | Option 2 superb great for wheelchair users | 3/2/2021 9:35 AM |
| 196 | Disappointed. Concerned about the concentration of vehicle traffic there if the bridge is to be sited on the Esplanade. Also concerned about the bridge being exposed to more extreme hydrological conditions at that location, shortening the bridge's lifespan or increasing maintenance costs. | 3/2/2021 9:05 AM |
| 197 | Disagree 100%. The new bridge must be at the same crossing point as the existing one. | 3/2/2021 8:43 AM |
| 198 | I don't think this is an appropriate place fir the new bridge. Will cause massive congestion along Clifton Road & parking would be a nightmare. A much better option is where the old bridge currently is. Also how was this decided to be the preferred option, who decided it? | 3/2/2021 8:38 AM |
| 199 | The bridge should be re-built where it currently is. | 3/2/2021 8:37 AM |
| 200 | Option 4 is just not well thought through at all. It may be the most cost effective to begin with. But has the council included the cost of the repair to the sea wall that is likely to be needed in order to support the additional long term loadings it is going to need to withstand? It will cost a lot more than £1.37million. "Closer to amenities" is a grab at making people feel it is for the public. The existing bridge is a short walk to the shops which I am sure most people do not | 3/2/2021 8:25 AM |

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| | have an issue with, and have not had an issue with for the last 100 years. Cheapest is not always the best option. An additional thing to note is, as you say in the cons list is pedestrian safety. Have you factored in the costs of guard rails to the esplanade? Along with the life costs of these too? Option 3 is by far the superior option. It is an existing location, so there are no new long term issues that you need to be worried about. It will be no worse than it was before. Have you considered using parts of the existing bridge that are still in good condition? Sourcing local help and contracts rather than outsourcing? You list a con as " existing footway from car park is narrow"... again, no worse than it was before, and I think people have managed over the last ten decades or so. Also, I come from just outside of London… your road traffic is laughably minimal. The road in question is not a through road either. The council really needs to reconsider their preferred option for a new bridge, and not just choose it because it's the cheapest. I once chose a cheap fork for my mountain bike… Fast forward to a week later and I had a £1500 dentist bill. You buy cheap, you pay twice. | |
| 201 | The preferred option in my opinion is a no go due to the impact on the Esplanade it should be replaced by the present bridge close to an existing car park. | 3/2/2021 8:06 AM |
| 202 | Not a good choice as no nearby parking. Will cause congestion. | 3/2/2021 7:57 AM |
| 203 | The bridge from the esplanade would be disastrous and we would be back in the same situation in no time with no beach access after a few rough and high tides wreck the bridge or completely undermine the foundations. The congestion on Clifton Road will be unmanageable. The Seatown option is much better where the old bridge is: less tidal, car parking, pedestrian safety. Going for a cheap option will cost more in no time. | 3/2/2021 7:51 AM |
| 204 | Option 3 . Parking on the esplanade is already a joke and for us the residents who live on the front this means when it comes to us wanting to park outside our homes we will not be able to with ease. There is already parking less than 50 meters from the original bridge and is perfectly located for everyone with no steps between the current car park and original bridge. | 3/2/2021 7:33 AM |
| 205 | I would like the existing bridge to either be repaired or a new one built in its stead. Parking on the beach front is a nightmare for residents and building a bridge on the esplanade will only add to this. The noise will be a misery for local residents. Please repair or replace the existing bridge. | 3/2/2021 7:31 AM |
| 206 | The proposed bridge from the esplanade would be a great boost for local businesses | 3/2/2021 7:23 AM |
| 207 | Keep the bridge where it is! | 3/2/2021 7:11 AM |
| 208 | Think bad idea with the swell under there at high tide going be disastrous when they jump of bridge like they do straight into difficulty. Parking will be a nightmare too. | 3/2/2021 7:01 AM |
| 209 | Wrong place, too busy and poor parking in this area already. Also will this be accessible at high tide? People in moray have said they want the new Bridge situated where the old one is. Are you listening to them? Personally option 3 or 5 would be my preferred choice. | 3/2/2021 6:44 AM |
| 210 | I think its a mistake to install in this location. Increased traffic down an already busy street will deter residents rather than encouraging. Also, kids will jump off this bridge into the fast flowing currents into the mouth of the river. The bridge shouldn't be in this location unless further infrastructure is installed. | 3/2/2021 6:26 AM |
| 211 | Esplanade appears to have been picked as cheaper option, does look good though & good access. But the negatives tide risk, damage, traffic, parking is not addressed in why this is picked & if concerns unwarranted., and what could the hidden cost be of the existing walls being made good to use is indeed if it cannot support the bridge relocation... this is a big concern if cost is picking this option, as it could actually be the most expensive... Actually like the new Seatown option if funding could be got - as wide access for all, nearer the car park. Tide less impactful. Indeed options at seaton seems to have less disadvantages (other than cost) and gives closer access to beach than esplanade option which seems to have higher negative traffic/tide/parking issues. Ultimately think we just need a good & usable bridge asap, whichever location is deemed best to last long term. | 3/2/2021 6:05 AM |
| 212 | I feel the best place for the bridge is where it currently exists. | 3/2/2021 4:45 AM |
| 213 | Number 1 | 3/1/2021 11:50 PM |
| 214 | I love the location but not a fan of the design at all. It starts well into the pathway. And beach side, it goes on far too much onto the beach and the black either side is really unsightly | 3/1/2021 11:34 PM |

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| 215 | Preferr to see it replace the old on in the same site | 3/1/2021 11:32 PM |
| 216 | Totally opposed to it. Whilst it sounds very appealing it will impact negatively on business. There will inevitably be the closure of Clifton Road to traffic. The consequences will also mean a rat run up the brae and down quarry road. The esplanade is not in a good way, structurally it is 50 years old and is not equipped to cope with increased football. The breakwater is in a desperate condition and is not expected to last more than a few years. It is ultimately protecting the river mouth and Clifton road. High tides will be a huge risk to that part of the river without the breakwater. Replacement will be upward of £3million. In its current position the bridge is simply iconic. It can be reached easily and does not create congestion on our busy esplanade area. It is the view of the greatest majority of our community and our views should be of primary importance. There is no costing for refurbishment of the existing bridge. Why not? This could be done and the SG funding included this option. Lastly, hugely disappointed in the lack of transparency and openness on this process. This is not the secret service but is important to our lives. | 3/1/2021 11:28 PM |
| 217 | Think it is great idea for access to shops and toilets | 3/1/2021 11:23 PM |
| 218 | Will ruin businesses | 3/1/2021 11:17 PM |
| 219 | Option 3 is my preferred option. The other 2 new builds have some very weak negatives. Looks like the decision is being made on cost of build alone. | 3/1/2021 11:02 PM |
| 220 | Seatown unless station park is to be developed then I would prefer esplanade location | 3/1/2021 11:01 PM |
| 221 | Do not pedestrianised the Clifton road as this will have a massive effect on businesses | 3/1/2021 10:58 PM |
| 222 | Do not close Clifton road as it will be a big effect on businesses. | 3/1/2021 10:56 PM |
| 223 | Don’t know yet | 3/1/2021 10:55 PM |
| 224 | Do not close Clifton road as it will be a massive effect on businesses | 3/1/2021 10:55 PM |
| 225 | Think we should be aloud cars on the street don’t think it would be a good idea to keep lossie as it is why keep change it | 3/1/2021 10:51 PM |
| 226 | The preferred option is the worst option and only based on cost. The replacement should be as close to the original bridge as possible. | 3/1/2021 10:51 PM |
| 227 | Do not close Clifton road as this will be a huge affect on businesses | 3/1/2021 10:48 PM |
| 228 | Do not want Clifton road closed down. Will have a big affect on businesses | 3/1/2021 10:43 PM |
| 229 | Do not close Clifton road , I have worked in restaurants opposite bridge for 30 years, I think this would affect the business, if there was no parking. | 3/1/2021 10:40 PM |
| 230 | Terrible idea. It will create too much traffic in that area, too many people on espalande and dangers of kids running staright across from beach to ice cream shops. Should stay in the existing position, either repair old bridge or put new one next to it. | 3/1/2021 10:35 PM |
| 231 | Do not want clifton road pedestrianised | 3/1/2021 10:35 PM |
| 232 | I think it’s ridiculous to pedestrian Clifton road Lossiemouth will be nothing with it closed to the public our family have been in business here for 40 years and I know for a fact if this happens we will have no trade | 3/1/2021 10:31 PM |
| 233 | Don't think bridge should be on Esplanade. Should be as near to where original bridge is as possible | 3/1/2021 10:17 PM |
| 234 | Esplanade option | 3/1/2021 10:16 PM |
| 235 | Wrong option. Clearly bridge should be in current position for road safety and parking reasons. | 3/1/2021 10:04 PM |
| 236 | Less comments from local residents | 3/1/2021 9:54 PM |
| 237 | I prefer option 3, a new bridge local to the existing one | 3/1/2021 9:51 PM |
| 238 | Option 2 | 3/1/2021 9:46 PM |
| 239 | Option 2 where it comes off across from shops and Clifton road. I think it will help business thrive in lossiemouth front too. | 3/1/2021 9:46 PM |

| | | |
|---|---|---|
| 240 | Where it already exists. | 3/1/2021 9:43 PM |
| 241 | Like It | 3/1/2021 9:40 PM |
| 242 | I don't really understand how option 4 can be the preferred option as the cons seem to be quite significant. The longevity of the bridge and the safety of pedestrians should take priority over cost. Youngters every summer love to jump off the bridge into the sea, and my fear is that with unknown currents and deep water, the bridge in this location will be dangerous. | 3/1/2021 9:40 PM |
| 243 | This would be my second choice. Although it is a cheaper option, I believe that positioning the bridge on the esplande would make the busiest part of the town too crowded. The fact that the sea wall is in poor condition suggests that this may become a maintenance issue longer term | 3/1/2021 9:37 PM |
| 244 | I think a bridge where the existing one is would be the best option, no beach front is already busy enough. Waste ofomey anywhere else. | 3/1/2021 9:37 PM |
| 245 | Please no arcades | 3/1/2021 9:36 PM |
| 246 | Definitely not on the esplanade,the breakwater is already in disrepair | 3/1/2021 9:28 PM |
| 247 | Wrong place, far too exposed to storms. False economy to build there. | 3/1/2021 9:25 PM |
| 248 | Option 3... new bridge where it is now. | 3/1/2021 9:11 PM |
| 249 | Not the right place for bridge !! High tide goes way up over this . Will cause traffic issues which will result in loss of business in the prom area . Risk to children with increased traffic on prom !! Bridge would be much better being left in position of existing bridge !! Long term cost not important . | 3/1/2021 9:01 PM |
| 250 | Don't like it - the bridge MUST be in the current position. Not just because it's an icon of Lossiemouth and the Moray Coast. The Esplanade is not suitable (and needs a lot of work to it anyway) the footfall and not to mention the lack of parking on Clifton Street would not support or be a bonus to local businesses. | 3/1/2021 8:55 PM |
| 251 | Option 3 - new footbridge local to existing | 3/1/2021 8:51 PM |
| 252 | Leave it where it is | 3/1/2021 8:48 PM |
| 253 | Option 3. New bridge local to the existing | 3/1/2021 8:45 PM |
| 254 | I would prefer the bridge to stay where it is at the moment | 3/1/2021 8:39 PM |
| 255 | Too little detail at this stage to make constructive comment; | 3/1/2021 8:32 PM |
| 256 | I feel the preferred would cause a safety problem with the road but I do not like the idea of the seafront being pedestrianised. For this reason I much prefer option 3 to keep to view from the town as similar as possible. | 3/1/2021 8:26 PM |
| 257 | Replace the existing bridge. The esplanade will not last before that needs replacing too. | 3/1/2021 8:23 PM |
| 258 | I think if that option was chosen then the breakwater would have to be repaired first | 3/1/2021 8:23 PM |
| 259 | Would be better where the old one is for parking | 3/1/2021 8:07 PM |
| 260 | Original place for bridge | 3/1/2021 8:05 PM |
| 261 | looks multi user friendly, and wide for on going social distancing issues | 3/1/2021 8:02 PM |
| 262 | Option 4 is by far the best and value for money. | 3/1/2021 7:57 PM |
| 263 | Either 3 or 5, parking is already a nightmare at the Esplanade, plenty of parking round by original site. Option 4 too exposed 3 or 5 are sheltered by the dunes | 3/1/2021 7:54 PM |
| 264 | Clifton Road, its business , the esplanade can not cope with the increased traffic nor building works. The bridge was washed away due to a high tide/storm .. tides are worse now with onal warming and build it there is incredulous. The infrastructure can not sustain it . The.build will most likely cUse the collapse of the esplanade . | 3/1/2021 7:48 PM |
| 265 | I would like to see the new bridge in the same area as the old one, replacing the old one. | 3/1/2021 7:44 PM |
| 266 | Option 4 is my favourite choice, new start, more accessible | 3/1/2021 7:43 PM |
| 267 | I think this is a mistake. The bridge and the view of the bridge are what make Lossiemouth an | 3/1/2021 7:42 PM |

| | | |
|---|---|---|
| | stunning place to live, work in, and visit | |
| 268 | I think there's going to be massive issues with parking with the chosen option. I worry about the bridges long term durability in that position with the river current | 3/1/2021 7:37 PM |
| 269 | Looks great, cost effective | 3/1/2021 7:35 PM |
| 270 | Option 4 but concerned about parking, as the road is already busy | 3/1/2021 7:27 PM |
| 271 | Do not build it there! There is next to no parking compared with the current site. How do you expect people with mobility issues to walk from the market cross all the way round to the esplanade then across the bridge. | 3/1/2021 7:26 PM |
| 272 | Original position | 3/1/2021 6:59 PM |
| 273 | To keep bridge in the original place as plenty of parking. | 3/1/2021 6:59 PM |
| 274 | Concerned the beach footing and platform of bridge is below high water line, blowing sand from the dunes would also accumulate around the walkway on the beach and possibly cover it entirely. If these issues are addressed it is a good design. Would be nice if access could be made for water sports users to the water where the old bridge is to avoid having to walk thru town with surfboards/kayaks etc | 3/1/2021 6:58 PM |
| 275 | A bridge off the esplanade would cause congestion with traffic etc....no car park....the beach is known to flood at various times of the year. A new bridge in my opinion would be better round the other side to protect it from major weathers.... | 3/1/2021 6:56 PM |
| 276 | I live in lossiemouth and find it had to belive that option 4 is the preferred option of the local population. Option 3 would be the preferred option! | 3/1/2021 6:33 PM |
| 277 | Prefer option 2. Looks lovely and a perfect position | 3/1/2021 6:27 PM |
| 278 | Option one, replacing original bridge. | 3/1/2021 6:21 PM |
| 279 | Esplanade as being more tourism and ease | 3/1/2021 6:11 PM |
| 280 | Esplanade | 3/1/2021 6:06 PM |
| 281 | I think option 4 is my favourite too. The design is great, being central to Lossie, it will flow really well off the promenade and will further enhance footfall to businesses. It is also cost effective. | 3/1/2021 6:05 PM |
| 282 | What is the current projected cost of a new bridge, will it come within the budget. Lack of parking and also extremely busy area already on sunny days so why add tho increasing this, when it could be placed near the old bridge, or the old foundations used. | 3/1/2021 6:04 PM |
| 283 | option 4 | 3/1/2021 5:48 PM |
| 284 | No problem - I also heard from friends | 3/1/2021 5:46 PM |
| 285 | It is not the public's preferred option. This has been totally made up probably due to it being the cheapest option. Although I do believe this is a good option. Additional work will need to be done on the beach side to raise up and reinforce the area or it will be submerged at high tide | 3/1/2021 5:40 PM |
| 286 | I'm concerned about the lack of parking for this option. On a nice day the prom is already packed with cars and folk crossing back and forth to the shops and restaurants. Also the close proximity to bars which could lead to people heading onto the beach after a few drinks - not the safest. Its also a pretty fast flowing section of the river. Personally I feel the original bridge location is safer all round. | 3/1/2021 5:24 PM |
| 287 | Replace existing bridge. The Esplanade would be too busy with traffic and pedestrians. Certainly the most dangerous place to build this. | 3/1/2021 5:10 PM |
| 288 | The 'prefered solution' (is that option 6?) seems to me to be the best approach Pretty much bang in the middle of the 2 main car parks and ideally situated for folks to nip off the beach to access local business. | 3/1/2021 5:04 PM |
| 289 | It makes financial sense to go for Option 4 as per the Scottish Government Remit. It is a pity that Option 3(Seatown) is dismissed so completly hence making it difficult for the Scottish Government to go for this option should they be willing to cover the greater expence | 3/1/2021 5:04 PM |
| 290 | Bridge would be better at the same location. Far better for parking/ crowd control for tourists | 3/1/2021 4:42 PM |

