Reference No: SSS-SKG-054

southern scientific services ltd

Supporting Information to Inform an Application for Derogation Licence under the European Communities (Birds and Natural Habitats) Regulations 2011–2021 pertaining to Kerry Slug (*Geomalacus maculosus*): Response to Q10 and 11.1 of the Application form

Requested For:	**Kerry County Council**
Prepared By:	**Colette Murray B.Sc. M.Sc.** **Southern Scientific Services Ltd**
Our Reference:	**SSS-SKG-054**

Report Prepared By	Colette Murray
Report Reviewed By	Monica Kane
Issue Date:	12/12/2024
Comment:	Final Report
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1 Introduction

Southern Scientific Services Ltd (SSSL) have been appointed by Kerry County Council as Project Ecologist for the South Kerry Greenway (SKG) project.

The project is 27km in length and will be completed in stages over a 4-year period.

In 2024 the Minister for Arts, Heritage and the Gaeltacht in exercise of the powers granted by Regulation 54 of the Habitats Regulations, then pertaining, granted Kerry County Council (KCC) a licence (Licence no. DER-KERRY-SLUG-2024-46) in respect of the Kerry slug authorising works. The works in question relate to the Gabions engineering based structures. The current licence is valid until 31st December 2024. This new application relates to a revised application for a derogation licence for Kerry slug for the period 2025 when the works are expected to get underway.

Sections of the Greenway will be constructed above the road level on suitable Kerry Slug habitat using a substructure of rock filled gabions that will be supported by the existing profile over a length of approximately 850m east of Drung Hill tunnels, and over a length of approximately 200m west of Drung Hill tunnels. Furthermore, the licence is required to remove an old stone wall supporting suitable Kerry slug habitat also included in the previous licence application.

The content of this report is largely based on the previous ecological report submitted by MWP to inform the 2023 derogation licence application: MWP (2023). South Kerry Greenway, Application for Derogation Licence, Supporting Information.

2 Background to the project

A planning application for the South Kerry Greenway was submitted to An Bord Pleanála by Kerry County Council on the 29th of August 2018. The application was accompanied by an EIAR prepared by Fehily Timoney and Company along with planning application documentation prepared by Kerry County Council. MWP completed the Biodiversity Chapter of the EIAR and the Natura Impact Statement (NIS) along with all associated ecological surveys.

The South Kerry Greenway project was granted planning in November 2020.

The EIAR and NIS for the SKG is available to view and download at Kerry County Council Lodges Planning Application for South Kerry Greenway | kerrycoco.ie[1].

A hard copy of the EIAR and NIS can be provided upon request.

3 Site Location Map

The map below shows the section at Drung Hill in the townlands of Kilkeehagh and Gleensk as well as the old stone wall in the townland of Gortaforia, which are the focus of this Derogation Licence application.

[1] https://www.kerrycoco.ie/home3/kerry-county-council-lodges-planning-application-for-south-kerry-greenway/

