Muswellbrook Shire Council

# CONSTRUCTION SPECIFICATION

AUS-SPEC (Cot 09)

## 0221 Site Management

**Version 01**

**Amendment Record for this Specification Part**

This Specification is Council's edition of the AUS-SPEC generic specification part and includes Council's primary amendments.

Details are provided below outlining the clauses amended from the Council edition of this AUS-SPEC Specification Part. The clause numbering and context of each clause are preserved. New clauses are added towards the rear of the specification part as special requirements clauses. Project specific additional script is shown in the specification as italic font.

The amendment code indicated below is 'A' for additional script 'M' for modification to script and 'O' for omission of script. An additional code 'P' is included when the amendment is project specific.

| Amendment Sequence No. | Key Topic addressed in amendment | Clause No. | Amendment Code | Author Initials | Amendment Date |
|---|---|---|---|---|---|
| 0 | No amendment has been made | all | Nil | | 14 June 2012 |
| | | | | | |

# Contents

# 0221 SITE MANAGEMENT

## 1 GENERAL

### 1.1 RESPONSIBILITIES

**General**

Designated areas for protection as per contract documents

**Incidental works**

Generally: Undertake the following:

- Reinstatement: Reinstate undeveloped ground surfaces to the condition existing at the commencement of the contract.
- Minor trimming: As required to complete the works as documented.

### 1.2 CROSS REFERENCES

**General**

Requirement: Conform to the following:

- *General requirements*.
- *Environmental Management plan*
- *Site Management Plan*

### 1.3 INTERPRETATIONS

**Definitions**

General: For the purposes of this worksection the following definitions apply:

- Clearance authority: Any authority covering statutory requirements relating to the project and requiring clearances for work in that particular area.
- Clearances: A formal certificate, approval or condition issued by a statutory authority to allow work to be carried out in a particular area.
- Contamination of land: The presence of a substance in, on or under the land which is a designated hazardous material and/or is at a concentration above that which is normally found in that locality, such that there presents a risk of harm to human health or to the environment.
- Green and organic waste: Includes all food wastes, vegetative wastes from land clearing and pruning operations, biosolids produced from the treatment of liquid wastes, garden wastes and forestry waste (bark and saw dust) and paper and cardboard products.
- Environment: The physical factors of the surroundings of human beings including the land, waters, atmosphere, climate, sound, odours, tastes, the biological factors of animals and plants and the social factor of aesthetics.
- Environmental audits: A review of environment management practices, in particular the evaluation of a site for environmental liability.
- Environmental impact assessment: A method for predicting environmental impacts of a proposed development including minimising identified impacts.
- Environmental management plan (EMP): A plan describing the management of the environmental issues and considerations for the activity being undertaken. This applies to the design, construction and operation of the buildings and infrastructure.
- Pollution incident: An incident or set of circumstances during or as a consequence of which there is, or is likely to be a leak, spill or other escape of a substance as a result of which pollution has occurred, is occurring or is likely to occur.
- Weed: An invasive plant that degrades our natural areas, reduces the sustainability or affects the health of people and animals.

### 1.4 MANAGEMENT AND CONTROL

**Plans submitted by the contractor**

Implementation: Approved management plans documented in **Submissions**.

**Management and control measures**

## 1.5 SUBMISSIONS

**Submissions program**

Time for submissions: Before start of construction

Training program: Submit a program to familiarise staff regarding the site Environmental Management Plan, environmentally sensitive areas and responsibilities.

**Environmental management plan (EMP)**

EMP: Submit an Environmental management plan and include the following details:

- Assignment of responsibility for environmental controls.
- Conditions of approvals, licences and permits to meet statutory requirements.
- Details of potential environmental impacts and operational control measures that are to be implemented including:
  - . Heritage.
  - . Preservation of visual values.
  - . Protection of endangered species.
  - . Preservation of habitat.
- Details of environmental protection for each activity.
- Locations of environmental controls and environmentally sensitive areas.
- Communication procedures.
- Emergency response procedures including response time.
- Environmental training plan and procedures.
- Environmental auditing program.
- Other items necessary to protect the surrounding environment.

Address the phases of activity, as appropriate:

- Before construction and site establishment.
- During construction.
- After construction, including rehabilitation activities and maintenance of erosion and sedimentation controls.

Preliminary environmental management plan: Submit with the tender documentation.

Completed environmental management plan: Submit before work commences on site.

