Checklist – CAC031M
Landscape and Revegetation Works – Establishment and Monitoring (MRTS16)

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| **Contractor** |  | **Certificate No.** |  | **Commencement Date** |  |
| **Contract No.** |  | **Lot Name** |  | **Establishment** |  | **Monitoring** |  |

| Reference | Requirements | Addressed | Comments / Observations |
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| Cl 9.1 | **Establishment Period (minimum 90 days)*** The Establishment Period may commence:
* when the installation of treatments is deemed compliant with the contract landscape documentation, specification and standard drawings, and
* upon issuing of a *Certificate of Commencement of the Establishment Period* by the Administrator. Milestone
* Where the Contractor has installed vegetation works in a series of defined Lots:
* a Certificate of Commencement of the Establishment Period may be issued for each defined Lot.
* the Contractor shall maintain an indicative spatial plan and records of Lots, as part of the Monthly Program and Inspection Report.
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| Cl 9.1.1Cl 9.1.2 | **Establishment Period Operations*** Ensure establishment operations are undertaken progressively throughout the Establishment Period to identify potential remedial actions and ensure treatments establish and meet the completion criteria specified in Clause 9.1.2. Leaving the repair and re-installation of defect works to between the penultimate and final inspection dates presents a high risk of not meeting the completion criteria. It also diminishes the establishment of the re‑worked treatments and potentially transfers liabilities to the department.
* Conduct joint inspections at least monthly.
* Conduct regular soil moisture checks to ensure adequate water is being applied relative to Site and seasonal conditions.
* Conduct an interim evaluation four weeks after installation for each Lot, in accordance with Clause 9.1.1.6. Hold Point 14
* Confirm repair and re‑installation of treatments have occurred within seven days of being identified through the monthly inspection program.
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| Cl 9.1.1.12Cl 9.2.1.12 | **Monthly Program and Inspection Reports (Establishment and Monitoring Periods)*** A Monthly Program and Inspection Report has been submitted to the Administrator every month within seven days of the joint inspections.
* Inspections of vegetation treatments are occurring at least monthly.
* The Monthly Program and Inspection Report includes:
* An indicative spatial plan and tables clearly identifying Lots, their commencement date and relative progress.
* A watering program for each Lot:
* establishment period Clause 9.1.1.1
* monitoring period Clause 9.2.1.1.
* Watering works undertaken:
* application dates and volumes.
* Monthly program of maintenance operations:
* establishment period Clauses 9.1.1.2 – 9.1.1.11
* establishment period – interim evaluation date and record of outcomes for each Lot, in accordance with Clause 9.1.1.6.
* monitoring period Clauses 9.2.1.2 – 9.2.1.11.
* Record of maintenance operations undertaken:
* dates of maintenance visits, intervention operations, repair and re‑installation works and inspections
* date of re‑fertilising operation (refer Clause 9.1.1.2)
* date of mulch top-up operations (refer Clause 9.1.1.11).
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| Cl 9.1.1.12Cl 9.2.1.12 | **Monthly Program and Inspection Reports (Establishment and Monitoring Periods) continued*** Record of issues identified during inspections, their general locations on marked up plans and actions required to remedy these including but not limited to:
* failed or failing vegetation treatments, and suspected cause of failure repair or re‑installation of failed treatments
* weed problems and associated management / spraying operations, including details on major weed species and type of intervention / herbicide controls
* pest and disease problems and associated management operations, including details on major pests and type of pesticide / fungicide controls
* mowing / slashing requirements.
* Damage to vegetation caused by vandalism or theft of vegetation. Vandalism and theft claims shall be supported by photographic evidence and/or police report.
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| Cl 9.1.1.1Cl 9.2.1.1 | **Watering (Establishment Period)*** Sufficient programming and documentation of watering operations has been included in the Monthly Program and Inspection Report, including:
* A watering program for each Lot detailing:
* frequency (includes dates) and volumes of watering operations
* parameters around when water is not required, *(for example, when rain events above 20 mm occur and so on)*
* parameters for when additional watering is required *(for example, temperatures above 36° or prolonged periods of westerly / northerly winds greater than 15 knots)*
* specific watering requirements in Clause 4.1 of the Annexure MRTS16.1 (where provided) have been implemented
* *ensure soil moisture is maintained to promote plant health and to achieve the completion criteria. Once seeding treatments germinate, it is critical to keep watering or seedlings will perish.*
* Where a temporary irrigation system is being used, confirm:
* is it delivering adequate water to all areas?
