

A1 in Northumberland: Morpeth to Ellingham

Scheme Number: TR010059

6.37 Environmental Statement Addendum: Earthworks Amendments - Non-Technical Summary for Change Request

Rule 8(1)(c)

Planning Act 2008

Infrastructure Planning (Examination Procedure) Rules 2010

Infrastructure Planning

Planning Act 2008

**The Infrastructure Planning
(Examination Procedure) Rules
2010**

**The A1 in Northumberland: Morpeth to
Ellingham**

Development Consent Order 20[xx]

**Environmental Statement Addendum: Earthworks Amendments -
Non-Technical Summary for Change Request**

Rule Reference:	8(1)(c)
Planning Inspectorate Scheme Reference:	TR010059
Doc Reference:	6.37
Author:	A1 in Northumberland: Morpeth to Ellingham Project Team, Highways England

Version	Date	Status of Version
Rev 0	January 2021	Consultation
Rev 1	March 2021	Deadline 4 Submission

CONTENTS

INTRODUCTION	1
SCOPE	1
EARTHWORKS AMENDMENTS	2
STUDY AREA	8
BENEFITS	9
THE BENEFITS FOR THIS PROPOSED CHANGE FOR THE SCHEME WOULD BE:	9
AIR QUALITY	9
NOISE AND VIBRATION	9
LANDSCAPE AND VISUAL	10
CULTURAL HERITAGE	11
ROAD DRAINAGE AND THE WATER ENVIRONMENT	12
GEOLOGY AND SOILS	13
MATERIAL RESOURCES	14
CONCLUSION	14
WHAT HAPPENS NEXT?	15

FIGURES

Figure 1 - Scheme Plan	3
------------------------	---

INTRODUCTION

An application for a Development Consent Order (DCO) was submitted by Highways England (the Applicant) to the Secretary of State for Transport via the Planning Inspectorate on 7 July 2020. The DCO would, if made, grant consent for the A1 in Northumberland: Morpeth to Ellingham, Part A (between Morpeth and Felton) of the Scheme and Part B (between Alnwick and Ellingham) of the Scheme. The application was accompanied by an Environmental Statement (ES) which considered if there would be significant effects on the environment as a result of the Scheme.

Further design development has continued to be by Highways England in order to realise efficiencies and benefits. This is particularly important in optimising a scheme being delivered by the public sector in the public interest. During this process, additional temporary and permanent earthworks (Earthworks Amendments) have been proposed, which would reduce earthwork movements.

The Applicant is proposing to maximise the re-use of materials (via excavation, deposition and temporary storage) and seek to eliminate the need for imported suitable material for earthworks construction (with the exception of specialist fill materials for structure and drainage) or any off-site disposal, in order to realise benefits for the Scheme. It is proposed that the bulk of materials would be managed within the site boundary. Further details of this option are provided in the Earthworks Amendments section below.

In order to assess any environmental effects of the proposed Earthworks Amendments an environmental impact assessment has been carried out. This Non-Technical Summary (NTS) presents a summary of the outcome of the assessment in non-technical language. It is not a duplication of the NTS of the ES [APP-337] submitted with the application and so should therefore be read in conjunction with it. A copy of the NTS submitted with the application can be found at:

<https://infrastructure.planninginspectorate.gov.uk/wp-content/uploads/projects/TR010059/TR010059-000737-Environmental%20Statement%20Non-Technical%20Summary.pdf>

SCOPE

An Environmental Impact Assessment (EIA) scoping exercise was carried out to identify those environmental topics where assessments might alter due to the proposed Earthworks Amendments, when compared to those assessed in the original ES. This exercise identified that only the following topics would be likely to change and require further environmental assessment:

- i Air Quality
- i Noise and Vibration
- i Landscape and Visual
- i Cultural Heritage
- i Road Drainage and the Water Environment

