Persimmon

Health, Safety
& Environment
Department

Traffic Management Standards

Contents

1. Introduction

The purpose of these standards is to ensure that all of our workforce are protected so far as reasonably practicable from being struck by a moving vehicles (including plant and machinery). Inadequate segregation of pedestrians and vehicles is one of the biggest causes of workplace fatalities and injuries on construction sites.

Site management must ensure that pedestrians and vehicles can move around the site safely and that people and vehicles must be kept separate.

2. Planning

Prior to construction projects commencing, traffic management must be considered at pre-start meetings and a plan of proposed walkways agreed. The Contract Manager for the project must complete a site traffic management assessment before work commences.

Refer to HSMS form 015 – Traffic Management Assessment

This form must be reviewed quarterly or in the event of any major changes to the traffic management arrangements.

Following the traffic management assessment, this must be produced into a pictorial diagram site traffic management plan (TMP), highlighting the controls agreed in the assessment.

3. Traffic Management Procedure

The following traffic measures must be adopted on site:

3.1 Traffic management plan (TMP)

The TMP must be displayed in the site office and in the canteen area, using magnetic TMP boards. These must reflect the current physical traffic management features that are on site. The TMP must be reviewed as the site evolves and the review date must be written on the TMP. If no changes then then TMP must be reviewed as part of the site management weekly checks and recorded on the magnetic board. Any changes to the TMP must be relayed to site workers and visiting drivers where appropriate.

3.2 Site induction and toolbox talks

All site workers and visitor drivers must be briefed on the TMP either via induction, toolbox talks or site management briefing, especially when significant changes made to the plan. Site workers must be regularly reminded to wear high- visibility clothing on site at all times.

3.3 Entrances and exits

Provide separate entry and exit gateways for pedestrians and vehicles. Sufficient control measures need to be in place to ensure site entrances are kept closed to prevent members of the public encroaching onto site.

Refer to HSMS Standards – Site Security and Public Protection.

3. Traffic Management Procedure cont.

The following traffic measures must be adopted on site:

3.4 Walkways

Provide firm, level, well-drained pedestrian walkways that take a direct route where possible and free of trip hazards. Site management must ensure that the walkways remain in a good state of repair and the commercial department must ensure that they allocate sufficient funds to maintain these walkways. Type 1 crush material that has been compacted can be used for temporary walkways on site but requires a lot of maintenance, especially in the winter months. Where walkways are going to remain on site for the duration of the build programme tarmac should be considered. Rubber matting should also be considered in high footfall pedestrian traffic areas to reduces the maintenance responsibilities and prevent slips/ trips. If metal road plates are used on walkways they must be of the non-slip type.

Site management must enforce the use of walkways and issue operative H&S notices and take disciplinary action where appropriate.

When planning walkways the following should be considered:

1. Is the route the most direct and will site workers use it?
2. Can arrangement be put in place to avoid main traffic routes, such as utilising garden areas?
3. Do the pedestrian routes avoid scaffold loading bays?
4. What size footpaths are required (width)?
5. Is there room for a holding area for delivery vehicles?

What type of material is used to form the walkways will depend upon the nature of the site, such as the ground conditions, time of year and the pedestrian footfall that will be using the walkway. This needs to be assessed on a site by site basis via the Management Assessment/ Traffic Management Plan.

The following hierarchy of measures should be considered:

- Good firm ground conditions that will unlikely to be effected by adverse weather – nothing
- Areas which may be effected by adverse weather but have low pedestrian footfall – bulk mulch
- Areas which may be effected by adverse weather and bulk mulch would not be a sufficient enough measure – aggregate or matting
- Areas which may be effected by adverse weather, have a high pedestrian footfall and will remain for the duration of the build programme – tarmac

3. Traffic Management Procedure cont.

The following traffic measures must be adopted on site:

3.5 Crossing

The TMP Where walkways cross roadways, provide a clearly signed and lit crossing point where drivers and pedestrians can see each other. Pedestrian crossing points must be a hooped barrier and if a busier pedestrian footfall crossing a spring mounted gate fitted.

3.6 Visibility

Make sure drivers exiting site out onto public roads can see both ways along any footway/ footpath before they move onto the road.

3.7 Obstructions

Do not block walkways so that pedestrians have to step onto the vehicle route. The telehandler drivers must ensure that they do not place any materials on pedestrian walkways.

3.8 Barriers

Site management must ensure that suitable barriers are used for pedestrian and vehicle segregation. A suitable barrier is one that is robust enough that if struck it would make a loud noise to alert the pedestrian of the presence of danger. The barriers also need to be sufficiently weighted down to prevent them moving in windy conditions and secured to prevent site workers moving them.

This must be achieved by either:

1. Linked metal barrier weighted down by sandbags.
2. Knee high plastic barrier filled with sand.

Plastic chain, orange mesh or road cones are not a sufficient option for segregating vehicles from pedestrians, however they may be useful to mark a footpath in areas where vehicles are not circulating or to keep pedestrians on the pavement.

If a Kerb has been formed which is sufficient to prevent a vehicle striking a pedestrian and keeping pedestrians on the pavement, then a fixed barrier is not required. For example, occupied areas of the site or areas where work is substantially complete and has limited pedestrian and construction plant movement. If a kerb has been formed in the working area of a site, then further measures should be considered to keep pedestrians on the pavement and safe crossing points, such as barrier posts and chains or plastic road barriers. Areas where machines are required to reverse, i.e. opposite loading bays, additional barriers should be put in place even when a kerb has been formed. This will need to be assessed on a site by site basis via the Traffic Management Assessment/ Traffic Management Plan.