**Soil erosion and sediment control plan**

Plan: Submit a soil erosion and sediment control plan and include the following details:

- Staging of operations and sequence of works.
- Diversion of upstream water around the site.
- Provision of temporary drains and catch drains.
- Application of diversion, dispersal and/or retention measures to concentrate flows to control and dissipate stormwater through the site without damage.
- Spreader banks or other structures to disperse concentrated runoff.
- Temporary grassing or other treatments such as contour ploughing or bunding to disturbed areas and long-term stockpiles.
- Restoration of disturbed areas in progress with the works.
- Use of mulch materials to protect disturbed or exposed areas where suitable.

Areas: Include all site areas and access and haulage tracks, borrow pits, stockpile and storage areas and compound areas.

**Waste management plan**

Plan: Submit a waste management plan and identify major waste streams that will be generated during the contract including:

- Green waste and organic waste.
- Construction waste, including:

  . Spoil.
  . Demolition waste.
  . Asphalt or bitumen.
  . Concrete
  . Metal.
  . Paint materials and empty containers.
  . Office waste.
  . Kitchen waste.
  . Sewage effluent.
- For each waste stream indicate:
  . How and where the waste is to be re-used, recycled, stockpiled or disposed off.
- How the waste will be transported between the site and point of re-use, recycling, stockpiling, treating or disposal and who will be responsible.

Plan: Submit details of location, labelling and protection of separate skips for the identified waste stream.

**Ground contamination control plan**

Plan: Submit a ground contamination plan and include the following details:

- If the land is identified as contaminated, or the presence of acid sulphate soils is found, prepare a Remediation Action Plan (RAP) in accordance with the Environmental Protection Authority (EPA) guidelines.

**Weed management plan**

Details required:

- Identify weeds and infestation zones within the work site/investigation period.
- Method of cleaning vehicles and machinery and cleaning date.
- Cleaning bay location and treatment date.
- Contaminated fill stockpile, treatment type and treatment date.

**Site preparation**

Mulching: Submit details of provisions for mulching cleared vegetation.

**Internal monitoring**

Documents: Provide documented procedures describing:

- How environmental monitoring is to be planned, implemented and recorded.
- Non-conformance control and corrective action procedures for all of the control measures that are to be implemented.

Records: Maintain records of the results of environmental monitoring, including the effectiveness of any remedial action taken.

Internal monitoring personnel: Provide staff member's names and contact details.

Machinery and equipment: Provide details of proposed plant.

**Emergency response**

Emergency response personnel: Provide staff member's names and contact details.

**Weed management personnel**

Submit details of:

- Subcontractors who will treat weed infestations.
- Chemical handlers, qualifications, date, and spray type.

## 1.6 INSPECTION

**Notice**

Inspection: Give notice so that inspection may be made of the following:

- Enclosures to trees to be retained.
- Trees to be removed.

## 2 EXECUTION

### 2.1 GENERAL

**Community liaison**
General: Notify residents about new or changed construction activities which will affect access to, or disrupt the use of, their properties.

Notice: 5 working days unless the work is of an urgent nature with safety implications.

Notification content:

- The nature of the work.
- The reason for it being undertaken.
- The expected duration.
- Changes to traffic arrangements and property access.
- The 24-hour contact number of the responsible representative.

**Legislative requirements**
Conditions of Development Approval relevant to environment controls:

Environmental Impact Statement issues relevant to environment controls:

**Complaints**
Report: Within 1 working day of receiving a complaint about any environmental issue, including pollution, submit a written report detailing the complaint and action taken.

Register: Keep a register of all environmental complaints and action taken.

**Cultural heritage**
Known cultural heritage site/areas:

Training: Ensure that all personnel working on site have received training relating to their responsibilities regarding cultural heritage and are made aware of any sites/areas, which must be avoided. Mark-up such sites/areas on a site map and make available to all relevant personnel during the works.

Notice: Give notice if any item is encountered which is suspected to be an artefact of heritage value or any relic or material suspected of being of Aboriginal or early settlement origin.

Action: Stop construction work that might affect the item and protect the item from damage or disturbance.

**Aboriginal sacred sites protection**
Enabling certificate:

Protection plan:

Identification measures:

Procedure following a breach of condition:

**Clearances**
If required obtain clearances from the following authorities:

### 2.2 CONTROL AND PROTECTION

**Air quality control**
General: Protect adjoining owners, residents and the public against dust, dirt and water nuisance and injury. Use dust screens and watering to reduce the dust nuisance.

