



Town of
Cambridge

CONSTRUCTION MANAGEMENT PLAN GUIDELINES

Please complete the Application Form and return to;

By Mail: Compliance Services
Town of Cambridge
PO Box 15
FLOREAT WA 6014

In Person: To the Customer Service Centre
1 Bold Park Drive, Floreat

For Assistance: Further information is available from
Compliance Services on 9347 6056

- October 2015 -

INTRODUCTION

What is a Construction Management Plan?

A Construction Management Plan ('**CMP**') is necessary to ensure construction, demolition and excavation on building sites do not adversely affect health, safety, amenity, traffic or the environment in the surrounding area.

The approved CMP is a contract between the Builder/developer and Council addressing the site and development management issues that are relevant during building activity. All contractors working on the site are to abide by and adhere to the provisions of the approved CMP.

When is a Construction Management Plan required?

The Town of Cambridge requires careful management of construction involving construction, building work, demolition and excavation. To achieve this, the Town will require builders and developers of specified large developments to prepare a CMP that takes into account all relevant aspects of building work, demolition or excavation for all major commercial, industrial, large residential development projects and any other developments which the Town considers appropriate.

The requirement for a CMP will be specifically stated in the planning approval for a site, or otherwise required by the Town, depending upon the presence of:-

- (a) Basement excavations;
- (b) Demolition of more than two (2) storeys;
- (c) External works with a value greater than \$1 million;
- (d) Where traffic or pedestrian management measures are required;
- (e) Where there is a likelihood of damage to local government property; and/or
- (f) Any other case where the Town considers that a CMP should be provided due to the nature of the work or locality or where the amenity of the area is likely to be disrupted or adversely affected.

The need for a CMP will depend on the nature of work, likelihood of disruptions, impact on local amenity, dangers or risks involved, traffic management or any other relevant issue required to be addressed under the Planning and Building Approvals.

Purpose of a Construction Management Plan

The CMP outlines the minimum requirements and must address the following, where applicable:-

- (a) Public safety and amenity;
- (b) Site plan and security;
- (c) Contact details of essential site personnel, construction period and operating hours;
- (d) Community information, consultation and complaints management Plan;
- (e) Noise, vibration, air and dust management;
- (f) Dilapidation reports of nearby properties;
- (g) Traffic, access and parking management;
- (h) Waste management and materials re-use;
- (i) Earthworks, excavation, land retention/piling methods and associated matters;
- (j) Stormwater and sediment control;
- (k) Asbestos removal management Plan;
- (l) Street tree management and protection and/or
- (m) Any other matter deemed relevant by the Town.

How will the Construction Management Plan be Enforced?

