

Supplementary Specification

**MRC Supplementary Specification
8503 Bus Stops and Shelters**

Revision 3.0

February 2026



Contents

8503.1	Introduction.....	4
8503.1.1	Definition of Terms.....	4
8503.2	Referenced Documents	5
8503.3	Description of Work	6
8503.4	Quality Systems Requirements	6
8503.4.1	Std Test Methods (Testing Regime)	6
8503.4.2	Hold Points, Witness Points and Milestones.....	6
8503.4.3	Construction Tolerances.....	8
8503.5	Preliminary	9
8503.5.1	Materials.....	9
8503.5.2	Contractor's Personnel.....	9
8503.5.3	Environmental Plan	10
8503.5.3.1	General	10
8503.5.4	General Workplace Health and Safety Requirements.....	10
8503.5.4.1	Council Work Health Safety Contractor Requirements.....	10
8503.5.4.2	Permits for Work	11
8503.5.4.3	Safe Systems of Work / Risk Assessment	11
8503.5.4.4	Legislative Compliance	11
8503.5.5	Works Procedure.....	11
8503.5.6	Temporary Operations and Accessibility During Works.....	11
8503.6	Construction	12
8503.6.1	Work Operations	12
8901.6.1.1	Work Scope	12
8503.6.3	Site Establishment and Disestablishment	12
8503.6.3.1	Site Layout with Superintendent.....	13
8503.6.4	Carrying Out Civil Works (as required).....	13
8503.6.4.1	Demolition of Existing Infrastructure (as required)	13
8503.6.4.2	Supply and Install Site Drainage Culverts.....	13
8503.6.4.3	Earthworks.....	13
8503.6.4.4	Pavement and Seal Works (as required)	14
8503.6.4.5	Utilising or disposing of excavated material;	15
8503.6.4.6	Installation of footings and concrete slab (to bus shelter area only),.....	15
8503.6.5	Path of Travel Infrastructure Installation	15



8503.6.5.1	Peripheral Works.....	15
8503.6.6	Erection and Installation of Bus Shelter, Including Furniture and Signage	16
8503.6.6.1	Erection of Frame and Roofing Members as Required by MRC Standard Drawings	16
8503.6.6.2	Installation of Seating in Accordance with MRC Standard Drawings.....	16
8503.6.6.3	Installation of Bus Stop Signage	16
8503.6.7	Clean Up, Backfilling, and Turfing;.....	17
8503.7	Post Construction	17
8503.7.1	Collection and Submission of All As Constructed Data	17
8503.8	Measurement and Payment.....	17



8503.1 Introduction

This Supplementary Specification refers to works associated with the installation of bus stops and the supply and installation of bus shelters to new or existing bus stops in accordance with Mackay Regional Council standards, and the project Drawings.

The scope of this Specification is limited to the infrastructure required for the operation of a public transport bus stop as defined in the TMR Public Transport Infrastructure Manual (PTIM) and all applicable DDA / DSAPT requirements, and does not extend to works outside that operational extent.

Where discrepancies exist between PTIM and other technical references, the highest standard of accessibility shall apply.

8503.1.1 Definition of Terms

This section describes any term which are specific to this specification or requires clarification due to an ambiguous understanding.

Term	Definition
Path of travel	As applies to this specification to mean the path needed to travel in compliance with DDA legislation to safely access the bus stop, this may include footpaths, kerb ramps, street/road crossings, traffic islands.
DDA	Acronym for Disability Discrimination Act 1992.
PTIM	References the DTMR Public Transport Infrastructure Manual, and as applies to this specification Chapter 5 – Bus Stop Infrastructure.
Operational Extent	To be taken to have considered the following within the design; - interface of the stop with the wider pedestrian network - provision of appropriate pedestrian and/or cycling, shared use crossing facilities - kerb ramps - appropriate connection, shared or dedicated provision, quality, storage space, width and configuration (wider kerb ramps are preferred when pedestrians and cyclists share crossings) - accessible path width, grade, continuity and alternative paths - need and placement of pedestrian infrastructure such as rest points, railings, street furniture - provision and/or placement of end-of-trip amenity components (for example, storage, water, other amenities) - pedestrian walkway and waiting shade cover for sun and weather protection. - connection to existing or planned shared or neighbouring Cycle amenities.
DSAPT	Acronym for Disability Standards for Accessible Public Transport which is the standards set under the Disability Discrimination Act 1992.



