

# A Clearway to Kyle - Skyefall

## A New Approach to Shared Road Rail Operation

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mainspring

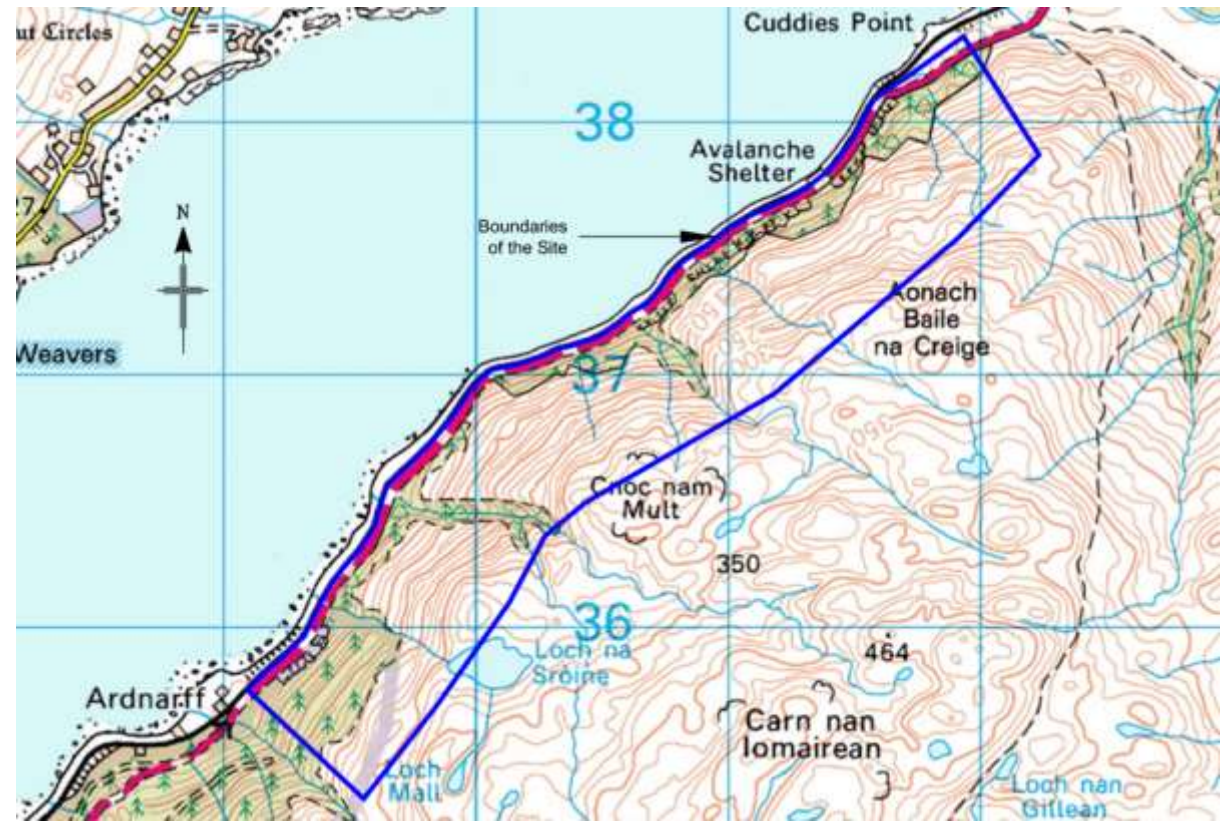
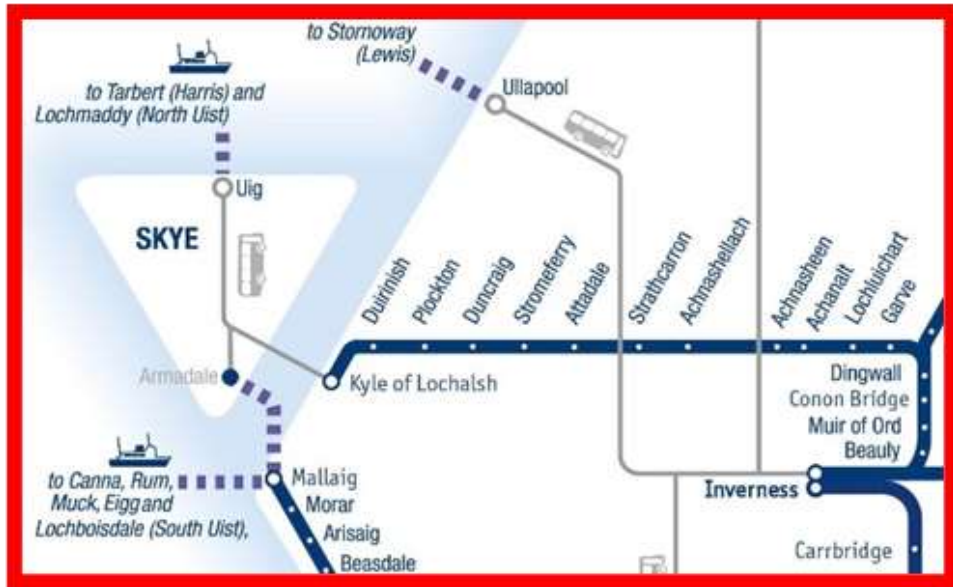
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THE HIGHLANDS AND ISLANDS TRANSPORT PARTNERSHIP

