

ROAD SAFETY DEPARTMENT

Temporary Traffic Management Schemes

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Main Objectives

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- Ensure a high level of safety for all road users.
- Identify and address RISK.
- Effective traffic management to cause least disruption to traffic.
- Minimise queues and delays.

Design of Traffic Management Schemes

- **Co-ordination is to be held with effected entities:**
 - Police, Local Council, Public Transport
 - Commercial Community
 - Special entities eg. MIA, AFM, Fire Rescue, Emergency Services.
- **Traffic diversions/re-routing schemes are to be designed to ensure the least disruption to traffic and ensure safety for all road users at all times.**
- **Signage and traffic management equipment layout is to reflect each different phase of the project.**

Design Criteria: Road Widths

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Criteria	Vehicular Direction	Minimum Width
Two heavy vehicles passing each other	2-way	5.5m
One heavy vehicle and one passenger car passing each other	2-way	4.8m
Two passenger cars passing each other	2-way	4.1m
One heavy vehicle passing	1-way	3.0m

Design Criteria: Equipment

Traffic Management Setup Criteria	Type of Road		
	One-Way Residential (<50 km/h)	Two-Way Linking Road (<60km/h)	Arterial/Distributor Road with Central Strip (<80km/h)
Distance btw front and obstacle and taper triangle	0.5m	15m	30m
Distance of first MEN AT WORK sign	45m	275m	500m
Min visibility distance from first MEN AT WORK sign	60m	60m	60m
Size of Signs	600mm	750mm	750mm
Size of Cones	450mm	450mm	450mm

Design Criteria: Equipment

Traffic Management Setup Criteria	Type of Road		
	One-Way Residential (<50 km/h)	Two-Way Linking Road (<60km/h)	Arterial/Distributor Road with Central Strip (<80km/h)
Side distance of Safety Zone	0.5m	0.5m	1.2m
Approach Taper	90m	175m	175m
Number of Cones	12	21	21
No. of Flashing Lamps	20	20	20

Traffic Cones and Barriers

- Concrete barriers must be touching each other and plastic barriers are to be interlocked.
- Concrete/plastic barriers used where excavation exceeds 100mm in depth.
- Plastic netting is to be used only where excavation does not exceed 100mm and used as hoarding only. Iron rods to have a cap at all times and are to be maintained. Bent rods are not acceptable.
- Flashing lights installed on the barriers and netting along the work site.
- Plastic barriers are to be filled with water or sand at all times. Bucket plastic barriers are to be filled with sand bags.

Traffic Cones and Barriers

- All barriers are to be aligned and along entire work site.
- All barriers are to have reflectors.
- Traffic cones are to be used for minor works not exceeding 24hours duration and for excavation not exceeding 100mm depth.
- Traffic cones are to be maintained and be reflective. Size of cones to be as per previous table.

Lighting

- To install floodlighting at critical locations eg. Junctions, pedestrian crossings, open trenches.
- Flashing lights to be along the entire work site alignment.
- Flashing lights to be in working order at all times.
- Flashing lights are to be installed at a minimum of 2m spacing.
- Temporary traffic lights to be installed as required.

Signage and Line Markings

- Temporary signage is to be installed only at the immediate commencement of works.
- All temporary signage is to have a sticker at the back indicating the Road Works Permit Number, the logo of the assigned contractor and a contact number.
- Height of signs with clear space of 2.1m on footways and 2.3m along cycle routes and a minimum distance of 600mm from carriageway.

Signage and Line Markings

- Size of signs to be as per previous table.
- Approach signage to be installed as per previous table.
- Temporary diversion signs installed as necessary.
- Temporary line markings are to complement scheme and signage.
- Information signs with project and contractor details.

Signage and Line Markings

- **Missing/damaged/dirty signs are not acceptable.**
- **Removal of temporary signage and line markings immediately upon completion of the project. Signage which is left on site after completion will be removed by Transport Malta at the expense of the assigned project contractor.**

Signage and Line Markings

- Temporary line markings to be yellow
- Temporary zebra crossing to be in white and yellow stripes.
A temporary ramp to be provided between the kerb and the pavement finished level.
- Diversion signs to have a yellow background.

