



8170 Gross Pollutant Traps

REVISION 25/08/2025

8170.1 Introduction

This supplementary specification refers to the supply and installation of gross pollutant traps as detailed on the project Drawings. This specification does not cover the installation of access to GPT's or any required service pad adjacent to the GPT's.

8170.1.1 Definitions of Terms

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

The terms used in this Technical Specification shall be as defined in Clause 2 of MRTS01 *Introduction to Technical Specifications*. Additional terms used in this Technical Specification are defined in the Table below.

GPT	Gross Pollutant Trap - A primary treatment device, which is a practical and cost-effective solution to trap and remove litter and gross pollution from stormwater runoff entering the receiving waterways and environment. Primary treatments include physical screening, rapid sedimentation, separation processes. Typical retained contaminants include gross pollutants, coarse sediments.
Filter	GPTs filters are defined as, be not limited to nets, baskets, filters and receiving receptacles with the intended purpose to trapping, separating and removing gross pollutants and coarse sediments.

8170.2 Referenced Documents

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

- MRS01 *“Introduction to Specifications”*;
- MRTS01 *“Introduction to Technical Specifications”*;
- MRS03 and MRTS03 *“Drainage, Retaining Structures and Embankment Slope Protections”*;
- MRS04 and MRTS04 *“General Earthworks”*
- MRS05 and MRTS05 *“Unbound Pavements”*
- The project Drawings; and
- Manufacturer’s specifications.
- Mackay Regional Council Planning Scheme Policy (PSP) *“Healthy Waters”*

8170.3 Description of Work Items

Work items incorporated by this supplementary specification are identified in Section 8170.6 and 8170.7 with individual activities/tasks for measurement and payment sourced from the Bill of Quantities and listed in MRC Supplementary Specification Annexure 8170_1 Gross Pollution Traps Section 1

8170.4 Quality Systems Requirements



8170.4.1 Std Test Methods (Testing Regime)

The following minimum testing regime applies to this specification:

Unless otherwise stated the manufacturer certification of the structure shall form the basis of the requirements.

Civil works activities associated with the subgrade/floor of excavation, bed preparation, concrete pours, shall be tested as per the relevant MRTS specification MRTS03, MRTS04, and MRTS70 unless otherwise approved by the Superintendent.

8170.4.2 Hold Points, Witness Points and Milestones

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

Activity	Inspection Type	When
Construction Procedure and other preliminary documentation as required by Clause 8170.5	Milestone	4 weeks prior to works commencing
Inspection of delivered items	Hold Point	At delivery time for each item.
Final location and alignment of drainage component	Hold Point	Prior to excavation commencing
Notification to Superintendent of stormwater diversion	Witness Point	Prior to excavation commencing
Bottom of excavation inspected for unsuitable material	Hold Point	At the completion of excavation and compacting of the excavated floor
Inspection of excavated floor prior to installing GPT	Hold Point	After compacted, trimming, and testing of excavated floor
Submission of procedure where groundwater has been encountered (as required)	Hold Point	Prior to excavated floor stability works
Excavated floor compliant, all test results submitted and compliant, alternative floor and bedding installed and approved by RPEQ Consultant	Hold Point	Prior to installing approval to proceed with installation of GPT
Installation of GPT and connection to stormwater network complies with design drawings alignment, grade, and levels.	Hold Point	Prior to backfilling commencing
Backfilling process	Witness Point	During backfilling process
Reinstatement of disturbed areas as per plans (as required)	Witness Point	After backfilling has been completed
“On Maintenance” works acceptance	Hold Point	At the completion of all works and site has been cleaned and returned to pre-construction state.
Submission of revised Asset Maintenance Plan	Hold Point	Submission with “As Constructed” Documentation
Submission of “On Maintenance”	Hold Point	Monthly during “On Maintenance”



asset maintenance records		period
“As Constructed” documentation	Hold Point	4 weeks prior to practical completion being requested.

8170.4.3 Construction Tolerances

Unless otherwise approved by the Superintendent the following construction tolerances shall apply as 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”.
- Stormwater culverts and drainage tolerances in accordance with MRTS03 “Drainage Structures, Retaining Structures and Embankment Slope Protections”
- Earthworks tolerances in accordance with MRTS04 “General Earthworks”.
- GPT Manufacturer/Supplier installation tolerances

Tolerances specific to the project are detailed on the design drawings and are included in Clause 2 of MRC Supplementary Specification Annexure 8170_1 Gross Pollutant Traps

8170.5 Preliminary

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

- Certification for nominated product/s and materials including Prequalification of materials to design criteria requirements
- Workplace Health and Safety (WHS) Plan including Work Method Statements (WMS)
- Contractors’ personnel experience, qualification, skills and training (10 days prior to undertaking work on site)
- Programme for the Work
- An Asset Maintenance Plan detailing requirements of Section 8170.5.4
- Environmental Management Plan
- Erosion and Sediment Control Plan (as required for site/s)
- Traffic Management Plan and Traffic Guidance Scheme (TGS)
- Quality Plan detailing requirements of 8170.4

Other preliminary requirements unique to the project will be listed in the MRC Supplementary Specification Annexure 8170_1 Gross pollutant Traps.