# Project Objectives

- Reducing road maintenance costs for Highland Council:
  - Remote area
  - Unstable rock face
  - Road, rail and sea loch in close proximity
  - Current annual repair costs around £1m
- Introducing an innovative road rail sharing solution:
  - Based on temporary solution
  - Coordinated road/rail control system
  - Low cost road/rail formation
  - Simplified operation and improved vehicles utilising tram train technology
- Applying concept to wider industry

# Location

- Between Ardnaff and Cuddies Point, Loch Carron
- Dingwall to Kyle of Lochalsh Line
- A890 road



# Current Operation

- Single track road between cliff and railway
- Single track railway parallel to sea loch
- RETB railway signalling
- Low speed (25mph)
- Passenger and special traffic
- 4 passenger trains per day
- Road nominal speed 60mph
- Between 450 and 770 vehicles per day in each direction

LOR	Seq.	Line of Route Description	ELR
SC205	009	Dingwall to Kyle of Lochalsh	KYL

Location	Mileage		Running lines & speed restrictions	
	M	Ch	15X TRAINS ONLY	OTHER THAN 15X TRAINS
Auchintee LC (UWC)	46	15	T	T
	46	20 *	* 35	* 35
Cam-Alt-Houses LC (UWC)	47	22	T	T
<b>ATTADALE</b>				
Attadale Halt UWC	48	29	T	T
	48	62 *	* 25	* 25
Arndarff LC (UWC)	51	50	T	T
<b>STROME FERRY TEP</b>				
	53	15	T	T
	53	26 *	* 30	* 30
<b>DUNCRAIG</b>				
	57	09	T	T

# The Problem

- Unstable rock face
- Damage to road and railway
- Complex maintenance procedures
- Requires temporary road/rail sharing



# Proposed Solution

- Permanent road rail shared section
- Separation of non motorised users
- Containment ditch below rock face
- Shorter RETB section (implemented)
- Low cost/low maintenance track form
- Safe method of operation:
  - Vehicles with track brakes
  - Special instructions for excursion traffic



# Development Option A

- New half barriers, traffic lights and associated signage.
- New RETB section provided to protect shared section operation.
- Clearway regulations and exclusions signage provided at each end
- Cattle grids provided to restrict animal access.
- Emergency refuge areas provided to accommodate vehicles trapped in section
- Innovative embedded roadway lighting solutions as protection mitigation

