Guidelines

for Development Works

CONTENTS

Amendment Record for the Guidelines

These amendments form part of the Development Works Guidelines 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 Guidelines for Development Works ("The Guidelines"). This document is to be read in conjunction with the Local Government's Development Works Planning Scheme Policy ('The Policy').

(2) Each section is broken up into parts

a. Part 1 provides an overview of the process and Documentation adopted as part of the policy.

b. Part 2 introduces the AUS_SPEC D "Design" series of Specifications as amended by and adopted by Local Government. The specifications are available on CD-ROM at a fee included in the schedule of fees and charges.

c. Part 3 introduces the AUS_SPEC C "Construction" series of Specifications as amended by and adopted by Local Government. The specifications are available on CD-ROM at a fee included in the schedule of fees and charges.

d. Part 4 provides guidelines to the final processes after the completion of construction of works associated with the development approval.

e. Part 5 provides specifications for the placement of fill on land over which building may occur at some later time. It is not intended to relate to the placement of compaction of material where such work is carried out as an integral part of a development process that is subject to some other quality control system.

1.2 PURPOSE OF THE GUIDELINES

(1) These guidelines provide probable solutions, i.e. the specifications and standards in the policy, do not necessarily establish compliance

with a code. Different standards, and specifications may be appropriate or necessary in particular circumstances.

(2) The purpose of the guidelines is to—

a. Provide information and advice about IDAS processes as they relate to the design and construction of infrastructure works and;

b. Provide information and advice to applicants, consultants and contractors to facilitate the carrying out of infrastructure works in accordance with the policy and;

c. Provide explanation of procedures which may assist the applicant to efficiently achieve the outcomes sought by the policy and;

d. Identify related requirements of the Local Government, including local laws.

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 GUIDELINES

(1) Schedule 1- Abbreviations defines particular abbreviations used in the policy.

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

(3) Throughout the parts of the guidelines a flow chart is provided to simplify the due process.

1.5 DOCUMENTATION ADOPTED IN THE POLICY

(1) The standards and specifications included within the policy represent a minimum standard for works. Higher standards and specifications may be approved in relation to site-specific conditions.

(2) Parts 2 and 3 of the policy comprise guidelines for the completion of the design and construction of works, and reference to adopted Specifications and Standard Drawings, which form the desired minimum engineering standards required for developmental

Operational Works within the Local Government. The AUS-SPEC Design and AUS-SPEC Construction Specifications have been reviewed and edited and are adopted as the Local Government version of the series. Each Specification has a record of amendments to the original Specification.

(3) Standards and Specifications included the Policy are the version that is current at the time of development of the policy.

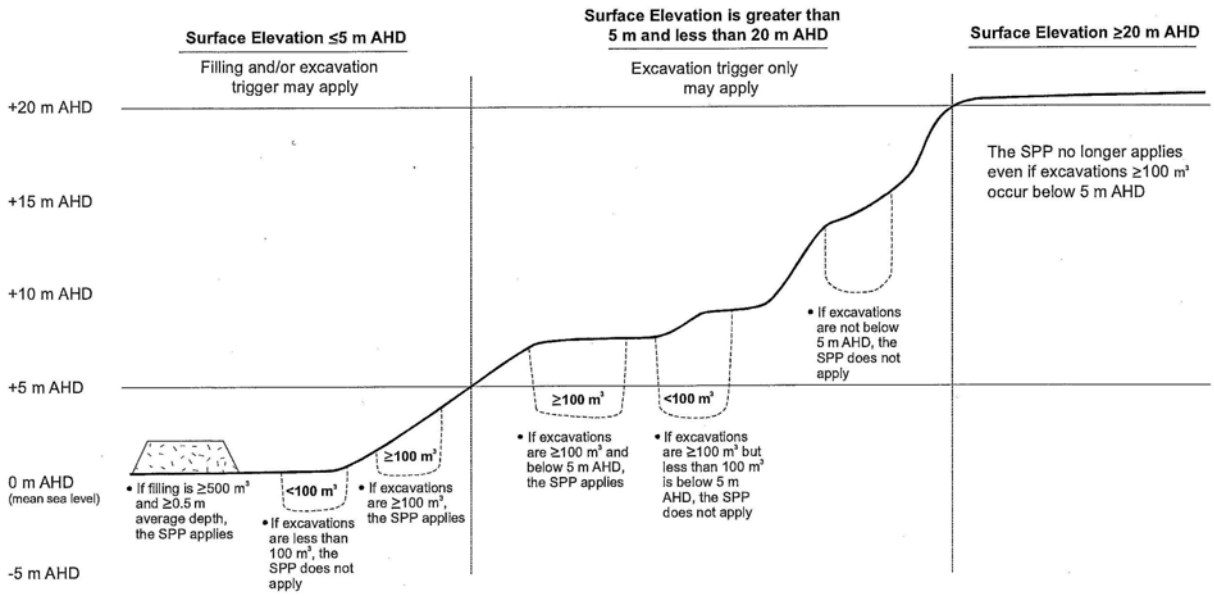
(4) Triggers for Acid Sulfate reports and construction requirements are defined in the State Planning Policy 2/02 Planning and Managing Development involving acid sulfate