MILESTONE

8170.5.1 Materials, Design & Manufacture

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 8170_1 Culvert Rehabilitation Section 3 and shall be the point of supply.

Concrete, grout, and reinforcing steel shall comply with the relevant MRTS Specification or Australian Standard as listed in 8170.2.

8170.5.2 Contractor’s Personnel



Personnel, sub-contractors and suppliers utilised in the installation of GPT's shall have the skills, capacity, and experience to deliver the installation of GPT's, the Contractor shall provide documented evidence for the Superintendent's approval to demonstrate the experience, qualification, skills and training of proposed personnel, sub-contractors, and suppliers.

MILESTONE

8170.5.3 Proposed Materials, Work Method Statement and Inspection and Test Plans

Prior to commencement of the works, the Contractor must submit to the Superintendent, technical data sheets and test certificates regarding the quality of materials and performance of products proposed for use in the Works.

The submissions must provide evidence of product compliance with the relevant performance criteria detailed in the design documents or associated references listed in 8170.2.

The Contractor must submit for the Superintendent's approval a detailed Work Method Statement (WMS) and Inspection and Test Plans (ITPs) for the specific GPT works. The WMS and ITPs shall reference all specification clauses and identify all testing and performance requirements and hold points.

MILESTONE

8170.5.4 Asset Maintenance Plan

All installed GPT's shall operate and be maintained after installation during the construction period of the project and be maintained for a minimum period (12) month commencing from the agreed "On Maintenance" date.

At the completion of the "On Maintenance" Period Council will inspect the GPT and associated componentry in conjunction with the Contractor before Hand Over and accepting responsibility for any future maintenance. The day of the inspection the Contractor shall make arrangements to lift all baskets/netting out of the GPT for the purpose of inspecting all componentry of the GPT/s.

An asset maintenance plan is required to be submitted by the Contractor to the Superintendent for review and assessment/approval as part of the required submissions prior to the project commencing or prestart is conducted. The plan should detail proposed maintenance activities aligned to the manufacturer's specification for the length of the Assets useful life (including the "On Maintenance" period) and for Asset Audit Inspections covering the following;

- Timeframes for cleaning baskets/nets
- Resources required for each maintenance activity (which may include cranes and/or vacuum trucks)
- Planned audit inspections (and timelines) for all componentry for the life of the GPT/s
- Asset useful life of all componentry including vehicle access requirements and a scheduled replacement timeline

MILESTONE

The Contractor shall be responsible for undertaking all inspections and works under the approved maintenance programme with a log of activities submitted to Council monthly. The Contractor shall remain responsible for cleaning of the GPT/s to achieve the required designated functional criteria of the design drawings and documents and manufacturers requirements during the "On Maintenance" period and submit a revised asset maintenance plan prior to "Off Maintenance".

HOLD POINT

8170.6 Construction



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.

Specific construction requirements associated with these works is detailed in MRC Supplementary Specification Annexure 8170_1 Gross Pollution Traps Section 5

8170.6.1 Work Operations

Work operations incorporated in this item will include:

- a) Work operations included in Clause 2.1.5 of MRS01 “Introduction to Standard Specifications”;**
- b) Supply of all materials;**

All materials, plant, and labour required to carry out the works under this Specification is to be supplied by the Contractor.

All items delivered to site shall be inspected upon delivery to site prior to use. Any items which are damaged or not manufactured as required by the design drawings are not to be used and are to be returned to the supplier.

HOLD POINT

- c) Pedestrian and traffic management**

Prior to commencing any site works the Contractor shall ensure the approved pedestrian and traffic management plan including traffic guidance schemes is current and relevant to the work proposed.

- d) Site layout with Superintendent**

The final location of the GPT's is to be marked out on site and shall be inspected and approved by the Superintendent prior to excavation commencing.

HOLD POINT

- e) Excavation, as required**

Where excavations are required, the Contractor shall ensure all precautions are taken to locate underground infrastructure including i.e. DBYD and potholing of the site.

The Contractor as required and as part of their construction procedure shall plan and allow for stormwater diversion measures which may include temporary pits and pipes. The Superintendent shall be made aware of the intention to divert stormwater prior to excavation commencing.

