

Kendal and Upper Kent Catchment Flood Risk Management Scheme

Lakeland Distribution Centre to Dale Farm
Flood wall and Embankment - Reach A
Planning Application - Engagement pack

November 2025



Contents

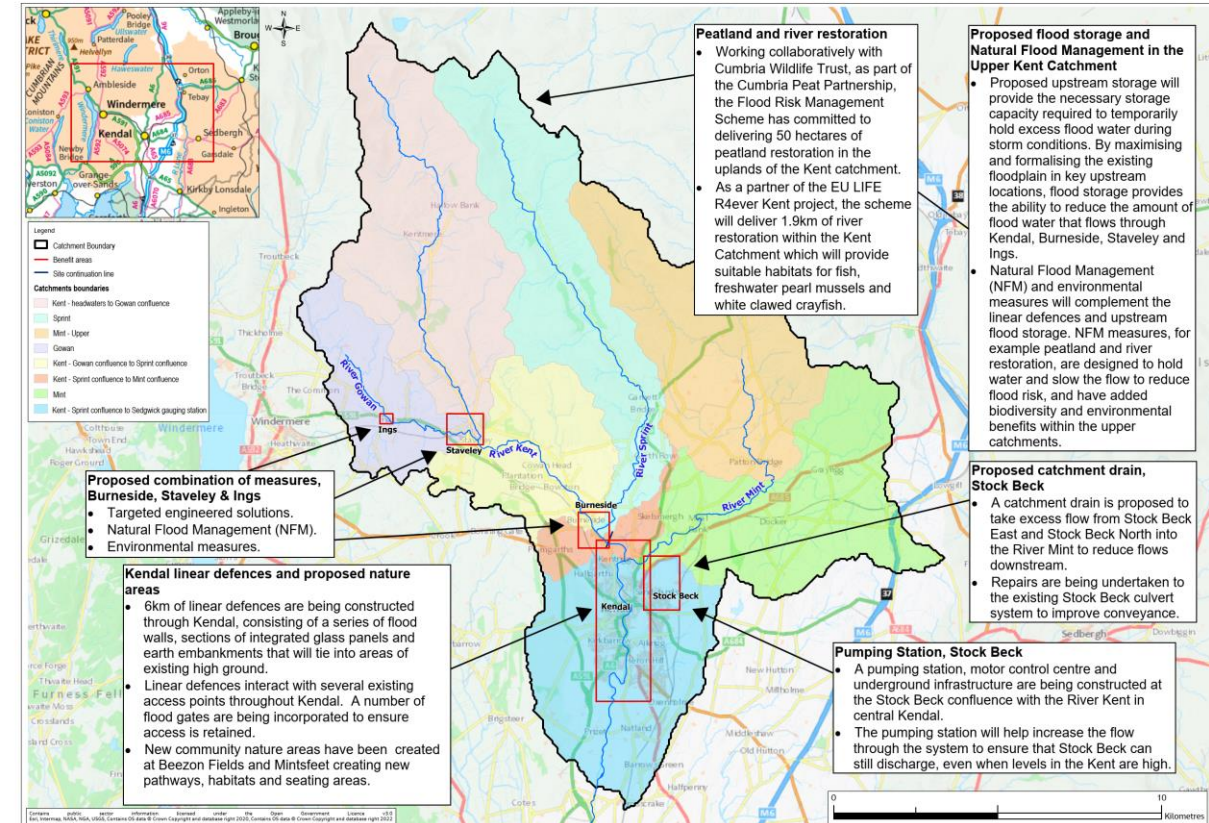


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All plans show in this document are available for download from the FloodHub website (<https://thefloodhub.co.uk/Kendal>) and can be viewed in person at the Flood Information Hub, 2 Beeson Road, Kendal, Cumbria LA9 6BW.

The Kendal and Upper Kent Catchment Flood Risk Management Scheme

- Following Storm Desmond in December 2015, the Environment Agency (EA), key partners and the local community worked together to identify options that seek to better manage flood risk across the Kent Catchment.
- Each potential flood risk option is assessed against the Environment Agency's key tests: to ensure they are economically viable, technically feasible, environmentally sustainable, socially acceptable, and safe to deliver.
- Through this process 60 initial options were reduced to a shortlist, resulting in a preferred option. This culminated in the development of the Kendal and Upper Kent Catchment Flood Risk Management Scheme (KFRMS).
- Consent for Phase 1 of the Flood Risk Management Scheme was granted on the 28 June 2019. This gave permission for the development of linear defences (including new and raised flood walls and embankments), ground raising, a pumping station, and public realm and landscape improvements at various sections of the Rivers Kent and Mint, known as 'Reaches'.
- Phase 1 of the KFRMS is nearing construction completion, with the EA considering the wider upstream measures to be taken forward in the next phases of the project.
- As part of the approved Scheme, the EA has planning permission to undertake flood risk management works to protect Westmorland Business Park and Lakeland Distribution Centre. This section of the scheme is known as Reach A.
- Informed by updated data, the revised proposal aims to improve the original design by refining the flood wall - beginning in the north, adjacent to the



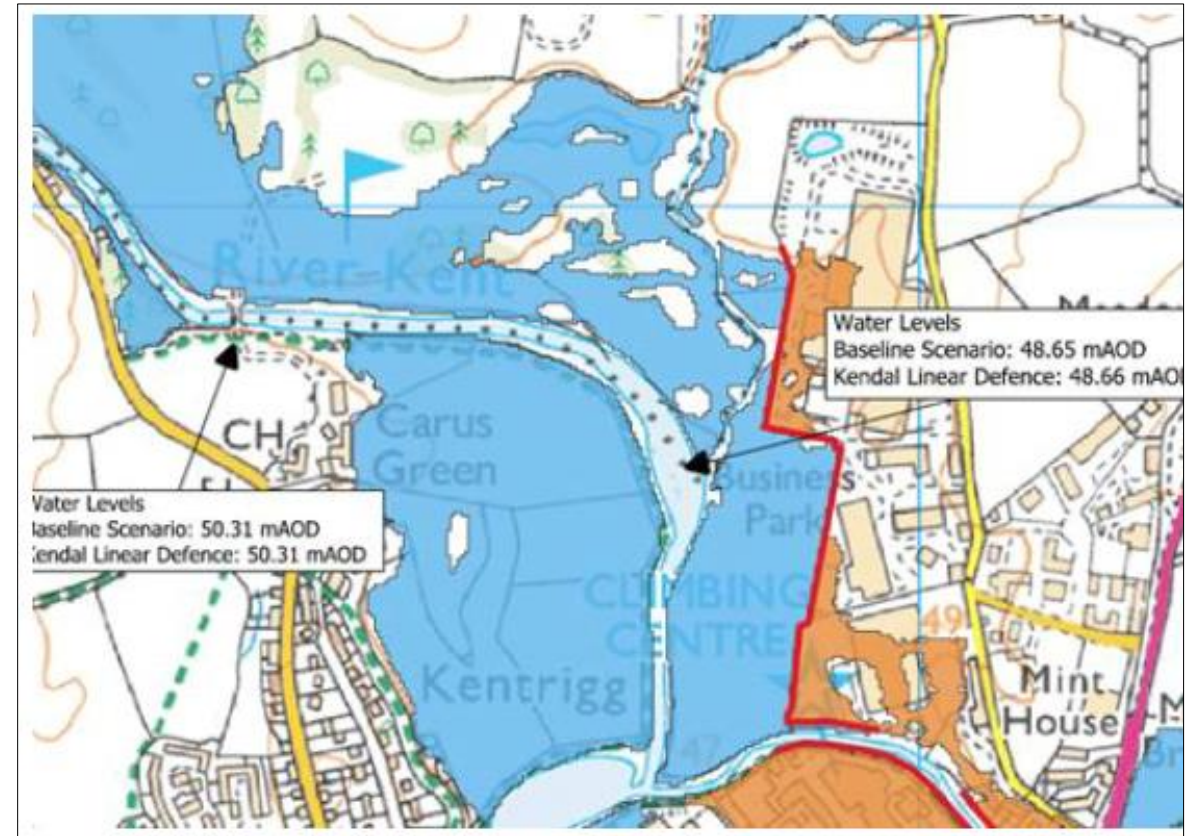
Kendal and Upper Kent Flood Risk Management Scheme measures

western boundary of Lakeland Distribution Centre, integrating it with an embankment that runs along the edge of Westmorland Business Park, continuing southward to connect with the defences on the north bank of the River Mint.

