Development Works

Planning Scheme Policy

CONTENTS

Summary of Document Schedules

No.	Title
1	Table of Abbreviations

Summary of Document Appendices

No.	Title	Timing of Submission to the Local Government
1	Document Amendment Feedback Form	Ongoing
2	Preliminary Design Checklist	At design submission
3	Pre-start Meeting Minutes	Within five (5) days after pre-start and prior to commencement of works
4	Road Closure Advertisement	
5	Design layers for as constructed	
6	On-Maintenance Inspection Checklist	After inspection and prior to acceptance of On-Maintenance
7	'On-Maintenance' Submission Checklist	At request for works to be placed On-Maintenance
8	Engineering Certificate	Prior to acceptance of On-Maintenance and Survey Plan Seal
9	Off-Maintenance Inspection Checklist	After inspection and prior to the end of the maintenance period and release of bond
10	Off-Maintenance Submission Checklist	At request for works to be taken Off-Maintenance
11	Checklist for sealing of the Survey Plan	Prior to Sealing of Survey Plan
12	Audit documentation checklist	By the Local Government prior to taking On-Maintenance

Amendment Record for this Policy

These amendments form part of the Development Works Planning Scheme Policy for the Burnett Shire Council.

Details are provided below outlining the clause amendments. The clause numbering and context of each clause are preserved.

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 specific, and not considered as A, M, or O as above.

Amendment Code No.	Key Topic addressed in amendment	Clause No.	Author Initials	Amendment Date
EXAMPLE A	Adopt State Policy 2/02 (Acid Sulfate Soils)	1.6	A	2/6/02

1 INTRODUCTION

1.1 COMPOSITION OF THIS DOCUMENT

(1) This document comprises the Local Government's Development Works Planning Scheme Policy ("The Policy"). This document is to be read in conjunction with the Local Government's Guidelines for Development Works Planning Scheme Policy ('The Guidelines').

(2) Appendices to The Policy, are provided in the form of—

a. Forms / Procedure / checklists.

b. Adopted Specifications;

c. Adopted Standard Drawings

1.2 PURPOSE OF POLICY

(1) The purpose of this policy is to communicate the Local Government's position with respect to development works by—

a. Providing a seven (7) part structure to enable clear steps for applicants to follow for development within the Shire, namely—

i. Part 1 – Introduction

ii. Part 2 – Design

iii. Part 3 – Construction

iv. Part 4 – Post construction

v. Part 5 – Filling of Land

vi. Part 6 – Schedule 1 Abbreviations

vii. Part 7 – Appendices

b. Stating specifications and standards adopted for works including those associated with reconfiguration a lot and making a material change of use and;

c. Stating the information the Local Government may request from an applicant to assist it in making an Operational Works application and;

d. Stating the further information the Local Government may request from an applicant to assist the Local Government in making an assessment of the application and;

e. Stating the information the Local Government may request from an applicant with whom an agreement is to be entered into to secure the Local Governments acceptance of works as complete and to the standards as set by this policy or to provide security for incomplete works.

1.3 APPLICATION OF THE POLICY

(1) The policy functions as part of the Integrated Development Assessment System (IDAS) under the *Integrated Planning Act 1997* (IPA)

(2) The policy provides probable solutions for codes within the Burnett Shire Council's Planning Scheme (the "Planning Scheme") and is to be read in conjunction with the planning scheme.

1.4 INTERPRETATION AND STRUCTURE OF THE POLICY

(1) Part 6 Schedule 1 - Abbreviations defines particular abbreviations used in this policy.

(2) The policy and guidelines use a stepped structure following the IDAS procedures.

1.5 DOCUMENTATION ADOPTED IN THIS POLICY

(1) Standards and Specifications included in this Policy as described below are the versions that are current at the time of the adoption of the Development Works Planning Scheme Policy.

a. Site & Road Layout—

- Institute of Municipal Engineering Australia. Queensland Division - Queensland Streets 1995
- AUSTROADS - Guide to Traffic Engineering Practice 1988
- Australian Road Research Board - Unsealed Roads Manual
- Queensland Government Department of Main Roads - Manual of Uniform Traffic Control Devices

- Queensland Government Department of Main Roads - Standard Drawings
- AUS-SPEC- Development Specifications - Design. Burnett Shire Council Version (Included in this Policy)
- AUS-SPEC- Development Specifications - Construction. Burnett Shire Council Version (Included in this Policy)
- IMEAQ - Standard Drawings. Burnett Shire Council Version (Included in this Policy)
- Queensland Government Department of Main Roads - Road Planning and Design Manual 2001

b. Pavement Design—

- ARRB - APRG 21 - A Guide to the Design of New Pavements for Light Traffic
- ARRB - Unsealed Roads Manual

AUSTROADS - Pavement Design - A Guide to the Structural Design of Road Pavements

c. Sewerage—

- Water Services Association of Australia - WSA 02 - 2002 Sewerage Code of Australia
- Water Services Association of Australia - WSA 04 - 2001 Sewerage Pumping Station Code of Australia

d. Water Supply—

- Water Resources Commission Queensland - Guidelines for the Planning & Design of Water Supply Systems
- Water Services Association of Australia - WSA 03 - 2002 Water Supply Code of Australia

e. Water Services Association of Australia - WSA 02 -2002 - WS-SPEC: 2000 Water Services Specification.

f. Acid Sulfate Soils—

- Information requirements for applications Planning Scheme Policy;
- State Planning Policy 2/02 Planning and Managing Development involving acid sulfate soils; and

- State Planning Policy 2/02 Guideline Planning and Managing Development involving acid sulfate soils.

g. Land and Allotment filling—

- Filling of Land processes (See Part 5).

1.6 STRUCTURE OF THE DOCUMENT

(1) The policy and guidelines use a stepped structure following the IDAS procedures.

1.7 POLICY AMENDMENTS

(1) Policy amendments are to be completed through a three stage system under IPA schedule 3 ('Process for making or amending planning scheme policies')

2 DESIGN

2.1 MINIMUM STANDARDS OF DESIGN

(1) Where an Operational Works application is required as conditions of a development IDAS approval, the Developer is to provide engineering design for those Operational Works in accordance with the Local Government's adopted Design Specifications as detailed in this Policy.

(2) The Local Government has adopted AUS-SPEC- Development Specification Series (Burnett Shire Council's version) as the minimum specifications applying to design of infrastructure and works for development within the Shire. (refer table 1)

(3) Design Specifications AUS-SPEC D1 to D13 inclusive outline the minimum requirements for common elements of Operational Works design.

(4) All development Operational Works are to be designed, submitted and constructed under the supervision of a Professional Engineer.

(5) The submitting Engineer is to specifically certify that the design or construction works meet the Local Government's requirements and relevant standards.

(6) The engineering design is to be carried out in accordance with the Development Conditions of Approval that the Local Government has issued.

2.2 APPLICATION FOR OPERATIONAL WORKS

(1) The application is to include design information, project specifications and plans provided in accordance with the specifications in this policy.

(2) 3 copies of the proposal plans and 1 copy of the specification is required by The Local Government for assessment purposes

(3) Fees are to be applicable as determined by the Local Government's Schedule of Fees as current and adopted at the time of the payment.

(4) The Local Government may request further information in relation to the application.

(5) On receipt of the further information the Local Government is to assess and make a determination on the application.

(6) If approved, the determination may contain conditions which are to be incorporated into amended plans and specifications issued for construction.

2.3 BEFORE STARTING THE DETAILED DESIGN AND SUBMITTING THE OPERATIONAL WORKS APPLICATION

(1) Conditions applicable to a previous material change of use and reconfiguring lot approvals may be applicable to the design criteria for the operational works application.

2.4 WHAT IS INVOLVED IN A LAND DEVELOPMENT DESIGN

(1) The design of development works is to take into account all site conditions and comply with the conditions of approval, the provisions of this Policy and accepted engineering practice.

(2) The Consultant is to bear full responsibility for all aspects of the design of all development works for which they are engaged.

(3) Furthermore the design is to be based on the standards current at the time of submission of engineering drawings.

(4) In all cases reference is to be made to AUS- SPEC DQS - Quality Assurance Requirements for Design.

2.4.2 Environmental Considerations

Government Regulations

(1) Developers and Consultants are to comply with environmental conditions, limitations and constraints as described in the following statutory Acts or their replacements —

- Transport Infrastructure Act 1994;
- Coastal Protection and Management Act 1995;
- Fisheries Act 1994;
- Transport Operations (Road Use Management) Act 1995;

- Water Act 2000;
- Integrated Planning Act 1997;
- Environmental Protection Act 1994; and
- Vegetation Management Act 1999

Contaminated Land

(2) Where land to be developed may have been subjected to contamination; investigation, reports and / or clearance in accordance with the Contaminated Land section of the Environmental Protection Act (EPA) is to be required.

(3) This requirement does not relieve the individual Developer from ensuring contaminated land / soil is not used for inappropriate developments elsewhere.

Dust and Erosion and Sediment Control

Refer to the Environmental Protection Act 1994

(4) Elements for the temporary and permanent control of Dust, Erosion and sedimentation are to be incorporated into the design.

Marine Habitat Disturbance

(5) Conditions relating to design elements and limitations placed by the EPA and DPI are to be incorporated into the design.

Acid Sulfate Soils

Refer to the State Planning Policy 2/02 Planning and Managing Development involving acid sulfate.

(6) If the land or proposed excavations are below RL20m Australian Height Datum (AHD) the developer is to be required to provide such studies and reports as required by the Acid Sulfate Policy.

(7) The design is to incorporate elements related to the treatment of acid sulfate soils in accordance with the Acid Sulfate Policy.

2.4.3 Site and Road Layout

Site and road layouts are to be in accordance with AUS-SPECD1 Geometric Road Design (Urban and Rural) and Stormwater Management Planning Scheme Policy.

(1) Under the Local Government's Planning Scheme, pre-approved site and road layouts may exist over the subject land.

(2) Water sensitive urban design is to be incorporated into the road layout and designed in accordance with the Stormwater Management Planning Scheme Policy.

(3) Streets and roads within the Urban Residential Zone and the Coastal Residential Zone are to be designed using 'Urban design criteria' as per Section D1.07 to D1.21 (inclusive) of AUS-SPEC D1 - Geometric Road Design.

(4) Streets and roads within the Hinterland Residential Zone and in developments which include lots of less than 4000 square metres in area are to be designed using 'Urban design criteria' as per Section D1.07 to D1.21 (inclusive) of AUS-SPEC D1 - Geometric Road Design.

(5) Streets within the Industrial Zones are to be designed using 'Urban design criteria' as per Section D1.07 to D1.21 (inclusive) of AUS-SPEC D1 - Geometric Road Design.

(6) Streets and roads within Rural zones are to be designed using 'Rural design criteria' as per section D1.22 to 1.29 (inclusive)

(7) Accurate topographical information is required to enable an accurate assessment by the Local Government of the suitability of the proposed road locations. The topographical information is to be provided as a minimum of 1.0m interval contours, which may be developed from orthophotos and confirmed by site levels.

2.4.4 Regulatory Signs

Refer to Queensland Transport-Manual of Uniform Traffic Control Devices (MUTCD)

(1) Any regulatory signs proposed are to be clearly identified and sized in the design plans in accordance with the MUTCD.

(2) Any approvals required for signs proposed on or near Main Roads are to accompany the design.

2.4.5 Earthworks

Earthworks are to be in accordance with Aus-Spec D6 Site Regrading.

2.4.6 Stormwater Drainage

(1) Stormwater Drainage is to be designed in accordance with the Stormwater Management Planning Scheme Policy.

2.4.7 Erosion and Sediment Control

Refer to D7 Erosion Control and Stormwater Management

(1) The design is to provide for erosion and sediment control on all works, which cause the disturbance of soils and natural surfaces.

(2) Where the development is in an environmentally sensitive area, a site specific Environmental Management Plan (EMP), which addresses all elements of potential construction impact on the local environment, is to be provided.

2.4.8 Inter-allotment Drainage

Refer to Aus-Spec D5 Stormwater Drainage Design and Queensland Urban Stormwater Drainage Design Manual (QUDM) and Stormwater Management Planning Scheme Policy

(1) In some instances the finished levels of a proposed allotment may be such that stormwater runoff from the allotment (or part of it) cannot satisfactorily drain to the street frontage.

(2) An underground drainage line may then be required to discharge runoff from the allotment into the main drainage system.

(3) Where inter allotment drainage forms part of the design, and is located on private land, the Developer is to arrange drainage easement(s) in favour of the Local Government.

