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Llywodraeth Cymru
Working on behalf of the
Welsh Government

Welsh Government

A55 / A470 GLAN CONWY INTERCHANGE PINCH POINT

EIA Screening Report

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FINAL PUBLIC

DATE: NOVEMBER 2020



CONTENTS

1	INTRODUCTION	1
2	SITE LOCATION AND WORKS	2
3	SITE VISIT	5
4	ENVIRONMENTAL BASELINE INFORMATION	6
4.1	STATUTORY DESIGNATIONS	6
4.2	OTHER STATUTORY DESIGNATIONS	7
4.3	NON-STATUTORY DESIGNATIONS	7
4.4	PROTECTED & NOTABLE SPECIES	8
4.4	AREAS OF POPULATION, COMMUNITY RESOURCES & INFRASTRUCTURE	9
4.5	WATER ENVIRONMENT	9
4.6	AIR QUALITY	10
4.7	CULTURAL HERITAGE, HISTORIC & LANDSCAPE DESIGNATIONS	10
4.8	CLIMATE	11
4.9	MAJOR ACCIDENTS AND DISASTERS	11
4.10	HEAT AND RADIATION	11
5	RECOMMENDATIONS	12
5.1	AIR QUALITY	12
5.2	NOISE	12
5.3	POLLUTION	13
5.4	ECOLOGY	13
5.5	MATERIALS	14
5.6	FURTHER REQUIREMENTS	14
5.7	CONCLUSIONS	14



APPENDICES

APPENDIX A

SITE BOUNDARY AND GENERAL ARRANGEMENT PLAN

APPENDIX B

ENVIRONMENTAL IMPACT ASSESSMENT SCREENING (LA102)

APPENDIX C

FUTURE GENERATIONS FRAMEWORK APPRAISAL

1 INTRODUCTION

This report has been requested by the North and Mid Wales Trunk Road Agent (NWMTRA) in order to screen the proposed works to the A55 / A470 Glan Conwy Interchange for Environmental Impact Assessment (EIA).

The purpose of screening is to determine whether a statutory EIA is needed in accordance with the requirements of the EIA Directive (2011/92/EU as amended by Directive 2014/52/EU) and under the Environmental Impact Assessment (Miscellaneous Amendments Relating to Harbours, Highways and Transport) Regulations 2017. Guidance is provided in the Design Manual for Roads and Bridges (DMRB) Standard LA 102: Wales National Application Annex to LA102 Screening Projects for Environmental Assessment (Welsh Government, July 2019), and has been used in this assessment in the form of a simple four-step process as shown in Appendix B.

The proposed works to the A55 / A470 Glan Conwy Interchange is a 'relevant project' under Annex II of the EIA Directive as it comprises improvement works and will cover an area greater than 1 hectare. Therefore, the proposed works have been screened to determine if it is likely to have significant environmental effects based on the criteria set out in Annex III of the EIA Directive.

2 SITE LOCATION AND WORKS

A site location plan is provided in Figure 1 and the Site Boundary and General Arrangement plan is provided in Appendix A. Further information relating to the site location, Scheme details and construction programme are provided in Table 2-1 below.

Table 2-1: Scheme Details and Construction Programme Information

Scheme Location & Type	
Scheme Location (NGR at centre point)	SH 80662 77410
Scheme Area	4.2 ha
Scheme Type	Maintenance & Improvement
Scheme Description	
<p>The scheme predominantly consists of signalisation of an existing roundabout, active travel provision and maintenance/renewal of the existing highways infrastructure (e.g. resurfacing; lighting; road markings; and signing). The key scheme components include:</p> <ul style="list-style-type: none"> • Signalisation of the A55 West bound off slip, A55 East bound off slip and • A470 (S) roundabout entry arms, along with signals associated with toucan • crossing locations; • Minor, localised, carriageway widening of southern section of circulatory to accommodate three lanes of traffic via kerb line amendment. Carriageway widening also required on the A470(S) spur road due to localised narrowing causing a pinch point in network; • Full renewal of street lighting for the roundabout and surrounding roads, • including lighting of new shared use footway through centre of roundabout; • Planing & resurfacing of full roundabout including off slip roads and • surrounding connecting roads; • Road markings to be renewed with new markings for additional lanes, stop • lines & destination markers; and • New shared use foot/cycleway construction within centre of roundabout and improved provision on approaches to roundabout. • New streetlighting for all on & off slips for JCT 19. 	
Scheme Details	
<p><i>Will the Scheme affect the soft estate?</i></p> <p>Yes. This Scheme will affect the soft estate to accommodate the infrastructure required for the lighting which includes columns and ducting.</p>	
<p><i>Will the Scheme require vegetation, trees or hedgerows to be removed?</i></p>	



Yes. This Scheme will require some localised vegetation removal to accommodate the proposed cycle and footpath, and it is likely that tree canopies will need to be cut back as part of regular maintenance activities.

Will the Scheme affect the drainage system?

Minor amendments only, to tie-in amended gully positions and re-alignment of filter drain.

See Chapter 5 for further recommendations.

Will the Scheme generate waste (specify)?

Yes. There will be some waste from vegetation removal, redundant material and packaging of new materials brought to site. Excavated material will be reused where possible. Potential for some arisings from existing pavement milling to require disposal.

See Chapter 5 for further recommendations.

Construction Information

Estimated Construction programme duration (no of shifts / weeks)

It is anticipated that the construction programme will last for a duration of three months.

Anticipated construction start date (if known)?

June 2020

Daytime / night time working (if known)?

The Scheme will be completed predominately during daytime working hours (08:00-16:00), however some works may be required during night time working hours (20:00-06:00).