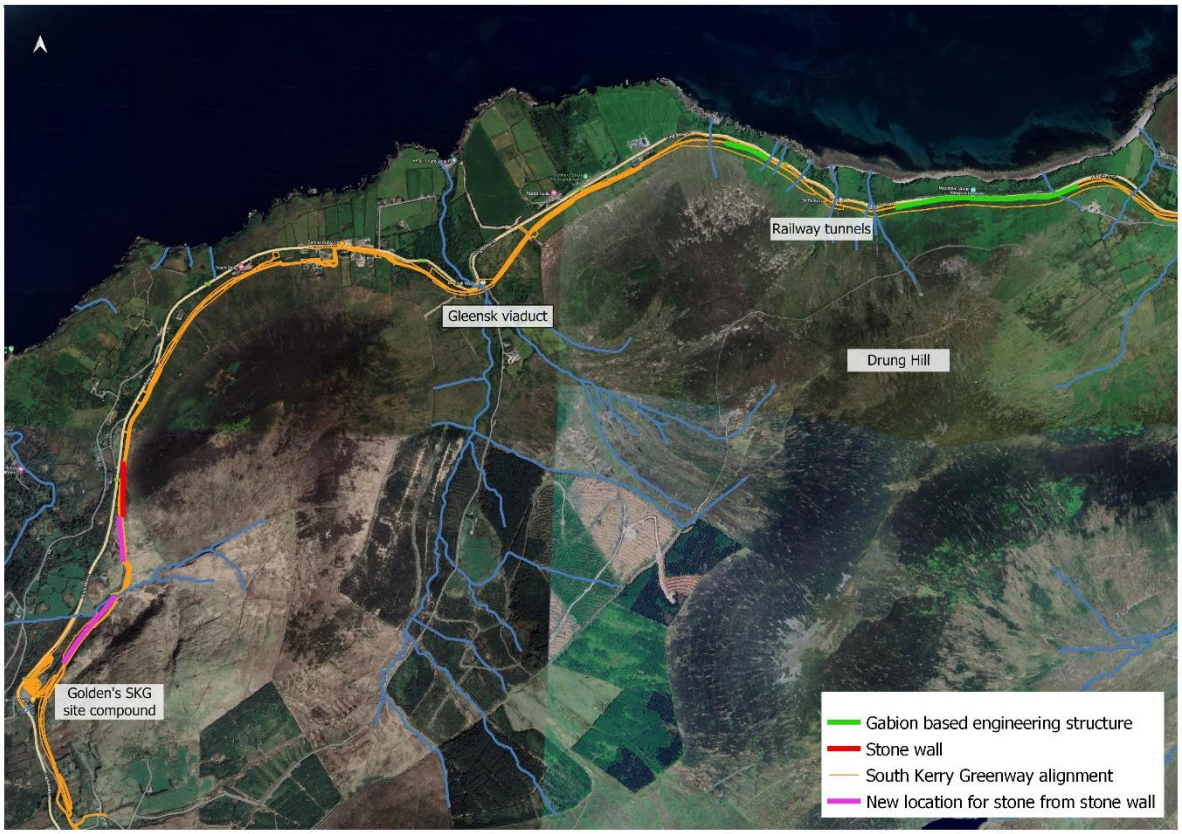


Figure 1. Map showing location of Gabion structures and old stone wall

4 Response to Question 10 – Licence application Form

4.1 Question 10

Question 10*: Please tick which reason below explains How this Application Qualifies under Regulation 54(2)(A-E) of the European Communities (Birds and Natural Habitats) Regulations:*

Answer: c. *In the interests of public health and public safety, or for other imperative reasons of overriding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment.*

The detailed response to this question is set out in ***Section 4*** *as follows.*

4.2 Introduction

The South Kerry Greenway (SKG) project has been in the making since 2003 when it was included in the Objectives of the County Development Plan. Since then, a number of bodies both voluntary, community or public have worked on bringing the project to fruition. In August 2013 the Department of Transport, Tourism and Sport announced approximately €6.5 million in funding to local authorities to deliver cycle routes under the National Cycle Network Local Authority Funding Scheme 2014-2016. Following on from the work completed by the local development companies Kerry County Council made an application for funding under the scheme and in April 2014 funding was approved by the Department of Transport, Tourism and Sport.

The project was submitted for planning permission in 2017 and granted in full by An Bord Pleanála in November 2020. The project has the full backing of National Policy and the support of Kerry County Council and Transport Infrastructure Ireland (TII). The grant of planning and successful Compulsory Purchase Order (CPO) process has placed the project as a priority for the communities of South Kerry. It is of a significant scale and importance in terms of social, economic, heritage and tourism for the region. The delivery of the project in stages over the next three years will see the re-awakening of a historic piece of long abandoned infrastructure in South Kerry which is vital for South Kerry's social and economic standing.

The overall objectives of the proposed development are as follows:

- Increase the economic contribution of tourism to the Irish economy, by increasing the value of tourism service exports, that is, by generating increased levels of overseas revenue.
- Provide a catalyst for the economic regeneration of the local economy by:
    - Successfully delivering a world class visitor experience
    - Supporting a tourism sector that is profitable and will achieve a sustainable level of growth and delivers jobs
    - Facilitating local communities to play an enhanced role in developing tourism in their area, thereby strengthening and enriching local communities
    - Recognising, valuing and enhancing the natural environment as the cornerstone of Irish tourism
- Maximise the economic potential of the project by:
    - Attracting the maximum number of visitors
    - Optimising the amenity value of the route

    - Designing the route for all users including the elderly and disabled as well as families with children
- Maximising the safety of the route

The project will provide a sustainable tourism product capitalising on the beautiful scenery of the area. It will maximise tourism numbers by being accessible to all users including families and the elderly and, as a primarily segregated route, maximising safety.

The Greenway has the potential to provide the critical mass of tourism necessary to make marginal proposals viable and to stimulate growth of additional tourism products.

It will also maintain and create a viable demand for local services such as shops, schools, post offices and transport linkages vital for the future of sustainable rural communities.

The following sets out how this project is of significant interest and importance to the public and wider communities of South Kerry.

4.3 Sustaining local population

The SKG route travels between Glenbeigh and Cahersiveen through a mainly rural landscape with low population density with the exception of the towns of Glenbeigh and Cahersiveen. The railway line was once a lifeline to South Kerry and a vital transport link around which communities lived and relied upon for connectivity and commerce. The SKG will form a new connective link between towns and communities in this sparsely populated rural area. The route, like many other successful greenways will bring new tourism activity to the area and this will have localised benefits in terms of jobs and sustaining communities. It may also provide stability in areas where there is population decline and no immediate visibility for new economic or social stability.

The presence of additional tourists in South Kerry will assist in the stability of local populations by providing locally based jobs in the area. There is potential for recreational tourism, accommodation, food, local guides, and associated services. It also has the effect of bringing benefits locally along the route in rural locations and outside of the larger population centres.

4.4 Farm sustainability

The proposed scheme will provide the potential to promote farm diversification into agri-tourism by:

- providing additional direct employment opportunities through tourism development
- increasing direct demand for farm produce
- providing additional farm income by scheme maintenance
- providing an accessible recreational amenity for local use.