(4) The easements are to have a minimum width of 3 metres. In some circumstances a greater width will be required dependent on access and other site constraints. Alternative widths may be proposed with the application for operational works with sufficient justification for the alternative width.

(5) All easement agreements required in favour of the Local Government is to be approved and notated by the Local Government, and included on the Survey Plan, prior to the release of the Survey Plan.

(6) The Developer is to meet all costs associated with the provision of easements.

2.4.9 Sewer Reticulation

Design is to be in accordance with Aus-Spec D12 Sewerage System and WSA 02-2002 - Sewerage Code of Australia.

(1) Easements in favour of the Local Government are to be provided over all trunk sewers and rising mains through private property.

(2) All easement agreements are to be in favour of the Local Government, notated by the Local Government, and included on the Survey Plan, prior to the release of the Survey Plan.

(3) The easements are to have a minimum width of 3 metres. In some circumstances a greater width will be required dependent on access and other site constraints. Alternative widths may be proposed with the application for operational works with sufficient justification for the alternative width.

(4) The Developer is to be required to meet all costs associated with the provision of the easements.

(5) A trunk sewer is the principle sewer of a catchment system that drains to the point of treatment.

(6) Where the Local Government's sewerage strategies identify a trunk main is to be located through a Development, the Local Government may require the Developer to install the trunk main in lieu of the normal reticulation mains.

(7) In such circumstances the Local Government may make a contribution toward the construction of the main.

(8) The Developer is to be required to contribute toward the cost of the trunk main, the equivalent cost of the sewer main necessary to serve the development.

(9) The requirements for the Local Government contributions defined in Section 2.5.4 below are to be observed.

2.4.10 Water Supply Reticulation

Design is to be in accordance with Aus-Spec D11 Water Reticulation and WSA 03-2002—Water Supply Code of Australia.

(1) Easements in favour of the Local Government are to be provided over all trunk water mains through private property.

(2) All easement agreements required in favour of the Local Government are to be approved and notated by the Local Government, and included on the Survey Plan, prior to the release of the Survey Plan.

(3) The easements are to have a minimum width of 3 metres. In some circumstances a greater width will be required dependent on access and other site constraints. Alternative widths may be proposed with the application for operational works with sufficient justification for the alternative width.

(4) The Developer is to meet all costs associated with the provision of the easements.

(5) Where the Local Government's water and sewerage Master Plans identify where a trunk main is to be located through a Development, the Local Government may require the Developer to install the trunk main in lieu of the normal reticulation mains.

(6) In such circumstances the Local Government may make a contribution toward the construction of the main.

(7) The Developer is to contribute toward the cost of the trunk main the equivalent cost of a 150 mm or 225mm water main as applicable.

(8) The requirements for the Local Government contributions defined in Section 2.5.4 below are to be observed.

2.4.11 Street Lighting

Design are to be in accordance with Aus-Spec D13 Lighting and Services

(1) Street lighting is to be provided within the Urban Residential Zone, Coastal Towns Planning Area and Hinterland Residential Zone.

2.4.12 Conflict of Services

(1) Clashes of services are to be avoided in design.

(2) Where there is the likelihood of conflict of services, e.g., close distances between stormwater drainage and sewers and or water, the design is to clearly indicate the levels of each service, the clearance between them and any proposed damage prevention measure eg concrete or stabilised encasement, support slab / girder etc.

(3) If conflict cannot be avoided the Consultant is to provide sufficient evidence that neither service is to be detrimentally affected in either capacity or maintenance.

2.4.13 Relocation of Services

(1) The Developer is responsible for the costs involved in the relocation or adjustment of any services necessitated by the development, including any frontage upgrading works necessary.

(2) Design Plans are to clearly show all existing services and details of alterations required.

2.5 OTHER AUTHORITIES

2.5.1 Utility Services

(1) The Developer is to supply evidence of all Service Providers' agreement/s and reticulation plan, prior to issuance of operational works approval.

(2) The design is to include provision of land areas for service control structures and utility service road conduit crossings.

2.6 BURNETT SHIRE COUNCIL – THE LOCAL GOVERNMENT

2.6.1 Works or witnessing of works by the Local Government

(1) The Local Government will require the following works associated with developments to be completed or witnessed by the Local Government's work force at the Developer's expense—

a. Connections and alterations to the Local Government's live sewer or water mains; and

b. Commissioning of sewage pump stations or sewage and water treatment works.

(2) Clear reference to the notice required for fees and witnessing of works is to be included in the design plans and specifications.

(3) Periods of notice and fees apply to mandatory the Local Government work/witness requests.

(4) Payment of relevant fees is required prior to the work/witnessing being carried out.

2.6.2 The Local Government Contributions towards Works

(1) Where the Developer is required to provide infrastructure of larger capacity than that required to service the proposed development, the Local Government may contribute towards the works by way of payment or works completed by the Local Government.

(2) The major components of any contribution are to be identified in a budget estimate supplied by the Local Government.

(3) These components may include design fees, materials supply, construction costs and Engineering supervision costs.

(4) The extent of the Local Government's contribution to works is to be agreed prior to the approval of the design.

2.6.3 Private Works Orders

(1) Where the Local Government is to carry out works associated with a development, the works are to be carried out under a private works order.

(2) The developer or his consultant is to apply in writing to the Chief Executive Officer for a private works order.

(3) The application is to include full engineering, specification and plan details of the part of work that the Local Government is to complete.

(4) The information provided to the Local Government is to be in accordance with the requirements of this Policy.

2.7 SUBMISSION AND ASSESSMENT OF DESIGN

2.7.1 Initial submission

(1) Designs are to be submitted to the Local Government's Chief Executive Officer for assessment of Operational Works within the set period as described in the conditions for the original Development approval of Material Change of Use or Reconfiguration.

(2) 1 copy of the design and specification document (Complete and Bound) and 3 copies of the design plans are to accompany the application.

(3) Electronic copies of the design drawings are to be provided in a format acceptable to the Local Government.

(4) The Local Government may require further information related to the submitted design.

(5) The design may be approved, with or without conditions.

2.7.2 After Approval

(1) After the Local Government Decision Notice, 3 new sets of plans, and an electronic copy, which include amendments, are to be submitted to the Local Government prior to the Pre-start meeting or the commencement of construction.

2.7.3 The Local Government requirements in a design submission

(1) The Developer or Consultant is to formally submit the design for assessment using the standard IDAS application forms.

(2) Drafting requirements are to generally in accordance with Aus-Spec D1 and Aus-Spec DSQ

(3) Information, checklists, schedules, design documents, specifications and plans accompanying the application are to be provided in accordance with this Policy.

(4) The Developer or Consultant is to provide an estimate of cost breakdown for Councils infrastructure records i.e.—

a. Roadworks;

b. Storm Water Drainage;

c. Water Reticulation;

d. Sewer Reticulation;

e. Landscaping;

f. Parks and structures there-on; and

g. Walk and Cycle Paths

2.7.4 Design Assessment by the Local Government

Design are to be in accordance with the AUS-SPEC DQS Design Quality Systems

2.7.5 Processing the Design Submission

(1) The Local Government will assess the application in accordance with IPA.

2.8 APPROVED DESIGN

(1) It is not permissible to make any amendments to any drawing as approved by the Local Government and issue them as drawings having been approved by the Local Government.

(2) A joint pre-start meeting, including the Local Government's delegate, the Consultant and the Contractor, is to be held on site prior to the Contractor being given possession of the site.

(3) Minutes of the pre start meeting (Appendix 3) are to be issued within five (5) days of that meeting.

2.9 DESIGN SPECIFICATIONS - INTRODUCTION

(1) The Local Government has adopted AUS-SPEC - Development Specification Series (Burnett Shire Council's version) as desired minimum standards for development works within the Shire, and as part of this Policy.

(2) The adopted Design Specifications are listed and Hyperlinked as described in Table 1 below.

(3) Where the development approval includes conditions that are site specific, or where design solutions are not adequately addressed within the Local Government's adopted Specifications, the Developer may provide engineering solutions and Specifications within the Operational Works design other than the Local Government's adopted specifications.

(4) Any proposed departures from the Local Government specifications are to be in accordance with minimum requirements of applicable

regulatory requirements and Australian Standards and Codes, and are to be approved by the Local Government prior to adoption.

2.10 STANDARD DRAWINGS

(1) The Local Government has adopted Standard Drawings as desired minimum standards for development works within the Shire, and as part of this Policy.

(2) The adopted Standard Drawings are listed in the table 2.

(3) Where the development approval includes conditions that are site specific, or where design solutions are not adequately addressed within the Local Government's adopted Standard Drawings, the Developer may provide engineering solutions and Standard Drawings within the Operational Works design other than the Local Government's adopted Standard Drawings.

(4) Any proposed departures from the Local Government Standard Drawings are to be in accordance with minimum requirements of applicable regulatory requirements and Australian Standards and Codes, and are to be approved by the Local Government prior to adoption.

2.10.2 Design Specifications

Table 1

Topic	No.	Specification Title
General	DQS	Quality Assurance Requirements for Design
	D6	Site Regrading
	D7	Erosion Control and Stormwater Management
	D8	Waterfront Development
	D10	Bushfire Protection
Roads	D13	Lighting and Services
	D1	Geometric Road Design (Urban and Rural)
	D2	Pavement Design
	D3	Structures/Bridge Design
	D4	Subsurface Drainage Design
Drainage	D9	Cycleway and Pathway Design
Water Supply	D5	Stormwater Drainage Design
Sewerage	D11	Water Reticulation (WSA 03)
	D12	Sewerage System (WSA 02 & WSA 04)

2.10.3 Standard Drawings

Main Roads Standard Drawings

The Queensland Transport Standard Drawings are available on this web link

http://www.mainroads.qld.gov.au/MRWEB/Prod/Content.nsf/b495dab138a6b17a4a256a42001c8f4f/4a2390f764ec17884a256cc900062196!OpenDocument

Burnett Shire Council Standard Drawings

Table 2 *Note: Table 2(b) is spread over a number of pages*

DRAINAGE

Number	Title /Topic
	Bedding And Backfilling
D201-1	Excavation, Bedding and Backfilling of Concrete Pipes - Sheet 1 of 2.
D201-2	Excavation, Bedding and Backfilling of Concrete Pipes - Sheet 2 of 2.
D202	Excavation, Bedding and Backfilling of Precast Box Culverts.
	Catchpit
D211-1	Bro-Pit Set out and Treatment to Kerb Type KC1.
D211-2	Bro-Pit Set out and Treatment to Kerb Types KC1 And KC2.

D211-3	Bro-Pit Set out and Treatment to Kerb Types KC1, KC2 And KC3 on Curves.
	Field Inlet
D221	Field Inlet / Grated Gully Pit Profiles and Dimensions

ROADS

Number	Title /Topic
	Type Cross Sections
R101	Residential, Rural Residential and Split Level Roads.
R102	Rural Roads.
R103	Verge Profiles.
R104	Industrial Access Road and Commercial Laneway.
	Driveways
R111	Residential Slabs and Tracks.
R112	Commercial Slab - Two Way Access.
R113-1	Rural and Urban Accesses Requiring Culverts.
R113-2	Rural and Urban Accesses.
R114	Standard Details Invert Crossing.
	Floodways
R115	Flood Gauge Post
	Footpaths
R116	Concrete Strip Footpaths for Unstable Site (H) or Greater.
R116-1	Concrete Strip Footpaths Stable Site.
	Kerb and Channel
R121	Kerbs, Channels and Inverts - Profiles and Dimensions.
R122	Invert Crossing Layout Details For Kerb Types KC1 And KC2.
R124	Kerb Ramp.
	Public Utilities
R131	Typical Service Conduit Sections.
R152	Conduit / Service Road - Crossing Details
	Road Edge Guide Posts
R136	Road Edge Guide Posts Types And Spacings.
	Signs
R117	Location Plan of Rural Addressing Number Post
R141	Street Name Sign And Post.
R142	Sign Footings And Locations.
R143	Arrangement Of Warning Signs At Detours.
R144	Bus Stop Sign Details.
R145	Arrangement Of Warning Signs At Side Tracks.
R146	Arrangement Ofwarning Signs At Traffic Through Work Site.
R147	Arrangement Of Warning Signs Where Roadworks Are In Centre Of Carriageway.

Number	Title /Topic
R148	Arrangement Of Warning Signs Where Roadwork Is On Road Shoulder.
R149	Arrangement Of Speed Limit Signs At Roadworks.
	Subsurface Drainage
R151	Side Drains, Mitre Drains And Seepage Drains Under Road Pavement.