- This standalone planning application seeks approval from Westmorland and Furness Council (WFC) to enhance the consented design of the flood defence wall and embankment.

Lakeland Distribution Centre to Dale Farm Flood Wall and Embankment – flood history

- Lying in the floodplain of both the River Kent and River Mint, Kendal has a long history of flooding, with the most recent event being Storm Desmond in 2015.
- Existing flood risk management measures, comprising Stock Beck Flood Storage Basin and culvert system, provide varying levels of resilience throughout the town, with some areas offering as little as a 1 in 5-year flood event.
- Despite these measures, national flood risk modelling indicates that both the north and centre of the town remain at risk of flooding during storm events.
- Works completed to date across Kendal have already reduced flood risk in the town, providing greater resilience against future storm events.
- The Environment Agency considers that the proposed scheme is the best practicable flood risk management measures for this part of Kendal, aimed at providing improved flood resilience to properties.



Environment Agency Flood Zone Mapping for the area surrounding Lakeland and Dale Farm

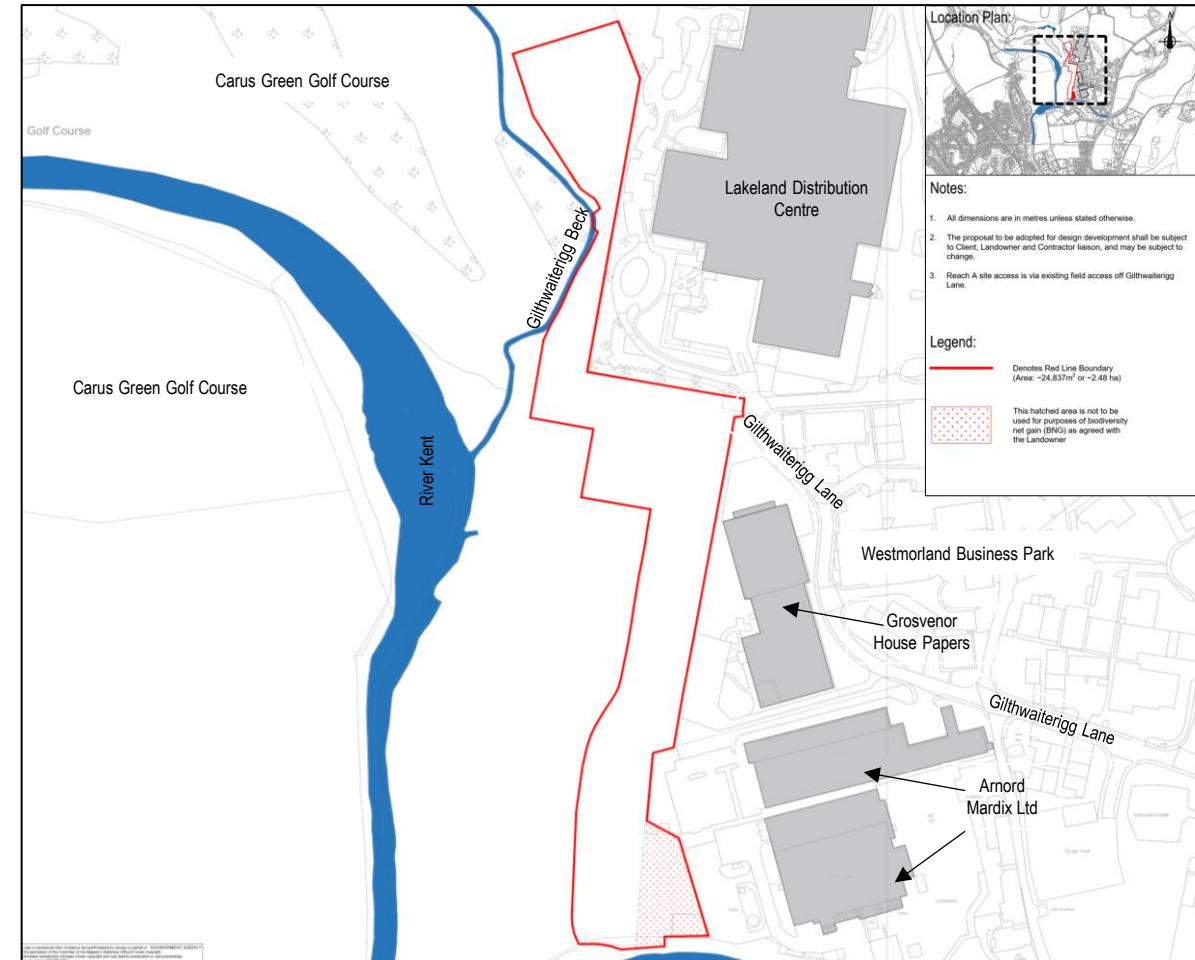
Legend

- Kendal Linear Defence
- 1% AEP Flood Extent – Kendal Linear Defences
- 1% AEP Flood Extent – Baseline Scenario



Lakeland Distribution Centre to Dale Farm Flood Wall and Embankment - the existing site

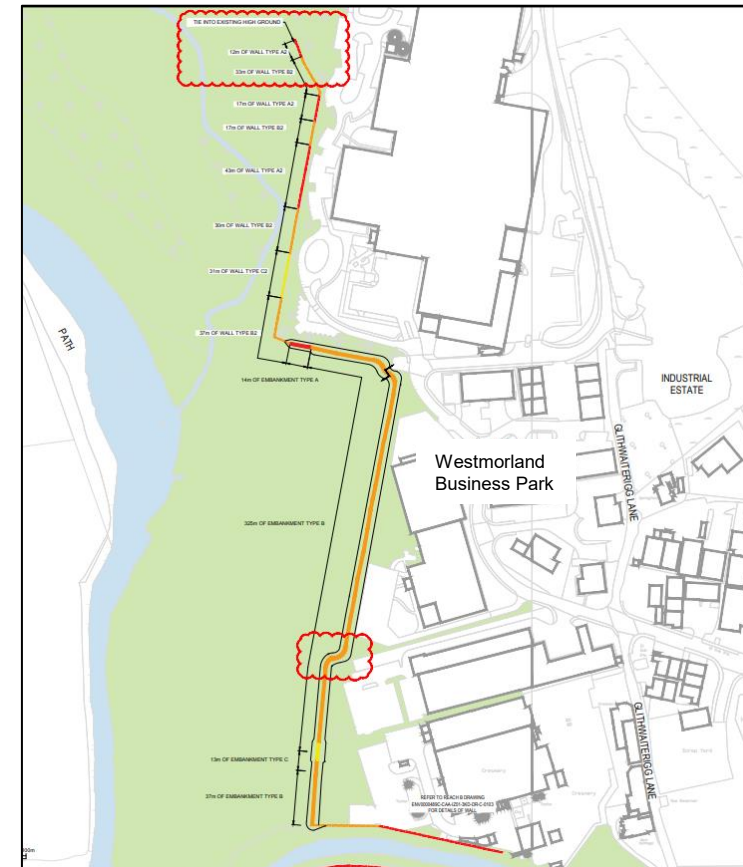
- Reach A lies to the north of Kendal, within the flood plain on the eastern bank of the River Kent and north of the River Mint. It is situated adjacent to Westmorland Business Park and Lakeland Distribution Centre, and east of Gilthwaiterigg Beck, a tributary of the River Kent.
- The surrounding area includes an industrial estate / business park to the east, farmland to the west, and Carus Green Golf Course.
- Located outside the boundary of Kendal Town Conservation area, the site falls within the political boundaries of:
 - Kendal Nether Ward
 - Kendal Town Council, and
 - Westmorland and Furness Council.



Extract from drawing ENV0000489C-JAC-ZZ-3AA-DR-C-0001 – Current red Line Boundary showing the area within which the flood wall and embankment will be built.

