EC DIRECTIVE 97/11 (as amended)

ROADS (SCOTLAND) ACT 1984 (as amended)

RECORD OF DETERMINATION

Name of Project:	**Location:**
A96 409 Fochabers Old Bridge Deck Refurbishment	A96 409 Fochabers Old bridge on a line located by joining: NGR 333969, 859482 + NGR 334059, 859403

DESCRIPTION OF PROJECT

BEAR Scotland (BEAR) has been commissioned by Transport Scotland to undertake bridge deck refurbishment works on the A96 409 Fochabers Old bridge. The bridge spans the River Spey between Fochabers and Mosstodloch (Appendix A, Figure 1 and Figure 2).

The bridge deck and parapets require continual maintenance and upkeep to ensure operational and safety standards are maintained across the structure.

The works will comprise of the following:

- Trim back tree branches overhanging the bridge (to prevent interference with works),
- Remove vegetation and organic material from deck,
- New deck joint to be installed at Piers 3 and 4,
- Concrete repairs on bridge deck (where required) and then waterproof and resurface bridge deck,
- Repair existing parapet,
- Lift and re-bed concrete paving slabs (various locations),
- Concrete repairs to in-situ kerbs,
- Install new metal gully covers to match existing, and clean out drainage system,
- Install new pedestrian guardrail (fixed to footway),
- White lining to show cycle lane/pedestrian footway segregation.

The works are programmed to begin 8th March 2021, with works taking place Monday to Friday from 07:30 to 17:00. Weekend working may be programmed to optimise weather and operational activities. No traffic management will be required as the bridge is pedestrianised.

PROJECT PROCUREMENT

The scheme is executed by the operating company as site operations – 'As of Right' scheme.

DESCRIPTION OF LOCAL ENVIRONMENT

The sections below provide a brief description of the local environment in vicinity of the A96 409 Fochabers Old bridge. The baseline information is based on a review of currently available information obtained from a desk-based study.

The headings have been set out to follow the recently updated Design Manual for Roads and Bridges (DMRB) chapters for environmental assessment and do not reflect a ranking of impact severity. Unless otherwise stated,

the study area considered for the assessment of potential impacts extends 300 m in each direction of the A96 409 Fochabers Old bridge.

1.0 Population and human health

Baseline information was collected through a desktop assessment containing data obtained from online web-based mapping tools including; Google Maps and Google Street View, Envirocheck, Ordnance Survey (OS), NatureScot, Scotland's Environment (SE), Scotland's Environment Scotland's Soils (SESS), SUSTRANS and the Road Traffic Statistic.

1.1 Properties (within distance bands)

Only twenty-four residential properties and one business premise lie within 300 m of the bridge. In total, two residential properties lie within 50 m of the bridge, six lie between 50 m and 100 m, ten lie between 100 m and 150 m, four lie between 150 m and 200 m, and two lie between 250 m and 300 m. The business premise lies 100 m north of the bridge. Residential properties nearest to the bridge (e.g. eight within 100 m) have no screening, with one property bordering and facing directly onto the bridge. Residential properties further afield are generally screened by intervening properties or a riparian embankment bordering the River Spey. The business premise is screened from the bridge by a riparian embankment bordering the River Spey. There are no sensitive receptors, community facilities or public open spaces within 300 m of the bridge.

1.2 Land use

The A96 409 Fochabers Old bridge lies within the Moray Council local authority area. At the time of writing, there are no planning applications within 300 m of the A96 409 Fochabers Old bridge[1].

BEAR do not currently have any major projects programmed in vicinity of the A96 409 Fochabers Old bridge.

The A96 409 Fochabers Old bridge spans the River Spey and connects the villages of Fochabers and Mosstodloch. Land use within 2 km of the bridge is categorised into the following[2]; (i) freshwater area, (ii) cultivated former parkland, (iii) managed woodland, (iv) designed landscape, (v) rectilinear fields and farms, (vi) industrial / commercial area, (vii) plantation, (viii) urban, and (ix) agricultural planned village.

The national scale land capability for agriculture[3] classifies land surrounding the A96 409 Fochabers Old bridge as being 'Class 3.2' – land capable of average production though high yields of barley, oats and grass can be obtained (grass leys are common) and 'Class 6.2' – land capable of use as rough grazings with moderate quality plants.

[1] https://publicaccess.moray.gov.uk/eplanning/spatialDisplay.do?action=display&searchType=Application Moray Council) [Accessed 27/01/21]
[2] https://map.hlamap.org.uk (HLAmap) [Accessed 27/01/21]
[3] http://map.environment.gov.scot/Soil_maps/?layer=1# (Scotland's Environment Scotland's Soils) [accessed 27/01/21]

1.3 Non-motorised user & community facilities

There are no National Cycle Network[4] routes within 300 m of the A96 409 Fochabers Old bridge. The bridge is pedestrianised and as such a pedestrian footpath[5] runs the length of the bridge. The pedestrian footpath is also recorded as a Core Paths[6] (FB08). Two further Core Paths lie within 300 m of the bridge e.g. Core Path SW02 and SRA02 connect to the bridge and the eastern extent of the bridge. There are no Public Rights of Way[7], pedestrian crossing points (controlled or uncontrolled), bus stops, bridle paths or other community assets within the study area. Street lighting is absent on the A96 409 Fochabers Old bridge.

1.4 Vehicle travellers

A96 409 Fochabers Old bridge is pedestrianised therefore no vehicular traffic on the bridge.

The A96, at the bridge, is a single carriageway with an Annual Average Daily Traffic (AADT) flow (2019 data) of 12,503 (ID: 50782) comprised of:

- 35 two wheeled motor vehicles,
- 9,214 cars and taxis,
- 0 pedal cycles (cyclists utilise the A96 409 Fochabers Old bridge),
- 51 bus and coaches,
- 2,419 Light Goods Vehicles (LGVs), and
- 784 Heavy Goods Vehicles (HGVs).

2.0 Air quality

Baseline information was collected through a desktop assessment including data obtained from online web-based mapping tools including; Scotland's Environment (SE), Air Quality in Scotland (SEAQS), Google Maps and Google Street View, Envirocheck, EU Pollutant Release and Transfer Register (PRTR), and Ordnance Survey (OS).

Baseline air quality is mainly influenced by vehicles travelling along the A96. Secondary sources are derived from vehicles travelling along the local road network, urban activities within Fochabers and Mosstodloch, and day-to-day agricultural and forestry land management activities.

There are no Air Quality Management Areas[8] (AQMAs) within 300 m of the A96 409 Fochabers Old bridge. Whilst no monitoring of air quality levels has been undertaken as part of this assessment, at the time of writing, automatic monitoring stations within the wider area record bandings in the 'green zone' (Low Index 1), and it is considered

[4] The National Cycle Network (NCN) is a network of cycle routes comprising minor routes, disused railways, pedestrian routes, canal towpaths and traffic calmed routes, created by the charity Sustrans. Given the mixed nature of routes that make up the NCN, sections of the network are also designated as Core Paths or Public Rights of Way.
[5] Local paths hold no statutory designation and can be pavements adjacent to roads or off-road paths.
[6] Core Paths can include; Public Right of Ways, footpaths, cycle tracks, paths covered by path agreements / orders, waterways, or crossing land to facilitate, promote and manage the exercise of access rights under the Land Reform (Scotland) Act 2003 (Sections 20 and 21), and are identified as such in Local Authority Core Paths plans.
[7] The National Catalogue of Rights of Way is maintained by ScotWays in partnership with Scottish Natural Heritage and local authorities (who can also retain their own records). Access along Public Rights of Ways are protected by the Countryside (Scotland) Act 1967, Section 46.
[8] Under section 83(1) of the Environment Act 1995, Local Authorities have a duty to designate any relevant areas where air quality objectives are not (or are unlikely to be) being met as Air Quality Management Areas.

that these readings are representative of air quality at the A96 409 Fochabers Old bridge[9]. Readings in the 'green zone' suggest that National Air Quality Strategy (NAQS) objectives are likely to be met and that air quality in the area is relatively good.