PARKS

Number	Title / Topic
	Shelters
P301-1	Typical Bus Shelter - Type 1 - Sheet 1 of 2
P301-2	Typical Bus Shelter - Type 1 - Sheet 2 of 2
P303-1	Gazebo Shelter - Type 1 - Sheet 1 of 2
P303-2	Gazebo Shelter - Type 1 - Sheet 2 of 2
P305-1	Rectangular Shelter - Type 1 - Sheet 1 of 2
P305-2	Rectangular Shelter - Type 1 - Sheet 2 of 2
P306-1	Gazebo Shelter - Type 2 - Sheet 1 of 2
P306-2	Gazebo Shelter - Type 2 - Sheet 2 of 2
P307-1	Picnic Table Shelter - Type 1 - Sheet 1 of 2
P307-2	Picnic Table Shelter - Type 1 - Sheet 2 of 2
P308-1	Rectangular Shelter - Type 2 - Sheet 1 of 2
P308-2	Rectangular Shelter - Type 2 - Sheet 2 of 2
P309-1	Rotunda - Type 1 - Sheet 1 of 3
P309-2	Rotunda - Type 1 - Sheet 2 of 3
P309-3	Rotunda - Type 1 - Sheet 3 of 3
P311-1	Bus Shelter - Type 3 - Sheet 1 of 2
P311-2	Bus Shelter - Type 3 - Sheet 2 of 2
P312-1	Rectangular Skillion Roof Shelter - Type 3 - Sheet 1 of 4
P312-2	Rectangular Skillion Roof Shelter - Type 3 - Sheet 2 of 4
P312-3	Rectangular Skillion Roof Shelter - Type 3 - Sheet 3 of 4
P312-4	Rectangular Skillion Roof Shelter - Type 3 - Sheet 4 of 4
	Footbridges and Boardwalks
P304	Timber Footbridge Using Girder Poles
P310	1.4m Wide Lowset Boardwalk on Sleepers.
	Park Furniture
P320	Brick BBQ with Concrete Top - Single Hotplate
P321	Brick BBQ With Concrete Top - Double Hotplate
	Toilets and Amenities
P330	Layout of Toilet Fixtures for Disabled Toilets.
P331-1	Male/Female Amenities Block - Type 1 Layout Plan Sheet 1 of 6
P331-2	Male/Female Amenities Block - Type 1 Elevations Sheet 2 of 6

Number	Title / Topic
P331-3	Male/Female Amenities Block - Type 1 Section A-A Sheet 3 of 6
P331-4	Male/Female Amenities Block - Type 1 Foundation Plan Sheet 4 of 6
P331-5	Male/Female Amenities Block - Type 1 Notes Sheet 5 of 6
P331-6	Male/Female Amenities Block - Type 1 Toilet Fixtures Sheet 6 of 6
P335	Locking Plate For Septic Tank Lid
P337	Double Toilet Roll Holder
P338-1	Male/Female Amenities Block - Elevations Sheet 1 of 8
P338-2	Male/Female Amenities Block - Floor Plan Sheet 2 of 8
P338-3	Male/Female Amenities Block - Foundation Plan Sheet 3 of 8
P338-4	Male/Female Amenities Block - Section A-A Plan Sheet 4 of 8
P338-5	Male/Female Amenities Block - Framing Plan Sheet 5 of 8
P338-6	Male/Female Amenities Block - Bench And Basin Plan Sheet 6 of 8
P338-7	Male/Female Amenities Block - Toilet Fixtures And Notes Sheet 7 of 8
P338-8	Male/Female Amenities Block - Foundation Details Sheet 8 of 8

WATER SUPPLY

Number	Title / Topic
W400	Backflow Prevention Device Slab and Pole Mounted Device
W401	Burnett Shire Council Hydrant Identification Standard.

SEWERAGE

Number	Title / Topic
	General
80524	Sewer Reticulation Typical Sewer Main Layout As Constructed Plans
S500	Access Chambers Cast Iron Cover and Frame C.I. Concrete Filled Cover Cast Iron Cover
S501	Access Chambers Cast Iron Cover and Frame Bolt Down
	2440 Diameter Sewage Pump Stations
100806	2440 Dia. Sewage Pump Station - Cover Sheet and Drawing Index
100807	2440 Dia. Sewage Pump Station - Site Layout Requirements
100808	2440 Dia. Sewage Pump Station - Electrical Requirements Plan
100809	2440 Dia. Sewage Pump Station - Civil Requirements Plan
100810	2440 Dia. Sewage Pump Station - Section A
100811	2440 Dia. Sewage Pump Station - Section B
100812	2440 Dia. Sewage Pump Station - Section C
100813	1830 Dia. Grit Collector Maintenance Hole - Details Sheet 1 of 3
100814	1830 Dia. Grit Collector Maintenance Hole - Details Sheet 2 of 3
100815	1830 Dia. Grit Collector Maintenance Hole - Details Sheet 3 of 3
100817	2440 Dia. Sewage Pump Station - Potable Water Details
100822	2440 Dia. Sewage Pump Station - Fabricated Mild Steel Headers

Number	Title / Topic
100832	1830 Dia. Grit Collector Maintenance Hole - Wall Pipe Detail
100833	Grit Collector Maintenance Hole - Inlet Valve General Arrangement
100834	Grit Collector Maintenance Hole - Inlet Valve Spindle Shaft Details
100835	Grit Collector Maint. Hole - Inlet Valve Bearing Support Details
100836	1830 Dia. Grit Collector Maint. Hole - Bar Screeen Detail Sheet 1 of 2
100837	1830 Dia. Grit Collector Maint. Hole - Bar Screeen Detail Sheet 2 of 2
101025	Chain and Bracket Details
101026	Pipe Support Bracket Details
101028	Hole Wall Pipe Details
100995	Typical Electrical Cubical Layout 6kw D.O.L.
101027	Typical Electrical Cubical Layout 30kw VF
100901	Standard Overflow Flap Valve Type 1 Chamber Details

3 CONSTRUCTION

3.1 CONSTRUCTION STANDARDS AND PROCEDURES

(1) Construction is to be in accordance with the Local Government's adopted Construction Specifications.

(2) Such Specifications are to be included or referenced in the design documentation and plans.

(3) The Local Government has adopted AUS-SPEC- Development Specification Series - Construction (Burnett Shire Council's version) as the specifications applying to development within the Shire.

3.2 WORKS SUPERVISION AND NOTIFICATION

All works are to be in accordance with AUS-SPEC CQS Construction Quality System.

(1) All works that are to revert to Local Government control are to be carried out under the supervision of a Professional Engineer registered on the NPER 3 or RPEQ and in accordance with this Policy.

(2) The Supervising Engineer / Consultant is to provide a completed set of checklists that are provided in the adopted specifications as part of the as constructed information.

3.3 DUTIES AND RESPONSIBILITIES OF THE DEVELOPER'S ENGINEER / CONSULTANT

3.3.1 Duties

(1) The Engineer/Consultant is to ensure that the works referred to in the application are executed in accordance with—

a. This Development Works Planning Scheme Policy;

b. The Local Government's Development approval conditions;

c. The Local Government's relevant codes and policies;

d. The Local Government's approved drawings, specifications and relevant Australian Standards; and

e. Accepted Engineering practice.

(2) During the construction phase, the Engineer/Consultant is to—

a. Certify all of the works on completion in accordance with the Local Government's approved inspection and testing plan;(refer Construction Specification CQC -Appendix CQC-B);

b. Provide detailed 'As Constructed' documentation (Refer Section3.4.5(6);

c. Allocate competent and experienced staff for site inspection and testing;

d. Provide sufficient site presence to assure that the works have been constructed in accordance with the Local Government's approved inspection and testing plan.

e. Arrange and attend hold points to be satisfied that the works meet the above requirements;

f. Arrange with the Local Government to jointly witness specific hold points as described within this Policy;

g. Identify unacceptable or incorrect work practices or workmanship and take immediate appropriate action for their rectification;

h. Exercise due skill and diligence to identify site determined design amendments, in advance where possible, but in any case to seek the Local Government's approval to the amendment prior to the amended works taking place;

i. Inspect and confirm acceptability of works prior to booking or confirming a Local Government's inspection.

3.3.2 Before Construction Commences

(1) Following approval of the Operational Works but before commencing any work on site, the Engineer/Consultant is to—

a. Submit one hard copy and one electronic copy of complete engineering plans and works specifications and standard drawings as amended in accordance with conditions of approval of the original design submission, five (5) working days prior to the pre-start meeting;

b. Provide the Local Government with evidence that the Contractor is experienced in the type of work involved;

c. Provide the Local Government with evidence of the following information at least one week prior to the date of commencement of the development works—

i. Name, address and telephone number of the Principal Contractor for the estate (including after hours contact);

ii. A copy of the formal instrument of appointment of the "Principal Contractor";

iii. Verification that the Principal Contractor's current Public Indemnity insurance is current and is for the minimum amount of ten million dollars ($10,000,000);

iv. Name and telephone number of the person to be contacted in regard to any matter arising from the construction of the works;

v. The intended date of commencement of works, and contract period;

vi. A copy of the application for a Notifiable project as required by the Workplace Health and Safety Act and Amendments;

vii. If requested, a Traffic Management Plan (TMP) for the works, compiled in accordance with the Main Roads Manual of Traffic Control Devices (MUTCD) and the minimum details described below;

viii. A copy of the relevant road authority's written approval of any side track proposed as part of the TMP;

ix. If side tracks or deviations are proposed through private property, copies of necessary legal agreements thereto;

x. The payment of a General Performance and Security bonds amounts as described in Section 3.4 below; and

xi. Confirmation that all environmental considerations and constraints have been addressed and as necessary and approved by the relevant authority.

3.3.3 Pre-start Meeting

(1) A joint pre-start meeting, including the Local Government's delegate, the Consultant and the Contractor, is to be held on site prior to the Contractor being given possession of the site.

(2) The Supervising Engineer/Consultant is to notify the Local Government, five (5) working days prior to the pre-start meeting to secure the Local Government Officers' attendance.

(3) The pre-start meeting is to generally follow the program as set out below—

a. Introduction of representatives of the Local Government, Consultant(s), Contractor(s) and any other relevant people,

(e.g. MRD officers if work is being carried out on roads under their jurisdiction);

b. Review of relevant conditions of development approval;

c. Review of the Local Government's construction requirements;

d. Ensure all parties have copies of the latest revision of each drawing, and the Contract and Specification;

e. Inspect and identify parks and environmentally significant areas and/or trees for preservation (refer Section 2.3);

f. Assess and modify as necessary proposed sediment and erosion control measures;

g. Confirm that all requirements of the Workplace Health and Safety Act have been met. (NO WORK is to commence unless the requirements have been met.);

h. Confirm that all signage is to be in accordance with the MUTCD and any Traffic Management Plan (TMP);

i. Identify any other requirements that other authorities may have in relation to the project, and

j. Confirm hold points necessary for the works, including any additional hold points specific to the project requirements (Refer AUS-SPEC CQC - Quality Control Requirements - C101 General).

(4) Typical hold points required to be witnessed by The Local Government inspector; include but may not be limited to—

a. SEWER—

i. Sewer mains (gravity and rising) in place, bedded and covered, prior to backfill;

ii. Sewer mains during final testing;

iii. House connections in place, concrete thrusted to underside of branch connection collar;

iv. Inspection chambers in place at start and end of hydrostatic testing procedure;

b. ROAD—

i. Subgrade at completion of excavation to determine if further CBR's are required;

ii. Subgrade (after density test results) for proof roll prior to gravel placement;

iii. Service conduit crossings after bedding prior to backfill.

iv. Subbase (after density test results) for proof roll prior to kerb and channel placement

v. Kerb and channel prior to pour, stringline in place;

vi. Base (after density test results) for proof roll after final trim, prior to seal;

c. LOT FILL—

i. During allotment filling (after density test results) at 50% height complete;

d. WATER—

i. Water supply mains, after bedding and concrete thrusting prior to backfilling;

ii. Water supply mains during final testing, and at completion, prior to being placed "On Maintenance".

iii. At practical completion / on maintenance inspection.

iv. At re-inspection of outstanding works after "On Maintenance" inspection.

(5) The Supervising Engineer/Consultant is to forward Minutes of the Pre-start meeting to the Local Government and the Contractor within 5 days after the meeting, and prior to commencement of work.