8503.2 Referenced Documents

This supplementary specification shall be read in conjunction with the following:

- MRS01 *“Introduction to Specifications”*;
- MRTS01 *“Introduction to Technical Specifications”*;
- MRS50 & MRTS50 *“Specific Quality System Requirements”*;
- MRS70 & MRTS70 *“Concrete”*;
- MRS05 & MRTS05 *“Unbound Pavements”*;
- MRS03 & MRTS03 *“Drainage Structures, Retaining Structures and Embankment Slope Protections”*;
- MRS04 & MRTS04 *“General Earthworks”*;
- MRS14 & MRTS14 *“Road Furniture”*;
- MRS11,12,20,21,22 & MRTS11,12,20,21,22 as applicable for seal treatment;
- MRS30 & MRTS30 *“Asphalt Pavements”*;
- MRC Supplementary Specification 8503.1 *“Bus Shelters Annexure”*;
- MRC Supplementary Specification 8900, *“Saw Cutting Existing Surface”*;
- MRC Guideline *“List of Furniture and Materials”*;
- DTMR *“Chapter 5: Bus stop infrastructure”*;
- Translink Bus Network Infrastructure Signage Manual
- Commonwealth Disability Discrimination Act 1992 (DDA) and updates;
- Mackay Regional Council Standard Drawings:
 - A3-00859 *“Bus Shelter – Elevation & Details”*;
 - A3-00860 *“Bus Shelter – Structural Notes & Slab Details”*;
 - A3-00861 *“Bus Shelter – Double Sided - Elevation & Details”*;
 - A3-00862 *“Bus Shelter – Double Sided - Structural Notes & Slab Details”*;
 - A3-00863 *“Bus Stop Sign Details, J-Pole Style”*
 - A3-00871 *“Bus Stops – Regular Stop”*;
 - A3-00872 *“Bus Stops – Intermediate Stop”*;
 - A3-00873 *“Bus Stops – Premium Stop”*;
 - A3-00874 *“Bus Stops – Signature Stop”*;
 - A3-00875 *“Bus Stops – Rural Bus Stop”*;
 - A3-00876 *“Bus Stops – Indented Bus Bay”*;
 - A3-10345 *“Bus Stops - Minimum Boarding Point”*; and
- The project Drawings.

Where a Mackay Regional Council Standard Drawing is referenced or included as part of this specification it shall take precedence over the PTIM Appendix 5B for the Mackay region.



8503.3 Description of Work

Work items incorporated by this supplementary specification are identified in Section 8503.6 and 8503.7 with individual activities/tasks for measurement and payment sourced from the Bill of Quantities and listed in MRC Supplementary Specification Annexure 8503_1 Bus Stops and Shelters Section 1

8503.4 Quality Systems Requirements

The contractor shall prepare a quality plan reflective of the requirements of this specification and compliant with MRTS 50. The quality plan is to be submitted to the Superintendent for approval four (4) weeks prior to site works commencing.

MILESTONE

8503.4.1 Std Test Methods (Testing Regime)

The following minimum testing regime applies to this specification:

Unless otherwise stated the manufacturer certification of the bus shelter shall form the basis of the requirements, including Form 15 or RPEQ certification as required for the Engineering Design Drawings, and form 12/16 for construction and erection.

Civil works activities associated with the subgrade/floor of excavation, concrete pours, drainage installation, subbase and base courses, and seal surfacing shall be tested as per the relevant MRTS specification MRTS03, MRTS04, MRTS05, MRTS11/12/19/20/21/22, MRTS30, and MRTS70 unless otherwise approved by the Superintendent.

“As Constructed” survey of all installed infrastructure shall be carried out with the data submitted as required to meet with the Contractors quality plan and as required by the superintendent. The As-constructed survey shall demonstrate the works have been constructed in accordance with WUC, including levels, grades, threshold interfaces and tolerances specified, that meet Disability Discrimination Act (DDA) requirements.

8503.4.2 Hold Points, Witness Points and Milestones

Milestone

Milestone is a point within a project which marks the start or completion of an activity or compliance requirement. Generally associated with provision of records or data for verification with the projects contract and specification.

Hold Points

Hold points are noted on various Sections of this Specification.

