

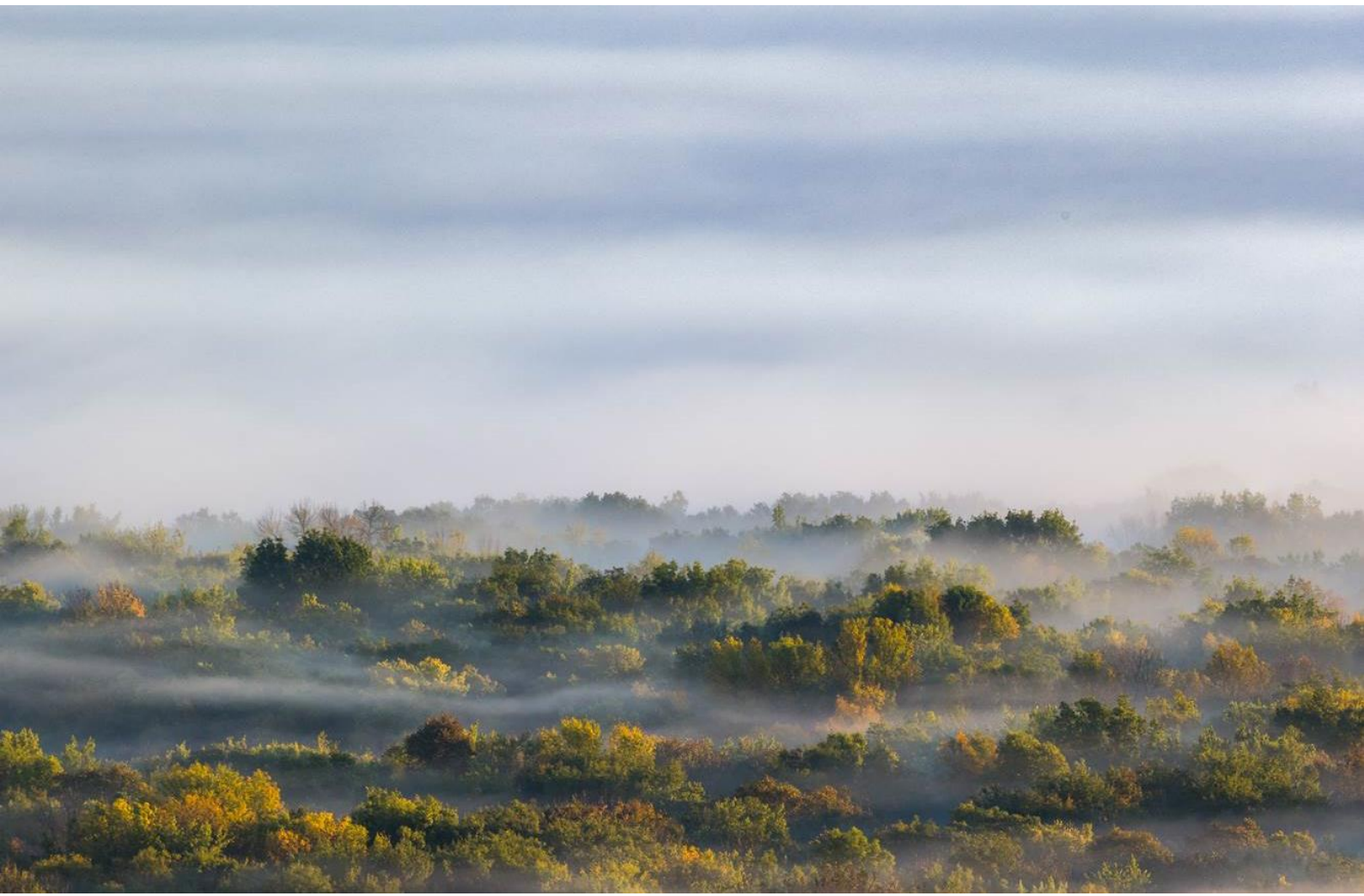
Knocknaegal Substation Extension

Landscape Strategy and Detailed
Planting Plan

PREPARED FOR
SSEN Transmission

DATE
30/05/25

REFERENCE
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CONTENTS

1.	LANDSCAPE STRATEGY	1
1.1	INTRODUCTION	1
1.2	REQUIREMENT	1
2.	THE SOFT LANDSCAPE ESTATE	1
2.1	DESIGN OBJECTIVES	1
2.2	BIODIVERSITY NET GAIN	1
3.	PROGRAMME FOR IMPLEMENTATION AND COMPLETION	2
4.	MAINTENANCE AND MANAGEMENT	5
4.1	OVERVIEW	5
4.2	MAINTENANCE AND MANAGEMENT YEARS 1–5	6
4.3	MAINTENANCE AND MANAGEMENT YEARS 6–10	7
4.4	MAINTENANCE AND MANAGEMENT YEAR 11 ONWARDS LONG TERM	9

