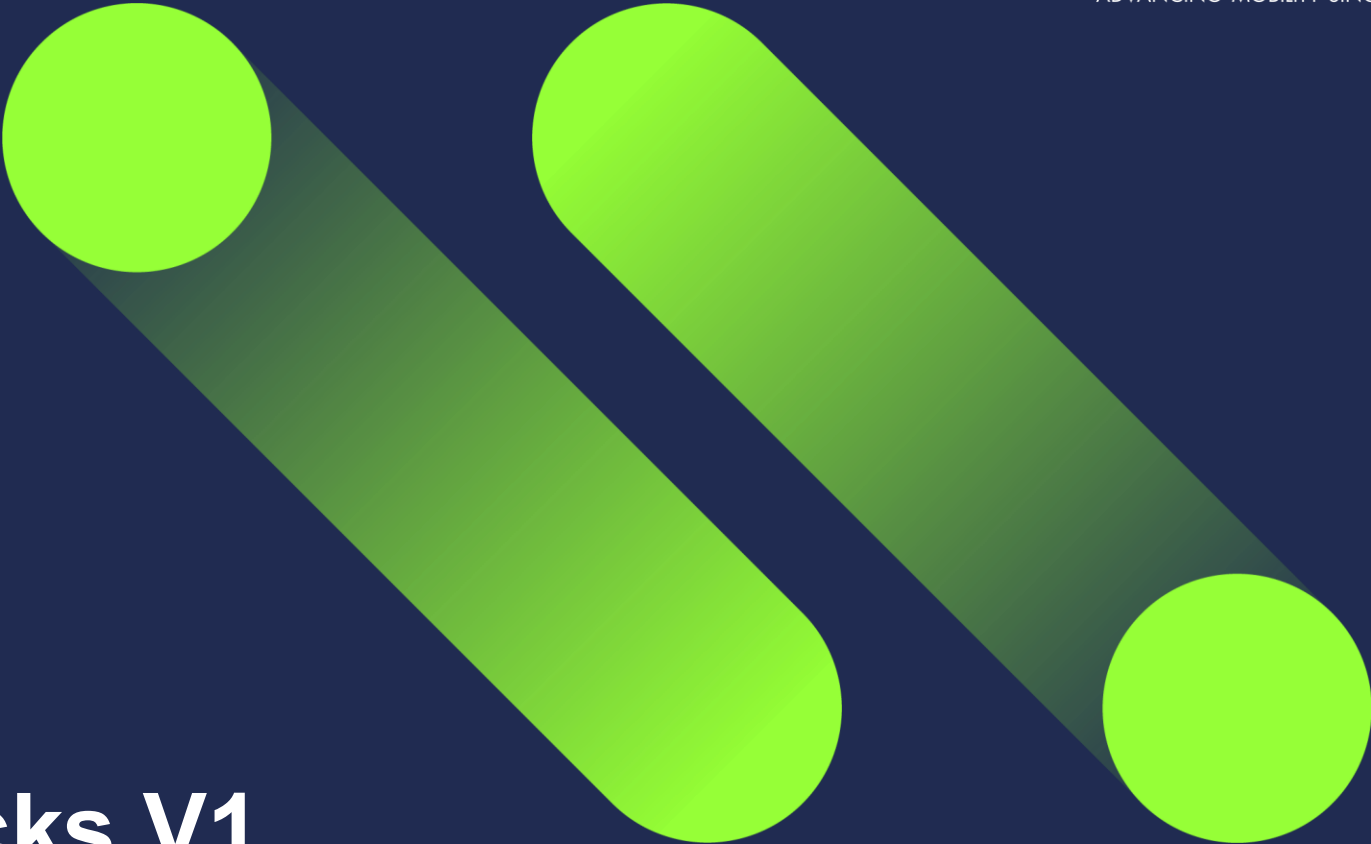




Satory Tracks V1

Site : 27, allée des marronniers – Versailles - France

Satory Test Tracks — Overview

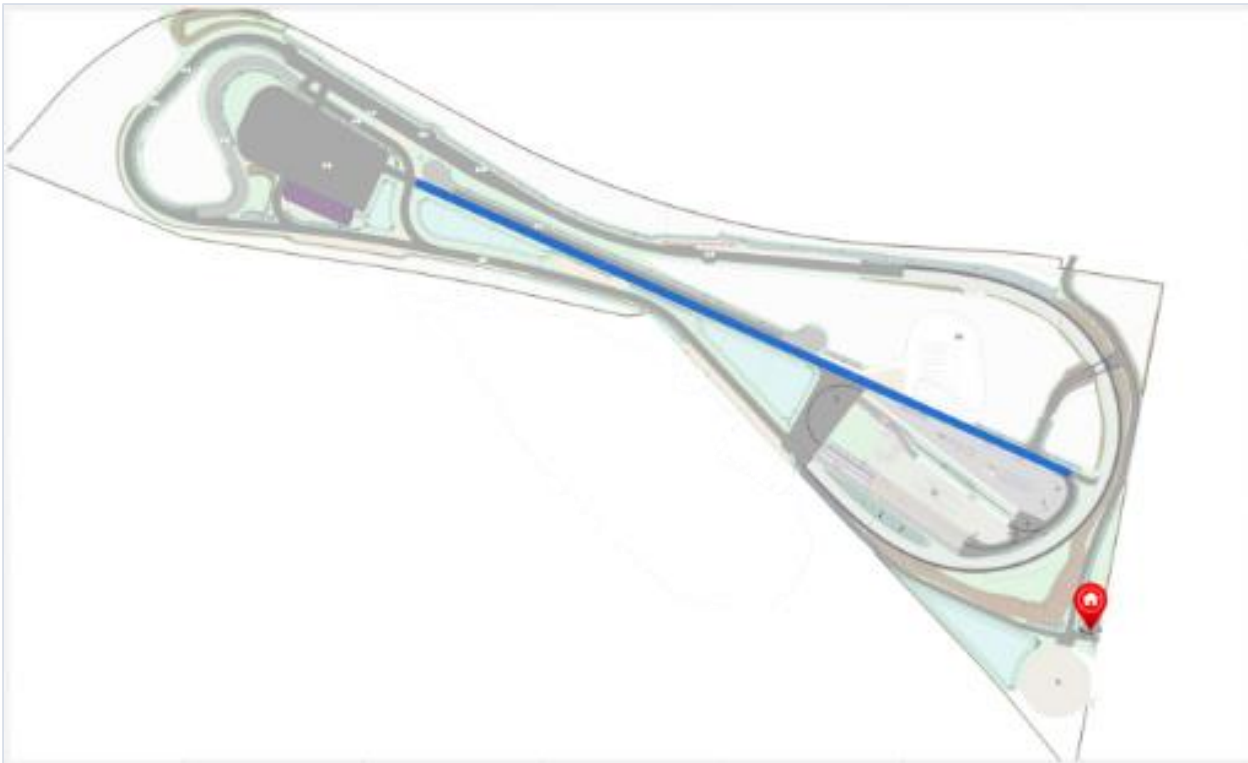
OVERVIEW



Eleven tracks, three test families

- 01 Parade Track
- 02 Speed Ring
- 03 Road Loop
- 04 Braking Zone
- 05 Manoeuvring Area
- 06 Cross-slope Track
- 07 Special Tracks
- 08 Obstacle Course
- 09 Sand Dune
- 10 Tank Hill
- 11 Armoured Vehicle Roundabout

TRACK DIAGRAM



The central access corridor and parade rehearsal route

FEATURES

840 m

Length

9 m

Width

0–70 km/h

Operating speed

Two-way

traffic

USES

- 14 July parade rehearsals
- Access from the underpass
- Access route alongside the cross-slope track

TRACK DIAGRAM



High-speed testing on the perimeter circuit

FEATURES

10 m

Width

110 km/h

Operating limit

220 km/h

Design

4–34,4 %

Parabolic banking

USES

- High- and very-high-speed tests
- One-way, anticlockwise traffic
- Parabolic bend and deceleration zone
- Minimum radius: 64 m outside the road loop

TRACK DIAGRAM



High-speed on the peripheral circuit

FEATURES

10 m

Width

3000 m

Length

110 km/h

Operating limit

4–34.4%

Parabolic banking

220 km/h

Design

USES

- Speed tests / very high speed
- One-way, counterclockwise traffic
- Parabolic turn and deceleration zone
- Minimum radius: 64 m (excluding the loop)