The European PRTR[10] online mapping tool does not identify any industrial or waste management sources within 1 km of the scheme.

3.0 Cultural heritage assessment

Baseline information was collected through a desktop assessment including data obtained from online web-based mapping tools including; the Royal Commission on the Ancient and Historical Monuments of Scotland (RCAHMS), Ordnance Survey (OS), Google Maps and Google Street View.

The A96 409 Fochabers Old bridge is a Category A listed structure '*Old Spey Bridge*' (ID: LB15645). The Category B listed '*Spey Bridge, Old Toll House*' (LB15646) also lies adjacent to the bridge (northern extent). Of lesser cultural heritage value, both the A96 409 Fochabers Old bridge and tollhouse are also recorded as Canmore National Records (CNRs) (ID: 16899 and 162145 respectively). In addition, five CNRs lie within 300 m of the scheme. There is no connectivity between the scheme and the five CNRs. The scheme lies 150 m northwest of *'Gordon Castle (Bog of Gight)'* Garden and Designed Landscape[11] (GDL00198), which contains Gordon Castle and associated formal gardens. There is no connectivity between the scheme and the Garden and Designed Landscape. There are no World Heritage Sites[12], Scheduled Monuments, Inventory Battlefields[13], Conservation Areas[14] or any other historically designated sites within 300 m of the A96 409 Fochabers Old bridge.

[9] http://www.scottishairquality.scot/latest/?la=falkirk (Air Quality in Scotland) [accessed 27/01/21]
[10] A pollutant release and transfer register (PRTR) is an inventory of pollution from industrial sites and other sources. A PRTR is a national or regional environmental database or inventory of potentially hazardous chemical substances and/or pollutants released to air, water and soil and transferred off-site for treatment or disposal. The industrial or business facility quantify and report the amounts of substances released to each environmental medium (air, water, soil) or transferred off-site for waste management or wastewater treatment. https://prtr.eea.europa.eu/#/home [accessed 30/09/20]
[11] Records of historic gardens and designed landscapes in Scotland are compiled and maintained by both Historic Scotland and NatureScot.
[12] World Heritage Sites are cultural and/or natural sites considered to be of 'Outstanding Universal Value', which are important across countries and generations and have been inscribed on the World Heritage List by the World Heritage Committee.
[13] Scotland's Inventory of Historic Battlefields is a list of Scotland's most important historic battlefields. Battlefields are landscapes over which a battle was fought. When a battlefield is included on the inventory it becomes a material consideration in the planning process. This means that it has to be taken into account when deciding planning applications.
[14] Conservation Areas 'are areas of special architecture or historic interest, the character or appearance of which it is desirable to preserve or enhance' (S.61 Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997).

4.0 Biodiversity

Baseline information was collected through a desktop assessment including data obtained from online web-based mapping tools including; Google Maps and Google Street View, Spatial Hub, Ordnance Survey (OS), NatureScot and Scotland's Environment (SE).

All environmental features have been assessed with reference to prior knowledge and experience of trunk road bridge refurbishment project construction methods, and the potential environmental impacts associated with these types of works in order to provide a robust impact assessment decision-making process. The assessment therefore aims to characterise environmental impacts rather than placing a reliance only on magnitude. The character of an impact is used to inform the determination of whether or not the impact on the feature in question is a significant one.

Invasive non-native flowering plant species (INNS) have been scoped out from ecological evaluation due to their lack of conservation status and so are not discussed further in that context. INNS are however discussed in the context of their potential as a risk to biodiversity and, under the Wildlife and Countryside Act 1981 (as amended) (WCA), regarding legal responsibilities to prevent their transfer.

The study area for Natura 2000 (and other sensitive sites) was defined as an area extending to 2 km in all directions from the centre line of the A96 409 Fochabers Old bridge.

The A96 Fochabers Old bridge spans the River Spey, which is an iconic river with a catchment area exceeding 3,000 km^2, stretching from the Monadhliath Mountains to the Moray Firth at Spey Bay. Land use in the upper catchment consists predominantly of hill farming, forestry and sporting estates. Two hydro-electric schemes at Tromie/Truim tributary and Spey Dam are also prominent features within the catchment. A wide range of freshwater and riparian habitats are found within the river, including beds of shingle, gravel, sand and silt, islands, fringing woodlands and marshes.

A number of designated sites are either spanned by the A96 409 Fochabers Old bridge or lie within 2 km of the bridge[15]. The River Spey Special Area of Conservation (SAC) (EU Site Code UK0019811) and River Spey Site of Special Scientific Interest (SSSI) (EU Site Code 170091) are spanned by the bridge. The Lower River Spey – Spey Bay SAC (EU Site Code UK0019978), Moray and Nairn Coast Special Protection Area (SPA) (EU Site Code UK9001625), Moray and Nairn Coast RAMSAR (EU Site Code UK13048) and Lower River Spey SSSI (EU Site Code 135824) also lie 415 m downstream from the bridge.

The River Spey SAC extends to 5759.72 ha. The SAC conservation objectives are to avoid deterioration of the habitats of the qualifying species[16] (Table 1) or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained and the site makes an appropriate contribution to achieving favourable conservation status for each of the qualifying features. The conservation objectives also include that the following

[15] https://sitelink.nature.scot/map (NatureScot) [Accessed 27/01/21]
[16] River Spey SAC Qualifying Interest List. https://apps.snh.gov.uk/sitelink-api/v1/sites/8365/documents/22 (NatureScot) [Accessed 27/01/21].

are maintained for the qualifying species in the long-term: (i) population of the species, including range of genetic types for salmon, as a viable component of the site, (ii) distribution of the species within site, (iii) distribution and extent of habitats supporting the species, (iv) structure, function and supporting processes of habitats supporting the species, (v) no significant disturbance of the species, (vi) distribution and viability of freshwater pearl mussel host species, and (vii) structure, function and supporting processes of habitats supporting freshwater pearl mussel host species[17].

The River Spey SSSI is also spanned by the A96 409 Fochabers Old bridge and is designated for the same qualifying species[18] as the River Spey SAC.

The Lower River Spey – Spey Bay SAC lies 415 m downstream of the bridge and is designated for a range of habitats existing within the Lower Spey catchment. The SAC conservation objectives are to avoid deterioration of the qualifying habitats[19] (Table 2) thus ensuring that the integrity of the site is maintained, and the site makes an appropriate contribution to achieving favourable conservation status for each of the qualifying features. The conservation objectives also include that the following are maintained for the qualifying habitats in the long term: (i) extent of the habitat on site, (ii) distribution of the habitat within site, (iii) structure and function of the habitat, (iv) processes supporting the habitat, (v) distribution of typical species of the habitat, (vi) viability of typical species as components of the habitat, and (vii) no significant disturbance of typical species of the habitat[20].