Lakeland Distribution Centre to Dale Farm Flood Wall and Embankment – the proposed scheme

- The original planning design was for Reach A flood defences to consist of a series of flood walls and embankments of varying heights within the floodplain, on the east bank of the River Kent.
- In January 2024, a review of levels was undertaken following a site walkover with the landowner. Subsequently a high-level proposal has been agreed to extend the linear flood defence north to ensure the design protects the entirety of Reach A. The proposal includes construction of a flood defence wall, with dimensions similar to those of the previously approved planning application, to align in height with the flood defences at Reach B, the Old Creamery Site, to ensure a fluid transition between the reaches.
- Following extensive modelling across the catchment, data indicates that the proposed works will not increase flood risk to nearby businesses or residential properties.
- The new improved proposed design includes:
 - **a flood defence wall** (~210m length) at the south west corner of Lakeland Distribution Centre. This continues in a northerly direction, parallel to the western boundary of Lakeland Distribution Centre, where it ties into high ground.
 - **a flood defence embankment** (~370m length) tapering from a tie-in with the adjacent flood defences at the Old Creamery site, Reach B, running parallel to the western boundary of Westmorland Business Park, looping back to the southern boundary of Lakeland Distribution Centre.
- **Surface water drainage** will collect water at a low point, discharging it through the embankment via a piped culvert. Three more culverts will be installed along the embankment to help with water flow and ponding.
- **Reinstatement and improvement of the existing access track** running parallel with the flood defences (Riverward side), to ensure continued landowner access to adjacent fields as well as maintenance access.

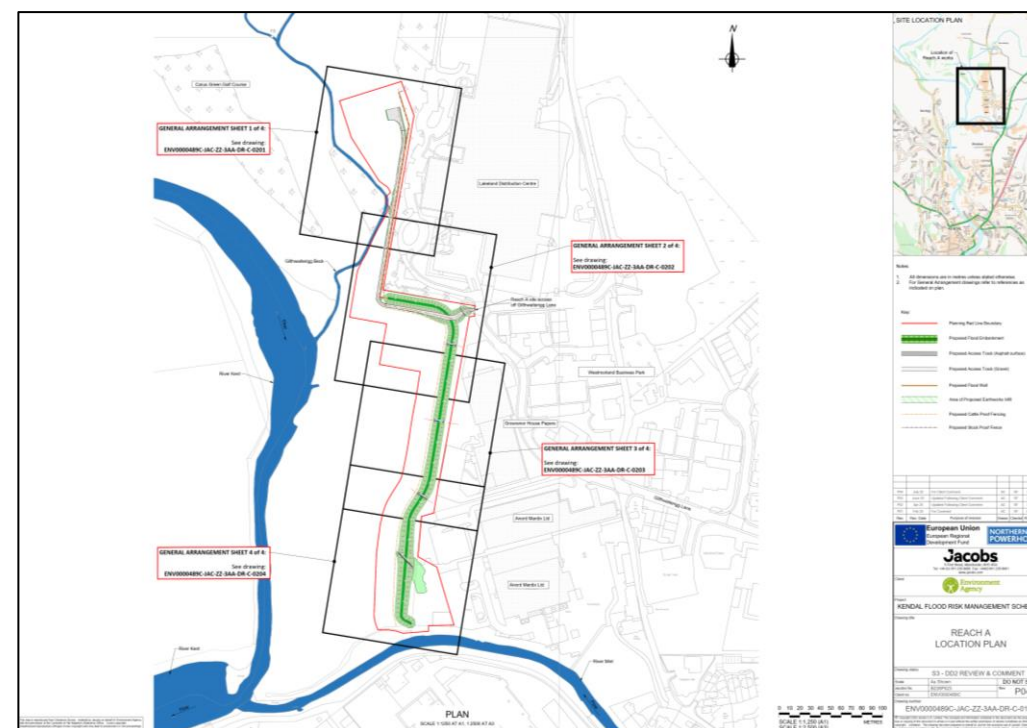


Extract from original approved scheme design consented 2019, now superseded – Lakeland Distribution Centre to Dale Farm Flood Defences, Reach A

Lakeland Distribution Centre to Dale Farm Flood Wall and Embankment – the proposed scheme

- The following criteria has been applied to the design of the proposed flood defences:
 - A 210m long reinforced **flood wall** to the north, slightly taller than the previous design—by around 20cm. The wall will be made of reinforced concrete and supported by steel piles, connecting to higher ground at its northern end, tapering into the flood embankment at the other end.
 - The side facing the river will be clad with natural stone cladding to blend in with the surroundings, while the other side, screened from view by a line of trees along the boundary with Lakeland Distribution Centre, will have a plain concrete look.
 - A safety (clipex) fence (1.2m minimum height above finish ground level) will be added on the river side of the sheet pile wall.
 - Providing **surface water drainage**, an existing twin pipe culvert and outfall from the nearby Lakeland Distribution Centre will be incorporated into the wall, with minor adjustments if needed. Three more piped culverts (300mm diameter) will be installed along the embankment to help with water flow.
 - The southern section of the flood defence will be a 380m long **earth embankment**, covered with grass and shaped with gentle slopes. It will be about 2m high at its tallest point—an increase of around 1.2m compared to the previous design. The embankment will be slightly shorter than originally planned but wider overall.
 - It will be built using compacted soil and topped with reinforced turf, with a layer of topsoil to help vegetation grow. A plain wire fence will be installed along the river-side embankment to prevent cattle from accessing and walking on it. This fence will be set half a metre away from the base of the slope and will connect with access gates.
 - At its southern end, the embankment will link up with an existing flood wall.

- An existing **access track** next to the river will be improved as part of the works. This will allow landowners and maintenance teams to reach nearby fields. The track will be made from compacted gravel and follow the natural ground level, with a gentle slope over the flood embankment to connect with Giltwhaiterigg Lane. Near the entrance, a short section (about 10m) will be finished with asphalt to match the road.
- The proposed scheme will not interact with any Public Rights of Way and there are no permanent or temporary diversions proposed.



Extract from ENV0000489C-JAC-ZZ-3AA-DR-C-0101 - Location Plan - P04 - Approved planning red line boundary

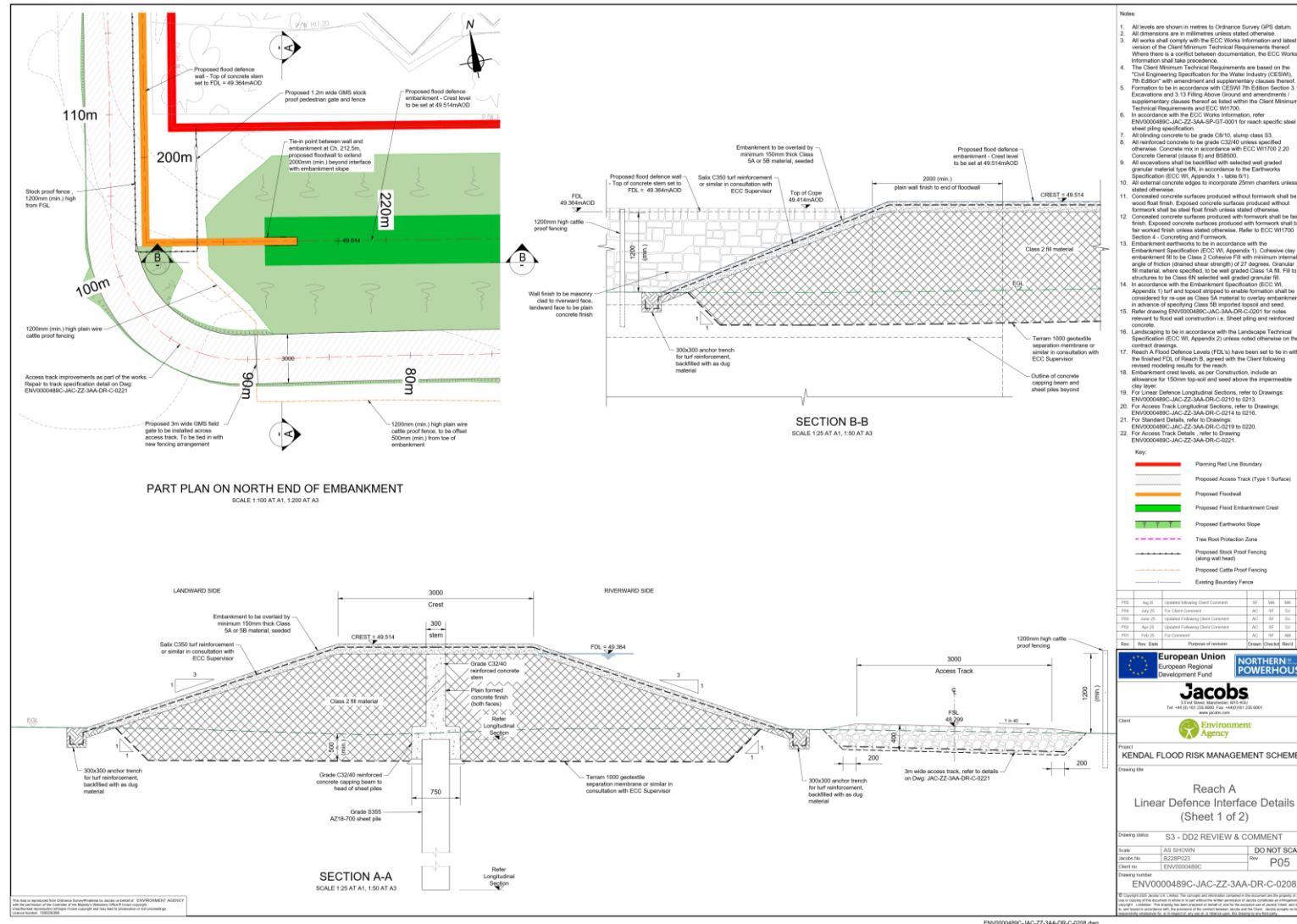
Lakeland Distribution Centre to Dale Farm Flood Wall and Embankment – 3D visualisation