“HOLD POINTS” are critical stages of the work, which require inspection by the Superintendent (or his nominated representative) and beyond which the Contractor will not be permitted to proceed without the written approval of the Superintendent.

A written “request for inspection” form shall be submitted to the Superintendent at least 48 hours prior to reaching the relevant “HOLD POINT”. One copy shall be submitted for each inspection. The signed copy will be handed back to the Contractor after the inspection to sanction work to proceed to the next stage or noting what work has to be done prior to re-inspection. This may involve inspection of the works by the Superintendent or approval of test results forwarded to the Superintendent by the Contractor.

Witness Points



Witness points are also important stages of work. However, these are not necessarily as critical work stages as defined by the hold points. Witness points are where the Superintendent (or his/her nominated representative) may review, witness, and inspect the work. The activities however may continue to proceed.

The following table represents the minimum inspection requirements for this specification;

Activity	Inspection Type	When	Reference
Construction Procedure and other submissions as required by Clause 8503.5	Milestone	4 Weeks prior to works commencing	8503.5
Inspection of delivered items	Hold Point	At delivery time for each item.	8503.6.2
Site layout of bus stop, including DTMR approval where on State Controlled Road	Hold Point	Prior to earthworks commencing	8503.6.3.1
Final location of shelter and footings, and any required drainage	Hold Point	During site survey layout prior to earthworks commencing.	8503.6.3.1
Demolition of existing infrastructure (as required)	Witness Point	Prior to commencement of civil works for new shelter	8503.6.4.1
Base of drainage culverts trench (as required)	Hold Point	After excavation of trench	8503.6.4.2
Bedding for culverts (as required)	Hold Point	Prior to laying culverts	8503.6.4.2
Culverts in laid and embedded (a required)	Witness Point	Prior to commencing backfilling operations	8503.6.4.2
Backfilling of culverts (as required)	Witness Point	After approval to proceed with backfilling	8503.6.4.2
Kerb ramp thickening	Witness Point	During prepour inspection	8503.6.4.3
Excavation and/or Embankment works of material, including installation of polythene sheeting	Witness Point	During earthworks activities	8503.6.4.3
Bed/Subgrade Excavation Floor proof roll	Hold Point	At completion of excavation and compacting	8503.6.4.3
Pavement saw cutting, as required	Hold Point	Marked out on site prior to commencing works	8503.6.4.4
Base course proof roll	Hold Point	After compaction	8503.6.4.4
Seal design	Hold Point	14 days prior to pavement proof roll	8503.6.4.4
Pavement seal	Hold Point	Prior to sealing of pavement	8503.6.4.4
Approval to proceed with asphalt works (as required)	Hold Point	After pavement seal works and prior to Asphalt works commencing	8503.6.4.4
Asphalt works	Witness point	After primer seal has been carried out and approval to proceed given	8503.6.4.4
Formwork and reinforcing prepour Inspection	Hold point	Prior to concrete pour proceeding	8503.6.4.6

Approval to strip formwork	Hold Point	After 70% strength gain	8503.6.4.6
Approval to backfill to slab	Hold Point	7 days after stripping and prior to installation of base course against kerb	8503.6.4.6
Carry out peripheral works as part of path of travel for bus stop	Hold Point	As required by the relevant specifications	8503.6.5.1
Installation of shelter, seats, panels, fencing, and TGSIs	Witness Point	After all other site works are completed and prior to clean up and turfing disturbed areas	8503.6.6.1 & 8305.6.6.2
Signage and linemarking installation	Witness Point	Approval to proceed 48 hours after seal works	8503.6.4.4 & 8503.6.6.3
Site clean up	Hold Point	At completion of all works prior to "On Maintenance" inspection	8503.6.7
"As Constructed" documentation submission	Hold Point	4 weeks prior to practical completion being requested.	8503.7.1

8503.4.3 Construction Tolerances

Unless otherwise approved by the Superintendent the following construction tolerances shall apply to this Specification;

The construction activity outcome shall not depart from the widths, lengths, heights, and shapes specified by the relevant specifications as applies to this specification;

- Concrete tolerances in accordance with MRTS70 Concrete;
- Earthworks tolerances in accordance with MRTS04 General Earthworks;
- Bedding, laying, and backfill to culvert tolerances in accordance with MRTS03;
- Pavement tolerances in accordance with MRTS05 Unbound Pavement;
- Seal Surfacing tolerances in accordance with MRTS11/12/19/20/21/22, and/or MRTS30;
- DDA compliance requirements prior to public use.