Moray and Nairn Coast SPA is designated for two Annex I species (qualifying under Article 4.1 of the EU Birds Directive), three migratory bird species (qualifying under Article 4.2 of the EU Birds Directive), and its large overwintering waterfowl assemblage (four individually cited species plus an additional four wildfowl) (Table 3). The SPA conservation objectives are to avoid deterioration of the habitats of the qualifying species[21] or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained. The conservation objectives also include to ensure for the qualifying species that the following are maintained in the long-term: (i) population of the species as a viable component of the site, (ii) distribution of the species within the site, (iii) distribution and extent of habitats supporting the species, (iv) structure, function and supporting processes of habitats supporting the species, (v) no significant disturbance of the species[22].

Moray and Nairn Coast RAMSAR has been designated for coastal and riverine habitats, including intertidal flats, saltmarsh, dunes, and associated floodplain alder (*Alnus glutinosa*) woodland. Several nationally scarce aquatic plants, invertebrates, and mammals are present. The site regularly supports migrating wintering birds and various species of wintering waders.

[17] River Spey SAC Conservation objectives. https://apps.snh.gov.uk/sitelink-api/v1/sites/8365/documents/29 (NatureScot) [Accessed 27/01/21].
[18] River Spey SSSI – Citation. https://apps.snh.gov.uk/sitelink-api/v1/sites/1699/documents/1 (NatureScot) [Accessed 27/01/21].
[19] Lower River Spey – Spey Bay SAC. Qualifying Interest List. https://apps.snh.gov.uk/sitelink-api/v1/sites/8311/documents/22 (NatureScot) [Accessed 27/01/21]
[20] Lower River Spey – Spey Bay SAC. Conservation Objectives. https://apps.snh.gov.uk/sitelink-api/v1/sites/8311/documents/29 (NatureScot) [Accessed 27/01/21]
[21] Moray and Nairn Coast SPA – Citation. https://apps.snh.gov.uk/sitelink-api/v1/sites/8550/documents/16 (NatureScot) [Accessed 27/01/21]
[22] Moray and Nairn Coast SPA Conservation Objectives. https://apps.snh.gov.uk/sitelink-api/v1/sites/8550/documents/29 (NatureScot) [Accessed 27/01/21]

A Preliminary Roost Assessment (PRA) and Preliminary Ecological Appraisal (PEA), undertaken by Highland Ecology and Development Ltd (HED) on 13th January 2021, noted that habitat surrounding the bridge is suitable for foraging bats, with extensive areas of woodland and riparian habitat. However, the PRA concluded that the bridge has very few potential roost features as any small gaps on the structure were shallow with running water, culminating in a low winter hibernacula potential for the bridge. Trees were also surveyed within 30 m of the bridge and were found to offer little or no suitable features for bats. No bat derogation licenses are therefore required for works to commence. Should works be extended significantly into the bat active period (May - October) then a follow up assessment will be required, which is likely to involve activity surveys. If bats are found to be present within 30 m of works, then a derogation licence is likely to be required from NatureScot for disturbance under current legislation. A survey for protected species was therefore undertaken along the banks that were accessible, however high-water levels and dense gorse along the bank (LHB upstream) limited the survey. No evidence of protected species was recorded in vicinity of the bridge.

The NBN online mapping tool records Japanese Knotweed (*Fallopia japonica*), Himalayan Balsam (*Impatiens glandulifera*) and Giant Hogweed (*Heracleum mantegazzianum*), invasive non-native species (INNS), as listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended), within 300 m of the A96 409 Fochabers Old bridge (in the last 10 years) within 10 km grid square NJ35. Three sightings of Japanese knotweed were recorded in 2011 and 2018, 110 m and 200 m northeast of the scheme. The geospatial information related to the Japanese knotweed records have coordinate uncertainty ranging between 7 m and 50 m. Two sightings of Himalayan balsam were recorded in 2012 and 2015, 100 m north and 225 m south of the scheme. One sighting of Giant hogweed was recorded in 2012, 100 m northeast of the scheme. The geospatial information related to the Himalayan balsam and Giant hogweed records have a coordinate uncertainty of 70 m. The PEA noted Japanese Knotweed along the River Spey riverbank (RHB upstream) of the bridge. No INNS was recorded on the bridge or land surrounding the bridge.

5.0 Landscape & visual effects

Baseline information was collected through a desktop assessment including data obtained from online web-based mapping tools including; Google Maps and Google Street View, Inventory of Gardens and Designed Landscapes, Ordnance Survey (OS), NatureScot and Scotland's Environment (SE).

There are no National Scenic Areas within 300 m of the A96 409 Fochabers Old bridge.

The A96 409 Fochabers Old bridge spans the River Spey, and views north and south of the bridge include; the A96, the River Spey (including riparian habitat fringing the river) and urban development linked to Fochabers and Mosstodloch.

The A96 and A96 410 Fochabers New, which lie 35 m north of the A96 409 Fochabers Old bridge, are prominent linear landscape features. The trunk road corridor, for example, has a distinct character shaped by fast-flowing traffic, road markings, safety barriers, signage and landscaping. The scale of the trunk road detracts from the quality and character of the wider landscape.

Notable woodland in vicinity of the A96 409 Fochabers Old bridge includes Bellie Wood, a 14.21 ha ancient[23] broadleaved woodland which extends northwards, approximately 35 m northwest of the bridge. 2.61 ha and 5.39 ha of broadleaved woodland also lie southwest of the bridge. There are no trees covered by a Tree Preservation Order within 300 m of the scheme.

6.0 Noise & vibration

Baseline information was collected through a desktop assessment including data obtained from online web-based mapping tools including; Scotland's Noise, Ordnance Survey (OS), Google Maps and Google Street View.

Baseline noise levels are mainly influenced by vehicles travelling along the trunk road. Secondary sources are derived from vehicles travelling along the local road network, urban activities within Fochabers and Mosstodloch, and day-to-day agricultural and forestry land management activities. The A96 409 Fochabers Old bridge does not fall within a Candidate Noise Management Area (CNMA), as defined by the Transportation Noise Action Plan Road Maps[24]. The day and night modelled noise level (Lden) for the carriageway along the trunk road, which lies 35 m north of the A96 409 Fochabers Old bridge, ranges from 70dB up to 75dB. Lden noise levels pertaining to the trunk road fall to between 55dB and 65dB at the A96 409 Fochabers Old bridge and at the nearest residential property.

7.0 Road drainage & the water environment

Baseline information was collected through a desktop assessment including data obtained from online web-based mapping tools including; Google Maps and Google Street View, Ordnance Survey (OS), SEPA Flood Maps, SEPA Water Environment Hub, UK Soil Observatory and Scotland's Environment (SE).

The A96 409 Fochabers Old bridge spans the River Spey (R. Fiddich to tidal limit). The River Spey is a classified[25] (ID: 23065) surface waterbody and lies in the River Spey catchment of the Scotland river basin district. The main stem is approximately 27.3 km in length. The river has been assigned a Water Framework Directive 2000/60/EC (WFD) overall classification of 'Good' and possesses an ecological classification of 'Good'.