TRACK DIAGRAM



Grip and endurance on a tight track

FEATURES

10 m

Width

3300 m

Length

24 m

Minimum radius

110 km/h

Operating limit

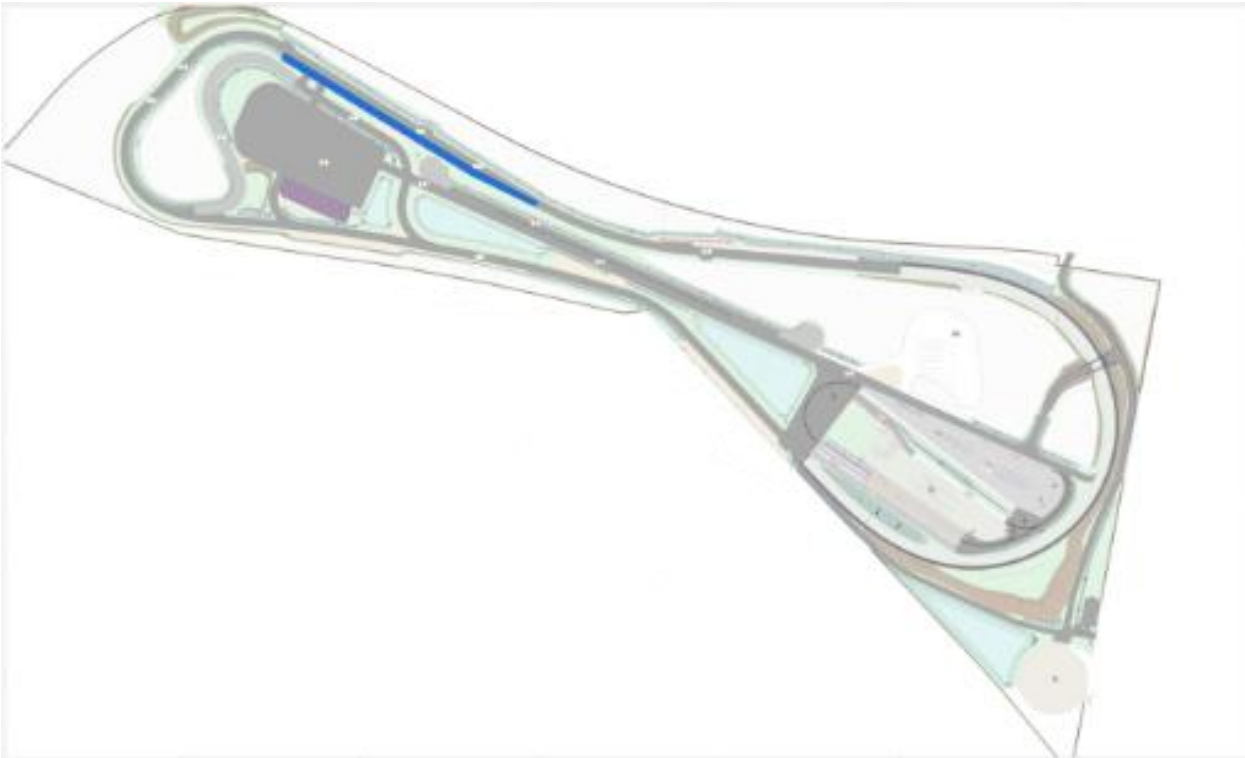
One-way

Possible access

USES

- Adhesion and endurance tests
- Handling tests for civilian and military vehicles
- Mostly shared with the speed ring