(5) State Planning Policy 2/02 Guideline Planning and Managing Development involving acid sulfate soils

(6) An overview of the processes related to acid sulfate soils is outlined in Planning Scheme Policy 3 section 3.2.3

(7) Figure 3.7 from the State Planning Policy 2/02 Guidelines is provided for your reference

Areas and Development to which SPP 2/02 Applies

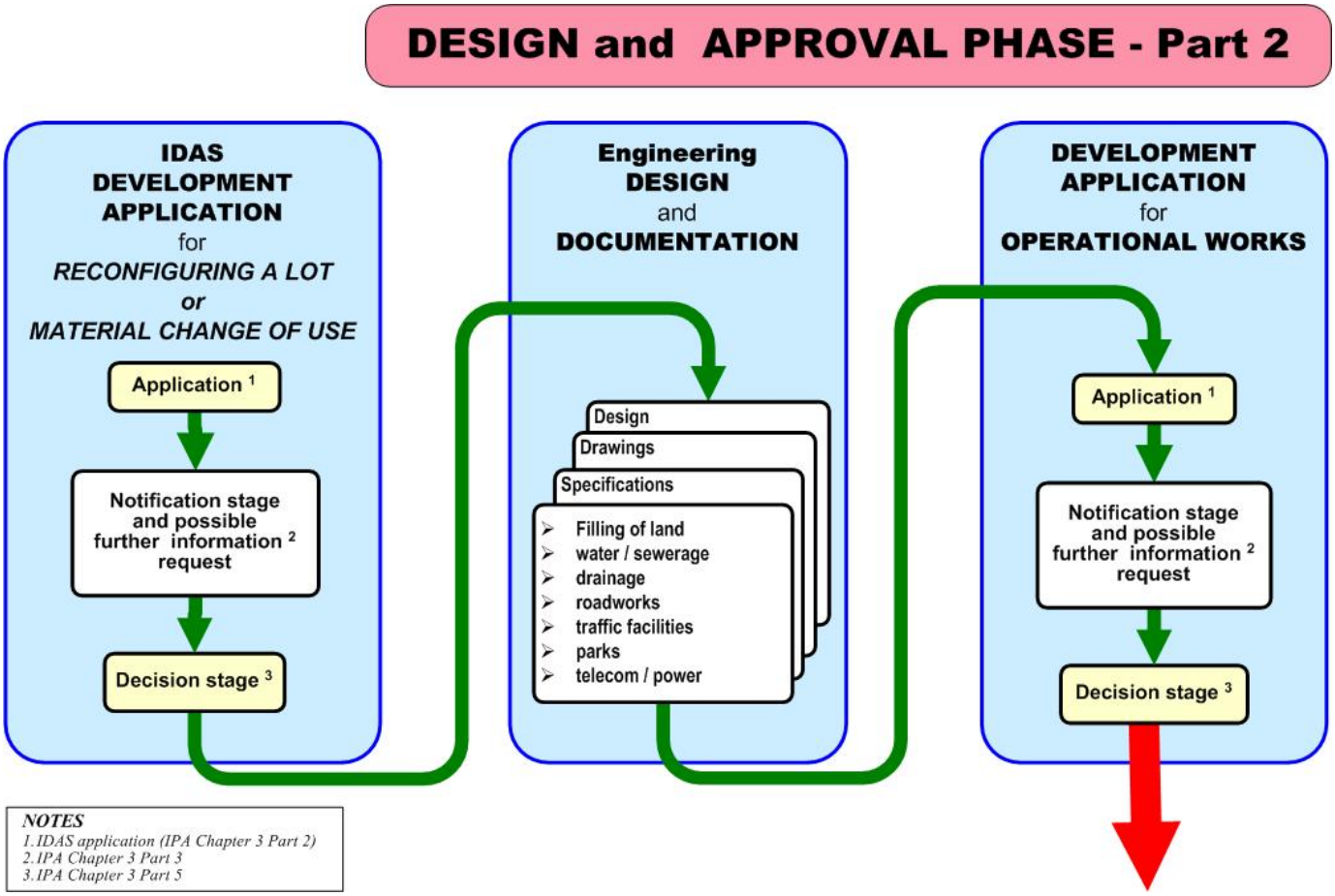


1.6 STRUCTURE OF THE DOCUMENT

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

(2) GUIDELINE AMENDMENTS — Users of the guidelines may provide suggested amendments on the amendment feedback form, (Appendix 1) which is provided with the policy document. Amendments are to be undertaken on a regular basis.

2 DESIGN


DESIGN and APPROVAL PHASE - Part 2
IDAS DEVELOPMENT APPLICATION for RECONFIGURING A LOT or MATERIAL CHANGE OF USE
Application 1
Notification stage and possible further information 2 request
Decision stage 3
Engineering DESIGN and DOCUMENTATION
Design
Drawings
Specifications
Filling of land
water / sewerage
drainage
roadworks
traffic facilities
parks
telecom / power
DEVELOPMENT APPLICATION for OPERATIONAL WORKS
Application 1
Notification stage and possible further information 2 request
Decision stage 3
NOTES
1. IDAS application (IPA Chapter 3 Part 2)
2. IPA Chapter 3 Part 3
3. IPA Chapter 3 Part 5

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 the Policy.

(2) In all instances the Local Government/Council representative for dealing with Operational Works is the Local Government's Director, Planning and Development.

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

(4) Where the 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 submit alternative engineering solutions for Local Government approval. Such departures from Local Government's Specifications and the reasons for these are to be clearly identified for approval by the Local Government's Director, Planning and Development.

(5) The Professional Engineer undertaking the supervision of design or construction works is required to document and keep detailed records of the works undertaken. The information required is detailed further in the Policy and in the Specifications, and includes design calculations, inspection records, quality assurance certifications and test results.

(6) The Local Government may require the Engineer to provide all or part of this documentation up to ten years after the completion of the works.

(7) The 'Construction' issue of plans and specifications are to be presented to The Local Government's Development Engineer prior to a pre-start meeting and prior to commencement of construction.

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 the policy.

(2) The application or elements of the application may be forwarded to a referral agency or to an advice agency. (Refer IPA 3.2.7)

(3) If the information contained within the application is considered inadequate for the Local Government to make an assessment, further information may be requested in accordance with S3.3.6 of the IPA.

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

(5) 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) Prior to the commencement of the detailed design it is strongly recommended that the Consultant(s) meet with the Local Government's Officers to discuss the project and to reach agreement on particular issues pertaining to the development.

(3) Such meetings provide both the Local Government and the Developer the opportunity to identify obstacles and possible solutions.

(4) A pre-design checklist is provided as Appendix 2.

