PUBLIC TRANSPORT SERVICES

TECHNICAL STANDARD

PART 129008

STATIONS - TOILET FACILITIES

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1.0 INTRODUCTION

The Department of Planning, Transport and Infrastructure (DPTI) Public Transport Services Division (PTS) owns and operates the Adelaide Metropolitan Passenger Rail Network (AMPRN). There are approximately 85 stations serving the AMPRN. The significant number of stations means that the process of upgrading or renewal is continuous. In order to both economise on design and construction effort and costs and enhance the passengers’ experience a set of common design and construction technical standards for stations has been developed.

Because the set of station standards is primarily used within the contract administration process the technical standards documents must be aligned with both the DPTI wide Master Specification and the PTS engineering management system.

The document attached at Annex A, Technical Standard – Stations - Toilet Facilities, is one of the set of station standards.

1.1 PURPOSE

The purpose of this Technical Standard is to outline the design requirements for toilet facilities at the station precinct.

1.2 SCOPE

This Technical Standard applies to all PTS projects and contractor organisations designing, constructing or maintaining passenger stations on the AMPRN.
2.0 ANNEX A – TECHNICAL STANDARD – STATIONS - TOILET FACILITIES

CONTENTS
1. General
2. Standards and Drawings
3. Reference Documents
4. Design Requirements
5. Hold Points

1. GENERAL

This Part specifies the requirements for the design of toilet facilities at railway stations on the Adelaide Metropolitan Passenger Rail Network (AMPRN).

2. STANDARDS AND DRAWINGS

STANDARDS

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3. REFERENCE DOCUMENTS

Federal Government | Disability Standards for Accessible Public Transport

4. DESIGN REQUIREMENTS

4.1 General

Unless otherwise stated in the Project Design Brief, Enhanced Amenity Stations shall be designed to incorporate a toilet facility. Any existing toilet facilities shall be closed and shall be replaced by the new toilet facility.

Unless otherwise stated in the Project Design Brief, Basic Neighbourhood Stations shall not have a toilet facility.


Refer to the Project Design Brief for location details of toilet facility.

4.2 Toilet Facility Features

The toilet facility shall have the following features:

1. Stainless steel outer cladding – 2.5 mm thick, Grade 316, No. 4 finish with a vertical grain;
2. Graffiti resistant walls;
3. Concealed operating components;
4. Electromagnetic locking;
(5) Self-locking door and a timer indicating to the customers when the allotted time is about to end;

(6) Electronic sensor operated;

(7) Non-slip, moisture resistant flooring;

(8) Smoke detection;

(9) Emergency lighting;

(10) Seat wash unit;

(11) Automated self flushing (no touch) stainless steel toilet pan;

(12) Automatic self cleaning wash cycle including fully disinfected and blown dry after each use;

(13) Automated self wash cycle;

(14) Electronic sensor operated stainless steel combined basin, soap dispenser and hand dryer;

(15) Stainless steel handrails;

(16) Stainless steel toilet paper dispenser;

(17) Sharps disposal;

(18) Sanitary disposal;

(19) Stainless steel fold down baby change table;

(20) Touch free sensor switches;

(21) Movement sensor;

(22) Voice message facility;

(23) Compliant signage including Braille;

(24) Hearing impaired indicator light;

(25) Audio speaker system for emergency announcements; and

(26) Remote monitoring capability.

4.3 Placement and Orientation

The toilet facility shall be located in a position that:

(1) is adjacent to, or as near to, the primary platform access point and in close proximity to major activity zones;

(2) minimises opportunities for climbing;

(3) limits circulation behind the unit;

(4) is clearly visible from the main entry and exit points of the station platform;

(5) is clearly visible to the majority of customers;
(6) is not near thick or high vegetation which would provide a concealment opportunities and impedes sight lines; and

(7) permits easy access for maintenance.

The toilet facility shall also be desirably located in a position that:

(1) provides clear vision of the majority of surrounding station areas and car parks; and

(2) is in close proximity to the overpass structure access i.e. stairs/ ramps and lift.

4.3.1 Door Orientation

The door of the toilet facility shall be orientated so as to face:

(1) public areas such as Access Paths, platforms, car parks or suitable areas with high usage; and

(2) away from residential properties.