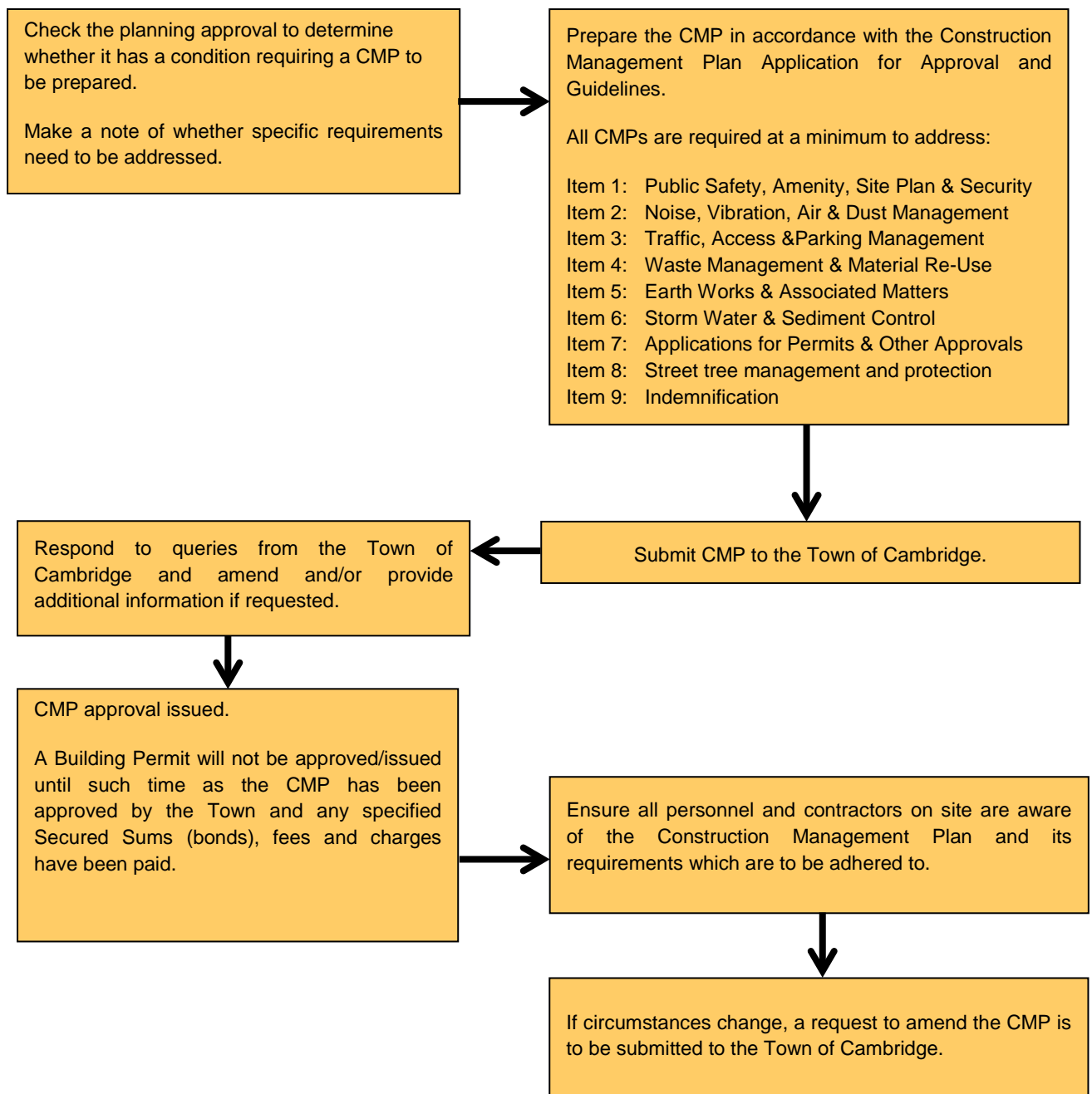
The CMP, as approved by the Town, must be complied with at all times.

Should the Town receive a complaint/enquiry regarding the building works, demolition or excavation, the Town will contact the builder/developer to address the complaint and to ensure strict adherence to the CMP.

If the CMP is not complied with at any time during the development, the Town has a range of enforcement options available, including but not limited to the following:-

- Issue of a Planning Infringement Notice;
- Issue a direction under the *Planning and Development Act 2005 (WA)* and/or under the *Building Act 2011 (WA)*; and/or
- Commence a prosecution in the Magistrates Court.

HOW TO PREPARE A CONSTRUCTION MANAGEMENT PLAN



ITEM 1: PUBLIC SAFETY, AMENITY SITE PLAN AND SECURITY

1.1 Objective

This section of the Construction Management Plan has been included to ensure the general public and the Town's Infrastructure is adequately protected from activities occurring on building sites.

1.2 When must this CMP element be addressed?

Applicable to all building sites for which a Construction Management Plan has been required.