(5) Issues to be discussed by the Local Government and the Developer may include but not be limited to—

- Relevant existing local infrastructure information available to the consultant and applicable fees e.g. water, sewer, drainage, road network and contours;
- Conditions relating to previous and current reports and studies that may influence the design;
- Other Authorities likely to be involved in the design approval process
- Ensuring that the proposed stormwater system is in accordance with the Stormwater Management Planning Scheme Policy for the area under consideration;
- Possible incorporation of retention basins into the stormwater design to eliminate increases in the intensity of downstream discharge;
- Lawful point(s) of stormwater discharge for stormwater disposal;
- Legal agreement with downstream properties for increased upstream stormwater discharge into their property is to be

required prior to the commencement of any stormwater design (where an increase in the intensity of downstream discharge is caused by the development);

- Internal and external catchment boundaries, runoff coefficients and times of concentration;
- Extent of acceptance of temporary drainage outlets through any balance allotments;
- Tailwater conditions as they exist and their capacity to carry flows from the upstream development;
- Park locations and sizes relevant to development conditions,
- Nearby works external to the influence of the development and possible requests for the Local Government to contribute towards some aspects of the work.
- Waste water disposal techniques including the location of the development relative to the Local Government's Defined Sewer Area;
- Connection point(s) for sewerage reticulation;
- Connection point(s) for potable water reticulation;
- Any need for a traffic analysis;
- Applicability of other Local Government Policies (not referred to in the conditions of approval) that may be relevant to the design;
- Any possible variations to the Local Government's Policies and standards.

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 the Policy and accepted engineering practice.

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

(3) The Consultant should address the design considerations in section 2.4, which is not intended to be comprehensive, highlights critical areas, which can have significant effects on cost and time for a project.

2.4.2 Environmental Considerations

(1) Environmental Protection Agency (EPA) and Department of Primary Industries (DPI) permits and approvals are to be provided for proposed developments on any tidal lands

(2) The Environmental Protection Act provides for potential delays and penalties associated with breaches in relation to environmental impacts of works.

2.4.3 Site and Road Layout

(1) Prior to preparing the development layout plan, the Local Government is to be consulted to ascertain if a site and road layout already exists for the area in question and to ensure that the road network proposed is to conform with the overall road hierarchy and open space plan envisaged.

2.4.4 Regulatory Signs

(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

(1) In specific areas, the Local Government has adopted minimum development levels, which are identified in the Planning Scheme.

(2) Local Government approval is required for the transport routes for fill material to the site

(3) The approved transport route is selected to minimise inconvenience or nuisance to the public. The Local Government may also require the Developer to make a financial contribution toward future maintenance of the road along the route if the cartage activity is considered to contribute to the premature failure of the road.

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

(1) The Local Government is committed to minimising erosion and sedimentation that can occur during and after construction of works.

(2) All construction works have the potential for erosion and resultant sedimentation therefore.

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

b. 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

(1) Refer to Aus-Spec D5, QUDM and Storm Management Policy

2.4.9 Sewer Reticulation

(1) Design is to be in accordance with D12 Sewerage System and WSA 02-2002 - Sewerage Code of Australia.

(2) All created 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.

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

2.4.10 Water Supply Reticulation

(1) Design is to be in accordance with D11 Water Reticulation and WSA 03-2002 - Water Supply Code of Australia.

(2) A hydraulic network analysis may be necessary to verify that pressure is available in the system to cater for peak hour demands and for the provision of fire fighting flows.

(3) A trunk or transfer main is a main whose primary purpose is to inter-connect source(s), treatment works, reservoir(s) and /or supply areas, normally without direct consumer connections

2.4.11 Street Lighting

(1) Design is to be in accordance with D 13 Lighting and Services.

(2) 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. e.g. 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

(1) The Developer is responsible for gaining the approvals of any other Authorities having jurisdiction over any part of the works

(2) All approvals are to be obtained and submitted to the Local Government prior to the acceptance of the design

2.5.1 Queensland Department of Main Roads

(1) Where the development fronts a road under the control of Queensland Department of Main Roads the Consultant is to design the required works, e.g., intersection or road widening, to the requirements of DMR.