Farm sustainability and population support are positive outcomes for the proposed scheme in this part of South Kerry.

4.5 Health and wellbeing

The scheme provides a positive means of improving health and wellbeing for both the local population and visiting tourists. It is an excellent amenity in a very unique local setting along the coast of South Kerry. The views are stunning and the topography and landscape is varied along the route. Visitors and locals travelling along the route whether cycling, walking, running etc are experiencing fresh air, the

environment, appreciating the heritage story of the former railway line and also gaining experience in the Local Towns and hinterlands of Glenbeigh and Cahersiveen. The off-road route gives potential for a wider engagement for this part of South Kerry for locals and tourists in a safe and engaging environment. The health benefits of cycling are universally recognised, and the promotion of cycling is enshrined at all levels of European and national policy. The Greenway will provide a safe predominantly segregated environment for cyclists and walkers and act as a stimulus to encourage greater participation in outdoor activity for locals and visitors to the area. Engagement in outdoor activities is a positive step in terms of wellbeing for the local communities along the route and for visitors.

4.6 Environment awareness

The re-use of this existing and abandoned infrastructure is positive in terms of sustainable development and bringing of value back to life. It provides a corridor or pathway for people to visit this part of South Kerry and experience the environment, the topography, the views and the flora and fauna long the route. The scheme will have information points along the route pointing out the features of importance in terms of ecology but also in terms of local geology and coastal features. The use of this greenway route will increase awareness on the environment in this part of South Kerry so is a positive aspect in terms of the environment. The project has been the subject of a very detailed Environmental Impact Assessment (EIA) Report and focussed ecological surveys. The design and re-use of the existing railway line infrastructure minimises intrusion into the landscape with new infrastructure and makes the best use of what naturally exists.

4.7 Culture and Heritage

The proposed Greenway includes the remains of significant elements of the former railway line and associated infrastructure and while it doesn't include protected structures, they are of local cultural heritage significance. These include features such as the line embankments and cut sections, the Drung Hill tunnels, small bridges, stone-built culverts and the extant rail buildings at Kells station.

The former line has been subject to a number of interventions since it closed in the 1960s, such as the removal of the tracks, a section removed by a road diversion, the construction of modern houses on its line and impacts by land improvement works. However, the rail line and its associated features survive as a relatively well-preserved landscape feature, although many sections have become overgrown and silted-in due to a lack of vegetation control and maintenance of drainage channels. As the railway line and many of its associated features are not protected, they are vulnerable to further impacts by localised developments, agricultural activity and general degradation by lack of maintenance.

The project will include repairs to the two rail viaducts at Valentia and Gleensk in order to repair and arrest ongoing corrosion damage to both of these Protected Structures and integration of the repaired railway viaducts into public accessible spaces as part of the greenway route is positive in terms of preserving and enhancing the heritage value of the original railway scheme.

The project will formalise the route of the railway line within the landscape and assist in halting the general decline of the physical remains of this element of the cultural heritage of the county.

4.8 Tourism and socio-economic benefits

Aside from the benefits for the local agricultural hinterland, the project will provide direct employment in the accommodation and food sectors of the local economy and, as an activity attraction, has the potential to extend the tourism season and provide increased year-round demand.

Government policy as outlined in 'Energising Ireland's Rural Economy' recognises the need for rural areas to capitalise on their indigenous assets in order to provide employment and rural regeneration. The route is located on and incorporates some of the most magnificent scenery of the world famous 'Ring of Kerry' tourist route. This is a unique local asset and one which can be utilised for the benefit of the local community.

4.9 Discussion

The permitted South Kerry Greenway project is of significant value and public interest in the county of Kerry. The scheme will have positive effects in terms of the following:

- Sustaining local population
- Farm sustainability
- Health and wellbeing
- Environment awareness
- Culture and Heritage
- Tourism and socio-economic benefits

The project is of significant value in terms of social, economic and heritage and the delivery of the project will also enhance environmental awareness for locals and visitors over its lifetime. It is a good example of sustainable development making use of previously abandoned infrastructure.

5 Response to Question 11 – Licence application Form

5.1 Question 11.1

Question 11 has four sections to be addressed, namely 11.1 to 1.4.

Section 5 of this report addresses the answer to Question 11.1.

A separate Report, submitted with this application, entitled 'Ecological Report to inform an Application for Derogation Licence Under the European Communities (Birds and Natural Habitats) Regulations 2011 – 2021 pertaining to Kerry Slug (*Geomalacus maculosus*)' addresses answers to Questions 11.2 to 11.4.

***Question 11.1**: Explanation as to why the derogation licence sought is the only available option for works and no suitable alternative exists as per Regulation 54 of the European Communities (Birds and Natural Habitats) Regulations.*

***Answer**: The response to this question is set out in **Section 5.2** as follows for the Gabion based engineering solution and in **Section 5.3** for the stone wall associated with the old railway.*

5.2 Gabion Based Engineering Solution

5.2.1 Location

The SKG will be constructed above the road level on a substructure of rock filled gabions that will be supported by the existing profile over a length of approximately 850m east of Drung Hill tunnels, and over a length of approximately 200m west of Drung Hill tunnels (see Appendix 1).