Traffic Cones

It is recommended to use coloured traffic cones to inform road users of the risks to safety or to guide users accordingly:

- **ORANGE**: Used where a traffic hazard is present, at road works projects and at projects using heavy equipment and heavy vehicles.
- **YELLOW**: Used at work site with slight risk, to alert drivers to proceed with caution and yield to construction vehicles and at No parking/no waiting areas.

Traffic Cones

- **GREEN:** Used at access points for construction vehicles at a work site, to alert driver and to mark diversion routes as guidance.
- **BLUE:** Used to signal danger from overhead utilities or structures such as overhead wires, bridges, signs, etc...
- **RED:** Used to mark areas of imminent danger with chance of serious injury or death, to block a workplace hazard and to mark emergency equipment such as fire hydrants.
- **PURPLE:** Used for sports, parties, celebrations.

Obstruction / Hazard

- Construction debris is not to accumulate on site.
- Machinery and equipment are to be kept in good working order and be stored at assigned locations on site.
- Construction materials are to be temporarily stored at assigned locations on site.
- Emergency access points are to be clearly marked, accessible and visibility lines and swept paths are to be checked.

Obstruction / Hazard

- Vehicular and pedestrian access points are to be checked to ensure safety for all road users.
- Construction vehicles are not to leave debris on their exit routes.
- Site is to be cleared on completion of works.

Maintenance of Schemes

- Flashing lights to be in working order.
- Signage is to be regularly checked and is to be clean and not damaged.
- Barriers to be aligned and filled with water/sand.
- Site to be clear from debris and other obstructions/hazards.
- Signage and line markings to be checked and updated regularly to reflect any changes in the traffic arrangements.

Typical Traffic Management Equipment



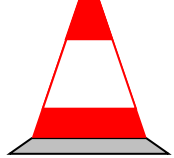
Road works ahead



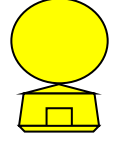
Road narrows on left-hand side ahead



Road narrows on right-hand side ahead



Traffic cone



Road danger lamp



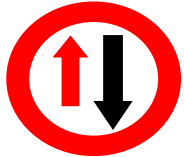
Typical temporary mandatory sign with yellow base plate