LIST OF TABLES

TABLE 1	LANDSCAPE AND HABITAT MANAGEMENT PRESCRIPTIONS, RESPONSIBILITIES AND WORK SCHEDULE	6
TABLE 2	SPECIES MONITORING PRESCRIPTIONS, RESPONSIBILITIES AND WORK SCHEDULE	8
TABLE 3	SPECIES MONITORING PRESCRIPTIONS, RESPONSIBILITIES AND WORK SCHEDULE	9
TABLE 4	LANDSCAPE AND HABITAT MANAGEMENT PRESCRIPTIONS, RESPONSIBILITIES AND WORK SCHEDULE	9

LIST OF FIGURES

FIGURE 1	PLANTING MITIGATION PLAN	3
FIGURE 2	PLANTING SCHEDULE	4

1. LANDSCAPE STRATEGY

1.1 INTRODUCTION

The purpose of this Landscape Strategy Plan is to provide operational guidance for the management and maintenance of the landscape mitigation proposed at Knocknagael Substation Extension. The document sets out the details of establishment periods for the proposed mitigation planting for the first five years post completion, provides a detailed summary of management requirements for years 6 – 10 and provides an overview of longer-term management for year 11 onwards.

The document also describes the soft landscape proposed for SSEN Transmission and is to be used by the appointed contractor and their consultants as an operational manual for undertaking management and maintenance works. Monitoring and reporting requirements are also provided.

This Landscape Strategy Plan will be amended as the project progresses in response to changes to the project that may arise during construction and required by the SSEN operations team based on the final development, as built.

The landscape planting proposed is informed by the Biodiversity Net Gain (BNG) commitments described in the Biodiversity Net Gain Assessment Report (SSEN, February 2025).

1.2 REQUIREMENT

This document has been prepared in response to pre-application consultation (22/04161/PREMAJ) which requested a Landscape Plan and Landscape Maintenance Plan be provided as part of the application to show how it is proposed to soften views onto the Proposed Development.

2. THE SOFT LANDSCAPE ESTATE

2.1 DESIGN OBJECTIVES

The soft landscape estate at the proposed Knocknagael Substation Extension has been designed to promote habitat connectivity, provide screening from sensitive visual receptors and support SSEN BNG targets.

The main Design Objective from a Landscape and Visual perspective is to:

- Provide screening buffers to local sensitive receptors and residential properties to the south and west through the planting of woodland on mounding;
- Integrate the substation into the local landscape by the planting of woodland; and
- Achieve the BNG as calculated in the Biodiversity Net Gain Assessment Report (SSEN, April 2025).

2.2 BIODIVERSITY NET GAIN

Through the implementation and establishment of the landscape strategy, the Site is expected to achieve a net loss in biodiversity units. Off-site habitat creation will be required to deliver BNG. The off-site opportunity will be arranged by the Applicant and will be kept within the Local Planning Authority (LPA) of the Proposed Development.

The Landscape Mitigation Plan aimed to maximise the BNG opportunities on-site while adhering to the ongoing management measures available at the site." . This Strategy further refined the species and mixes proposed in the BNG report, however the habitats are considered to meet the same habitat classifications proposed to deliver BNG.

3. PROGRAMME FOR IMPLEMENTATION AND COMPLETION

Construction of the substation extension would take place over an approximately 32-month period following the granting of consents, with an anticipated completion date of Summer 2028.

The Landscape Strategy Plan will be amended as the project progresses in response to changes to the project that may arise during construction and required by the SSEN operations team based on the final development, as built.