TRACK DIAGRAM



Controlled braking, stopping and restart tests

FEATURES

325 m

Length

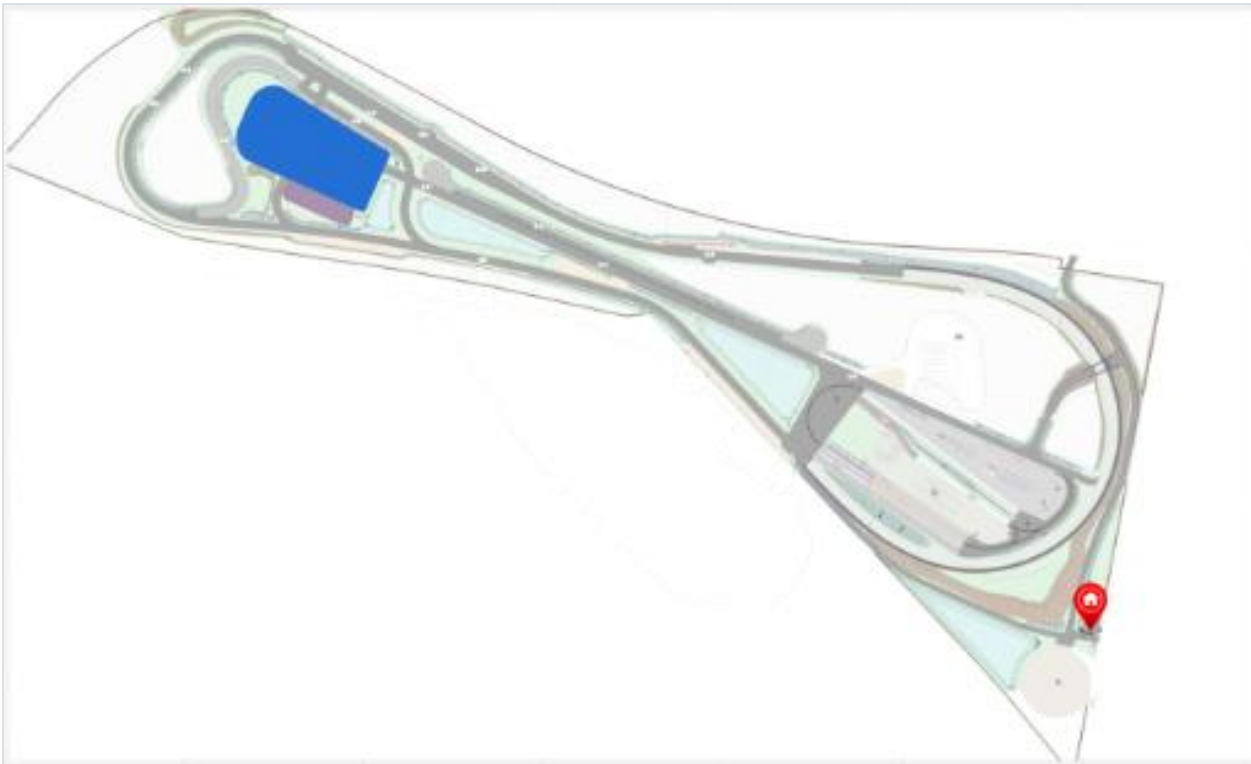
20 m

Width

USES

- Braking tests and scheduled stops
- Third lane from the left on the straight
- Flashing red beacon and hazard lights
- Shared use requires track-controller approval

TRACK DIAGRAM



15,000 m² for modular test layouts

FEATURES

15,000 m²

Surface

175 m

Maximum length

77–96 m

Width

1 %

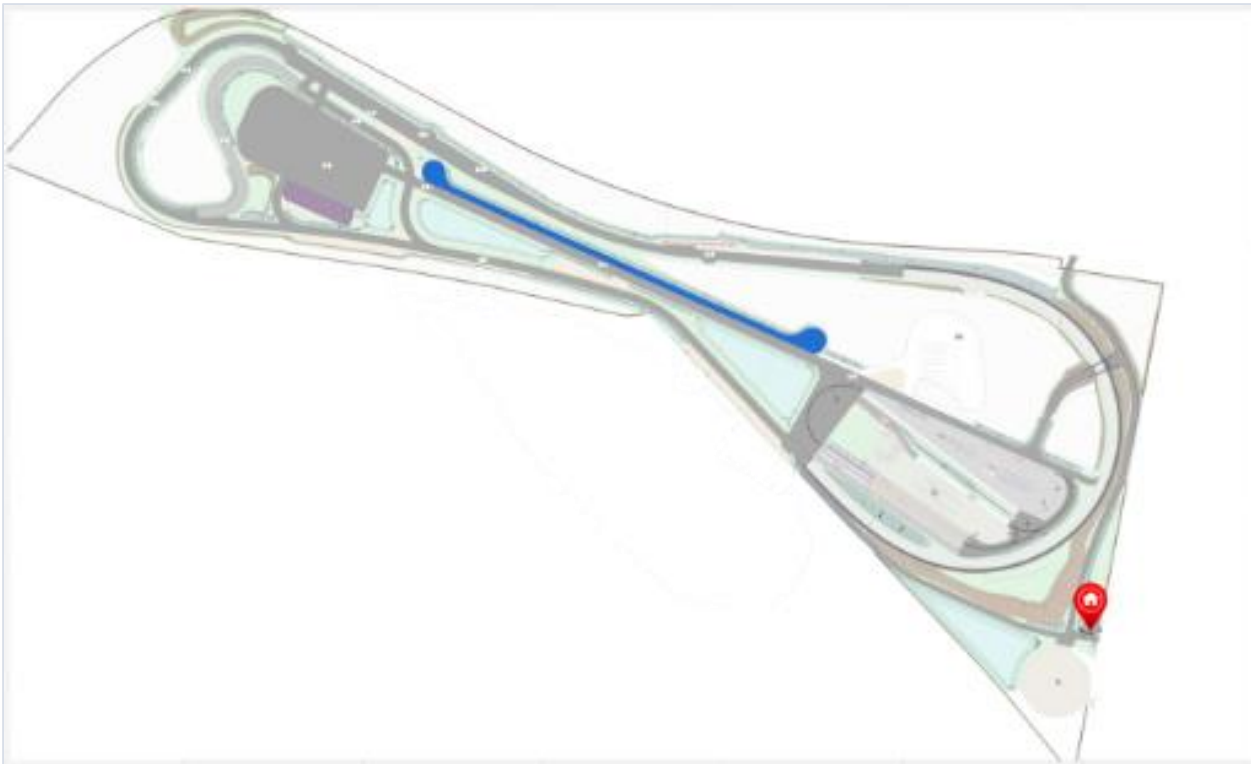
Single gradient

USES

- Braking, steering and stopping tests
- Temporary layouts / workshops
- Special tests subject to risk assessment