There are no unclassified surface waterbodies spanned or culverted beneath the A96 409 Fochabers Old bridge. Six small minor unclassified surface waterbodies, considered to be minor tributaries or drainage channels, herein referred to as Dipple Burn, Drain1 and Pond1 to Pond4, lie within 300 m of the bridge. Dipple Burn lies 25 m southwest of the bridge, Pond1 lies 115 m southwest, Drain1 lies 140 m southwest, Pond 2 lies 200 m southwest, Pond3 lies 215 m southeast and Pond4 lies 300 m southeast. None of the six small minor surface waterbodies

[23] There are two types of ancient woodland: ancient semi-natural woodland and ancient replanted woodland. Ancient semi-natural woodland are sites that have retained the native tree and shrub cover and have not been planted (although it may have been managed by coppicing or felling and allowed to regenerate naturally). Ancient replanted woodland are sites where the original native tree cover has been felled and replaced by planting, usually with conifers and usually this century.

[24] https://noise.environment.gov.scot/action-planning-round-two.html (Scotland's Environment Scotland's Noise) [Accessed 27/01/21]

[25] The Scottish Environment Protection Agency (SEPA) have developed a surface waterbody classification system in line with the requirements of the River Basin Management Plan in accordance with Annex V of the European Union Water Framework Directive 2000/60/EC (WFD), which is applied to all significant surface waterbodies in Scotland. This system is based on an assessment of key chemical and ecological indicators. The classification system categorizes waterbodies into the following bands; High, Good, Moderate, Poor, Bad.

share direct connectivity with the A96 409 Fochabers Old bridge, and all are too small (in terms of catchment area) to be classified as main stem waterbodies by SEPA under the WFD.

The A96 409 Fochabers Old bridge lies on the 'Fochabers' and 'Spey Coastal' groundwaters, which have both been classified as 'Good'[26]. The bridge is also located within the 'Aberdeenshire, Banff, Buchan and Moray' Nitrate Vulnerable Zone[27].

Communication with the Design Engineer confirmed that drainage on the bridge deck is provided by gullies, eight on the wrought iron arch and four on the masonry arch.

8.0 Geology & soils

Baseline information was collected through a desktop assessment including data obtained from online web-based mapping tools including; Spatial Hub, British Geological Survey (BGS) Superficial and Bedrock Geological map viewer, BGS Geoviewer, BGS UK Hydrogeology viewer and UK Soil Observatory Soils map viewer.

In addition to its biological interest, the Lower River Spey SSSI is important for the unique braided channels and range of gravel bar types throughout the Lower River Spey. The SSSI geomorphological diversity includes examples of raised accumulations of shingle and gravel, and an associated floodplain with extensive paleochannels (Table 7). Shingle related habitats are found within the region and support a variety of biodiversity. The geomorphological feature has been designated unfavourable, partly due to various river engineering works, including channel dredging and realignment[28].

Table 1. Lower River Spey SSSI Geological notified features

Geomorphology:	Fluvial geomorphology of Scotland

The bedrock geology under the A96 409 Fochabers Old bridge is recorded as Fochabers Sandstone Formation, which has a lithological description of 'red-bed sandstone with sporadic silty calcareous mudstone with fossil fish-bearing limestone/concretions'[29]. The superficial geology (deposits overlying the bedrock) under the A96 409 Fochabers Old bridge is recorded as Alluvium (clay, silt, sand and gravel) which is unconsolidated, 'semi-sorted sediment in the bed of a stream or on its floodplain or delta, or as a cone or fan at the base of a mountain slope'[30].

9.0 Material assets & waste

[26] https://map.environment.gov.scot/sewebmap/ (Scotland's Environment) [Accessed 27/01/21]
[27] A Nitrate Vulnerable Zone defines areas designated under the EU Nitrates Directive that are at risk of pollution from nitrates used in agricultural practice.
[28] Lower River Spey SSSI. Site Management Statement. https://apps.snh.gov.uk/sitelink-api/v1/sites/1107/documents/3 (NatureScot) [Accessed 27/01/21]
[29] Fochabers Sandstone Formation. https://webapps.bgs.ac.uk/lexicon/lexicon.cfm?pub=FOC (BGS). [Accessed 27/01/21]
[30] Alluvium. https://webapps.bgs.ac.uk/lexicon/lexicon.cfm?pub=ALV (BGS) [Accessed 27/01/21]

Baseline data has been obtained from the Design Engineer.

The scheme is executed by the operating company as site operations e.g. 'As-of-Right' scheme of value less than £350,000, therefore a Site Waste Management Plan (SWMP) is not required.

The following materials will be used during the scheme construction:

- Surface course material
- Deck joint
- Deck waterproofing
- Metal (gully covers)
- Aluminium (pedestrian guardrail)
- Tack/Bond coat, paving grade bitumen to seal vertical faces
- Eurolite thermoplastic road markings
- Bitumen emulsion
- Marker paint
- Cold bitumen sealant
- Bitumen bound road planings
- Concrete repair material

The following equipment will be used during the scheme construction:

- Planer
- Paver
- JCB 3CX
- Rollers
- Sweeper
- Bond coat tanker
- Pickup trucks
- Welfare van or portable chemical toilet
- 20 tonne tippers
- Lining machine

The following fuel and/or chemicals will be stored on site for the duration of the scheme:

- Diesel
- Petrol
- Gas
- Oil
- Tar glue remover

10.0 Climate

Fuel will be required for transport to and from the scheme which will lead to greenhouse gas emissions. Any release of greenhouse gas emissions can contribute to climate change. The project is unlikely to be affected by the impacts of climate change, other than increasing likelihood of extreme weather events leading to issues with work taking place on site.

DESCRIPTION OF THE MAIN ENVIRONMENTAL IMPACTS OF THE PROJECT AND PROPOSED MITIGATION

As a result of a desktop study and site visit, issues requiring consideration have been identified and potential effects, their magnitude and overall significance (based on the sensitivity of receptor) have been considered in terms of both construction and operational effects. Residual effects are based on consideration of potential impacts (i.e. impacts in the absence of mitigation, and with mitigation implemented). Compliance with environmental mitigation measures detailed in the Site Environmental Management Plan (SEMP) will form part of the mitigation measures in place to minimise environmental impacts.

Headings have been set out to follow the recently updated DMRB chapters for environmental assessment and do not reflect a ranking of impact severity. Based on the nature of the works, unless otherwise stated, the demarcation of the study area for the assessment of potential impacts is limited to all land within 300 m of the A96 409 Fochabers Old bridge.

11.0 Population and human health (properties, land use, vehicle travellers, non-motorised users & community facilities)

No access to properties will be restricted during the works and there will be no loss of land or change in land use as a result of the works.

The A96 409 Fochabers Old bridge is a pedestrianised bridge, therefore traffic management (TM) is not required during the works. As such, no temporary effects on traffic movement is predicted from the works. The site compound, which will accommodate materials, vehicles, ancillary plant, non-road mobile machinery[31] (NRMM) and welfare facilities, will be located within a small area of the footpath south of the bridge, thus ensuring the safety of the workforce.

The following mitigation measures will reduce impacts of works on non-motorised users[32] (NMUs) using the A96 409 Fochabers Old bridge during the construction phase:

- Appropriate measures will be implemented to permit the safe passage of NMUs of all abilities utilising the footpath/cycleway, which also accommodates Core Path FB08.