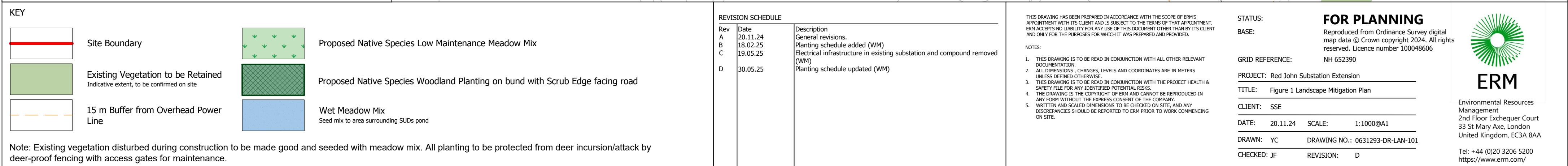


FIGURE 2 PLANTING SCHEDULE

Woodland area 7,030m²			
Woodland planted at 1.5m (1 plant per 2.25m ²) centres in groups of three and five same species per group.			
Species	Common Name	Specification cm height	Nos
Betula pubescens	Downy Birch	60-80	780
Corylus avellan	Hazel	60-80	780
Sorbus aucuparia	Rowan	60-80	520
Prunus padus	Bird cherry	60-80	520
Salix caprea	Goat Willow	60-80	520
Scrub Edge Mix. 922m²			
Scrub edge mix planted at 3 plants per m ² in groups of five and seven same species. Hazel planted closest to woodland.			
Viburnum opulus	Guelder Rose	45-60	553
Rosa rubiginosa	Sweet Briar	40-60	553
Corylus avellana	Hazel	60-80	553
Rosa canina	Dog Rose	45-60	553
Sambucus nigra	Elder	60-80	553
Low Maintenance Meadow Mix 19,062m² . Wet Meadow Mix 1,141m²			
Grass seeding to be carried out using MG5 Meadow Mix (SCM8) with Wet Meadow Mix (SCM2) for the areas designated as SuDs Pond, all as supplied by Scotia Seeds. Sowing rates 3g/m ² MG5 Meadow Mix – ‘This general meadow mix for well-drained, loamy soils in open sites uses wild origin grasses as well as the wildflowers that are used in all our mixes. It is based on British Plant Communities Mesotrophic Grassland 5 (Cynosurus cristatus – Centaurea nigra grassland). There are 19 wildflower & 7 grass species in this mix.’			
H&S Note. Ensure UG cables and pipes are identified and marked on site by main contractor prior to carrying out any planting works in the vicinity.			

4. MAINTENANCE AND MANAGEMENT

4.1 OVERVIEW

The maintenance and management actions for each landscape element are designed to ensure that both SSEN Transmission biodiversity net gain policy and planning condition requirements are met.

Monitoring is required to check on the establishment of the landscape elements and progress towards achievement of their designed functions. Monitoring is also required critically, for electrical safety and site security.

The following are general requirements of the landscape management and maintenance applicable to the lifespan of the Landscape Strategy:

- All litter and debris to be removed on each visit;
- ;
- By agreement with SSEN Transmission, felled logs may be retained on site to form refuges in locations away from public nuisance and would not affect future maintenance operations;
- Plant / seed failure on larger scales outside of occasional / expected normal failure shall be investigated to identify the cause prior to replacement planting or seeding;
- Weeds that affect the habitat type objectives shall be managed, primarily through cutting operations. Herbicides shall normally only be used on injurious weeds as defined under the Weeds Act 1959 and invasive non-native species (INNS) defined by the Wildlife and Countryside Act 1981 and the Wildlife and Natural Environment (Scotland) Act 2011 (as amended);
- Injurious weed shall be fully controlled, and arising disposed of at appropriate facility and by methods in line with current legislation and guidance;
- All works on existing and new trees shall be carried out in accordance with Tree work recommendations BS3998:2010 and Trees in relation to design, demolition and construction British Standard 5837:2012, and operations should be undertaken by certificated personnel from the Arboricultural Association's list of Registered Contractors;
- Maintenance operations by machinery should be appropriate to the task, and when weather and ground conditions are suitable;
- Operations shall be suspended where ground conditions prevent the use of machinery without damage to the ground surface;
- Works near or in watercourses shall have appropriate biosecurity measures to prevent ecological damage;
- The site shall be inspected at least once a year and a brief report submitted to the SSEN Transmission Project Manager setting out any issues observed on site, including but not limited to:
 - any damage, compaction or excessive wear to grass areas;
 - any damage or disease to tree and shrub areas;
 - any tree or shrub growth that may provide a climbing aid to scale security fences or which intrudes into the CCTV visibility zone around the security fence;

- any trees considered at active risk of falling onto the security fence or into the live substation; and
- In all cases where issues are noted, a proposal for reinstatement / repair or remedial work shall be submitted.

In addition to the above, it is recommended that where possible, arisings are taken off the Site and disposed of at an appropriate recycling facility.