- The 3D visualisation below shows the view of the proposed flood wall and embankment (Reach A), taken from the public footpath at the confluence of the River Kent and Giltwhaiterigg Beck, looking towards Lakeland Distribution Centre.



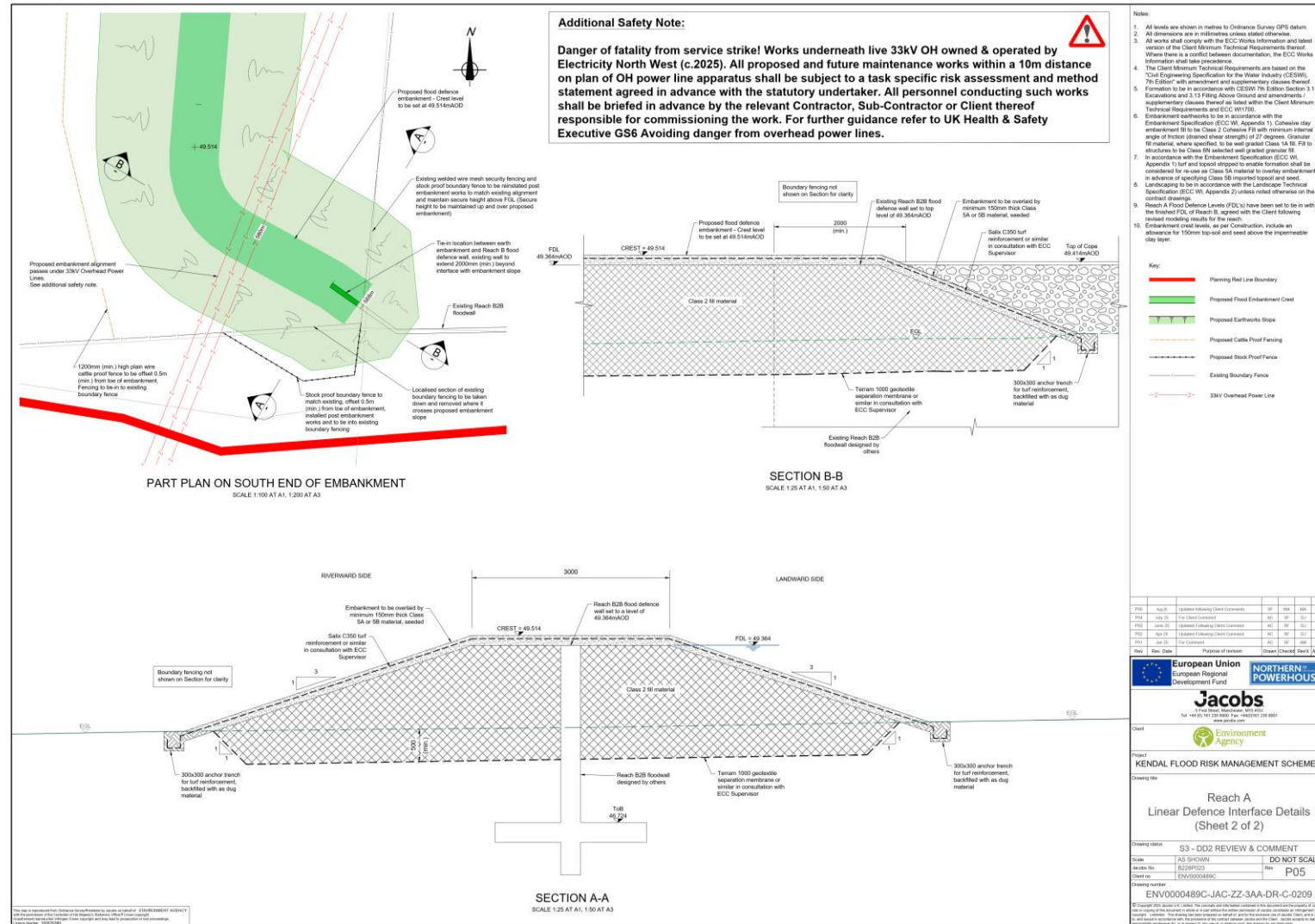
Extract from ENV0000489C-JAC-ZZ-3AA-VS-PL-0001-A3-P01- Reach A landscape visualisation

Lakeland Distribution Centre to Dale Farm Flood Wall and Embankment – the proposed scheme



