

Business Management System			
Reference: BP-f-012	Rev: V1.1	Issue: December 2021	Authorised: Ellis Ashton

Continuation of industrial land uses at former
Seiont Brickworks, Caernarfon
Environmental Statement Part B

Seiont Ltd

December 2023

Revisions Control Page

Date	Summary of Changes Made	Changes Made By (Name)
07.12.2023	Issue for PAC consultation	Stephen Blunt

DRAFT

Business Management System			
Reference: BP-f-012	Rev: V1.1	Issue: December 2021	Authorised: Ellis Ashton

Contents

Former Seiont Brickworks, Caernarfon – Environmental Statement Part B	5
6 Cultural Heritage.....	5
6.1 Cultural Heritage baseline	5
6.2 Noise arising from the development.....	6
6.3 Assessment of impact.....	6
7 Landscape and visual amenity.....	7
7.1 Landscape and visual assessment	7
7.2 Baseline.....	7
7.3 Summary of landscape and visual effects	8
8 Ecology and Nature Conservation	8
8.1 European designated sites	8
8.2 Ecological impact assessment	9
9 Noise.....	11
9.1 Noise scope.....	11
9.2 Noise assessment	11
10 Traffic generation and effects	12
10.1 Traffic scope	12
10.2 Traffic effects on heritage sites	14
11 Drainage and the water environment.....	14
11.1 Location and flood risk	14
12 Water quality.....	15
12.1 Water quality baseline.....	15
12.2 Potential effects from the development.....	15
13 Cumulative effects with other projects.....	16
13.1 Other cumulative effects with the bypass.....	16
13.2 Cumulative effects with other projects.....	16
14 Risk of disaster.....	18
14.1 Vulnerability to man-made incidents	18
14.2 Vulnerability to natural disasters	18
14.3 Conclusion – risk of disaster	19
15 Conclusion	19
15.1 Conclusion to Environmental Statement.....	19
Appendix J- Landscape and Visual Impact Assessment	20
Appendix K – Habitats Regulations: Test of Likely Significant Effects report	21
Appendix L – Ecological Impact Assessment report	22

Business Management System			
Reference: BP-f-012	Rev: V1.1	Issue: December 2021	Authorised: Ellis Ashton

Appendix M – noise report..... 23

Appendix N – A4085 traffic noise calculations 24

Appendix O –Flood Consequence Assessment 25

DRAFT

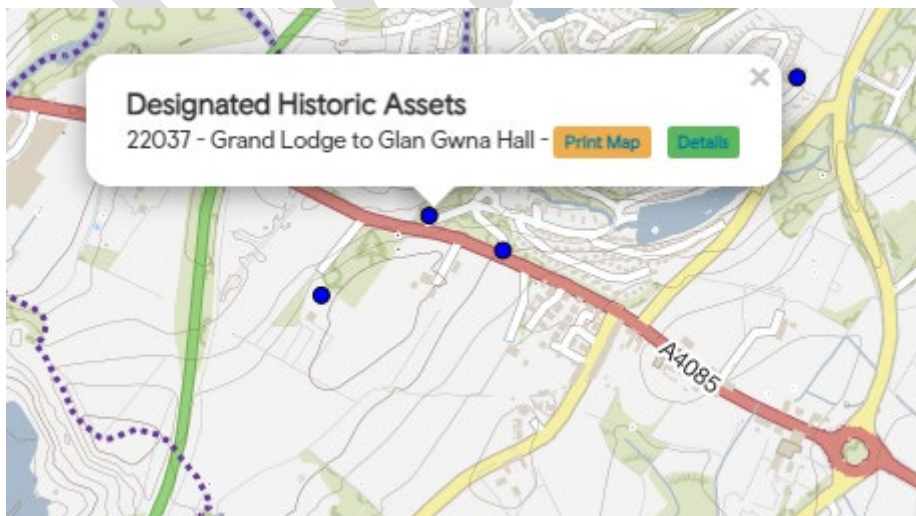
Business Management System			
Reference: BP-f-012	Rev: V1.1	Issue: December 2021	Authorised: Ellis Ashton

