

EXTRAORDINARY CLOSURE: TUNNEL OF RUBÍ

March 2026

1. Background

On **24 January 2026**, the structural pathologies that had been under monitoring in the Rubí Tunnel, located on **Line 246 Castellbisbal–Mollet**, gest worst.

As a result, railway traffic was suspended and emergency works were undertaken **until February 5th**. From that date onwards, railway traffic was reopened for a **12-hour daily time window**, allowing rehabilitation works on the tunnel structure to be carried out during the remaining hours of the day.

The affected traffic flows are:

- Freight services in the direction of Figueres, in both gauges: standard and Iberian.
- Conmuters Line R8 Granollers – Martorell.



2. Current situation

Recently, Maintenance team has reported that, despite the actions carried out, the monitoring of the tunnel indicates a higher level of instability than expected, making it **mandatory to suspend traffic** once again in order to work intensely.

As the tunnel is permanently monitored, a two-day period was available prior to the complete suspension of traffic, which will take place on **March 14th at 00:00**.



TBP 562/25 BA v3.0

Datos generales

Subdirección NORESTE

Plan Marco Sin plan marco

Actuación Otros

Id Sesión TOC 2024-5-004

Time window for the works according to TBA 562/25:

From Wednesday to Sunday, closure of both tracks between 22:30 and 10:30.

Opening period: Monday and Tuesday without closure. From Wednesday to Sunday, from 22:30 to 10:30.

PROYECTO DE OBRAS DE REPARACIÓN Y REFORZAMIENTO DEL TUNEL DE MOLLET-SANT FOST - CASTELLBISBAL-AGUJAS RUBÍ (BARCELONA)

Las actuaciones previstas a llevar a cabo para realizar las reparaciones correspondientes son las siguientes:

- Anillo de refuerzo: Ejecución de un anillo de refuerzo compuesto por cerchas metálicas HEB 200 espaciadas 1.2 m y chapa Bernold a la altura del ala inferior de las cerchas y apoyada en ellas. Se colocará a su vez una armadura 15 cm x 15 cm Ø10 mm a la altura del ala superior. Posteriormente se dispondrá de hormigón armado con fibras de acero bombeado de espesor >20 cm y hormigón proyectado con fibras de polipropileno de espesor 5 cm. El

2.1 Current situation - Iberian gauge.

LINE 270		
Max load		
Characteristic gradient: 29‰ (Bif. Aigües – Sant Andreu)		
	Loc. 253	Loc. 256
Simple	730 t.	1010 t.
Doble	1160 t.	
With high-strength coupler	1320 t. (double traction)	1230 t. (simple traction)

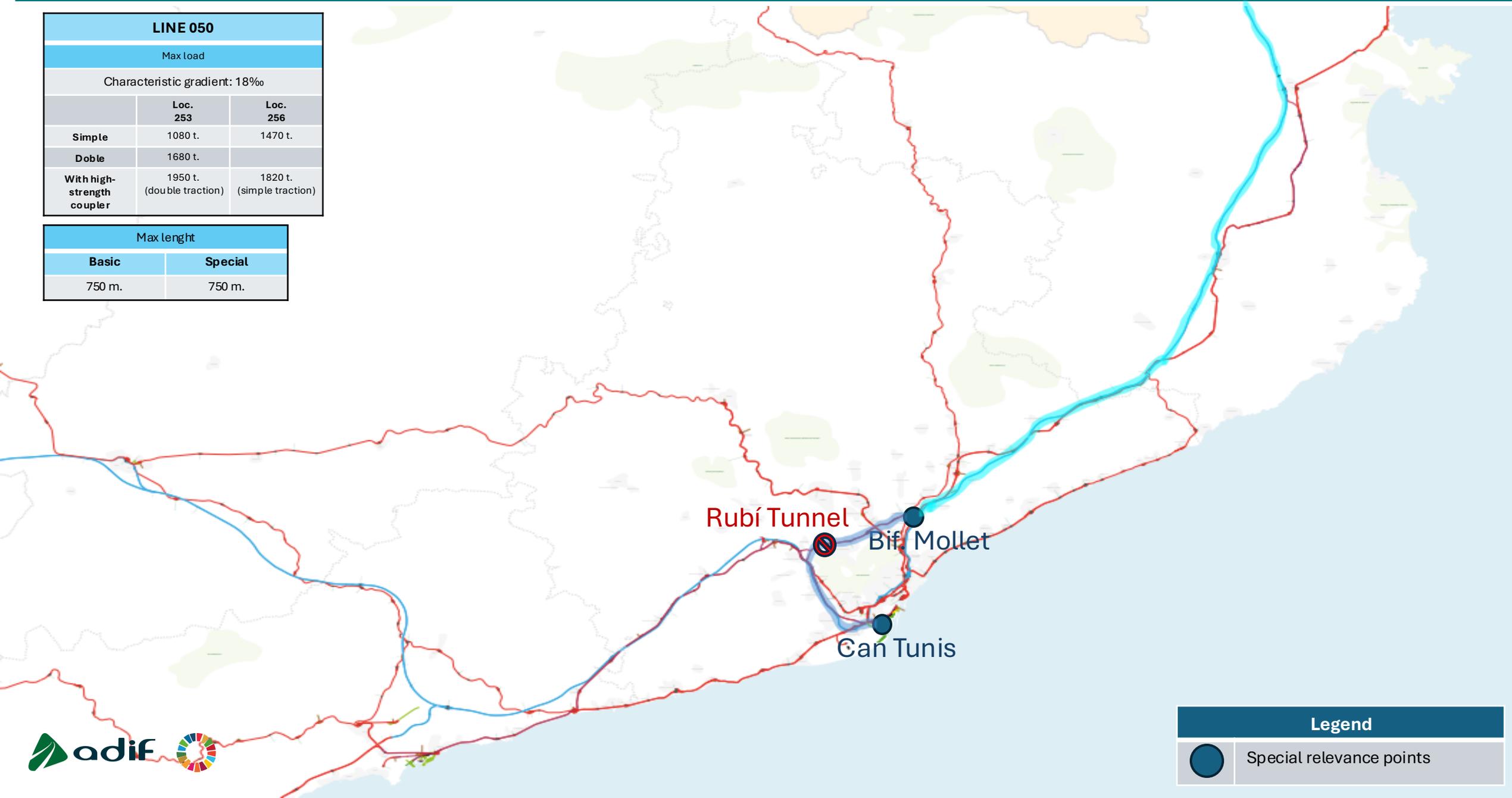
Max lenght	
Basic	Special
450 m.	550 m.