**Lighting of fires**
Prohibition: Do not light fires.

**Noise control and vibration**
Maximum noise level at the site boundary:

Noise control measures:

Monitoring: Measure vibration levels of the peak particle velocity to AS 2187.2.

Limits: Do not exceed the vibration or airblast overpressure recommended in AS 2187.2 Appendix J.

**Dust control**
Dust control measures:

**Vegetation and fauna**

Wild life protected: All native.

Trees to be removed: Inspect to establish if nesting native fauna are present. If present give notice.

Pruning: To AS 4373.

**Water quality**

Wash out: Ensure that wash out does not enter waterways or stormwater drains.

Cross connection: Ensure that there are no cross connections between the stormwater and the public sewerage system.

**Dewatering**

General: Keep groundworks free of water. Provide and maintain slopes, crowns and drains on excavations and embankments to ensure free drainage. Place construction, including fill, masonry, concrete and services, on ground from which free water has been removed. Prevent water flow over freshly laid work.

Disposal: Dispose of water off site.

## 2.3 MANAGEMENT AND CONTROL MEASURES

**Environmental management plan (EMP)**

Assignment of responsibility for environmental controls:

Conditions of approvals, licences and permits to meet statutory requirements:

Implementation and control measures for the following potential environmental impacts:

- Heritage:
- Preservation of visual values:

Locations of environmentally sensitive areas:

Environmental controls for environmentally sensitive areas:

Environmental training plan and procedures:

Environmental auditing:

- Third party auditors:
- Scope of work:
- Audit program:

Environmental control measures particular to the following phases of activity:

- Before construction and site establishment:
- During construction:
- After construction, including rehabilitation activities and maintenance of erosion and sedimentation controls:

Completed environmental management plan: Submit before work commences on site.

Training program: Submit a program to familiarise staff regarding the site Environmental Management Plan, environmentally sensitive areas and responsibilities.

**Soil erosion and sediment control plan**

Staging of operations and sequence of works:

Diversion of upstream water around the site:

Provision of temporary drains and catch drains:

Stormwater control:

Diversion:

Dispersal:

- Retention:
- Contour ploughing or bunding to disturbed areas and long-term stockpiles:

Restoration of disturbed areas in progress with the works:

Use of mulch materials to protect disturbed or exposed areas where suitable:

Areas: Include all site areas and access and haulage tracks, borrow pits, stockpile and storage areas and compound areas.

**Waste management plan**

Establish major waste streams that will be generated during the contract including:

- Green waste and organic waste.
- Construction waste, including:
  - . Spoil.
  - . Demolition waste.
  - . Asphalt or bitumen.
  - . Concrete
  - . Metal.
  - . Paint materials and empty containers.
  - . Office waste.
  - . Kitchen waste.
  - . Sewage effluent.
  - . Hazardous materials.

Identification: Submit details of location, labelling and protection of separate skips for the identified waste stream.

**Ground contamination control plan**

Ground contamination:

- Contaminant:
- Acid sulphate soils:

Remediation Action Plan (RAP):

- Stockpile sites: Locate on previously cleared areas.

**Weed management plan**

Weed species:

Weed infestation zones:

## 2.4 TRUCK CONTAMINATION

**Truck contamination precautions**

Covers: Use tarpaulins to prevent the dropping of materials on public roads.

Washing: Wash the underside of all vehicles leaving the site as follows:

- Mud: Do not carry mud on to adjacent paved streets or other areas.
- Noxious plants: If noxious plants, as designated by the Local Authority, are present on the site ensure seeds are not carried on to adjacent paved streets or other areas.

**Wheel wash/shaker bay**

Facilities: Provide the following:

Shaker area size:

- Surface: Crushed concrete or rock of between 100 mm and 200 mm rough diameter.
- Services: High pressure hose water supply.
- Location: Site the shaker bay and provide berms as required to drain to grassed areas of the site and allow infiltration to the subsurface.

## 2.5 MANAGEMENT AND CONTROL PLAN IMPLEMENTATION

**Approval**

Approval authority:

**Implementation**

General: Implement the following approved management and control plans:

- Environmental management control plan.
- Soil erosion and sediment control plan.
- Air quality control plan.
- Waste management plan.
- Ground contamination plan.

- Weed management plan.