Former Seiont Brickworks, Caernarfon – Environmental Statement Part B

6 Cultural Heritage

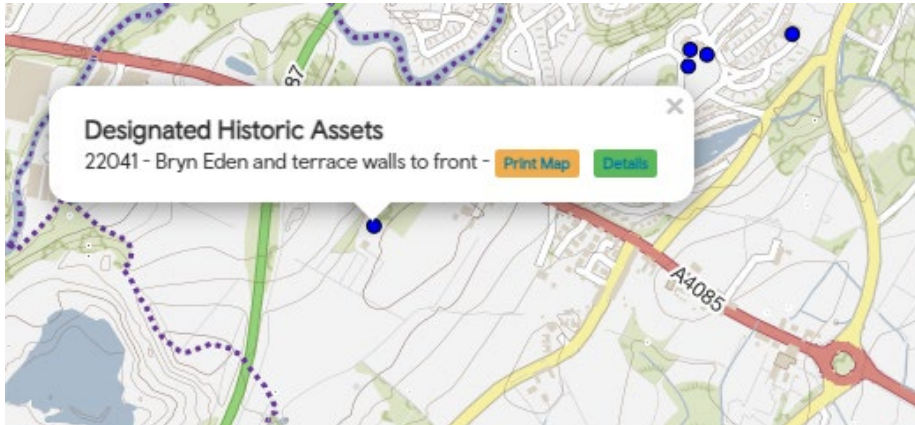
6.1 Cultural Heritage baseline

- 6.1.1 The proposal is for the continued use of land within the bypass construction site compound (the former brickworks yard), and for creation of a new access between the bypass haul road and Waunfawr Road at Plas Treflan. The property Plas Treflan has no historic designation, and works would be limited to the visibility splay at the property’s frontage onto Waunfawr Road.
- 6.1.2 Cadw advised at Scoping stage that the potential effects on sites within 3km radius should be a material planning consideration and should be scoped into the ES. The vast majority of these sites are not visible from the development site and therefore, consideration should be given to the tranquillity and change in noise levels of those sites. The 2016 Environmental Statement confirmed that the World Heritage Site of Caernarfon Castle lies 1.3 kilometres to the northwest and there is no inter-visibility with the quarry.
- 6.1.3 Cadw specifically mention listed buildings ‘22037 Grand Lodge to Glan Gwna Hall’ and ‘22041 Bryn Eden and terrace walls to front’ as designated sites that although not visible from the proposed development, could potentially be affected by increased noise levels. The location of these sites is shown on Cadw records at <https://cadw.gov.wales/advice-support/cof-cymru/search-cadw-records>. Both are separated from the application site by the embankment of the recently-built A487 Caernarfon bypass and so have no intervisibility.
- 6.1.4 22037 Grand Lodge to Glan Gwna Hall was included in the Grade II Listing ‘as a well-preserved late C19 lodge of Picturesque style at the former south-western entrance to Glan Gwna Hall’. It is located on the north side of Ffordd Waunfawr and is therefore exposed to effects from HGV traffic generated by the proposed development. The full Cadw Listing Report is presented in Appendix I. This property appears to be in use as a private house. It can be glimpsed from the public highway but is largely screened by the boundary wall and trees. Designated asset 22054 ‘Gate piers and walls at entrance to Glan Gwna Hall’ is located just to the east along the same road.



- 6.1.5 22041 Bryn Eden and terrace walls to front was included in the Grade II Listing ‘as a largely unaltered mid-C19 house, employing a mixed Italianate and Gothic architectural vocabulary, important for the

evidence it provides of increasing prosperity in the nearby county town at this time'. It is set back some distance from the south side of Ffordd Waunfawr, and is therefore exposed to effects from HGV traffic generated by the proposed development. The full Cadw Listing Report is presented in Appendix I. This property appears to be in use as a private house. It can be glimpsed from the public highway but is largely screened by intervening properties, the boundary wall and trees.



6.2 Noise arising from the development

6.2.1 Two sources of noise arising from the development were considered in this assessment:

- Noise generated by the concrete batching and material recycling operations at the application site
- Noise generated by additional HGV traffic on the A4085 Waunfawr Road, serving the development.

6.2.2 The noise from each source, and propagation to these sites, was determined specifically as part of the noise assessment (Chapter 9), and found to be within the criterion (5dB above background) at which an adverse impact could occur at the nearest receptors. Bryn Eden is the closer of the two sites to the noise source within Seiont Quarry and so that relationship has been assessed as the worst case. Bryn Eden is 770m from the quarry, more than 500m further than the nearest receptors, and separated from it by the embankment of the Caernarfon bypass which stands some 6m above the adjoining ground, forming a further barrier to noise propagation.

6.2.3 Grand Lodge to Glan Gwna Hall lies close to, but a little below the level of, Waunfawr Road and is partly shielded by the boundary wall which interrupts noise generated close to the ground by tyres and vehicle engines.

6.3 Assessment of impact

6.3.1 CADW's response to the initial screening direction concluded in short that the proposed development was unlikely to have a significant effect on the designated heritage assets. Neither Bryn Eden nor Grand Lodge to Glan Gwna Hall is directly accessible to the public, but their heritage value might be appreciated by users of nearby public spaces such as footpaths.

6.3.2 Bryn Eden may be visible from one footpath which has now been truncated by the bypass embankment. Glimpses of Grand Lodge to Glan Gwna Hall are available from the footway of the A4085 Waunfawr Road but this is on the opposite side of the carriageway. No noise generated by the proposed site activities would be perceptible at either Listed Building. Additional traffic on the A4085 Waunfawr Road is shown in Chapter 10 to be 11.5 vehicles per hour which is not sufficient to affect

Business Management System			
Reference: BP-f-012	Rev: V1.1	Issue: December 2021	Authorised: Ellis Ashton

the perception of users of the footway. The tranquillity of the settings would not be affected by the development.

6.3.3 The proposed development would therefore have no impact on cultural heritage.

7 Landscape and visual amenity

7.1 Landscape and visual assessment

7.1.1 The proposal is for the continued use of land within the bypass construction site compound (the former brickworks yard), and for creation of a new access between the bypass haul road and Waunfawr Road at Plas Treflan. All land within the proposal boundary is within or adjacent to land currently disturbed and in use for bypass operations. The effects of continued working are therefore visual impact effects and not direct landscape-scale effects.

7.1.2 The current 'Do-minimum' situation is the restoration of the former factory yard as a grassed open space under existing permissions, as described in section 4.1 of this ES. The proposed continuation of use would delay permanently (but not ultimately prevent) the restoration of land within the application boundary, but does not directly affect the restoration proposals or timetable for the remainder of the mineral working site.

7.1.3 Visual effects and indirect landscape effects of the proposed continued use are described in detail in the specialist report 'Landscape and Visual Impact Assessment' v2 prepared by RML and attached as Appendix J.

7.2 Baseline

7.2.1 The Seiont Brickworks is in an area of low rolling hills that form the broad transition between the mountains of Eryri to the narrow coastal strip. The topography has a broad north-east to south-west grain that is expressed as a range of parallel ridges and shallow valleys. Many of the watercourses have formed steep-sided wooded valleys. The proposed development is located within the Afon Seiont valley directly south-east of Caernarfon and north-west of the Caernarfon and Bontnewydd bypass. Brick working is a long-established activity within the valley.