Cross-slope Track

TRACK DIAGRAM



Stability testing at up to 30% cross-slope

FEATURES

240 m

Full-camber section

30 %

Cross-slope

50 km/h

Speed

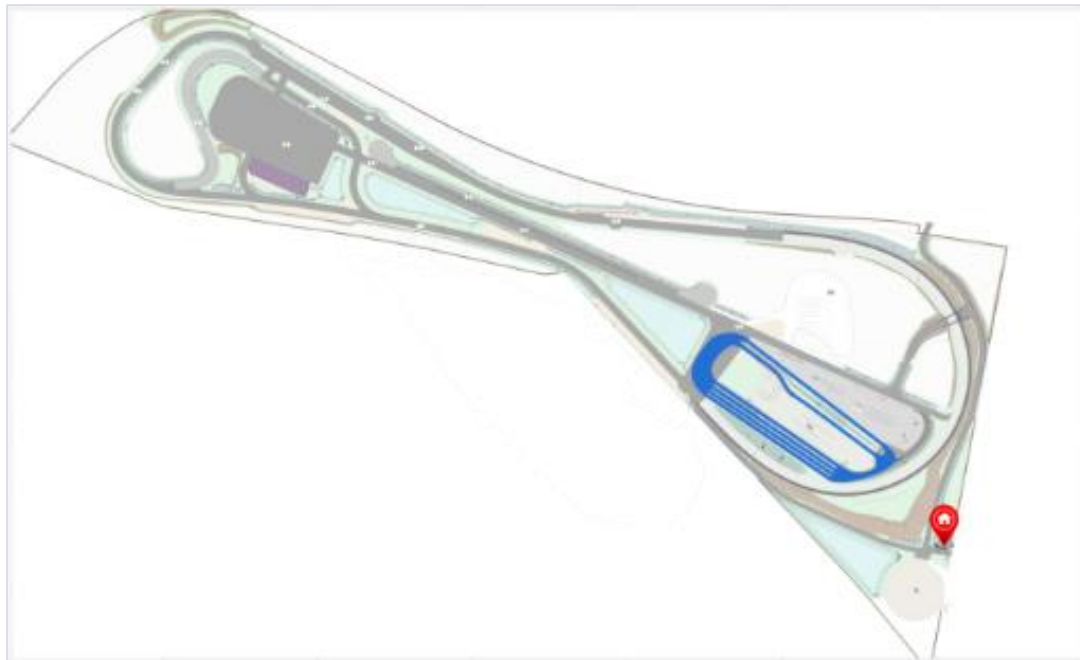
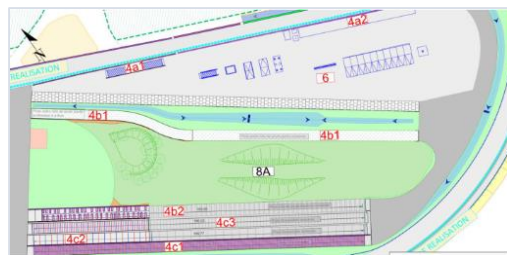
28–30 m

Turning areas

USES

- Grip and lateral stability
- Wheeled and tracked military vehicles
- Alternating traffic: one activity at a time
- 30 m transitions; longitudinal gradient < 0.1%.