Keep right



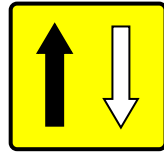
Keep left



Give way to oncoming vehicles



Priority over vehicles from opposite direction



Contra flow

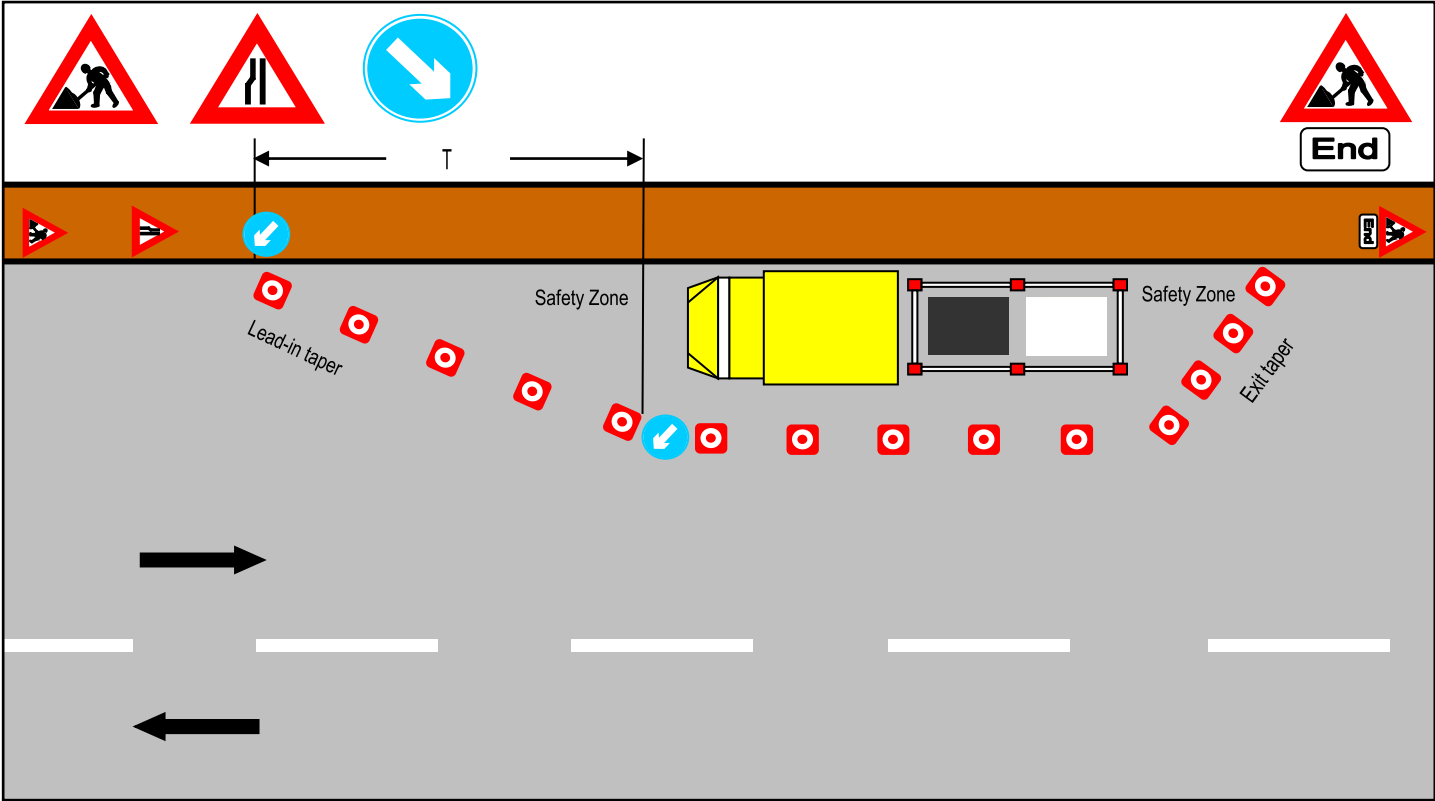