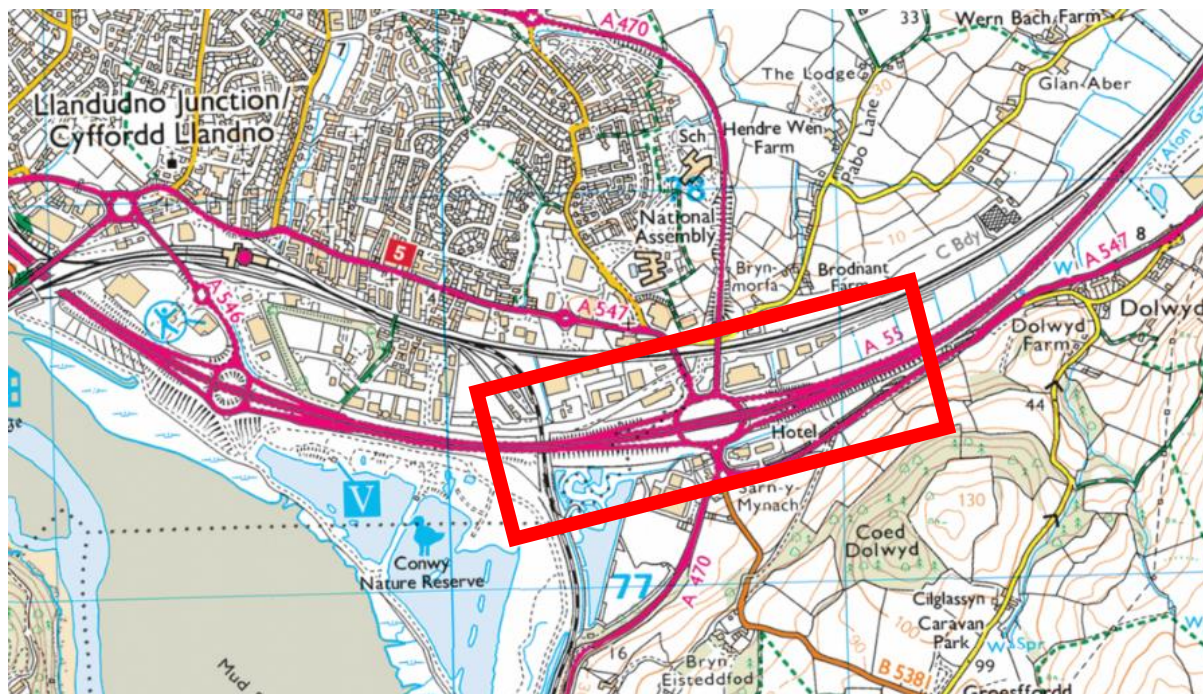
Type of equipment to be used (if known)?

Traffic management will be required for the duration of the works to some extent. The plant and machinery will be typical construction equipment suited to this type of works e.g. chainsaw, excavator etc. The exact equipment and construction methodology for the work are not known at the stage.

Description of Surrounding Environment

The Scheme is situated to the south of Llandudno Junction on Junction 19 of the A55. The junction serves the A470 which continues north towards Llandudno and also serves smaller A and B roads such as the A547 and B5381 which serve Conwy and Colwyn Bay. Llandudno Junction situated along the north west of the junction. Business and commercial retail units are predominately situated just north west of Junction 19 and the residential dwellings are separated by the railway line.

The land surrounding the Scheme towards the north east and south and south east are predominately agricultural and consists of large open fields separated by hedgerows and lined with small pockets of woodland. There are several farms and residential properties between Llandudno Junction and Mochdre, with the denser and more built up areas congregating around the coastline.



'This map is based upon Ordnance Survey Material with the Permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationary Office'

Figure 1: Location of the proposed works

3 SITE VISIT

An Ecological walkover of the roundabout was undertaken on the 26th September 2019 which included the following surveys:

- Phase 1 Habitat Survey; and
- Preliminary Ground level roost assessment for trees

The findings of the surveys are summarised below:

- The site comprises heavily managed semi-improved neutral grassland, with small sections of broadleaved plantation woodland and dense scrub.
- There were parcels of broadleaved woodland and small areas of dense scrub occurring throughout the site.
- Two parcels of Priority Habitats comprising Lowland Mixed Deciduous Woodland were identified which form part of the soft estate of the A55 slip roads.
- Based on the habitats identified within the site, the species considered to be a potential constraint to the Scheme includes:
 - Bats
 - Birds
 - Reptiles and Amphibians

See Chapter 5 Recommendations for further information and details of further surveys and other requirements before and during the construction of the Scheme.

4 ENVIRONMENTAL BASELINE INFORMATION

4.1 STATUTORY DESIGNATIONS

EUROPEAN DESIGNATED SITES

European Designated Sites (also known as Natura 2000 Sites), which include any Special Protection Area (SPA), Special Area of Conservation (SAC), Sites of Community Importance (SCIs) and Ramsar sites, have been identified in Table 4-1 below where they are located within 2km of the Scheme or within 30km of the Scheme where bats are one of the qualifying interests of the designated site (measured from closest point).

Table 4-1 European Designated sites within proximity to the Scheme

Designated Site	Qualifying Features	Distance & Direction
Creuddyn Peninsula Woods	Creuddyn Peninsula Woods has developed on a series of Carboniferous limestones hills, and the habitats that are a primary reason for selection of this site is the Tilio-Acerion forest slopes, screes and ravines. Additional habitats present as a qualifying feature, but not a primary reason for selection of this, which includes important orchid sites.	1.2km north west
Meirionnydd Oakwoods and Bat Sites SAC (adjacent to the east side of A498 near Nant Gwynant)	The site is primarily designated as it is a very large example of old sessile oak woods in North Wales, which also supports rare and scarce bryophytes and lichens and rich ground flora. The site is also designated for Presence of Annex II species Lesser Horseshoe Bat.	28km south west
Gwydyr Forest Mines SAC (within Snowdonia National Park)	Lesser Horseshoe Bat present as a qualifying feature, but not primary selection for Site. Primary Selection for the site designation is for the presence of Annex 1 habitats which comprise; Calaminarian grasslands of the <i>Violetalia calaminariae</i> .	16km south west

Source: JNCC January 2020

SITES OF SPECIAL SCIENTIFIC INTEREST (SSSI)

Sites of Special Scientific Interest (SSSIs) within 2km of the Scheme have been identified below in Table 4-2.