TRACK DIAGRAM



Six severe inputs for endurance testing

FEATURES

6–8 cm

Small paved potholes
— depth

7.00 m

Sinusoidal track —
wavelength

20 cm

Trapezoidal potholes
— depth

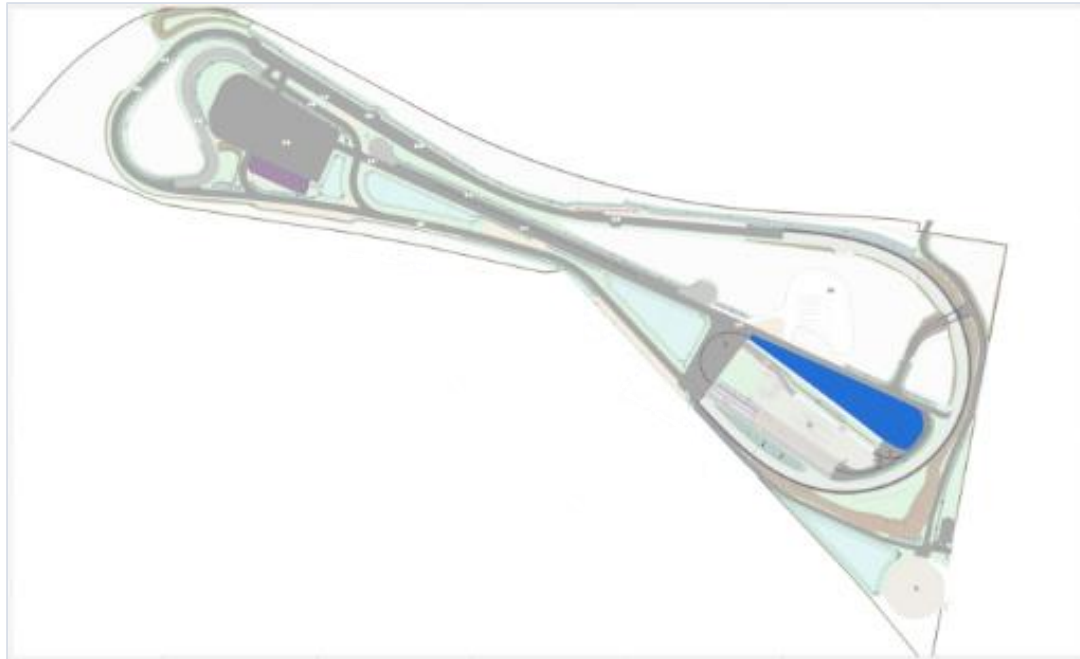
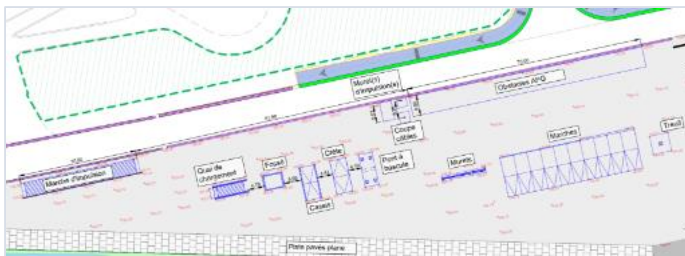
2.00 m

Sinusoidal track —
wavelength

OTHER FEATURES

- Impulse step: length 35 m
- APG obstacles: length 70 m × width 6 m
- Corrugated track: wavelength 0.85 m
- Alternating traffic: one activity at a time on each track.