The accessible path of travel must maintain DDA compliant width, grade, and crossfall for its entire length, including transitions at driveways, pram ramps, islands, and temporary diversions. No point along the path shall exceed 1:40 crossfall or 1:20 longitudinal grade unless a compliant landing is provided.

Finished surfaces must be shaped to prevent ponding within 1.5 m of the boarding point or shelter entry. Overland flow paths must direct water away from the accessible boarding area. Minimum fall from the slab shall be 1% unless site constraints justify otherwise.

Trip edges must not exceed 5 mm at any construction joint, interface with existing pavement, or transition between materials.

Tolerances specific to the project are detailed on the design drawings and are included in Clause 2 of MRC Supplementary Specification Annexure 8503_1 Bus Stops and Shelters



8503.5 Preliminary

The Contractor is to submit the following documentation 4 weeks prior to commencing work or a prestart is conducted.:

- Works procedure;
- Third party approval of work procedure and other required documentation as required;
- Materials and bus shelter submission;
- Certification of bus shelter footing design and bus shelter design drawings;
- Personnel experience;
- Environmental Plan;
- Quality Plan;
- Erosion and Sediment Plan (as required for site/s);
- Traffic Management Plan and TGS's;
- Work Health & Safety Plan;
- Seal Design.

Other requirements unique to the project will be listed in the MRC Supplementary Specification Annexure 8503_1 Bus Stops and Shelters.

MILESTONE

8503.5.1 Materials

Bus shelters must be supplied from Council's preferred supplier and comply with Council's requirements unless otherwise approved by the Superintendent. Alternative materials or suppliers will only be considered where the Contractor has submitted details of the alternative and can demonstrate the bus shelter is of equivalent or better standard than that nominated in the MRC Guideline "List of Furniture and Materials".

MILESTONE

Supply of all materials to site is the responsibility of the Contractor at their cost, where items are Principal supplied the nominated storage site shall be obtained from MRC Supplementary Specification Annexure 8503_1 Bus Stops and Shelters Section 3 and shall be the point of supply.

Where existing shelters, seats, panels, and signage are to be salvaged unless instructed otherwise by the Superintendent MRC Supplementary Specification Annexure 8503_1 Bus Stops and Shelters Section 4 will detail the items to be salvaged and the nominated storage site. This will also include any reuse of existing items.

All civil items and materials shall be supplied in accordance with their relevant MRTS Specification.

8503.5.2 Contractor's Personnel

Personnel, sub-contractors and suppliers utilised in the preparation of the base, laying of the pavers, and their sealing shall be experience in the processes and activities required to carry out the works.

The Contractor shall provide documented evidence for the Superintendent's approval to demonstrate the experience, qualification, skills and training of proposed personnel, sub-contractors a minimum 4 weeks prior to works commencing.

MILESTONE



8503.5.3 Environmental Plan

The Contractors Environmental Plan shall be reflective of the requirements of MRTS51 and MRS51 and be submitted for approval by the Superintendent 4 weeks prior to site works commencing.

MILESTONE

8503.5.3.1 General

The Contractor shall remove all rubbish, debris, disused materials etc., from the Site. The Site shall be maintained in a clean state.

The Contractor shall be responsible for ensuring no debris is deposited on public or private rights of way because of the works outside of the immediate work area, including any deposits arising from the movement of plant and vehicles.

The Contractor shall keep pollution in the vicinity of the Works within reasonable minimum limits noting that this clause does not exempt the Contractor from complying with the limits controlled or required by legislation.

The Contractor shall collect, transport and dispose of waste at a registered waste facility.

8503.5.4 General Workplace Health and Safety Requirements

As a condition of this document, it is required that the Contractor and its workers (including all sub-contractors etc., and their workers) engaged to perform a service or work on site must at all times ensure (so far as reasonably practicable) the health and safety of all persons who are, or may be, affected by work under this Supplementary Specification or the services provided.