5.2.2 Design Approach and Constraints

The design approach was to explore and develop the least impact solution on the ground. The design solution evolved through a series of iterative steps and was driven by the interaction of the project team bringing all expertise to the table.

That final design was driven by a number of factors such as structural stability/integrity, health and safety, minimisation of habitat loss, access for the works, vertical and horizontal design requirements to meet standards, visuals etc.

The stretch of the greenway requiring gabion structures had the potential to be one of the most iconic sections given its elevation and unimpeded views across Dingle Bay and also due to the presence of the tunnels and historical rail infrastructure. Accordingly, identifying the best technical solution while maintaining its value, balanced with minimisation of habitat loss and environmental impacts.

5.2.3 Option 1. On- line on the existing Railway Line

Initially the existing line was explored in terms of suitability, however this section had stability issues due to the previous works completed adjacent to it when forming the bench below the railway line. That bench was part of the widening of the National Road at the time. It also had constraints in terms of the extent of rock material upslope and in the case of constructing a full width greenway to the specifications required would have led to some excavation into that upper slope areas depending on levels and topography.

In order to get the required greenway footprint width and infrastructure constructed on the existing line would have meant providing structural support on its outer north facing edge. In that scenario it would be necessary to bring a support structure in either reinforced concrete (RC) or in an engineered Gabion type structure from the Lower National Road at full height up to the railway line footprint. To do this would mean delivering a very extensive engineered support structure at this location which would stretch over a significant length and elevation. This type of structure would entail significant intrusive engineering works.

It would lead to a very large area of habitat loss, and it would be visually very intrusive in the landscape. In addition, it would also have a knock-on effect on local drainage and, long term, may not facilitate any habitat recovery.

This option was discounted for the following reasons:

- Concerns on stability upslope of the existing railway line plus tight corridor space to deliver the infrastructure required.
- Very large area of habitat loss.
- Visually intrusive in the landscape at this location on a scenic coastal drive.
- Local impacts on drainage.

5.2.4 Option 2. Bringing the Greenway down to the existing National Primary Road level

The option of bringing the greenway down from the upper railway line level to the public road for this section and then bringing it back online again further west was also explored at the time. This option had a number of issues.

From a design point of view the vertical alignment and gradients required could not be achieved.

From a traffic and health and safety perspective bringing the required 3m wide greenway infrastructure down to road level was not desirable and would introduce risk to the users of the Greenway.

Given the width of the road at this location it would not be possible to accommodate the required footprint of the greenway on the ground with a safe setback from the road corridor.

One of the options explored was to excavate into the vertical face at road level and create the required space for the Greenway with a set back from the road. This would require a support structure to be in place for the vertical face above the Greenway and in so doing would lead to a linear section of vertical face RC or Gabion structure at height to provide slope stability and support. This type of structure over an extensive height and length would be visually obtrusive and would also entail a significant area of habitat loss. Local drainage issues would need to be dealt with and any risk of destabilising the shelf above would have to be accommodated in the design and construction solution. The civil engineering works would be extensive.

This option was discounted for the following reasons:

- Vertical alignment and gradients required for the Greenway could not be achieved.
- Health and Safety ad public risk adjacent to a busy National Primary Road.
- Engineering solution to develop a setback space/corridor at road level to accommodate a greenway corridor would lead to a significant engineered vertical support structure along this length and this would have engineering constraints and potentially larger knock-on constraints upslope.

- From a visual perspective an extensive support structure at road level along this section of a scenic route would not be desirable.
- Large footprint of habitat loss and localised impacts on drainage.

5.2.5 Option 3. Use the mid-level bench for the Greenway

The existing mid-level bench (above the National Road and below the railway line) was considered from an engineering, environmental and constructability perspective.

This existing bench will work from a vertical alignment and gradient point of view although it does still require an engineered support structure on its northern edge.

The support structure along the northern edge was examined in terms of an RC retaining/support wall or an Engineered Gabion wall system. The focus was to develop a solution that was structurally sound but with a minimum footprint and least loss of habitat. A further focus was a structure that could bring some potential habitat redevelopment/maturity over time for the benefit of the Kerry Slug at this location. The concept of the gabion baskets in this area and providing structural support to the middle bench route would mean a smaller footprint, less visual intrusion, lower habitat loss and also the potential that rock within the gabion's baskets could revert over time to suitable habitat for use by the Kerry slug. The smaller footprint and the proposed design cross section means that there is less intrusive excavation into the slope to stitch in or mesh the gabions to the landscape and thus the constructability of this type of solution at this location is the most optimal solution. This solution will also require the use of shotcrete concrete in some sections above the upper slope where fractured rock occurs to stabilise the rock for health and safety reasons.

The design approach of this option was the preferred one, based on what's set out above and based on the key points below:

- The vertical alignment and design gradients along with the required corridor space for the greenway could be achieved.
- The gabion solution was the least intrusive from a constructability perspective.
- From a visual perspective the gabion solution would have the least footprint and over time the potential for revegetation or colonisation by plants would ultimately soften the landscape and blend in.
- From a habitat perspective the smaller footprint of a structure was more desirable and that in tandem with a gabion solution with local stone fill material would mean that there is potential for the gabion areas to become suitable or viable habitat for Kerry Slug use over time.
- Using the mid-level bench corridor avoided potential rock fall or slope instability risk associated with the lands above the rail line route.