2.1 Current situation – Standard gauge.

LINE 050		
Max load		
Characteristic gradient: 18‰		
	Loc. 253	Loc. 256
Simple	1080 t.	1470 t.
Doble	1680 t.	
With high-strength coupler	1950 t. (double traction)	1820 t. (simple traction)

Max lenght	
Basic	Special
750 m.	750 m.



3. Estimated timeframe

Works Management indicates the need for a total closure lasting **5 to 7 weeks from March 13th**.

Performance assessment of the works will be done in order to generate more accurate timeframe.





4. Traffic alternatives



4.1 Traffic alternatives – Iberian gauge.

Circulations: Portbou – Can Tunis

The diversion is carried out from Mollet Sant Fost, continuing to Sant Andreu station in order to perform a locomotive reversal to access Line 220 via Aigües Junction and Montcada Junction. The route then continues along Line 220 until reaching Lleida Pirineus station, where a further locomotive reversal is performed to allow operation along Line 200 towards Sant Vicenç de Calders. The route continues by taking Line 240 towards Vilafranca del Penedès and accessing Can Tunis/Morrot via Castellbisbal.

Considerations to be taken into account:

- This implies a reduction in the maximum tonnage and maximum train length due to the characteristics of the line and its ruling gradient.
- Locomotive reversal at Sant Andreu and Lleida-Pirineus stations.
- Increase in running times.

4.1 COMPARISON OF THE DIVERSION from Line 246 to Lines 220, 200 and 240 for Iberian gauge trains.

LINE 270		
Max load		
Characteristic gradient: 29‰ (Bif. Aigües – Sant Andreu)		
	Loc. 253	Loc. 256
Simple	730 t.	1010 t.
Doble	1160 t.	
With high-strength coupler	1320 t. (double traction)	1230 t. (simple traction)

LINE 200		
Max load		
Characteristic gradient: 27‰ (Bellvitge).		
	Loc. 253	Loc. 256
Simple	730 t.	1010 t.
Doble	1160 t.	
With high-strength coupler	1320 t. (double traction)	1230 t. (simple traction)

LINE 220		
Max load		
Characteristic gradient: 22‰ (Manresa – Cervera).		
	Loc. 253	Loc. 256
Simple	890 t.	1220 t.
Doble	1400 t.	
With high-strength coupler	1610 t. (double traction)	1500 t. (simple traction)

LINE 240		
Max load		
Characteristic gradient: 14‰		
	Loc. 253	Loc. 256
Simple	1370 t.	1830 t.
Doble	2100 t.	
With high-strength coupler	2470 t. (double traction)	2240 t. (simple traction)

Max length	
Basic	Special
450 m.	550 m.

Max length	
Basic	Special
450 m.	550 m.

Max length	
Basic	Special
300 m.	350 m.

Max length	
Basic	Special
500 m.	575 m.



Legend	
	Special relevance points
	Locomotive reversion
	TCRs: Rubí's Tunnel

4.1 Bypass to Irun-Hendaye Border



Studying operative solutions if required

4.1 Circulation times comparison

Original route

Portbou – Rubí – Morrot

- **Running distance:** 192,13 km.
- **Total time:** 2h 42 min.
- **Max length:** 550 m.
- **Max load:** 1320 t.
- **Reversion time:** no reversion.

Deviated route

Portbou – Manresa – Morrot

- **Running distance :** 521,37 km.
- **Total time :** 6h 53 min
- **Max length :** 350 m.
- **Max load :** 1320 t.
- **Reversion time :** 20 minutes technical stop (2 reversions).