* has the system been removed prior to handover?
* Watering operations are not:
* causing runoff and erosion damaging landscape treatments
* spraying, flowing or ponding onto paved areas.
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| Cl.9.2.1.1 | **Watering (Monitoring Period)*** Sufficient programming and documentation of watering operations has been included in the Monthly Program and Inspection Report, including a watering program for each Lot:
* anticipated frequency (includes dates) and volumes of watering operations
* parameters around when to water and when not to water
* specific watering requirements in Clause 4.1 of the Annexure MRTS16.1 (where provided) have been implemented.
* Where a temporary irrigation system is being used, confirm:
* is it delivering adequate water to all areas?
* the system has been removed prior to handover.
* Watering operations are not causing runoff and erosion damaging landscape treatments, spraying, flowing or ponding onto paved areas.
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| Cl 9.1.1.2 | **Fertilising (Establishment Period)*** Has re‑fertilising of the Lot occurred at the specified rates six weeks after installation?
* If vegetation is showing signs of nutrient deficiency (yellowing, poor / stunted growth for example), have trace elements and/or microbial inoculants been identified and applied in the fertilising program to ensure plant health and achievement of the completion criteria?
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| Cl 9.2.1.2 | **Fertilising (Monitoring Period)*** If vegetation is showing signs of fertility or nutrient deficiency (yellowing, poor / stunted growth), has additional fertiliser been applied in the fertilising program to ensure plant health and achievement of the completion criteria?
* Have container stock treatments been fertilised with an all‑purpose controlled / slow release fertiliser, one month prior to the completion of the Monitoring Period?
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| Cl 9.1.1.3Cl 9.2.1.3Cl 8.3 | **Weed control (Establishment and Monitoring Periods)*** Lots are presenting generally weed free and weeds are being regularly managed (minimum monthly interventions) throughout the duration of the Establishment and Monitoring Periods? *If weeds are left unchecked, or only maintained towards the end of the period, it is highly probable weed issues will be an ongoing issue for the department.*
* All prohibited and restricted Biosecurity Matters are addressed as per MRTS51 *Environmental Management* and the EMP‑C.
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| Cl 9.1.1.4Cl 9.2.1.4Cl 8.3 | **Pest and Disease Control (Establishment and Monitoring Periods)*** Does vegetation show any sign of diseases or pests, and if so, have they been identified and treated accordingly?
* All prohibited and restricted Biosecurity Matters are addressed as per MRTS51 *Environmental Management* and the EMP‑C.
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| Cl 9.1.1.5 | **Protection of vegetation works*** Appropriate temporary measures have been installed to protect newly installed vegetation works? *Most seeding treatments are susceptible to damage from water sheet flows and concentrated flows and will not stabilise a surface until cover crop is established.*
* Temporary measures have been removed prior to the completion of the Establishment Period.
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| Cl 9.1.1.6 | **Interim evaluation (Establishment Period)** Hold Point 14* Four weeks after installation of a treatment, evaluate performance against the criteria of Clause 9.1.1.6.
* If a treatment does not meet the criteria the Contractor shall determine likely cause, if any, and depending on outcome:
* adjust watering and fertilise, or
* repair or reinstate treatment, or a combination of above.
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| Cl 9.1.1.7Cl 9.2.1.7 | **Repair or re-installation of treatments (Establishment and Monitoring Periods)*** If a treatment is damaged or fails the Contractor shall:
* investigate and determine cause, and
* repair or reinstall the treatment within seven days of the issue being identified.
* *Depending on the type extent of re-installation, a new Certificate of Commencement of the Establishment Period may need to be issued for the Lot, or part of it.*
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| Cl 9.1.1.8Cl 9.2.1.8 | **Mowing, slashing and brush cutting (Establishment Period)*** Grass areas are being managed at the required intervention level, in accordance with Table 9.1.1.8? *Note more frequent intervention requirements for high profile areas.*
* Woodland / forest seeded areas have been left unmown but have been managed for weeds.

**Mowing, slashing and brush cutting (Monitoring Period)*** Grass areas have been managed at the required intervention level, in accordance with Table 9.2.1.8? *Note High Profile Areas are regularly mown.*
* Woodland / forest seeded areas have been left unmown but have been managed for weeds.