The works will provide a permanent safety improvement for all NMUs utilising the bridge, and no residual impacts are anticipated at the operational phase of the proposed scheme.

[31] Non-Road Mobile Machinery is a broad category which includes mobile machines, and transportable industrial equipment or vehicles which are fitted with either an internal spark ignition petrol engine, or a compression ignition diesel engine and not intended for transporting goods or passengers on roads. Examples of non-road mobile machinery include, but are not limited to: (i) generators, (ii) bulldozers, (iii) pumps, (iv) construction machinery, (v) mobile cranes, etc.

[32] For the purposes of this report, NMUs are considered to be all non-motorised traffic, including pedestrians, cyclists and equestrians (with particular consideration of the needs of those with disabilities).

12.0 Air quality

During the construction phase, activities undertaken on site could potentially have some localised and short-term air quality impacts in proximity to the works. The construction phase will, for example, require a range of equipment, vehicles and NRMM which will contribute to local dust and air pollutants. There is also the potential for fugitive dust emissions associated with cold milling bridge deck and concrete repairs to bridge deck.

However, with mitigation in place following 'Best Practicable Means' and 'Best Practice Guidelines'[33], effects on air quality during construction are not anticipated to be significant, and any minor impacts will also be intermittent, temporary and short-lived. The following mitigation measures will also be implemented to ensure potential impacts are not significant:

- A designated site compound for waste, plant, material and welfare facilities will be established on a small area of the footpath south of the bridge. Good housekeeping will also be employed throughout the works (e.g. free of litter and debris).
- Skips (if required) will be securely covered.
- Wherever possible, all ancillary plant, vehicles and NRMM will be shut-down when stationary. All ancillary plant, vehicles and NRMM will also have been regularly maintained, paying attention to the integrity of exhaust systems.
- If any emissions of dark smoke should occur (except at start up), the vehicle or machinery involved will be taken out of service immediately and any defect rectified before use.
- If powered generators are required, the use of diesel or petrol will be avoided and the use of mains electricity or battery powered equipment will be used (where practicable).
- Cutting, grinding and sawing equipment will be fitted or used in conjunction with suitable dust suppression techniques e.g. water spray or local exhaust ventilation system that fits directly onto tools.
- Regular monitoring (e.g. by engineer or Clerk of Works) will take place when dust, particulate matter and exhaust emissions (DPMEE) generating activities are occurring. In the unlikely event that unacceptable DPMEE are emanating from the site, the operation will, where practicable, be modified and re-checked to verify that the corrective action has been effective. Actions to be considered include: (a) minimizing cutting and grinding on-site, (b) reducing the operating hours, (c) changing the method of working, etc.
- Upon completion of the works, the working area will be cleaned.

There will be no residual impacts upon completion of the works.

13.0 Cultural heritage assessment

Consultation was undertaken with Moray Council regarding consent requirements for maintenance works on the Category A listed A96 409 Fochabers Old bridge. Moray Council has granted planning permission (Ref: 20/01642/APP) and Listed Building Consent (Ref: 20/01641/LBC) for the following development: '*repair and maintenance works to bridge deck including parapet repairs and installation of new pedestrian guardrail at Old Spey Bridge High Street Fochabers Moray'.* The consultation process concluded that there is no requirement for a Heritage Impact Statement. All works outlined in this RoD comply with the conditions outlined in the planning permission and Listed Building Consent. However, if any works other than those detailed in the 'description of

[33] Institute of Air Quality Management. (2014). Guidance on the assessment of dust from demolition and construction (version 1.1).

project' had to be introduced, or any substantial changes had to be made to the working methodology or materials used, works will cease and consultation will commence with Moray Council regarding consent requirements.

All works are confined to the A96 409 Fochabers Old bridge deck, therefore there is no direct connectivity between the scheme and the Category B listed *'Spey Bridge, Old Toll House'* (LB15646), the CNRs or the '*Gordon Castle (Bog of Gight)*' Garden and Designed Landscape. Moreover, the works do not include any alterations that would affect the historic and architectural character of these features.

The bridge deck refurbishment works will improve the integrity, resilience and longevity of the Category A listed A96 490 Fochabers Old bridge.

14.0 Biodiversity

Consultation with NatureScot determined that there is no requirement for aquatic ecological surveys as works will not directly impact the River Spey and the results of any in-water surveys would not alter the project or the mitigation measures required. A Habitats Regulations Assessment (HRA) has also shown that there is enough information and assessment evidence to conclude that the proposed scheme will not cause a Likely Significant Effect on the River Spey SAC, Lower River Spey – Spey Bay SAC, Moray and Nairn Coast SPA or Moray and Nairn Coast RAMSAR, either alone or in-combination with other projects or plans. Moreover, it is not anticipated that the works will result in changes to water quality provided pollution control measures outlined in Section 17.0 'Road drainage and the water environment' are followed.

The destruction, displacement, removal or cutting of any plant or plant remains (including tree, shrub and herbs) is considered River Spey SSSI Operations Requiring Consent. Consultation with NatureScot confirmed that trimming back overhanging trees does not risk damaging any of the special interests of the site and therefore does not require SSSI consent.

A PRA (including a survey of trees within 30 m of the bridge) determined that trees offer little or no suitable features for bats, therefore no bat derogation licenses are required. If the works are delayed until the bird breeding season (March to August inclusive), an inspection of trees and branches will be undertaken prior to works commencing to ensure the absence of nesting birds. A PEA found no evidence of protected species in vicinity of the bridge.

It is likely that ancillary plant, vehicles and NRMM as part of the work processes will lead to a slight increase in noise in the area surrounding the works. This could potentially disturb local wildlife. However, considering the nature, duration, size and scale of the scheme, and the good site practice mitigation measures which will be followed during the construction phase, the desktop and site surveys have confirmed that it is unlikely that works will pose a significant environmental risk.

All mitigation measures detailed within Section 12.0 'Air quality', Section 16.0 'Noise and vibration' and Section 17.0 'Road drainage and the water environment' will be followed to protect wildlife and designated sites. The following 'Best Practicable Means' and 'Best Practice Guidelines' mitigation measures will also be implemented to ensure potential impacts on wildlife and designated sites are not significant:

- BEAR Scotland will appoint an Environmental Clerk of Works (EnvCoW) to visit the site periodically to supervise operations onsite to ensure appropriate environmental safeguards are being adhered to. The EnvCoW will undertake an initial day-one site visit to review site management practices, provide toolbox talks and highlight the requirements of the SEMP. Following this, site visits are anticipated to be arranged during critical phases of works e.g. cold milling of carriageway, removal/installation of deck joint, parapet installation, application of deck waterproofing, resurfacing.
- All ancillary plant, vehicles, NRMM and personnel will be constrained to the A96 409 Fochabers Old bridge and footpath south of the bridge, thereby eliminating damage to designated sites and potential direct mortality and disturbance to species. The working footprint may only be altered in agreement with the EnvCoW.
- If during works unforeseen disturbance of protected species becomes evident, works will cease, and appropriate mitigation measures will be discussed, agreed and implemented with stakeholders e.g. NatureScot, SEPA, Marine Scotland, etc.
- All site workers will receive adequate training relevant to their role prior to working on the bridge, including specific environmental inductions and 'toolbox talks' as required.
- BEAR Scotland's Environmental Team will be contacted to allow consideration of potential environmental effects if unplanned works will be undertaken outwith the agreed working areas, or there is any deviation from the agreed programme and/or method of working.