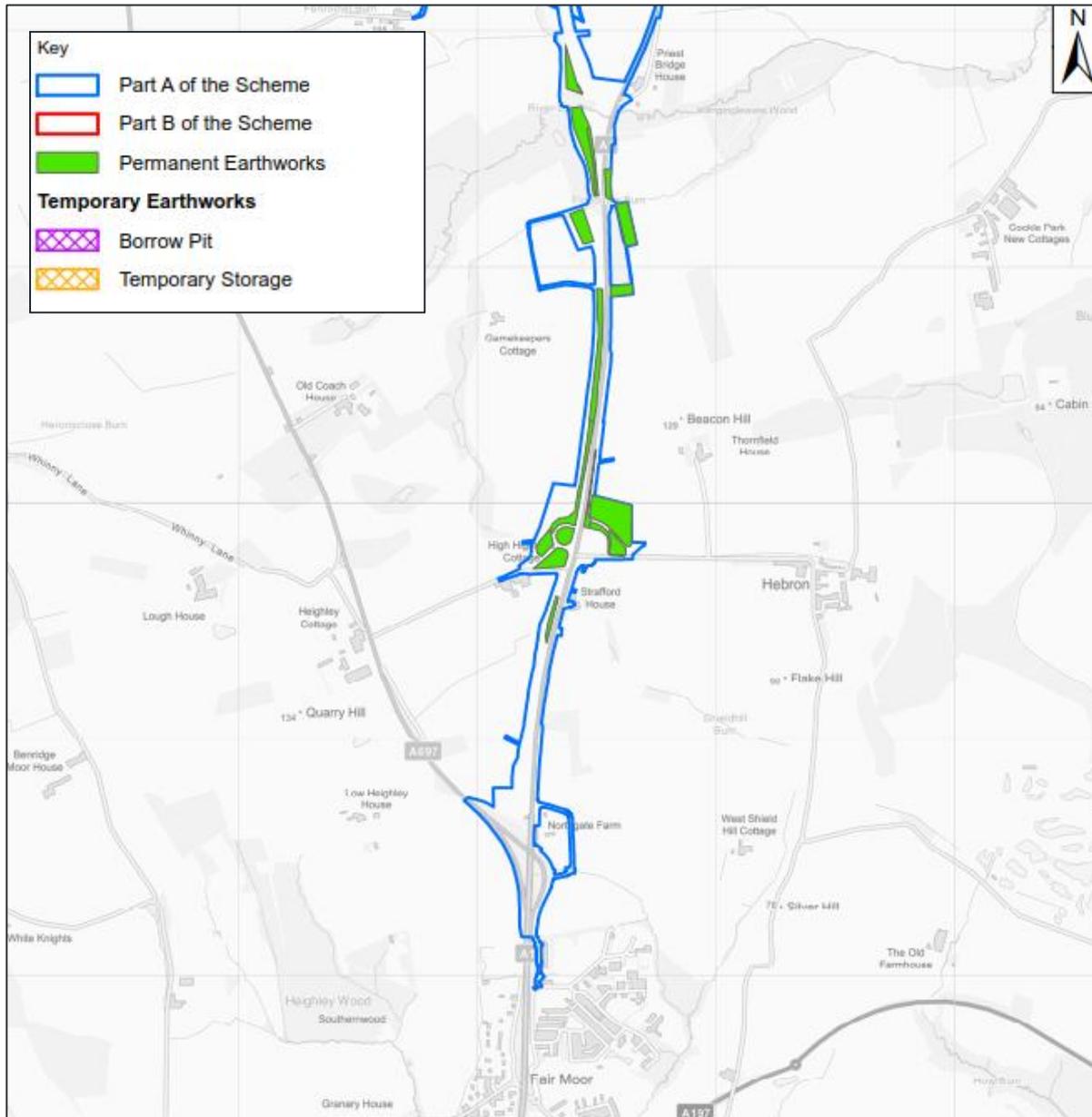
- i Geology and Soils
- i Materials Resources

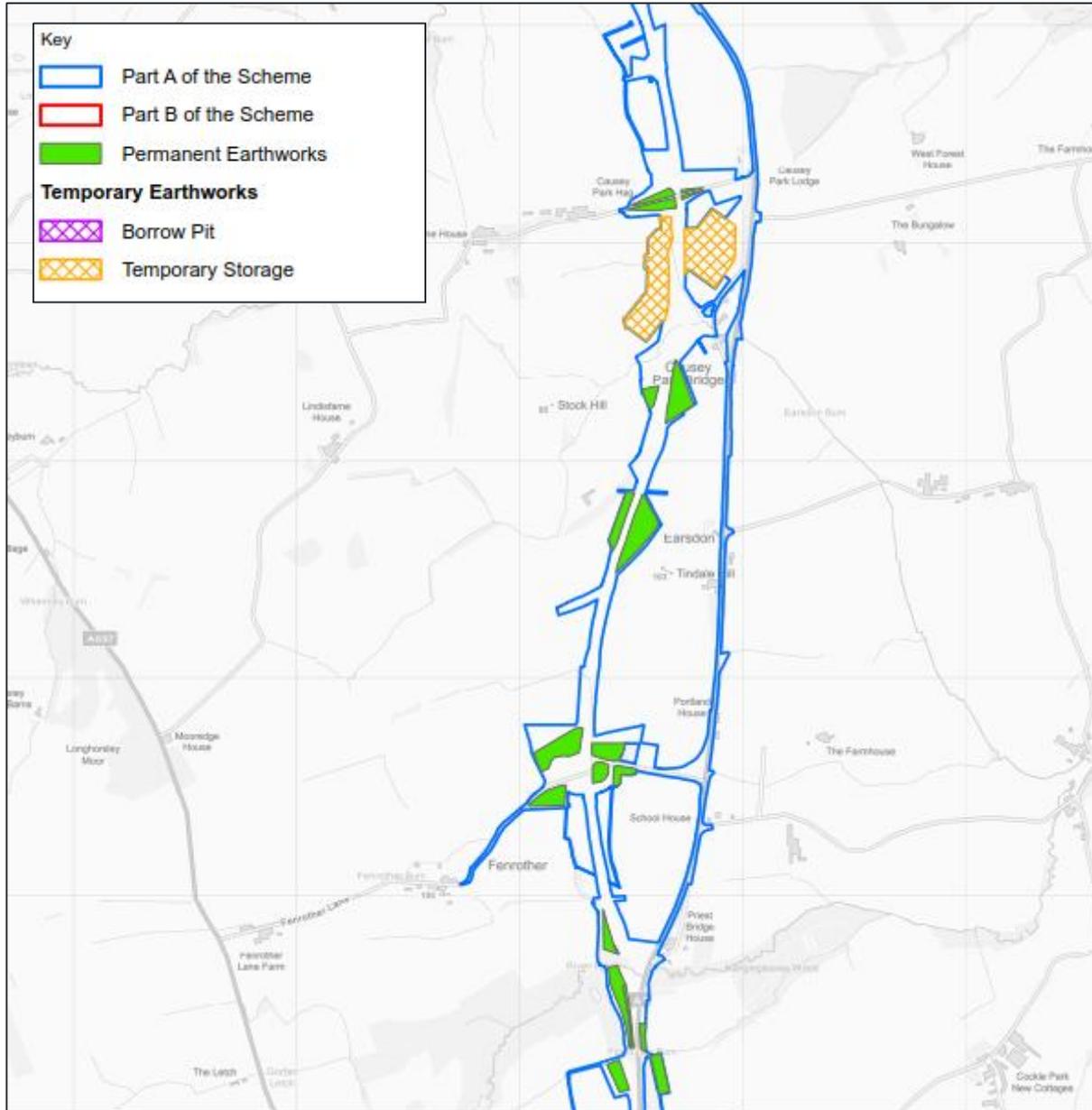
An Environmental Statement Addendum has been produced which presents the outcome of the assessment of the likely significant effects for these topics as a result of the Earthworks Amendments.