3.3.4 Traffic Management Plan (TMP)

Elements of TMP

TMP are to be in accordance with AUS-SPEC C201 – Control of Traffic and Manual of Traffic Control Duties (MUTCD).

(1) If regulatory signage is required, the Contractor is to provide a Traffic Management Plan in accordance with MUTCD to the Local Government for approval. The plan is to include the following elements—

a. Details of any proposed detours, side tracks or temporary deviations of traffic flow, including the forecasted duration of any such changes to traffic conditions and the existing surfaces;

b. Reference to the proposed sections/diagrams of the MUTCD for each situation proposed for the traffic management;

c. If the side track is proposed on private property, provide copies of signed access agreements in place detailing approvals, conditions and periods relating to side tracks through private property; and

d. The traffic disruption time is to be over estimated, as an extension of time will necessitate re-advertising.

e. Means of control of disruption / effect in peak traffic periods.

Compliance with TMP

(2) To ensure compliance with the TMP and the MUTCD, the contractor is to undertake regular day and night inspections of the road signage at not greater than weekly intervals or if requested by the Local Government.

Non Compliance

(3) Any non-compliance identified by the inspection is to be detailed on a formal site instruction to the Principal Contractor requiring rectification within 24 hours.

(4) If the signage is not brought into compliance within the required time, the Supervising Engineer/Consultant is to issue a request to the Local Government to carry out immediate rectification of signage.

(5) The request is to be accompanied with a copy of the TMP and details of works required to ensure compliance.

(6) The Local Government may take immediate action, without reference to the Principal Contractor to have the signage comply with the approved plan.

(7) The Local Government may recover all costs incurred in taking the rectifying action, including rent on the Local Government's signs, by drawing down the general performance bond (refer 3.5.2).

(8) The account is to be settled prior to the development works being accepted on maintenance.

Public Advice

(9) The following advice/information is to be provided in writing by the Principal Contractor for all side tracks, overnight detours and traffic disruptions—

a. The name of the road affected;

b. The dates between which the traffic flows are to be affected.

c. A written description of an alternate route (applicable to detours only); and

d. A map clearly showing the area of road affected and the alternate route where applicable.

(10) The above advice is to be provided to the following parties a minimum of 7 days prior to the commencement of works affecting traffic—

a. The Local Government;

b. Police Department;

c. Fire Brigade;

d. Ambulance;

e. State Emergency Service; and

f. Schools or Public Institutions within a 1km radius of the works.

Advertising

(11) The Principal Contractor is to prepare an advertisement in accordance with section 915 of the Local Government Act, for all sidetracks, detours and temporary road closures in the format that appears as Appendix 4.

(12) The advertisement is to be approved and signed by the Local Government a minimum of 7 days prior to the placement of the advertisement.

(13) The Principal Contractor is to undertake the submission of the advertising of in local news services, a minimum of two (2) days prior to the proposed works.

(14) In addition to the public advertising the Principal Contractor is to also undertake a letter drop to all private residences and businesses that may be affected by the works.

(15) Direct personal advice will be provided to each property owner/occupier as to how access is to be maintained to the directly affected properties for the duration of the works.

Completion or Extension of Time

(16) At the completion of the advertised time period for the works, the road is to be fully re-established including surfacing and all warning signs and traffic control devices are to be removed.

(17) On the occasion that the works will not be completed within the advertised time period the Public Advice and Advertising procedures defined above are to be carried out again a minimum of 7 days prior to the expiration of the previously advertised time period.

3.4 INSPECTION AND TESTING

Inspection and testing are to be in accordance with AUS-SPEC CQC – Quality Control Requirements.

(1) The Local Government's representative is to be invited by the Supervising Engineer/Consultant to be present at the inspections listed below.

(2) It is the Supervising Engineer/Consultant's responsibility to—

a. Ensure all the necessary details as listed have been checked and complied with prior to asking for an inspection of the particular work element by the Local Government;

b. Request the Local Government inspections, arrange a mutually acceptable time and meeting place a minimum of one clear working day before the inspection;

c. Provide the Local Government a formal written report within three working days after the inspection if remedial work is required, and;

d. Complete Test and Inspection sheets for each element of the construction.

(3) No additional work on the particular work element is to proceed until the following inspections have been satisfactorily completed.

3.4.2 Earthworks and Subgrade Inspection

Inspections are to be carried out in accordance with AUS-SPEC CQC Quality Control Requirements.

(1) These inspections are to generally include—

a. Checking service conduit pipe classes and locations against design position and markers, (if kerb and channel is in place);

b. Check backfill of service trenches;

c. Check location of mitre and subsoil drains;

d. Proof rolling the bottom of the excavation after compaction, test verification and trimming;

e. Checking of subgrade, kerb & channel levels and cross fall;

f. String line profile between kerbs & check reduced levels at design intervals on centreline and kerb lip;

g. Checking all related civil works;

h. Visually check subgrade material to confirm the proposed limits of different pavement depths or identify the need for further testing; and

i. Check and provide copies of compaction test certificates for the subgrade and backfill to trenches to the Local Government Inspector prior to or at the time of the inspection.

(2) The location of the tests is to be clearly identified on the test certificates and be representative of the subgrade.

(3) If Local Government inspections indicate failed areas regardless of test results, they may order further testing to be performed.

(4) The cost of specified uncompleted tests and failed re-ordered tests are to be borne by the developer.

(5) The Local Government is to pay for re-ordered tests if they pass.

3.4.3 Roadworks and Pre-seal Inspection

Refer to AUS-SPEC CQC Quality Control Requirements

(1) These inspections are to generally include—

a. Checking base course gravel after compaction;

b. Check and provide copies of compaction test certificates including pavement depths for the subbase and base to the Local Government Inspector prior to or at the time of the inspection;

c. Pre-prime inspection of the pavement surface to ensure street and intersection profile is constructed to design and surface is suitable for priming;

d. Proof rolling the top of the base course layer;

e. Spray seal - Proposed application rates of prime and binder and spread rates of pre-coated aggregate are to have been approved prior to the inspection;

f. Asphaltic concrete - Proposed application rates of prime and results of mix acceptance tests are to have been approved prior to the inspections; and

g. Stormwater drainage works affecting the roadworks completed and located as designed.

3.4.4 Sewage and Water Reticulation Inspection

Inspections shall be in accordance with AUS-SPEC 401 Water Reticulation and C402 – Sewerage System.

These inspections are to generally include:

Sewage Reticulation

a. Correct location and thrusting of house connections after bedding and cover, prior to backfill;

b. Backfill and surface shaping;

c. Alignment and profile of mains using draw tool and CCTV;

d. Pressure testing of mains; and

e. Benching and Hydraulic testing of access chambers.

f. The Local Government requires that connections to live sewer be witnessed by the Local Government staff and that this work

is carried out by suitably qualified and accredited plumbing code and confined space personnel.

Water Reticulation—

g. Correct location of mains and conduits;

h. Bedding, backfill and surface shaping;

i. Correct depth of main;

j. Valves hydrants bends & tees and thrust blocks;

k. Pressure testing; and

l. Chlorinating.

m. The Local Government requires that the Local Government staff witness connections to pressured water mains and that suitably qualified personnel carry out this work.

3.4.5 "On Maintenance" Inspection

(1) Appendix 6 of this Policy provides a checklist of the items that are generally required to be inspected at an "On Maintenance" inspection.

(2) The Supervising Engineer/Consultant is responsible for ensuring that the works have been completed and the listed items in Appendix 6 are in accordance with the Operational Works Permit, Local Government's technical specifications and accepted engineering practice prior to requesting an "On maintenance" inspection.

(3) Any construction works that either the Consulting Engineer or the Local Government's Engineer deems unacceptable is to be itemised in a defects list.

(4) Minor defects, as determined by the Local Government, may be attended to within 30 days of the inspection and are not to delay the Local Government's acceptance of the works on maintenance.

(5) Major defects, defects affecting public safety, or minor defects with potential to deteriorate or have a negative effect on other elements of the work are to be rectified prior to the Local Government's acceptance of the works on maintenance.

(6) “As Constructed” details are to be surveyed in the field, with levels to AHD(m), and provided to the Supervising Engineer / Consultant by a registered surveyor or a qualified engineering surveyor.

(7) The data is to be submitted to the Local Government orientated on true geographical co-ordinates, Mapping Grid of Australia (MGA94) Zone 56.

(8) A re-inspection of the rectification works and payment of the appropriate re-inspection fee is required prior to the Local Government accepting the works on maintenance.

(9) Notwithstanding the above, the project will not be formally accepted "On Maintenance" until all as constructed documentation is submitted to the Local Government as hard copy and electronic version compatible to the Local Government's electronic programs.

(10) A certificate (refer Appendix 8) for Certificate format) from the supervising Engineer/Consultant certifying that all elements of the works have been constructed in accordance with this policy and the plans and specifications will be provided to the Local Government prior to the works being accepted on maintenance and prior to the sealing of the survey plan.

(11) Following a satisfactory "On Maintenance" inspection, and payment of an Operational Works inspection fee to the Local Government the supervising Engineer/Consultant is to submit a written request to the Local Government for acceptance of the works "On Maintenance". (refer “On Maintenance” submission checklist Appendix 7).

(12) The plan of survey will not be sealed until the work has been accepted on maintenance and all conditions of the Development and Operational Works approval have been met. (Refer section 4 of this Policy).

(13) The Local Government will, upon confirmation that no outstanding matters or fees exist, provide confirmation of acceptance of the works "On Maintenance".

3.5 GENERAL PERFORMANCE BOND AND SECURITY BOND

(1) The Local Government's Director Planning and Development, based on the sensitivity of the works and risk effect of works on public safety environment and infrastructure, will determine the need for a general performance bond.

3.5.2 General Performance Bond

(1) The Local Government may require the submission of a general performance bond before any works commence.

(2) The bond is to cover the cost of any remedial action undertaken by the Local Government to—

a. Control dust, smoke or noise nuisance emanating from a development site;

b. Cleaning of silt from downstream waterways or stormwater drains that has resulted from erosion attributed to the development works;

c. Repair of upstream or downstream erosion attributed to the works;

d. Improvement or repair of road works warning signs to comply with the approved signage arrangement or Traffic Management Plan (TMP); or the Manual Of Traffic Control Devises (MUTCD);

e. Repair proven damage to the Local Government's infrastructure;

f. Rectification of damage to adjacent private property or common fencing; and

g. Payment of any fines imposed under the Environmental Protection Act Nuisances laws or regulations.

h. Repair/cleaning of roads affected by traffic generated by the works.

(3) The Local Government's costs will include administration and overtime where urgent remedial works are required outside of normal work hours.

(4) Remedial works are to be undertaken at the direction of the Local Government.

(5) The Local Government is to give the Supervising Engineer/Consultant a minimum of 24 hours notice of any pending action except where the general public's safety is considered to be at risk and immediate Local Government action is warranted.

(6) The notice is to initially be given verbally and is to be confirmed by written notice within the notification period.

(7) The General Performance bond is to be submitted to the Local Government in conjunction with the Supervising Engineer/ Consultant's notification of the commencement of works detailed in Section 3.3 above.

(8) The General Performance bond is to be valued at a minimum of $5,000 or higher, as determined by the intensity of development. Refer to table in guideline at 3.4.1 and is to be submitted as cash or an irrevocable bank guarantee.

(9) The release of the bond is to not occur until all works that are to revert to the Local Government's control are capable of being accepted on maintenance including the submission of as

constructed drawings, engineer's certification and the maintenance bond.

3.5.3 Security bond

(1) The Local Government may require that the Developer provide a security bond for some Development Work.

(2) Such work includes the upgrading of the Local Government's public infrastructure as a result of the development impact, and can include roads, stormwater drainage, sewerage and water supply systems and trunk mains.

(3) The Developer's Engineer is to provide a realistic estimate of cost of the work for the Local Government's approval.

(4) The bond is to be paid to the Local Government at 20% above the agreed estimate for the works and is to be submitted as cash or an irrevocable bank guarantee.

(5) On written application by the Developer during the course of construction of the bonded works, the bond may be partially released by the Local Government at minimum monthly periods until the balance of the unpaid bond equals the maintenance bond amount of 5% of the value of the bonded works. This amount is to be dealt with in accordance with Section 4.2 (Maintenance Bond) of this Policy.)

3.6 CONSTRUCTION SPECIFICATIONS INTRODUCTION

(1) The Local Government has adopted AUS-SPEC - Development Specification Series (Burnett Shire Council's version) as desired minimum standards for development works within the Shire.

(2) The Local Government amendments are listed on an amendment Record Sheet provided at the beginning of each Specification.