Based on the minor nature of the works, there will be no operational impacts to the A96 409 Fochabers Old bridge upon completion of the works. As such, it is not anticipated that there will be any impacts on designated sites or their qualifying features during the operational phase.

15.0 Landscape & visual effects

During the 42-day construction period, there will be temporary short-term impacts on the visual amenity of the area due to the presence of ancillary plant, vehicles, NRMM, site compounds and stockpiles of materials on the pedestrian footpath south of the A96 409 Fochabers Old bridge. However, light pollution/glare is not a material consideration as the demolition works are programmed Monday to Friday, 07:30 to 17:00.

The following mitigation measures will reduce the visual impacts of the works:

- During all stages of the works, the site will be kept clean and tidy, with ancillary plant, vehicles, NRMM, materials and wastes stored appropriately in the designated site compound on the pedestrian footpath leading to the bridge.
- Good housekeeping will also be employed throughout the works (e.g. free of litter and debris).

Based on the minor nature of the works, there will be no operational impacts to the A96 409 Fochabers Old bridge upon completion of the works, with bridge deck refurbishment works enhancing the visual appearance of the bridge and therefore contributing to the aesthetic value of the area.

16.0 Noise & vibration

During the construction phase, activities undertaken on site could potentially have some localised and short-term noise impacts in proximity to the works. The works will, for example, require a range of equipment, vehicles and NRMM, and noise will also be generated when cold milling the bridge deck and through the use of grinders, impact wrenches, chipping hammers, etc. Any temporary short-term increase in noise levels may cause disturbance to local wildlife and NSRs. However, the site compound will be located on a small area of the footpath south of the bridge (> 150 m from potential NSRs), works will also be undertaken utilising a day-time working pattern (07:30 – 17:00) and any noise increases will be intermittent and will only last for the duration of the works (42 days).

With mitigation in place following 'Best Practicable Means' and 'Best Practice Guidelines', as described within BS 5228-1[34] and BS 5228-2[35], effects on noise and vibration during construction are not anticipated to be significant, and any minor impacts will also be intermittent, temporary and short-lived. Given the nature of the works, and the height of the bridge above the River Spey, no ground-borne vibration impacts have been forecast. The following mitigation measures will also be implemented to ensure potential impacts are not significant:

- Any work outside of normal working hours will be agreed with Moray Council.
- If unacceptable noise is emanating from the site the operation will, where possible, be modified and re-checked to verify that the corrective action has been effective. Actions to be considered include (a) minimizing cutting and grinding on-site, (b) reducing the operating hours, (c) repositioning equipment, (d) changing the method of working etc. Corrective actions will be actioned through the non-conformance reporting procedure, which ensures a root-cause analysis is carried out on each incident. The non-conformance procedure also ensures that appropriate corrective and preventative action measures are agreed and implemented in a timely fashion with all parties and are recorded, actioned through to closeout, and fully auditable and traceable.
- If ancillary plant, vehicles or NRMM not assessed by this RoD are required to complete the works, then an immediate review will take place between the Clerk of Works, Senior Engineer and BEAR's Environmental Team, as appropriate.
- Drop heights from vehicles and NRMM will be kept to a minimum to minimise noise when unloading.
- All ancillary plant, vehicles and NRMM with directional noise characteristic will (where practical) be shut down in intervening periods between site operations and will be started sequentially rather than all together. All ancillary plant, vehicles and NRMM used onsite will also have been regularly maintained, paying attention to the integrity of silencers and acoustic enclosures. All ancillary plant, vehicles and NRMM will also be positioned so as to cause minimum noise disturbance. If necessary, acoustic barriers or enclosures will be provided.
- The use of grinders, impact wrenches, chipping hammers, etc. will be avoided (except where there is an overriding justification), and if used will be fitted with mufflers or silencers of the type recommended by the manufacturer.
- All compressors will be 'sound-reduced' models fitted with properly lined and sealed acoustic covers which will be kept closed when in use.
- HGV reversing warning systems, site vehicles and NRMM will be switched to the minimum setting required by HSE and, where possible, will utilise 'broadband non-tonal' or 'directional sound reversing' alarms.

There will be no residual impacts upon completion of the works.

[34] BS 5228-1:2009+A1:2014. Code of practice for noise and vibration control on construction and open sites. Noise.
[35] BS 5228-2:2009+A1:2014. Code of practice for noise and vibration control on construction and open sites. Vibration.

17.0 Road drainage & the water environment

Any construction work above a waterbody has inherent risk factors. Potential risks to the River Spey from bridge deck refurbishment works include spills from ancillary plant, vehicles and NRMM, and dirty water runoff from the designated site compound. There is also a risk that material and equipment could fall into the River Spey during the works. The likelihood of flooding on the A96 Fochabers Old bridge is not a risk factor, due to the bridge deck's height above the River Spey. There is also no requirement for in-water works.

All mitigation measures detailed within Section 12.0 'Air quality' and Section 14.0 'Biodiversity' will be followed to protect the River Spey and surface water drainage. The following Guidance for Pollution Prevention[36] (GPPs) will also be followed: GPP 1, GPP 5, GPP 6, GPP 8, GPP 21 and GPP 22.

The GPPs include, but are not limited to, the following mitigation measures:

- An edge protection system (EPS) will be utilised to prevent debris and sediment falling from the bridge deck during the works. Sandbags will be located at the bottom of the containment systems and debris netting will cover the EPS.
- The abstraction or transfers of water, or the washing of tools in the River Spey is not permitted.
- No discharges into the River Spey will be permitted.
- Regular visual pollution inspections of the designated site compound and work site (particularly near bridge deck drainage and at the site compound) shall be conducted (e.g. site walkover by engineer or Clerk of Works), especially during periods of heavy rain.
- All site personnel will be made aware of site spillage response procedures and in the event of a spill, all works associated with the spill will stop, and the incident reported to the Clerk of Works. Small spills that did not leave the site boundary and are cleaned up without material environmental harm or residual environmental impact would most likely not be required to be notified to SEPA, NatureScot or other stakeholders. However, all such incidents will be recorded and reported to BEAR Scotland's Environmental Team. In the event of a 'serious incident'[37], SEPA and NatureScot will be notified without delay. Such notification will include: (i) the time and duration of the incident, (ii) a description of the cause of the incident, (iii) any effect on the environment as a result of the incident, and (iv) any measures taken to minimise or mitigate the effect and prevent a recurrence.
- Spill kits will be available and replenished onsite when required.
- All waste, vehicles, ancillary plant, NRMM and fuels will be stored in the site compound, on the footpath south of the A96 409 Fochabers Old bridge, and will be fully bunded, secured and located, if space is available, at least 10 m from drainage entry points and the River Spey, in order to comply with GPP 5 'works and maintenance in or near water'. Refuelling will only be undertaken at designated refuelling areas (e.g. on hardstanding, with spill kits available, and >10 m from the River Spey and drainage entry points) where practicable. Only designated trained and competent operatives will be authorised to refuel plant. All waste, vehicles, ancillary plant, NRMM and fuels will also be stored in a manner that ensures they are protected from damage by collision or extremes of weather. Any vehicles, ancillary plant, and NRMM not in operation will (where possible) be sited in the site compound.