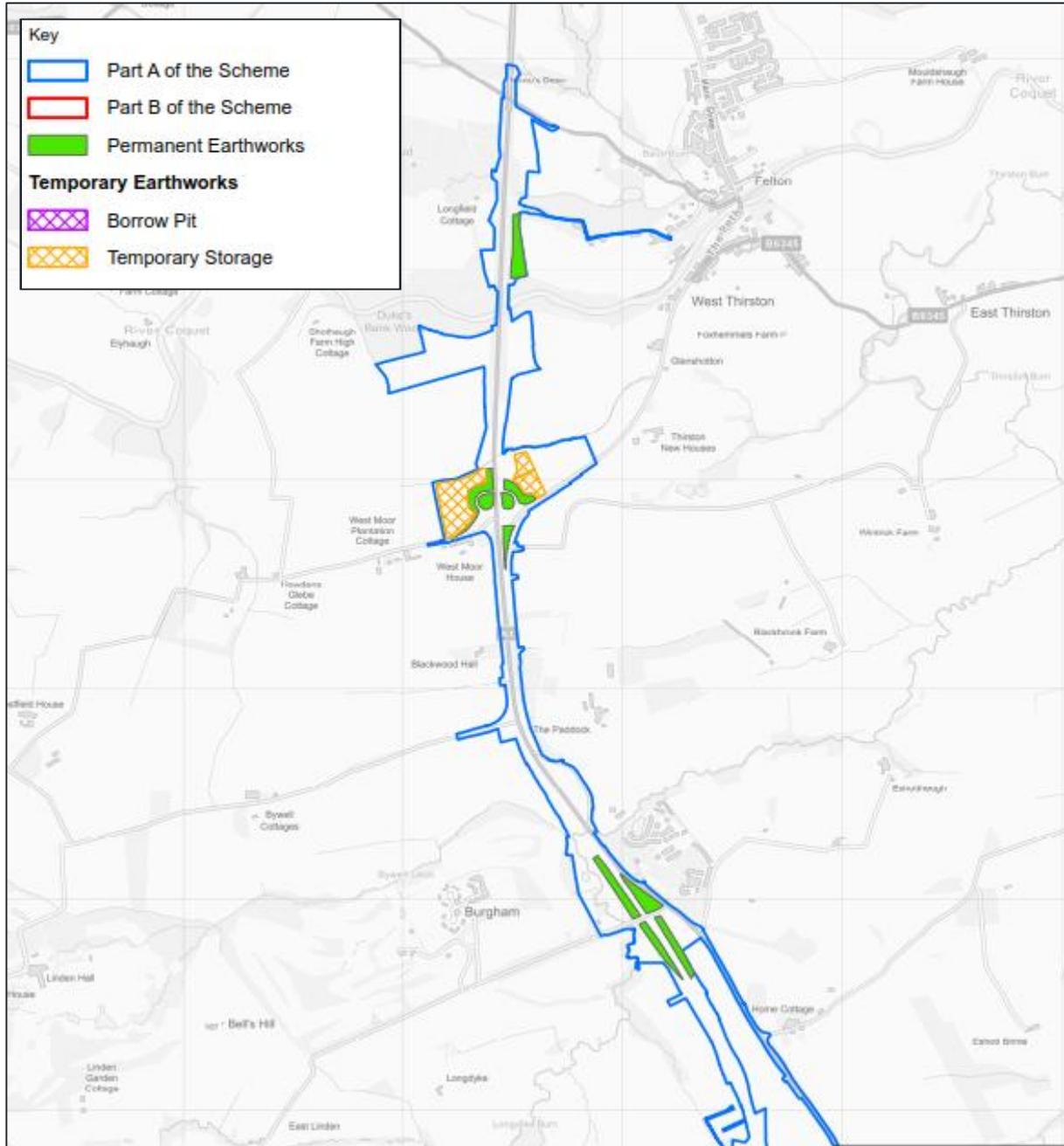
EARTHWORKS AMENDMENTS

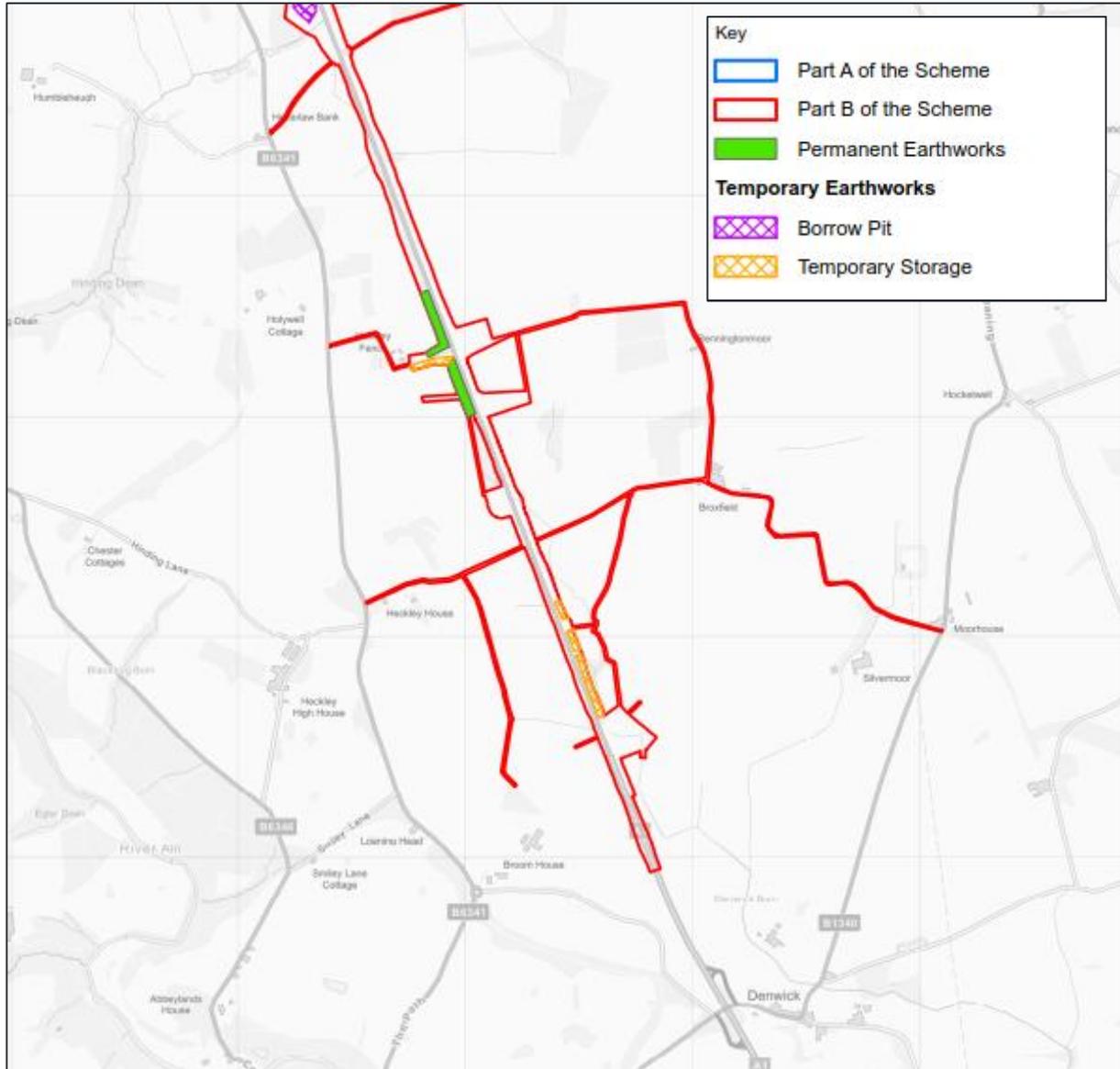
The indicative earthworks locations are shown on **Figure 1 - Scheme Plan** below.