(2) The Consultant is to submit that design to DMR. The final Local Government approval of the engineering design and specification is to not be granted until DMR approval has been obtained.

(3) If any development works require crossing of a DMR road (e.g., water or sewer main) the crossing is to be designed to DMR standards and subject to their approval.

2.5.2 Utility Services

(1) The Developer is to supply evidence of an Electricity Authority supply agreement and reticulation plan plus a Telephone Authority approved service plan.

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

(3) The Survey Plan will not be signed and released until evidence is received from the Electrical Authority that an agreement has been entered into and appropriate monies paid for the supply of electricity to each lot of the development.

2.5.3 Other Authorities

(1) The Developer is responsible for gaining the approvals of any other Authorities having jurisdiction over any part of the works

(2) All approvals are to be obtained and submitted to the Local Government prior to the acceptance of the design.

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 notice and fee procedures for specific works

2.6.2 The Local Government Contributions towards Works

(1) Works to which the Local Government has agreed to contribute are to be clearly designated within the design documents to allow separate quotations / tenders to be called for those portions of the works.

2.6.3 Private Works Orders

(1) The relevant officer is to review the details of the private works request and forward it to the relevant section for action.

(2) Payment/s to the Local Government are to be made prior to the works being undertaken.

2.7 SUBMISSION AND ASSESSMENT OF DESIGN

2.7.1 Initial submission

(1) The Local Government's Director, Planning and Development or delegate is to confer with the Consultant regarding the review and conditions/amendments applicable to the design.

(2) Requests for further information may be reduced or mitigated by pre-design submission discussions with the Local Government officers.

(3) Any amendment to the design documents is to be provided to the Local Government a minimum of 5 days prior to the Pre-start meeting.

(4) It is preferred that plan submissions are A3 paper size with legible font and as defined in AS 1100.101-1992

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) Minimum plan requirements for a design submission will include but not be limited to: -

a. Locality plan, identifying the site in relation to surrounding roads

b. Plan of the whole development area, showing original contours, structures and natural features

c. Erosion and sedimentation plan showing the location and details of all proposed control devises.

d. Plan/s of the proposed roads including all design elements and services.

e. Longitudinal and cross sectional sections of roads

f. Plans and longitudinal sections of sewers.

g. Complete details of pump stations

(2) An electronic copy of the drawings enables the Local Government to review the proposed development in relation to Infrastructure planning.

2.7.4 Design Assessment by the Local Government

(1) The Local Government's officers are not responsible for checking drawings in detail and it is the consultants' responsibility through its quality assurance procedures to ensure that drawings are in accordance with the Local Government's standards, acceptable engineering practice and result in a safe and acceptable design.

(2) The Local Government's assessment is to be on an audit basis only, checking that the submitted design is generally in accordance with conditions of the development approval, the applicable standards and within the original intent of the design.

(3) If the audit checking reveals any matters found to have been incorrectly ticked off on the design check list as being attended to, or, casually attended to, the submission is to be returned to the

Consultant for resubmission once rectified. A rechecking fee may be levied in these cases.

(4) In the event that a dispute arises over design fundamentals the Developer may appoint an independent consultant associated with the Institute of Arbitrators Australia at the Developer's own cost in order to help resolve any disputes. The Local Government is, however, under no obligation to accept the consultant's advice should it deem the advice not to be in the best interests of the wider community and surrounding environment.

(5) Disputes that may arise from a determination of a member of the Local Government's staff's interpretation of the Local Government's Policy may be placed before a general meeting of the Local Government for clarification of the Local Government's intent with regard to the relevant Policy. Should the Local Government's determination fail to resolve the dispute, application may be made to the Local Government Ombudsman for further determination.

2.7.5 Processing the Design Submission

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

(2) The Local Government is to consider an application for operational works and notify the applicant of its decision within the time limits prescribed in Section 3 IPA.