Table 4-2 Sites of Special Scientific Interest (SSSI) within 2km of the Scheme

Designated Site	Qualifying Features	Distance & Direction
Aber Afon Conwy	Aber Afon Conwy is of special interest for its marine and terrestrial invertebrate biology. The tidal reach of the site extends approximately 16 kilometres, encompassing Conwy Bay between Penmaenbach Point and Great Orme's Head. This coastal plain estuary is of particular importance as it has the largest extent, most complete zonation, richest variety and best examples of high quality intertidal estuarine communities.	0.8km south west
Benarth Wood	Benarth woods is a mixed deciduous woodland comprising oak, beech and sycamore woodland adjacent to the Conwy Estuary, with an important population of wild service tree, and a carpet of greater woodrush adjacent to the estuary itself.	1.7km south west
Creuddyn Peninsula Wood	Peninsula Wood comprises 4 SSSIs namely, Gloddaeth SSSI, Marle Hall Woods SSSI, Coed Bron Garth SSSI, and Pydew SSSI.	1.5km north

AREAS OF OUTSTANDING NATURAL BEAUTY (AONB)

The Scheme is not within 2km of any Areas of Outstanding Natural Beauty.

4.2 OTHER STATUTORY DESIGNATIONS

The Scheme is not within 2km of any other Statutory Designations.

4.3 NON-STATUTORY DESIGNATIONS

Within 2km of the junction there are several non-statutory designated sites comprising;

- The Coed Dolwyd woodland is designated as ancient semi natural woodland and is located approximately 320m south east of the Junction.
- Conwy RSPB / Nature Reserve is located on the edge of the Conwy Estuary approximately 440m south west from the Junction.
- There is one Wildlife site within proximity to the Junction comprising Broadleaved woodland known as Coed Cilglasin which is 900m south east from the Junction.
- Towards the north of the Scheme, there is an area of ancient woodland and a wildlife site located just north of Esgyrn located approximately 1.3km north from the Junction.

4.4 PROTECTED & NOTABLE SPECIES

The land within the boundaries of the Scheme comprises of low-lying managed grassland and shrub species. There are many tree and shrub species situated on the motorway embankment bordering the Scheme which could be a potential habitat for reptiles, birds, bats and dormice. The Scheme will require localised vegetation clearance and the relocation of signage will also affect the soft estate. As the works will be contained within the highway boundary, only identified protected and notable species recorded within 0.5km of the Site have been considered. Species Records from the last 10 years are listed in Table 4-4 below.

Table 4-4: Species records located within 0.5km of the Scheme, measured from closest point

Species	Distance & Direction From Scheme
Lapwing	100m
Buzzard	100m
Redwing	150m
Tawny Owl	100m
Song Thrush	200m
Blackcap	200m
Herring Gull	200m
Coal Tit	200m
Bullfinch	220m
Badger	230m
Lesser Black-backed Gull	280m
Lesser Horseshoe Bat	220m
Soprano Pipistrelle	220m
Slow Worm	250m
Pipistrellus Bat Species	920m
Noctule Bat	515m
Pipistrelle	515m
Soprano Pipistrelle	515m

There are over 200 records of birds and bats recorded within the Conwy RSPB / Nature Reserve. There are no invasive plant species records within the vicinity of the junction, however there are several records of non-native invasive plant species and species within Conwy RSPB / Nature Reserve.

4.4 AREAS OF POPULATION, COMMUNITY RESOURCES & INFRASTRUCTURE

Table 4-5 summaries sensitive receptors (i.e. residential properties, hotels etc) and community resources (i.e. footpaths, cycleways etc.) located within 0.5km the site that may be affected.

Table 4-5: Sensitive receptors within 0.5km of the Site

Receptor / Resource	Distance & Direction from Scheme
Premier Inn Llandudno Glan-Conwy	40m east
The Afon Conwy	40m east
Shell Garage	50m north west
North Wales Campervans	75m south
Several residential properties behind Premier Inn	85m south
Industrial building	90m south west
Large commercial businesses within Business Parks north of A55	160m north west
Large commercial businesses within Business Parks north of the railway line	315m north
Residential properties of Llandudno Junction	600m north west
Residential properties on Pabo Lane	460m north east
Public footpath	440m south
Public footpath	300m north

The Scheme is not situated within any Noise Action Planning Priority Areas (NAPPAs).

4.5 WATER ENVIRONMENT

Table 4-6 identifies watercourses and permanent water bodies located within 2km of the Scheme.

Table 4-6: Watercourses within 2km of the Scheme

Water course/ Water Body	Distance & Direction

Afon Conwy	0.95km south west
Afon Ganol which is a tributary of the Afon Conwy	15m south
Unnamed drainage ditch	160m north
Unnamed ponds	262m and 585m south west
Unnamed drainage ditch	900m east
Unnamed drainage ditch	540m north east

The junction sits within an area of medium risk of flooding from rivers and seas, with the land to the south of the junction which sits within an area of high risk of flooding from rivers and seas. The land towards the north and north west of the roundabout is within a low Flood Risk zone, and due to its elevation and distance from the Afon Conwy, it is unlikely this area of the Scheme is at risk of flooding. The area towards the south and north east of the roundabout are within an area which has a high risk of flooding.

4.6 AIR QUALITY

There are no Air Quality Management Areas (AQMA) within 2km of the junction.

4.7 CULTURAL HERITAGE, HISTORIC & LANDSCAPE DESIGNATIONS

Listed structures within 2km of the Junction are listed in Table 4-7 below:

Table 4-7: Listed Buildings within 2km

Building	Grade	Distance
Bottom Lodge at Bryn Eisteddford	Grade II	450m east
Access bridge to Bryn Eisteddford	Grade II	500m south
All buildings within Bryn Eisteddford Grounds (Including the walls, cottage, shed, carts, garages and kitchen walls (nine buildings))	Grade II	750m south
Top Lodge at Bryn Eisteddford	Grade II	1km south west
Brodnant Farmhouse	Grade II	500m north east

There are no scheduled monuments, conservation areas or any designated landscape areas within 2km of the Junction.

4.8 CLIMATE

Traffic flows are not predicted to change as a result of the proposed scheme. The TUBA assessment has identified a £51,000 carbon benefit resulting from the scheme. This is from a reduction in carbon emissions, therefore resulting in a net positive impact to greenhouse gasses.

Climate resilience has been considered as part of this scheme. New energy efficient LED lighting is being installed as part of the scheme reducing energy requirements, and associated carbon emissions, for the A470/ A55 interchange and this section of the A55.

4.9 MAJOR ACCIDENTS AND DISASTERS

The scheme comprises minor modifications and improvements to the existing A470/ A55 interchange. These improvements are not considered to increase the:

- vulnerability of the project to risks of major accidents and/ or disasters;
- and any consequential changes in the predicted effects of that project on environmental topics.