7.2.2 Statutory landscape designations in the study area are:

- UNESCO World Heritage Site – Castles and Town Walls of King Edward in Gwynedd. Approximately 1.6 km north-west of the development
- National Park – Eryri. At its closest boundary located at Betws Garmon, Eryri is about 6 km distant from the proposed development.
- Area of Outstanding Natural Beauty ('AONB') – Ynys Môn/Anglesey. At its closest point the boundary of the AONB located on the Menai Strait is about 2.4 km north-west of the development.
- Registered Parks and Gardens of Historic Interest – Morfa Common Park. Within the study area Morfa Common Park is immediately downriver of Seiont Brickworks.

7.2.3 There are a number of non-statutory designated landscapes in the County, the closest of which is about 2.8km to the west of the proposal site.

7.2.4 Broadly, the ZTV shows that there would be no view of the development from the World Heritage Site, the National Park or the AONB but the development would be visible from a small part of the WHS Essential Setting, and from the edge of Morfa Common Park. Plant and building would be visible from locations within the immediate vicinity including developed areas of Caernarfon that are to the north and west of the brickworks site. High-sided vehicles using the proposed access road could be visible from small parts of the Foryd Bay Special Landscape Area, NW Fringes of Snowdonia SLA and

Business Management System			
Reference: BP-f-012	Rev: V1.1	Issue: December 2021	Authorised: Ellis Ashton

Dinorwig historic landscape area at 3km distance. From locations at a distance of 0.5 to 2 km from the development boundary, the ZTV indicates that the plant would be visible from the elevated ground with slopes facing Seiont Brickworks. In Caernarfon, these areas include residential areas. To the east views are limited, by the A487 Bypass, to a number of scattered dwellings.

7.3 Summary of landscape and visual effects

- 7.3.1 The assessment reported in Appendix J concludes that there would be indirect effects of 'slight negative' significance on four of the twelve Landscape Character Areas under consideration.
- 7.3.2 Views of the proposed construction of the new access, and vehicle movements between the clay pit and the A4085 during construction and operation, would be available to dwellings on the south-eastern boundary of the Tyddyn Llwydyn and Glan Seiont Estates, and some properties scattered along the broad ridge between Caeathro and Bontnewydd. Properties on Seiont Mill Road would not experience a change in view, just the continuation of site activities and a reduced use of Seiont Mill Road for lorries.
- 7.3.3 No individual residences are predicted to experience a significant detrimental change to their view, other than Plas Treflan. The existing visual barriers are adequate for the proposed development, or the additional industrial elements introduced into views do not constitute a significant change in the view.
- 7.3.4 Plas Treflan would experience a major adverse impact which combined with medium receptor sensitivity, the proposal is assessed as having a large negative effect on the visual amenity. The proposed access would be a visual change, but seen against the backdrop of the new bypass embankment. This embankment will develop its cover of grass and tree planting over the coming years.
- 7.3.5 Views would be available from portions of the public rights of way in the area but in most cases the intervening landform or vegetation screen or filter the view so that the visual effect is of 'slight negative' or 'neutral' significance. Community facilities including St Peblig church and the Ysbyty Eryri – Bodfan complex would have no change in visual impact.
- 7.3.6 The proposed continued operations would continue to use lighting when working hours extend beyond daylight hours. The working hours would be the same as those given in Condition 20 of planning permission C17/0011/19/MW, ie 07.00 – 19.00 on Mondays to Fridays; 07.00 – 13.00 on Saturdays. The use of lighting within the site would therefore be at times when street lighting and other domestic lighting is in use, and so any visual impact from lighting would be insignificant. PIR controls and the selection of lighting types will follow guidance to mitigate effects on bats and other wildlife, as set out in section 8.
- 7.3.7 The potential cumulative visual effect of this proposal with that of the gas-fuelled standby electricity generating plant, proposed separately, has been considered. No significant effects of the combination of developments were found.

8 Ecology and Nature Conservation

8.1 European designated sites

- 8.1.1 Within a 5 km radius of the application site there are four European sites having features which could be affected by the project:

- Glynllifon SAC UK0012661 (5km distant). Feature(s): Lesser Horseshoe Bat
 - Menai Strait and Conwy Bay Special Area of Conservation (SAC) UK0030202 (1.5km distant)
Feature(s): 1110 Sandbanks which are slightly covered by sea water all the time; 1140 Mudflats and sandflats not covered by seawater at low tide; 1170 Reefs; 1160 Large shallow inlets and bays; 8330 Submerged or partially submerged sea caves
 - Abermenai to Aberffraw Dunes SAC UK0020021 (4.5km distant) Feature(s): 2110 Embryonic shifting dunes; 2120 Shifting dunes along the shoreline with *Ammophila arenaria* ('white dunes'); 2130 Fixed coastal dunes with herbaceous vegetation ('grey dunes'); 2170 Dunes with *Salix repens ssp. argentea* (*Salicion arenariae*); 2190 Humid dune slacks; 3150 Natural eutrophic lakes with Magnopotamion or Hydrocharition – type vegetation; Transition mires and quaking bogs; 1395 Petalwort *Petalophyllum ralfsii*; 1441 Shore dock *Rumex rupestris* ; Great Crested Newt *Triturus cristatus*
 - Glannau Mon: Cors Heli SAC UK0020025 (4.5km distant) Feature(s): 1130 Estuaries; 1310 Salicornia and other annuals colonising mud and sand; 1140 Mudflats and sandflats not covered by seawater at low tide; 1330 Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*); *Spartina* swards (*Spartinion maritimae*); Vegetated sea cliffs of the Atlantic and Baltic Coasts
- 8.1.2 A Test of Likely Significant Effects (TLSE) report presented in Appendix K was prepared for these sites¹. This concluded that none of these European sites is close enough to the proposed development for there to be any risk of direct habitat loss or damage.
- 8.1.3 Two potential pathways for indirect effect were identified: waterborne, via the Afon Seiont; and airborne, through emissions of fugitive dust to the air. Each of these was considered in relation to each European site, taking account of fundamental interruptions to those pathways and the distances involved, as set out in the draft TLSE matrix which forms Appendix A to the TLSE report. In considering the dispersion of airborne emissions, the Menai Strait and Conwy Bay SAC was taken as proxy for the more distant Abermenai to Aberffraw Dunes SAC and Glannau Mon: Cors Heli SAC, as a 'worst case' value.
- 8.1.4 The draft Test of Likely Significant Effect has concluded that significant effects can be ruled out for the European sites and their listed features.
- ## 8.2 Ecological impact assessment
- 8.2.1 An Ecological Impact Assessment encompassing both the proposed operations for concrete batching, recycling and related activities; and the separate proposed STOR generating plant (see section 1.1 of this ES) was undertaken by Ecoscope Ltd, and the report is attached as Appendix L. The desk study reviewed surveys in the quarry conducted before the commencement of site works, concluding that these vary in quality and provide a restricted picture. Among these surveys, the Phase 1, Badger and Otter surveys and a significant effort focussing on bats provided a useful baseline for assessing the ecological impact of the proposals.
- 8.2.2 Records made in the 2015 breeding bird survey of the former quarry show the presence of 16 species including two 'Red List' and four 'Amber List' species. Number and species association is proportional to the location, but the conclusions on the number of nesting birds falls below what the field data suggests and indicates excessive caution in interpretation, which could have been rectified by a further survey (in line with modern recommendations). The assumption must be that more species bred in the former quarry than were recorded as doing so. No wintering bird surveys were

¹ Habitats Regulations: Test of Likely Significant Effects report for proposed operations at former Seiont Brickworks, Caernarfon. Jones Bros Ruthin (Civil Engineering) Co Ltd. August 2023.

Business Management System			
Reference: BP-f-012	Rev: V1.1	Issue: December 2021	Authorised: Ellis Ashton

undertaken, but in the walkover survey for revised Phase 1 undertaken on 12th January 2023, Woodcock, Buzzard and Grey Wagtail were observed, and Dipper was recorded from the bridge to the brickworks yard on 24th January 2023.

- 8.2.3 The absence of accurate data on reptiles, and some potential flaws in the recording of amphibians in the reports reviewed, means that conclusions must be based on the likelihood of species being present rather than qualified evidence. Using that approach, based on former records, habitat quality and without additional survey of retained habitat, it was concluded that slow-worm (*Anguis fragilis*), Common Lizard (*Zootoca vivipara*) and Grass Snake (*Natrix helvetica*) were very likely to have been present on site before the bypass works, and may still be present in retained habitat.
- 8.2.4 The majority of the proposed development occurs on land previously occupied by hard standing associated with the former brickworks or on previously excavated areas of the quarry. The proposed new access route largely follows the haul route used during the bypass construction but in places crosses former grazing land in the north-east corner which is within the site boundary.
- 8.2.5 The following potential direct impacts are recognised as a result of the proposals:
- Disturbance associated with Plant, lighting and construction;
 - Pollution: Potential impact of silt entering the Afon Seiont during construction;
 - Pollution: Emissions of fugitive dust leading to deposition on foliage of habitat associated with the Afon Seiont and nearby woodlands;
 - Noise pollution of Plant, with potential impacts on bat activity;
 - Light pollution and potential impacts to bats and Otter.
- 8.2.6 Without mitigation, the potential impact to Wildlife Sites and their Qualifying Features within 1 km is assessed as Negligible at a Local (SSSI) level.
- 8.2.7 Without mitigation, the combined development proposals are assessed as having a negative impact on Bats (all species), Otter, Habitat quality and ecological features of the Afon Seiont that is assessed as being Major on a Regional Level ('having an impact on a priority habitat or species distribution that may be significant in any of the individual countries making up the British Isles').
- 8.2.8 The report makes recommendations for mitigation that would reduce these negative impacts:
- Avoidance: not carrying out construction works on site at night, and maintaining a dark corridor along the Afon Seiont to avoid disturbance of otters, bats and migratory fish
 - Protection: using silt barriers and other techniques during construction, and directing any surface water drainage through settlement lagoons or vegetated linear water bodies, to protect the Afon Seiont from silty run-off. Testing to ensure water of high pH is not discharged to the river
 - Protection: avoiding or minimising noise produced from construction or the proposed development reaching the river margins, during hours of dusk/darkness when bats and otters would be active
 - Enhancement: planting specifically to create buffers for dust deposition into woodland and flowing watercourses
 - Mitigation: if security lighting is needed, use only 'wildlife-friendly' lighting designed to minimise spread of illumination and effect on bats.
- 8.2.9 Implementation of the strategy reduces the impact of the proposal to Minor at a Regional level.

Business Management System			
Reference: BP-f-012	Rev: V1.1	Issue: December 2021	Authorised: Ellis Ashton

8.2.10 By reference to paragraph 5.2.2 this impact would apply to a receptor of 'Medium' value or sensitivity, and be of 'Minor' magnitude, leading to a significance assessment of 'Slight'. It would not therefore be a 'Likely Significant Impact' in EIA terms.