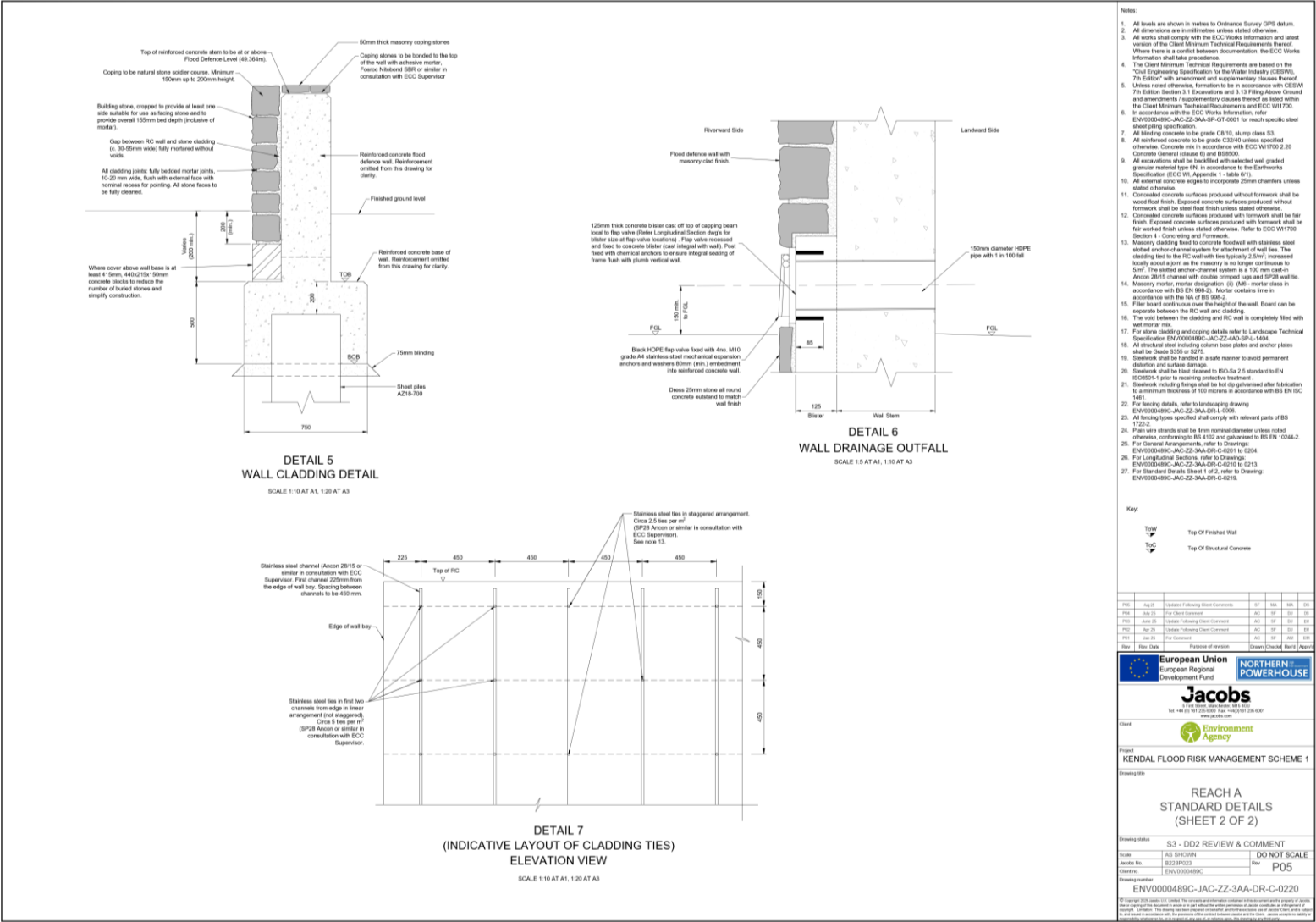
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Lakeland Distribution Centre to Dale Farm Flood Wall and Embankment – the proposed scheme



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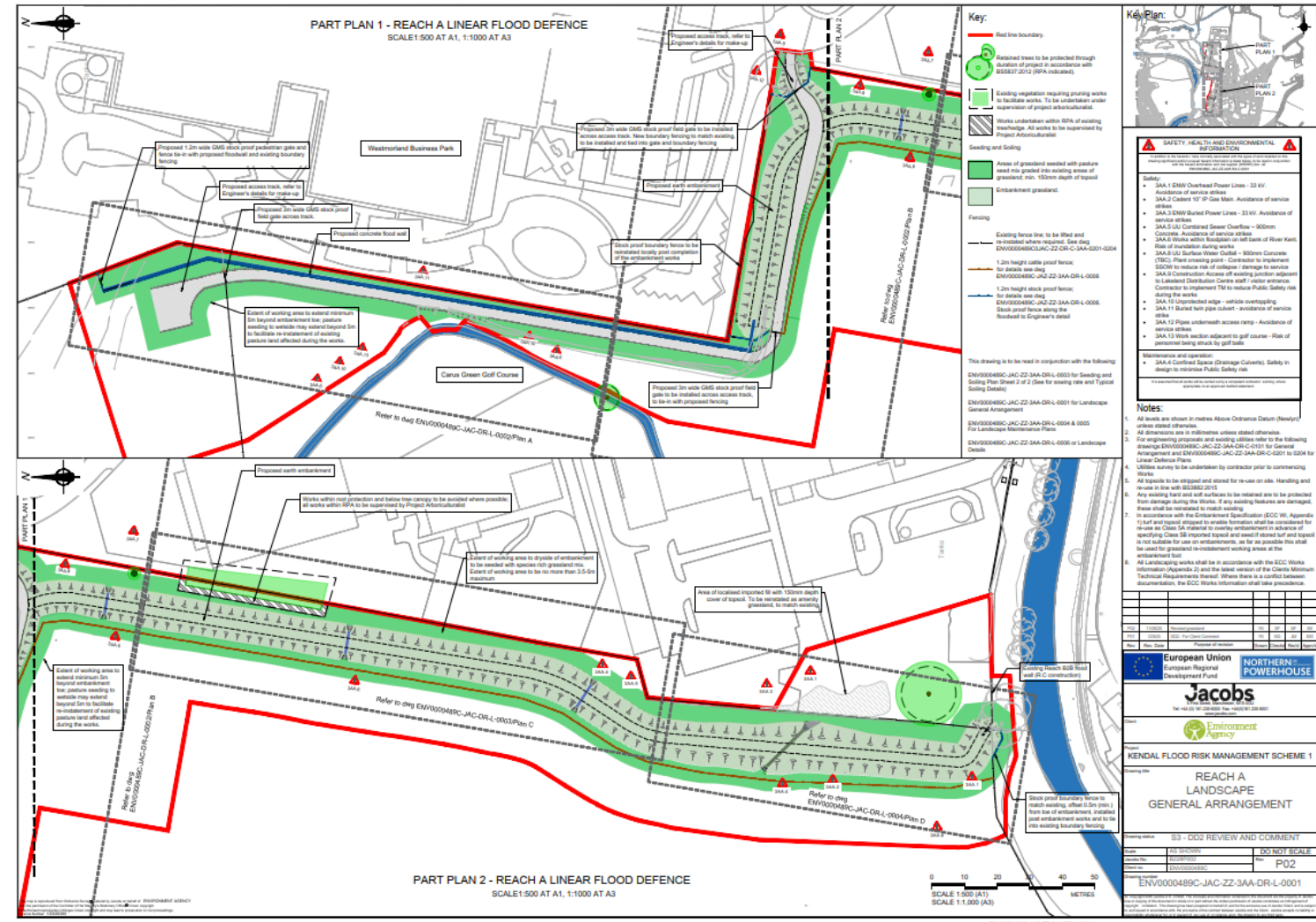
Lakeland Distribution Centre to Dale Farm Flood Wall and Embankment – the proposed scheme



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Lakeland Distribution Centre to Dale Farm Flood Wall and Embankment – the proposed scheme

- The embankment alongside Westmorland Business Park will result in the stripping of topsoil and grassland to facilitate construction works, which will result in a temporary loss of vegetation in this area. This will be reseeded, to grow back and subsequently managed.
- The detailed landscape design is being finalised, in agreement with WFC, but is not expected to differ greatly from that proposed as part of the Consented Scheme.