(3) Where complex or sensitive issues are involved, or there is a shortfall in the information provided by the Applicant, the Local Government has provision under IPA to request further information.

(4) Minor civil site works designs submitted in conjunction with building applications are to generally be approved in conjunction with the building application. e.g. single accesses.

(5) The approval may be subject to amendments or conditions similar to more complex designs.

(6) After the completion of the IDAS stages, the design submission is to be either:

a. Not approved - where the Local Government's Chief Executive Officer determines that the approval conditions or design principles have not been met; or

b. Approved subject to conditions/amendments and return of amended plans and documents to the Local Government prior to commencement of construction; or

c. Approved subject to conditions/amendments of a minor nature, which are to be included in as constructed drawings at the

completion of the project. Minor amendments do not include any issue that may affect:

i. Size or configuration of any underground infrastructure; and/or

ii. Determination of the Q100 flood levels;

(7) Approved without conditions / amendments relating to the design, in which case only standard conditions will apply. (Standard approval conditions are to apply).

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 (Policy Appendix 3) are to be issued within five (5) days of that meeting.

(4) Within twenty (20) working days of the Local Government's final approval, the Consultant is to submit two (2) complete sets of approved drawings and an electronic copy for The Local Government's use. Where no amendment of the original submission was required the original submission is acceptable.

(5) All amended documents are be supplied to the Local Government's Delegate a minimum of five (5) working days prior to the pre-start meeting.

(6) The Consultant is to notify the Local Government's delegate five (5) working days prior to the pre-start meeting.

(7) If latent conditions dictate a design variation during the construction, a hold point on that element is initiated and, the Consultant is to in apply writing to the Local Government's Director, Planning and Development and gain approval before such variations can proceed.

2.9 DESIGN SPECIFICATIONS - INTRODUCTION

(1) The Local Government's adopted design Specifications referenced in various sections throughout, are available on CD-ROM at a fee stated in the schedule of fees and charges.

(2) The Local Government's amendments are to be listed on an amendment record sheet provided at the beginning of each Specification.

(3) Any departure from the Local Government's Specifications is to be clearly identified within the Operational Works Application for approval by The Local Government's Director, Planning and Development.

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 the Policy.

(2) The adopted Standard Drawings are listed in The Policy.

(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.

(5) Refer to Main Roads and WSA accepted standard drawing where the Local Government standard drawings do not apply or are not listed in Table (2). Table 1(a) Main Roads Standard Drawings

(6) The Queensland Transport Standard Drawings are available on this web link

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

(7) The Local Government has made comment to the WSA drawings as to the acceptance or variation to the relevant drawing. It is therefore important to refer to this information prior to using any WSA drawing.

2.10.2 Design Specifications

(1) The Local Government has in some cases has modified and adopted the Aus-Spec specifications as listed in table.