9 Noise

9.1 Noise scope

9.1.1 Concrete batching and materials recycling activities were previously conducted at the site under planning permission C17/0011/19/MW. Noise limits were adhered to throughout those operations, and no noise complaints have been received during the use of the site in that period. The current proposal is to continue those activities in the same location, and so no change in the character of noise arising from those activities is anticipated.

9.1.2 The chapter presents noise measurement data gathered by the specialist acoustic team at the site and surrounding receptors to establish the baseline condition, and at comparable concrete batching and rock crushing/screening operations to gain data for modelling. The distribution of noise from those operations was then modelled for comparison with measured background noise. To account for the possible approval of the separate STOR generating plant on an adjoining part of the site (see Chapter 1) the assessment assumes that the STOR plant could be established and operating, but is not part of the existing background noise.

9.1.3 Noise from HGV movements on the public highway is described under the chapter on Traffic generation, and so is not duplicated here.

9.2 Noise assessment

9.2.1 A specialist noise impact assessment was conducted and a report prepared by ITP Energised. That report, reference 6446 v1.0 dated 2023-12-04, is attached as Appendix M. The baseline noise survey showed that the appropriate daytime background noise level for assessment is 44dB at representative receptors NSR1 and 2, and 41dB at NSR3. Noise sources at this time were predominantly natural in origin, ie not industrial or road traffic.

9.2.2 Initial noise modelling indicated the need to enclose the crusher – screener to reduce the propagation of noise towards receptors. The applicant therefore decided to house this plant within a portal framed building matching the existing plant maintenance shed, to reduce noise so that the appropriate daytime threshold is not exceeded.

9.2.3 The predicted operating noise from simultaneous concrete batching operations and crushing-screening operations, taking account of the intermittent nature of concrete batching, meets or is 2dB lower than the criterion level at which a low adverse impact could arise at receptors.

9.2.4 The possibility of noise arising from the concrete batching and materials recycling operations arising in combination with noise from the separate proposed STOR generating plant has been considered. The noise impact assessment concludes that during combined operations the noise at receptor NSR 3 could exceed the daytime criterion level of 46dB by +2dB. The noise at receptors NSR1 and 2 would remain below the criterion. Although the three operations would very rarely, if ever, be carried out simultaneously the applicant has committed to preparing and working to a Noise Management Plan to avoid noise levels exceeding the criterion where low adverse impact could arise. Options for mitigation include arrangements to suspend crushing or concrete batching when the STOR generating plant is in operation.

Business Management System			
Reference: BP-f-012	Rev: V1.1	Issue: December 2021	Authorised: Ellis Ashton

10 Traffic generation and effects

10.1 Traffic scope

- 10.1.1 The continued operation of concrete batching, materials recycling and other proposed activities at the site will generate HGV and light vehicle traffic. Further vehicle movements, estimated at 4 per working day on average, would arise in association with the B8 Storage and distribution use of part of the site.
- 10.1.2 The proposal includes the creation of a new permanent vehicular access from Waunfawr Road which would serve the site once constructed, along with the continued use of Seiont Mill Road. The existing haul route across the land would be formalised with hardstanding to provide an internal access road.
- 10.1.3 A 3m footway/cycleway is proposed along part of Waunfawr Road each side of the new access, and leading eastwards to a 2.5m wide footway/cycleway which would run under the bridge which forms part of the Caernarfon to Bontnewydd bypass. West of the new access point (ie towards Caernarfon), Waunfawr Road does not have a footway on either side.
- 10.1.4 A visibility splay of 4.5m x 70m in each direction would be provided at the new access from Waunfawr Road, achieving the required Stopping Sight Distance as shown in the Transport Assessment Report and drawings noted in Part A para 2.2.3. Improvements and alterations are also proposed to Waunfawr Road near the new vehicular access which would involve widening Waunfawr Road to provide a right-hand turn lane (ghost island) for vehicles travelling from Caernarfon.
- 10.1.5 A new access to serve the neighbouring property of Plas Treflan is proposed from the internal access road and the existing access to Plas Treflan from Waunfawr Road would no longer be used and would be stopped up.
- 10.1.6 The proposed new access from Waunfawr Road would serve to remove three existing access points; a previous agricultural access where the new access is proposed, vehicular access to Plas Treflan and the access to Seiont Quarry. The existing vehicular access from Seiont Mill Road would continue to be used for light vehicles, however, access to the site would now be shared between two access points; Seiont Mill Road and access from Waunfawr Road.
- 10.1.7 All light vehicles would utilise Seiont Mill Road access. It is expected that there would be between 10-15 personnel on site at any one time, in comparison with around 300 on site during the construction of the bypass. Therefore, there would be significantly fewer light vehicle movements utilising the Seiont Mill Road access than there were in the period when the bypass was being constructed.
- 10.1.8 The majority of HGV's would be directed to use the proposed new access from Waunfawr Road. Some HGV's travelling to the site from the A487 would need to utilise Seiont Mill Road if not suitable for the unsurfaced new access route. The number of HGV movements along Seiont Mill Road is not expected to be any greater than the number experienced during the use of the site in association with the construction of the bypass.
- 10.1.9 The expected number of traffic movements associated with the proposed development based on the applicant's expectations are set out below:
- Material brought in for recycling – assume 75,000 tonnes per annum, which would equate to 3,750 loads at 20t per load;
 - Material taken out after recycling – assume 75,000 tonnes per annum, which would equate to 3,750 loads at 20t per load;
 - Aggregate brought in for production of concrete – assume 18,000 tonnes per annum, which would equate to 600 loads at 30t per load;

- Cement brought in for production of concrete – assume 3,000 tonnes per annum, which would equate to 100 loads at 30t per load;
- Concrete for use – assume a volume of 10,000m³ per annum, which would equate to 1,667 loads at 6m³ per load;
- Workshop – assuming 10 vehicles per day, which would generate 2,780 movements.
- B8 Storage and distribution – assume 4 movements per day.