| | | |
|---|---|---|
| | and for access to walks. | |
| 291 | Option 4 (esplanade) is the cost effective option and will be the focal point of the Town. Nevertheless, the esplanade and its immediate surround and the vehicle-traffic flow will require capital investment to complement the re-positioning of the bridge and to allow easy and safe access. Do the costs for this Option (4) include any expenditure on the esplanade, for example, the platform/base area adjoining the esplanade? | 3/1/2021 4:40 PM |
| 292 | I love it . The position is more convenient . | 3/1/2021 4:38 PM |
| 293 | Would like it in its original place | 3/1/2021 3:52 PM |
| 294 | Excellent. Parking might be an issue but encourages more to walk and will connect brilliantly to shops on the esplanade | 3/1/2021 3:47 PM |
| 295 | Large distance from any parking other than the already contested esplanade | 3/1/2021 3:38 PM |
| 296 | Concerned the preferred option will be too exposed given the location and the way the tides and wind act at that point. There is a high likelihood the beach part of the bridge would become submerged and access/exit from the beach could prove problematic, particularly for those with accessibility issues. The increase in footfall and traffic on and near the esplanade will be dangerous unless further work is undertaken on the esplanade and parking restrictions introduced (with some spaces reserve for disabled visitors and local residents). The instability of the seawall is also concerning. Option 5 would be a better compromise - closer to public conveniences, less distance to walk from the car park (people will stop using the car park if the bridge is on the esplanade) and amenities so businesses will still benefit from the bridge being moved closer to town but not so far as to disrupt traffic and pedestrian access to the shops. Whichever option is chosen the bridge must be wide enough for wheelchair and buggy access. Associated work should be carried out to secure the riverbed that runs under the bridge. Especially if option 4 is chosen, it's the most dangerous part of the water with at least two deaths occurring there in my lifetime - people will jump off the bridge wherever it is sited, they must be prevented from doing this to avoid certain injury or danger from the rip-tides. | 3/1/2021 3:34 PM |
| 297 | Overall good but major parking issues parking available by old bridge would be usable by option 5 | 3/1/2021 3:32 PM |
| 298 | Need to see the information presented in an intelligible format before any comment can be made | 3/1/2021 3:17 PM |
| 299 | The new bridge should be where the bridge is now. If the new bridge goes on the esplanade it will be so dangerous with cars parked and traffic. It’s already bad enough on a nice day!! | 3/1/2021 3:02 PM |
| 300 | Will there be a narrowing of the river and if so is there an increased risk of flooding. | 3/1/2021 2:29 PM |
| 301 | Facebook ‘Lossiemouth community council’ | 3/1/2021 2:27 PM |
| 302 | I think it could lead to pedestrian congestion around and already small area.Parking is,at times,HORRENDOUS around there with inconsiderate motorists actually parking ON the pavement if theres no spaces so siting the bridge there could lead to gridlock at times. | 3/1/2021 2:24 PM |
| 303 | Good Decision, but they fail to recognise that the location of this option would place it in the middle of both seatown carpark and Station park carpark. Therefore I don't really see what the issue with parking is. Thanks | 3/1/2021 2:21 PM |
| 304 | Wrong option - the public and people who have to live with the bridge is replacing the existing bridge on the existing location. People going to the shops will still go to the shops. | 3/1/2021 2:13 PM |
| 305 | Option 4 is the most sustainable and most beneficial option to Lossiemouth. | 3/1/2021 2:05 PM |
| 306 | Best location, most cost effective, keeps in spirit with towns origins, will promote esplanade as a town focal point and ensure better buy in with community, tourists and local businesses. Properly and thoughtfully designed new bridge could become a regional architectural statement, putting Moray & Lossie even more on the map as a go-to destination than they already are! | 3/1/2021 2:04 PM |
| 307 | East Beach users come from across Moray, not just the town. It's next to impossible to park on the Esplanade now, and if the bridge is sited there then spaces will be filled for several hours by people having a day at the beach. Also, excited out-of-control children will be running across the road to get an ice-cream or sweeties. Best option nearest to current, and upgrade the car park there at the same time, with additional public toilets. | 3/1/2021 1:52 PM |

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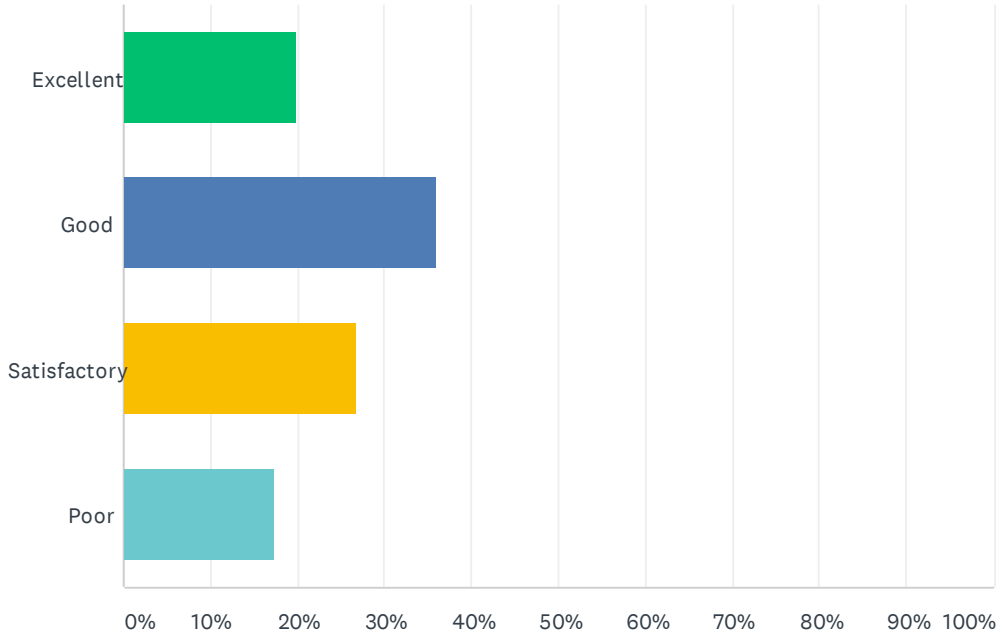
|---|---|---|
| 308 | Good. Parking might be a problem | 3/1/2021 1:40 PM |
| 309 | I agree with your preferred option | 3/1/2021 1:33 PM |
| 310 | The area where the bridge goes onto the beach was fully submerged in the last storm we had in jan/Feb. Even when there is a high tide the sea comes up to that area. It should be in the same place as the old one, where it Is less exposed to the tide. | 3/1/2021 1:28 PM |
| 311 | I understand the reasons for choosing it. But it was not my preferred solution. Its furthest from the carpark, furthest from a large section of holiday makers that reside in Seatown and the caravan park. It will increase demand for parking closer to the bridge adding to congestion on the already busy road - should it be pedestrianised as a result? | 3/1/2021 1:25 PM |
| 312 | What are the plans for traffic mgmt and the esplanade which is badly in need of repair | 3/1/2021 1:07 PM |
| 313 | The options given look good to me. I feel option 4 is best | 3/1/2021 1:06 PM |
| 314 | I like option 3, it's near the car park, if it was on the esplanade it would make that road even worse for parking and traffic | 3/1/2021 12:52 PM |
| 315 | I think it is the best option for the future | 3/1/2021 12:52 PM |
| 316 | Option 4, looks amazing and its a lot closer to the ice cream shops. A lot easier for everyone, specially buggies as the bridge will be shorter. | 3/1/2021 12:36 PM |
| 317 | I was against the bridge going here when i first submitted my choice, but having seen the graphics and read all the information I cannot wait for the bridge to be built. | 3/1/2021 12:05 PM |
| 318 | Delighted we are getting access to our beach again | 3/1/2021 11:21 AM |
| 319 | I think putting the bridge on the esplanade would cause greater traffic and accessibility issues | 3/1/2021 11:04 AM |
| 320 | Happy with any access to the beach | 3/1/2021 10:37 AM |
| 321 | Good Loction with. Excelent shape and form | 2/28/2021 7:07 PM |

# Q3 How did you find the virtual Exhibition?

Answered: 381 Skipped: 0




| ANSWER CHOICES | RESPONSES | |
|---|---|---|
| Excellent | 19.95% | 76 |
| Good | 35.96% | 137 |
| Satisfactory | 26.77% | 102 |
| Poor | 17.32% | 66 |
| TOTAL | | 381 |

| # | PLEASE PROVIDE DETAILS ON YOUR CHOICE | DATE |
|---|---|---|
| 1 | Accessed with great difficult | 3/9/2021 10:40 AM |
| 2 | Too long - just want to see the options. | 3/9/2021 10:16 AM |
| 3 | Virtual imposable to find on the internet. | 3/9/2021 9:09 AM |
| 4 | Nightmare to navigate on phone. An easier slide show with clearer options would have been better | 3/9/2021 9:05 AM |
| 5 | Took several attempts to be able to see it, and then used as a slide show which would have been easier for everyone | 3/9/2021 8:39 AM |
| 6 | Platform used required desktop computer / laptop access and takes too long to load. Although engaging may have impeded access to less technological savvy | 3/9/2021 5:03 AM |
| 7 | Low end graphics. A decent still montage would have been more informative. | 3/8/2021 10:29 PM |
| 8 | Not ideal for viewing on mobile devices. Had to download a separate app, couldn't figure out what to do at first and then the slide title covered part of the text on the slide. I think it's a cool idea, but could use a little more development for phones | 3/8/2021 10:11 PM |
| 9 | Lack of prominence to the plans to Gina CR5 through exploitation of Lossie thereby ruining g it's USP . | 3/8/2021 12:01 PM |
| 10 | Option 2. Far less impact on the community, continued use of the existing car park and certainly close enough to local services and businesses | 3/8/2021 11:20 AM |
| 11 | Answered it Q2 | 3/8/2021 11:04 AM |
| 12 | See comments in section 2 above | 3/8/2021 10:39 AM |
| 13 | Connection wasn't secure so couldn't watch it | 3/8/2021 10:04 AM |
| 14 | Unable to see any virtual flyovers of options other than the already decided on preferred option | 3/8/2021 9:59 AM |
| 15 | The virtual tour is very slow and could not be viewed properly | 3/8/2021 8:32 AM |
| 16 | Keep bridge where it is. | 3/7/2021 9:52 PM |
| 17 | Difficult to view on mobile | 3/7/2021 8:59 PM |
| 18 | Not usable on a mobile phone. | 3/7/2021 6:58 PM |
| 19 | I feel it doesn't cover all pros and cons of each option. | 3/7/2021 6:48 PM |
| 20 | Esplanade area is always a high tourist foot fall, with cars continually cruising up and down trying to get parked ! Parking on the pavement next best option. The attraction is 10 fold ! 1 HOTEL 3 RESTAURANTS 2 ICREAM SHOPS SURF SCHOOL UP TO 30 SURFERS DAILY PADDLE BORDERS CANOESTS WHO NEED PARKING !!! This is a situation I see DAILY BEST OPTION IS NOT THE CHEAPEST DON'T MAKE THIS AREA IN TO A CIRCUS PLEASE | 3/7/2021 2:20 PM |
| 21 | It was easy to follow. | 3/7/2021 2:08 PM |
| 22 | Option 3 | 3/7/2021 1:59 PM |
| 23 | Option 3 | 3/7/2021 1:47 PM |
| 24 | I would choose a new bridge just south of the existing bridge. Or very close to the existing bridge. | 3/7/2021 1:26 PM |
| 25 | It was good to see the virtual exhibition, as it allowed me to understand where the options, are being considered. | 3/7/2021 12:58 PM |
| 26 | Cartoonish - real images should have been used. This survey is also poor because of this dialogue box design. | 3/7/2021 12:34 PM |
| 27 | Option 5, as it is close enough to existing car park. | 3/7/2021 12:22 PM |
| 28 | I would like the bridge to be built in seatown. | 3/7/2021 11:42 AM |