1.3 Matters for Consideration

1.3.1 Site Plan

Please attach a scaled site plan (1:100 or 1:200) with your application indicating the following:-

- Location of all of the Town's infrastructure, such as street trees, signage, kerbing, drainage, street lights and power poles;
- Where materials will be stored and/or unloaded;
- Location of perimeter fencing, waste disposal bins;
- Location of materials hoist, concrete mixer ,sanitary facilities;
- Location of proposed construction work zones, if any
- Location of any scaffolding hoardings or gantries;
- Location of crossovers or other access points;
- Location of wash down areas for trucks;
- Parking arrangements for work site personnel, concrete and delivery trucks;
- Any proposed redirection of pedestrian traffic;
- Public Safety and Traffic Management; and

1.3.2 Signage - Contact Details of Essential Site Personnel

Signage specifying any security measures and key contact details shall be erected on the perimeter of the building site (i.e. attached to the building, fence or hoarding). A 24 hour contact name and mobile phone number must be provided. The construction period is also to be specified.

Essential safety signs to protect workers and the public around building sites are to be installed for the duration of works (e.g. *'Danger Construction Site - No Unauthorised Access'* and All Visitors Report to Site Office).



1.3.3 Security Measures

Security measures must be in place at all times when the site is not in operation. This may include: perimeter barriers, locks, surveillance systems, security lighting and motion detector.

1.3.4 Community Information and Complaints Management Plan

A Community Information and Engagement Plan is to be prepared detailing how the local community will be kept informed about the development. The Builder must deliver an information newsletter to all properties around the site, in the area specified by the Town.

The Site Personnel must promptly respond to all complaints. All parking and noise complaints must be actioned within one hour. A Complaints Register is to be accurately maintained and shall include the following details:-

- Name of complainant (if known)
- Date and time of complaint
- Action taken

1.3.5 Public Domain

Any damage to the footpath, road, kerb stormwater drains and street furniture that results from excavation, demolition and building work is the responsibility of the builder or developer.

Any hazard which may impact on pedestrians, cyclists and motorists' safety should be repaired immediately. Bicycle paths must be maintained where existing bicycle access is provided adjacent to a construction site.

The general public must be protected from construction activities, including vehicle loading and off-loading within the public domain. Precautions must be fully specified and include the following measures:-

- The use of spotters and traffic controllers.
- Restriction on the hours of operation of these activities (non-peak hours).
- Security mesh or barriers to separate the public from the work area.

Unless otherwise permitted:-

- obstructions must not protrude from premises causing it to interfere with pedestrians or traffic in a public place.
- all construction materials must be stored onsite and not in the street or public space.

When a crossover is required for vehicular access to the site, consider:-

- The type and size of trucks entering the site.
- The loading and potential for damage to the existing crossover and footpath.
- The nature of protection of crossover and pavements.
- The need for a dilapidation survey of the footpath before and after works have taken place.

ITEM 2: NOISE, VIBRATION, AIR AND DUST MANAGEMENT

2.1 Objective

To minimise the impact of noise and vibration on the immediate neighbourhood.
To provide a framework to plan and cater for building activities outside of normal hours.
To minimise the likelihood of damage to adjacent buildings and structures.
To ensure that air quality (airborne dust and pollutants) in and around a building site is maintained at acceptable levels throughout the construction period.

2.2 When must this CMP element be addressed?

For building works planned out of Council prescribed hours.

For noisy works including, but not limited to, jack hammering, pile driving, rock breaking, demolition works over two storeys, or where explosives are used.

On all sites where construction is exposed/open or not fully contained.

For demolition or sites requiring basement excavations.

On all sites where piling of soil is necessary.

2.3 Matters for Consideration

2.3.1 Noise Management Plans

In accordance with Regulation 13 of the *Environmental Protection (Noise) Regulations 1997*.

- Construction work being undertaken should comply with the control of environmental noise practices set out in Section 6 of the AS 2436-1981 Guide to Noise Control on Construction, Maintenance and Demolition Sites;
- The equipment used for the construction work or demolition work must be the quietest reasonably available;
- The work must be carried out in accordance with a Noise Management Plan

(NMP) - (prepared by a suitably qualified acoustic consultant).