4.3.2 Toilet Facility Location

The toilet facility shall not compromise the circulation space or 3 m clear zone from the front of the platform, vide Part 129003 “Platforms”, Clause 5.2 “Platform Widths”.

The toilet facility shall not be located under the overpass or the staircase.

Stations with side platforms shall have the toilet facility set at the back of the platform on a purpose built support deck to maximise circulation space as per Figure 4.3.2(a) unless otherwise stated in the Project Design Brief.

![Figure 4.3.2(a) – Typical Location for Toilet Facility on a Side Platform](image-url)

Stations with integrated bus/rail platforms shall have the toilet facility centrally located on the platform as per Figure 4.3.2(b).
4.4 **Accessibility**

The toilet facility shall be accessible for all customers and shall meet the requirements of Disability Standards for Accessible Public Transport (DSAPT), Building Code of Australia (BCA), AS 1428.1 Design for Access and Mobility – General requirements for access – New building work and AS 1428.2 Design for Access and Mobility – Enhanced and additional requirements – Buildings and facilities.

4.5 **Structural Considerations**

Structural assessments shall be undertaken using manufacturers supplied product details to establish loading requirements when locating toilet facilities on platforms.

4.6 **Utility Services**

The toilet facility shall have connections to electricity, water, sewer and telephone (for remote monitoring).

4.7 **Access to/ from Toilet Facility**

An Access Path shall be provided from the door of the toilet facility to the Primary Access Path in accordance with Part 129006 “Pedestrian Access” and the Project Design Brief.
4.8 **Placement of Furniture**

Refer to Part 129007 “Furniture”.

4.9 **Proximity Lighting**

Lighting in the immediate proximity of the toilet facility shall be sufficient to allow people to access the facility in complete safety, under all light conditions and have no dark patches.

Lighting along the Access Path to the toilet facility shall be provided in accordance with Part 129014 “Electrical Infrastructure”.

4.10 **Signage**

Signs shall be provided in accordance with Part 129010 “Signage and Pavement Marking”.

Signs prescribed for use in relation to toilet facilities shall include:

1. Guide signs – to direct customers to the toilet facility; and
2. Information signs – unisex access toilet information on toilet facility.

4.11 **Installation**

The toilet facility including foundations shall be installed as per the manufacturer’s instructions.

4.12 **Maintenance**

The Contractor shall subcontract the maintenance, servicing and cleaning of the toilet facility to “WC Innovations” for a period of 12 months from the Date of Practical Completion.

Maintenance shall include, but is not limited to, checking, repairing and adjusting the following items as necessary:

1. Door opens and closes in the normal manner and backs off when obstructed;
2. Timed occupation – check three minute and ten minute settings;
3. Roof mounted movement sensor function and setting;
4. PLC alarms – note any alarms and check relevant components for faults or damage;
5. Auto washing and drying operation including wash test system, wash nozzles, rain bird, blowers, blower motors, solenoid valves and manifolds;
6. Toilet flushing mechanism operation and settings;
7. Toilet paper dispensing system and settings;
8. Lights and indicators;
9. Muzak system – test all voice messages;
10. Physical damage or deterioration to fittings or tiles;
11. Hand wash station, sensors, control unit and solenoid valve;
12. PLC unit inputs and outputs;
(13) Plumbing leaks;
(14) Time clock and associated settings;
(15) Sanipad chute opening and closing smoothly; and
(16) Needle chute unrestricted.

4.12.1 Joint Inspection

The Contractor shall arrange a joint inspection with Contractor, WC Innovations and the Superintendent two weeks prior to the 12 month maintenance period expiring. The Superintendent shall be given at least 14 days notice of the inspection. The joint inspection shall constitute a HOLD POINT.

4.12.2 Warranty

The Contractor shall ensure WC Innovations warrants the construction of the unit and performance of the individual components, including all parts repaired or replaced during the maintenance period, at no additional cost to the Principal for a period of 12 months from the Date of Practical Completion.

5. HOLD POINTS

The following is a summary of Hold Points; vide Part 140 “Quality System Requirements”, referenced in this Part:

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