| | | |
|---|---|---|
| 29 | Very well presented, transparent that us only devuded by cost, not logic, practicality or consideration for the local community. | 3/7/2021 10:44 AM |
| 30 | Option 3 - the replacement of the current bridge. Best value in the long run. by far. | 3/7/2021 10:39 AM |
| 31 | Option 3 or 5 | 3/7/2021 10:36 AM |
| 32 | Could not access on my iPad. | 3/7/2021 9:59 AM |
| 33 | I'm viewing it on an Android phone, so wasn't the best | 3/7/2021 9:58 AM |
| 34 | Very informative | 3/7/2021 9:34 AM |
| 35 | Safer for public use | 3/7/2021 9:10 AM |
| 36 | Leave Bridge where it is | 3/7/2021 8:58 AM |
| 37 | Very informative and good graphics. Took me a little bit to get used to how it worked. | 3/7/2021 7:16 AM |
| 38 | Middle option best for everyone, | 3/7/2021 7:09 AM |
| 39 | Not the easiest to navigate . | 3/6/2021 8:30 PM |
| 40 | Virtual exhibition is a great idea, however I did have a few problems accessing it but did manage to sort it after a while. | 3/6/2021 6:55 PM |
| 41 | it is the safest and most sheltered place | 3/6/2021 5:39 PM |
| 42 | Replace in the position of the current brisge | 3/6/2021 4:43 PM |
| 43 | Option 3 is a good crossing point close to large parking area at Seatown near canal bank, away from busy road. Also handy for holidaymakers staying at nearby caravan park. Whatever option, there is no mention of whether capital costs include dismantling and removal of existing bridge, or a least the decking and railings. Leaving the existing bridge in situ will have the same negative problems of the "Do nothing" scenario of Option 1. | 3/6/2021 4:25 PM |
| 44 | Constantly needed to 'pause' the exhibition to give time to read the information. A simple click to proceed to the next slide would have worked better. | 3/6/2021 4:05 PM |
| 45 | Less congestion on esplanade and there is car parking by the river side. | 3/6/2021 1:59 PM |
| 46 | A bit inaccessible on my tech | 3/6/2021 1:00 PM |
| 47 | It only gave example of option4 | 3/6/2021 11:06 AM |
| 48 | Near original bridge | 3/6/2021 10:59 AM |
| 49 | Although I would love to see the bridge remain at its original location I realise that cost is the biggest factor when building. I must admit that it makes sense to have the bridge coming out onto the esplanade where local facilities are sited. May I say though that the current existing toilet facilities might be used far more once bridge is back open and could do with being upgraded especially as footfall past this will increase from walking from car park to new footbridge. Is this a point that the local community council has discussed? On a side note local business will profit due to people being able to hop over and buy ice creams,coffees etc etc. | 3/6/2021 9:04 AM |
| 50 | couldn't navigate on phone. kept sticking | 3/6/2021 8:34 AM |
| 51 | Difficult to access for many in the community | 3/5/2021 11:18 PM |
| 52 | The slides were too large to see properly on my phone and some of the slides in the later part of the presentation were blank | 3/5/2021 8:20 PM |
| 53 | explains things is simple terms | 3/5/2021 4:49 PM |
| 54 | Changed slide too quickly for me! | 3/5/2021 4:01 PM |
| 55 | Easy to follow bite size story boards, excellent graphics and bullet points. | 3/5/2021 3:18 PM |
| 56 | Option 2 as stated above | 3/5/2021 12:43 PM |
| 57 | At times it was too wordy | 3/5/2021 12:26 PM |

| | | |
|---|---|---|
| 58 | Difficult to maneuvre around the different boards. | 3/5/2021 11:01 AM |
| 59 | Long loading times and didn't give a simple overview of the options. | 3/5/2021 8:17 AM |
| 60 | Better access, | 3/5/2021 7:23 AM |
| 61 | Same place as current bridge. | 3/5/2021 12:29 AM |
| 62 | 3D view added nothing, would be better to just view slides. PDF failed to load, error 404 Forbidden | 3/5/2021 12:17 AM |
| 63 | It took at least four tries to download and when I did manage to download it was very difficult to operate | 3/4/2021 7:55 PM |
| 64 | I couldn't get the virtual exhibition to load and looked at the leaflet version instead. | 3/4/2021 7:11 PM |
| 65 | Could not navigate in a mobile - someone kindly screen shot each slide and posted it on social media | 3/4/2021 6:43 PM |
| 66 | Very good but would have preferred the bridge in the middle of the room to have been in colour | 3/4/2021 5:08 PM |
| 67 | Back where it was | 3/4/2021 2:12 PM |
| 68 | Option 3 Looks so much better in the existing position. Easy access to parking, safety of general public, no congestion on Main Street. The amenities are only round the corner., within easy walking distance. | 3/4/2021 2:08 PM |
| 69 | The artsteps video link would not work on my phone (Google Pixel 3a) and was poor on my laptop, causing the fans to overwork, and not loading well at all. Microsoft Sway might have been a better choice given the average internet speeds in the area. The boxes in the SurveyMonkey are also too small for comments - they don't expand vertically, meaning much scrolling for proof-checking! | 3/4/2021 12:26 PM |
| 70 | Gave clear concise background information on all choices and the project | 3/3/2021 11:33 PM |
| 71 | The virtual exhibition was very easy to navigate and find out all relevant information | 3/3/2021 10:14 PM |
| 72 | Difficult to get into | 3/3/2021 6:25 PM |
| 73 | Can be accessed from home | 3/3/2021 4:41 PM |
| 74 | all clearly explaine | 3/3/2021 4:11 PM |
| 75 | Once in the virtual exhibition, the images would not download. Wasted over 10 minutes. Finally accessed it but felt a distinct bias. | 3/3/2021 11:49 AM |
| 76 | Replace existing bridge where it is now | 3/3/2021 10:20 AM |
| 77 | Very informative display giving details of each option from a cost and demographic point of view | 3/3/2021 8:45 AM |
| 78 | The 3d visuals helped to imagine what they will be like. | 3/3/2021 7:32 AM |
| 79 | closer to the car park, avoiding overcrowded esplanade | 3/3/2021 7:31 AM |
| 80 | see above | 3/2/2021 11:33 PM |
| 81 | It was excellent! | 3/2/2021 10:42 PM |
| 82 | Focussed too much on the cheaper proposals. All bridge designs should have been given the same presentation. | 3/2/2021 9:44 PM |
| 83 | Couldnt access it, picked up leaflet in coop | 3/2/2021 7:42 PM |
| 84 | I liked the pictures and the costings . It let you see the total cost of each option. However, I daresay your bias is evident in the pros and cons of your preferred option which is full of positivity. | 3/2/2021 6:50 PM |
| 85 | There appears to be better access here for all to enjoy. Less traffic problems so a safer option for me | 3/2/2021 6:41 PM |
| 86 | Straight replacement where it is now | 3/2/2021 6:34 PM |

| | | |
|---|---|---|
| 87 | Easy access from the promenade. | 3/2/2021 5:35 PM |
| 88 | Bridge stays where it is | 3/2/2021 5:28 PM |
| 89 | Easy to move around. | 3/2/2021 5:21 PM |
| 90 | Easy to understand | 3/2/2021 5:08 PM |
| 91 | Option 3 | 3/2/2021 5:04 PM |
| 92 | Not necessary to replicate an Art Gallery exhibition space | 3/2/2021 4:26 PM |
| 93 | Not usable on phone or tablet | 3/2/2021 4:09 PM |
| 94 | Difficult to navigate | 3/2/2021 4:03 PM |
| 95 | Please do not put bridge on the esplanade! The traffic on Clifton road is already horrendously busy through weekends, and holidays. It's really dangerous and unpleasant. And have you seen the amount of rubbish that results from a high footfall in the summer? Are you going to provide provision for this? And please can we make this beach a family friendly No dogs beach. Its disgusting taking grandchildren over with dog poo every third step. | 3/2/2021 3:48 PM |
| 96 | As I mentioned earlier, I believe the bridge should remain where it is or very close to where it is. Anyone participating in any water sports etc would find it handier than trying to haul canoes, paddle boards or the like across to the esplanade. Lossiemouth is famed for the view over the east beach from above showing the current bridge and could remain so if the new bridge was sited in the same place. | 3/2/2021 3:38 PM |
| 97 | On line of old bridge | 3/2/2021 3:02 PM |
| 98 | Wasteful of time and resources. Make a pdf which is accessible and quick to read. Total gimmick and the software looks like it’s from the 1980s. | 3/2/2021 2:07 PM |
| 99 | Bridge from esplanade will cause more rubbish on beach. | 3/2/2021 1:51 PM |
| 100 | Couldn’t access it so ended up on the PDF version. Option 4 pics are incorrect. Pros and cons very basic, descriptions and costing to brief and don’t indicated what is included or not, ie do costing include planning complications and strengthening improving the poor seawall if them options were taken? | 3/2/2021 1:41 PM |
| 101 | Not enough parking in the Esplanade. | 3/2/2021 1:33 PM |
| 102 | Experience on mobile device limited | 3/2/2021 12:51 PM |
| 103 | 2 | 3/2/2021 11:50 AM |
| 104 | I would like the new bridge to be in the same place as old one. | 3/2/2021 11:47 AM |
| 105 | I agree that the preferred option is the best. | 3/2/2021 11:27 AM |
| 106 | Replace close to existing structure | 3/2/2021 10:40 AM |
| 107 | The exhibition was biased towards the 4th option on the esplanade, without the replacement of the sea wall defences this option will not last as long as one up river. | 3/2/2021 10:33 AM |
| 108 | better for wildlife and reduced littering on the beach | 3/2/2021 10:24 AM |
| 109 | I would prefer the bridge to be sited where it is at present as it will lessen congestion on esplanade and is close to carpark | 3/2/2021 9:38 AM |
| 110 | Found it difficult to locate all videos | 3/2/2021 9:35 AM |
| 111 | Clunky, but got there in the end. | 3/2/2021 9:05 AM |
| 112 | Having this sort of "right-on" trendy virtual exhibition brings nothing to the proposals. A simple PDF would have done the job and at much lower cost. Also, this survey does not allow for proper comment to be made. It is too brief and comment boxes, at one line, are far too small. | 3/2/2021 8:43 AM |
| 113 | I would rather the bridge was situated where the old bridge currently is | 3/2/2021 8:38 AM |
| 114 | Well presented | 3/2/2021 8:06 AM |
| 115 | Hard to open and navigate. | 3/2/2021 7:57 AM |

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| 116 | Unable to read signage. Very difficult to use. | 3/2/2021 7:31 AM |
| 117 | The virtual exhibition gave a clear idea of the proposal but it’s in the wrong location | 3/2/2021 7:11 AM |
| 118 | A bit clunky but did work. | 3/2/2021 6:44 AM |
| 119 | Hood to use once navigated the control. | 3/2/2021 6:05 AM |
| 120 | There is a lack of parking along the fton and to pedestrianise this area would devastate local business. There is parking in the current situ for any users. | 3/2/2021 4:45 AM |
| 121 | Many have been unable to access this, a video would have been easier. How are non computer savee folks able to complete the survey. | 3/1/2021 11:28 PM |
| 122 | Businesses will suffer | 3/1/2021 11:17 PM |
| 123 | Nobody can be bothered with fancy nonsense but good old fashioned information is the best - Option 1. Option 2 and so on | 3/1/2021 11:06 PM |
| 124 | Clearest information and visuals on the bridge I have seen | 3/1/2021 11:02 PM |
| 125 | Trouble logging in then it just jumps around | 3/1/2021 11:01 PM |
| 126 | You cannot pedestrianise Clifton Road. It would be awful for businesses | 3/1/2021 10:55 PM |
| 127 | Same location as the current bridge, or as close as possible. It's a safer option to a return to normality for Lossiemouth. | 3/1/2021 10:51 PM |
| 128 | good job needs further discuss | 3/1/2021 9:54 PM |
| 129 | Good impression of final look | 3/1/2021 9:40 PM |
| 130 | Option 3 - the bridge in its current location has stood the test of time. It has been well protected from rough waters by the dunes. This bridge is also an iconic part of the landscape, loved my locals and tourists alike, and has been appreciated through the generations. | 3/1/2021 9:40 PM |
| 131 | I believe option 5 is the best fit for the replacement. It would have less of an impact on the already busy esplande. | 3/1/2021 9:37 PM |
| 132 | Give a PowerPoint why the extra steps? | 3/1/2021 9:37 PM |
| 133 | Replacement on site of existing bridge. Protected from winter storms and likely to persist for longer. | 3/1/2021 9:25 PM |
| 134 | Option 3 - new footbridge local to existing | 3/1/2021 8:56 PM |
| 135 | Well it is | 3/1/2021 8:55 PM |
| 136 | Keep bridge where it’s situated just now | 3/1/2021 8:39 PM |
| 137 | Found it very difficult to navigate, like you are trying to make people not bother looking at it. | 3/1/2021 8:26 PM |
| 138 | I did use my phone which said it wasn’t supported. This may have been why the experience wasn’t great. I couldn’t read all of the information because I couldn’t make it landscape. | 3/1/2021 8:23 PM |
| 139 | A bit clunky | 3/1/2021 7:54 PM |
| 140 | Rebuild in current location for ease.of car parking and safety from high tides and storms | 3/1/2021 7:48 PM |
| 141 | It was very delicate and more annoying that just a normal report | 3/1/2021 7:44 PM |
| 142 | Option 3 but demolish old bridge and replace in current location with wider access and anti motorcycle gates. | 3/1/2021 7:42 PM |
| 143 | Very well put together exhibition. | 3/1/2021 7:37 PM |
| 144 | Great adaptation | 3/1/2021 7:35 PM |
| 145 | None as never saw the virtual exhibition | 3/1/2021 7:00 PM |
| 146 | Struggled to navigate | 3/1/2021 6:59 PM |
| 147 | It doesn't show clearly what the bridges will look like, absolutely useless | 3/1/2021 6:33 PM |

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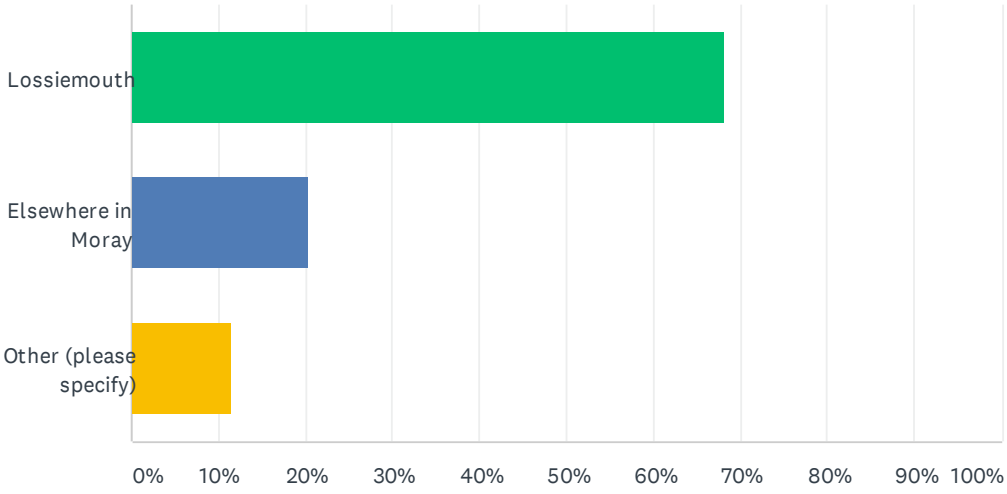
|---|---|---|
| 148 | Could have provided view of the approach and a walk over. View of potential parking provision. | 3/1/2021 6:33 PM |
| 149 | I would have chosen option 4 | 3/1/2021 6:05 PM |
| 150 | Link kept freezing. Also poor this is done online when many local people wont have access to this. | 3/1/2021 6:04 PM |
| 151 | Well it was! | 3/1/2021 5:46 PM |
| 152 | Nice visualisations, easy to understand and navigation. Did not work well on mobile device | 3/1/2021 5:04 PM |
| 153 | A very good presentation in the absence of beng able to have a public exhibition. | 3/1/2021 5:04 PM |
| 154 | Esplanade | 3/1/2021 4:38 PM |
| 155 | Looks good but a bit annoying. Just slides please! | 3/1/2021 3:47 PM |
| 156 | I couldn't see the exhibition on my mobile; it was difficult to navigate through the exhibition; unnecessarily faffy - some videos and slides would have done the job; more explanation on the background to the choices and preferred option would have been helpful too. | 3/1/2021 3:34 PM |
| 157 | Monday wasted on arty-crafty presentation that obscured the information we were supposed to evaluate | 3/1/2021 3:17 PM |
| 158 | Slight concern over parking, but appreciate the convenience from the esplanade | 3/1/2021 2:15 PM |
| 159 | It was very easy to navigate and information was clear | 3/1/2021 2:13 PM |
| 160 | Good information video, need to see final design though | 3/1/2021 2:04 PM |
| 161 | Tour moved on too fast to read and consider boards, had to keep trying to go back. Sometimes it would go to the footprints when you clicked on them, but often not. Frustrating. | 3/1/2021 1:52 PM |
| 162 | Why are you still using 2000's style digital presentation - how many people access this on Phone and Pads. It terms of diversity this, the presentation, fails | 3/1/2021 1:33 PM |
| 163 | Would have been fine and easier to just see pictures | 3/1/2021 12:52 PM |
| 164 | Very well put together | 3/1/2021 12:52 PM |
| 165 | Brilliant walk through of all the points, easy to pause and look back at any slides i wanted to read or look at again. Only one small point, it does progress quite quickly & if you are not good with computers you may find it a bit difficult to pause and start on each slide. | 3/1/2021 12:05 PM |
| 166 | Really enjoyed the virtual experience | 3/1/2021 11:21 AM |
| 167 | New bridge in the same place as the old one | 3/1/2021 11:04 AM |
| 168 | Very clear information & well presented | 3/1/2021 10:37 AM |