4.2 MAINTENANCE AND MANAGEMENT YEARS 1–5

This section sets out the specific maintenance, management, and monitoring requirements for establishment years 1 to 5. Table 1 sets out the operations and timescales. Table 2 sets out the species monitoring prescriptions, responsibilities and work schedule. All works shall also meet the over-arching requirements as set out in Section 2.

This work is the responsibility of the landscape contractor in years 1 to 3 (depending on form of contract), and the responsibility of SSEN Operations thereafter.

TABLE 1 LANDSCAPE AND HABITAT MANAGEMENT PRESCRIPTIONS, RESPONSIBILITIES AND WORK SCHEDULE

Landscape element	Management	Required (years)
Woodland	<p>Check for INNS or noxious weeds at every site visit. If found remove by hand (where safe to do so) or spot treatment with herbicide if agreed by SSEN Transmission.</p> <p>Cut areas within 5 m of substation security fence, cutting 33% every three years.</p> <p>Check any stakes, ties, plant guards, refix / straighten / replace as required.</p> <p>Plant beds are to be cut twice annually to minimise competition to tree growth.</p> <p>All plant stations to be firmed up necessary.</p> <p>At each maintenance visit check each plant station and if growth is being impacted by ground fauna. If is being affected treat as weed growth and remove 0.5 m around each plant station as required.</p> <p>All plants that are missing or dead, or which are failing to make satisfactory growth.</p> <p>Apply slow release or similar fertiliser in March / April to all tree planting stations, at manufacturers recommended rate.</p> <p>Recommended minimum of three visits per year, with additional visit for replacement planting.</p> <p>Remove tree ties, guards & stakes at year five or sooner once established.</p> <p>Inspect at every visit and report any requirements for remedial works to SSEN Transmission.</p>	1-5
Scrub Edge	<p>Check for INNS or noxious weeds at every site visit. If found remove by hand (where safe to do so) or spot treatment with herbicide if agreed by SSEN Transmission.</p> <p>Cut areas within 5 m of substation security fence, cutting 33% every three years.</p> <p>Check any stakes, ties, plant guards, refix / straighten / replace as required.</p> <p>Plant beds are to be cut twice annually to minimise competition to tree growth.</p> <p>All plant stations to be firmed up necessary.</p>	1-5

Landscape element	Management	Required (years)
	<p>At each maintenance visit check each plant station and if growth is being impacted by ground fauna. If is being affected treat as weed growth and remove 0.5 m around each plant station as required.</p> <p>All plants that are missing or dead, or which are failing to make satisfactory growth.</p> <p>Apply slow release or similar fertiliser in March / April to all tree planting stations, at manufacturers recommended rate.</p> <p>Recommended minimum of three visits per year, with additional visit for replacement planting.</p> <p>Remove tree ties, guards & stakes at year five or sooner once established.</p> <p>Inspect at every visit and report any requirements for remedial works to SSEN Transmission.</p>	
Wildflower Grass/ SuDs Pond	<p>Wildflower Grass areas shall be strimmed only once a year to a height of 100mm in late August.</p> <p>In a warm and wet year, a second cut may be required and if so this should be carried out either in October or March as appropriate.</p> <p>The timing of all cutting operations should take into consideration any protected species (such as reptiles) that may be present.</p> <p>Control INNS and nuisance weeds by spot weeding, remove seed heads if risk of setting seed.</p> <p>Meadow grass and wildflower sward that is species poor shall be enhanced. In areas of low fertility, closely strimming or mow the existing sward and remove all cuttings in August. Rake or scarify to disturb the ground and overseed with a suitable mix of wildflowers selected to the microclimatic and soil conditions and repeatedly tread over the area. After sowing mow the grass to a height of 60mm in height to allow light and air to the emerging seedlings for a full growing season.</p> <p>Inspect annually and report any requirements for remedial works to SSEN Transmission.</p>	1-5
Drainage Channel	<p>Ensure ditch is clear and functional.</p> <p>Control INNS and nuisance weeds by spot weeding, remove seed heads if risk of setting seed.</p> <p>Inspect annually and report any requirements for remedial works to SSEN Transmission.</p>	1-5

4.3 MAINTENANCE AND MANAGEMENT YEARS 6–10

The maintenance and management actions for each landscape element are designed to ensure that the objectives set out in Section 2, meet planning condition requirements. Monitoring is also required critically, for electrical safety and site security.

This section sets out the specific maintenance, management and monitoring requirements for years 6 to 10 and assigns responsibilities where appropriate.

This section sets out the specific maintenance, management, and monitoring requirements for establishment years 6 to 10. Table 3 sets out the operations and timescales. Table 4 sets out the species monitoring prescriptions, responsibilities and work schedule. All works shall also meet the overarching requirements as set out in Section 2.