TRACK DIAGRAM



Controlled obstacle-crossing tests

FEATURES

1 vehicle

per obstacle

Two directions

Access

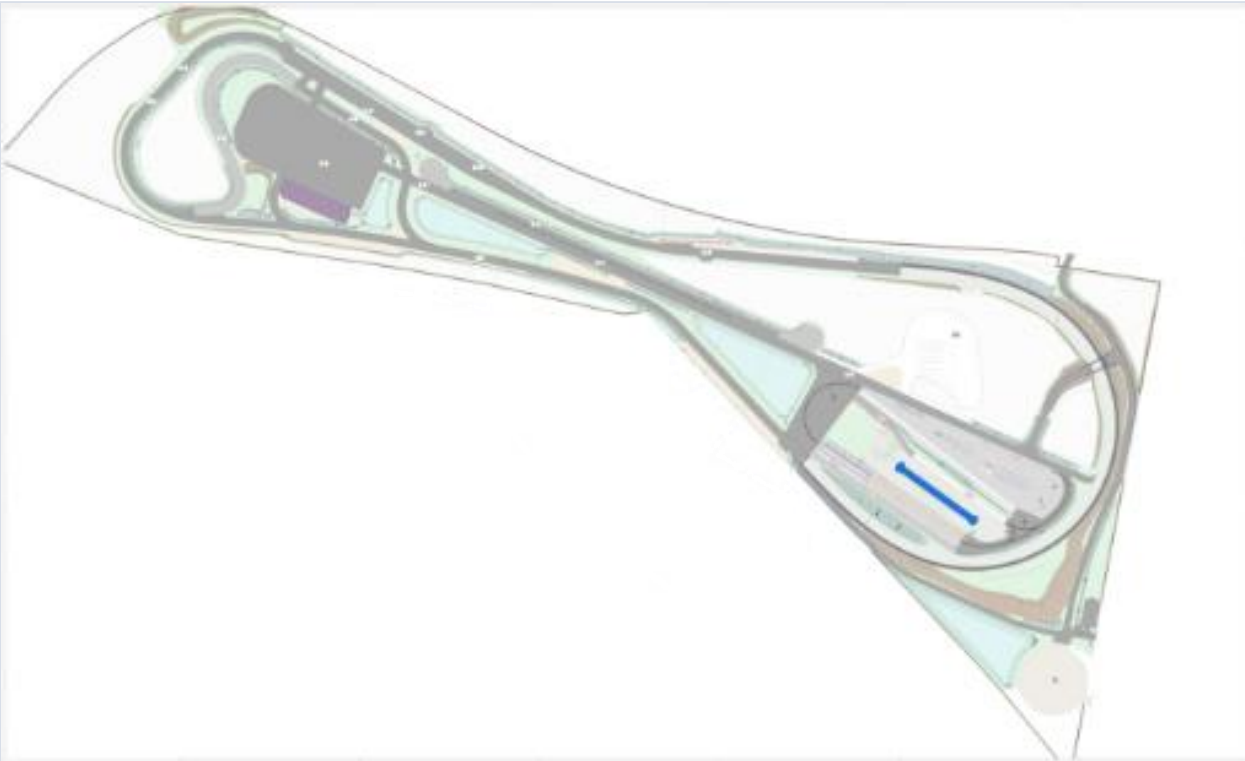
Pedestrians

Supervised

USES

- Steps, walls and ditch
- Tilting bridge and loading dock
- Armoured vehicles and heavy goods vehicles
- Qualified drivers; support staff remain upstream.

TRACK DIAGRAM



Traction and obstacle-crossing on soft ground

FEATURES

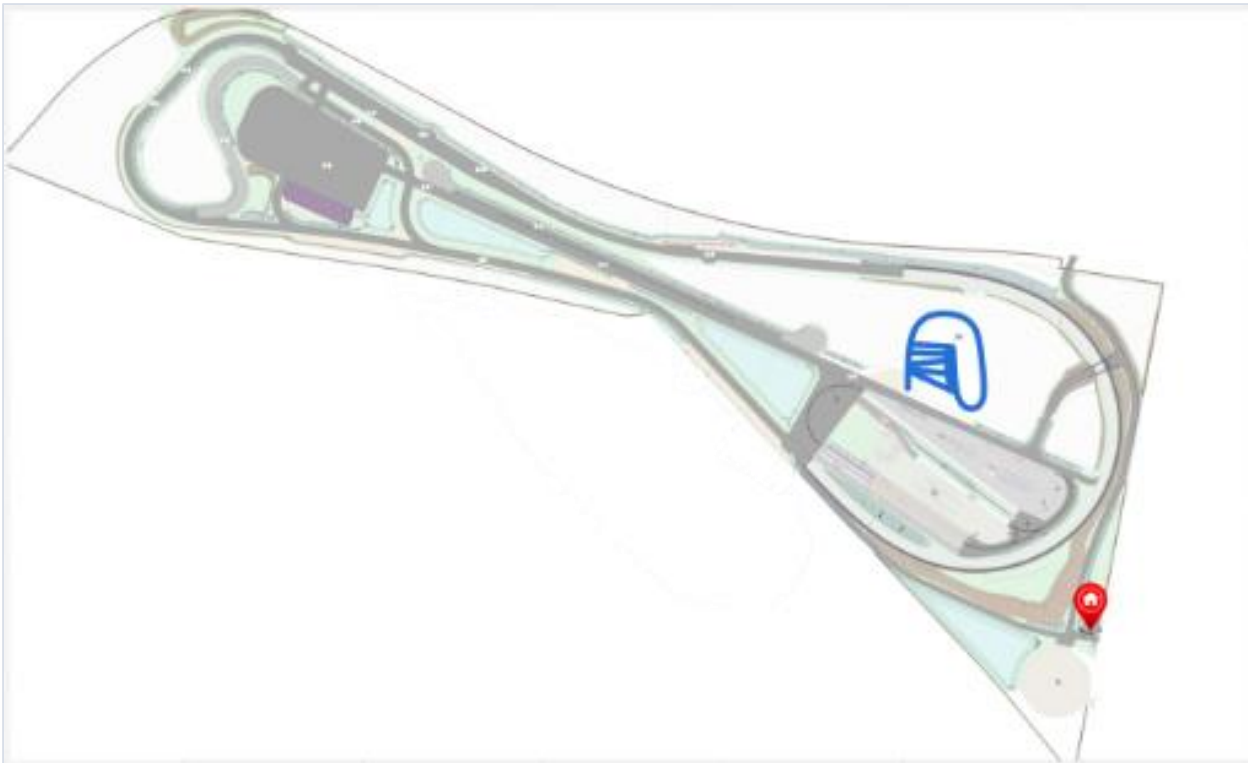
Two-way
traffic

Soft ground, sand
Surface

USES

- Obstacle-crossing on sand
- Armoured vehicles and heavy goods vehicles
- Supervised pedestrian reconnaissance
- One vehicle on the crossing at a time.