10.1.10 This totals 14,497 loads or 28,994 heavy goods vehicle movements (worst case assumes no ‘back-loads’ occur. Wherever possible, vehicles would carry a load on their return trips to reduce the numbers shown here).

10.1.11 A comparison between the previous HGV movements on Seiont Mill Road associated with the site (whilst used in connection with the Caernarfon to Bontnewydd bypass) in comparison to the expected HGV movements, primarily on Waunfawr Road, evenly distributed through the year is set out in Table 1.

Table 1 Comparison between existing and proposed vehicle movements at the site

Assumptions	Existing vehicle movements (in connection with use of site in relation to Caernarfon to Bontnewydd bypass)	Expected vehicle movements associated with proposed development
Total movements per annum	56,450 per annum	28,994 per annum
46 weeks per year	1,227 per week	630 per week
5.5 days per week	223 per day	115 per day
10 hours per day	22 per hour	11.5 per hour

10.1.12 These movements would be between both points of access to the site, but the majority of HGVs would use the access from Waunfawr Road.

10.1.13 Depending on the source of material, the delivery lorries would use routes towards Caethro roundabout and then use the A4085 to reach the proposed new site entrance and turn off the public roads. From the entrance they would travel into the quarry, observing the speed limits and other controls set by the quarry operator.

10.1.14 The quantity of traffic generated on public roads would be less than the threshold of change at which further consideration of air quality effects would be required under DMRB LA105 guidance for scoping. As set out in paragraphs 3.20 – 3.23 of the Screening Report (Appendix A), air quality effects from traffic have therefore been scoped out.

10.1.15 Paragraph 3.24 of the Screening Report (Appendix A) explains that the total vehicle movements per annum on the haul road would be substantially lower than the vehicles movements associated with the use of the site in connection with the Caernarfon to Bontnewydd bypass. Paragraphs 3.25 – 3.27 of that Screening Report demonstrate that traffic on Waunfawr road towards Caethro generated by the proposal is not likely to have a significant noise or vibration effect on receptors. Calculations using the Calculation of Road Traffic Noise method are presented in Appendix N. These calculations show that the traffic on Waunfawr Road generated by the proposal would add approximately 1.1dB(A) to

Business Management System			
Reference: BP-f-012	Rev: V1.1	Issue: December 2021	Authorised: Ellis Ashton

the existing Basic Noise Level, and 1.5dB(A) during the busiest periods. By reference to DMRB LA111² Table 3.54a a short term noise change of 1.0 – 2.9dB L(A10, 18hr) is defined as ‘Minor’ magnitude, and Not Significant for the receptor.

10.2 Traffic effects on heritage sites

10.2.1 Traffic serving the proposed activities will use a dedicated access route that largely follows the line of the haul route used during construction of the bypass. These vehicles will be separated from possible heritage receptors at Bryn Eden and Grand Lodge to Glan Gwna Hall (see section 6) by the new embankment for the bypass which provides an effective visual and acoustic screen. Grand Lodge to Glan Gwna Hall lies behind a boundary wall alongside the A4085 from Caethro to the new site entrance. Bypass traffic is the dominant daytime noise source at those locations and so effects of the proposals on tranquillity at these heritage sites can be ruled out.

11 Drainage and the water environment

11.1 Location and flood risk

11.1.1 The location of the proposal site and access in relation to the River Seiont and its associated flood risk zones is shown in paragraphs 1.10, 1.14 and Figure 1.2 of the Screening Report (Appendix A). An updating of the Flood Consequences Assessment has been conducted specifically for this project, and the report is presented as Waterco ref 12421-FCA-03 in Appendix O.

11.1.2 The flood risk associated with the proposed development zones is set out in the report. It shows that part of the proposed development is located in the more elevated part of the site, outside the 0.1% annual probability flood extent (ie within Flood Zone A). For that part of the site ‘It can be concluded that site is flood free during all considered fluvial events up to and including the 0.1% AEP event. The risk of flooding from all other sources is very low. As such, no flood risk mitigation measures are considered necessary.’ ‘Less vulnerable’ elements of the proposal (the open storage B8 use) are located partly within the Flood Zone C and these have been assessed against TAN15 acceptability criteria within the Flood Consequences Assessment.

This text was prepared according to an earlier draft report prepared to meet the Scoping requirements.

NRW subsequently requested additional flood modelling to cover more extreme flood event and blockage scenarios including long-term climate change.

Text to be reviewed and amended when revised report available (Dec 2023)

11.1.3 The proposed site access road and Waunfawr Road are flood-free (paragraph 3.39). There is no ground raising within the extent of predicted flooding, and so no effect on the flood storage capacity of the floodplain.

11.2 Site drainage

11.2.1 Surface water within the application site drains by infiltration and possibly by surface or shallow sub-surface movement to the River Seiont. Rain falling on the remaining concrete slabs (dating from the former brickworks buildings) is shed locally onto permeable surfaces. The proposed new building

² Design Manual for Roads and Bridges LA111 Noise and Vibration Rev2 Highways England May 2020

Business Management System			
Reference: BP-f-012	Rev: V1.1	Issue: December 2021	Authorised: Ellis Ashton

housing the recycling crusher will harvest rainwater for use in dust suppression and toilet flushing. The remaining drainage will continue to be via shallow infiltration through the aggregate surface, and lateral flow to the existing open ditch at the eastern edge of the former brickworks site. If necessary this ditch will be enlarged to provide additional storage capacity in extreme events. Any works would be carried out in accordance with a design approved by the Sustainable Drainage Systems Approval Body (Gwynedd Council).