NV0000489C-JAC-ZZ-3AA-DR-L-0001-P02 - Extract from General arrangement plan

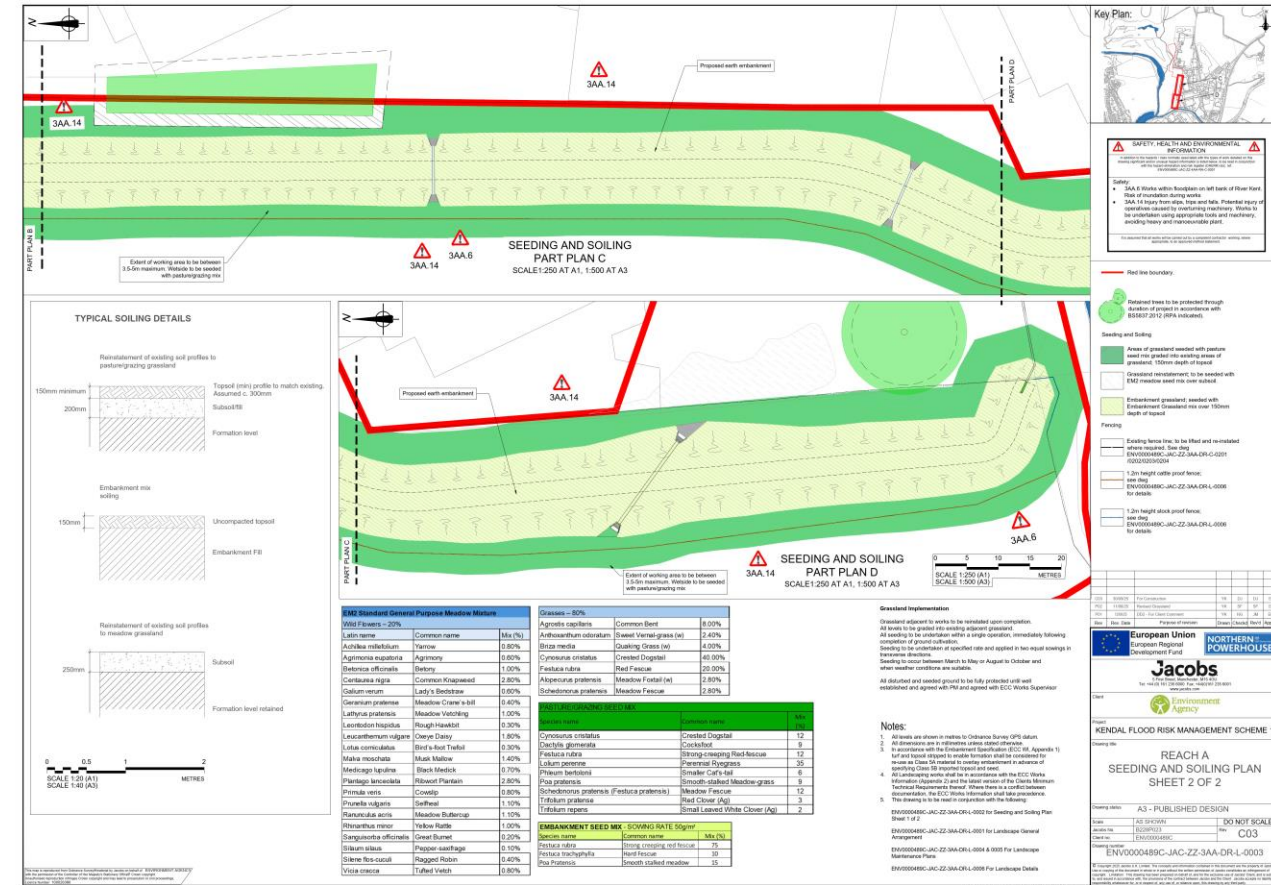
Lakeland Distribution Centre to Dale Farm Flood Wall and Embankment - landscaping

■ Landscaping (see plan opposite)

- At the southernmost extent of the proposed alignment, the cluster of tree trunks and roots from previously felled trees will be removed. Replacement planting will occur at a 1:6 ratio in a suitable location, subject to landowner agreement. The proposed works will avoid the pre-identified Root Protection Areas (RPAs).
- Existing trees will be retained where possible. There is opportunity to integrate hedgerow to the boundary treatment at the wet side of the embankment, implementing a central stock proof fence prior to planting.
- To further reduce potential impacts, existing trees will be preserved where possible. Subject to landowner agreement, additional tree planting and hedgerow planting may be added to the field side of the new embankment.

■ Land quality

- The revised alignment crosses two United Utilities owned surface water sewer outfalls and crosses a Cadent gas main, which will be considered through design and construction of the structure.
- A risk assessment will address existing hydrocarbon risks where embankments will be raised, and potential seepage cut-off could create a new pollutant pathway.
- Measures will be taken to avoid potential chemical spillages during construction.



Extract from ENV0000489C-JAC-ZZ-3AA-DR-L-0003 - Seeding & Soiling Plan

Lakeland Distribution Centre to Dale Farm Flood Wall and Embankment - the environment

■ Environment

- A Habitats Regulation Assessment (HRA), Biodiversity Protection Plan, a detailed Ecological Impact Assessment (ECiA) and species survey report(s) for bats, otters, badgers, great crested newts and aquatics, as well as a Flood Risk Assessment, have been prepared and accompany the planning application.
- As no additional likely significant environmental effects are anticipated beyond those identified in the previously approved scheme, Westmorland and Furness Council have concluded that a further Environmental Impact Assessment is not required.
- The proposed scheme offers opportunities to deliver positive benefits for local wildlife and habitats through the application of Biodiversity Net Gain (BNG). Additional measures to further enhance biodiversity will also be explored. The final BNG plan will be developed collaboratively with Westmorland and Furness Council and the landowner.
- The Planning Statement submission also gives consideration to other environmental issues covering cultural heritage and archaeology, noise and vibration, air quality, geology, soils and waste, landscape, townscape and visual impacts, and traffic and transport.
- A Construction Environmental Management Plan will be agreed with Westmorland and Furness Council.



Lakeland Distribution
Centre to Dale Farm,
Reach A



Lakeland Distribution Centre to Dale Farm Flood Wall and Embankment – engagement and consultation

- Stakeholder engagement and consultation forms a critical component of decision-making in the development of the Kendal and Upper Kent Catchment Flood Risk Management Scheme (FRMS).
- The benefits of pre application engagement are set out within the National Planning Policy Framework (NPPF) published in December 2024. Paragraph 40 states: ‘Early engagement has significant potential to improve the efficiency and effectiveness of the planning application system for all parties. Good quality pre application discussion enables better coordination between public and private resources and improved outcomes for the community’.
- The overarching aim of our engagement and consultation on Lakeland to Dale Farm Flood Wall and Embankment is to ensure that directly affected stakeholders are engaged at a formative stage, early in the design process, when they have an opportunity to be actively involved and influence the scheme design.
- In line with Gunning principles 1, 2,3, and 4, we aim to demonstrate that our approach to engagement, consultation and communications is delivered at the right time, is fair and above all, meaningful. In addition, engagement and consultation is carried out in accordance with the latest Government and local policy and guidance, including Westmorland and Furness Council’s Statement of Community Involvement (SCI).

Gunning principle		Our commitment
1	that consultation must be at a time when proposals are still at a formative stage;	Our consultation will be carried out at a point when a final decision on the design of the Kent Catchment Flood Risk Management scheme has not been made or pre-determined by the decision makers
2	that the proposer must give sufficient reasons for any proposal to permit of intelligent consideration and response;	The information we provide will relate to the consultation and tell the story of the Kent Catchment Flood Risk Management Scheme. It will be available, accessible, and easily interpretable enabling consultees to provide an informed response.
3	that adequate time is given for consideration and response; and	We will provide sufficient opportunity for consultees to participate in the consultation. There is no set timeframe for consultation, despite the widely accepted twelve-week consultation period. The length of time given for consultees to respond will be relative to the size of the scheme and extent of impact of the consultation
4	that the product of consultation is conscientiously taken into account when finalising the decision.	We will demonstrate how we took consultation responses into account.

Lakeland Distribution Centre to Dale Farm Flood Wall and Embankment – engagement and consultation

- The purpose of our engagement and consultation with key stakeholders and directly affected landowners is to:
 - Create shared understanding of the scheme
 - Work directly with stakeholders to ensure their interests, concerns and aspirations are consistently understood and considered
 - Gather feedback on the design of the proposed flood embankment and wall, helping to develop alternatives, or identify a solution as required
 - Provide real opportunities for those directly affected to have an influence as a result of their involvement
 - Provide sufficient information, and time for full consideration and response from the stakeholder and design team
- The Environment Agency is committed to continuous engagement and consultation from the evolution of the original scheme to the initial design and development of the proposed flood embankment and wall. Ongoing since 2024, engagement on Lakeland to Dale Farm (Reach A) has been and continues to focus on:
 - Landowners and businesses directly affected;
 - Natural England;
 - Kendal Town Council,
 - Westmorland and Furness Council,
 - Electricity North West, Cadent, United Utilities, and
 - Those indirectly affected, to include Carus Green Golf Course, and residents on the opposite side of the River Kent.
- Methods include:
 - Engagement meetings (face-to-face on site/virtual) with landowners / businesses / statutory consultees
 - Scheme updates via newsletters (hard copy/email) and information on the Kendal Flood Hub website
 - Letters / phone calls / email
 - Information displays in the Kendal Drop-in Information Hub
 - Publication of a pre-application engagement pack on the Flood Hub website: <https://thefloodhub.co.uk/kendal> and/ or <https://thefloodhub.co.uk/upperkent>
- Landowners have been consulted regularly, particularly to inform development of the design, access arrangements, programme, and the Biodiversity Net Gain (BNG) assessment.
- The Environment Agency has sought to collaborate on the proposed development to minimise the impact of the works in terms of design and particularly the landscaping of the flood defence structures to minimise the visual impact and ensure access is maintained.
- In addition, face-to-face meetings will be held with Kendal Town Council at key milestones throughout the scheme's development, through their programme of meetings.