8503.5.4.1 Council Work Health Safety Contractor Requirements

As a minimum, the Contractor must ensure they and their workers (including all Contractor's sub-contractors etc.) comply with the following work health and safety requirements:

- Undertake Council Contractor and site inductions prior to commencing work.
- Ensure all workers are competent, and provide proof of competencies, licenses, and training on request.
- Have an approved safe system of work (including risk assessment) for the task and ensure the work is completed according to this safe system of work.
- Provide adequate supervision for all high-risk construction tasks.
- All incidents and near misses are to be reported to their Council representative within 60 minutes.
- Participate in Contractor pre-start meetings, safety interactions, site meetings and site inspections.
- Review information provided by Council such as site-specific hazards, risks and interaction issues and implement controls to, so far as reasonably practicable, eliminate, or if that is not possible, mitigate the risk.
- Supply safe plant and equipment with pre-start checks, maintenance/ service records and manufacturer's manual.
- For all hazardous chemicals, ensure current Safety Data Sheets (SDS) are available and that appropriate controls (including as required under SDS requirements) are implemented.
- Comply with Council Safety, Drug and Alcohol and Fitness for Work policies.
- Be familiar with applicable site emergency procedures, closest emergency assembly point and sign in and out of site registers where required.



- Compliance with any reasonable direction given by Council relating to work health and safety.

8503.5.4.2 Permits for Work

The Contractor must ensure applicable permits for the various work activities are completed and approval issued by the statutory body for those works, all requirements for submission, completion, and obtaining permits shall be at the Contractors cost.

8503.5.4.3 Safe Systems of Work / Risk Assessment

The Contractor must prepare and submit a safe method of work (risk assessment) and relevant controls prior to commencement of work.

The completed risk assessment is to be provided to the Superintendent for review and approval prior to works commencing. Safe Work Method Statements (SWMS) are required for all high-risk construction activities and Job Safety Analysis (JSA) or similar risk assessments are required for other tasks. The risk assessment (whether SWMS, JSA or other) must be reviewed and signed by the workers prior to undertaking the work.

MILESTONE

The Contractor shall implement a Safety Management System (SMS) that includes sections addressing the project scope.

8503.5.4.4 Legislative Compliance

Without limiting the Contractor's other obligations, the Contractor must comply with all Acts, Regulations, Standards and Codes of Practice about work health and safety matters that are applicable to the scope of work undertaken or services being provided.

8503.5.5 Works Procedure

The Contractor shall prepare a works procedure for all activities required under this specification which also address WH&S specific requirements for the site, this shall include but not be limited to the following;

- i. Site setup, including traffic management and public consultation;
- ii. Identification of underground utilities which impact the works and the proposed treatment to address the impacts;
- iii. Requirements for temporary operations of the bus stop during staged construction works;
- iv. Staging of works;
- v. Individual activity construction procedures, drainage, earthworks, pavement, surface sealing, concrete works, testing and inspections as required;
- vi. Timeline of works;
- vii. Collection of "As Constructed" data.

The works procedure shall be submitted to the Superintendent for approval four (4) weeks prior to site works commencing.

MILESTONE

8503.5.6 Temporary Operations and Accessibility During Works

During the construction phase the Contractor shall maintain temporary operations and accessibility of the bus stop during works, this shall include but not be limited to;

- Maintaining temporary accessibility during staged works;
- Fall protection around open slab/footing excavations; and
- Ensure all temporary boarding areas comply with DSAPT (consistent with temporary arrangements envisaged in PTIM Appendix 5A).



8503.6 Construction

Carrying out all works associated with the construction and installation of bus stops, shelters, and associated infrastructure including paths of travel with materials as specified on project drawings.

This section lays out the works operations with more detail based on specific requirements of this supplementary specification. Some activities may appear to include items which are stated within other specifications, the purpose is to reinforce that requirement specific to this supplementary specification.

8503.6.1 Work Operations

Work operations incorporated in this item are those included in Clause 2.1.5 of MRS01 "Introduction to Standard Specifications" and the following work scope activities and associated sub activities;

8901.6.1.1 Work Scope

The scope of works (including all associated sub activities) covered under this specification is as follows:

- Supply of all materials;
- Site layout with Superintendent;
- Temporary works to enable bus stop to continue to operate as required by DSAPT (PTIM Appendix 5A).
- Site Establishment and Disestablishment;
- Excavate and disposal of existing infrastructure;
- Earthworks to bus stop and path of travel as required;
- Insitu poured concrete slab to bus stop and pathways;
- Excavate, install and backfill culverts as required;
- Set up and install concrete slab, pathway, islands, kerb ramps, and fencing;
- Construction of roadway approaches (pavement and seal) to bus stop as required;
- Reinstate and/or install signage and linemarking;
- Install bus shelter and shelter furniture;
- Clean site;
- Collate and submit "As Constructed" data.