The following are general requirements of the landscape management and maintenance applicable to the lifespan of the Landscape Strategy.

The Site shall be inspected at least once a year and a brief report submitted to the SSEN Project Manager setting out any issues observed on site, including but not limited to:

TABLE 2 SPECIES MONITORING PRESCRIPTIONS, RESPONSIBILITIES AND WORK SCHEDULE

Landscape element	Management	Required (years)
Woodland	<p>Check for INNS or noxious weeds at every site visit. If found remove by hand (where safe to do so) or spot treatment with herbicide if agreed by SSEN Transmission.</p> <p>Cut areas within 5 m of substation security fence, cutting 33% every three years.</p> <p>Check growth and vigour, any trees not performing or where competition then selective removal / thinning of tree crop to be undertaken. Logs where appropriate can be used to create habitat piles in accordance with Section 4.</p> <p>Inspect at every visit and report any requirements for remedial works to SSEN Transmission.</p>	6-10
Scrub Edge	<p>Check for INNS or noxious weeds at every site visit. If found remove by hand (where safe to do so) or spot treatment with herbicide if agreed by SSEN Transmission.</p> <p>Cut areas within 5 m of substation security fence, cutting 33% every three years.</p> <p>Check growth and vigour, any scrub not performing or where competition then selective removal / thinning of scrub crop to be undertaken.</p> <p>Inspect at every visit and report any requirements for remedial works to SSEN Transmission.</p>	6-10
Wildflower Grass / SuDs Pond	<p>Wildflower Grass areas shall be strimmed only once a year to a height of 100mm in late August..</p> <p>In a warm and wet year, a second cut may be required and if so this should be carried out either in October or March as appropriate.</p> <p>The timing of all cutting operations should take into consideration any protected species (such as reptiles) that may be present.</p> <p>Control INNS and nuisance weeds by spot weeding, remove seed heads if risk of setting seed.</p> <p>Meadow grass and wildflower sward that is species poor shall be enhanced. In areas of low fertility, closely strimming or mow the existing sward and remove all cuttings in August. Rake or scarify to disturb the ground and overseed with a suitable mix of wildflowers selected to the microclimatic and soil conditions and repeatedly tread over the area. After sowing mow the grass to a height of 60mm in height to allow light and air to the emerging seedlings for a full growing season.</p> <p>Inspect at every visit and report any requirements for remedial works to SSEN Transmission.</p>	
Drainage Channel	<p>Ensure ditch is clear and functional.</p> <p>Control INNS and nuisance weeds by spot weeding, remove seed heads if risk of setting seed</p> <p>Inspect annually and report any requirements for remedial works to SSEN Transmission.</p>	6-10

TABLE 3 SPECIES MONITORING PRESCRIPTIONS, RESPONSIBILITIES AND WORK SCHEDULE

Landscape / Ecological feature	Monitoring prescription	Responsible	Required (years)	Date last undertaken	Actioned by
Woodland planting	Achieved target height growth and coverage as per LVIA assumptions.	SSEN Transmission	15		

4.4 MAINTENANCE AND MANAGEMENT YEAR 11 ONWARDS LONG TERM

This section sets out a rolling five-year programme for maintenance, management, and monitoring of the site in the long-term and assigns responsibilities where appropriate.

The maintenance and management actions for each landscape element are designed to ensure that the objectives set out in Section 2 are achieved and to allow the successful establishment of a sustainable healthy landscape, fulfilling the landscape and visual mitigation functions to which SSEN Transmission have committed and / or planning conditions require.

Monitoring is required to check on the establishment of the landscape elements and progress towards achievement of their designed functions. Monitoring is also required critically, for electrical safety and site security.

TABLE 4 LANDSCAPE AND HABITAT MANAGEMENT PRESCRIPTIONS, RESPONSIBILITIES AND WORK SCHEDULE

Landscape element	Management
Woodland	Inspect trees for health and disease and report any requirements for remedial works SSEN Transmission. Report on any thinning required. Inspect trees for risk of falling that pose a threat to the security fencing.
Scrub Edge	Inspect scrub for health and disease and report any requirements for remedial works SSEN Transmission. Report on any thinning required.
Wildflower Grass / SuDs Pond	Inspect at every visit and report any requirements for remedial works to SSEN Transmission. Check for INNS or noxious weeds at every site visit.
Drainage Channel	Ensure ditch is clear and functional. Inspect annually and report any requirements for remedial works to SSEN Transmission.



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