**Reporting**

General: Compile the environment management plan (EMP) reports regularly to report the progress in relation to:

- Performance against statutory requirements.
- Performance against the EMP and the EMP policy, ecologically sustainable development outcomes and targets.
- Summary of monitoring, inspection and audits.
- Summary of reports required to meet the statutory requirements.
- Summary of environmental emergencies, incidents, non-compliance and complaints.

## 2.6 SITE NURSERY

**Temporary works**

Perimeter: Provide a bund wall of compacted fill as follows:

- Height: 400 mm.
- Batter grade: 2H:1V.

## 2.7 TEMPORARY LANDSCAPE FENCING

**Fence dimensions**

Height: 1200 mm.

Maximum post spacing: 5000 mm.

**Components sizes**

Corner and gate posts: Hardwood or preservative-treated softwood, 250 mm diameter.

Intermediate posts: Star picket.

Gate: Provide a suitable hinged gate with a gate latch.

Wire: Top, intermediate and bottom rows of 3.2 mm plain galvanized steel wire. Thread the top wire through pieces of plastic tube and through corner posts.

**Removal**

Completion: Remove the fence at the end of the planting establishment period.

## 2.8 TREE PROTECTION

**Standard**

General: Comply with the recommendations of those parts of AS 4970 which are referenced in this worksection.

**General**

Warning sign: Display a sign in a prominent position at each entrance to the site, warning that trees and plantings are to be protected during the contract. Remove on completion.

Lettering: Road sign type sans serif letters, 100 mm high to AS 4970 Appendix C.

Protection measures program: Before commencement of earthworks.

**Trees to be retained**

Extent: All trees NOT marked for removal.

**Tree protection**

Tree protection zone: To AS 4970 Section 3.

Tree protective measures: To AS 4970 Section 4.

Monitoring and certification: To AS 4970 Section 5.

## 2.9 EXISTING SERVICES

**Marking**

General: Before commencing earthworks, locate and mark existing underground services in the areas which will be affected by the earthworks operations including clearing, excavating and trenching.

**Excavation**

General: Do not excavate by machine within 1 m of existing underground services.

Location: DIAL 1100 BEFORE YOU DIG is a free service, from anywhere in Australia, of identifying underground pipe and cables (possible within two working days). See www.1100.com.au.

## 2.10 TREES TO BE REMOVED

**Designation**

Marking: Mark trees and shrubs to be removed as follows:

- Location: 1000 mm above ground level.

## 2.11 SITE CLEARING

**Extent**

General: Clear only the following site areas:

- Areas to be occupied by works such as structures, paving, excavation, regrading and landscaping.
- Other areas designated to be cleared.

Contractor's site areas: If not included within the areas documented above, clear generally only to the extent necessary for the performance of the works.

**Clearing and grubbing**

Clearing: Remove everything on or above the site surface, including rubbish, scrap, grass, vegetable matter and organic debris, scrub, trees, timber, stumps, boulders and rubble.

Grubbing: Grub out stumps and roots over 75 mm diameter to a minimum depth of 500 mm below subgrade under buildings, embankments or paving, or 300 mm below finished surface in unpaved areas. Backfill holes remaining after grubbing with sand material to prevent ponding of water. Compact the material to the relative density of the existing adjacent ground material.

Old works: Remove old works, including slabs, foundations, pavings, drains and manholes found on the surface.

## 2.12 TRANSPLANTING

**General**

General: Conform to **Transplanting schedule**.

Notice: Give notice prior to:

Conditions: Select a time for transplanting having regard to the appropriate season, time of actual operation, rootball diameter and depth, lifting methods and weather conditions.

**Preparation**

Watering: Establish a temporary trickle irrigation system, or manually water the intended trees for a period of two weeks prior to ball excavation work.

Fertilising: Apply one application of liquid fertiliser mix to the foliage and root as appropriate to the species. Apply sufficient liquid fertiliser mix to allow the spray to drip from foliage and soak into the root ball. Do not spray the fertiliser mix on excessively hot, dry or windy days.

**Root ball**

General: Minimise the cutting of roots. Use only sharp tools, water blasting or water cutting.

Initial cut:

- Manually or by chain trenching machine. Trees whose root balls have been excavated by backhoe or excavator will be rejected.
- Located 250 mm beyond the required finished root ball dimensions of each side to allow any damaged roots to be trimmed back to final dimensions and sealed.

Hand trimming:

- To 100 mm less than the required finished root ball dimension. Cut back all roots greater than 25 mm diameter.