As a result, major accidents and disasters are not considered further in this EIA Screening report.

4.10 HEAT AND RADIATION

Heat and radiation are unlikely to be of relevance to the scope of most highways' projects. The proposed scheme characteristics have been reviewed, which indicates that neither heat nor radiation are of relevance to the proposed scheme and are therefore not considered further in this EIA Screening Report.

5 RECOMMENDATIONS

Recommendations have been suggested in Sections 5.1 to 5.6 to ensure any potential environmental impacts on the environment are minimised or mitigated.

5.1 AIR QUALITY

The Scheme is not anticipated to impact on air quality given the nature of work proposed. Traffic management that is effective in ensuring workers are kept safe and that traffic flows are maintained should serve to minimise emissions from any changes in traffic that may arise because of construction works. The works will be completed predominately during day time hours, but some night-time hours may be required. Local traffic diversions and junction closures may be in place for the duration of works if the works are undertaken at night. The Scheme should have no impact on air quality related to emissions from vehicles travelling during peak hours. The Scheme should have no significant impact on the operation of the motorway junction. Any impacts to air quality should be temporary for the duration of construction (estimated 3 months).

The following best practice measures should be implemented to further minimise the effects of air quality:

- Tool-box talks to be delivered to all site personnel;
- Plant to be serviced regularly;
- Plant should be well maintained and shut down in the intervening periods between work, or throttled down to a minimum;
- There should be constant monitoring of dust levels and effective methods of work should be adopted to prevent dust becoming airborne at the source, for example; using wet sweeping methods to prevent accumulation of dust and mud and using effective exhaust ventilation and filtering to minimise potential dust pollution; and
- All machinery should use Ultra Low Sulphur Diesel (ULSD) where possible.

5.2 NOISE

The site is subject to moderate-large volumes of noise as a result of existing traffic and vehicular use. The nearest residential receptors are located just behind the Premier Inn, approximately 180m south of the Scheme. There is potential for nearby residential receptors to experience temporary increased levels of noise for the duration of the works, although these will be minor and short-term in nature (3 months).

The works should be effectively programmed in advance to avoid delays in the construction programme. This will serve to minimise the amount of time surrounding receptors are potentially exposed to any noise disturbance from the works. Best practice mitigation measures should be in place, including notification of the works to surrounding sensitive receptors.

The following noise management measures should be implemented to further minimise the effects of noise:

- Use of noise control equipment such as jackets, hoods and shrouds on construction equipment such as generators etc.;
- Tool-box talks to be delivered to all site personnel;
- Plant to be regularly serviced and maintained;

- Locate plant as far as reasonably practicable away from receptors;
- Shut down plant when not in use;
- Use of white noise reversing alarms; and
- Minimise drop heights of waste and equipment into lorries and other plant.

5.3 POLLUTION

Given the nature of the works, and location there are no significant pollution impacts likely to be caused by the proposed works are anticipated, including to the water environment. However, the following mitigation measures must be implemented to minimise the risk of pollution resulting from accidental spillages:

- The works should be undertaken in accordance with the relevant current Natural Resources Wales Pollution Prevention Guidelines (PPGs), and subsequent Guidance for Pollution Prevention (GPPs) including PPG1, GPP5, PPG6, GPP21, and GPP22;
- Spill kits must be made available on site and personnel should be competent at deploying spill kits in the event of a spillage. In the event of a pollution incident, work should cease in the vicinity of the incident and contaminants must be cleaned up immediately. All incidents must be reported and a Pollution Incident Report form completed. Subsequent waste material resulting from a spillage should be disposed of appropriately (PPG6);
- If an unexpected source of pollution is identified on site during works, construction should cease immediately. The area around the pollution should be sealed off to prevent further spread / exposure of contaminants to workers. An appropriate environmental regulator should be contacted on 0300 065 3000 for further advice (PPG6);
- Minimising the exposure of bare ground and stockpiles reduces the likelihood of increased sedimentation into the nearby watercourses (GPP5);
- The control and movement of site material can generate silt and oil contaminated water. The washing of wheels and plants on the sides of roads and rivers therefore propose a risk of pollution, wheel washing should therefore occur in designated areas (at least 10m away from the watercourse) (PPG6);
- The plant will also be kept regularly serviced to limit emissions (PPG6); and
- Avoid unnecessary vegetation clearance. This keeps damage to a minimum and helps prevent sediment pollution from run-off. Only clear vegetation when works are required.

5.4 ECOLOGY

An ecological walkover was undertaken of the roundabout in September 2019 and the following conclusions and recommendations were made:

- Bats – although the habitats on Site provided negligible suitability for roosting bats, the broadleaved woodland and scrub habitats within the centre of the roundabout could be used by foraging and commuting bats and should therefore be protected and retained throughout the construction phase to prevent the severance of potential bat flight lines and removal of potential foraging ground;
- Birds – The scattered scrub and broadleaved plantation woodland habitats present on the Site are suitable to support breeding birds. Therefore, it is advised that the Scheme is appropriately designed to exclude the removal of trees from the Site. If tree removal is required, this should be undertaken outside of the breeding bird season (March to August inclusive). If this is not

possible, a suitably experienced ecologist would be required to be on Site to undertake a nesting bird check within 48 hours before any clearance works commence.

Since the Ecological Walkover was undertaken in September 2019, the study area of the Scheme has increased and includes additional works. Therefore, an updated Ecological Constraints Walkover and Assessment was been undertaken in May 2020 and the following further recommendations made to manage any ecological constraints prior to the Scheme commencing have been made:

- Bats - One tree within the Site (Target Note 3) was recorded as having Low suitability to support roosting bats. It is recommended that a secondary at height inspection of potential roosting features (PRFs) of the tree to confirm the assessment, that it is of Low or Negligible suitability for roosting bats. It is recommended any new lighting is to follow recent best practice Institute of Lighting Professionals (ILP) principals, only what is necessary and to avoid spill, where light falls outside the boundary of the area being lit.
- Reptiles and Amphibians – recommended that precautionary measures for vegetation clearance work are implemented, including sensitive vegetation clearance and any clearance works being carried out during the April to September/early October, to avoid disturbance of reptiles during hibernation period. Due to the proximity of several water bodies to the road verges, and the suitable connecting terrestrial habitat, it is recommended that further surveys for amphibian presence are undertaken.