To carry out the comparisons set out, a simulated run is generated using a 256 locomotive, with a 1.220t. load and a length of 300 meters at standard running time..

4.2 Traffic alternatives – Standard gauge.

Circulations: Figueres – Can Tunis

The only possible diversion is to terminate the journey at **La Llagosta** station. To enter this station, a locomotive reversal at Riera de Caldes via Line 280 is required, allowing the journey to continue along Line 278.

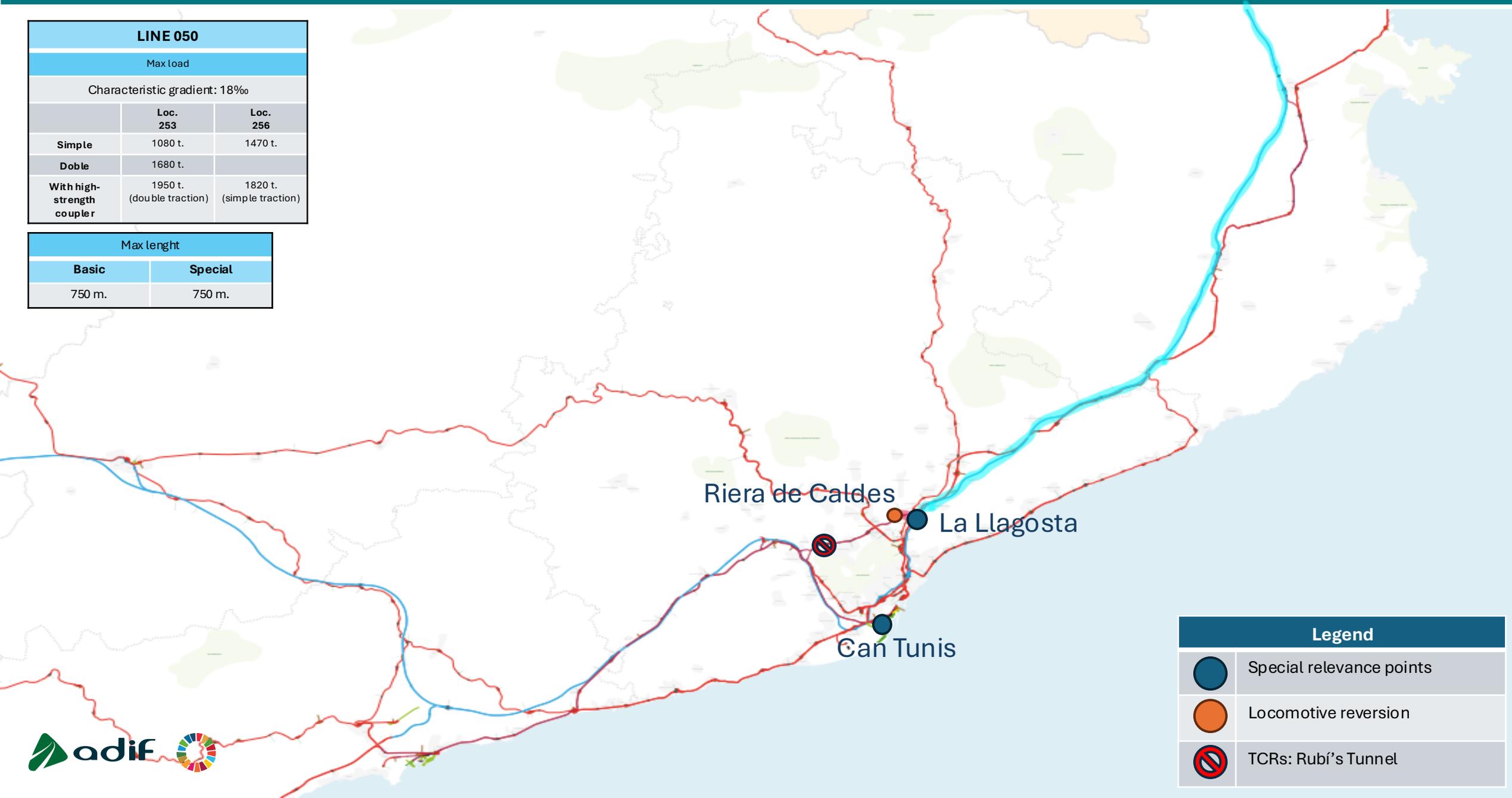
Considerations to be taken into account:

- Inability to access the destination.
- Locomotive reversal at Riera de Caldes.

4.2 SITUATION FOLLOWING THE CLOSURE OF RUBÍ TUNNEL FOR STANDARD GAUGE TRAINS.

LINE 050		
Max load		
Characteristic gradient: 18‰		
	Loc. 253	Loc. 256
Simple	1080 t.	1470 t.
Doble	1680 t.	
With high-strength coupler	1950 t. (double traction)	1820 t. (simple traction)

Max lenght	
Basic	Special
750 m.	750 m.



Legend	
	Special relevance points
	Locomotive reversion
	TCRs: Rubí's Tunnel