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| Cl 9.1.1.9Cl 9.2.1.9 | **Pruning (Establishment and Monitoring Periods)*** Are there pest and disease infested parts of plants that require pruning?
* Pest or disease infested pruning’s are disposed of offsite, in accordance with Clause 11 of MRTS04 *General Earthworks*.
* Are there trees which require formative pruning to promote canopy development or provision of height clearances and offsets around paths or public spaces?
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| Cl 9.1.1.10Cl 9.2.1.10 | **Selective removal of non‑complying vegetation (Establishment and Monitoring Periods)*** Non‑complying and potentially non‑complying vegetation has been removed, prior to the completion of the Period? *Refer Clauses 9.1.10 and 9.2.1.10 for typical examples of non‑compliant vegetation.*
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| Cl 9.1.1.11Cl 9.2.1.11 | **Topping up of mulch (Establishment and Monitoring Periods)*** Mulch has been topped up to its original depth (typically 100 mm mass areas and 150 mm around trees), within 30 days prior to the completion of the Period?
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| Cl 9.1.2 | **Establishment Period completion criteria*** At the completion of the *Establishment Period a Certificate of Completion of the Establishment Period* shall be issued by the Administrator. Milestone
* The Establishment Period has been completed for a given Lot when:
* The minimum ninety‑day duration, from the date of *Certificate of Commencement of the Establishment Period*, has been completed, and
* Where completion criteria in Clause 9.1.2 has been achieved.
* *Where completion criteria have not been achieved, the Establishment Period shall continue beyond the minimum ninety‑day until vegetation treatments meet the completion criteria.*
* Contracts without a Monitoring Period should be handed over to the Authority as a single package. *This may require some completed Lots to be held in a Monitoring Period for a short duration, until all Lots have completed their Establishment Period.*
* Where works are being handed over to an Authority after an Establishment Period, ensure the Region's Maintenance Operation representative (for example, RoadTek) and, where required, local government representative are present at the penultimate and final inspections to ensure all parties are aware of the new maintenance area/s and requirements? *Where the Region's maintenance is conducted by a private contractor (for example, SEQ), ensure a representative is also present.*
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| Cl 9.2 | **Monitoring Period*** The Monitoring Period shall commence:
* at the completion of the Establishment Period, when the *Certificate of Completion of the Establishment Period* is issued by the Administrator. Milestone
* at the issuing of a *Certificate of Commencement of the Monitoring Period* by the Administrator. Milestone
* Where the Contractor has installed vegetation works in a series of Lots:
* a *Certificate of Commencement of the Monitoring Period* can be issued for each Lot. *All Lots should preferably finish on the same date or project Milestone to allow the entire site to be handed back to the relevant Authority.*
* the Contractor shall maintain a Monthly Program and Inspection Report.
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| Cl 9.2.1 | **Monitoring Period operations*** Ensure monitoring operations, including the repair and re‑installation of treatments, are undertaken progressively to ensure adequate time for treatments to establish and meet the completion criteria and hand over to the Region or Authority. *Leaving the completion of defect works to between the penultimate and final inspection dates is high risk, diminishes the establishment of the re‑worked treatments and potentially transfers asset liabilities to the department.*
* Conduct joint inspections at least monthly.
* The Contractor shall care for the installed vegetation treatments to ensure their long‑term sustainability and to meet the completion criteria of Clause 9.2.2.
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| Cl 9.2.2 | **Monitoring Period completion criteria*** At the completion of the Monitoring Period a *Certificate of Completion of the Monitoring Period* shall be issued by the Administrator. Milestone
* Monitoring Period has completed for a given Lot when:
* The minimum duration of all Lots, from the date of *Certificate of Commencement of the Monitoring Period*, has been completed, and
* Completion criteria in Clause 9.2.2 has been achieved.
* *Where completion criteria have not been achieved, the Monitoring Period shall continue beyond the minimum duration until vegetation treatments meet the completion criteria.*
* All Monitoring Period lots must be handed over to the Authority in a single package at the completion of the Monitoring Period.
* Ensure the Region's Maintenance Operation representative (for example, RoadTek) and, where required, local government representative is present at the penultimate and final inspections to ensure all parties are aware of the new maintenance area/s and requirements? *Where the Region's maintenance is conducted by a private contractor (for example, SEQ), ensure a representative is also present.*
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| Additional issues for consideration |
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| Audited by: |  |  |  |
| Name |  | Signature |  | Date |  |