Outcome: Cut root ball to be:

- Symmetrical about the trunk and in proportion to the overall size of the tree except where the limitations of individual tree planter openings requires specific tailoring of the root ball dimension.
- Notwithstanding the above, cut the root ball shall be cut to a size designed to maximise the root ball in the best interests of each specimen.

Trench: Backfill and lightly compact with clean sand, free of any foreign matter, pathogens or any substances likely to be deleterious to future root growth. Apply sufficient root inducing formulation, at the manufacturer's recommended concentration, to effectively saturate the backfill in the trench.

**Maintenance of on-site plant material**

Watering: Maintain a trickle irrigation system around each tree, located within the trenched root ball perimeter. Program the system to supply water at an optimum rate to encourage healthy growth and avoid desecration through excessive transpiration following the pruning of the roots. Monitor the system continuously until the tree is lifted and removed to it's final destination.

Fertilising: Submit a program for regular fertiliser applications continued over this period.

Responsibility: Take any other precautions required to safeguard the health and well being of all on site plant material prior to the lifting and transplanting of all such stock into their finished location.

**Above ground**

Pruning: If selected pruning of branches appears necessary to balance root loss obtain prior approval. Prune only as directed and as specified in **Tree maintenance.**

Lifting: Thoroughly irrigate to the full depth of the rootball two days prior to transplanting of each specimen. Do not fracture the ball of soil around the root system. Maintain ball in firm condition during transplanting by wrapping in hessian or other appropriate open weave material, securely tied.

Storage: Transport transplanted trees to a designated nursery site. Store and maintain until ready for planting.

Planting: Avoid disturbance to the rootball during moving and planting. After placement, remove the rootball wrapping and ties by cutting.

Watering: At the completion of transplanting, water the root ball thoroughly and continue to water until established.

**Transplanting schedule**

| Species | Method | Pruning |
|---|---|---|
| | | |
| | | |
| | | |

## 2.13 TREE MAINTENANCE

**General**

General: Conform to the **Tree maintenance schedule**.

Notice: Give notice prior to commencing tree maintenance.

Work on trees: If it is necessary to perform any work on trees to be retained, give notice.

Pruning requirements: All pruning to be carried out in accordance with AS 4373 and Occupational Health and Safety Act 1983 and the relevant industry code of practice. Works to be carried out by a fully qualified and experienced arborist. Carry out all required works in a safe and progressive manner.

**Execution**

Repair: Undertake tree surgery and make good damage to existing trees noted to be retained.

Operations: Remove dead and decayed wood or limbs that have been broken. Make all cuts at branch collars. If trees show signs of deterioration after the work has been done, carry out a program of soil amelioration such as soil aeration, irrigation or incorporation of organic material. Continue this program until the end of the Plant Establishment Period.

Root pruning: Do not unduly disturb the remaining root system. Cut off damaged roots cleanly inside the exposed or damaged area. Cover exposed root area with soil immediately. Do not leave roots exposed.

Wetting and new root stimulation: Form a water collecting basin and apply a rooting hormone and wetting agent to the rootball.

Precautions: Avoid damage to trees being treated or to nearby trees and surroundings. Do not use trees as anchors for winching operations or bracing. Provide bracing as necessary before cutting to prevent uncontrolled breakages and damage to surroundings.

Failure: If repair work is impracticable, or is attempted and is rejected, remove the tree and root system and make good.

**Tree maintenance schedule**

| Tree species | Description of work |
|---|---|
| | |
| | |
| | |

## 2.14 SEDIMENT FILTERS

**General**

Inspection: For displacement, undercutting, over-topping and soil buildup, after each rain event. Effect repairs immediately.

Removal: When the upslope areas have been permanently stabilised.

**Straw bale filters**

Description: Temporary structures made of straw bales (cereal straw) laid end to end across direction of stormwater flow in order to filter sediment.

Slopes: If filter is at toe of a slope, place bales 1500 – 2000 mm away from slope, to provide access for maintenance and to allow coarse sediment to drop out of suspension before reaching sediment filter.

Binding: Wire-bound or with string-tied bindings wrapped around the bale sides.

Installation:

- Trench:100 mm deep trench the width of a bale and the length of the proposed sediment filter.
- Placing: Lengthwise in the trench with ends tightly abutting and corners lapped.
- Fixing: Drive two 50 x 50 mm wooden stakes or metal star pickets through each bale. Ensure bales are packed closely and staked securely. Eliminate gaps with loose straw wedged between tight.