[36] https://www.netregs.org.uk/environmental-topics/guidance-for-pollution-prevention-gpp-documents/guidance-for-pollution-prevention-gpps-full-list/ NetRegs. [accessed 12/01/21]

[37] 'serious incident' means: (i) any accident, spillages, or uncontrolled discharge which has had, or could have, an adverse impact on the water environment, or (ii) any malfunction, breakdown or failure of plant or techniques which has had an adverse impact on the water environment, or (iii) any event, such as force majeure or action taken to save human life or limb, which results, or is likely to result, in a breach of contract or any condition of a licence.

- All vehicles and NRMM used onsite will have been regularly maintained, paying attention to the integrity of oil tanks, coolant systems, gaskets etc. A checklist will be present to make sure that the checks have been carried out.
- No vehicle washing will take place on the A96 409 Fochabers Old bridge e.g. all vehicle washing will take place in approved vehicle washing areas with access to appropriate drainage.
- Generators, and other ancillary plant and NRMM, where there is a risk of leakage of oil or fuel, will have internal bunding OR will have a secondary containment system (e.g. drip trays, plant nappies, etc.) placed beneath them that meets 110% capacity requirements. Containment systems will be emptied regularly.
- Consideration will be given to work patterns in relation to wet weather and strong winds.

There will be no residual impacts upon completion of the works.

18.0 Geology & soils

As the works will take place entirely on the A96 409 Fochabers Old bridge deck, and due to the structure's height above the River Spey, there will be no impact on geology and soils.

19.0 Material assets & waste

The scheme is executed by the operating company as site operations e.g. 'As-of-Right' schemes of values less than £350,000, therefore a SWMP is not required.

There will be limited consumption of natural resources associated with the works and none of the activities will require any resources from the Natura 2000 sites.

Metal from the existing parapet and concrete arisings will be removed from the site and recycled.

Provided the following mitigation measures are followed, environment impacts from the use of materials and natural resources and disposal of waste during the construction phase are not anticipated to be significant:

- Good materials management methods (e.g. use of 'just-in-time' delivery to minimise double handling of soil), will be implemented wherever possible.
- All wastes removed from site will be consigned, transported and disposed of in full accordance with all relevant UK legislation e.g. Duty of Care[38] requirements apply e.g. evidence of material transfer notes and/or waste exemption certificates will be supplied by a licenced waste carrier.
- If hazardous substances must be used on site, each substance will be subject to assessment under the Control of Substances Hazardous to Health (COSHH) Regulations 2002. Hazardous substances will also be clearly labelled and stored in line with COSHH safety data sheets within the designated site compound, at least 10 m from drainage entry points and the River Spey (where possible). Hazardous substances will also be disposed of in line with COSHH safety data sheets and COSHH waste will NOT be mixed with general waste and/or other recyclables.
- If any substance used on site displays the 'Dangerous to the Environment' COSHH symbol, then the following controls will be implemented: (i) the substance will not be permitted to enter surface drains (ii) any spillages will be contained using bunding and then absorbed with an absorbent material (e.g. dry

[38] The 'Duty of Care' requires that a waste holder (producer, carrier or disposer) takes all reasonable steps to ensure that waste is described in a way that permits its safe handling and management and that any transfer of waste is accompanied by a written description of the waste, including an EWC code.

sand or earth) and then collected and stored in a suitable container which is properly labelled and sealed securely in preparation for disposal, (iii) spillages or uncontrolled discharges will be immediately reported to SEPA.
- The site will be monitored regularly for signs of litter and other potential contaminants and litter will be removed before and after works take place. The site will also be left clean and tidy.
- Wastewater from welfare facilities (if required) will be subject to effluent treatment followed by tanker removal.

20.0 Climate

The Climate Change (Scotland) Act sets out the target and vision set by the Scottish Government for tackling and responding to climate change. The Act includes a net-zero target for greenhouse gas emissions before 2045 (from the baseline year 1990)[39]. In response, BEAR Scotland, working on behalf of Transport Scotland, undertake carbon monitoring of our major projects and operational activities. Emissions from our activities are recorded using Transport Scotland's Carbon Management System. BEAR Scotland also undertakes resource efficiency activities to manage and reduce emissions contributing to climate change. Actions and considerations for the bridge deck refurbishment works are detailed in Section 19 'Material assets & waste'.

As works are taking place utilising a daytime working pattern (07:30 – 17:00), there is no requirement for additional power generated tower lighting within the scheme extents. In addition, local contractors and suppliers will be used as far as practicable to reduce fuel use and greenhouse gas emitted as part of the works.

Refurbishment of the A96 409 Fochabers Old bridge deck will extend the maintenance intervals required for future works on the bridge. In doing so, the service life of the structure is also extended.

21.0 Risk of major accidents or disasters

The A96 409 Fochabers Old bridge is not located within a geographical region that is subject to natural disasters and there is no likelihood of flooding on the bridge due to its height above the River Spey.

The bridge is not used by vehicular traffic therefore there is no risk of collision from errant vehicles within traffic management.

Release of pollutants during works, or as a result of an accidental spillage, have the potential to affect all habitats and species present within the River Spey. The key issue with respect to pollution is the procedures put in place to minimise the risk of contaminants entering the River Spey in sufficient concentrations to cause adverse effects on site integrity. A Site Environmental Management Plan (SEMP) will therefore be produced by BEAR Scotland which will set out a framework to reduce the risk of adverse impacts from construction activities on sensitive environmental receptors. The SEMP will set-out a process for recording environmental risks, commitments and constraints and will identify the procedures and measures that will be used to manage and control these aspects. In addition, the SEMP seeks to ensure compliance with environmental legislation, government policy, and scheme-specific environmental objectives. The SEMP will also formalise a mechanism for monitoring, reviewing and

[39] The Climate Change Act was amended in Scotland in 2019 from an 80% reduction by 2050, to a net-zero target by 2045.

auditing environmental performance and compliance. As such, any sub-contractors contracted for the works will comply with all conditions of the SEMP and may be subject to audit throughout the contract.

A Designer's Risk Register will be prepared by BEAR Scotland, which addresses potential environmental risks. Activity-specific RAMS will also be produced and will recognise and highlight environmental risks and detail how these will be addressed, as well as contingency plans to deal with environmental incidents. RAMS produced by sub-contractors (if required) will be approved by BEAR Scotland prior to works commencing.

Considering the above, it is judged that the residual effects of the scheme to risks from major accidents or disasters is low.

22.0 Cumulative effects

There are no known external projects currently planned, or recently completed, that have the potential to contribute to in-combination or cumulative effects on designated sites in vicinity of the scheme[40].

There are no major projects currently at the planning stage that will be carried out by BEAR Scotland or sub-contractors on the A96 409 Fochabers Old bridge, or in the immediate vicinity of the bridge during 2020/2021, that could result in 'in-combination' or 'cumulative effects'. Bridge deck refurbishment works will also improve safety on the bridge and protect against future deterioration of the structure. Maintenance therefore extends the period between major interventions on the bridge. As the bridge deck refurbishment works on their own are not anticipated to have a significant effect, there will be no 'in-combination' or 'cumulative effects' of the works given that standard best practice mitigation measures will be in place to avoid environmental impacts.