5.2.6 Discussion

From the outset the design team within Kerry County Council in conjunction with the engineers in MWP focussed on the least impact solution be it from an engineering, visual, habitat, or environmental perspective. The solution for this stretch of the greenway had to be deliverable on the ground within the constraints of good design parameters, environmental and ecological constraints. It also had to have a finished product that was safe to use for all, and one that could be managed over its' lifetime.

While there is no perfect solution for this section of the greenway given its' topography, habitats, visual sensitivity, proximity to the National Road and constraints, the middle bench level route, combined with a Gabion based engineering solution, was the only viable and deliverable solution.

Accordingly, the Option 3 solution is the only available option for works and no suitable alternative exists.

5.3 Old Stone Wall

5.3.1 Location

The old stone wall that is referred to in this revised Kerry slug derogation licence application was constructed as a boundary wall on the eastern side of the old railway. The portion that will be removed lies in the townland of Gortaforia in Kells (see Figure 1 above, and Appendix 2).

5.3.2 Requirement for the Removal of the Stone Wall

Approximately, 240m of stone wall runs parallel to the Greenway on its eastern side will be removed. In this area, much of the former railway track has been dug away some years ago to facilitate upgrading and widening of the N70 resulting in a steep slope from the edge of the N70 up to the stone wall and beyond up the mountain side. The task is to construct the new Greenway on the side of this steep slope, which will involve steepening the slope even further on the eastern side to provide a 4m wide level platform to construct the Greenway. The slope will be stabilised with significant engineering works involving soil nailing of the new cut slope. The steepest slope possible would be at 60 degrees to the horizontal and the top of the new cut slope would undermine the existing stone wall, thus the stone wall will need to be removed. This is apparent from the attached cross-section at this location (see Appendix 2).

If the cut slope could be steepened from 60 degrees to 70 degrees or more, which would provide very unsafe working conditions during the construction phase, the top of the cut slope would only just be on the western side of the existing stone wall. If it were left siting on the top of the cut slope, the stone wall, which is currently very unstable, would pose substantial risk to the Health and Safety of Greenway users on completion of the project.

Due to the constraint of the existing N70 being in such close proximity, it is not possible to move the Greenway further west away from the stone wall.

5.3.3 Proposed New Location and Habitat Creation of the Stone

The stone from the stone wall will be temporarily stored at Golden's old quarry site compound before being placed in one of two permanent locations (see Appendix 2):

- on a slope west of the Greenway track, which lies roughly 100m south of its current location, or
- on a slope west of the Greenway track between Golden's and the Top of the Rock stream in the townland of Knockaneyouloo approximately 400m south of the original location.