(3) The Local Government's adopted construction specifications (AUS-SPEC) listed in Table 3 below and referenced in various sections throughout are provided electronically on CD-ROM.

(4) Whilst most construction is to be guided by various specifications within the group, all work is to be completed in accordance with the Local Government's version of AUS-SPEC CQS and CQC, which specify the quality system requirements and quality control requirements for developments.

Table 3—Construction Specifications

The Specifications listed in this table are particular specification document

Topic	No.	Specification Title
General	CQS	Quality System Requirements
	CQC	Quality Control Requirements
	C101	General
	C201	Control of Traffic
	C211	Control of Erosion and Sedimentation
	C212	Clearing and Grubbing
	C213	Earthworks
	C265	Boundary Fencing
	C271	Minor Concrete Works
	C501	Bushfire Protection (Perimeter Tracks)
Roads	C231	Subsoil and Foundation Drains
	C232	Pavement Drains
	C233	Drainage Mats
	C241	Stabilization
	C242	Flexible Pavements
	C244	Sprayed Bituminous Surfacing
	C245	Asphaltic Concrete
	C247	Mass Concrete Subbase
	C248	Plain or Reinforced Concrete Base
	C254	Segmental Paving
	C255	Bituminous Micro surfacing
	C261	Pavement Markings
	C262	Signposting
	C263	Guide Posts
	C264	Guard Fence
	C601	Street Lighting Construction
Drainage	C220	Stormwater Drainage - General
	C221	Pipe Drainage
	C222	Precast Box Culverts
	C223	Drainage Structures
	C224	Open Drains including Kerb & Gutter (Channel)
	C230	Subsurface Drainage - General
Water Supply	C401	Water Reticulation (WSA 03 & WS SPEC)
Sewerage	C402	Sewerage System (WSA 02 & WS SPEC)

4 POST CONSTRUCTION

4.1 THE LOCAL GOVERNMENT REQUIREMENTS BEFORE ACCEPTANCE OF THE WORKS 'ON MAINTENANCE'

(1) The Local Government may accept development work 'on maintenance' in its entirety, withhold acceptance in its entirety, or withhold acceptance on a minor part of the works until completed to the satisfaction of the Local Government.

(2) The Local Government is to accept works "On Maintenance" if—

a. The work is complete and certified by the Developer's Engineer as being constructed in accordance with this Policy, approved plans and specifications. (refer Appendix 8)

b. As Constructed drawings and quality control records in accordance with this Policy are submitted and approved by the Local Government (refer Appendices 6 and 7);

c. Relevant maintenance bonds have been paid to the Local Government, and

d. Fees for the inspection and oversighting of the works have been paid to the Local Government based on the total cost of works.

e. The actual cost breakdown for Councils infrastructure records has been provided i.e.—

   i. Roadworks;

   ii. Storm Water Drainage;

   iii. Water Reticulation;

   iv. Sewer Reticulation;

   v. Landscaping;

   vi. Parks and structures there-on;

   vii. Walk and Cycle Paths; and

viii. Total cost of works.

(3) The Local Government will arrange for the release or reduction of any relevant performance and security bonds held.

4.2 MAINTENANCE PERIOD

(1) A maintenance period for a minimum of twelve (12) months is applicable for all works to be handed over to the Local Government.

(2) The Local Government may set a minimum maintenance period greater than twelve (12) months for specific elements of works.

(3) The Local Government's maintenance period is not to be confused with the Defects Liability Period applicable to contractors.

(4) During the maintenance period the Developer is to remain liable for—

a. The repair and rectification of any defects within the constructed works;

b. The redesign and reconstruction of any works that have failed to perform in accordance with the design intent;

c. Rectification of any omissions in the design drawings that are necessary for compliance with the conditions of development, or the Local Government 's Local Laws and Planning Scheme Policies current at the time of submission of engineering drawings; and

d. Maintenance of grass levels and health for all works during the maintenance period such the grass condition does not impede nor cause diversion of stormwater, erosion or sedimentation.

e. Maintenance of grass cover such that a dust nuisance is not generated as defined in the Environmental Protection Act.

(5) The reconstruction of works carried out to rectify either a construction defect, or the failure of the works to perform to the design intent, will be subject to a further maintenance period of up to 12 months as determined applicable by the Local Government.

(6) Any third party or vandal damage is to be reported to the Local Government as soon as it becomes apparent to the Developer.

(7) Any evidence as to the cause or persons responsible for the third party damage is also to be reported to permit the Local Government to undertake appropriate action to recover damages.

(8) At any time during the maintenance period the Local Government may undertake random inspections to determine the satisfactory maintenance of the works.

(9) Where maintenance requirements or defects are noted, the Local Government will provide written advice to the Developer's Consulting Engineer requiring appropriate works to be carried out within 30 days.

(10) Where public safety or health is at risk, or there is evidence of actual or probable environmental harm, as a result of a lack of maintenance or defective works, verbal advice is to be given to the Consulting Engineer requiring appropriate action within 24 hours.

(11) Where either of the Local Government's notifications are not complied with, the Local Government may undertake the necessary works without further reference to the developer.

(12) All costs incurred by the Local Government in carrying out such works up to the value of the maintenance security bond will be recovered from the security maintenance bond.

(13) Where the cost of works exceeds the value of the maintenance security bond the Local Government may enact legal proceedings to recover those costs.

4.3 MAINTENANCE SECURITY BOND

(1) A condition of the Local Government accepting the works "On Maintenance" is the lodgement to the Local Government of a maintenance security bond of 5% of the value of the works as constructed by way of cash, or an unconditional Bank Guarantee.

(2) The Developer is to lodge this amount to safeguard the Local Government if repairs/alterations are required during the maintenance period by the Local Government.

4.4 THE LOCAL GOVERNMENT REQUIREMENTS BEFORE ACCEPTING THE WORKS 'OFF MAINTENANCE'

4.4.1 Off Maintenance Requirements

(1) The maintenance period may be extended beyond the 12 months to cater for the maintenance of items of work that are defective or have been reconstructed or repaired during the maintenance period.

(2) The Local Government may relieve the developer for the maintenance liability of aspects of the works that have performed satisfactorily for a period of twelve months.

(3) The works are not to be accepted 'off maintenance' or any part of the maintenance bond released until all aspects of the works have performed satisfactorily for a period of 12 months.

(4) Where a part of the works has been repaired during the maintenance period, the Local Government may exercise discretion to reduce the maintenance bond for the extended maintenance period.

(5) The minimum security retained by the Local Government is to be sufficient to fully reconstruct the repaired section of the works if the repair also fails.

(6) Before the Local Government accepts full responsibility for the works i.e. approve the works as "Off Maintenance", the checklists attached as Appendices 9 and 10 are to be submitted together with the items checked as relevant for the works.

(7) The Supervising Engineer/Consultant is to request of the Local Government, in writing, that the works be accepted as "Off Maintenance" and that any moneys or bonds held as security be released.

(8) The Local Government is to, upon confirmation that no outstanding accounts owing from the development are due to The Local Government, confirm acceptance of the works "Off Maintenance", and arrange for release of the maintenance security bond.

4.4.2 "Off-Maintenance" Inspection

(1) Appendix 9 provides a checklist of the items that are generally required to be inspected at an "Off Maintenance" Inspection and items/elements noted for specific inspection at the previous “On Maintenance” inspection.

(2) The Supervising Engineer/Consultant is responsible for ensuring that the works are presented in accordance with this Policy, the approved drawings, the Local Government's Technical Specifications and accepted engineering practice prior to requesting an "Off Maintenance" inspection.

(3) Where there is indication that the works are not performing or may be subject to a reduced design life, rectification work is to be undertaken before the development is accepted off maintenance.

(4) Rectification works may be subject to an extended maintenance period.

(5) Following a satisfactory "Off Maintenance" inspection, the Consultant is to submit a written request to the Local Government for acceptance of the works "Off Maintenance", and for the release of the maintenance security bond. (Refer Appendix 9)

(6) The Local Government will, upon confirmation that there are no outstanding fees or accounts are due, provide confirmation of

acceptance of the works "Off Maintenance", and arrange for the release of the maintenance security bond.

4.5 BONDS AND SURVEY PLAN SEALING

(1) All security and maintenance bonds submitted to the Local Government for non-trunk and trunk infrastructure works are to be in the form of cash or an irrevocable, unconditional, open dated guarantee issued by a bank, or other acceptable financial institution acceptable to the Local Government.

(2) Where security is lodged in the form of a cheque, the Local Government will not be obliged to act upon the payment until the cheque has been cleared.

(3) The submission of a cash bond is to be accompanied with a letter detailing what the security is for and the Local Government approval number to which it applies.

(4) The Local Government is to issue a receipt, acknowledging acceptance of the bond.

(5) The receipt is to be retained, as proof of lodgement and the Local Government is to only return unused portions of cash bonds to the person or company nominated on the receipt as lodging the bond unless specifically directed in writing by the lodger of the bond to make alternate payment.

(6) The information on Bank guarantees is to ensure that the bond document clearly identifies the contributions and works being bonded, including locations and road names if these are named in the approval.

(7) The Developer may convert a security bond to a maintenance bond by applying to the Local Government, clearly identifying both the converted bond and the intended new bond and their relevant approval numbers.

(8) The Local Government is to formally notify the institution issuing the bond of any reduction in the security required due to payment of contributions or satisfactory completion of works for which the bond was lodged.

(9) If at any time the bond is to be redirected to secure contributions or works not specifically stated on the bond document, the Local Government is to require a letter from the institution approving the redirection of the security.

(10) Where a bond is to be released prior to the completion of payments for the construction of works, (due to property transfer etc) the Local

Government is to not release the bond until alternate security is lodged to the Local Government

4.6 BONDING FOR EARLY SEALING AND RELEASE OF SURVEY PLANS

(1) The Local Government may, at its discretion, accept a bond to secure incomplete works associated with a development and seal the plans of survey prior to the completion of the works.

(2) The works within the common property and the connection of essential services such as sewerage, water and electricity to each of the individual lots associated with Community Management Title developments are to be completed or bonded to the same standards as standard reconfiguration developments.

(3) The Local Government assesses the merits of bonding and survey plan release on case-by-case basis.

(4) Factors in considering each case may include—

a. The total extent of the development works required and the extent of works undertaken to date;

b. The provision or otherwise of services considered to be essential, including electricity, telephone, street lighting, water supply, sewerage, drainage, road frontage, kerb and channel and access;

c. The extent of risk, which the Local Government would be assuming if the developer fail to undertake the works, required;

d. The capacity of the Local Government to undertake the works on short notice if it is necessary to do so; and

e. Advice from the developer as to anticipated time frames to undertake the works and as to the reasons that the developer is unable to undertake the works at the time that the request for bonding of uncompleted works is made.

4.6.2 Prerequisites for early plan seal

(1) The Local Government is to be satisfied that all outstanding works both internal and external to a subdivision are capable of being completed within three months from the date the Local Government seals the survey plan for the subdivision.

(2) The Local Government will require the Developers Consulting Engineer / Consultant to submit a works program detailing all major portions of the work outstanding and their programmed completion dates.

(3) All outstanding works required to comply with the conditions of approval are to be secured with the Local Government by a bond.

4.6.3 Bond Value

(1) To determine the value of security to be lodged, the Developer's Supervising Engineer/Consultant is to submit a detailed schedule of quantities and estimated rates for the works proposed to be bonded to the Local Government for review.

(2) Upon agreement by the Local Government of the estimated cost of the works, security is to be lodged to the value of 120% of that estimate.

(3) For works that are subject to a signed fixed price contract, and have not commenced, security is to be lodged to the value of 120% of the value of the contract price for those works proposed to be bonded

(4) A copy of the contract together with the contract schedule of quantities and rates is to be provided to the Local Government as verification of the value of the works.

(5) For works that are subject to a signed fixed price contract and are partially complete, the Developer's Consulting Engineer / Consultant is to submit a certified schedule of quantities and contract rates for the outstanding works.

(6) Upon agreement of the scheduled estimate of the works, security is to be lodged to the value of 120% of that estimate.

4.6.4 Reduction of Bonds

(1) Upon written request the value of any security bond held by the Local Government in relation to the incomplete works may be reduced to 120% of the agreed estimated value of the works remaining at the time of the request.

(2) The application for the reduction of security is to be accompanied by the Developer's Consulting Engineer's certified schedule of quantities and contract rates for the incomplete works.

(3) A security bond issued by a financial institution may be reduced as the works bonded are completed to the value of the works maintenance bond.