Backfilling: Compacted excavated soil to ground level on downhill side of barrier, and 100 mm above ground level on the uphill side of the bales.

**Silt fence**

Description: A temporary barrier of geotextile, supported on wire or mesh fencing in order to filter sediment from stormwater flow.

Slopes: If filter is at toe of a slope, locate fence 1500 – 2000 mm away from slope, to provide access for maintenance and to allow coarse sediment to drop out of suspension before reaching sediment filter.

Contours: Locate fence line and posts along contours curving upstream at the sides to direct flow toward middle of the fence.

Installation:

- Trench: 100 mm wide x 200 mm deep along line of posts and upslope from barrier.
- Posts: 1200 mm long pre drilled steel star picket posts at 3000 mm centres, driven 600 mm and fitted with plastic safety caps.
- Wire mesh: ≥ 14 gauge x ≤ 150 mm mesh spacing. Fasten wire mesh to upslope side of posts with 25 mm long heavy-duty wire staples and tie wire. Extend wire mesh 150 mm into trench.
- Filter: Geotextile selected to suit local soil conditions cut from a continuous roll to minimise joints.
- Fixing: Wire ties to the uphill side of fence posts, and extended 200 mm into the trench. Do not staple onto trees.
- Joints: 150 mm overlap at a support post, with both ends fastened to the post.

Performance: Retain soil found on site but with openings large enough to permit drainage and prevent clogging.

Fence height: 600 mm average.

Backfilling: Backfill trench over toe of geotextile and compact soil.

**Straw bale - geotextile filters**

Description: Sediment filter comprising straw bales and geotextile.

Slopes: If filter is at toe of a slope, place bales 1500 – 2000 mm away from slope, to provide access for maintenance and to allow coarse sediment to drop out of suspension before reaching sediment filter.

Binding: Wire-bound or with string-tied bindings wrapped around the bale sides.

Bale installation:

- Trench: 100 mm deep trench the width of a bale and the length of the proposed sediment filter.
- Placing: Lengthwise in the trench with ends tightly abutting and corners lapped.
- Fixing: Drive two 50 x 50 mm wooden stakes or metal star pickets through each bale. Ensure bales are packed closely and staked securely. Eliminate gaps with loose straw wedged between tight.

Geotextile installation:

- Geotextile selected to suit local soil conditions cut from a continuous roll to minimise joints.
- Fixing: Staple geotextile to top of straw bale and extend down the uphill face of the bale into the trench. Stretch the geotextile and peg securely into the subgrade.
- Joints: 150 mm overlap at a support post, with both ends fastened to the post.

Performance: Retain soil found on site but with openings large enough to permit drainage and prevent clogging.

Backfilling: Compacted excavated soil to ground level on downhill side of barrier, and 100 mm above ground level on the uphill side of the bales against and over toe of the fabric.

## 2.15 DISPOSAL OF MATERIALS

**Disposal**

Spoil: Remove cleared and grubbed material from the site and dispose of legally.

Burial: Bury concrete and other inorganic fragments as follows:

- Location: Beyond built or paved areas.
- Depth: > 600 mm from finished ground level to the top of the object.
- Compaction: Eliminate voids.

**Mulch**

Seed free aerial vegetative matter: Put through a chipper. Reduce to pieces not larger than 75 x 50 x 15 mm and stockpile for re-use as mulch.

Material not permitted: Leaf matter and tree loppings from privet, camphor laurel, coral tree, poplar, willow and noxious weeds.

## 2.16 HABITAT PROVISION

**Requirements**

Material: Felled trees and excavated rocks.

## 2.17 COMPLETION

**Temporary works**

**Joining up**

Abutments: Join new and existing work including cutting if required, in the manner appropriate to the materials and make good to existing work.

**Clean up**

Progressive cleaning: Keep the work under the contract clean and tidy as it proceeds and regularly remove from the site rubbish and surplus material arising from the execution of the work including any work performed during the Defects Liability Period or the Plant Establishment Period.

Removal of plant: Within fourteen days of the date of Practical Completion, remove Temporary Works, Construction Plant, buildings, workshops and equipment not forming part of the Works, except such as are required for work during the Defects Liability Period or the Plant Establishment Period. Remove these on completion.

## 2.18 VERMIN

**Vermin management**

Requirement: Employ an approved firm of pest exterminators and provide a certificate from the firm stating that the completed building is free of vermin.