Lakeland Distribution Centre to Dale Farm Flood Wall and Embankment – engagement and consultation

- Our approach with the wider public aims to raise awareness of the Flood Risk Management Scheme, keeping them up to date with progress on the scheme's development throughout. In addition, we continue to raise awareness of the scheme and engage with politicians, and specialist interest/local groups, such as local Flood Action Groups, and the Kentmere Flood Liaison Group.
- The purpose of our engagement and communications here is to:
 - Provide the wider public and those interested with balanced, objective information
 - Help them understand the purpose of the Flood Risk Management Scheme, providing an overview of the design development process (for example, early ground investigations and surveys), our road map to delivery (timescales), and provide a broad overview of potential solutions.
 - Methods include direct access to the team through the Flood Scheme Information Hub, an online FloodHub information resource, information boards, newsletters, presentations, VolkerStevin Engage App, and non-technical summaries, as well as utilising local communication channels and networks.



Kendal Flood Risk Management Scheme

The Environment Agency is delivering a proposed Flood Risk Management Scheme to better protect homes and business from flooding in the Kent catchment, and improve the local environment and community amenities. Kendal is the first area to be delivered, followed by Burneside, Staveley, and Ings, and upstream measures including flood storage. In addition, Natural Flood Management measures are being integrated into the plans which aim to slow the flow of water and provide wider environmental benefits across the catchment. Information on the Kendal pages has been provided by the Environment Agency and was correct at the time of upload. The Flood Hub is not responsible for any information held on the Kendal pages. For any enquiries, see the Contact section of the page.

European Union
European Structural and Investment Funds

NORTHERN POWERHOUSE

Environment Agency

Kendal Flood Risk Management Scheme

European Union
European Regional Development Fund

In association with E&R Properties as landowner

Plan of flood defences and finishes

Scheme overview

The Environment Agency is delivering a Flood Risk Management Scheme to better protect homes and business from flooding in the Kent catchment, and improve the local environment and community amenities. Kendal is the first area to be delivered, followed by Burneside, Staveley, and Ings, and upstream measures including flood storage.

What have we done?

This section of flood defence involved the repair and strengthening of the existing stone wall. New coping stones have been installed, as well as works to the footings to stop the seepage of water through the base of the wall.

Environmental and wildlife benefits

Two Goat Willow trees (Feathered trees)

- Supports lots of wildlife including the elusive and regal purple emperor butterfly
- Provides the early source of pollen and nectar for bees and other insects
- Habitat for caterpillars and moths
- Foraging benefits for birds
- An ideal species for this location as it thrives in damper more open ground near rivers, lakes, streams and canals

Three Alder trees (Extra heavy standard trees)

- A food plant for caterpillars and several moth species
- Provides the early source of pollen and nectar for bees and other insects
- The seeds of this tree are eaten by a number of bird species such as the siskin, redpoll and goldfinch
- The root systems provide perfect nest sites for otters
- An ideal species for this location due to its durability and strength, particularly when planted in or near water.

Community improvements

As part of the works the footpath has been fully resurfaced.

Landscaping

We will be undertaking some landscaping works in Autumn which is ideal planting season. Five new trees will be planted in this area.

Stock Beck overview

Stock Beck comprises of several sections of watercourse that originate in farmland before entering the eastern side of Kendal. The watercourses converge and are joined by connections from surface water drains. The combined flows pass through largely culverted sections within the urban area and outfall into the River Kent in the town centre, near Gooseholme Park.

As part of the Kendal and Upper Kent Catchment Flood Risk Management Scheme we will address the flood risks associated with Stock Beck, and design improvements which will manage water within the catchment more effectively. A combination of measures will be used to improve the conveyance of Stock Beck through the town, as well as managing excess flows to reduce the risk of flooding.

Rehabilitation works are being carried out to maintain the flow through existing culverts located along Stock Beck, together with construction of a new pumping station at Gooseholme, and a proposed catchment drain to the Northeast of Kendal.

Culvert rehabilitation works

Works are required to replace and rehabilitate a number of sections of the Stock Beck culvert system in the areas of Calder Drive, Sandylands Road, Rusland Park, Auction Close, Silverdale Drive and Gavel Court. Our specialist contractor 'OnSite' will carry out the work.

This work is due to commence from 5th August for approximately 16 weeks. Whilst the majority of work will be undertaken in the highway, we will require temporary access to some residents' gardens and/or driveways. Those affected will be notified prior to the work, and traffic management put in place where required. Any inconvenience caused will be kept to a minimum.

Environment Agency **Jacobs** **VolkerStevin**

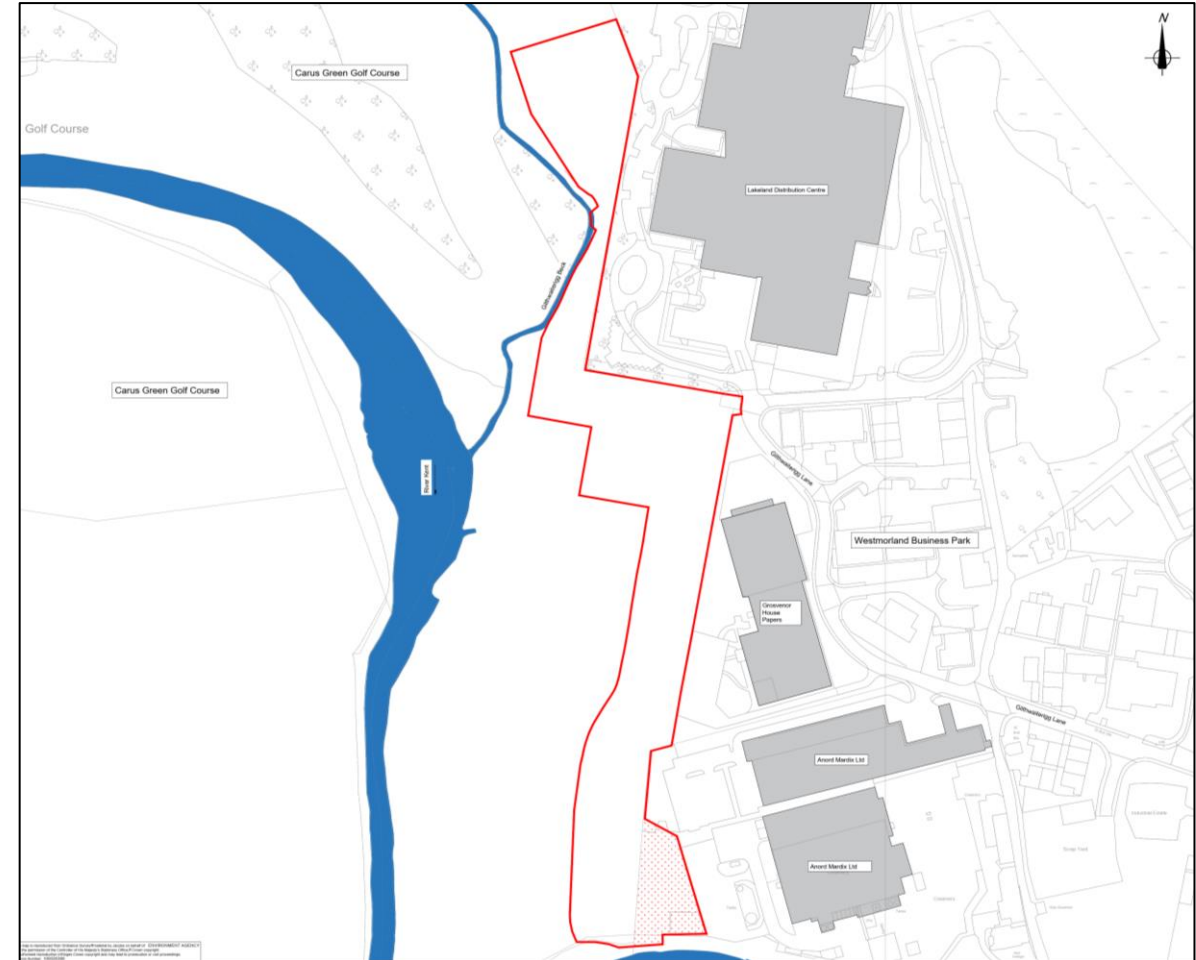
www.thefloodhub.co.uk/kendal
@EnvAgencyNW