5.5 MATERIALS

The Scheme will generate waste material in the form of materials, old infrastructure and packaging from materials brought to site. Waste should only be transported by a registered waste carrier to a suitably licensed waste management facility (the credentials of both waste carrier and waste facility should be checked prior to the movement of any waste). All waste transported should be documented with waste transfer notes.

5.6 FURTHER REQUIREMENTS

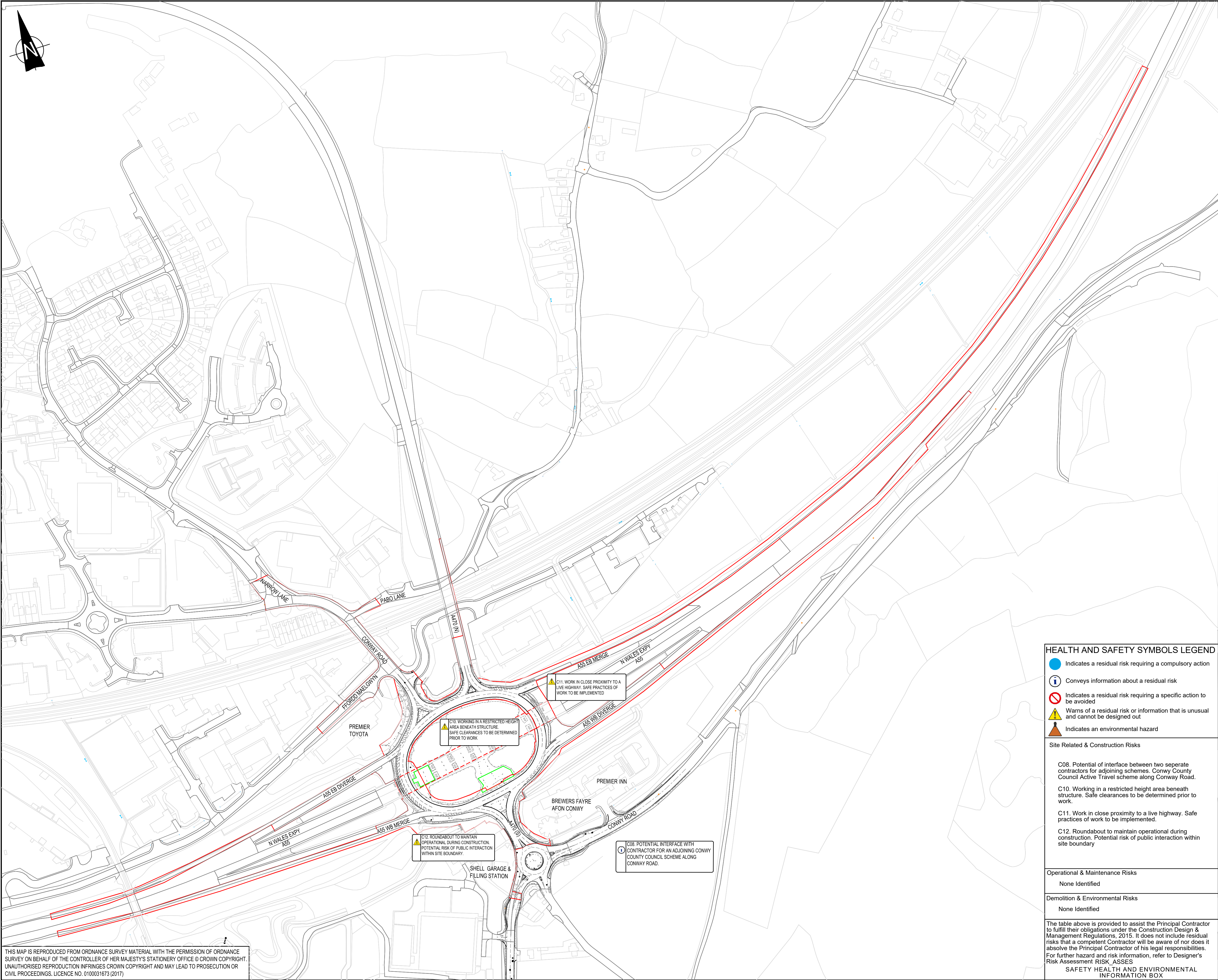
Tool-box talks on air quality, waste management, biodiversity, pollution prevention and noise reduction should be delivered to all site personnel by the site manager.

5.7 CONCLUSIONS

The proposed Scheme has been screened in accordance with LA 102 (Appendix B) and has been found not to require any further actions regarding the completion of a statutory EIA.

Appendix A

SITE BOUNDARY AND GENERAL ARRANGEMENT PLAN



File name: C:\USERS\PERC\CAD\DESIGN\GLAN CONWY\70057672\WSP-HGN-GC-DR-001000 SITE BOUNDARY.DWG, printed on 04 May 2020 17:15:35, by Colin, Pedro

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6. DRAWING TO BE READ IN CONJUNCTION WITH SPECIFICATION APPENDIX 0/1, 1/17, 1/18, 1/19.
7. SITE EXTENTS MAY BE EXTENDED FOR TEMPORARY TRAFFIC MANAGEMENT PURPOSES, SUBJECT TO PRIOR AGREEMENT WITH THE HIGHWAY AUTHORITY.

KEY:

- EXTENDED SITE BOUNDARY (42,177 m2)
- POTENTIAL AREA FOR ONSITE STORAGE FACILITY SUBJECT TO AGREEMENT WITH NMWTRA.