Works out of Hours

If it is anticipated that there will be any requirement to work outside the hours of 7am to 7pm Monday to Saturday, then an application will need to be submitted to Council, for approval of the work, at least seven (7) days prior to the construction work commencing. The application will need to include a suitably prepared Noise Management Plan.

Day time works

Notwithstanding the requirement for a Noise Management Plan (NMP) to address after hours work, large scale demolition and construction projects/sites are also required to submit a NMP for works conducted during the hours of 7am to 7pm. The NMP will need to address construction noise which may cause nuisance or disturbance as a result of the close proximity of any noise sensitive premises and/or the particular scope of the development or the equipment being employed. A NMP should be provided for demolition work and for potentially noisy building construction activities such as piling, compacting and concrete pouring processes.

MINIMUM REQUIREMENTS FOR A NOISE MANAGEMENT PLAN

The Noise Management Plan needs to meet the following requirements:

Have you provided us with all of the following details?

Please tick appropriate box- **Yes No**

1. Noise Management Plan (NMP) to be in accordance with the requirements of the Environmental Protection (Noise) Regulations 1997.

Yes No

2. Provide a construction program including details of and the duration of activities.

Yes No

Identify the likely periods of noise and vibration

3. Provide prediction of noise emissions on the construction site, in particular of the piling, rock breaking, jack hammering and compaction processes.

Yes No

4. Identify all noise sensitive premises located in the near vicinity.

Yes No

5. Specify control measures for noise and vibration – i.e. equipment design/ site and work practices.

Yes No

6. Submit procedures to be adopted for monitoring noise emissions –i.e. verifying actual noise levels.

Yes No

7. Provide details of complaint response procedure e.g. Provisions to provide notification to identified noise sensitive premises.

Yes No

8. Detail follow up procedures– investigation of ongoing or unresolved noise issues. Include contact details of persons who will be available to receive reports relating to noise issues during work time and after hours.

2.3.2 Control of Sand and Dust

Please advise what methods are proposed to control the drift of sand and dust from the site.

Provide details of any equipment and activities that may cause excessive dust or otherwise effect air quality. Dust suppression techniques/equipment may be required depending upon the following:

- Weather and wind conditions
- Exposure/proximity to the public and surrounding buildings
- Proximity to air intake vents on adjacent buildings. Intake from these vents must be prevented through the installation of adequate filters or other approved measures.

Minimise dumping of loose materials on a site. If dumping of loose material is unavoidable, detail methods for preventing dust and other airborne matter impacting on the surrounding area. Ensure these measures are adequate when the site is unattended.

Minimise airborne dust arising from trucks and other vehicles entering and leaving the site by providing details on the method and frequency of watering down driveways and trucks with consideration to water efficiency.

Specify materials to be stored on site and their exposure to wind and the weather elements. Detail methods for preventing loose materials from becoming airborne.

Perimeter fencing must be designed to minimise the impact of dust on the public and adjacent areas.

Equipment powered by internal combustion engines must be properly maintained and regularly serviced to prevent the discharge of excessive pollutants, including smoke and/or toxic fumes or odours, and must meet acceptable noise levels.

Materials can only be cut in designated areas set away from boundaries and public areas, with adequate dust (and noise) suppression. Where cutting needs to occur in situ, localised dust suppression measures must be utilised.

2.3.4 Vibration Control

Will any building operations or earthworks involve the use of equipment that could possibly cause damage by vibration or settlement to the property of adjoining property or the adjacent road reserve, laneway or other property under the care, control or management of the Town?

Please provide details on how the vibration is to be managed and where applicable, attach certification by an appropriate qualified consultant.



ITEM 3: TRAFFIC, ACCESS AND PARKING MANAGEMENT

3.1 Objective

This section of the Construction Management Plan has been included to ensure disruption to traffic caused by building activities is minimised and to ensure the safety of all road users.

3.2 When must this CMP element be addressed?

For all sites that have an impact on vehicle, waste collection, cyclist and/or pedestrian flows.