# Q4 Where do you live?

Answered: 381 Skipped: 0



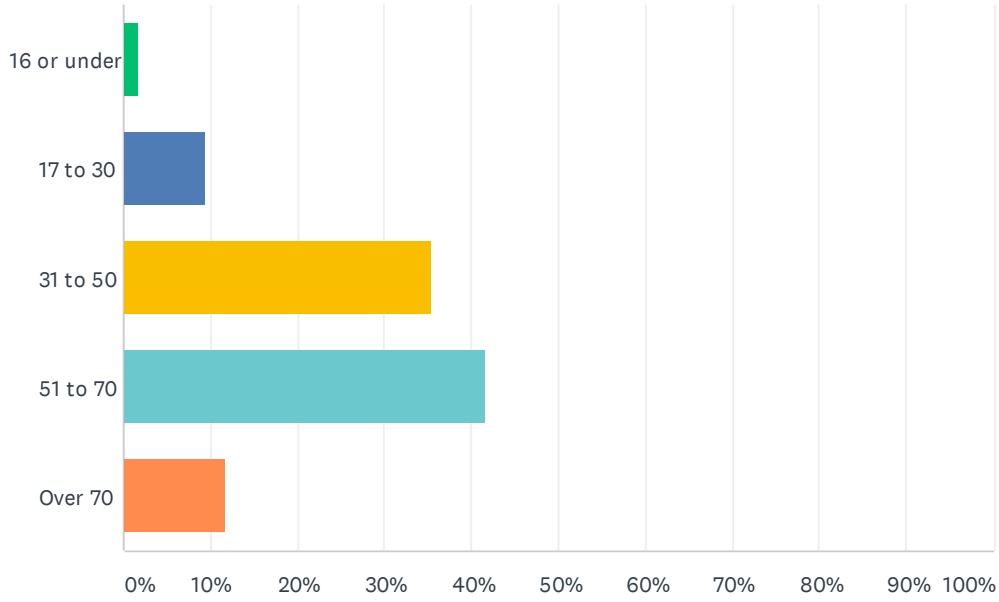

| ANSWER CHOICES | RESPONSES | |
|---|---|---|
| Lossiemouth | 68.24% | 260 |
| Elsewhere in Moray | 20.21% | 77 |
| Other (please specify) | 11.55% | 44 |
| TOTAL | | 381 |

| # | OTHER (PLEASE SPECIFY) | DATE |
|---|---|---|
| 1 | Elgin but grew up in lossie. | 3/9/2021 8:52 AM |
| 2 | Lancashire | 3/8/2021 1:37 PM |
| 3 | Highland | 3/8/2021 9:59 AM |
| 4 | Perth, Western Australia. I am a Lossie loon. | 3/7/2021 12:58 PM |
| 5 | Glasgow but we're thinking about moving to Lossie cos we've retired. Currently we're up once a month for weekends and longer. I've seen the river and dunes shift and change a lot in 33 years. | 3/7/2021 12:34 PM |
| 6 | Glasgow (I am from Lossie and it is where my parents and family live). | 3/7/2021 10:39 AM |
| 7 | Clackmannanshire | 3/7/2021 9:58 AM |
| 8 | Alloa | 3/7/2021 9:58 AM |
| 9 | NZ , I grew up in Lossiemouth and my family is there | 3/7/2021 12:07 AM |
| 10 | Edinburgh but originally lossie and all my family and friends still in lossie | 3/6/2021 8:25 PM |
| 11 | Just outside Lossiemouth and a frequent user of all parts of the town | 3/6/2021 7:59 PM |
| 12 | Elgin | 3/6/2021 7:15 PM |
| 13 | Liverpool | 3/6/2021 6:55 PM |
| 14 | Aberdeen but my family live in Lossiemouth and I visit regularly | 3/5/2021 8:20 PM |
| 15 | Aberdeen, but far Lossie | 3/5/2021 2:28 PM |
| 16 | Linlithgow, but I have a flat in Clifton Road we use on a monthly basis. | 3/5/2021 10:59 AM |
| 17 | Berkshire (moving to Lossiemouth in July21) | 3/5/2021 12:17 AM |
| 18 | Strathpeffer but have static at Lossiemouth Bay Caravan Park. 😊 | 3/4/2021 9:50 PM |
| 19 | Ipswich Suffolk | 3/4/2021 6:09 PM |
| 20 | Now live in Cullen, but was born and brought up on Lossie just beside the cross. The bridge has always been special to us Lossie folk, and where it is is perfect. | 3/4/2021 5:08 PM |
| 21 | Burghead | 3/4/2021 3:12 PM |
| 22 | Aberdeenshire, but I have 2 self catering cottages in Lossie | 3/3/2021 11:33 PM |
| 23 | Fife | 3/2/2021 5:35 PM |
| 24 | Forres | 3/2/2021 5:21 PM |
| 25 | Midlothian | 3/2/2021 5:04 PM |
| 26 | Hopeman | 3/2/2021 4:05 PM |
| 27 | Aberdeenshire | 3/2/2021 2:22 PM |
| 28 | Edinburgh, but we are frequent visitors and have been disappointed not to be able to access the beach. | 3/2/2021 9:58 AM |
| 29 | Just out of lossie , Inchbroom | 3/2/2021 9:35 AM |
| 30 | Kent - Family live in Lossiemouth. | 3/2/2021 8:25 AM |
| 31 | Elgin | 3/1/2021 11:34 PM |
| 32 | Aberdeen, but grew up in Lossie | 3/1/2021 9:40 PM |
| 33 | Glasgow | 3/1/2021 9:37 PM |
| 34 | england, soon to move to moray | 3/1/2021 8:02 PM |
| 35 | Milton Keynes | 3/1/2021 7:42 PM |

| | | |
|---|---|---|
| 36 | Inverness | 3/1/2021 7:27 PM |
| 37 | Elgin | 3/1/2021 5:40 PM |
| 38 | Hull | 3/1/2021 4:05 PM |
| 39 | Inverness | 3/1/2021 3:47 PM |
| 40 | Colorado USU | 3/1/2021 3:17 PM |
| 41 | Penarth, Vale of Glamorgan (family home is Lossiemouth) | 3/1/2021 2:13 PM |
| 42 | Born in Lossiemouth | 3/1/2021 2:04 PM |
| 43 | Edinburgh | 3/1/2021 1:25 PM |
| 44 | Aberdeenshire | 2/28/2021 7:07 PM |

# Q5 How old are you?

Answered: 381 Skipped: 0




| ANSWER CHOICES | RESPONSES | |
|---|---|---|
| 16 or under | 1.57% | 6 |
| 17 to 30 | 9.45% | 36 |
| 31 to 50 | 35.43% | 135 |
| 51 to 70 | 41.73% | 159 |
| Over 70 | 11.81% | 45 |
| TOTAL | | 381 |

Lossiemouth East Beach Footbridge Replacement Exhibition

Email Feedback

| Date | Comment |
|---|---|
| 01/03/21 | A brief note to feedback on the online exhibition for the above project. A very thorough assessment of options, clearly explained, and very user friendly online platform. The preferred option appears to be best value and looks excellent. My only question is what happens to the old bridge? I presume it will be removed and the area made good? Sorry if I missed this in the exhibition.<br>Thanks for providing clarity on this project and best wishes for making progress as quickly as possible. |
| 02/03/21 | I fully support the new East Beach bridge Option 4<br>It is where the original bridge was sited and now with cost this option is most value for money<br>This would also be a great boost on Raft Race day starting from the bridge going round a bhoy up river and back |
| 05/03/21 | I have a copy of the leaflet regarding different options for the new bridge and i would like to add my comments.<br>I think option 4 The council's preferred option would be an absolute disaster from the point of view of traffic problems.<br>On a normal sunny day with no bridge, it is almost impossible to park across from the shops in Clifton Road .<br>My choice would be the original site Option 3 which, although much costlier, would be near to the large car park, and would not give any traffic problems but would still retain the iconic view from Prospect Terrace<br>I would like my choice, and my wifes to be added to Option 3 |
| 05/03/21 | Having read through the booklet explaining the options and costs, my view is that Option 5 is the one to go for. It would be closer to toilet facilities and better for car parking. |
| 05/03/21 | My husband spent years doing the research.<br>I gave files to the bridge committee after he died a few years ago, Seems they haven't taken anything on board or passed info on to Moray Council!!!<br>Also, a survey / vote was taken last year round Lossiemouth and **over 60% requested it replace where it is now.**<br>19% said ...esplanade!<br>So why waste more money on another survey?????<br>Job should have been finished by now. Even the RAF at Lossiemouth offered to help in 2018!!!<br>The Bridge was put near Seatown for very good reasons!! Save congestion of traffic, etc. Already a car park nearby.<br>Putting it opposite Miele's,etc will cause chaos..... traffic, parking, risk to pedestrians, etc!!!<br><br>Have you ever been along that road on a sunny day????<br>Queues for icecream, kids dotting out between cars.<br>Just an accident waiting to happen!!! |

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| | Where are they to park?<br>Making 'pedestrian only' road will definitely NOT help businesses! No parking nearby!!<br>Enjoy the good weather 😎<br>We in Lossiemouth hope to soon.....on the East Beach! |
| 05/03/21 | Thank you for your excellent explanatory leaflet covering the options for the replacement bridge. The lack of a bridge is a definite negative for Lossie and its businesses. I have no comment to make at this stage on the relative merits of the suggested solutions. However I was surprised that no mention is made of global warming. The prognosis that seems to be accepted is for a rise in mean sea level of 30cm by 2050 and of a metre by 2100. Given the bridge is to be designed to last until well after then, I think it sensible to give some thought to:<br>1. the siting and reinforcement of the bridge at either end.<br>2. The effect of a mean rise and the impact of the expected increased number of severe storms on the dunes themselves. (You mention the destructive power of previous storms on the harbour walls themselves in your pamphlet).<br>It would be profligate to spend any of the suggested sums to then find the replacement bridge destroyed by a 'new' generation storm. A little further thought at this stage may well produce a more lasting solution.<br>Best of luck for an essential (in my opinion) project |
| 05/03/21 | I was interested to see the options being presented and wish to comment as follows:<br>Whilst I love the East Beach and spent most of my formative years on holiday in Lossiemouth in a caravan the closure of the bridge actually has some benefits for the environment overall with no litter, less disturbance to the natural beauty and is accessible for the water enthusiasts on paddle boards, surf boards etc. I have sat outside the Salt Cellar this past year and just looked on in wonder at those out there catching waves and no one else to worry about.<br>There is a lovely long beach to the west that is quite accessible to all and has plenty parking, accessibility to this beach could be improved if felt necessary to be more inclusive. So you could just leave the beach closed, if I want an ice cream it does not stop me going to Lossie.<br>Your costs for your preferred option 4 are questionable as I don't believe they will stop at the £1.375 million.<br>Final hydraulic design will be completed during design stages therefore your costs will likely increase.<br>There is no mention of the argument about planning needing to be obtained as you have used elsewhere as surely the very early versions of the bridge that previously failed can't be valid.<br>The sea wall in this area is noted to be in poor condition so again there will be additional costs associated as you will need to address this issue.<br>It has been muted that the closure of the bridge is all down to a political angle to have the esplanade upgraded and pedestrianised, therefore I believe there will be even more costs associated with this option.<br>I would like to see a more believable cost to this option or confirmation that these items are already built in. |

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| | If you pedestrianise this part of town making it inaccessible by car then Lossiemouth will see a significant decline in visitors, do we never learn that if we can't just pop in we just won't come!??<br>I don't think your preferred option is complete and therefore inaccurate in its presentation.<br>I will watch with interest. |
| 07/03/21 | I am emailing on behalf of my mother who is not on internet.<br>These comments are solely hers<br>Her preferred option is to replace the existing bridge with one in a similar location for safety reasons. Namely that coming off the esplanade will be much busier for traffic putting children and families coming to and from a bridge at higher risk.<br>And a bridge from the esplanade would cause increased traffic chaos.<br>Also the current state of disrepair of the esplanade is a concern. It has uneven slabs, broken concrete and erosion under it. Will this be repaired?<br>The main reason for not liking the preferred option is the lack of parking.<br>Whereas there's an existing car park near the existing bridge. |
| 07/03/21 | **Key Points**<br>• **Provides the most cost effective compliant footbridge crossing in both capital and whole life costing terms.**<br>*( Yes it will be less expensive based on the provided costings but how can it be stated as being 'the most cost effective' as a final hydraulic design has not been undertaken and therefore accurate costings are not available. It may well be that option four will not be the most cost effective of the locations.)*<br>• **Economic and social benefit as located closer to amenities.**<br>*(Yes closer to amenities but we are only talking of a very small amount of metres here. I am led to believe that actually not all businesses in close proximity to option 4 see this choice as being of economic benefit!)*<br>• **Better integration into the wider public realm.**<br>*(It would actually site the bridge in what is already one of the most congested areas of Lossiemouth if not Moray. A pedestrian crossing has already been added at this site to help alleviate the congestion and therefore I cannot see why this location would be of benefit as it certainly does not demonstrate 'better integration'.)*<br>• **Final hydraulic design will be completed during the final design stages.**<br>*(Why is this a key point? Surely it is obvious that a final hydraulic design would have to ensure that structures would be of sufficient size that natural flooding would not be worsened and that the design would ensure that the structure would withstand the design flood and remain traversable. However, this would apply no matter the location so why is it listed as a key point of option 4? What is actually more pertinent here is that this statement alludes to the fact that a final design stage has not been undertaken and that therefore 'New Footbridge At Esplanade Capital Costs: £1,375,00 is to a certain extent fictional in that it does not in fact reflect what the actual capital cost will be. Does The Moray Council have access to more accurate figures than they have published and a final hydraulic design has actually been undertaken for all or some of the options? )* |