TRACK DIAGRAM



Traction and obstacle-crossing on steep slopes

FEATURES

Mandatory direction

Traffic

Slopes 40% & 50%

Profile

Supervision

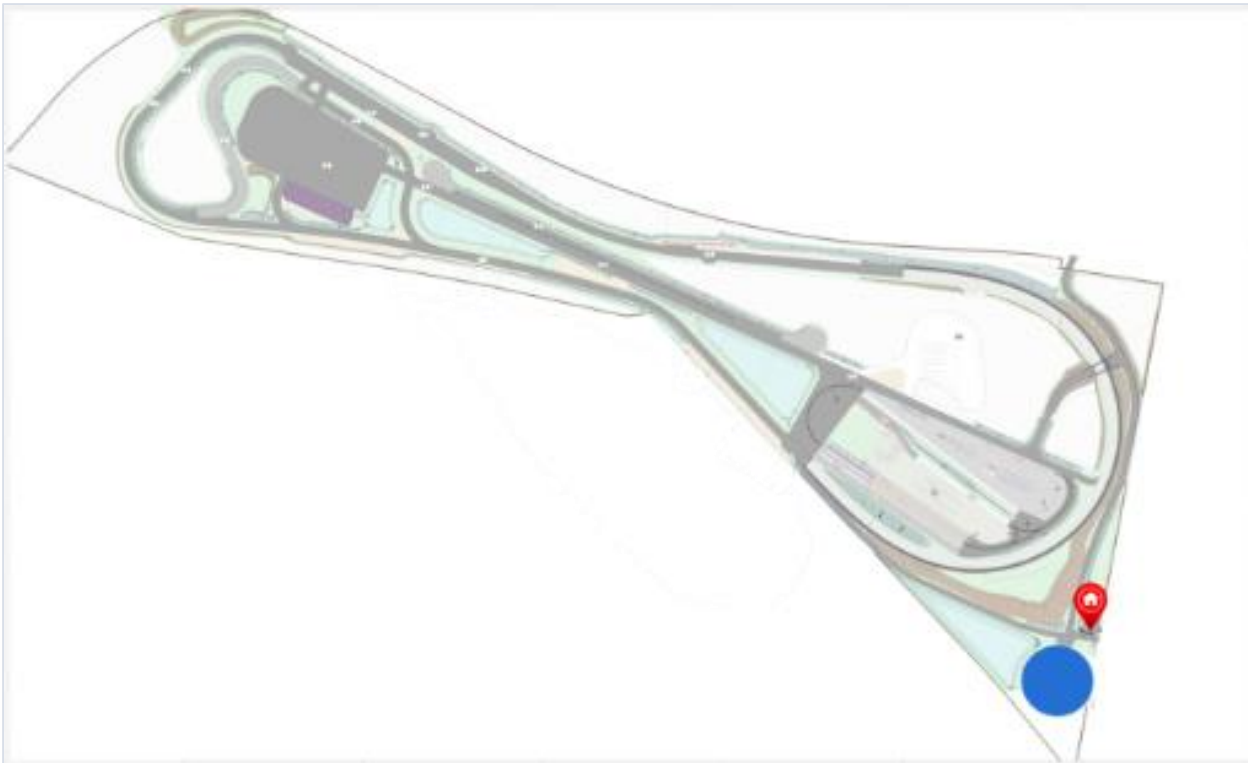
Required

USES

- Traction tests
- Armoured vehicle obstacle-crossing
- Extreme slopes subject to risk assessment
- Downhill area and slope axis must remain clear.

Armoured Vehicle Roundabout

TRACK DIAGRAM



**Braking and urban-traffic
simulation on an 80 m circle**

FEATURES

80 m
Diameter

One activity
at a time

Direction unrestricted
during track use

USES

- Braking tests
- Urban-traffic simulation
- Demonstrations / logistics
- “EXCLUSIVE USE” sign displayed during manoeuvres.