8503.6.2 Supply of All Materials;

All materials, plant and equipment, and labour required to carry out the works under this Specification is to be supplied by the Contractor, where the shelter and furniture is Principal supplied the designated storage site will be the point of supply for the purposes of this Specification.

The Contractor shall store all materials as required by the manufacturer and supplier, the location shall be included in the Contractors works procedure and be approved by the Superintendent.

All items shall be inspected at delivery to site prior to use. Any items which are damaged are not to be used and are to be returned to the supplier.

HOLD POINT

8503.6.3 Site Establishment and Disestablishment

The Contractor shall establish the work site in accordance with their submitted site plan and be approved by the Superintendent. If the site set up location is within private property or on a State controlled road



the Contractor shall submit to the Superintendent the DTMR and/or property owners written approval and any associated condition requirements at no cost to the Principal.

At the completion of works the Contractor must disestablish the site and return it to the preconstruction state or as agreed to with the relevant stakeholder (DTMR or property owner).

8503.6.3.1 Site Layout with Superintendent

Prior to any site works commencing the Contractor must mark out on site the location of all infrastructure to be installed as part of the bus stop installation or renewal. This includes works leading up to and away from the bus stop as required for the path of travel to be DDA compliant and any temporary measures to enable continued operations of the bus stop.

Upon completion of site marking the Contractor shall obtain the Superintendent approval to proceed prior to works commencing. Where the location of the bus stop is on a State Controlled road, as required a representative from DTMR shall be present to approve the location, alignment, and shoulder works associated with the installation of the bus stop.

HOLD POINT

Where a bus shelter is to be installed the final location of the footing (including slab as required) is to be marked out on site and shall be inspected and approved by the Superintendent prior to excavation commencing, also reviewing as required drainage culvert installation/s and drainage from the crossfall of the road.

HOLD POINT

8503.6.4 Carrying Out Civil Works (as required)

Civil works as applies to this specification includes works as required at the bus stop and along the path of travel to enable the bus stop to be DDA compliant. The works shall be carried out to comply with the relevant Specification for the activity and the requirements of the design drawings.

8503.6.4.1 Demolition of Existing Infrastructure (as required)

The Contractor shall carry out demolition works as required by the design drawings, all components identified for reuse shall be carefully taken up and stored for reuse. Where existing shelters or seats are damaged, bent, corroded, or non-compliant with current MRC standards, they shall not be salvaged for reuse.

Demolition materials not identified for reuse shall be disposed of by the Contractor at an approved Council waste facility.

WITNESS POINT

8503.6.4.2 Supply and Install Site Drainage Culverts

Where drainage culverts, headwalls, and aprons are required as set out in the design plans including along the "path of travel" excavation, bedding, culvert laying, and backfilling shall be carried out in accordance with the requirements of MRTS03 and MRTS04, with inspections, geotechnical testing, as constructed survey, and tolerance requirements applying unless stated otherwise in MRC Supplementary Specification Annexure 8503_1 Bus Stops and Shelters.

HOLD POINT

8503.6.4.3 Earthworks

Earthworks shall be carried out as required by the approved Contractors works procedure/s and be this specification and its annexure, where there is a lack of detail MRTS04 shall be complied with.



Stripping of topsoil shall be carried out as required by Clause 8 of MRTS04, the Contractor is to stockpile identified top soil for later use at a location approved by the Superintendent. The re-use as landscaping top soil shall be at the discretion of the Superintendent at the time of excavation. Testing for compliance to AS of the top soil shall be as required by the Superintendent.

All earthworks, embankment or excavation of material shall be to level and grade as per design drawings, vertical tolerances shall not exceed +5mm/-10mm.

Where a concrete slab is to be installed and poured as part of a bus stop with a bus shelter localised foundation excavation shall occur at the location of the kerb ramp to ensure the kerb ramp and its "flairs" have a minimum 215mm concrete thickness unless otherwise approved by the Superintendent.