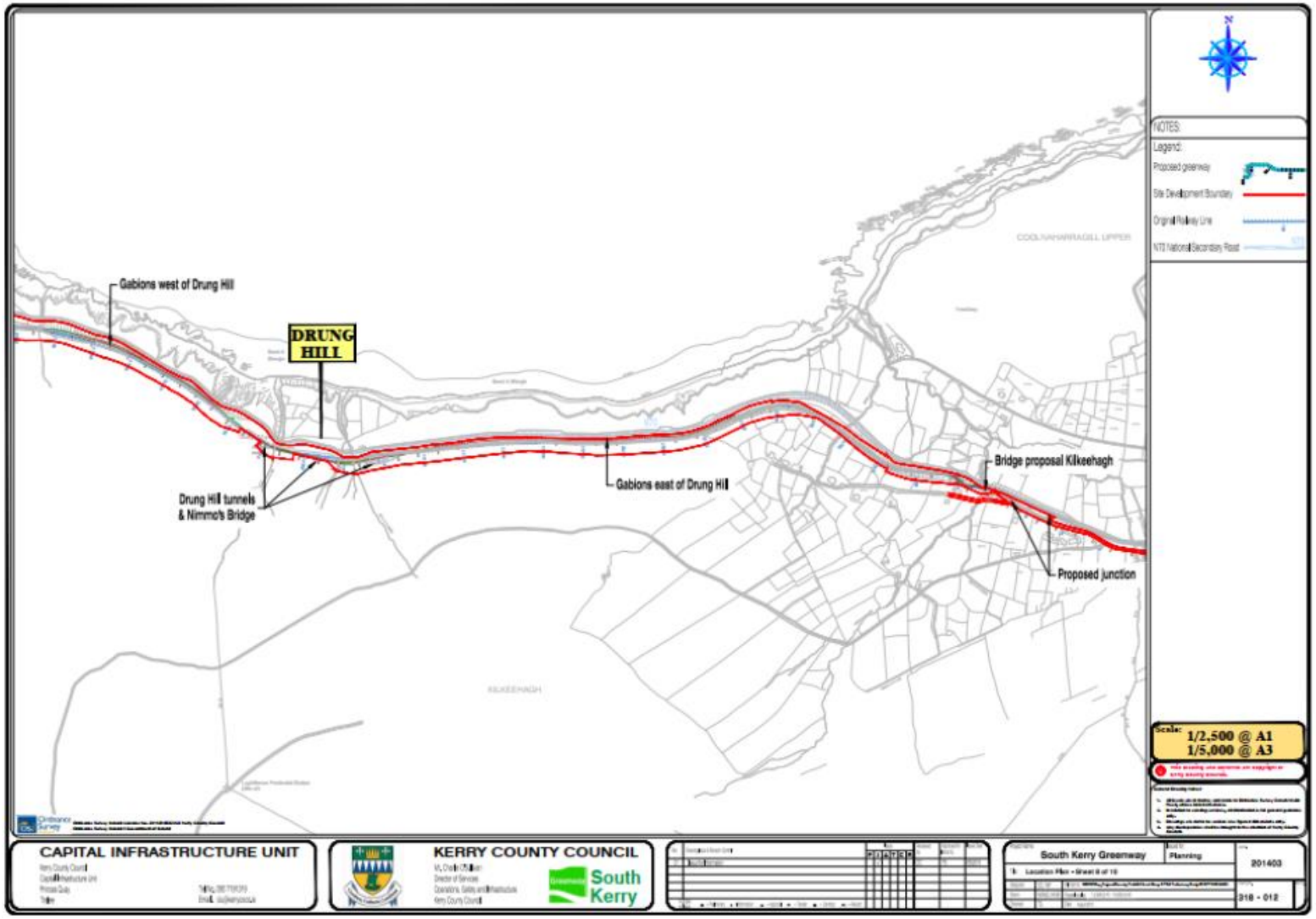
5.3.4 Discussion

The planned Greenway just west of the stone wall is located above the N70 on a steep hill slope of about 60 degrees. There is no other alternative design for this approach due to the proximity of the N70 to the west of the Greenway and the steeply rising slope to the east.

Appendix 1

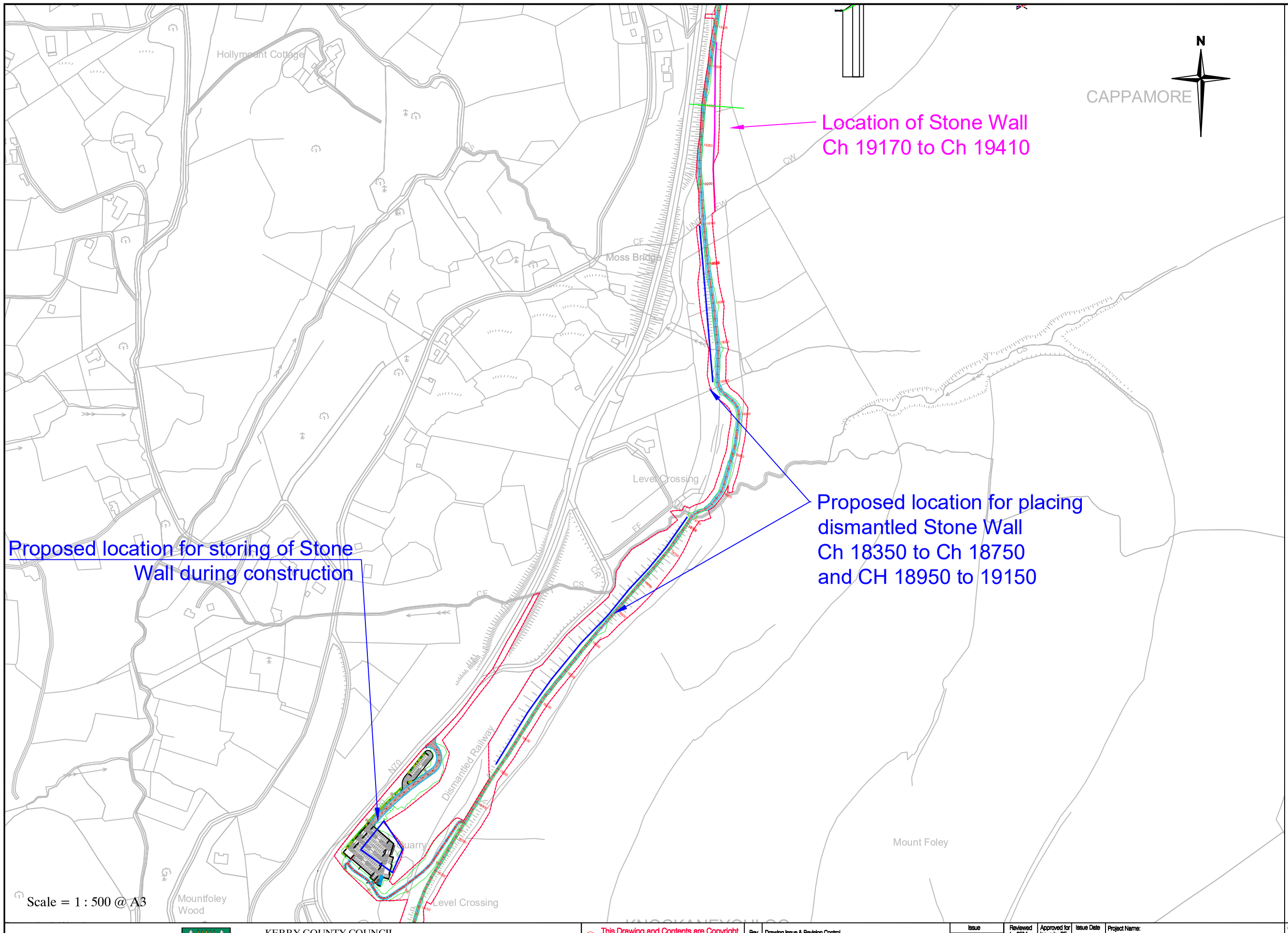
Site layout map showing location of Gabion section