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| | *I am of the opinion that the above 'Preferred Option: Option 4' documentation raises pertinent points about for example the costing of Option 4 and all of the bulleted headings and that these points deserved to be addressed.*<br><br>In addition there is nothing as listed in the business case that could not be achieved if a new bridge were to be located at any of the options. The business case is therefore not site specific.<br><br>It would appear then that the only reason for Moray Council recommending that Option 4 be the preferred option is flawed in that it is shown as being the less expensive option when in fact all the final capital costs for all options are unknown and the least expensive option is therefore unknown.<br><br>Even if it were assumed that Option 4 was the cheapest option, would it be the best option in the opinion of the people who will live close to and use the bridge? Certainly 63% of Lossiemouth residents have already expressed disagreement with that and I would hope that that would be reflected in the decision and in the recommendation made to the Scottish Government by The Moray Council on behalf of the people of Moray in general and of the people of Lossiemouth in particular.<br><br>We have a great opportunity here but I sincerely hope that The Moray Council do not inadvertently ruin this opportunity by recommending the building of a bridge in a location that is both congested and unwanted. How can that ever be construed as being of 'best value'. |
| 07/03/21 | Dear Moray Council. I write to express grave concern that the survey response form regarding preferred options to the Lossiemouth footbridge is poorly designed and is bound to lead to a very limited response that will not reflect local opinion adequately. Apart from failing to list the four options to choose from, it does not ask if respondents are private individuals or local businesses.<br><br>See for yourself at https://www.surveymonkey.co.uk/r/YNGRTJQ <https://www.surveymonkey.co.uk/r/YNGRTJQ><br><br>After spending a lot of money producing an excellent survey and virtual exhibition, this response form is nothing short of a disaster and doesn't help to take us forward. Let's start over a gain, please - uregently! |
| 07/03/21 | My reaction to the current iconic footbridge being relocated to the esplanade is not a good one.<br>It beggars belief that our 100 year old pedestrian footbridge at approximately 1mtr wide is going to be replaced with a 3.5 metre bridge capable of taking the widest vehicle that is permissible to travel on our uk roads.<br>Do people not realise the cost difference between building a 1.5 metre wide structure capable of accommodating two passing wheelchairs and a 3.5 metre construction believe me talk about wasting public or government money defies belief really. I am not a bridge expert but as someone who has developed many building projects, it really does not make economic sense. |

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| | The only possible answer to this appalling decision must be purely down to cost and having total disregard to public opinion to have it rebuilt/replaced in its current position.<br>I understand an offer was on table from a local contractor to remove the complete existing bridge in sections down to the current piling and replace it with a wider complete new bridge in galvanised steel for a fraction of these vastly inflated prices quoted to supply a 3.5 metre wide replacement .<br>I have lived in Lossie all my life and when the bridge discussion ever arises I am quick to ask the question what do you think about the relocation and believe me never once have I heard a positive reaction everyone had the same thoughts, concerns about the breakwater,esplanade condition,congestion of traffic.<br>It is truly just beyond comprehension that it could be relocated. Finally remember the cheapest option is not always the best one. |
| 07/03/21 | On behalf of the Lossiemouth Community Council, we write with our feedback to the proposed option indicated in the options appraisal.<br>From the onset we welcome the Scottish government's funding of our access to the East beach, such access is absolutely essential for our community and for locals and tourism alike.<br>It should be noted that the greatest majority of the community who took part in the initial survey, expressed a preference that the bridge should remain in situ at the Seatown.<br>We see from the proposals that despite this preferred option, the esplanade has been identified as the favoured one..<br>Whilst we understand that cost is the defining factor, we have a duty of care in fully representing our community on issues which have been raised by the people of Lossie.<br><br>What concerns Lossiemouth Community Council is that whichever option is chosen, it provides us with a long term, safe and easy access for users and continued retail activity for local businesses.<br>We would, with respect, highlight the following issues raised by our community, in particular 3 of these.<br>Firstly, that the bridge and access to the bridge, may be at risk given the life expectancy of our crumbling breakwater. You have a copy of the 2014 independent report commissioned by the Moray Council following concerns raised repeatedly by the community council. It has a life expectancy of only a few more years and the estimated cost to replace it in 2014 was between £2 and 3 million.<br><br>Secondly, the esplanade itself is a 1970's structure which has had little or no attention over the decades, the structure underneath and the pavings on top are in a poor condition and have been neglected over time. It currently has limited footfall but inevitably, if the bridge is moved to the esplanade then there will be a considerable increase in individuals using it as an access route to the beach.<br><br>We would hope that at some point in the future funding could be identified from the Scottish Government or some other funding source for the work required to ensure these structures are fit for purpose. |

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| | Lastly, we were advised some 18 months ago, wrongly it seems that Clifton Road would need to be pedestrianised or a one way system put in place if the bridge is moved to this site. We predict that the volume of cars and people accessing the bridge will be significant and that congestion will become an issue, our economy has been badly hit by the bridge closure and by covid19. We do not want our businesses to suffer further and would hope that if the bridge is moved here then the council will not change their views on this matter and that every effort will be made to ensure that traffic continues to be able to travel freely on Clifton road in order to benefit local businesses. |
| 08/03/21 | I am providing feedback on the plans for a new bridge in Lossiemouth. I have viewed all the options and was a little surprised that the favoured option is smack bang in the town centre. I fully understand the reasons for this but chaos would ensue, is it a coincidence that the favoured option is the cheapest? My preferred option is option 5 the Sea town option, I would be grateful if you would take cognisance of my comments. |
| 09/03/21 | The Lossie Bridge, After reading through the printed presentation of the options etc. for the new bridge and reading all the pros and cons for the different options. It absolutely screams out that the best place for the bridge is where it is now.<br>That is also the wish of the majority of people who live here. Not to mention the congestion at the busiest part of the town for months<br>Let commonsense prevail!!!!! It also surprises me that designs are not already on paper to be decided on. I do hope you get this e-mail. |
| 09/03/21 | I have read the proposals and feel either option 3 or 5 would be best. As a resident in the town I feel the bridge would be best placed near to the large existing car park in Moray Street and the public conveniences. It will also allow easy access to the beach for folks surfing etc.<br><br>One of my concerns for option 4 is the comment re: sea wall. It is in apparent disrepair and could cause costs to be increased. I also think the promenade by the shops would become extremely congested on sunny days |
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# Welcome

The Purpose of this Virtual Exhibition it to allow you the opportunity to see the preferred option for the replacement bridge at Lossiemouth



# Background

- The original footbridge linking the town of Lossiemouth to the East Beach was constructed in 1906 by Lossiemouth Town Council.
- In 1918 the footbridge was relocated to its current position by the Old Harbour Commission,
- The Lossiemouth Old Harbour Commission ceased to exist when the harbour closed, at which point the footbridge became ownerless. This was confirmed in 2016 by the "Queens And Lord Treasurers Remembrance" Crown.
- In August 2019 a central span of the footbridge failed and it was closed in the interest of public safety.
- In September 2019 The Scottish Government's Culture Secretary committed to funding the work required to reinstate a crossing to the East Beach.
- In December 2019, Moray Council agreed to manage the replacement footbridge project and take ownership of the footbridge once completed.



# Background

In September 2020, Moray Council awarded a design and build contract to replace the footbridge to Beaver Bridges. This is a two stage contract, the first stage is to undertake an Option Appraisal to assess which option provides best value. The second stage is to design and build the footbridge.

In November 2020 Steve Westbrook, Economist, was appointed to undertake an Economic Impact Assessment to show what the impact would be on the local economy with and without a footbridge to the East Beach. This document also identifies projects that could be taken forward by the community to improve the area around the East Beach.

**Information on the Option Appraisal and the Economic Impact Assessment are available to view and comment on in this exhibition.**



# Options Appraisal 1

The Options Appraisal reviews many different aspects in the options selection process. The process which has been applied is the industry standard and similar to that used by Transport Scotland. The appraisal will look at the following key areas:-

- **Geology**—Assessment of the ground condition at each of the possible locations for construction of the footbridge, to determine if any option performs better than others.
- **Hydrology**—looking in to the potential issue with regards flooding, wave action and sediment to determine if a particular option has more detriment than others.
- **Environment**—Looks at the possible implication each option may have on the environment and if one carries more environmental damage than the others.
- **Land and Property**— the appraisal assesses any risk that different locations pose with regard to land ownership and access for construction of the footbridge
- **Cost** - Options appraisal will not only look at the cost of building the footbridge but also the cost to maintain the footbridge including materials choice and construction techniques.



# Options Appraisal 2

As Part of the Options Appraisal the feedback given in November 2020 has been considered. The key themes were:-

- **Increased traffic**—Predicted increase in traffic along Clifton Road.
- **Parking**—Increase in walking distance from East Beach Car Park to the Esplanade location compared to the existing footbridge.
- **Increase in pedestrians at the Esplanade**—Increase in foot traffic at the Esplanade could impact on public safety.
- **Access for all**—The proposed footbridge should accommodate access for all with sufficient width to allow free passage.
- **Access to amenities**—Locating the footbridge at the Esplanade brings together the amenities of Clifton Road with the beach.
- **Exposure**—Concern there would be an increase in weather and wave actions at the Esplanade.
- **Heritage**—The existing footbridge and its location are considered aesthetically important as an iconic part of Lossiemouth's heritage.
- **Anti-social behaviour**—Concerns about vandalism and thrill seekers using the structure to jump from into the water.



# Option 1 - Do-nothing

Under the do-nothing scenario the existing footbridge would be left as is, closed to access and allowed to deteriorate at an ongoing rate. The public would continue to have no direct link to the East Beach .

| Positives | Negatives |
|---|---|
| Zero capital cost to Moray Council. | The deteriorating structure presents a safety risk |
| Less human disturbance on East Beach resulting in a potential ecological benefit. | Impact on local economy through loss of major attraction. |
| | Impact on wellbeing of local community through loss of access to a valued outdoor asset. |
| | Disturbance of river flow should the structure collapse. |



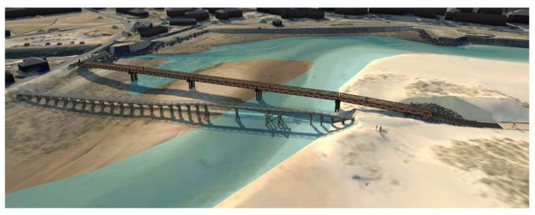
# Option 2 - Do-minimum

Under the do-minimum scenario the superstructure would be limited to the footprint and self-weight of the existing structure. The existing footbridge is approximately 1.2 metres wide between parapets and 120 metres long.

| Positives | Negatives |
|---|---|
| Crossing to East Beach reinstated. | Remaining life of substructure unknown. |
| Lower capital cost in relation to full replacement. | Short term solution, whole life cost will be high. |
| Heritage retained. | The footbridge would continue to be narrow, constrained by the existing substructure. |
| | It is unlikely Moray Council would take ownership of this structure given the likely ongoing costs to maintain it. |

# Option 3 – New Footbridge Local to the Existing

**View 1 : From the North**



**View 2 : From the East**

**View 3 : From Church Street, High Tide**

**View 4 : From Church Street**



# Option 4 – New Footbridge at the Esplanade

**View 1 : From South West at High Tide**

**View 2 : From South West at Low Tide**

**View 3 : From Esplanade**

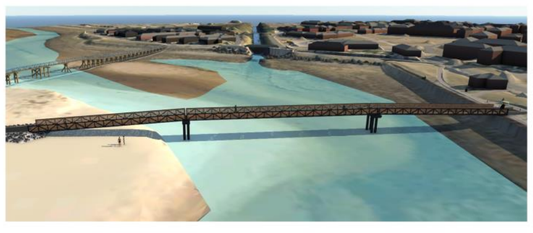
**View 4 : From North East**



# Option 5 – New Footbridge at Seatown Road

**View 1 : From South East at High Tide**

**View 2 : From South East at High Tide**



**View 3 : From East**

**View 4 : From Seatown Road**



# Preferred Option: Option 4—New Footbridge at the Esplanade

**Key points**

- Provides the most cost-effective compliant footbridge crossing in both capital and whole life costing terms.
- Economic and social benefit as located closer to amenities.
- Better integration into the wider public realm.
- Final hydraulic design will be completed during the final design stages

**Option 4 – New Footbridge at the Esplanade Capital Cost: £1,375,000**



# Option 3 – New Footbridge Local to the Existing Pros and cons

| Positive | Negatives |
|---|---|
| The provision of a new footbridge structure with a 120-year design life. | Longest overall span of the 3 footbridge locations, with greatest capital and whole life costs. |
| There is likely to be no impact to the existing traffic and pedestrian movements . | The existing footway to the footbridge from the East Beach carpark is narrow. |
| The existing footbridge has survived over 100 years in this location, likely owing to the shelter from the dunes and favourable hydrology. | Constrained works area off Church Street, disturbance to local residents is likely to be unavoidable during construction. |
| Comparable overall appearance to the existing structure. | Sea defences will be compromised during the works and temporary measures will be required. |
| | The location appears disconnected from amenities. |

**Option 3 – New Footbridge Local to the Existing Capital Cost: £2,225,000**



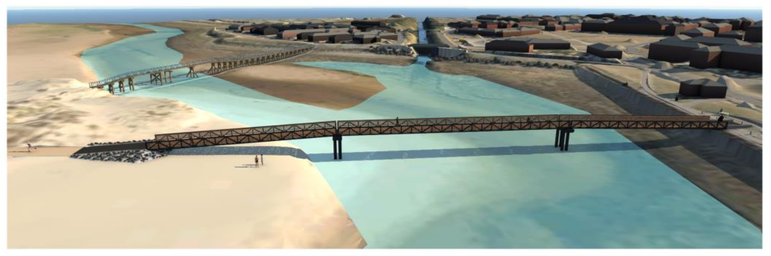
# Option 4 – New Footbridge at the Esplanade Pros and cons

| Positives | Negatives |
|---|---|
| The provision of a new footbridge structure with a 120-year design life. | The location is more exposed to the sea, and the river channel is constricted. |
| Shortest overall span , with lowest capital and whole life costs. | Greater distance from East Beach carpark for pedestrians to walk compared to existing. |
| Potential economic and social benefit as located closer to amenities. Better integration into the wider public realm. | Potential for increased traffic and pedestrian safety issues as Lossiemouth's attractions will be focused more to one area. |
| The shorter individual spans allow the use of an underslung structure providing a more open and pleasurable footbridge crossing. | The seawall in this area is noted to be in poor condition. |

**Option 4 – New Footbridge at the Esplanade Capital Cost: £1,375,000**



# Option 5 – New Footbridge at Seatown Road Pros and cons



| Positives | Negatives |
|---|---|
| The provision of a new footbridge structure with a 120-year design life. | A footbridge has not been sited in this location before so may present planning issues. |
| A middle ground of the 3 replacement options in many respects. | Not the most cost-effective option. |
| Lands in an open existing area adjacent to public conveniences. | |

**Option 5 – New Footbridge at Seatown Road Capital Cost: £1,750,000**



# Next Steps

**Business Case** –

The findings of the Options Appraisal and Economic Impact Assessment, as well as the feedback received from the community, will be included in the Business Case. This Business Case is required to secure the funding from Scottish Government .