EXTENT OF EIA WORK UNDERTAKEN AND DETAILS OF CONSULTATION

The following environmental parameters have been considered within this RoD:

- Population and human health (properties, land use, NMU & community facilities)
- Air quality
- Cultural heritage assessment
- Biodiversity
- Landscape & visual effects
- Noise & vibration
- Road drainage & the water environment
- Geology & soils
- Material assets & waste
- Climate
- Risk of major accidents or disasters
- Cumulative effects.

A PRA and PEA were undertaken by Highland Ecology and Development Ltd on 13th January 2021. Consultation was also undertaken with Moray Council regarding consent requirements for maintenance works on the Category A listed A96 409 Fochabers Old bridge.

[40] https://publicaccess.moray.gov.uk/eplanning/spatialDisplay.do?action=display&searchType=Application Moray Council) [Accessed 27/01/21]

STATEMENT OF CASE IN SUPPORT OF A DETERMINATION THAT A FORMAL EIA AND EIAR IS NOT REQUIRED

The works are considered to constitute a relevant project falling within Annex II of the Environmental Impact Assessment Directive 2014/52/EU because the A96 409 Fochabers Old bridge spans, and therefore has connectivity to several 'sensitive areas'.

Bridge deck refurbishment works have been subject to screening using the Annex III criteria to determine if a formal Environmental Impact Assessment (EIA) is required under the Roads (Scotland) Act 1984 (Environmental Impact Assessment) Regulations 2017. Screening using Annex III criteria, reference to consultation undertaken, and review of available information has not identified the need for an EIA.

The project will not have significant effects on the environment by virtue of factors such as:

- **Characteristics of the scheme**
  - The total working area is less than 1 ha.
  - The works are temporary and short-term (42 days).
  - The scheme is not located within any areas designated for landscape interests.
  - There is no requirement for in-water works.
  - There will be limited consumption of natural resources associated with the works.
  - A Habitats Regulations Assessment (HRA) has shown that there is enough information and assessment evidence to conclude that the proposed scheme will not cause a Likely Significant Effect on the River Spey SAC, Lower River Spey – Spey Bay SAC, Moray and Nairn Coast SPA or Moray and Nairn Coast RAMSAR, either alone or in-combination with other projects or plans.

- **Location of the scheme**
  - All works are confined to the A96 409 Fochabers Old bridge deck, which spans the River Spey SAC and River Spey SSSI. The Lower River Spey – Spey Bay SAC, Moray and Nairn Coast SPA, Moray and Nairn Coast RAMSAR and Lower River Spey SSSI lie 415 m upstream of the bridge.

- **Characteristics of potential impacts of the scheme**
  - Works are limited to bridge deck refurbishment and will not damage, modify, or alter the character or footprint of the Category A listed A96 409 Fochabers Old bridge.
  - No nationally designated nature conservation sites will be significantly affected by the works.
  - There is no likelihood of flooding on the bridge due to its height above the River Spey.
  - Land use will not change as a result of the works.
  - There will be no impacts on vehicle travellers, and measures will be in place to limit any short-term impacts on NMUs. The works will provide a permanent safety improvement for all NMUs utilising the bridge.
  - With good practice pollution prevention measures implemented onsite, there is a negligible risk of a pollution event, and any potential impacts of the works are expected to be temporary, short-term, and limited to the construction phase.
  - The SEMP, Designer's Risk Register, and activity-specific method statements will include plans to address environmental incidents.
  - Bridge deck refurbishment works will enhance the visual appearance of the bridge and therefore contribute to the aesthetic value of the area.
  - Measures will be in place to ensure appropriate removal and disposal of waste.
  - No change is predicted in respect to the vulnerability of the A96 409 Fochabers Old bridge to the risk (or severity) of major accidents or disasters.

- No impacts on the environment are expected during the operational phase as a result of the works.

Mitigation measures detailed above and compliance with mitigation stipulated in the SEMP will ensure no significant negative impacts on sensitive receptors.

Appendix A: Scheme location and site photographs

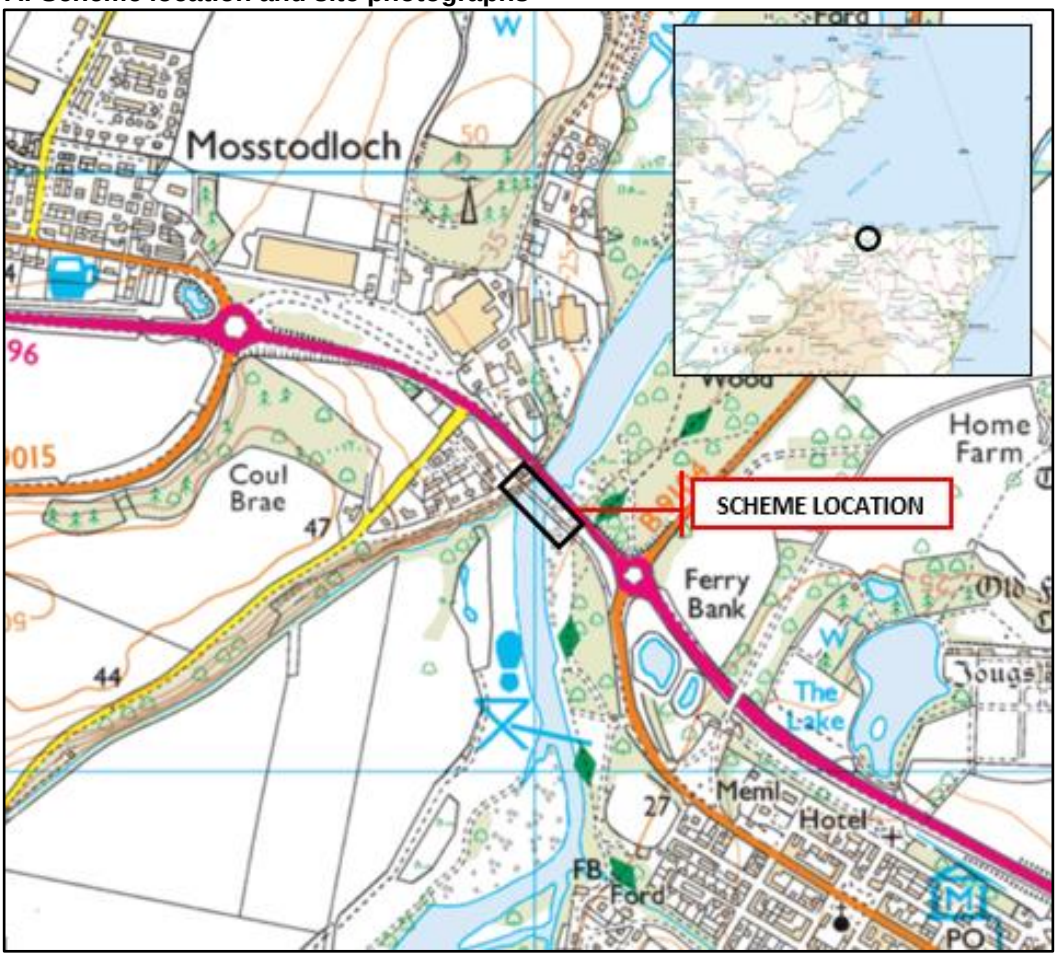

Figure 1. A96 409 Fochabers Old bridge (highlighting scheme extents). Source: Grid Reference Finder. Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown Copyright and database right 2020.

Figure 2. The A96 409 Fochabers Old bridge (looking south). Source: BEAR Scotland.