Reference No: SSS-SKG-054



Appendix 2

Drawings relating to stone wall



NOTES:

1.

Land Take Line

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Mr. Frank Hartnett,
Director of Services,
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(a) This Map is based on Irish Transverse Mercator (ITM) Coordinate System
(b) All Altitudes indicated are in Metres , and are referred to Ordnance Datum, which is Mean Sea Level at Malin Head, Co. Donegal (1970 Adjustment).
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Rev	Drawing Issue & Revision Control	Issue P	I	A	T	C	R	Reviewed by PEM	Approved for Issue by PE	Issue Date
01	Issued for Information		✓							

Issue P I A T C R ✓

Purpose of Issue : P = Preliminary I = Information A = Approval T = Tender C = Contract R = Record

Title:

Project Name:	South Kerry Greenway	Component:	TII Project Ref. No. Text
Title:	Stone Wall Relocation at Kells Layout Plan		Job No. J407
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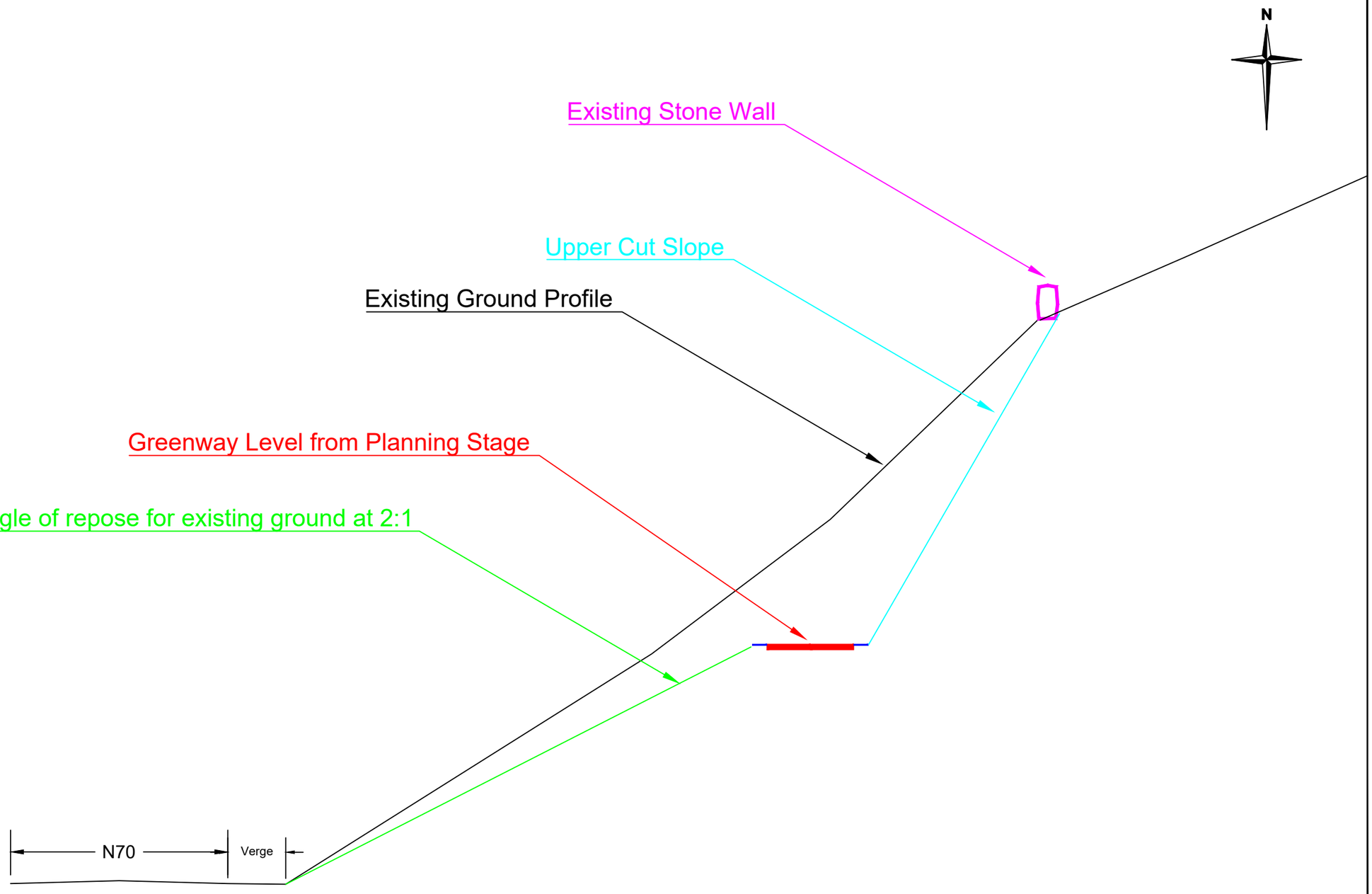
Checked:		Date: Jan 2024	