3.3 Matters for Consideration

3.3.1 Traffic Management Plan (TMP)

A suitably endorsed Traffic Management Plan is to be prepared that addresses site and traffic issues arising from the development works and to identify the traffic management procedures to be implemented by contractors and subcontractors during the project. Primary issues to be addressed in the Traffic Management Plan are identified below:-

- (a) Analysis of existing traffic volumes (vehicles, pedestrians and cyclists).
- (b) Existing and proposed speeds - are there temporary speed reductions proposed?
- (c) Existing on and off site car parking facilities.
- (d) Public transport routes – will the works impact on public transport routes? If so have arrangements been made with the Public Transport Authority for a route deviation?

NOTE: Traffic Management Plans for larger developments and those in 'difficult' locations will need to be prepared by an accredited Traffic Controller, as determined by the Manager Compliance Services.

3.3.2 Temporary Road Closures

All applications for temporary road closures must be made 10 days in advance. A newsletter to the affected local residents/businesses is to be issued 5 days prior to the closure.



3.3.3 Vehicle Access

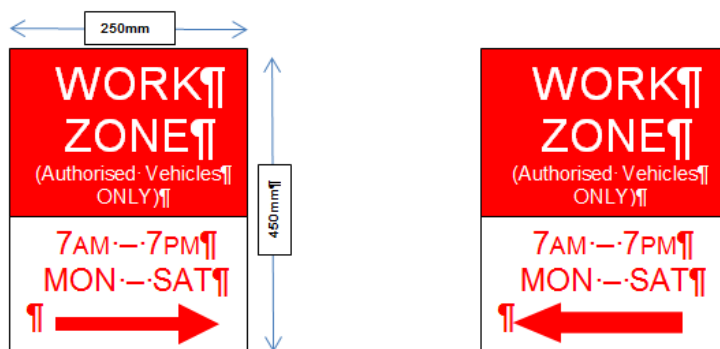
The general public must be protected from construction activities including vehicle loading and off-loading within the public domain.

Precautions must be fully specified and include the following measures:

- (a) The use of spotters and traffic controllers.
- (b) Restriction on the hours of operation of these activities (non-peak hours).
- (c) Security mesh or barriers to separate the public from the work area.

3.3.4 Construction Work Zones

Will the parking bays in the road reserve be required for the exclusive use of the building work site during the construction? If yes, an application is to be submitted for a Construction Work Zone Permit. Please contact Compliance Services.



3.3.5 Parking

Parking and traffic controls around building sites must be complied with and accommodated in a manner that minimises disruption to the precinct.

Careful consideration must be made for the provision of the parking requirements for contractor/worker vehicles. Please provide details of all parking arrangements.

3.3.6 Pedestrian Movement

The path of pedestrian and cyclists is to be free of obstruction and clearly legible. In some instances it is acknowledged that pedestrian diversions/detours are required.

If the footpath and verge is proposed to be obstructed by the installation of the work shed, the Town may require the shed to be placed on gantries above the footpath or may require the installation of kerbing, at the applicant's expense, to provide safe pedestrian access on the road.

3.3.7 Storage of Materials and Equipment on Road Verge (Verge Permit)

Is it proposed that any materials will be stored on the road verge? If yes, please complete an application for a Verge Permit.

3.3.8 Access to the Site

Will access to the site be required through any other property or a Town reserve? If yes, please provide details and copies of written authorisation of the property owner.



ITEM 4: WASTE MANAGEMENT AND MATERIAL RE-USE

4.1 Objective

This section of the Construction Management Plan has been included to ensure consideration is given to maximising the reuse and/or recycling of building materials.

4.2 When must this CMP element be addressed?

Applicable to building sites where waste and materials re-use is to occur.

4.3 Matters for Consideration

Applicants should consider resource recovery and waste management actions to reduce the amount of waste ending up in landfill. Consideration should be given to:

4.3.1 Storage and Disposal of Rubbish

Submit details on how rubbish and waste is to be contained on the site and disposal methods.