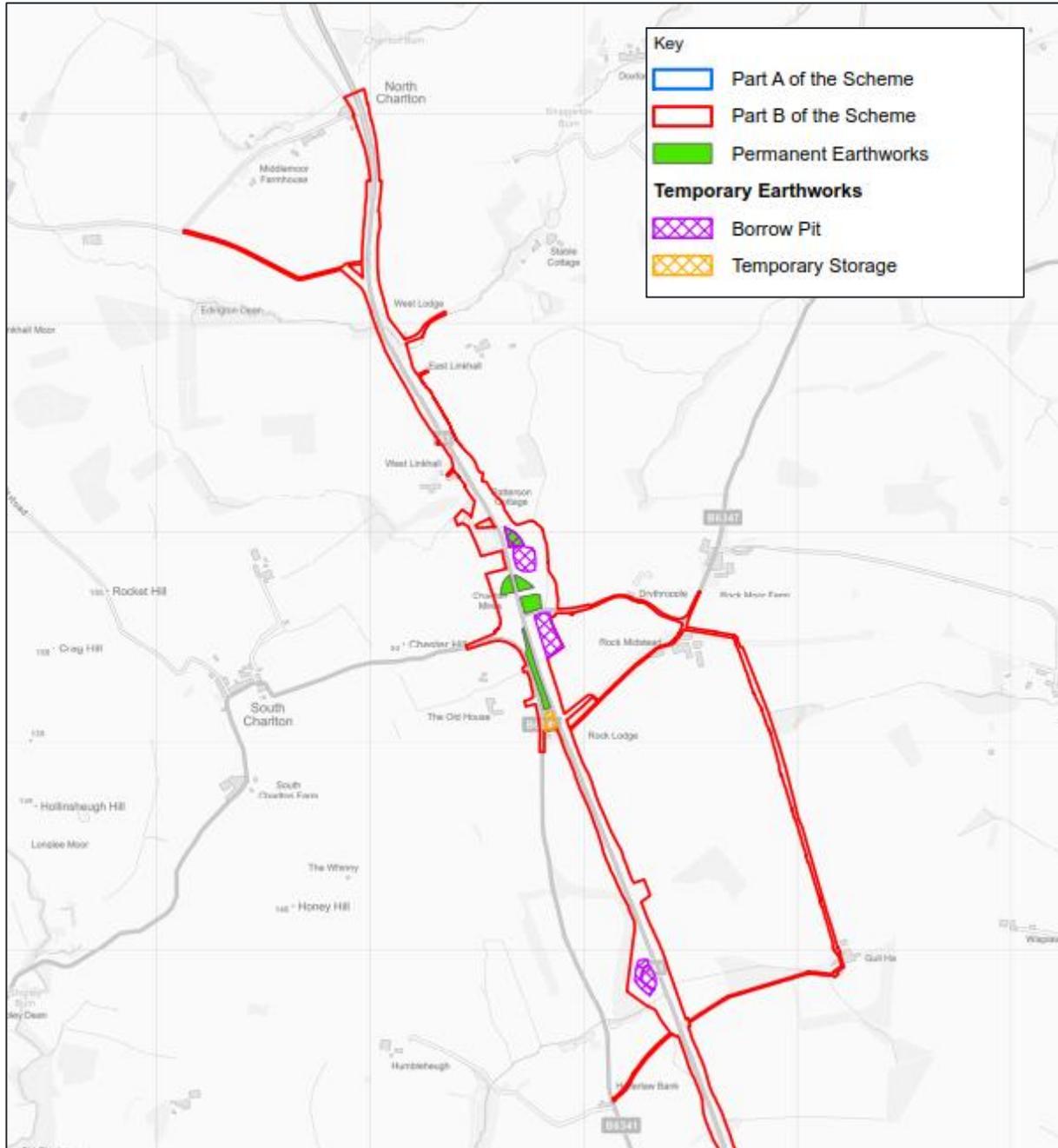
Figure 1 - Scheme Plan











There are 61 areas of Earthworks Amendments to balance materials across both Parts A of the Scheme and Part B of the Scheme which are located across both Part A and Part B of the Scheme.

For Part A of the Scheme, the amount of imported material would remain the same as detailed in the original ES, and the proposed Earthworks Amendments would eliminate the need for approximately 200,000 m³ of excess material being disposed offsite, compared to the original ES. These proposals for Part A of the Scheme would be achieved by the following:

- i The increase in height of soil bunds already proposed in the original ES would maximise use of soil bunds for disposal of excess site material.
- i Maximising of fill within slackened (gentler) slopes for re-use of site material, as proposed in the original ES.
- i Laying down additional material increasing some localised ground levels.
- i Raising levels of junction “bowls”¹ (level or rounded rather than dished).
- i Creating new, temporary soil storage areas.

For Part B of the Scheme, there would be a proposed reduction of imported materials of approximately 132,000 m³ (of which approximately 88,000 m³ is from Part A of the Scheme) compared to the original ES, which is anticipated to lead to approximately 110,000 m³ to be used onsite rather than being disposed offsite. These proposals for Part B of the Scheme would be achieved by the following:

- i Creation of new soil bunds to maximise re-use of excess site material.
- i Maximising of slopes for re-use of excess site material.
- i Laying down additional material increasing some localised ground levels.
- i Raising levels of junction “bowls” (level or rounded rather than dished).
- i Creating new, temporary soil storage areas.
- i Utilising borrow pits² to exchange and win additional material suitable for construction.