Left-hand lane of a dual two-lane carriageway road closed

Site Layout



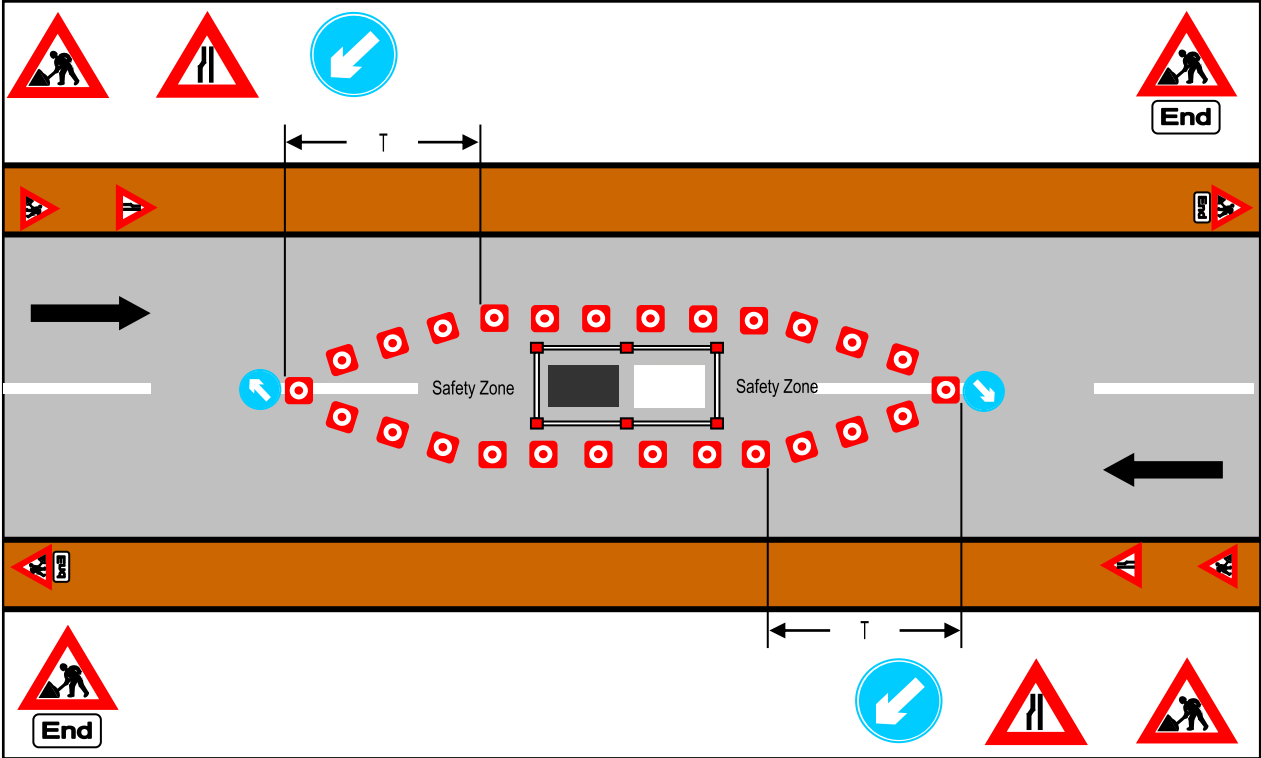
Basic site layout with works vehicle



Site Layout

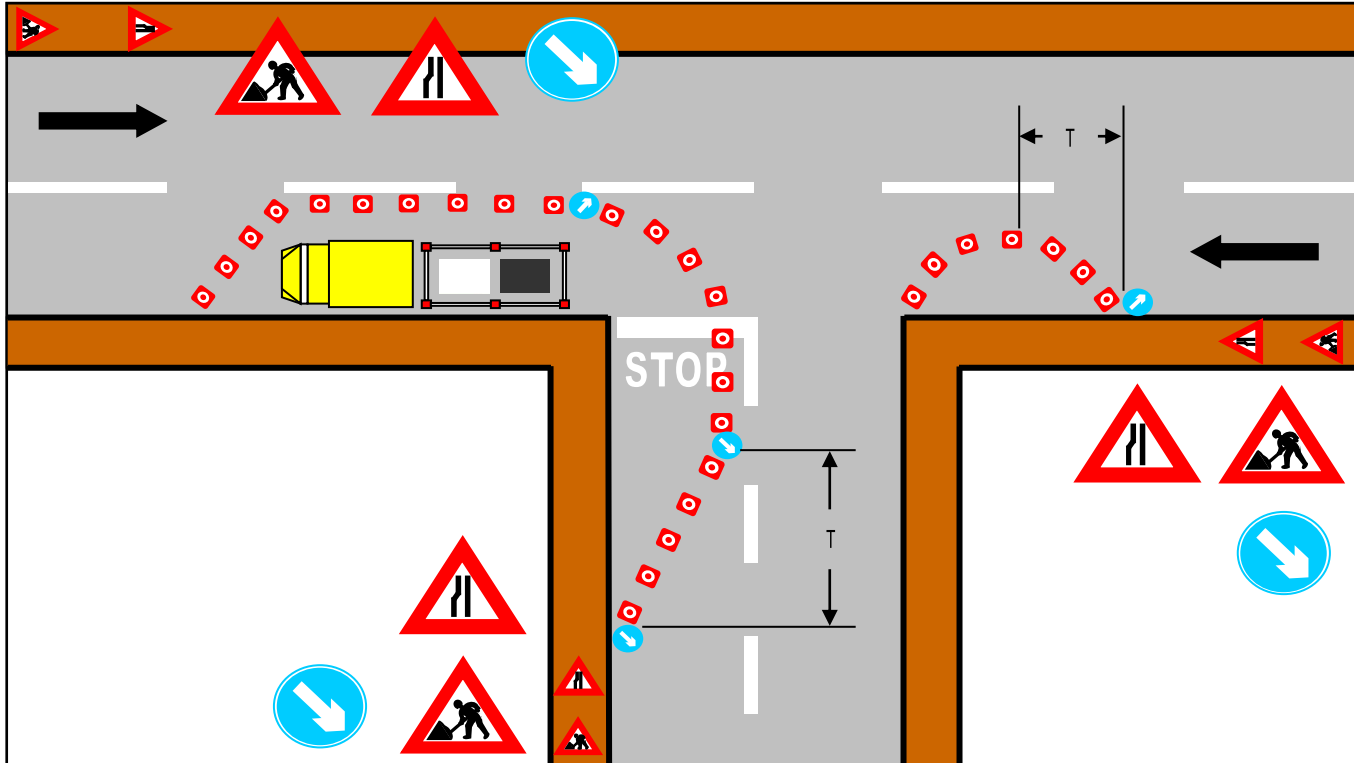