(4) In the case of a security bond reduction to the value of the maintenance bond, the wording on the original issue of the bond is to clearly state that the purpose of the bond is for "the maintenance of works associated with..."

(5) Unless otherwise agreed by The Local Government, only 3 security bond reductions at one-month intervals will be permitted before the works are accepted "On maintenance".

4.6.5 Realisation of Bonds

(1) Works that remain incomplete three months after the Local Government has sealed the plan of survey may be undertaken by the Local Government or by a contractor under the direction of the Local Government.

(2) All costs incurred by the Local Government in undertaking the works, including the Local Government's supervision costs are to be recovered from the security bond.

(3) Where costs incurred by the Local Government exceed the value of the security, the Local Government will take all necessary legal action to recover the additional costs from the Developer.

4.7 SEALING OF SURVEY PLANS AFTER CONSTRUCTION IS COMPLETE

(1) If the plans are to be sealed after construction is complete and all documentation, engineering certification and as constructed drawings are submitted and accepted, the only bond required to be lodged is the Maintenance Bond (refer Appendix 11).

4.8 CONTRIBUTIONS

(1) The Local Government may, as a condition of development approval, require contributions by the Developer towards the costs of previously constructed or future infrastructure, such as water and sewerage headworks, roadworks, drainage, footpaths, parks and open space.

(2) The value of the contributions, any time constraint for payment and Consumer Price indexing is defined by the Conditions of Development.

(3) All contributions are calculated in accordance with the Local Government's Policy current at the time of payment.

(4) Upon request, the Local Government will check the current value of the contribution before payment is submitted and advise the developer of any changes to the values as conditioned in the Development Approval.

(5) All contributions are to be paid in full prior to the Local Government sealing of the survey plan or before any use of the site permitted by

the Local Government approval commences, whichever is the earlier.

(6) The Developer is to provide written details of the purpose and breakdown of payments as described in the conditions of approval of the development/s that relate to current and past development approvals or appeal conditions.

4.9 SEALING THE PLANS OF SURVEY

(1) An applicant is to submit to the Local Government an accurate Plan of Survey, which accords with the approved proposal plan.

(2) Upon being satisfied that the Plan of Survey conforms to the approval granted, and that all development conditions have been met, the Local Government will sign and seal the Survey Plan and release it to the Applicant for lodgement in the Titles Office.

(3) The Plan of Survey is to be accompanied or preceded by all easement documents to be registered in conjunction with the plan and all community management statements applicable to the development/s.

(4) Where land is to be transferred to the Crown as Public Use land as parks or reserves, the full description of the use is to be noted as a property description on those Public Areas on the plan. e.g. (Recreation) (Park and Drainage Purposes) (Nature reserve).

(5) For land to be transferred to the Local Government for any purpose, e.g. sewage pump stations, drainage reserves, or for town planning purposes, stamp duty is to be paid on the transfer by the Developer.

(6) All conditions of the Local Government approval of a development are to be complied with prior to sealing of the survey plan.

(7) Appendix 11 of this policy has been prepared as a checklist of the IPA and the Local Government's general requirements for sealing the survey plan.

(8) The applicant is to submit and certify the completed checklist in conjunction with the application for sealing the survey plan.

(9) In the event that either the conditions of approval have not been fully complied with, or all of the required documentation has not been submitted with the application for plan sealing, the Local Government will give the applicant written notice stating the action to be taken to allow the plan to be approved and sealed.

5 FILLING OF LAND

5.1 INTRODUCTION

(1) Over the years there have been many blocks of land that have had fill placed on them. The fill has been of various qualities and densities and, in many cases, there has been no attempt to consolidate the material.

(2) The possibility of permitting construction on such a site - and in many cases there is no record or knowledge that the land has been filled - is a major concern.

(3) A policy to manage future filling operations and to endeavour to address past practices is essential.

5.2 PURPOSE

(1) The purpose of this part of the policy is to regulate the placement of fill using:

a. More than 50 cubic metres of fill; or

b. More than 10 cubic metres of fill with an average depth of more than 150mm above natural ground level.

5.3 OBJECTIVES

(1) The objectives of this part of the policy are to establish a set of conditions to regulate the placement of fill material on land within the Shire so as to—

a. Ensure that filling is only placed and compacted to an acceptable standard;

b. Protect owners and builders from the possibility of constructing on unstable fill; and

c. Afford Council protection from claims for allowing construction on unstable fill.

5.4 APPLICATIONS FOR APPROVAL TO COMMENCE FILLING

5.4.1 OPERATIONAL WORKS APPLICATION

(1) An operational works application is required for placement of fill in accordance with the Planning Scheme. Applications for operational works for filling are to be submitted in writing as an "Operational Work" on Integrated Development Assessment System (IDAS) application forms.

(2) The Application will be assessed by Council in accordance with the *Integrated Planning Act 1997.*

5.4.2 DRAINAGE

(1) The provisions of Clause 5.6.7 in relation to drainage are to be complied with.

5.4.3 INSPECTIONS

(1) Inspections shall be in accordance with the Operational Works requirements.

5.4.4 BONDS

(1) A Bond equal to 120 % of the agreed estimate of cost for the works may be required as a condition of approval to ensure satisfactory operation and completion of the filling process. This bond, if applied, is to be paid to Council by means of cash or irrevocable bank guarantee within 14 days of approval of the application and prior to the commencement of work.

(2) The release of a bond or the return of any unexpended bond will only be made on certification that the work has been completed satisfactorily.

(3) In large projects, however, arrangements may be made for staged releases of the bond. In this case, releases will only be made on certification that the agreed stages have been completed satisfactorily.

5.5 RETAINING WALLS

(1) Where filling work involves the construction of a retaining wall and that retaining wall—

a. carries no surcharge loading; and

b. the total finished height of the wall, or the total height of the fill or cut retained is no more than 1 metre above the adjoining ground level; and

c. the wall is no closer than 1.5 metres to a building or another retaining wall;

that work is classed as self assessable building work under the IPA and the Building Regulations and accordingly, the work falls within the scope of the policy. In such case, the work is to satisfy the requirements of this policy.

(2) All other work involving the construction of a retaining wall constitutes building work for which a building application is to be made and fees paid in accordance with the fees applicable at the time. In such cases this policy does not apply.

5.6 COMPLIANCE WITH STANDARDS

5.6.1 DESIGN STANDARDS

(1) The placement of "Structural Fill" is to be carried out in accordance with the Australian Standard "Guidelines on Earthworks for Commercial and Residential Developments" (AS3798-1996). The following specific requirements apply.

5.6.2 SITE PREPARATION

(1) The natural surface is to be stripped of all vegetation prior to the placement of fill. Topsoil may be removed and stockpiled for reuse.

(2) Tree stumps and other organic material are to be removed. Holes and depressions are to be filled and compacted to the existing natural surface level with material that is similar to the surrounding ground material or proposed fill material.

5.6.3 FILL MATERIAL

(1) Fill material is not to contain—

a. Organic material such as grass, trees, roots or timber; or

b. Materials contaminated with toxic substances or soluble compounds harmful to the environment; or

c. Metal, plastics or Builder's debris; or

d. Organic soils or silts or other materials that have the deleterious properties of silt; or

e. Other materials with properties that are unsuitable for the forming of structural fill ((this includes but is not limited to rocks or boulders in excess of 150 mm. Diameter).

5.6.4 BATTERS

(1) Batters are to be constructed to facilitate maintenance with the use of conventional maintenance equipment.

(2) Slopes not exceeding 1 horizontal to 4 vertical are recommended and approval of slopes exceeding 1 horizontal to 3 vertical will not be considered unless supported by a report from an authority having NATA certification for earthworks or an RPEQ.

(3) Filling is not to extend onto neighbouring properties or public land without prior written approval from the respective parties.

5.6.5 EXISTING SERVICES

(1) Where existing underground facilities such as utility services for water, sewerage, gas, electricity, television or telephone traverse the land to be filled, the applicant is to satisfy the responsible Authority that the filling will be completed in a manner that will not inconvenience access to or maintenance of those services.

(2) In some cases, this may involve the negotiation of conditional approval with the Authority concerned and conditions may include requirements such as the raising of the services and/or the provision of easements.

(3) Where an authority other than the local government is involved, a copy of the written approval of that authority together with a copy of any conditions attached to the approval, is to accompany the application.

(4) For applications affecting the local governments services, the matter will be dealt with as part of the approval process.

5.6.6 COMPACTION

(1) All structural fill is to be placed and compacted to the following minimum relative compactions—

Compaction

Item	Project	Minimum Relative Compaction Percentage	
		Minimum Dry Density Ratio	Minimum Density Index
1	Residential:Lot Fill	95 (Std.)	65 (Std.)
2	Commercial:Fills to support minor loadings, including floor loadings of up to 20 kPa and isolated pad or strip footings to 100 kPa	98 (Std.)	70 (Std.)

5.6.7 STORMWATER

(1) No fill material is to be placed so as to redirect or restrict existing drainage watercourse or overland flow paths.

(2) Fill placed is not to cause water to pond on adjacent properties or increase the possibility of flooding risk to upstream or downstream properties.

(3) Drainage to the requirements of Council is to be constructed as part of the filling or filling activities.

5.7 SUPERVISION, TESTING AND CERTIFICATION

(1) Council will only accept fill as approved fill, if—

a. The filling operation has been designed and supervised by a Practising Registered Professional Engineer (Queensland) in accordance with AS 3798-1996. Such a design is to take into account existing topography, soil and drainage conditions; and

b. An "As Constructed" plan of fill showing property description, boundaries and surface levels prior to filling, finished surface levels after filling, and any other works as constructed or altered in the fill operation is supplied to Council; and

c. Copies of compaction test results accompanied by an Engineer's Certificate certifying compliance with Council's requirements and compliance with AS 3798-1996 is supplied to Council.

5.8 COMPACTION TESTS

(1) All compaction and quality tests must be undertaken in accordance with A.S. 3798-1996 — "guidelines on earthworks for commercial and residential developments".

6 SCHEDULE 1— ABBREVIATIONS

ABBREVIATION	DEFINITION / EXPLANATION
APRG	A Guide To The Design Of New Pavements For Light Traffic
ARRB	Australian Road Research Board
AUS-SPEC	Development Specification Series (Burnett Shire Council's Version)
CBR	Californian Bearing Ratio
CMS	Community Management Statement
CQC	Construction Quality Control (as per AUS-SPEC)
DMR	Department of Main Roads
DNRM&W	Department of Natural Resources, Mines and Water
DOT	Department of Transport
DPI	Department of Primary Industries
DQS	Quality Assurance Requirements For Design
EPA	Environmental Protection Agency
FSL	Finished Surface Level
IDAS	Integrated Development Assessment System
IMEAQ	Institute of Municipal Engineering Australia, Queensland (now Institute of Public Works Engineering Australia Qld Division Inc.)
IPA	*Integrated Planning Act 1997*
LGAQ	Local Government of Queensland
MUTCD	Manual of Uniform Traffic Control Devices
RPEQ	Board of Professional Engineers Queensland
NATA	National Association of Testing Authorities
NPER	National Professional Engineers Register
QUDM	Queensland Urban Stormwater Drainage Design Manual
SP	Survey Plan
TMP	Traffic Management Plan
WRC	Water Resources Commission of Queensland (now part of Natural Resources, Mines and Water)
WSA	Water Services Association of Australia
BCC	Brisbane City Council
AHD	Australian Height Datum
RAFT	A Hydraulics Software Program for storm water calculations
XP-RatHGL	An Urban Stormwater Drainage Design Program

7 APPENDICES

APPENDIX 1 — DOCUMENT AMENDMENT FEEDBACK FORM

This Amendment feed back form is provided for the policy users to provide suggested amendments to the policy for consideration in the Local Government's review system.

Contact information of policy user

Company _____

Representatives Name _____

Address _____

Phone _____

Email .....