WITNESS POINT

Excavation of material to level and grade as per design drawings, dimensional tolerances to be compliant with the GPT's manufacturers requirements.

Bed/Subgrade is to be inspected for areas of unsuitable material and possible groundwater.

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

HOLD POINT

- f) Utilising or disposing of surplus 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. If disposal offsite is to occur and dependent on volumes materials are to be disposed at regulated waste facilities or at site with current Bulk Earthworks approvals in place. Spoil disposal criteria and methodology as per MRTS 51 and EP175 are to be followed.



g) Compacting material at bottom of excavations;

Excavated floor preparation including compaction shall be carried out as per MRTS04 and is to be presented for inspection by the Superintendent with inspections, geotechnical testing and geometric requirements applying unless stated otherwise in MRC Supplementary Specification Annexure 8170_1 Gross Pollutant Traps.

HOLD POINT

If groundwater is present the Contractor shall submit a modified installation procedure endorsed by the GPT's supplier and endorsed by the Contractors RPEQ Engineering Consultant. The contractor is responsible for the dewatering of the site at no cost to the Principal.

HOLD POINT

Approval to proceed with installation shall be granted by the Superintendent upon the receipt of compliant test results and/or alternative floor and bedding installation has occurred and approved by the Contractors RPEQ Engineering Consultant.

HOLD POINT

h) Carrying out all works to allow the installation of the gross pollutant trap and materials, as specified on the project Drawings, and to the manufacturer's specifications.

The contractor shall install the GPT/s as required by the manufacturer's procedure and specifications, and to the line and levels as specified by the project drawings and documents. When the GPT is in place the Contractor shall connect the upstream and downstream stormwater network to the GPT.

With the GPT connected to the stormwater network, where the Contractor has diverted the stormwater during installation any temporary pits and pipes or other drainage structures shall be demolished and removed.

Prior to proceeding with backfilling of the GPT and the connecting stubs to the stormwater network the Contractor carry out a joint inspection with the Superintendent to verify the installation and geometrics of alignment and level.

HOLD POINT

i) Backfill and compaction

Backfill materials and the backfilling process to the GPT and pipe stub joints shall be carried out in accordance with MRTS03, and MRTS04. Layers are to be laid and compacted in 150mm maximum compacted layers. Testing of embedment and backfill shall be carried out as required by MRTS03 and MRTS04 for the respective zones. The backfill shall be finished at the finished surface levels or any adjacent concrete or pavement as required by the design drawings and documents.

WITNESS POINT

j) Reinstating disturbed surfaces, where applicable.

All disturbed surfaces shall be reinstated with topsoil and turf where as required by the design drawings and documents, all waste materials and excess soil disposed of as approved by the Superintendent.

WITNESS POINT

8170.7 Post Construction

a) Works Inspection and Future Maintenance – "On Maintenance" Period

The Contractor shall arrange for the Superintendent to carry out an "On Maintenance" site inspection, this inspection and submitted As Constructed Documentation shall determine the timing of the defect's liability period. The GPT/s and their baskets/nets shall be cleaned within



2 days of this inspection being carried out and be “clean” at the time of the inspection, and on the day of the inspection the Contractor shall make arrangements to lift all baskets/netting out of the GPT for the purpose of inspecting all componentry of the GPT/s

HOLD POINT

Maintenance of the GPT’s (including removal of waste materials) shall be carried out by the Contractor for the term of the “On Maintenance” period as laid out in the Asset Maintenance Plan approved by Council. A revised Asset Maintenance Plan shall be submitted as part of the As Constructed and QA documentation.

HOLD POINT

During the “On Maintenance” period the Contractor shall carry out scheduled audit inspections of the Gross Pollution Trap/s for compliance with the design criteria, in the absence of detail the manufacturers requirements shall apply. All inspections shall be recorded and submitted to the Superintendent for Council’s records. These records shall include any rectification of components of the GPT/s.

HOLD POINT

At the time of “Off Maintenance” the Contractor shall ensure all baskets/nets are clean and arrangements made to lift them out for the purpose of inspecting all componentry of the GPT’s.

b) Collection and submission of all As Constructed data including QA data requirements.

The Contractor is responsible for the collection and submission of As-Constructed documentation as required by *MRC D20 - Drawings and Documentation* for approval by the Superintendent 4 weeks prior to requesting a practical completion inspection.

The format of submitted “As Constructed” documentation shall be compliant with MRC Supplementary Specification 8919.

HOLD POINT

8170.8 Measurement and Payment

Provision for these works shall be included in the scheduled unit rate for the items show in Clause 8170.3 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
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