**Statutory Consents** –

We will need to obtain statutory consents before we can build the footbridge such as, Planning Consent, Marine Licence and Habitats Regulation Assessment.

**Detailed design** –

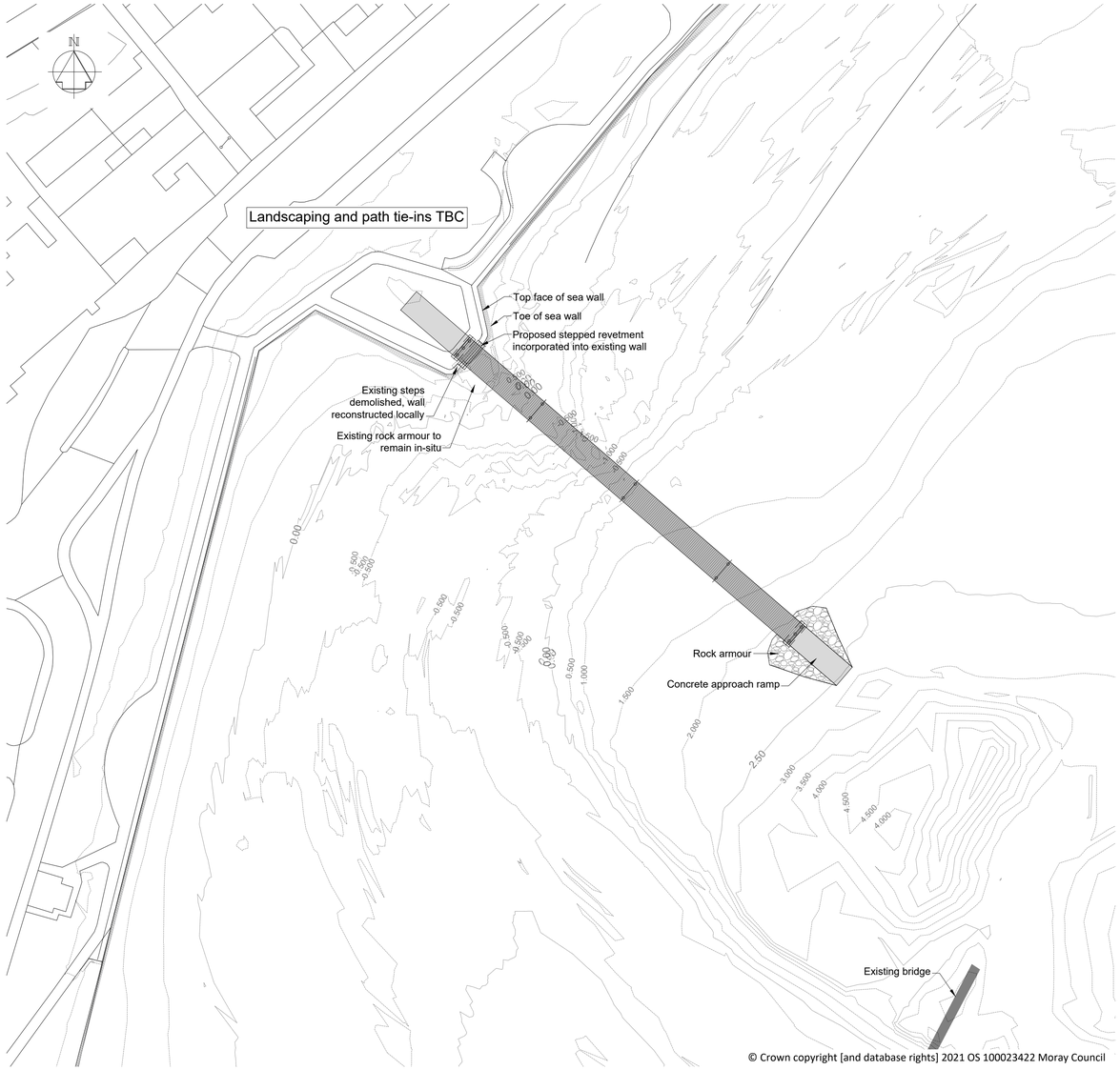
Once we have secured funding and have the required consents we will design the footbridge.

**Construction** –

On completion of the design the footbridge will be constructed.

**It is anticipated that the footbridge will be constructed by Spring 2022.**

# Appendix G – General Arrangement Drawing

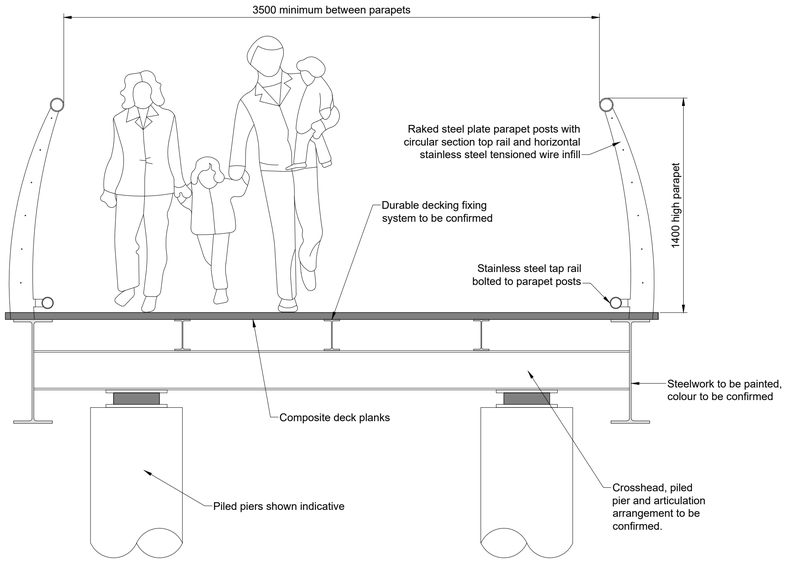



PLAN ON BRIDGE

SCALE 1:200

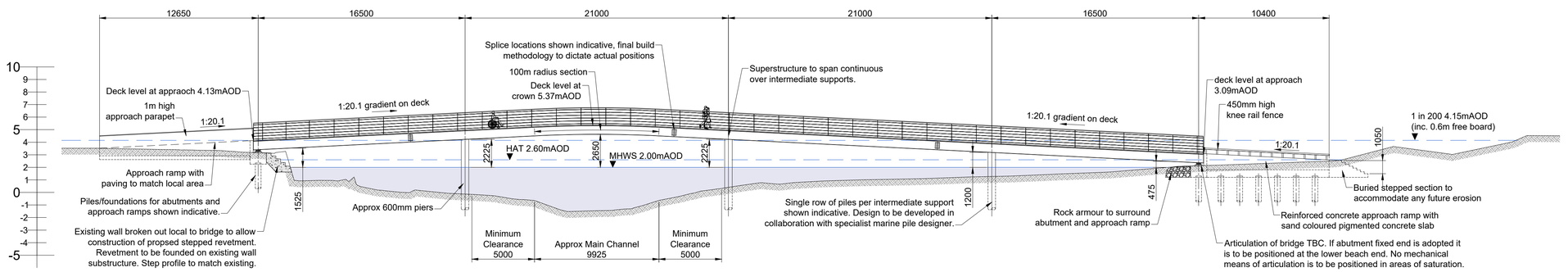
VIEW ON INFRAWORKS MODEL

SCALE NTS




TYPICAL BRIDGE SECTION

SCALE 1:20




SOUTHWEST ELEVATION

SCALE 1:200

## NOTES

1. All dimensions in millimeters. All levels in meters.
2. This drawing to be read in conjunction with other scheme drawings if applicable
3. This is a CAD produced drawing and should not be amended by hand
4. Do not scale from this drawing, work to stated dimension only. If in doubt ASK.

| Rev | Description | Chkd | By | Date |
|---|---|---|---|---|
| xx | | xx | xx | xx/xx/xx |

Beaver Bridges Ltd
5 Knights Court,
Archers Way,
Battlefield Enterprise Park,
Shrewsbury SY1 3GA
Tel: 01743 811 811

Client

MORAY COUNCIL

Project Name

LOSSIEMOUTH REPLACEMENT FOOTBRIDGE

Drawing Title

MARINE LICENSE
GENERAL ARRANGEMENT

| Start Date | Drawn | Designed | Checked | Scale |
|---|---|---|---|---|
| 16/06/2021 | LJ | LJ | SH | AS SHOWN |

| Drawing Status | Page Size |
|---|---|
| PRELIMINARY | A1 L |

| Drawing No | Rev |
|---|---|
| BB2020-ML-001 | 00 |

File: C:\Users\luke\Beaver Bridges Ltd\Beaver Bridges LTD - Documents\1. BB LTD\9. ORDERS\BB2020 Lossiemouth, Moray Council\4. DESIGN\DRAWINGS\BB2020-ML-001 0.dwg,Plotted by: luke,on; 07/07/2021 14:52:45

# Appendix H – Pre-application Consultation Report

# PRE-APPLICATION CONSULTATION REPORT

## Marine (Scotland) Act 2010: Section 24

### 1. Proposed Licensable Marine Activity

Please describe below or, where there is insufficient space, in a document attached to this form the proposed licensable marine activity, including its location:

| |
|---|
| Erection of a new 75m long footbridge over the River Lossie between the Esplanade and East Beach to replace the existing footbridge between Seatown and East Beach. |

### 2. Applicant Details

| Title | Initials | Surname |
|---|---|---|
| Mr | W | Burnish |

Trading Title

| |
|---|
| The Moray Council |

Address

| |
|---|
| PO Box 6760 |
| Elgin |
| Moray |
| IV30 9BX |

Name of Contact
(if different)

| |
|---|
| NA |

Position within Company

| |
|---|
| Senior Engineer |

| Telephone No. | Fax No. |
|---|---|
| 01343 563757 | NA |

| Company Registration No. | Email |
|---|---|
| NA | Will.Burnish@Moray.gov.uk |

Is this prospective applicant the proposed licensee?

Yes ☐ No ■

If NO, please complete Section 3 below.

**3. Proposed Licensee Details**

| Title | Initials | Surname |
|---|---|---|
| Mr | L | Jenkins |

Trading Title

| |
|---|
| Beaver Bridges Ltd. |

Address

| |
|---|
| 5 Knights Court |
| Archers Way |
| Shrewsbury |
| SY1 3GA |

Name of Contact
(if different)

| |
|---|
| NA |

Position within Company

| |
|---|
| Bridge Engineer |

| Telephone No. | Fax No. |
|---|---|
| 01743 811811 | NA |

| Company Registration No. | Email |
|---|---|
| 09733378 | Luke@beaverbridges.co.uk |

4. **Pre-Application Consultation Event**

Please describe below or, where there is insufficient space, in a document attached to this form the pre-application consultation event

| |
|---|
| The PAC event was advertised in the Press and Journal as required on Friday 30th July 2021 and on the Marine Scotland Website. A copy of the print advertisement is appended.<br><br>Due to Covid 19 restrictions and as permitted by The Marine Works and Marine Licensing (Miscellaneous Temporary Modifications) (Coronavirus) (Scotland) Regulations 2020 the PAC event was held online utilising the virtual exhibition platform www.artsteps.com.<br><br>The period of 12 weeks referred to in Section 23(2) of the Marine (Scotland) Act 2010 expired on 22nd October 2021. |

5. **Information provided by the Prospective Applicant at the Pre-application Consultation Event**

Please provide below or, where there is insufficient space, in a document attached to this form details of any information provided by the prospective applicant for a marine license at the preapplication consultation event:

| |
|---|
| A copy of the exhibition material is appended. This included visual representations, extracts from relevant studies and walkthroughs of the 3D visualisation model.<br><br>Link to the exhibition: https://www.artsteps.com/view/602a820c733453278da39f1c |

6. **Information received by the Prospective Applicant at the Pre-application Consultation Event**

Please provide below or, where there is insufficient space, in a document attached to this form details of any comments and objections received by the prospective applicant for a marine license at the pre-application consultation event:

| |
|---|
| No comments or objections have been received following the online PAC event. |

7. **Amendments made, or to be made, to the Application for a Marine Licence by the Prospective Applicant following their Consideration of Comments and/or Objections received at the Preapplication Consultation Event**

Where any amendments are made, or are to be made, by the prospective applicant for a marine licence to the marine licence application as a direct result of their consideration of comments and/or objections received at the pre-application consultation event, please provide below or, where there is insufficient space, in a document attached to this form details of such amendments:

| |
|---|
| No comments or objections received hence no amendments made. |

8. **Explanation of Approach taken by the Prospective Applicant where, following Relevant Comments and/or Objections being received by the Prospective Applicant at the Pre-application Consultation Event, no Relevant Amendment is made to the Application for a Marine License**

Where, following comments and/or objections having been received by the prospective applicant for a marine licence at the pre-application consultation event, no relevant amendment is made to the application for a marine licence by the prospective applicant, then please provide below or, where there is insufficient space, in a document attached to this form an explanation for the approach taken

| |
|---|
| NA |

CERTIFICATION

| | |
|---|---|
| Insert Name | Luke Jenkins |
| Insert Address | Beaver Bridges Ltd |
| | 5 Knights Court |
| | Archers Way |
| | Battlefield Enterprise Park |
| | |
| | |
| Town | Shrewsbury |
| County | Shropshire |
| Postcode | SY1 3GA |

I certify that I have complied with the legislative requirements relating to pre-application consultation and that the pre-application consultation has been undertaken in accordance with the statutory requirements:

[redacted]

The D&J
The Press and Journal

FRIDAY, JULY 30, 2021 £1.40

UK REGIONAL DAILY NEWSPAPER OF THE YEAR

## Chance to win £1,000 for Garden of the Year

PAGE 16

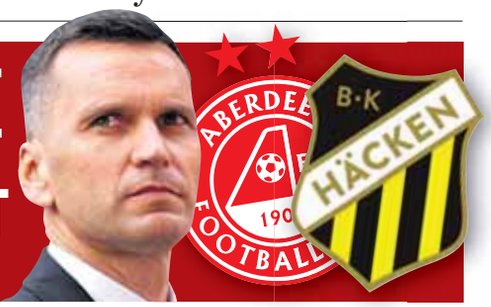
PAGE 13

## Guide dog pup in memory of mum

Kris visits north-east to meet the family who named him

## LARGER THAN LIFE FERGIE FOR PITTODRIE

SEE BACK PAGE



## DONS HOLD OUT AS SWEDES PUT UP BRAVE FIGHT

SEE BACK PAGE

# Green revolution sees centres open to more recycling

Greater freedom for households as council responds to feedback

LAUREN TAYLOR

PEOPLE power has forced greater freedom in recycling for Aberdeenshire households.

The council had imposed strict limits on the use of waste centres during the pandemic, but has now taken on board feedback from the public.

The current limits of eight car visits a month will be done away with come Sunday, August 1.

Residents will still have to book a slot to drop off their rubbish, but visits will become unlimited.

The change comes after concerns were raised over a reduction in bin collections and evidence that fly-tipping has increased during the coronavirus era.

Aberdeenshire Council waste manager Ros Baxter said the authority had listened to communities and amended their current approach accordingly.

Meanwhile NHS Grampian has reported more than 100 positive coronavirus cases in the last 24 hours – for the first time in a week.