4.3.2 Waste Minimisation and Recycling

Please provide details of the following:

- (a) Procedures for the collection and sorting of recyclable construction materials.
- (b) Provision of containers for recyclable materials including cardboard, glass, metal, and plastic and green waste.
- (c) The re-use of timber, glass and other materials. The recycling of asphalt, metal, bricks, tiles, masonry, concrete, plasterboard, plastic, batteries, cardboard, carpet and other materials.
- (d) Procedures for removal of waste (materials that cannot be reused or recycled) from the site.
- (e) Procedures for removal of hazardous or dangerous materials from the site.
- (f) Provisions for collection of daily rubbish from workers.

ITEM 5: EARTH WORKS AND ASSOCIATED MATTERS

5.1 Objective

This section of the Construction Management Plan has been included to minimise the likelihood of damage to adjacent buildings and structures or other property under the care control and management of the Town.

5.2 When must this CMP element be addressed?

Applicable to building sites where excavation, piling and associated ground works is to occur.

5.3 Matters for Consideration

5.3.1 Piling

The Town does not encourage Sheet Piling and encourages less intrusive methods of retaining. Sheet piling will not generally be approved unless an appropriately qualified consultant/engineer certifies that it will not damage nearby properties.

If sheet piling is proposed to be used, details shall be provided by an engineer certifying that all requirements and standards will be complied with. Dilapidation Reports of properties in the vicinity (as determined by the Town) will need to be carried out by the Builder and reports provided to the Town.

It is noted that:

- (a) No two walls are the same.
- (b) Careful analysis of each structure and the affect it may have on the structure should be undertaken.
- (c) This analysis should be carried out by the architect, professional contractor or structural engineer. The builder's engineer should make specific design recommendations.

5.3.2 Ground Anchors

Will ground anchors be installed beyond the property boundary? If yes, please provide details certified by a qualified consultant and written consent of the effected owners.

5.3.3 Underpinning

Will ground stabilisation or underpinning be required at the property boundary or structures on adjoining properties? If yes, please provide all details and plans.

5.3.4 Excavation Management

Are there any excavation works proposed that could possibly cause damage to the property of adjoining property or the adjacent road reserve, laneway or other property under the care, control or management of the Town?

Please provide details on how the land is to be retained and attach certification by an appropriate qualified consultant.



5.3.5 Dilapidation Reports

The purpose of a Dilapidation Report is to record the current condition of a property prior to any building work being undertaken. Dilapidation reports are typically undertaken by independent professional consultants on properties adjacent to the proposed building site and should comprise:-

- a) the relevant property owner's signature;
- b) annotated photographs;
- c) site and floor plan; and
- d) details of any pre-existing damage (including measurements).

The report can be used to resolve any disputes that may arise during or after the building works.

The Town does not undertake dilapidation reports. A dilapidation report should be commissioned by the builder/applicant. All costs associated with the preparation of a dilapidation report shall be borne by the applicant/builder(s).

The Town reserves its right in its absolute discretion to request any additional Dilapidation Reports, where it is of the opinion that a property may be affected by demolition and/or building works and the Builder shall promptly comply with the Town's request.

NOTE: A copy of the dilapidation report for any property/site listed on the State Register of Heritage Places will be forwarded to the Heritage Council for its records.

ITEM 6: STORM WATER AND SEDIMENT CONTROL

6.1 Objective

This section of the Construction Management Plan has been included to ensure to prevent contamination of, or damage to, stormwater drains and waterways; and to ensure sediment from the building site is retained onsite during building works.

6.2 When must this CMP element be addressed?

Applicable to all building sites where works may detrimentally affect the quality of stormwater run-off into the drains.

6.3 Matters for Consideration

6.3.1 Water Discharge

Water discharge is not permitted to flow to adjacent private or public property and is to be adequately contained within the lot.

- (a) Drainage of the site is to be directed to the legal point of discharge through construction.
- (b) Stormwater in sediment control points is to be filtered before entering the legal point of discharge.
- (c) Waste materials, including liquid wastes such as paint, concrete slurries and chemicals, must not be discharged into a stormwater drain.