HEALTH AND SAFETY SYMBOLS LEGEND

- Indicates a residual risk requiring a compulsory action
- Conveys information about a residual risk
- Indicates a residual risk requiring a specific action to be avoided
- Warns of a residual risk or information that is unusual and cannot be designed out
- Indicates an environmental hazard

Site Related & Construction Risks

- C08. Potential of interface between two separate contractors for adjoining schemes. Conwy County Council Active Travel scheme along Conway Road.
- C10. Working in a restricted height area beneath structure. Safe clearances to be determined prior to work.
- C11. Work in close proximity to a live highway. Safe practices of work to be implemented.
- C12. Roundabout to maintain operational during construction. Potential risk of public interaction within site boundary

Operational & Maintenance Risks

None Identified

Demolition & Environmental Risks

None Identified

The table above is provided to assist the Principal Contractor to fulfill their obligations under the Construction Design & Management Regulations, 2015. It does not include residual risks that a competent Contractor will be aware of nor does it absolve the Principal Contractor of his legal responsibilities. For further hazard and risk information, refer to Designer's Risk Assessment RISK_ASSES

SAFETY HEALTH AND ENVIRONMENTAL INFORMATION BOX



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T+ 44 (0) 292 076 9200
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CLIENT:



SITE/PROJECT:

A55 JUNCTION 19
GLAN CONWY ROUNDABOUT

TITLE:

EXTENDED SITE BOUNDARY

SCALE @ A1:

1:2000 @A1

CHECKED:

PB

APPROVED:

NH

PROJECT NO:

70057672

DESIGNED:

PC

DRAWN:

PC

DATE:

May 20

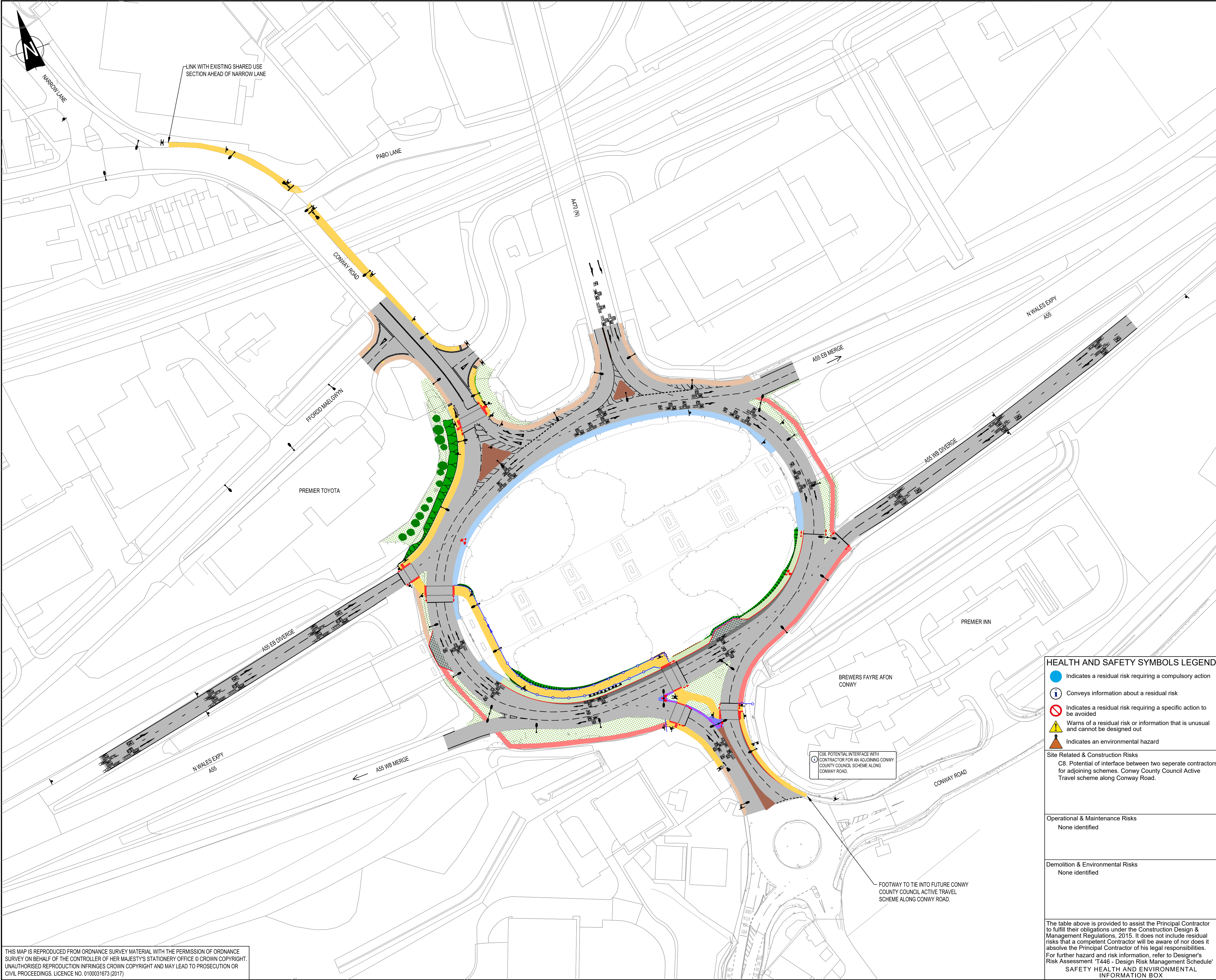
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- THE WORKS SHOULD BE CARRIED OUT IN ACCORDANCE WITH THE CONTRACT WORKS INFORMATION. PLEASE SEE OTHER SERIES DRAWINGS FOR MORE DETAILS OF DESIGN ELEMENTS.
- THE LOCATION AND DEPTH OF ALL EXISTING SERVICE APPARATUS SHOULD BE CONFIRMED PRIOR TO COMMENCING ANY EXCAVATION WORK. REFER TO EXISTING SITE & SERVICES DRAWINGS FOR KNOWN BURIED SERVICES, 70057672-WSP-HGN-GC-DR-00113 TO 00118.
- DRAWING TO BE PRINTED IN COLOUR.