STUDY AREA

The Scheme study area has not changed as a result of the Earthworks Amendments. All works associated with the Earthworks Amendments would be undertaken within the Scheme boundary and so any activities would be no closer to any existing receptors than has already been assessed in the original ES. The baseline conditions reported in the original ES have therefore not changed.

¹ The area created between off or on slip roads as they circle round off the A1

² A borrow pit is a term used in construction for a hole, pit or excavation that has been dug for the purposes of removing gravel, clay and sand used in a construction project

BENEFITS

The benefits for this proposed change for the Scheme would be:

- i Greater flexibility during construction to reduce road haul and offsite disposal, therefore reducing vehicle emissions including greenhouse gas.
- i Greater flexibility during construction to reduce the importation of material, therefore reducing vehicle emissions including greenhouse gas.
- i By keeping the majority of material transportation within the Site, vehicle movements between Part A of the Scheme and Part B of the Scheme and for disposal, would be minimised, reducing construction traffic.
- i Where constructed, the addition of new bunds would provide positive impacts in integrating the earthworks into the landscape and immediate landform.
- i Where constructed, the addition of new bunds would facilitate screening for sensitive receptors near the A1, especially during initial woodland establishment, softening the appearance.
- i The increase in height of soil bunds already proposed would facilitate better screening of the A1, especially during the woodland establishment, softening the appearance.
- i Uplift / slackening of slopes to areas would provide positive impacts in integrating the earthworks into the landscape and immediate landform.
- i Infilling of junction “bowls” would achieve better integration with the existing landform.

AIR QUALITY

OVERVIEW

The air quality assessment considered the impacts and effects of the Earthworks Amendments on dust and particulate matter generated as a result of the construction works.

The Earthwork Amendments are not anticipated to generate impacts upon Air Quality during the operation of the Scheme, therefore this has not been assessed.

CONSTRUCTION

Whilst the Earthworks Amendments would amend the construction activities (i.e. dust generating activities) considered within the original ES, for example in relation to the location of temporary stockpiles, all works would be located within the Scheme boundary used for the original ES. There would therefore be no additional impacts on air quality as a result of the Earthworks Amendments, and therefore there would be no significant air quality effects. This means there would be no change in the assessment reported in the original ES.

NOISE AND VIBRATION

OVERVIEW

The noise and vibration assessment considered the impacts and effects of the construction and operation of the Earthworks Amendments on noise and vibration levels at nearby

sensitive receptors. Sensitive receptors can include residential properties and health and education facilities.

CONSTRUCTION

As the Earthworks Amendments would be located within the Scheme boundary used for the original ES, there would be no additional impacts on noise and vibration as a result of the Earthworks Amendments, and therefore there would be no significant noise and vibration effects. This means there would be no change in the assessment reported in the original ES.

OPERATION

The Earthworks Amendments would include the introduction of additional permanent bunds, which have the potential to provide additional screening of noise from the Scheme, therefore potentially reducing adverse impacts and increasing beneficial impacts. However, the noise reductions achieved by the noise barriers proposed in the original ES would not change with the proposed additional bunds. There would therefore be no additional impacts on noise and vibration as a result of the Earthworks Amendments, and therefore there would be no significant noise and vibration effects. This means there would be no change in the assessment reported in the original ES.

The heights and extents of noise barriers proposed in the original ES would be maintained to ensure predicted noise reductions can still be achieved.

LANDSCAPE AND VISUAL

OVERVIEW

The landscape and visual assessment considered the impacts and effects of the Earthworks Amendments on landscape character and visual amenity areas, such as footpaths, during construction and operation.

CONSTRUCTION

There might be some changes to the impacts felt to visual receptors during the construction of the Earthworks Amendments, as a result of the proposed soil bunds, increased localised ground levels, raised levels of the junction 'bowls' and new temporary soil storage areas. For example, seven residential receptors would experience an increase in visual impacts during construction. However, the north-east edge of the proposed temporary soil storage at Part A of the Scheme, as seen in Figure 1, would be left to naturally self-seed with grass to provide a visual screen for some of these residential receptors. Furthermore, mitigation proposed in the original ES would be implemented.

The above impacts would not give rise to significant effects. It is therefore considered that there would not be any change in the significance of the effects experienced during construction as a result of the Earthworks Amendments when compared to the assessment of construction effects reported in the original ES.

OPERATION

Twenty-two receptors would experience beneficial visual impacts once the Earthworks Amendments are constructed, as a result of the proposed soil bunds, the slackening of slopes and raised levels of the junction 'bowls'.

In addition, one residential receptor would experience beneficial visual impacts as a result of the proposed increase in height of a proposed bund, which would provide additional screening of the Scheme. However, one residential receptor and one commercial property would experience an increase in visual impacts as a result of the proposed increase in height of two proposed bunds. As the visual prominence of these bunds would reduce following the establishment of proposed woodland planting, and with the implementation of mitigation proposed in the original ES the above impacts would not give rise to significant effects.