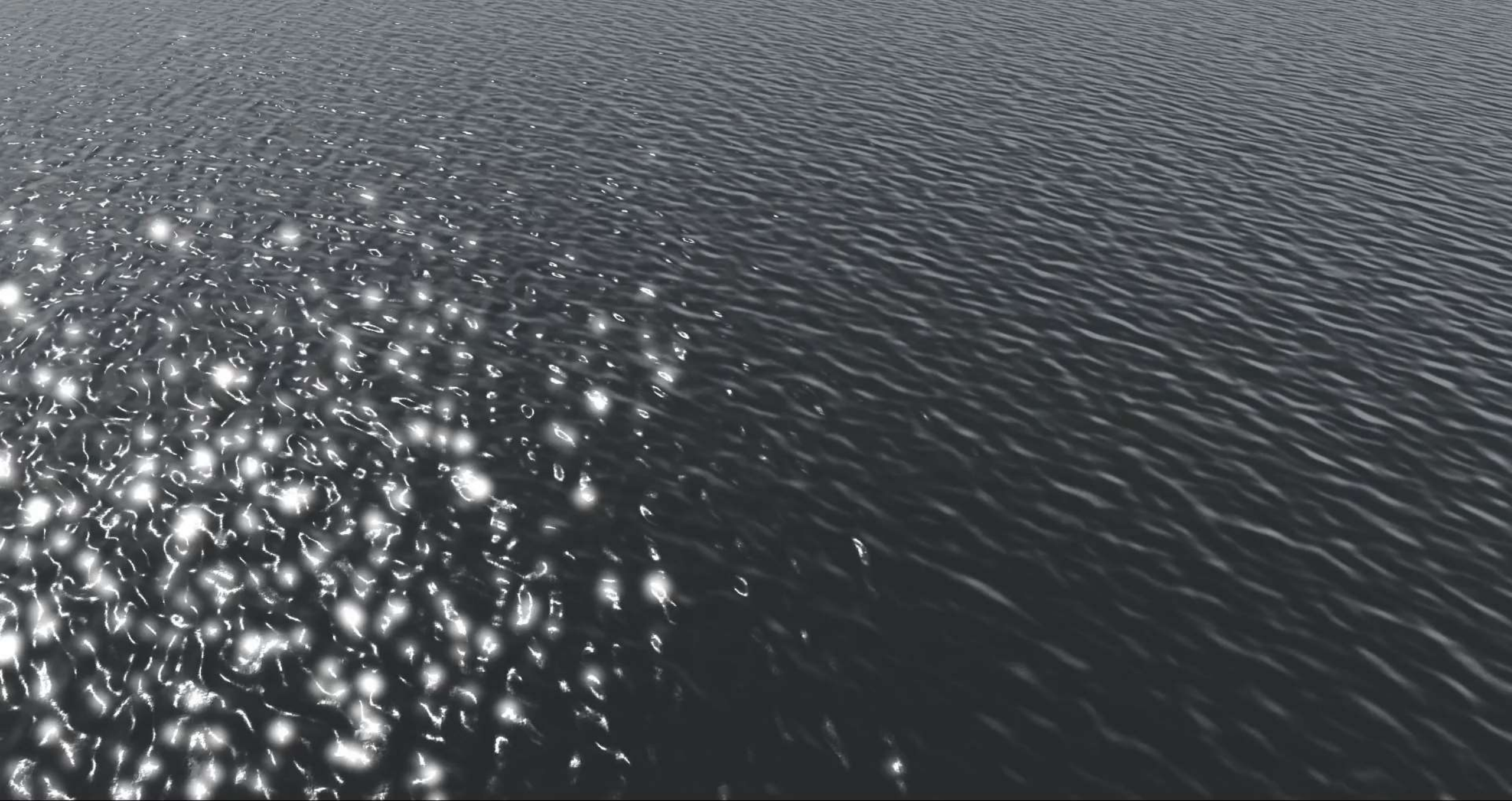


# Development Option B (Single Option)

- New full barriers, traffic lights and associated signage.
- Front/rear ANPR SPECS cameras installed at section entrance/exit
- New RETB section provided to protect shared section operation.
- Clearway regulations and exclusions signage provided at each end
- Cattle grids provided to restrict animal access
- Emergency refuge areas provided to accommodate vehicles trapped in section







# Wider Applications and Benefits

- Embedded track form compatible with P8 wheel profile
- Road and rail safe traffic management process
- Opportunity to provide low cost road/rail interface for re-openings
- Wider range of rail vehicle options:
  - Tram Train
  - VLR
  - Tram/LRVs

# Next Steps

- 2023 project report available
- Meet with stakeholders to discuss options
- Prepare a business case for Strathcarron trial
- Seek innovation funding to set up trial