Environment Agency **CAPITA** **Jacobs** **VBA**

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Lakeland Distribution Centre to Dale Farm Flood Wall and Embankment – construction

- The primary site compound will be located approximately 300 metres from the works area, on Gilthwaiterigg Lane. This will serve as the centre for welfare facilities throughout the construction period. A smaller welfare facility will also be available within the red line boundary of the works area.
- Access to the site will be via an existing farm gate at the junction of Lakeland Distribution and Gilthwaiterigg Lane, passing through Westmorland Business Park. As part of the scheme a permanent access rack will be built to facilitate construction activities, enable ongoing maintenance of the flood defences and provide landowner access.
- Experienced subcontractors will carry out specialist tasks, including sheet piling, stone masonry works, fencing and landscaping requirements.
- A Construction Environmental Management Plan (CEMP), outlining best working practices will be implemented. This will include a Pollution Prevention Plan, a Biosecurity Plan, pre-construction works toolbox talk, and provision of a watching brief for works near the River Kent Special Area of Conservation (SAC), and Site of Special Scientific Interest (SSSI). A similar CEMP was successfully implemented for the Consented Scheme and will be adopted for the Proposed Development.
- A Traffic Management Plan will be in place to ensure safe and efficient vehicle movements. Regular updates will be shared with Lakeland Distribution to maintain coordination and minimise disruption.
- A designated laydown area has been identified opposite the site entrance on Gilthwaiterigg Lane. This area will be secured with Heras fencing, supplemented by either deer or stock-proof fencing.
- Regular updates will be provided to stakeholders in the area before and throughout the construction period.
- All necessary permits for Flood Risk Activities (FRAP) will be obtained before works begin.



Extract from drawing ENV0000489C-JAC-ZZ-3AA-DR-C-0001 – Current red Line Boundary

Lakeland Distribution Centre to Dale Farm Flood Wall and Embankment – construction

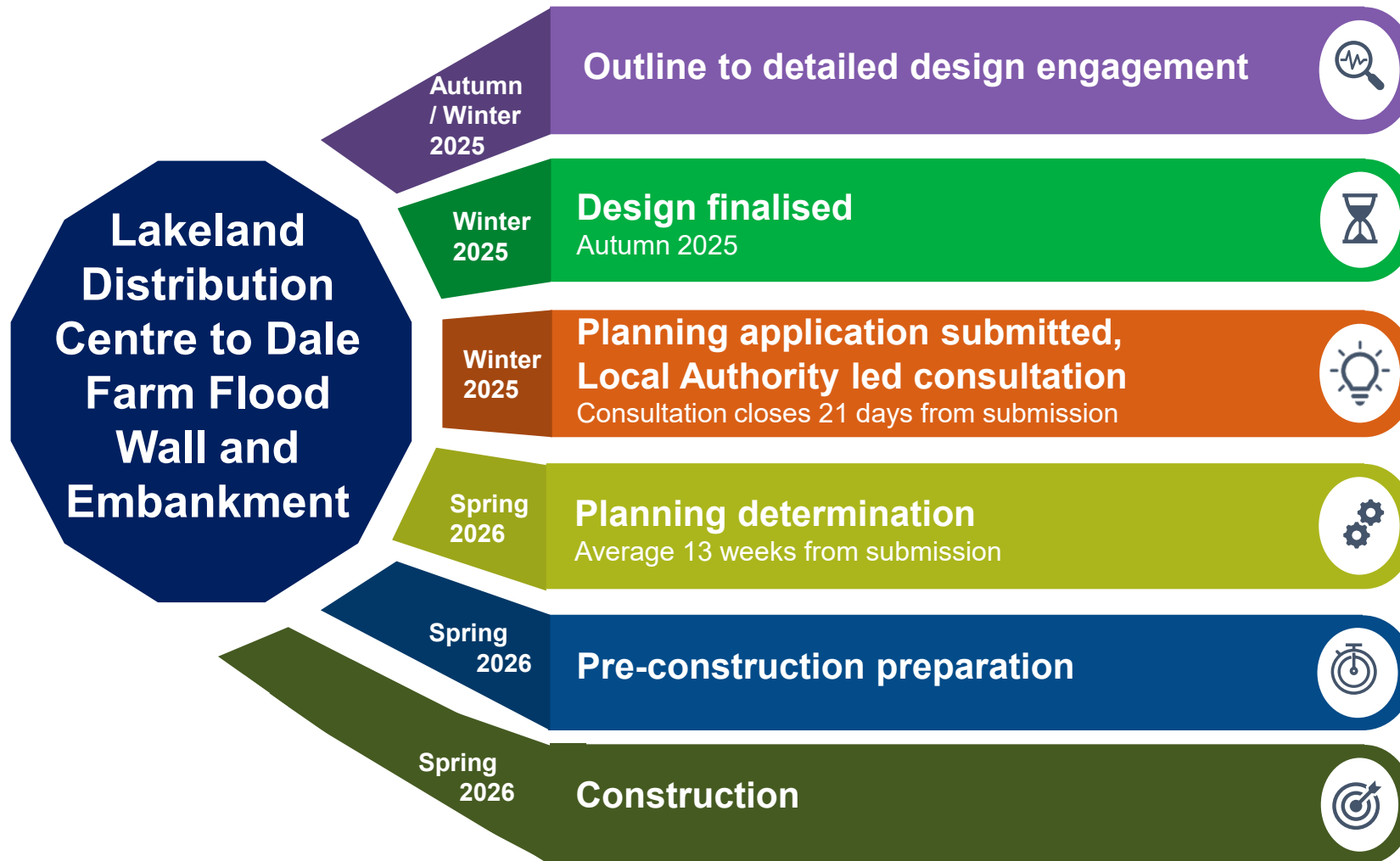
- The construction site will be securely fenced off with gated access, ensuring it remains inaccessible to the public. Site perimeter fencing will follow the red line boundary and will include:
 - 2.0m high deer fencing
 - 1.2m high stock-proof fencing
- Temporary service crossings will be installed to protect existing utilities, with ongoing coordination with United Utilities, Electricity North West and Cadent.
- Silt fencing will be installed at the southern end of the site, particularly near the River Mint and Gilthwaiteigg Beck, to prevent sediment runoff and protect the local watercourses.
- To safely carry out the works, some localised pruning of overhanging branches will be required. This will take place along the boundary with Lakeland Distribution Centre, near the planned flood defence wall and embankment, including the entrance to Gilthwaiteigg Lane. This is to prevent damage to tree limbs during construction.
- Works are expected to begin in Spring 2026 and will aim to last approximately 7 months.
- Measures will be in place to manage and minimise noise, vibration and dust.
- These requirements are designed to reduce disruption to nearby businesses and residents and to protect the local environment.
- The Construction Management Plan will be agreed with Westmorland and Furness Council.



Heras fencing

Lakeland Distribution Centre to Dale Farm Flood Wall and Embankment – programme of works

- The following key deliverables taken from the project programme will be supported by a detailed **project execution plan**.



Further information

- Supporting documents and further information including frequently asked questions are available on the flood hub www.thefloodhub.co.uk/kendal

Consultation

- The Environment Agency aim to submit a formal planning application for the Lakeland Distribution Centre to Dale Farm, Flood Embankment and Wall Planning Submission in Winter 2025. Westmorland and Furness Council will then lead a period of statutory planning consultation that will last for 13 weeks. This is different to the early consultation and engagement carried out by the Environment Agency because comments are sent to Westmorland and Furness Council; they no longer go directly to the Environment Agency.

Information to be provided with the planning application

- Once the planning application package is submitted, it is available to view, together with all the supporting information on Westmorland and Furness Council's planning portal <https://planningregister.westmorlandandfurness.gov.uk>