It is considered that there would not be any change in the significance of the effects experienced during operation as a result of the Earthworks Amendments when compared to the assessment of operational effects reported in the original ES.

CULTURAL HERITAGE

OVERVIEW

The cultural heritage assessment considered the impacts and effects of the Earthworks Amendments on cultural heritage such as archaeological remains, historic buildings or structures, conservation areas and historic landscapes, during construction and operation.

CONSTRUCTION

The Earthworks Amendments could potentially disturb or damage below ground heritage assets located within the Scheme boundary, for example the Scheduled Monument Ellsnook Round Barrow and below ground assets at Charlton Mires Junction as a result of changes in the hydrology from the excavation and removal of material for two proposed borrow pits located immediately to the east of the Scheduled Monument Ellsnook Round Barrow. However, it would be ensured that the area used for the borrow pits would not be within 35m of the location of the Scheduled Monument Ellsnook Round Barrow. In addition, the proposed borrow pits located at Charlton Mires will be subject to investigative trial trenching to ensure there are no adverse impacts.

The Earthworks Amendments could also adversely impact on the setting of Grade II Listed Building Church of St Cuthbert, Hebron due to the proposed increase in height of a proposed bund at Highlaws Junction. However, adverse impacts would decrease as proposed woodland planting matures over time. In addition, proposed temporary soil storage areas would adversely impact the setting of five Grade II listed buildings at Causey Park House, and the setting of the Grade II Listed Building Thirston New Houses. Furthermore, a proposed bund has the potential to adversely impact the setting of Felton Park and the designated heritage assets contained within it.

The above impacts would not give rise to significant effects. It is therefore considered that there would not be any change in the significance of the effects experienced during construction as a result of the Earthworks Amendments when compared to the assessment of construction effects reported in the original ES.

OPERATION

The borrow pits proposed immediately to the east of the Scheduled Monument Ellsnook Round Barrow have the potential to permanently adversely impact below ground heritage assets (Scheduled Monument Ellsnook Round Barrow and below ground assets at Charlton Mires Junction).

The Earthworks Amendments would also permanently adversely impact on the setting of Grade II Listed Building Church of St Cuthbert, Hebron due to the proposed increase in height of a proposed bund at Highlaws Junction. However, adverse impacts would decrease as proposed woodland planting matures over time.

The borrow pits proposed immediately to the east of the Scheduled Monument Ellsnook Round Barrow would be re-filled after excavation with a suitable fill material with a similar permeability and fill quality. Material of higher permeability would be placed beneath or around the borrow pits that are proposed to function as detention basins (an excavated area adjacent to a water body to protect against flooding) to allow groundwater to move freely around the lined basins. The above impacts would not give rise to significant effects. It is therefore considered that there would not be any change in the significance of the effects experienced during construction as a result of the Earthworks Amendments when compared to the assessment of construction effects reported in the original ES.

ROAD DRAINAGE AND THE WATER ENVIRONMENT

OVERVIEW

The road drainage and the water environment assessment considered the impacts and effects of the Earthworks Amendments on road drainage and the water environment, including changes to the local hydrogeology, the impact of groundwater to the functionality of the borrow pits and local flood risk generated during construction and operation.

CONSTRUCTION

During construction, the Earthworks Amendments could increase surface water run-off on surrounding rural and agricultural land and could also increase groundwater vulnerability and cause changes to the hydrodynamics with subsequent adverse impacts upon groundwater during excavation works.

However, the following mitigation measures are proposed in addition to those included in the original ES:

- i If there were any high flow events within the Scheme boundary, construction works would be avoided to reduce the risk of shallow groundwater levels which would reduce the likelihood of groundwater flooding.

- i Ensuring that flood routes are maintained during construction through the use of temporary earth bunds.
- i Ensuring that a minimum buffer of 8 m between earthworks and any watercourses is maintained to ensure that local flood risk is not increased.
- i Groundwater level dewatering (draining) of aquifers would be required for the construction of the borrow pits. Captured groundwater would be treated prior to discharge into local watercourses.

The above impacts would not give rise to significant effects. It is therefore considered that there would not be any change in the significance of the effects experienced during construction as a result of the Earthworks Amendments when compared to the assessment of construction effects reported in the original ES.

OPERATION

As the design and implementation of suitable fill material with a similar permeability and fill quality would be ensured within the borrow pits, no additional impacts to flood risk and hydrogeology during operation are anticipated. There would therefore be no change in the assessment reported in the original ES.

GEOLOGY AND SOILS

OVERVIEW

The geology and soils assessment considered the impacts and effects of the Earthworks Amendments on geology and soils including re-use of materials, Mineral Safeguarding Areas (for the protection of deposits of minerals which are, or may become, of economic value) and the potential to encounter contaminants during construction.

The Earthwork Amendments are not anticipated to generate impacts upon Geology and Soils during the operation of the Scheme, therefore this has not been assessed.