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Scale = 1 : 500 @ A3

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Director of Services,
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Rev	Drawing Issue & Revision Control	Issue P	I	A	T	C	R	Reviewed by PEM	Approved for Issue by PE	Issue Date
01	Issued for Information		✓							

Issue P I A T C R

Purpose of Issue : **P** = Preliminary **I** = Information **A** = Approval **T** = Tender ✓ **C** = Contract **R** = Record

Title:

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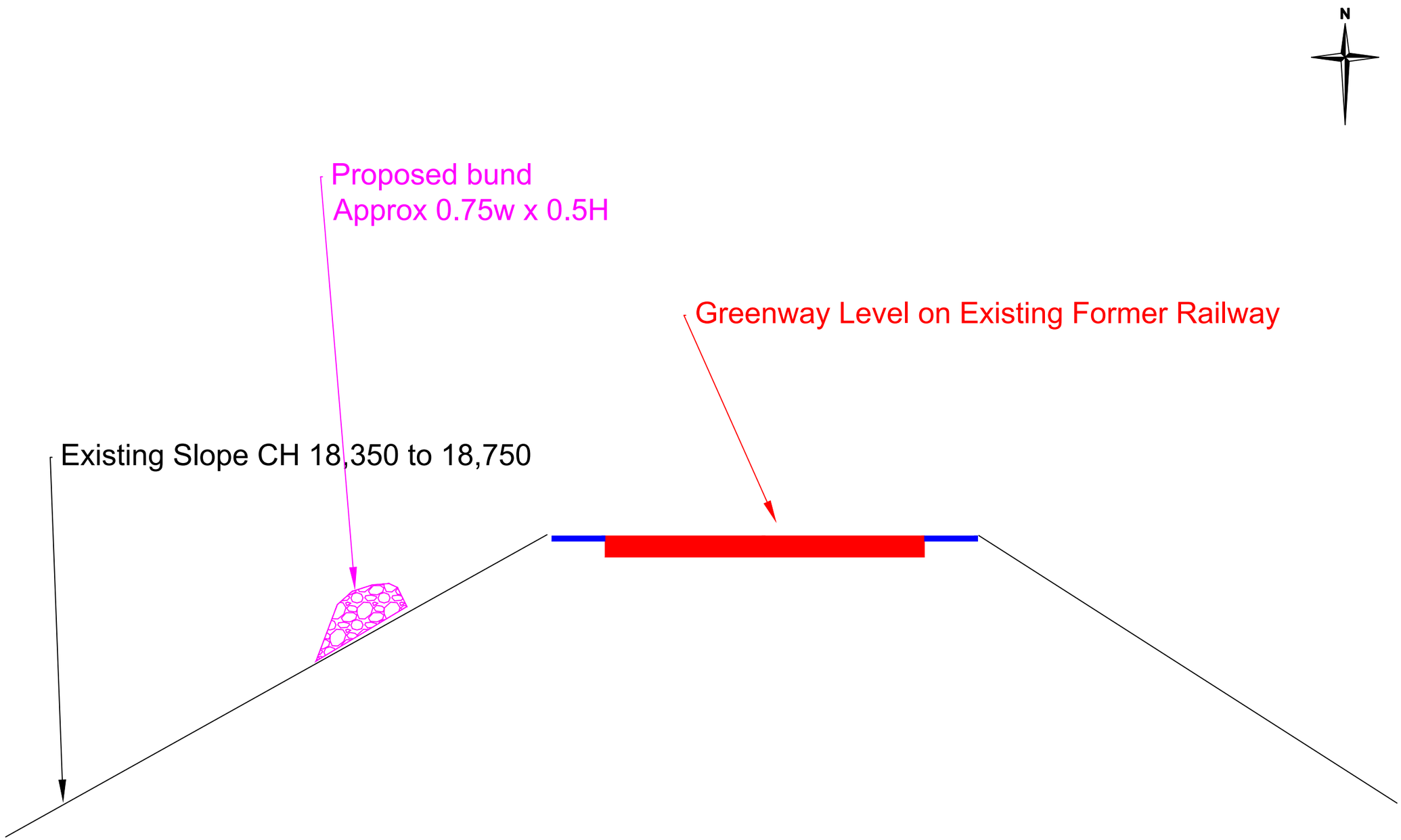

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Land Take Line

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Issue: P I A T C R ✓

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Title:

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Checked:		Date: Jan 2024	