3. Traffic Management Procedure cont.

The following traffic measures must be adopted on site:

3.9 Reversing vehicles

There may be times when a trained banksman is required, for example, the load is restricting the telehandler/ mobile plant operator's vision or reversing operations in an area where there is limited space or pedestrians likely to be present. Pedestrian barriers can be utilised to remove the need for a trained banksman provided they sufficiently exclude pedestrians from the area where the telehandler/ mobile plant is reversing.

3.10 Mud on the Road

Mud should not be dragged out of site onto public roads that would cause a nuisance to members of the public. Sufficient control measures should be in place, especially during the winter months, which could include:

- Sufficient run off area, which is swept regularly.
- Use of pressure washers to clean areas down.
- Use of vehicle wheel washers to reduce mud from wheels being deposited.
- Use of a road sweeper, especially during muck away activities.

It is important that site teams follow the arrangements set out in the environmental plan that was submitted and approved as part of the planning process.

3.11 Occupied areas

How construction vehicles move through occupied areas requires careful management to protect the public, particularly children. As a first step, wherever possible, construction vehicles should be excluded from occupied areas. As a second step, where this is not possible, then the duration the construction vehicles need to be in the occupied areas and the distance they need to travel needs to be reduced to as low as possible. This can be achieved by:

- Phasing occupation of dwellings so that construction vehicles as much as possible can be excluded or reduced from occupied areas.
- Considering bulk material storage locations, to prevent or reduce the need for construction vehicles to traverse through occupied areas.

Whilst most construction vehicles have useful aids such as reversing cameras and sensors, these additional controls may not sufficiently assist to reduce the risk in all vehicle movements.

If site vehicles do need to enter occupied areas, site management must fully consider the hazards throughout the lifecycle of the build and put in appropriate control measures, which could include:

- Trained banksman, for example, where there is a heavy flow of construction/ pedestrian traffic, the operator has restricted vision due to the load, there is limited space and construction vehicles have to encroach close to footpaths.
- Suitable pedestrian barriers, for example in areas where there is a risk that a member of the public could step directly into the path of construction vehicles.

All control measures must be recorded on the traffic management assessment.

3. Traffic Management Procedure cont.

The following traffic measures must be adopted on site:

3.12 Carparks

All sites must have adequate car parking facilities for the number of site workers working on site, taking into account busy periods. This must be considered at pre-start meetings and a plan of car parking arrangements agreed. Site workers must be prevented from parking in occupied areas of site and obstructing traffic management routes. Site workers may only take their vehicles onto site to offload tools and must then park in the site carpark once this has been done. Carparks must be tarmac or equivalent and well drained. Site workers must not be expected to walk through an unreasonable amount of mud and stagnant water to get to their vehicles.

3.13 Haul roads

For larger sites where high volumes of traffic are expected a haul road/ delivery route should be considered, to prohibit pedestrian and vehicles circulating in the same area.

3.14 Speed restrictions

The site speed limit must be restricted to a maximum of 10 MPH. Signage must be displayed throughout site reminding vehicle drivers of this speed limit.

3.15 Material storage areas and site compounds

Adequate segregation must be in place in material storage areas or these areas should be prohibited to pedestrians.

If the telehandler is permitted to enter the site compound then suitable pedestrian segregation should be in place. As site compounds are usually in areas with restricted space to manoeuvre, any telehandler movements must be done using a banksman.

When installing the silos for mortar storage, these must be located in an area away from the pedestrian walkways, due to the high amount of reversing activity that the telehandler will have to undertake.

3. Traffic Management Procedure cont.

The following traffic measures must be adopted on site:

3.16 Loading/ offloading of materials

The loading/ offloading of site materials or waste must not be done on the public road, this activity must take place on site and in a segregated, controlled area.

3.17 Ground worker zones

Where practical to do so stage 1 ground works (roads and sewers, foundations, and oversites) operations should be segregated from the main superstructure works taking place. The following control measures must be considered to minimise interaction between ground workers vehicles and general site workers:

- Heras fencing or other robust barriers to physically segregate the separate areas;
- Signage displayed to designate the ground works only zone;
- Respective work areas marked up on traffic management plans and hazards boards;
- Traffic marshals to be considered during higher risk operations such as muck-shifts;
- Segregated pedestrian and vehicle access points into the ground works zone;
- Robust pedestrian segregation within the ground works zone where works are taking place along plant access routes (e.g. substructure brickwork);
- Using the thumbs up procedure.

4. Monitoring

Site management are ultimately responsible for the day to day traffic management on site and must carry out daily visual checks to ensure that the segregation remains in place. Site management must complete the weekly site managers check list and record any issues observed, taking the necessary actions. The Contract Manager responsible for the site must regularly check the traffic management arrangements and record his findings and any actions to be carried out on the forward planning sheet. The Group HS&E department will monitor compliance with these standards and inspect the TMP during routine HS&E inspections.

5. Further reading

Refer to HSMS guidance – Traffic Management Site Set-up

HSE-traffic management on site
HSE-workplace transport safety a brief guide
HSE-the safe use of vehicles on construction sites

HBF standard for traffic management

6. Toolbox Talk

Refer to HSMS TBT – Traffic Management