11.3 Flood risk conclusion

11.3.1 For these reasons it is concluded that the proposed development complies with TAN15, would not be at unacceptable risk of flooding, nor would it increase the risk of flooding elsewhere.

12 Water quality

12.1 Water quality baseline

12.1.1 The development lies entirely within the catchment of the River Seiont. The river is classified under the Water Framework Directive (Cycle 3) as having overall 'Moderate' status (a decline from 'Good' status under Cycle 2). Its Ecological Status is 'Moderate', and its Chemical Status is 'High'. The ammonia (NH₃) status is also 'High'³

12.2 Potential effects from the development

- 12.2.1 The proposed continuation of operations at the site will not alter the current pattern of drainage nor the quality of surface run off. The concrete batching plant and crushing – screening plant used for recycling are mobile units which stand on the surface and do not require excavation for foundations. Simple foundations will be required for the proposed building to house the crusher. No other ground disturbance, other than shallow works to form the access point onto Waunfawr Road, is proposed and so there is no risk that any unknown ground contamination would be affected or mobilised to affect water quality.
- 12.2.2 No material with the potential to release silty or any contaminants would be stored within the area designated for B8 storage, unless fully contained to prevent silt washout.
- 12.2.3 Operations will continue to be managed under the existing Construction Environmental Management Plan, together with controls on the materials imported for recycling. These controls will be approved by NRW as part of the Environmental Permit for the site that will be required before importation of inert wastes can commence. Monitoring of site runoff and drainage, and reporting to NRW, will be a requirement of the Environmental Permit.
- 12.2.4 The temporary site offices and staff welfare accommodation established at the site for the bypass construction will remain in a reduced form. This accommodation would be connected to mains drainage and services, which will remain for the duration of the proposed continued use. There is no risk of discharges to the River Seiont.
- 12.2.5 Maintenance of plant and equipment within the designated area would be conducted to avoid pollution. Products and materials such as oils, lubricants and cleaning fluids would be stored in secure, bunded facilities in accordance with COSHH requirements. All works involving lubricants, fuels and other liquids would continue to be conducted under cover within the existing building, using drainage trays and equipment to capture any fluids for proper recycling or disposal.

³ [Water Watch Wales \(naturalresourceswales.gov.uk\)](http://naturalresourceswales.gov.uk) Cycle 2/ Cycle 3 comparison map, viewed 9.6.2023

12.2.6 The proposed new access from Waunfawr Road would be surfaced in bituminous material for at least 50m from the junction. Drainage from this impermeable surface would be discharged to a surface watercourse by connection to the existing Waunfawr Rd drainage system in agreement with the local highway authority. The remainder of the haul road would be constructed of unbound aggregate with cross-falls, so that rainfall would either infiltrate or shed to the adjacent quarry lands.

13 Cumulative effects with other projects

13.1 Other cumulative effects with the bypass

13.1.1 The bypass is now open to traffic and is considered as forming part of the baseline for the proposal. All effects identified in this assessment are therefore additional to the baseline including the bypass.

13.2 Cumulative effects with other projects

13.2.1 The separate but adjacent STOR project consists of a 20 MWe gas fired short-term operating reserve (STOR) plant (sometimes referred to as a 'Peaking plant') comprising ten natural gas-fueled engines and associated infrastructure. Paragraph 1.1.4 of this ES provides further detail.

13.2.2 Peblig Industrial Estate is an old estate alongside the Afon Seiont, which is now the subject of a planning application reference C22/0696/14/LL. This is a 'Full application for the demolition of existing industrial and commercial units and development of new industrial and commercial units (B1, B2 & B8) together with new road infrastructure, service yards and common areas, parking, flood meadow and landscaping on land at Peblig Industrial Estate'.



{Source: Gwynedd Council Track and Trace website}

13.2.3 The potential for cumulative effects arising should one or both of these projects be carried out in addition to the proposed concrete batching plant and other elements within this ES has been considered methodically, under each of the topic headings used within this ES. Topics scoped out of the assessment of the proposed concrete batching and other industrial activities were also scoped out of consideration for cumulative effects. The findings are presented in Table 2.

Table 2 Projects with potential cumulative effects

ES TOPIC	STOR CUMULATIVE	PEBLIG IE CUMULATIVE
6. Cultural Heritage	No effects from either development	Combined traffic increase (see 10) not sufficient to generate significant effect on heritage assets
7. Landscape and Visual Amenity	Negligible effect from each development independently, so additive effect is slight	Developments are separated visually due to location, so no cumulative effect
8. Ecology and Nature Conservation	Possible cumulative noise (see 9) during daytime hours Developments generate different emissions to air, with insignificant effects on vegetation, so cumulative effect on vegetation is unlikely Lighting of STOR plant only for security, so not cumulative with this development	Developments separated by distance so effects on Afon Seiont are the only consideration. Controls on water pollution apply to both sites, protecting water quality. Light scatter onto river corridor could form cumulative effect on riparian wildlife but careful design would avoid this.
9. Noise	There could be periods when both the concrete plant / materials recycling operations and the STOR were operating during daytime hours, leading to the combined noise at some receptors exceeding the agreed criterion. Management as set out in Chapter 9 would avoid that situation arising.	Developments are separated by distance so traffic would be the source of any cumulative noise. The noise arising from cumulative traffic generation on Waunfawr Road is assessed as +1.9dB over baseline, compared to +1.1dB over baseline for the Seiont development alone. The cumulative effect is not significant.
10. Traffic generation and effects	The STOR would not generate traffic once operational, so no cumulative effect arises	Peblig IE predicted to add 40 movements per hour to A4085, split equally to E and W of site. Seiont development predicted to add 12 HGV movements per hour to E of new access. The cumulative effect would be +7.3% of existing traffic.