Table 1—Design Specifications

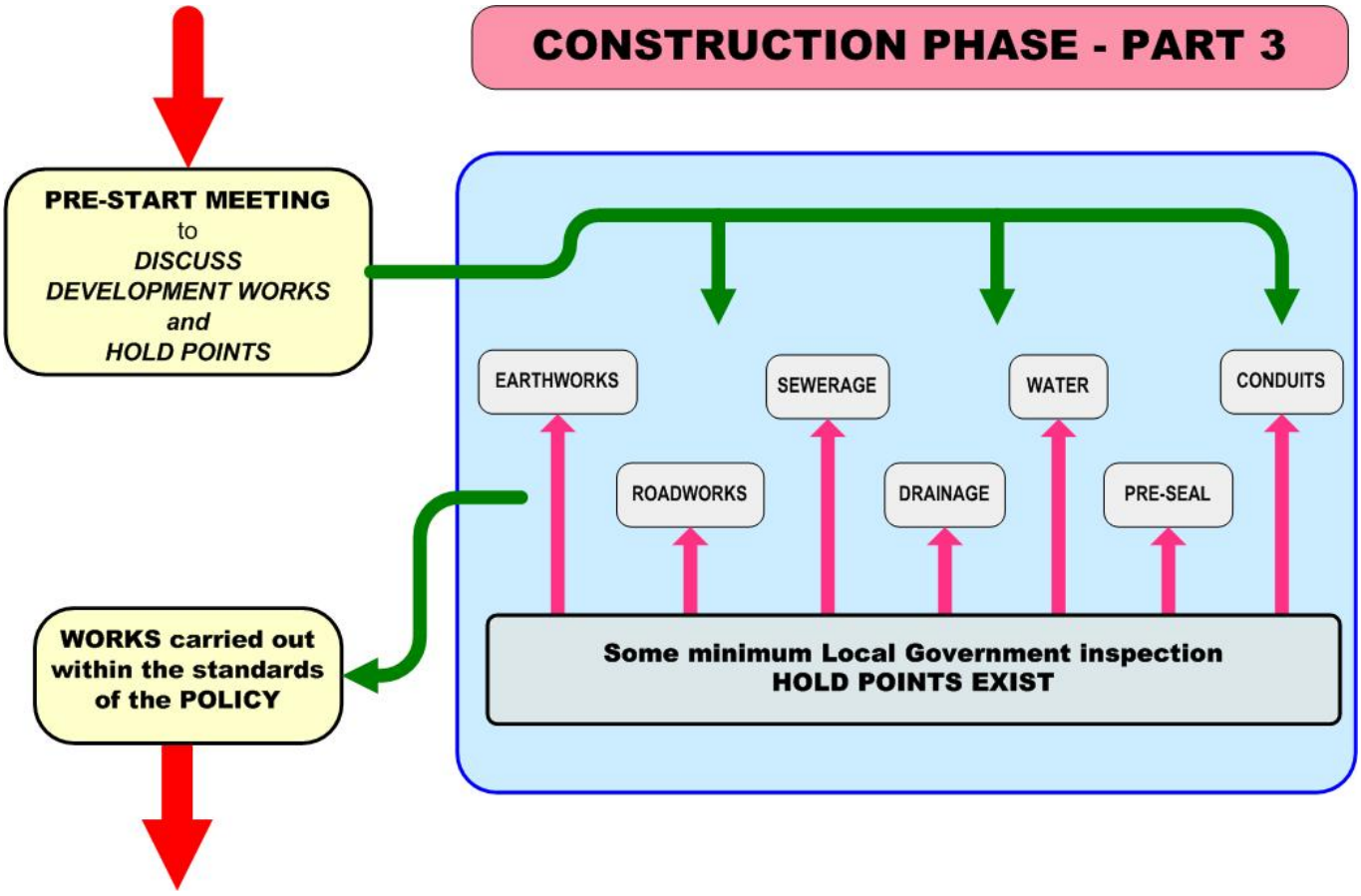
Topic	No.	Specification Title
General	DQS	Quality Assurance Requirements for Design
	D6	Site Regrading

	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

(1) The Local Government standard drawings are listed in a table within the Policy.

3 CONSTRUCTION



3.1 CONSTRUCTION STANDARDS AND PROCEDURES

(1) In all instances the Local Government representative for dealing with Operational Works is the Director, Planning and Development Department

(2) Where the Operational Works approval includes conditions that are site specific, or where design/construction 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/construction other than the Local Government's adopted specifications.

(3) Such departures from the Local Government's adopted specifications are to be clearly identified as non - compliant to the adopted specifications and are to be submitted for approval by the Local Government within the Operational Works submission or prior to commencement of the particular works if the changes are proposed during the construction phase.

3.2 WORKS SUPERVISION AND NOTIFICATION

(1) The Developer may appoint an Engineer or Consultant Engineer for the purpose of works supervision, which may or may not have been the designing engineer.

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

3.3.1 Duties

(1) During the construction phase

a. The Local Government's Director, Planning and Development will generally approve site determined design variations undertaken during the construction phase with sound engineering judgement.

b. Where an amendment is carried out without the approval of the Local Government, the non approval is to be substantiated by the Supervising Engineer / Consultant and all rectification works subsequently identified are to be carried out at the expense of the developer.