CONSTRUCTION

The original ES identifies areas of potential contamination within the Scheme boundary, including the former foot and mouth (highly contagious virus disease of cloven-hoofed animals) burial pit, which if encountered could adversely impact upon human health. Although the Earthworks Amendments comprises proposed height increases for two bunds in the area of the burial pit, no additional excavation would be undertaken. Furthermore, specific Risk Assessments and Method Statements would be prepared for works in the area of the former foot and mouth burial site, in line with specific guidance to be obtained from the Department for Environment, Food & Rural Affairs.

The original ES states that approximately 33 hectares of mineral resource including sand and gravel, limestone and coal located within the Mineral Safeguarding Areas would be affected by permanent land take in Part B of the Scheme. The borrow pits proposed as part of the Earthworks Amendments would reduce the area of Mineral Safeguarding Areas that would be sterilised (unable to mine due to the Scheme), which is a benefit.

It is considered that there would not be any change in the significance of the effects experienced during construction as a result of the Earthworks Amendments when compared to the assessment of construction effects reported in the original ES.

MATERIAL RESOURCES

OVERVIEW

The material resources assessment considered the impacts and effects of the Earthworks Amendments on material resource consumption and waste generation and disposal generated during construction and the first year of operational works.

The Earthwork Amendments are not anticipated to generate impacts upon Material Resources during the operation of the Scheme, therefore this has not been assessed.

CONSTRUCTION

The overall aim of the Earthworks Amendments is to manage materials within the Scheme boundary and hence greatly reduce (and potentially eliminate) the need for importation of material for the majority of earthworks construction and to minimise off-site disposal.

Where possible, material generated within the Scheme would be re-used, for example to re-fill proposed borrow pits, for access tracks / footway foundations or as thicker topsoil spread. Any additional unsuitable material generated as a result of the Earthworks Amendments would be treated so that it may be used as material re use within the Scheme. Any imported material from Part A of the Scheme to Part B of the Scheme would be retained for re-use. Offsite disposal would be limited to contaminated materials only, which are expected to be limited in volume.

It is anticipated that the Earthworks Amendments would result in a reduction of 165,000 tonnes of imported materials to Part B, of which 110,000 tonnes would comprise earthworks from Part A of the Scheme. This would also reduce the movement of earthworks material between Part A of the Scheme and Part B of the Scheme.

In addition, as a result of the re-use of materials within the Scheme for the Earthworks Amendments, there would be an overall reduction in material disposed to landfill.

It is considered that there would be no change in the significance of the effects experienced during construction as a result of the Earthworks Amendments when compared to the assessment of construction effects reported in the original ES.

CONCLUSION

This NTS presents a summary in non-technical language of the environmental assessment that has been undertaken for the Earthworks Amendments. A scoping exercise identified that seven environmental topics required further assessment (Air Quality, Noise and Vibration, Landscape and Visual, Cultural Heritage, Road Drainage and the Water Environment, Geology and Soils and Material Resources). This is because for other topics the outcomes of the assessment were unlikely to be different for the Earthworks Amendments when compared to the previous assessment reported in the original ES.

The assessments undertaken for the seven topics have concluded that although there is potential for new adverse and beneficial impacts as a result of the Earthworks Amendments, overall this would not alter the findings of the original ES.

WHAT HAPPENS NEXT?

At the time of publication of this Non-Technical Summary, which should be read in conjunction with the previously published Non-Technical Summary, published in June 2020, the DCO examination has entered Deadline 4. The Examining Authority has a duty to complete the examination of the application by the end of a period of six months, beginning with the day after the close of the Preliminary Meeting. The Preliminary Meeting part 1 was held on 15 December 2020 and part 2 on 5 January 2021. The examination of the application primarily takes the form of consideration of written submissions. Registered interested parties can send written comments to the Planning Inspectorate.

On completion of the examination after six months, the Examining Authority will then have three months to consider its recommendation. This recommendation and a supporting report will then be passed to the Secretary of State for Transport, who will have three months to decide whether to grant a Development Consent Order.

Finally, when the Secretary of State's decision is published, there will be a six-week High Court challenge period. If there are no High Court challenges, the decision will be final.

The Environmental Statement Addendum and supporting documents can be viewed online at: <https://infrastructure.planninginspectorate.gov.uk/projects/north-east/a1-in-northumberland-morpeth-to-ellingham/?ipcsection=docs>

Further information about the Planning Act 2008 process and DCO can be found on the Planning Inspectorate National Infrastructure Planning website: <http://infrastructure.planninginspectorate.gov.uk/>

© Crown copyright 2021.

You may re-use this information (not including logos) free of charge in any format or medium, under the terms of the Open Government Licence. To view this licence:

visit www.nationalarchives.gov.uk/doc/open-government-licence/

write to the **Information Policy Team, The National Archives,**

Kew, London TW9 4DU, or email

psi@nationalarchives.gsi.gov.uk.

This document is also available on our website at www.gov.uk/highways

If you have any enquiries about this document
A1inNorthumberland@highwaysengland.co.uk

or call **0300 470 4580***.