KEY:

- EXISTING CARRIAGEWAY TO BE RESURFACED
- EXISTING TRAFFIC ISLAND TO BE RESURFACED
- EXISTING VERGE TO BE MAINTAINED
- EXISTING FOOTWAY TO BE RETAINED
- EXISTING FOOTWAY TO BE REMOVED
- PROPOSED FULL DEPTH CARRIAGEWAY CONSTRUCTION
- PROPOSED SHARED USE FOOTWAY/ CYCLE WAY
- PROPOSED VERGE
- PROPOSED FOOTWAY CONSTRUCTION
- PROPOSED FILL EARTHWORKS
- PROPOSED CUT EARTHWORKS
- PROPOSED GRASSCRETE MAINTENANCE BAY
- PROPOSED KERBLINE ALIGNMENT
- PROPOSED PEDESTRIAN GUARD RAIL
- PROPOSED RED TACTILE PAVING
- PROPOSED BUFF TACTILE PAVING
- PROPOSED SIGNAL HEAD
- PROPOSED LIGHTING COLUMN
- PROPOSED TRAFFIC SIGN
- PROPOSED MAINTENANCE ACCESS GATE
- PROPOSED POST & WIRE FENCE
- PROPOSED TREE PLANTING

P01	27/02/2020	AE	FOR TENDER	PC	NH
REV	DATE	BY	DESCRIPTION	CHK	APP

DRAWING STATUS: D2 - FOR TENDER



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Asiant Cefnffyrdd Gogledd a Chanolbarth Cymru
North & Mid Wales Trunk Road Agent

SITE/PROJECT: A55 JUNCTION 19
GLAN CONWY ROUNDABOUT

TITLE: GENERAL ARRANGEMENT

SCALE @ A1: 1:750 @A1	CHECKED: PC	APPROVED: NH
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PROJECT NO: 70057672	DESIGNED: AE	DRAWN: AE	DATE: May 20
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HEALTH AND SAFETY SYMBOLS LEGEND

- Indicates a residual risk requiring a compulsory action
- Conveys information about a residual risk
- Indicates a residual risk requiring a specific action to be avoided
- Warns of a residual risk or information that is unusual and cannot be designed out
- Indicates an environmental hazard

Site Related & Construction Risks
C8. Potential of interface between two separate contractors for adjoining schemes. Conwy County Council Active Travel scheme along Conway Road.

Operational & Maintenance Risks
None identified

Demolition & Environmental Risks
None identified

The table above is provided to assist the Principal Contractor to fulfill their obligations under the Construction Design & Management Regulations, 2015. It does not include residual risks that a competent Contractor will be aware of nor does it absolve the Principal Contractor of his legal responsibilities. For further hazard and risk information, refer to Designer's Risk Assessment 'T446 - Design Risk Management Schedule' SAFETY HEALTH AND ENVIRONMENTAL INFORMATION BOX

Appendix B

Environmental Impact Assessment screening (LA102)

STEP 1: IS THE PROJECT ANNEX I OR ANNEX II?

The first stage is to identify if the project falls within Annex I or Annex II of the EIA Directive descriptions, as provided in Table 1 below.

Table 1: Projects that fall within Annex I or Annex II of the EIA Directive

EIA Directive	Type of project	EIA requirement
Annex I	Construction of motorways and express roads. Construction of a new road of four or more lanes, or realignment and /or widening of an existing road of two or more lanes, where such new road, or realigned and/ or widened section of road would be 10 km or more in a continuous length.	EIA mandatory; an ES must be published.
Annex II	All other road projects (excluding strictly maintenance projects*) not listed in Annex I.	A determination must be followed that meets the requirements of the EIA Directive and the EIA Regulations. EIA need is determined by significance of effect.

*A project is considered strictly maintenance if it does not change the nature of the asset.

According to the EIA Directive definitions, the project does not fall within Annex I. It does fall within Annex II of the EIA Directive as it includes improvement works.

STEP 2: IS THE PROJECT 'RELEVANT'

For Annex II projects, thresholds are set for the size and environmental sensitivity of the works, to determine whether the project is classified as a 'relevant project' under the EIA Regulations. In general, the requirements are as follows:

“a project for constructing or improving a highway where the area of the completed works together with any area occupied during the period of construction or improvement by requisite apparatus, equipment, machinery, materials, plant, spoil heaps or other such facilities exceeds 1 hectare or where any such area is situated in whole or in part in a sensitive area.”

Wales National Application Annex to LA 102 states that a screening request should evidence how temporary traffic management has been incorporated into the calculation of the area occupied during construction or improvement. The total area of works including temporary traffic management (as described in Table 2.1 of the Screening Report) is within Table 2 below.

The project will cover an area more than the Annex II size threshold of 1 hectare and is therefore a 'relevant project' under Annex II of the EIA Directive.

Table 2: Screening Process Decision Table

Is the project a Maintenance or Improvement project?	Improvement
Does the project fall under an Annex I or Annex II project?	Annex II
Is the project over 1 ha incorporating temporary traffic management and all of the storage area for materials and equipment?	Yes, the project area is approx. 4.2ha
Is the project likely to have a significant effect on the environment?	The works are localised and will take place over a short period of time (3 months). Vegetation clearance required to facilitate the Scheme (lighting columns and proposed footway/cycleway) will also affect the soft estate. However, these activities will not occur in any protected or designated areas. The works will take place predominately during daytime working hours, and sensitive receptors within proximity to the Scheme could experience temporary noise disruption. Providing best practice and pollution prevention measures are in place throughout the construction phase, no significant effects are predicted on the environment.

How have the sustainable development principles, as described in the Well-Being of Future Generations Act (Wales) 2015, section 5 have been taken into account?		<p>The construction phase and operational phase impacts from the Scheme to both current and future generations have been considered and presented within the screening process contained within this table.</p> <p><u>Construction:</u></p> <p>No significant impacts are anticipated throughout the construction phase with the implementation of best practice mitigation measures. The Scheme is localised and will only last a short duration (3 months). The Schemes implementation will importantly increase pedestrian and vehicular safety along the highway corridor.</p> <p><u>Operation:</u></p> <p>The aim of the Scheme is to upgrade the capacity of the roundabout, replacement of street lighting columns, resurfacing of the highway and connecting roads, renewal of line markings and provision of a shared use footway through the roundabout. Through doing this, there is potential for increased levels of safety for road users and pedestrians. The improvements at this location will help Wales move towards 'A Wales of Cohesive Communities'. Notably, the works will contribute towards supporting community connectivity and safety.</p> <p>The scheme has been appraised against the seven well-being goals as identified in Table C-1 in Appendix C.</p>
Considering Annex III of the EIA Regulations – is the project going to have a significant effect on the environment?	What is the existing land use?	The Scheme is taking place along A55 dual carriageway and at the A55 / A470 Glan Conwy Interchange. The existing land use of the area affected by the works comprises paved areas and soft estate on land owned by the Welsh Government.
	What is the relative abundance, quality and regenerative capacity of natural resources in the area?	The area immediately surrounding the site is likely to experience disturbance from the existing traffic on the A55. There is low level vegetation and grass within the highway verge with trees located along the embankment. It is considered that the site has a relatively high regenerative capacity due to regular vegetation clearance as part of ongoing maintenance for visibility and safety around the highway network.
	What is the absorption capacity of the natural environment with regards to the following:	