Of the 126, 59 were in Aberdeen, 49 in Aberdeenshire, 18 in Moray and one death in Aberdeen.

Full story: Page 6

## Driver who ruined teen life is jailed

DANNY MCKAY

A driver who caused a crash that left a teenage scooter rider paralysed from the chest down has been jailed for 18 months.

Brendan Gall, 34, appeared for sentencing at Aberdeen Sheriff Court yesterday having previously been convicted of causing serious injury by dangerous driving and other offences.

Driving at speed on the B994 Kintore to Kemnay road in October 2018, Gall smashed into 19-year-old Oskar Sumera, causing extensive injuries, which have left the young man a wheelchair user.

Sheriff Philip Mann said of the teenager: "His life has been changed forever."

He told Gall: "You didn't set out to cause anyone injury, but you did drive dangerously with catastrophic consequences."

Full story: Page 11

# Recruitment

## Skilled and Trade

SHETLAND FISHERMEN

### EXECUTIVE OFFICER

'Shetland Fishermen' is a collective term for three organisations that together serve the interests of Shetland's fish catching industry: Shetland Fishermen's Association (SFA), Shetland Fish Producers' Organisation (SFPO) and Shetland Shellfish Management Organisation (SSMO). Although legally distinct, and with different remits, they work closely together and share offices in Lerwick.

An exciting opportunity has now arisen to join the Shetland Fishermen team as SFA Executive Officer.

The SFA is a long-established trade body charged with the political representation of Shetland's fish catching industry. Sustainable fishing plays a vital role in Shetland's economy, and the waters around Shetland account for a significant proportion of UK fish catches every year. SFA membership today extends to some 120 vessels, ranging in size from five to over 80 metres, and the almost 500 fishers that own and crew them.

Reporting initially to the existing executive team, the successful candidate will assist with the representation of our members' interests on wider industry bodies, in local and national government and in the media.

Applicants will be expected to be articulate, enthusiastic and capable of taking responsibility for a demanding workload that is liable to change at short notice. Experience of the fisheries sector is not essential but would be an advantage.

The successful candidate is likely to have had some experience in a responsible role and be educated to degree level or a professional equivalent.

An attractive salary and benefits package will be on offer for this position.

Informal enquiries are welcome and should be made to Una Simpson, Office Manager (01595 693197 or una@shetlandfishermen.com). Further particulars are available upon request.

**To apply for this position, please send your CV, together with a covering letter outlining your suitability for the position, to James Anderson, Chairman, Shetland Fishermen's Association, Mair's Quay, Lerwick ZE1 0PW.**

**The closing date for receipt of applications is 27 August 2021.**



## Health and Care

FERRYHILL COMMUNITY CENTRE
Albury Road, Aberdeen AB11 6TN
manager@ferryhillcommunitycentre.org.uk

*Position 1 :-*
**BREAKFAST CLUB ASSISTANT** (Term Time)
**7.30-9.30 5 days per week**
**Experience and PVG preferred but not necessary.**

*Position 2 :-*
**DUTY ASSISTANT** (Term Time)
**Monday eve 4.15p.m. – 8.30.p.m.**
**Sunday 9.45 -2.15p.m.**

Interested applicants can apply for both or one of the above positions by email to the Manager using the above email address.

## Skilled and Trade

**A.C. Morrison & Richards**
**Solicitors & Estate Agents**

### LEGAL SECRETARY

Vacancy for a Legal Secretary. Previous experience in conveyancing and general private client work preferred. Full or part-time considered.

Applications in writing to: Fiona Milne, A.C. Morrison & Richards, Solicitors, 18 Bon Accord Crescent, Aberdeen AB11 6XY

fmilne@acmr.co.uk

## Health and Care

THE PRINCE'S FOUNDATION

Rothesay Rooms, the award-winning Royal Deeside restaurant, is recruiting for a range of part-time, full-time and seasonal front-of-house roles, and for an ambitious restaurant supervisor.

Our Ballater destination eatery has been included in the Michelin Guide since 2018 and has built a reputation for decadent dining and exquisite customer service. The ideal candidates will be passionate about great food, wine and hospitality. While experience in the hospitality industry in managerial or customer service positions is preferred, training will be provided.

The restaurant, run by charity The Prince's Foundation, is located in the heart of beautiful Royal Deeside, roughly one hour from Aberdeen, Huntly, Grantown-on-Spey, Aviemore, and Blairgowrie.

**Please send CVs and enquiries about all available roles to Carolina Cochrane, group general manager, at c.cochrane@dumfries-house.org.uk**



# Notice Board

## Public Notices

**BEAVER BRIDGES LIMITED, 5 KNIGHTS COURT, ARCHERS WAY, BATTLEFIELD ENTERPRISE PARK SHREWSBURYSY1 3GA**

**ACTING AS AGENT FOR THE MORAY COUNCIL, PO BOX 6760, ELGIN MORAY IV30 9BX**

**MARINE (SCOTLAND) ACT 2010**

**MARINE LICENSING (PRE-APPLICATION CONSULTATION) (SCOTLAND) REGULATIONS 2013**

Notice is hereby given that The Moray Council, having its registered office at PO Box 6760

Elgin, Moray, IV30 9BX plans to hold an online (due to Covid-19 restrictions) pre-application consultation event regarding licensable marine activities relating to the proposed Lossiemouth East Beach Replacement Footbridge.

(i) Description:

Erection of a new footbridge over the River Lossie in Lossiemouth between the Esplanade (opposite 17C Clifton Road) and East Beach to replace the existing footbridge between Seatown and East Beach. The proposed bridge is to project from an increased level at the Esplanade, crossing over to the beach in 4 spans totalling an approximate 75m length. The bridge will be a minimum of 3.5m wide and will be designed to allow access to a multitude of users.

(ii) For further information please refer to The Moray Council online planning portal https://publicaccess.moray.gov.uk/eplanning and search for application 21/00809/APP.

(iii) The pre-application online consultation event will be held on an online platform due to current Covid-19 restrictions on the following dates:

For 2 days, 6 weeks after the publication of this notice. E.g., September 6th - 7th 2021

Please type the following link into your internet browser to access the consultation event:

Address for the online platform E.g., https://www.artsteps.com/view/602a820c733453278da39f1c

(iv) Persons wishing to provide comments on the proposed new bridge, can do so by writing to / or emailing Beaver Bridges, no later than **September 31st 2021.**

**By Email**: info@beaverbridges.co.uk

**In writing** to Beaver Bridges Ltd, 5 Knights Court, Archers Way, Battlefield Enterprise Park, Shrewsbury , SY1 3GA.

Comments should be dated and should clearly state the name (in block capitals) and full return e-mail or postal address of those making comment.

(v) Comments made to the prospective applicant are not representations to the Scottish Ministers. If Beaver Bridges Limited on behalf of The Moray Council makes an application for a marine licence, an opportunity will be given for representations to be made to the Scottish Ministers on the application.

### CONDITIONS OF ACCEPTANCE OF ADVERTISEMENTS

The Publishers retain full discretion as to the contents of "The Press and Journal" and reserve the full right to refuse to publish an advertisement or omit or suspend any advertisement for which an order has been accepted in every case without stating any reasons for doing so.
While every effort will be made to insert an advertisement at the time specified, no guarantee can or will be given for such insertion. The Publishers shall not be liable for any error, omission or inaccuracy in a published advertisement, nor do they accept any liability for any loss which the Advertiser may allege to have been caused by any such error, omission or inaccuracy. No responsibility is taken for any mishap in handling box number replies.
The Publishers reserve the right to alter, modify, suspend or cancel an advertisement at any time without notice.
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The Advertiser confirms that any information supplied with the advertisement is accurate, complete, true and not misleading. Furthermore, the Advertiser guarantees that the Advertisement is legal, decent, honest and truthful, and complies with all relevant law and regulation including codes and industry guidance in regards to an advertisement and its products or services.
The Advertiser's personal data will be processed in accordance with our privacy policy which can be found at https://www.dcthomson.co.uk/privacy-policy/
The placing of an order shall be considered as an acceptance of these conditions.

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YourAds, P.O. Box 43,
1 Marischal Square, Broad Street,
Aberdeen AB10 1BL



### GOODS VEHICLE OPERATOR'S LICENCE

MENZIES DISTIBUTION LTD of UNIT E TWELVETREES BUSINESS PARK, TWELVETREES CRESCENT, LONDON, E3 5JG is applying to change an existing licence as follows. To add and operating centre to keep 7 good vehicles and 0 trailers at 16, COXTON PARK, ELGIN, IV30 8AZ.

Owners or occupiers of land (including buildings) near the operating centre(s) who believe that their use or enjoyment of that land would be affected, should make written representations to the Traffic Commissioner at Hillcrest House, 386 Harehills Lane, Leeds, LS9 6NF, stating their reasons, within 21 days of this notice. Representors must at the same time send a copy of their representations to the applicant at the address given at the top of this notice. A Guide to Making Representations is available from the Traffic Commissioner's Office.

Lossiemouth East Beach Footbridge Replacement Virtual Exhibition

# Welcome

The Purpose of this Exhibition it to allow you the opportunity to see the effect of the New Bridge at Lossiemouth on the Marine Environment

BEAVER BRIDGES

LOSSIEMOUTH COMMUNITY DEVELOPMENT TRUST

Scottish Government
Riaghaltas na h-Alba
gov.scot

HIE
Highlands and Islands Enterprise
Iomairt na Gàidhealtachd 's nan Eilean

MORAY COUNCIL

# Background

- The original footbridge linking the town of Lossiemouth to the East Beach was constructed in 1906 by Lossiemouth Town Council.
- In 1918 the footbridge was relocated to its current position by the Old Harbour Commission,
- The Lossiemouth Old Harbour Commission ceased to exist when the harbour closed, at which point the footbridge became ownerless. This was confirmed in 2016 by the "Queens And Lord Treasurers Remembrance" Crown.
- In August 2019 a central span of the footbridge failed and it was closed in the interest of public safety.
- In September 2019 The Scottish Government's Culture Secretary committed to funding the work required to reinstate a crossing to the East Beach.
- In August 2020, Moray Council granted Planning Permission for the bridge to be constructed at the Esplanade

Lossiemouth East Beach Footbridge Replacement Virtual Exhibition

# New Footbridge at the Esplanade

View 1 : From South West at High Tide

View 2 : From South West at Low Tide

View 3 : From Esplanade

View 4 : From North East

Lossiemouth East Beach Footbridge Replacement Virtual Exhibition

# Works within the Marine Environment

As part of the Marine Licence process we are would like to inform you of the works which are planned within the Marine Environment

The following are key task which will be undertaken in the marine environment:-

1. Installing of 3 number piers below Mean High Water springs. The piers are designed to support the main bridge.
2. The east abutment and approach ramp will be constructed within the beach area. The ramp is designed to ensure access for all and is protected with rock armour.
3. The centre span clearance for navigation will be higher that the highest point on the existing bridge

Lossiemouth East Beach Footbridge Replacement Virtual Exhibition

# Outcomes of Ecological Appraisal : Habitat

**Potential constraints:**

- Spey Bay SAC
- Moray Firth SAC
- Salt marsh and dune grassland

**Mitigation measures:**

- Works will not effect SAC within the area
- All Site Compounds to be on existing Hard Standing
- Minimal foot print area is required on which to construct the bridge.

Lossiemouth East Beach Footbridge Replacement Virtual Exhibition

# Outcomes of Ecological Appraisal : Otters

**Potential constraints:**

- Otters traveling long the river
- Limited opportunities for rest points for otters within work site

**Mitigation measures:**

- Any exposed pipe should be capped
- Exit ramps from trenches should be provided
- Works to be limited to day light hours
- Undertake ecological awareness tool box talks

Lossiemouth East Beach Footbridge Replacement Virtual Exhibition

# Outcomes of Ecological Appraisal : Birds

**Potential constraints:**

- Nesting birds in the grassland and dune areas
- Nesting birds in vegetation on Clifton Road

**Mitigation measures:**

- Works to commence prior to nesting season
- All Vegetation that requires to be removed to be done by end of March 2022
- Undertake ecological awareness tool box talks

Lossiemouth East Beach Footbridge Replacement Virtual Exhibition

# Outcomes of Ecological Appraisal : Fish

**Potential constraints:**

- The river will be used by a range of fish species
- The bridge site does not contain suitable habitat for spawning fish

**Mitigation measures:**

- If pile driving is required then undertake a spate risk assessment to determine if further mitigation methods are required.
- Undertake ecological awareness tool box talks

# **Outcomes of Ecological Appraisal :** Marine Mammals

**Potential constraints:**

- Dolphins within the Moray Firth
- Seals hauling out on to beach

**Mitigation measures:**

- If pile driving is required then undertake a spate risk assessment to determine further mitigation methods are required.
- If seals haul out or are seen within the locality of the works, works to stop
- Undertake ecological awareness tool box talks

Lossiemouth East Beach Footbridge Replacement Virtual Exhibition

# **Outcomes of Ecological Appraisal :** Conclusions

The proposed works are in an area which has significant human disturbance. The dune and saltmarsh grasslands are an important habitat, and disturbance to these areas should be kept to a minimum. A range of bird species use the area but are unlikely to nest close to the bridge. However, any disturbance of breeding should be avoided by timing the works outside the breeding season and / or checking the ground prior to commencing work.

# Feedback

If you wish to give us you feed back on the event you can :-

**Email:** flooding@moray.gov.uk

**Write to:** Lossiemouth East Beach Bridge Project Team
Consultancy, Moray Council,
PO Box 6760, Elgin, Moray,
IV30 9BX

BEAVER BRIDGES

LOSSIEMOUTH COMMUNITY DEVELOPMENT TRUST

Scottish Government
Riaghaltas na h-Alba
gov.scot

HIE
Highlands and Islands Enterprise
Iomairt na Gàidhealtachd 's nan Eilean

moray COUNCIL

# Appendix I – Planning Decision Notice

**MORAY COUNCIL**
**TOWN AND COUNTRY PLANNING (SCOTLAND) ACT 1997, as amended**

**PERMISSION FOR DEVELOPMENT**

**[Heldon And Laich]**
**Application for Planning Permission**

TO [redacted]

With reference to your application for planning permission under the above-mentioned Act as amended, Moray Council in exercise of its powers hereby **GRANT** planning permission for the following development:-

**Erection of new footbridge over River Lossie between Esplanade and East Beach to replace existing footbridge between Seatown and East Beach on Site Opposite 17C Clifton Road Lossiemouth Moray**

in accordance with the plan(s) docquetted as relative hereto and the particulars given in the application, and where appropriate, subject to the condition(s) and reason(s) as set out in the attached schedule.

This permission does not carry with it any necessary consent or approval to the proposed development under the building regulations or other statutory enactments and the development should not be commenced until all consents have been obtained.