11. Drainage and the water environment	The STOR plant sits outside the flood risk zone and has no permanent staff, so no cumulative effect arises	Peblig IE application confirms that surface water will be managed to avoid any increased risk of flooding downstream, and so no cumulative effect arises
12. Water quality	The STOR plant presents very low risk as lubricants are contained within the generator containers, and no liquid fuels are involved. No cumulative effect	Risks from pollutants within replacement industrial premises should be controlled by application of current legislation and regulation procedures, and is likely to be to higher standard of infrastructure than existing. No cumulative effect

14 Risk of disaster

14.1 Vulnerability to man-made incidents

14.1.1 The MPA concluded that there are no major installations in the vicinity of the site that could affect its operations. The operating area and haul route are sufficiently distant from the A487 bypass that they would not be affected by possible incidents involving highway traffic. The proposed development would not therefore increase vulnerability or risk from man-made incidents.

14.2 Vulnerability to natural disasters

14.2.1 The nature of the development is not particularly susceptible to natural disasters, as it involves operations with inert mineral materials, safely-stored fuel and similar products, and cement which would be fully contained within sealed silos.

14.2.2 As noted in section 11, the north western end of the site lies within a 'C2 Flood Zone' on the Seiont river floodplain. There is the potential of flooding in relation to operations in the B8 General storage area of the site as well as the potential need for staff evacuation, emergency services access or major accident response. Chapter 11 'Drainage and the water environment' presents the assessment of flood risk at the site, referring to a detailed flood assessment which concludes that only the margins of the area used for storage and staff parking would be inundated in a 0.1% annual probability flood extent (Flood Zone C). These 'Less vulnerable' elements of the proposal were assessed against TAN15 acceptability criteria within the Flood Consequences Assessment.

14.2.3 The provision for staff evacuation and for emergency services access in the event of an incident on site, or major accident on surrounding roads including the bypass, is set out in the site Emergency Plan. The proposed site access road and Waunfawr Road are flood-free. Formalising the highway access at Waunfawr Road and maintaining the haul road suitable for HGV traffic would provide an additional route for emergency access or site evacuation in the event of flood damage or risk to the Seiont Mill Road and river bridge. There is no ground raising within the extent of predicted flooding, and so no effect on the flood storage capacity of the floodplain. For these reasons it is concluded that the proposed site use would not be vulnerable to flooding disaster and would not increase the risk of such disaster to other neighbouring sites.

Business Management System			
Reference: BP-f-012	Rev: V1.1	Issue: December 2021	Authorised: Ellis Ashton

14.3 Conclusion – risk of disaster

14.3.1 The magnitude of the impact of the proposed development on the risk of disaster is 'No change'. The significance is therefore 'Neutral' and not material in the decision-making process.

15 Conclusion

15.1 Conclusion to Environmental Statement

- 15.1.1 The applicant is seeking a new planning permission for changes to the site access and for use of the land as general storage (B8 use class), concrete batching plant area, recycling area, plant maintenance, associated weigh bridge and the siting of portacabins to be used as offices with associated parking and retention of workshop building, all on a permanent basis. The requirement for this Environmental Statement was determined at the Screening stage, and subsequently the scope was agreed through consultation with the MPA and consultees. The rationale for scoping is set out in section 1.4. The assessment has been conducted in line with that agreed scope, and has not been restricted by lack of information or other factors.
- 15.1.2 The ES presents the findings of the assessment in the context of the setting of the site, described in Chapter 3. The site lies on the south-eastern side of the town of Caernarfon, Gwynedd. The area is substantially the site of the former Seiont brickworks which comprised a brick clay quarry and brick production factory, more recently used as a temporary compound in connection with the Caernarfon to Bontnewydd bypass construction project. Alternatives, both 'Do Minimum' and seeking an alternative location for the proposed activities, have been considered but ruled out for reasons stated in Chapter 4.
- 15.1.3 Mitigation, in the form of operating controls and the design of the site layout, would reduce potential impacts identified during the assessment. This mitigation has been taken into account in the conclusions for each topic. No significant environmental effects from the proposed development, alone or in combination with other proposed development nearby (the STOR electricity generating plant or the Peblig Industrial Estate redevelopment) have been identified by the assessment.

Business Management System			
Reference: BP-f-012	Rev: V1.1	Issue: December 2021	Authorised: Ellis Ashton

Appendix J- Landscape and Visual Impact Assessment

DRAFT

Business Management System			
Reference: BP-f-012	Rev: V1.1	Issue: December 2021	Authorised: Ellis Ashton

Appendix K – Habitats Regulations: Test of Likely Significant Effects report

DRAFT

Business Management System			
Reference: BP-f-012	Rev: V1.1	Issue: December 2021	Authorised: Ellis Ashton

Appendix L – Ecological Impact Assessment report

DRAFT

Business Management System			
Reference: BP-f-012	Rev: V1.1	Issue: December 2021	Authorised: Ellis Ashton

Appendix M – noise report

DRAFT

Business Management System			
Reference: BP-f-012	Rev: V1.1	Issue: December 2021	Authorised: Ellis Ashton

Appendix N – A4085 traffic noise calculations

DRAFT

Business Management System			
Reference: BP-f-012	Rev: V1.1	Issue: December 2021	Authorised: Ellis Ashton

Appendix O –Flood Consequence Assessment

(placeholder – assessment report to follow)

DRAFT