	<ul style="list-style-type: none">• Wetlands	The Scheme is not located within a wetland area. However, the RSPB Conwy is located within 500m of the Scheme. The surrounding water environment is considered to be subject to existing disturbance by the A55 given the proximity of the surrounding highway network. The Scheme will utilise best practice measures and pollution prevention measures, therefore no significant impacts to the surrounding water environment are anticipated.
	<ul style="list-style-type: none">• Coastal Zones	The Scheme is not located within a coastal zone; therefore, no impacts are anticipated.
	<ul style="list-style-type: none">• Mountain and Forest Areas	The Scheme is not located within a mountain or forest area; therefore, no impacts are anticipated.
	<ul style="list-style-type: none">• Nature Reserves and parks	The Scheme is not located within or is adjacent to the boundary of any nature reserves and parks, therefore, no impacts are anticipated. The Scheme is however, within 500m of Conwy RSPB / Nature Reserve. The surrounding water environment is considered to be subject to existing disturbance by the road given the proximity of the surrounding highway network. The Scheme will utilise best practice measures and pollution prevention measures, therefore no significant impacts to the surrounding water environment are
	<ul style="list-style-type: none">• Areas classified or protected under member states' legislation; special protection areas designated by member states pursuant to Directive• 79/409/EEC and 92/43/EEC	The Scheme is not within or adjacent to the boundary of any designated areas. Given the nature of the works, no impacts on the designated sites are anticipated.



	<ul style="list-style-type: none">• Areas in which the environmental quality standards laid down in Community legislation have already been exceeded	The Scheme is not situated within any AQMAs or NAPPAs. However, the works will be completed predominately during daytime hours. Given the nature of the works and their temporary duration (3 months), there will be no long-term impact caused by the works.
	<ul style="list-style-type: none">• Densely populated areas	The Scheme is over 0.5km from the densely populated areas around Llandudno Junction. Sensitive receptors in close proximity however, such as located on Conway Road and Pabo Lane are likely to experience existing disturbances from noise. The Scheme will be completed predominately during daytime working hours so noise impacts are expected to be minimum. The impact of noise will be temporary and for a short duration (3 months). Therefore, given the nature of the works and provided best practice and pollution prevention measures are in place, there are no anticipated impacts.
	<ul style="list-style-type: none">• Landscapes of historical, cultural or archaeological significance	The Scheme is not located within or adjacent to any historic designated areas. The nearest historic designation is a Listed Building located 450m from the Scheme. Therefore, no impacts are anticipated on historic designations.
What is the overall outcome of the screening process		The works are confined to localised areas of highway with a total area of approximately 4.2ha. Standard mitigation measures will be in place during construction. No significant environmental impacts are anticipated. The works are considered not to require a statutory EIA.

Appendix C

FUTURE GENERATIONS FRAMEWORK APPRAISAL

The scheme has been appraised against the seven well-being goals as identified in Table C-1.

Table C-1 – Future Generations Framework Appraisal

Well-being Goal	A55 / A470 Glan Conwy Interchange
A Prosperous Wales	The scheme provides an economic value through the improvements in journey time and reduction in accidents. The economic value for the option is £9.0million and has a positive BCR of 9.9. The social value associated with the scheme is as a result of the general improvements to the junction and the perception of the increased safety aspect of driving through the junction. The users of the junction also perceive that the improvements are addressing their needs and concerns. The construction of the scheme is also going to aim to use the Welsh workforce as much as possible, providing a boost to the Welsh economy.
A Resilient Wales	<p>The scheme is likely to improve access from the Llansanffraid Glan Conwy village and Llandudno. Additionally, the scheme mitigates queuing back onto the A55 strategic highway network thus improving journey time reliability for strategic traffic. The scheme includes a new NMU link which is going to improve the safety of crossing the junction.</p> <p>Furthermore, the impact on ecology and biodiversity is neutral. At WelTAG Stage Three an Ecological Constraints Assessment was produced. The Assessment identified the need for pre-clearance checks and supervision by an ecologist removing vegetation, removing vegetation outside of bird nesting season (April-September), and ensuring that best practice measures are in place throughout the works, no impacts to biodiversity are anticipated.</p>
A More Equal Wales	Construction is likely to take place outside of the peak summer time, with an opening in late 2020. This minimises the impact on users. Furthermore, as the area experiences high levels of tourism in the summer period, the improvements are going to benefit the local residents. Moreover, scheduling the works outside of the peak tourist time, this may lessen the strain and ease the works traffic management.
A Healthier Wales	The scheme is likely to see a reduction in accidents. The accident appraisal identified that over a five-year period, a third of collisions could be mitigated using the historical data available for the study area. The scheme also aims to improve the active travel from the junction to Pabo Lane industrial estate. The scheme has future potential of linking into RSPB Conwy and the active travel route towards the Llansanffraid Glan Conwy village.
A Wales of Cohesive Communities	The signalling of the scheme and moving the pedestrian crossing through the centre of the roundabout is likely to make people with children, disabilities and other groups more likely to use the active travel route through the junction and consider using active travel as a form of transport. The scheme has the potential to support local amenities such as the commercial units to the South of Glan Conwy Interchange and support the Ffordd Maelgwyn industrial estate.
A Wales of Vibrant Culture & Thriving	An analysis into the Welsh language skills from the ONS identified that 30% of people can speak, read or write Welsh in the Conwy area compared to 21% for the overall Wales. The improvement to the junction is unlikely to influence the area's culture or Welsh language use.



Welsh Language	
A Globally Responsible Wales	<p>The project may consider the use of sustainable materials and low-carbon technology for the new lighting and the resurfacing of the junction tarmac material. The TUBA assessment has identified a £51,000 carbon benefit resulting from the scheme. This is from a reduction in carbon emissions, therefore resulting in a net positive impact to greenhouse gasses.</p>