WITNESS POINT

If unsuitable material is identified this is to be removed and replaced with approved material as per the instructions of the Superintendent.

Where the design drawings require a slab or pathway to be constructed on ground surfaces or foundation bedding a Polythene Sheeting is to be laid in accordance with MRTS70 prior to concrete being poured, the Contractor is to notify the Superintendent of the intention to pour concrete.

WITNESS POINT

All loose material is to be removed from the subgrade or excavated bed. Bed/subgrade preparation is to be carried out as per MRTS04 and is to be presented for inspection and proof roll (as required) for the Superintendent with inspections, geotechnical testing and as constructed survey requirements applying unless stated otherwise in MRC Supplementary Specification Annexure 8503_1 Bus Stops and Shelters.

HOLD POINT

8503.6.4.4 Pavement and Seal Works (as required)

Road pavement or shoulder to be excavated to design drawing levels and grades unless otherwise approved by Superintendent due to site constraints and pavement drainage requirements.

Where existing sealed pavement is required to be saw cut this shall be carried out in accordance with MRC Supplementary Specification 8900 – Saw cutting existing surface.

HOLD POINT

Supply, laying, compaction, and trimming of unbound pavement shall be carried out as per MRTS05 and design drawings.

At the time of the proof roll the pavement is to be presented for inspection by the Superintendent. Crossfall and pavement drainage are to be inspected to ensure no ponding of water will occur against the bus stop slab and all overland flows directed away from the access kerb ramp, Where there is no concrete slab the hardstand shall be finished to ensure overland flow of stormwater is directed away from the boarding point. Finished pavement surface shall be trimmed and finished to +/- 5mm's against bus stop/shelter slab.

HOLD POINT

Seal design is to be submitted to the Superintendent 14 days prior to pavement proof roll being requested.

HOLD POINT

Seal works are to be carried out as per the relevant MRT Specification and design drawings unless otherwise directed by the Superintendent, inspection of surface by the Superintendent prior to seal works commencing shall be carried out.

**HOLD POINT**

Where the design drawings nominate asphalt sealing the Superintendent shall give the approval to proceed after the required time has lapsed after primer seal.

HOLD POINT

Asphalt to be laid and compacted to the requirements of MRTS30.

WITNESS POINT

Line marking and signage shall be carried out in accordance with MRTS14 and MRTS45 respectively in accordance with the design drawings unless otherwise directed by Superintendent.

HOLD POINT**8503.6.4.5 Utilising or disposing of excavated material;**

Excess excavated materials shall be disposed of by the contractor or utilised as per Superintendents instructions. Material stockpiled shall ensure that all Environmental ESC measures are in place and maintained.

8503.6.4.6 Installation of footings and concrete slab (to bus shelter area only),

Where a Cantilever Shelter is installed, the concrete slab and footings shall be upgraded beyond standard footpath thickness. Minimum thickness and reinforcement shall follow the manufacturer's structural requirements and must exceed typical footpath slab construction.

All concrete works associated with the footings and slab of the bus stop shall be carried out in accordance with MRTS70, MRC standard drawings, and the design drawings with inspections, geotechnical testing and As Constructed survey requirements applying unless otherwise in MRC 8503.1 Bus Shelters Annexure.

HOLD POINT

Where the kerb ramp (Type "A") and associated "flares" are located localised thickening shall be carried out to ensure the minimum depth of concrete is 215mm, formwork and steel reinforcing shall be installed to reflect this thickening.

WITNESS POINT**8503.6.5 Path of Travel Infrastructure Installation**

The Contractor shall be responsible for all works requiring DDA compliance to connect the bus stop to the existing infrastructure to enable a path of travel by all users to the bus stop in accordance with the design drawings.

8503.6.5.1 Peripheral Works

The works shall be those outside of the immediate area of the bus stop, they include but are not limited to traffic islands, kerb ramps, signage, linemarking, TGSIs, drainage, pavement works, and footpath/bikepath installation. All works shall be installed and completed in accordance with Clause 8503.6.4, the design drawings, and the following Standards;

- Drainage and kerbing works comply with MRTS03;
- Earthworks comply with MRTS04;
- Pavement works comply with MRTS05;
- Seal works comply with relevant Specification MRTS11/12/19/20/21/22, and/or MRTS30;
- Signage complies with MRTS14;
- Linemarking complies with MRTS45;



- Concrete Works comply with MTR570;
- Fibre Reinforced Concrete Paving complies with MRC Supplementary Specification 8204;
- TGSi supply and installation complies with MRC Supplementary Specification 8500;
- Soft landscaping works comply with MRC Supplementary Specification 8300;
- Hard Landscaping (fencing) complies with MRC Supplementary Specification 8321;

All testing, inspections, and tolerances shall apply as required by the relevant specification unless otherwise directed by the Superintendent.