Date of Notice: **4 August 2021**

[redacted]

**Head Economic Growth and Development Services**
Economy, Environment and Finance
Moray Council
Council Office
High Street
ELGIN
Moray
IV30 1BX

**IMPORTANT NOTE**

**YOU ARE OBLIGED TO COMPLY WITH THESE CONDITIONS AND NOTES**

**SCHEDULE OF CONDITIONS**

By this Notice the Moray Council has **GRANTED PLANNING PERMISSION** for this proposal subject to conditions as appropriate to ensure implementation of the proposal under the Town & Country Planning (Scotland) Act 1997, as amended. **It is important that these conditions are adhered to and failure to comply may result in enforcement action being taken.**

**CONDITION(S)**
Permission is granted subject to the following conditions: -

1 No works in connection with the development hereby approved shall commence unless an archaeological Written Scheme of Investigation (WSI) has been submitted to and approved in writing by the Council, as Planning Authority and a programme of archaeological works has been carried out in accordance with the approved WSI. The WSI shall include details of how the recording and recovery of archaeological resources found within the application site shall be undertaken, and how any updates, if required, to the WSI will be provided throughout the implementation of the programme of archaeological works. Should the archaeological works reveal the need for post excavation analysis the development hereby approved shall not be brought into use unless a Post-Excavation Research Design (PERD) for the analysis, publication and dissemination of results and archive deposition has been submitted to and approved in writing by the Council, as Planning Authority. The PERD shall be carried out in complete accordance with the approved details.

**Reason:** To safeguard and record the archaeological potential of the area.

2 Notwithstanding the submitted details, no works in connection with the development hereby approved shall commence unless the following has been submitted to and approved by the Council, as Planning Authority in consultation with the Roads Authority:

a) Detailed drawings (Scale 1:500 minimum) showing the location, design specifications, materials and timescale for the provision of pedestrian and cycle routes from the south of The Esplanade side of the new bridge, including the provision of new paths and the widening of existing paths, to ensure minimum widths of 3.0 metres for any routes to be used by cyclists, and an enhanced circulatory area where the new bridge meets The Esplanade at Clifton Road. Dropped kerbs and tactile paving are to be provided at all locations where the route(s) meet with or cross the public road and 'Ladder'/'Tramline' paving is to be provided at all locations where pedestrian only routes meet with shared pedestrian/cycle routes. (Note: On existing routes which are to be utilised by cyclists and/or wheelchair users, 'cobbles' and other uneven surfaces must be reviewed and, if necessary, replaced with a surface suitable for wheeled users).

b) Detailed drawings (Scale 1:200 minimum) showing the longitudinal sections of all new and widened paths connecting to the existing paths

and to the circulatory area at The Esplanade end of the new bridge to demonstrate that gradients are compliant with mobility standards. Cross Section drawings (Scale 1:100 minimum) showing any required re-grading of slopes adjacent to the new/widened paths and the location and design specification for any required ground retaining features.

c) Detailed drawings (Scale 1:500 minimum) showing the location, design specifications and timescale for the provision of a cycle route utilising Clifton Road and the adjacent improved paths to provide access for cyclists travelling from the A941 to the new bridge, including all signage, road markings and dropped kerbs to direct and aid cyclists travelling to the bridge and nearby cycle parking.

d) Detailed drawings (Scale 1:500 minimum) showing the location, design specifications and timescale for the provision of wayfinding signage for pedestrians and cyclists from the northern and southern approaches to the new bridge, in particular from the Gregory Place and Station Car Parks and from the A941 (Clifton Road).

e) Detailed drawings (Scale 1:500 minimum) showing the location, design specifications and timescale for the provision of additional signage directing road users from the A941 Elgin Road to the Public Car Parks within Lossiemouth and the relocation of the existing road signage on the southern side of Seatown Ring Road/Church Street to the rear of the proposed new footway at the Gregory Place Car Park.

f) Detailed drawings (Scale 1:500 minimum) showing the design specifications, materials and timescale for the provision of a new footway connecting the Gregory Place Car Park to Seatown Ring Road/Church Street on either the eastern or western side of the existing vehicular access.

Thereafter the improvements to pedestrian and cycle access and signage shall be provided in accordance with the approved details and agreed timescales.

**Reason:** To ensure provision of safe and suitable access to the bridge for pedestrians (including those with mobility impairments) and cyclists in the interest of road safety.

3 No works in connection with the development hereby approved shall commence unless the following has been submitted to and approved by the Council, as Planning Authority in consultation with the Roads Authority regarding:

a) A Construction Traffic Management Plan which shall include the following information:

i) Construction Programme, including start date and duration of works;

ii) Details of the location of a site compound for the storage of materials, equipment, staff parking, deliveries and the provision of welfare facilities;

iii) Measures to be put in place to prevent material being deposited on the public road;

iv) Measures to be put in place to safeguard the movements of pedestrians and cyclists;

v) Traffic management measures to be put in place during the works, including any specific instructions to drivers, including delivery drivers.

And

b) Details of any required/proposed temporary construction access which shall include the following information:
   i) A drawing (scale 1:500 minimum) regarding the location and design specifications of the proposed access(es);
   ii) Specification of the materials used for the construction access(es);
   iii) All traffic management measures required to ensure safe operation of the construction access(es);
   iv) Details, including materials, for the reinstatement of any temporary construction access(es); and
   v) Details regarding the timescale for the opening up and closure of any temporary access(es) together with the time period over which the temporary access(es) will be used.

Thereafter the development shall be implemented in accordance with the approved details.

**Reason:** To ensure an acceptable form of development in terms of the arrangements to manage traffic and construction vehicles during construction works at the site, and in the interests of road safety and the amenity of the area/adjacent properties.

4 The development hereby approved shall be carried out in accordance with the mitigation measures specified in section 5 of the Preliminary Ecological Survey by Walking the Talk dated 21 October 2020 approved as part of this application.

**Reason:** In order to ensure the development is carried out with minimal impact on species that may potentially be present in and around the development site.

5 Within one month of completion of works or first use of the bridge (whichever is the soonest) evidence shall be submitted to the Council, as Planning Authority, that shows as built drawings of the bridge have been submitted to the UK Hydrographic Office (Admiralty Way, Taunton, Somerset, TA1 2DN) for their records.

**Reason:** To ensure the UK Hydrographic Office charts can be updated timeously, in the interests of navigational safety of mariners.

6 No development shall commence until details of the colour of finishes for all steel work (bridge decking and legs) of the bridge hereby approved shall be submitted to and approved in writing by the Council, as Planning Authority. Thereafter the development shall be implemented accordance with the approved details.

**Reason:** To ensure the finishes of the bridge are appropriate details of which are lacking and in the interests of the character of the surrounding area.

**REASON(S) FOR DECISION**
The Council's reason(s) for making this decision are:-

The proposed bridge would be sited and designated appropriate for its location, and would not have a detrimental impact on the character and amenity of the surrounding area. Suitable upgrades are proposed in order to ensure local footpaths and road infrastructure can safely serve the proposed bridge. In this regard, the proposal is in accordance with the provisions of the Moray Local Development Plan 2020 (MLDP).

Half of the bridge would fall outwith the settlement boundary of Lossiemouth, as defined in the MLDP and also sits within the Lossiemouth to Portgordon Coast Special Landscape Area designation. Policy EP3 - Special Landscape Areas only permits development outwith defined settlements in certain circumstances, and the proposal is not covered under any of the permitted uses specified in the policy for rural areas (i.e. those outwith defined settlement boundaries). Policy EP6 - Settlement Boundaries does not permit any development immediately outwith the settlement. However, the supporting information provided with the application demonstrates the significant benefits the proposal will have for the local economy. The proposal will also improve public access to a valued amenity, with subsequent benefits for health and wellbeing. The proposal is considered to be an acceptable departure from these policies in unique circumstances and is unlikely to set a precedence for development elsewhere that would be contrary to these policies.

**LIST OF PLANS AND DRAWINGS SHOWING THE DEVELOPMENT**
The following plans and drawings form part of the decision:-

| Reference | Version | Title |
|---|---|---|
| BB2020-PL-001 | 00 | Location plan |
| BB2020-PL-003 | 00 | Constraints plan |
| BB2020-PL-008 | P01 | Landscape plan |
| BB2020-PL-005 | 00 | Proposed drainage layout and details |
| BB2020-PL-004 | P01 | Proposed fencing |
| BB2020-PL-002 | P02 | Proposed footbridge general arrangement |
| BB2020-PL-006 | P02 | Proposed kerbs footways paved areas and signs |
| BB2020-PL-007 | P03 | Proposed kerbs footways paved areas and signs |

**IMPORTANT NOTES ABOUT THIS DECISION**

**DURATION OF THIS PERMISSION**
In accordance with Section 58 (i) of the Town and Country Planning (Scotland) Act 1997 as amended, the development to which this permission relates must be begun not later than the expiration of 3 years beginning with the date on which this permission is granted.

If the development has not commenced within this period then this permission shall lapse unless there is a specific condition attached to this permission which varies the stated timescale.

## COMMENCEMENT AND COMPLETION OF THE DEVELOPMENT

The following are statutory requirements of the Town & Country Planning (Scotland) Act 1997, as amended. Failure to meet their respective terms represents a breach of planning control and may result in formal enforcement action. Copies of the notices referred to below are attached to this permission for your use.

## NOTIFICATION OF INITIATION OF DEVELOPMENT

S.27A of the 1997 Act, as amended requires that any person who has been granted planning permission (including planning permission in principle) and intends to start development must, as soon as practicable after deciding the date they will start work on the development, give notice to the planning authority of that date. This ensures that the planning authority is aware that the development is underway and can follow up on any suspensive conditions attached to the permission. Therefore, prior to any work commencing on site, the applicant/developer must complete and submit to the Moray Council, as planning authority, the attached Notification of Initiation of Development.

## NOTIFICATION OF COMPLETION OF DEVELOPMENT

S.27B of the 1997 Act, as amended requires that any person who completes a development for which planning permission (including planning permission in principle) has been given must, as soon as practicable after doing so, give notice of completion to the planning authority. This will ensure that the planning authority is aware that the development is complete and can follow up any planning conditions. Therefore, on completion of the development or as soon as practicable after doing so, the applicant/developer must complete and submit to the Moray Council, as planning authority the attached Notification of Completion of Development.

## NOTIFICATION OF COMPLETION OF PHASED DEVELOPMENT

Under S.27B(2) of the 1997 Act, as amended where permission is granted for phased development, the permission is subject to a condition (see Schedule of Conditions above) requiring the applicant/developer as soon as practicable after each phase to give notice of that completion to the planning authority. This will allow the planning authority to be aware that particular phase(s) of the development is/are complete.

When the last phase is completed the applicant/developer must also complete and submit a Notification of Completion of Development.

## ADDITIONAL NOTES FOR INFORMATION OF THE APPLICANT

The following notes are provided for your information including comments received from consultees:-

THE NORTHERN LIGHTHOUSE BOARD have commented that:-

> Marine safety information and a local Notice to Mariners must be issued to water users and a copy provided to the Northern Lighthouse Board prior to and during the course of works in the construction of the bridge.

THE TRANSPORTATION MANAGER, DIRECT SERVICES has commented that:-

Planning consent does not carry with it the right to carry out works within the public road boundary.

Before commencing development the applicant is obliged to provide all technical information, including drawings and drainage calculations, to be reviewed. Upon completion of the development the application is obliged to provide As Built drawings to enable the inclusion of the works on the asset management database and GIS layers. Advice on this matter can be obtained by emailing transport.develop@moray.gov.uk

Before starting any work on the existing public road the applicant is obliged to apply for a road opening permit in accordance with Section 56 of the Roads (Scotland) Act 1984. This includes any temporary access joining with the public road. Advice on these matters can be obtained by emailing roadspermits@moray.gov.uk

No building materials/scaffolding/builder's skip shall obstruct the public road (including footpaths) without permission from the Roads Authority.

The applicant shall free and relieve the Roads authority from any claims arising out of their operations on the road or extension to the road.

No retaining structures or embankments shall be constructed along the edge of the road, whether retaining the public road or ground adjoining the public road without prior consultation and agreement of the Roads Authority.

**DETAILS OF ANY VARIATION MADE TO ORIGINAL PROPOSAL, AS AGREED WITH APPLICANT (S.32A of 1997 ACT)**

None

**DETAILS WHERE DIFFERENT TIME-PERIOD(S) FOR DURATION OF PLANNING PERMISSION IMPOSED (S.58/59 of 1997 ACT)**

None

**TERMS OF S.75 AGREEMENT RELATING TO THIS APPLICATION**

The terms, or summary of terms of the Agreement can be inspected at:-

None

## NOTICE OF APPEAL

## TOWN AND COUNTRY PLANNING (SCOTLAND) ACT 1997

If the applicant is aggrieved by the decision to refuse permission for or approval required by a condition in respect of the proposed development, or to grant permission or approval subject to conditions, the applicant may appeal to the Scottish Ministers under section 47 of the Town and Country Planning (Scotland) Act 1997 within three months from the date of this notice. The notice of appeal should be addressed to the Planning and Environmental Appeals Division, Scottish Government, Ground Floor, Hadrian House, Falkirk, Callendar Business Park, Callendar Road, FK1 1XR. This form can be obtained and may also be downloaded and/or submitted online from www.eplanning.scotland.gov.uk

If permission to develop land is refused or granted subject to conditions whether by the planning authority of by the Scottish Ministers, and the owner of the land claims that the land has become incapable of reasonably beneficial use in its existing state and cannot be rendered capable of reasonably beneficial use by the carrying out of any development which has been or would be permitted, the owner of the land may serve on the planning authority a purchase notice requiring the purchase of the owner of the land's interest in the land in accordance with Part 5 of the Town and Country Planning (Scotland) Act 1997.

# MORAY COUNCIL

## NOTIFICATION OF INITIATION OF DEVELOPMENT

Section 27A Town and Country Planning (Scotland) Act 1997

| | |
|---|---|
| Application Number | **21/00809/APP** |
| Date Decision Issued | |
| Location and Description of Development | Erection of new footbridge over River Lossie between Esplanade and East Beach to replace existing footbridge between Seatown and East Beach on Site Opposite 17C Clifton Road Lossiemouth Moray |

**Please note that all suspensive conditions must be discharged prior to commencement of development**

| | |
|---|---|
| **Date works are to Commence** | |

**Name, Address and contact details of developer**

. . . . . .

. . . . . .

**The Full name and Address and contact details of the landowner, if a different person**

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**Where an agent is appointed, their full name and contact details**

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Signed . . . . . .

Name (Print) . . . . . .

Date . . . . . .

**Please complete and return this form to:**

**Development Management & Building Standards Manager, Moray Council, PO Box 6760, Elgin, Moray, IV30 1BX**
**OR**
**E-mail: development.control@moray.gov.uk**

# MORAY COUNCIL

## NOTIFICATION OF COMPLETION OF DEVELOPMENT

Section 27A Town and Country Planning (Scotland) Act 1997

| | |
|---|---|
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| | |
|---|---|
| **Date of completion of works** | |

**Name, Address and contact details of developer**

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**The Full name and Address and contact details of the landowner, if a different person**

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**Where an agent is appointed, their full name and contact details**

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Signed . . . . . .

Name (Print) . . . . . .

Date . . . . . .

**Please complete and return this form to:**

**Development Management & Building Standards Manager, Moray Council, PO Box 6760, Elgin, Moray IV30 1BX**

**E-mail: development.control@moray.gov.uk**