Key Topic addressed and suggested wording of amendment	Policy Clause No.	Comment Date
Example Adopt State Policy 2/02 (Acid Sulfate Soils) This policy has adopted state planning policy 2/02 in relation to management requirements for acid sulfate soils	2.4.1 Acid Sulfate Soils	2/6/02

APPENDIX 2 — PRELIMINARY DESIGN CHECKLIST

HAVE YOU CHECKED	POLICY REFERENCE	CHECKED	
		YES	N/A
ENVIRONMENTAL CONSIDERATIONS	Section 2.4.2		
Environmentally Significant Areas		☐	☐
Contaminated Land		☐	☐
Dust, and Siltation		☐	☐
Requirements for environmentally relevant areas		☐	☐
Other Approved Reports		☐	☐
SITE AND ROAD LAYOUT	Section 2.4.3		
Layout acceptable and in accordance with the Local Government's Road Network Hierarchy (if applicable)		☐	☐
Roads located suitable with contours		☐	☐
Consent of adjoining owners if affected by the design		☐	☐
Major intersection/roundabout preliminary design acceptable to the Local Government		☐	☐
Traffic study prepared		☐	☐
PARKS	Section 2.7, 4.9		
Park areas as approved in development conditions.		☐	☐
IMPORTED FILL	Section 2.4		
Fill source and nature ascertained and approved?		☐	☐
Transport routes for imported fill approved?		☐	☐
Acceptable spoil location?		☐	☐

APPENDIX 2 — PRELIMINARY DESIGN CHECKLIST 2 of 3 Pages

HAVE YOU CHECKED	POLICY REFERENCE	CHECKED	
		YES	N/A
STORMWATER DRAINAGE	Stormwater management Planning Scheme Policy		
Easements and/or drainage reserves for the design		☐	☐
Major/Minor systems in accordance with the local Government's stormwater strategy		☐	☐
Tailwater conditions		☐	☐
Legal Point of discharge		☐	☐
Extent of flooding and influence on proposed parks			
External works to be incorporated into the stormwater system (a contribution may be applicable)		☐	☐
WATER SUPPLY & SEWER RETICULATION	Section 2.4		
Layout acceptable to the Local Government		☐	☐
In accordance with the Local Government's Water and Sewer Defined Areas		☐	☐
Is an extension of the Defined Area required for this development? (If yes an application will be required).		☐	☐
Connection points to, and accurate location of existing pipelines.		☐	☐
Network analysis required		☐	☐
Designed to cater for future possible extension?		☐	☐
Existing systems have necessary capacity?		☐	☐
External works to be incorporated into the water supply and sewerage systems (a contribution may be applicable)		☐	☐
CONFLICT WITH EXISTING SERVICES	Section 2.4.12	☐	☐
ANY RELOCATION OF SERVICES REQUIRED	Section 2.4.13	☐	☐
MAIN ROADS APPROVAL IN PRINCIPLE AND SPECIFIED REQUIREMENTS OF DESIGN		☐	☐
ELECTRICAL/TELECOM APPROVAL IN PRINCIPLE	Section 2.5.1	☐	☐

APPENDIX 2 — PRELIMINARY DESIGN CHECKLIST 3 of 3 Pages

HAVE YOU CHECKED	POLICY REFERENCE	CHECKED	
		YES	N/A
OTHER AUTHORITIES (Advice or Concurrence Agents)	2.5		
NRM&W		☐	☐
DPI - Fisheries		☐	☐
Q-Rail		☐	☐
EPA		☐	☐
Other		☐	☐
		☐	☐
		☐	☐
BURNETT SHIRE COUNCIL	Section 2.6		
Live Water or Sewer Locations		☐	☐
Mechanical and Electrical Installation		☐	☐

APPENDIX 3 — PRE-START MEETING MINUTES

1 of 6 Pages

Date: _____ File Number _____

Project: _____

Principal: _____

Contractor: _____

PRESENT:	NAME	REPRESENTING	
Local Government:			
Supervising Officer:			
Contractor:			
Principal:			
Meeting Start Time:		Meeting Finish Time:	

Job Personnel

POSITION	NAME	FROM
Local Government Inspector:		
Supervising Engineer:		
Supervising Officer:		
Contractor:		
Construction Foreman:		
Superintendent:		
Principal:		

Topic	Yes	No	Action By
Construction Drawings received for Project	☐	☐	
Operational Works Condition Amended	☐	☐	
2 copies to contractor			
2 copies to the Local Government (Burnett Shire)	☐	☐	

APPENDIX 3 — PRE-START MEETING MINUTES 2 of 6 Pages

INSPECTION AND TESTING —Inspection Requirements for Minimum Holding Points

[Minimum notice to be provided - twenty-four (24) hours]

Item (Stage)	By the Superintendent	By the Local Government Representative
Start of Job/Pre-Start		
LOT FILL		
During allotment filling (after density test results) at 50% height complete		
Lot Fill at completion after final surface density test results		
ROAD		
Road Subgrade		
Kerb Stringline & Foundation		
Pavement (Pre-seal)		
Subgrade at completion of excavation to determine if further CBR's are required		
Subgrade (after density test results) for proof roll prior to gravel placement;		
Service conduit crossings after bedding prior to backfill		
Subbase (after density test results) for proof roll prior to kerb and channel placement		
Kerb and channel prior to pour, stringline in place		
Base (after density test results) for proof roll after final trim, min. 2 days prior to seal		
STORMWATER		
Stormwater Pipe and structures in place prior to backfill		
WATER		
Water Pipe & Pressure Testing		
Water supply mains, after bedding and concrete thrusting prior to backfilling		
Water supply mains during final testing, and at completion, prior to being placed "On Maintenance".		

R = Required X = Not Required O = Optional

APPENDIX 3 — PRE-START MEETING MINUTES 3 of 6 Pages

INSPECTION AND TESTING —Inspection Requirements for Minimum Holding Points

[Minimum notice to be provided - twenty-four (24) hours]

Item (Stage)	By the Superintendent	By the Local Government Representative
SEWER		
Sewer mains (gravity and rising) in place, bedded and covered, prior to backfill		
Sewer pipe and pressure testing		
Sewer mains during final testing		
Inspection chambers in place at start and end of hydrostatic testing procedure;		
Sewer Manhole Hydro Testing		
House connections in place, concrete thrusted to underside of branch connection collar		
SERVICES BY OTHERS		
Electricity, Water & Telstra Conduits in place prior to backfill		
At practical completion / on maintenance inspection.		
On Maintenance		
Off Maintenance		
At re-inspection of outstanding works after "On Maintenance" inspection.		

R = Required X = Not Required O = Optional

APPENDIX 3 — PRE-START MEETING MINUTES 4 of 6 Pages

INSPECTION AND TESTING — Inspection Requirements for Minimum Holding Points

[Minimum notice to be provided - twenty-four (24) hours]

Materials

Lot fill sources				
Bedding Sand Source				
Gravel source				
Gravel type	Onsite CBR.....		Subgrade replacement CBR....	
	Sub-base – CBR ...		Base - CBR -	
Concrete source				

Testing Requirements

Subgrade (at locations nominated by Superintendent)

In-situ CBR (soaked)	
Density test	

Gravel pavement (at locations nominated by Superintendent)

Density test	
Quality test	

Pavement depths to be recorded in density test certificate.

Asphalt (normally undertaken by Asphalt Supplier);	

Lot fill (at locations nominated by Superintendent)—

Density tests	
Water reticulation	
Sewers and manholes	

Lot Pegging

Note: Lot frontages need to be pegged prior to laying conduits and lot boundaries to be staked/pegged for sewer house connections by a registered surveyor or a qualified engineering surveyor.

Surveyor:	

APPENDIX 3 — PRE-START MEETING MINUTES 5 of 6 Pages

INSPECTION AND TESTING — Electricity and Telstra Conduits

Check AUS SPEC for duplication / Adequate

Note: Contractor to co-ordinate inspections by electricity service provider as detailed in Job Specification.

Pavement Thickness

Note: Gravel pavement depth to be confirmed based on In-situ soaked CBR test results. In-situ CBR tests are to be undertaken as soon as possible after initial sub-grade preparation and before final trim to enable Superintendent to confirm pavement design depth based on CBR results. Superintendent to submit pavement design to Council for approval prior to pavement works commencing.

'As Constructed' Drawings (Refer 3.3.6 (6)	R = Required	X = Not Required
Contractor to provide 'As Constructed' information as follows:		
(Information to be recorded prior to backfilling)		
Roadworks finished levels (centre line and kerb & channel) at design points;		
Stormwater pipe invert levels;		
Lot fill levels;		
Sewer invert levels and dimensions as listed below:		
Distance of sewer line from property boundary;		
Sewer invert levels at manholes;		
Location of end of house junction as follows:		
(i) Distance along the sewer line from the downstream manhole to the end of the house connection;		
(ii) Perpendicular distance from sewer line to the end of the house connection;		
(iii) Depth of end of junction;		
(iv) Perpendicular distances from two property boundaries.		
Water reticulation:		
(i) Alignment of water main;		
(ii) Location of hydrants, valves, bends, etc.		
(i) Confirmation of road conduit locations.		
Other:		

APPENDIX 3 — PRE-START MEETING MINUTES 6 of 6 Pages

Traffic Control / Signage

Contractor to submit a traffic control plan detailing extent of signage, barricades, etc to be used before any work commences.

Sediment and Erosion Control

Construction Timeframe

Note: Works program to be submitted by contractor within seven (7) days.

Anticipated practical completion date:

Proposed working hours: Normal: am to pm

Public Holidays/Weekends: Days: am to pm

Contractual Matters

Insurance Details:

Works Insurance: Public Liability: Workers Comp:

Possession of site:

Workplace Health & Safety Issues:

Other Matters

Operational Works Approval Specific Conditions:

Note: (If insufficient space is provided then attach additional pages as required)

APPENDIX 4 — ROAD CLOSURE ADVERTISEMENT

NOTICE OF TEMPORARY ROAD CLOSURE TO TRAFFIC

_____ *(STREET/ROAD)* _____ *(TOWNSHIP)*

As a result of _____ works on or near the above roads, it will be necessary to close *(Road/Street)* _____ between *(Roads/Streets)* _____ to all through traffic, commencing from *(Time)* _____ on *(Day / Date)* _____ through to *(Time)* _____ on *(Day / Date)* _____

The closure is required to

(Works Description) _____

All roadworks and detours will be appropriately signed.

We apologise for any inconvenience this drainage upgrade may cause.

_____ (Date) _____
Chief Executive Officer

APPENDIX 5 — Design Layers for As Constructed

This table provides preferred layer names for various topics for digital submission of data.

TOPIC	Preferred Layer Name
Road	KERB_ISLAND KERB_ISLAND_LABELS ROAD_CEN ROAD_CEN_LABELS ROAD_EDGE ROAD_EDGE_LABELS ROAD_FLUSH_POINT ROAD_PARKING ROAD_PARKING_LABELS ROAD_PATH ROAD_PATH_LABELS ROAD_PRAMRAMP ROAD_SSD ROAD_SSD_LABELS
Stormwater	STORM_LABELS STORM_PIPE STORM_PIPE_CEN STORM_PIT STORM_STRUCTURE STORM_SURFACE
Sewer	SEWER_FITTINGS SEWER_HOUSECON SEWER_LABELS SEWER_NONPRESSURE SEWER_PIT SEWER_PRESSURE SEWER_VALVE
Water	WATER_FITTINGS WATER_HYDRANT WATER_LABELS WATER_METER WATER_PIPE WATER_PIT WATER_VALVE
Cadastre	CADASTRE CADASTRE_LABELS CADASTRE_STLABELS

As Constructed drawings in Model Space are to be located in their correct positions in Mapping Grid of Australia (MGA94) Zone 56 co ordinates.

