AURELION PUBLICATION | TEMPLATE GUIDE

Aurelion Road Safety Audit (RSA) Checklist & Risk Matrix

A controlled working framework for identifying, prioritising, assigning and closing road-safety findings across design and operational reviews.

Prepared by Aurelion Solutions

1. Intended use

This template supports structured road-safety review and issue tracking. It is not a substitute for the applicable authority RSA procedure, accredited/approved auditor requirements, or project-specific terms of reference.

2. Audit workflow

1. Confirm audit stage, scope, drawings/models, design assumptions and previous audit actions.
2. Undertake desktop review and site inspection where required by scope.
3. Record each safety problem as a distinct finding linked to location and evidence.
4. Identify affected road users, credible crash mechanism and consequence.
5. Assign likelihood and severity using the project-approved risk method.
6. Recommend a proportionate treatment addressing the safety mechanism.
7. Record designer/client response, owner, due date and disposition.
8. Verify closure or document accepted residual risk through the required governance route.

3. Aurelion default risk matrix

The downloadable workbook uses a transparent 5×5 screening matrix (Likelihood 1–5 × Severity 1–5). This is an Aurelion working convention only; replace it if the authority/client mandates another matrix.

Severity \ Likelihood	1	2	3	4	5
1	1 Low	2 Low	3 Low	4 Low	5 Moderate
2	2 Low	4 Low	6 Moderate	8 Moderate	10 High
3	3 Low	6 Moderate	9 Moderate	12 High	15 High
4	4 Low	8 Moderate	12 High	16 High	20 Critical
5	5 Moderate	10 High	15 High	20 Critical	25 Critical

4. Finding fields

Field	Purpose
Finding ID / stage	Traceability across audit cycles
Location / drawing ref	Unambiguous spatial/design reference
Road user	Driver, pedestrian, cyclist, motorcyclist, PT user, service/emergency etc.
Safety problem	Observed/design condition creating risk
Crash mechanism	How the condition could lead to harm
Likelihood / severity	Project-approved scoring inputs
Risk score / band	Prioritisation aid, not a substitute for judgement
Recommendation	Treatment linked to the safety mechanism
Designer/client response	Accept / modify / reject with rationale
Owner / due date	Action accountability
Closure evidence	Drawing revision, photo, calculation, instruction or approval
Status / residual risk	Open, in progress, closed, accepted residual risk

5. Checklist themes

- Design consistency, operating speed and driver expectancy
- Horizontal/vertical alignment, sight distance and visibility
- Junction form, priority, turning paths and conflict points

- Pedestrian crossings, desire lines, accessibility and refuge
- Cycling and micromobility interfaces
- Motorcycle exposure and roadside hazards
- Public transport stops and passenger movements
- Parking, loading, servicing and reversing movements
- Signs, markings, signals, lighting and delineation
- Roadside safety, barriers, clear zones and fixed objects
- Construction/temporary traffic arrangements where in scope
- Emergency access, maintenance and operational usability

6. Workbook controls

The accompanying XLSX is designed as a working register with controlled dropdowns, automatic risk score/band, action ownership, due dates and closure status. Project teams should preserve an issued PDF snapshot at each formal audit milestone.

References & source controls

Use the latest edition/current authority publication at the time of each project. The references below informed this Aurelion publication; no proprietary tables, rates or copyrighted manual content are reproduced.

- **Dubai RTA — Traffic and Road Legislations** — https://www.rta.ae/wps/portal/rta/ae/home/open-data/traffic-road-legislations