HOLD POINT

8503.6.6 Erection and Installation of Bus Shelter, Including Furniture and Signage

Bus shelters shall be prefabricated structures supplied to comply with MRC Clause 2.15 of MRC Guideline “List of Furniture and Materials” and the relevant MRC standard Drawing/s for the type of bus stop and shelter required.

The Contractor is responsible for the procurement, supply, and erection of the bus shelter, furniture, and peripheral signage and TGSi’s and storage in compliance with Clause 8503.6.2.

Council will not accept damaged components including paint defects (chipping or scratches).

The internal spatial clearances (clear paths, boarding area envelopes, TGSi positions, etc.) shall be governed by the applicable MRC standard drawing/s.

8503.6.6.1 Erection of Frame and Roofing Members as Required by MRC Standard Drawings

Installation of bus shelter frame, roofing, and panels shall be carried out in accordance with MRC Std Drawings and project drawings in accordance with the Manufacturers drawings, specification and requirements. Roof drainage shall be captured and directed away from the passenger envelope of the bus stop.

WITNESS POINT

8503.6.6.2 Installation of Seating in Accordance with MRC Standard Drawings

Installation of bus shelter seating shall be carried out in accordance with MRC Std Drawings and project drawings in accordance with the Manufacturers drawings, specification and requirements.

WITNESS POINT

8503.6.6.3 Installation of Bus Stop Signage

Installation of bus stop signage shall be carried out in accordance with the relevant MRC Std Drawings and project drawings, this also includes Tactile Ground Surface Indicators (TGSi), J-pole with signage installation as required by the individual location/s in accordance with MRC Std Drawing A3-00863.

Bus Zone Signage – Orientated parallel to traffic direction at the extents of the bus zone.

J-Pole Signage – Orientated perpendicular to the traffic direction;

- 210mm off end of slab at boarding point,
- 600mm from front edge of bus stop slab/kerb,
- A minimum 10m from bus zone sign,
- Timetable cases to be 2 X A3 in size, facing the oncoming traffic and be centred 1300mm from finished Ground Level.

WITNESS POINT



8503.6.7 Clean Up, Backfilling, and Turfing;

Any disturbed areas are to be topsoiled, turfed, and made good. Works are to comply with MRC Supplementary Specification 8300 or as approved by the Superintendent.

The site is to be cleaned of all debris, excavated material, and construction materials and returned to the preconstruction state or as agreed to with the relevant stakeholder (DTMR or property owner) prior to opening to the public.

HOLD POINT

8503.7 Post Construction

Items which close out the project, and readies the project for the "On Maintenance" inspection. All items below **MUST** be complied with prior to the Contractor requesting an "On Maintenance" inspection and/or as required during the Defects/Liability (On Maintenance) period.

8503.7.1 Collection and Submission of All As Constructed Data

Certification of works including Form 16 and Form 12, and DTMR (Qld Transport) certification of bus stop and associated DDA compliant access and path of travel infrastructure shall be submitted with the "As Constructed" Plans and documentation.

Contractor is to supply and submit "As Constructed" documentation as required by *MRC D20 - Drawings and Documentation* for approval by the Superintendent 4 weeks prior to requesting a "On Maintenance" inspection.

HOLD POINT

Format of submitted "As Constructed" documentation shall be compliant with MRC Supplementary Specification 8919.

8503.8 Measurement and Payment

Provision for these works shall be included in the scheduled unit rate for the items show in Clause 8503.3 of this Supplementary Specification and Annexure. No separate payment will be made for the works specified within this Supplementary specification or it's annexure.

Version Control:

Version	Description	Reviewed / Endorsed	Date
1.0	Original issue		23.11.2021
2.0	Review of specification	C. Sultana	07.02.2024
3.0	Full Review of Specification	C. Sultana	16/02/2026