6.3.2 Wash Down Facilities

Wash down areas must be located near the site entrance and be designed to capture and treat water prior to discharge into the stormwater system.

6.3.3 Sediment Control

The storage of loose materials such as soil, sand and gravel must be carefully considered and measures put in place to prevent their displacement.

6.3.4 Water Conservation

Activities on construction sites need to consider permanent water saving measures. All hoses must be in good condition and fitted with a trigger nozzle etc.

6.3.5 De-Watering

Is it proposed to de-water the site? If yes, pre-approval from the Town will be required prior to discharging any ground water from the site into the Town's street drainage system during the de-watering operations. In addition a consultant's report may be required. Approval may also be required from State Agencies e.g. Swan River Trust, Department of Water and Department of Environment and Conservation.

ITEM 7: APPLICATIONS FOR PERMITS AND OTHER APPROVALS

The Construction Management Plan is a requirement of Planning and Building approval BUT DOES NOT NEGATE the requirement for separate applications and approvals for such items as:-

- Road and footpath temporary closures/obstructions.
- Work Zones.
- Use of and storage of materials on the verge in front of the development.
- Gantry and hoardings.
- Refund of Secure Sums and Works bond inspection request.
- Disposal of water from dewatering operations.
- Noise Management Plan – out of hours work.
- Use of a crane.
- Signs.

These Permit Applications can be obtained from the Town of Cambridge website (Refer to Building Services Section). **Please refer any enquiries to Compliance Services.**

ITEM 8: STREET TREE MANAGEMENT AND PROTECTION

8.1 Objective

This section of the Construction Management Plan has been included to prevent the unauthorised removal and/or damage to verge street trees and other property under the care control and management of the Town.

8.2 When must this CMP element be addressed?

Applicable to building sites where a street tree is located on the verge or public property.

8.3 Matters for Consideration

1. A tree protection zone is to be established around the trunk of the tree. This tree protection zone shall include a temporary barricade/fence of at least 2metre X 2metre, erected around the tree to protect the root zone and tree during development construction works.(preferably with a tree protection zone sign) - **Refer diagram below**
2. Building materials, building rubble and/or debris shall not be placed or stored against the barricade or within the tree protection zone.
3. The use of appropriate sized machinery is to occur so that contact with the upper canopy of a street tree does not occur at any time. Any branches requiring removal for clearances to facilitate the development works shall only be undertaken by a qualified Arborist or Town approved Officer, after written approval from the Town of Cambridge Infrastructure Parks.
4. In the event that current existing irrigation on the verge is to be removed or altered, a temporary and/or supplementary watering program may need to be implemented.
5. All building contractors engaged on the development are to be made aware of the importance of protecting the Town's street tree, and that any damages occurring to the tree, wilful or otherwise will be subject to prosecution under the Town of Cambridge Local Government and Public Property Local Law.

The Town does not encourage the removal of verge street trees and encourages the retention of healthy trees.



Typical Verge street tree protection barricade/fencing - with signage.

ITEM 9: INDEMNIFICATION

Upon submission of the Construction Management Plan, the applicant/builder undertakes to indemnify the Town of Cambridge against ALL claims which may be made against the Town for damages or otherwise, in respect of any loss, damage, death or injury caused by, or in the course of or arising out of the use of the road reserve and the property of the Town of Cambridge, during all periods when the reserves are in use due to the works associated with the development. If requested, the applicant/ builder shall also provide evidence of Public Liability Insurance.

DISCLAIMER

This Guideline has been developed to provide information in relation to the general requirements for Construction Management Plans. It is not extensive and the Town of Cambridge hereby expressly disclaims all liability for errors and omissions of any kind whatsoever whether negligent or otherwise for any loss, damage, injury or other consequences that may arise from any reliance on this publication. The use or representation of any product or system is not to be taken to imply approval or endorsement of the same.