APPENDIX 6 — "ON MAINTENANCE" INSPECTION CHECKLIST

Note: This sheet is to be filled out completely and submitted as part of the as constructed documentation

REQUIREMENTS	CHECKED	
	YES	N/A
ROADWORKS—		
Grades and profiles to roads and footpaths	☐	☐
Topsoiling and seeding to all disturbed areas	☐	
Grass cover as per specification	☐	☐
AC surfacing for texture and finish	☐	☐
Bitumen surfaces to be swept of excess stone/bitumen within fourteen (14) days of the sealing	☐	
Street sign Posts	☐	☐
Property pegs	☐	☐
Advisory signs and line marking	☐	☐
Check conduit markers against property pegs	☐	
STORMWATER DRAINAGE—		
Erosion and sediment control devices in place	☐	☐
Roads, pipes, structures, flow paths clear of silt and debris	☐	☐
No ponding on roads, in pipes, structures, kerbs on flow paths	☐	
Turfing to prescribed areas	☐	
Pipes laid straight to grade and line	☐	☐
No damaged pipes	☐	
No reinforcing steel exposed to cut off pipes	☐	
Quality of concrete work	☐	
Pipe penetrations to manholes finished off	☐	
Check for unsound render work	☐	
Convertor slabs mortar bedded	☐	
Manhole lids to specification requirements	☐	
Gullies and grates to specification requirements	☐	
Correct drops through manholes	☐	
Overland flow paths to profile	☐	
Inter-allotment drainage pipes and manholes clean and dry	☐	
Inter-allotment drainage pipes laid true to grade	☐	☐
Correct manhole sizes, lids, locations	☐	☐

APPENDIX 6 — "ON MAINTENANCE" INSPECTION CHECKSHEET 2 of 2 Pages

REQUIREMENTS Refer Appendices	CHECKED YES	 N/A
STORMWATER DRAINAGE (continued)—		
Manhole lids finished to match finished surface levels and slopes per specification	☐	☐
Stormwater management / erosion control devices in place & effective	☐	☐
PARK AND LANDSCAPE WORKS—		
Note: Refer to Landscaping and Landscape Plans Planning Scheme Policy for "On Maintenance" inspection information.		
WATER SUPPLY AND SEWERAGE—		
Water supply and sewer connection estimate obtained and paid	☐	☐
Conduit markers	☐	☐
Water main pressure test and chlorination water quality test results available if required	☐	☐
Hydrant and valve marker posts	☐	☐
Sewers and manholes clean and dry (free of infiltration)	☐	☐
Sewer air test results presented if required	☐	☐
Sewer laid true to line and grade. Pipe condition confirmed by CCTV inspection, copy of video to the Local Government.	☐	☐
Manhole locations	☐	☐
Manholes water-tight & to specification	☐	☐
Quality of concrete work/benching	☐	☐
Manhole lids	☐	☐
Manhole lids finished to be +25 to +75 above FSL	☐	☐
GENERAL—		
Site is clean, tidy, free of rubbish, rocks, sticks, unauthorized stockpiles, etc.	☐	☐
Allotment earthworks to be free draining and generally in accordance with the approved design	☐	☐
Stormwater quality control measures	☐	☐
Integrity of environmentally significant areas	☐	☐
Work on adjacent or balance lots to be free draining and generally cleaned and tidied	☐	☐

Supervising Engineer / Consultant: _____

Signature: _____

Company Representative's Name: _____

APPENDIX 7 — 'ON-MAINTENANCE' SUBMISSION CHECKLIST

PRESENT:	NAME	REPRESENTING	
Local Government:			
Supervising Officer:			
Contractor:			
Principal:			
Meeting Date and Start Time:		Meeting Finish Time:	

This form is to be completed and accompanied by—

Requirement	Refer To Policy Section	Complied With		Attachments
		Yes	N/A	
Supervision Certificate and Request for "On Maintenance"	Section 4	□		□
2. Statement of Compliance	Section 4	□		
3. 'As Constructed' Drawings	Section 4	□ Dev Eng □ GIS □ Infra Services		□
4. Other Documentation	Appendices 3.1 to 3.6			
All relevant Testing and Inspection check sheets completed		□		□
Manuals and guarantee documents for machinery.		□	□	□
Certification from geotechnical testing company of any Level 1 supervision works		□	□	□
Copy of certified contract value		□	□	□
Approval from other authorities that works within their jurisdiction have been completed satisfactorily		□	□	□
Copy of license for any works in creeks or pumps station overflows		□	□	□
Other..		□		□
5. Letter of Reinstatement		□	□	□
6. Request for sealing of survey plan	Appendix 3.7	□	□	□
7. 'On Maintenance' Inspection checklist fully completed and inspection report sheet	Appendix 3.7	□		□
8. Payment of re-inspection fees	Schedule of Fees & Charges	□	□	□

APPENDIX 7 - 'ON-MAINTENANCE' SUBMISSION CHECKLIST 2 of 2 Pages

Requirement	Refer To Policy Section	Complied With		Attachments
		Yes	N/A	
9.Bonding				
Request for release or reduction of uncompleted works bond held by Burnett Shire Council	Section 3.5	☐	☐	☐
Lodgement of Maintenance Security Bond	Section 3.5	☐	☐	☐
10. Contractor Guarantee		☐		☐
11. 'On Maintenance' Inspection Checklist	Appendix 6	☐		☐

I hereby certify that the information contained within this application (including the information contained in the attachments) is complete and correct in all particulars.

Consultant: .....

Checking Officer: .....

(Name in Full):

Signature: .....

Position: .....

Date: .....

APPENDIX 8 — ENGINEERING CERTIFICATE AND REQUEST FOR "ON MAINTENANCE"

Estate/Development Name: _____

Survey Plans: _____

Stage No. (if applicable): _____

Council Reference and Development Permit No: _____

Operational Works Permit No: _____

I/We being a Registered Professional Engineer under the Provisions of the Professional Engineers Act 1929 – 1975 and having been commissioned to carry out the supervision of the works comprising—

_____

_____

_____

_____

_____

Do hereby certify that:

In accordance with the Development Permit and Operational Works approval conditions for this project, we advise that we have carried out inspections, reviewed tests and reports on the works and confirm that, to the best of our knowledge, the works have been completed in accordance with the approved Operational Works drawings and specifications, permit conditions, project inspection and test plans and any amendments approved by the Local Government.

We enclose 2 hardcopy sets and one electronic copy of the "As Constructed" drawings for the project for your review.

I/We acknowledge that Local Government's acceptance of the works as "On Maintenance" is to be issued in reliance upon this certificate.

All applicable documentation as defined in Local Government's Development Works Policy has been submitted and we therefore request that the Local Government accept the works "on Maintenance" as of (INSERT DATE).

Consultant Firm: _____

Registered Professional Engineer: _____
(Name in Full)

Signature: _____ Date: _____

Position in firm: _____ RPEQ No. of Individual: _____

APPENDIX 9 — 'OFF-MAINTENANCE' INSPECTION CHECKLIST

PRESENT:	NAME	REPRESENTING	
Local Government			
Supervising Officer			
Contractor			
Principal			
Meeting Date and Start Time:		Meeting Finish Time:	

This form is to be completed and accompanied by the requirements marked * as listed.

*Requirement	Refer To Section	Complied With		Attachments (as required)
		Yes	NIA	
Items from On Maintenance check list.	Section 4.1			
1		☐		☐
2		☐		☐
3		☐		☐
4		☐		☐
5		☐		☐
6				
Grass coverage		☐		☐
Erosion and Sedimentation				
1		☐		☐
2		☐		☐
Defects to be corrected prior to On Acceptance				
1		☐		☐
2		☐		☐
3		☐		☐
4		☐		☐
5		☐		☐

APPENDIX 10 — 'OFF-MAINTENANCE' SUBMISSION CHECKLIST

This form is to be completed and accompanied by the requirements marked * as listed.

*Requirement	Refer To Section	Complied With		Attachments (Add as required)
		Yes	NIA	
'Off Maintenance' Inspection successfully Completed including Council's 'Off Maintenance' Inspection checklist completed and inspection report sheet.	Section 4.4	☐		☐
Request for Acceptance of Works "Off Maintenance"		☐		
Payment of Re-inspection fees	Schedule of Fees & Charges	☐	☐	☐
Request for release of Maintenance Security Bond	Section 4.4.2	☐		
'Off Maintenance' Inspection Checklist	Appendix 3.8	☐		☐

I hereby certify that the information contained within this application (including the information contained in the (attachments) is complete and correct in all particulars.

Consultant: _____

Checking Officer: _____

(Name in Full):

Signature: _____

Position: _____

Date: _____

APPENDIX 11 — CHECKLIST FOR SEALING OF THE SURVEY PLAN

Description of Development and Stage	
Survey Plan No.	
Material Change of Use Permit Number	
Reconfiguration Permit Number	
Operational Works Permit Number	

I hereby certify that the information contained within this application (including the information contained in the attachments) is complete and correct in all particulars.

Signed: _____ Date: _____

Name: _____ Company _____

This form is to be completed and submitted with the application for sealing of survey plans.

Description	Complied With		DIP Ref	Attached
	YES	N/A		
All conditions of the above permits listed on the covering letter and met	☐			☐
Operational Works approved by Burnett Shire Council	☐			☐
Written approval obtained from any other relevant State Government Departments				
DNRMW - Department of Natural Resources, Mines and Water	☐	☐		☐
QDMR – Queensland Department of Main Roads	☐	☐		☐
EPA – Environmental Protection Agency	☐	☐		☐
DPI – Department of Primary Industries	☐	☐		☐
Other-…… (If insufficient, attach list)	☐	☐		☐
Landscape design approved by Burnett Shire Council	☐	☐		☐
Completed estimated rates and Bill of Quantities (if construction work not started) or completed tender (if construction work started)	☐			☐
All works completed to the satisfaction of Council's Engineer and 'As constructed' documentation submitted and approved	☐	☐		
All incomplete work is able to be completed within three months of the plan being sealed including submission and approval of 'As constructed' documentation	☐	☐		
The subdivision has been pegged and verified by Surveyor's Certification	☐			

APPENDIX 11 — CHECKLIST FOR SEALING OF THE SURVEY PLAN

This form is to be completed and submitted with the application for sealing of survey plans.

Description	Complied With		DIP Ref	Attached
	YES	N/A		
Written confirmation that the supply of electricity is connected.	☐	☐		☐
All necessary reserves & easements prepared, approved and signed/sealed. e.g.	☐	☐		☐
Community management statement	☐	☐		☐
Lawful Point of Discharge	☐	☐		☐
Letter for temporary drainage outlet	☐	☐		☐
Outlets across balance allotment	☐	☐		☐
Inter allotment drainage	☐	☐		☐
Security Bond amount submitted in form of cash or bank guarantee	☐	☐		☐
120% of approved estimate (if bonding prior to calling tenders)	☐	☐		☐
120% of tender amount (if bonding after tender called)	☐	☐		☐
130%of outstanding works (if construction has commenced)	☐	☐		☐
5% Maintenance Security Bond (if construction is complete)	☐	☐		☐
Evidence that all rates and charges against the land have been paid	☐			☐
All headworks charges for water and sewerage have been paid	☐	☐		☐
Any contributions to downstream stormwater drainage have been paid	☐	☐		☐
All "Public Use Land" noted with description on the face of the plan	☐	☐		☐
All easement documents over the land signed	☐	☐		☐
Solicitors undertaking for lodgement of transfer documents	☐	☐		☐
Evidence that other service providers have been given Survey Plan copies. Telstra	☐	☐	☐	☐
Evidence that other service providers have been given Survey Plan copies. Australian Post	☐	☐	☐	☐

APPENDIX 12 — COUNCIL'S AUDIT DOCUMENTATION CHECKLIST

Refer to Section 3.3	YES	N/A	Attached
Testing and Inspection Requirements check sheets duly certified for—			
Earthworks	☐		☐
Roadworks	☐		☐
Stormwater Drainage	☐		☐
Sewer Reticulation	☐	☐	☐
Water Reticulation	☐	☐	☐
Copies of test results on—			
Compaction of fill	☐	☐	☐
Select subgrade material quality	☐	☐	☐
Select subgrade compaction	☐	☐	☐
Subbase/base course material quality	☐	☐	☐
Subbase/base course compaction	☐	☐	☐
Prime or primer seal spray and aggregate application rates	☐	☐	☐
Gradings and bitumen content for asphalt including tonnage records	☐	☐	☐
AC core testes	☐	☐	☐
Sewer pressure tests	☐	☐	☐
Grading to sewer bedding	☐	☐	☐
Grading to water main bedding	☐	☐	☐
Water main pressure tests	☐	☐	☐

APPENDIX 12 — COUNCIL'S AUDIT DOCUMENTATION CHECKLIST 2 of 2 Pages

Refer to Section 3.3	YES	N/A	Attached
Water main water quality tests (chlorination and biological)	☐	☐	☐
Sewer air tests	☐	☐	☐
CCTV video recording of sewer lines Deflection draw tool	☐	☐	☐
Any concrete testing required by the technical specifications	☐	☐	☐
Concrete strength tests for kerb and channel and all structural members	☐	☐	☐
Any other job specific testing carried out or ordered by the Engineer or to ensure compliance with the Specification.	☐	☐	☐
Copies of—			
Inspection diaries detailing the time and date of all inspections, items inspected and copies of all site instructions issued as a result of the inspection	☐		☐
Level books showing RL cheeks on all relevant aspects of the works including subgrade, stormwater pipes, sewers, lot levels and finished pavement levels	☐		☐
Records that all materials used on site have been checked that they are stamped as complying with the relevant Australian Standards required by the specification	☐		☐
Records of supplier of major infrastructure materials e.g. water/sewer materials, bitumen.	☐		☐

Supervising Engineer/Consultant: _____

Signature: _____

Company Representative's Name: _____