Works in centre of two-lane single carriageway



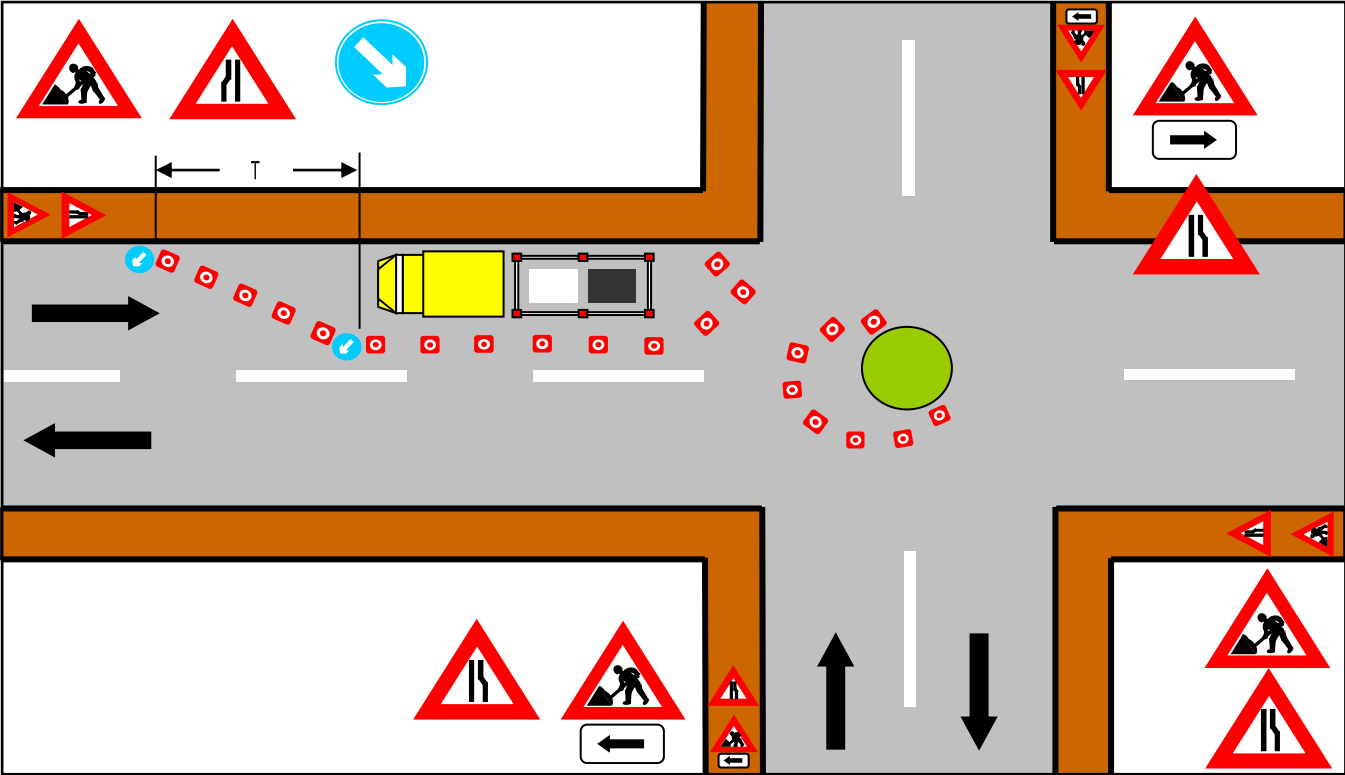
Site Layout

Works at road junctions



Site Layout

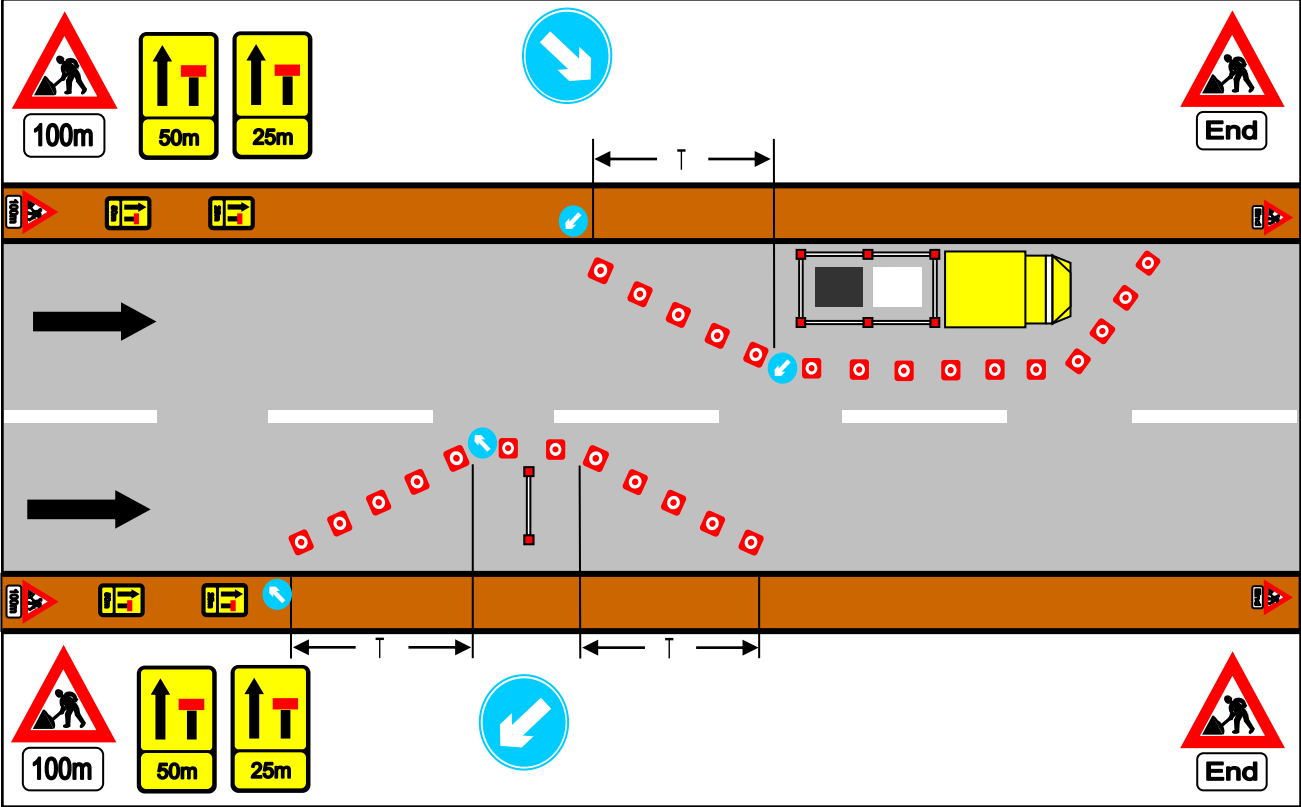
Works at roundabouts



Site Layout



Works on 60km/h dual carriageway road - left hand lane closed to traffic



DETAILS FOUND AT:

<https://assets.publishing.service.gov.uk/media/5a7d8038e5274a676d532707/safety-at-streetworks.pdf>



www.transport.gov.mt