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 the data requested under 3.3.2 "Before Construction Commences" within the policy.

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 in 3.3.3 Pre-start Meeting in the Policy.

(4) A Pre-start meeting checklist is provided as Appendix 3 to the Policy

3.3.4 Traffic Management Plan (TMP)

Compliance with TMP

Non Compliance

(1) The Local Government may, at its discretion, subtract the costs of urgent works from General Performance Bond (Refer 3.4)

Public Advice

(2) The Principal Contractor is to be provided in writing notifications as outlined in 3.3.4 Traffic Management Plan -Public Advice in the Policy.

Advertising

(3) 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 of the Policy.

Completion or Extension of Time

(4) 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.

(5) 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

(1) If The Local Government's representative is unable to be in attendance at any hold points and requested inspections, the determination of the Consultant's representative in relation to compliance or non-compliance of the element of work will be accepted by the Local Government.

(2) Photographs of particular elements to be subsequently backfilled, taken by the supervising Engineer/Consultant may assist in verification of quality if The Local Government is unable to attend.

(3) Inspections failed by The Local Government's representative will require further inspections and may attract additional inspection fees.

(4) Relevant verification test results are to be provided prior to the requested inspections.

(5) The Local Government Test and Inspection checklists are provided in AUS-SPECCQC -.

a. Other test and Inspection checklists may be approved by the Local Government for use, provided that elements of the different stages of the testing and inspection of works as described in the Policy are include.

3.4.2 Earthworks and Subgrade Inspection

(1) Sub-base and base depths, finished levels, compaction test and re-test results are to be provided to the Local Government prior to The Local Government witnessed proof roll inspections.

3.4.3 Roadworks and Pre-seal Inspection

(1) The supervising Engineer / Consultant is to have the approved specifications for the seal/prime on site.

(2) Where there is no kerb and channel the edge of the pavement is to be spot marked prior to the pre-priming inspection.

3.4.4 Sewage and Water Reticulation Inspection

(1) Inspections are to be in accordance with AUS-SPEC 401 Water Reticulation and C402 – Sewerage System.

Sewerage Reticulation—

(2) 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—

(3) Prior advise to customers by the Contractor will be required if the connection to the Local Government's water mains will cause disruption to existing customer water supply.

(4) The Contractor is to contact the Director Planning and Development for procedure and timing relating to advices to effected customers

(5) The Director Planning and Development, may at his/her discretion require prior advertising of any planned disruption with costs to be borne by the Developer.

3.4.5 "On Maintenance" Inspection

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

(2) The Local Government has adopted an Asset Design and As Constructed (ADAC) system for design and as constructed techniques.

a. The supervising Engineer / Consultant will be provided with the relevant software to install as VB script into their AutoCAD.

(3) The Local Government's engineering design department will provide the Supervising Engineer/Consultant with drafting format requirements.

(4) A preferred format for the Engineering Certificate is provided as Appendix 8 of the Policy.

3.5 GENERAL PERFORMANCE BOND AND SECURITY BOND

3.5.1 General Performance 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.

(2) Table 2 provides a guideline for the determination of general performance bonds against various sizes and types of works.

Table 2—Performance Bond Estimates

Minor	Single access		$ 5 000
	Individual lot fill		$ 5 000
	Works for1-10 lots or equivalent	Urban	$ 5 000
		Rural	$ 3 000
Medium	Works for10-40 lots or equivalent	Urban	$ 10 000
		Rural	$ 6 000
Major	Works greater than 40 lots	Urban	$ 15 000
		Rural	$ 9 000

3.5.2 Security bond

(1) The security bond may be required by the Local Government as a surety for the construction of works at later stages of the development where the development population creates the need for the works.

(2) In cases where The Local Government carries out work, payment will be made to directly to the Local Government by way of private works orders procedures.

(3) Refer Section 2.5.3 of the Policy for Private works orders

3.6 CONSTRUCTION SPECIFICATIONS INTRODUCTION

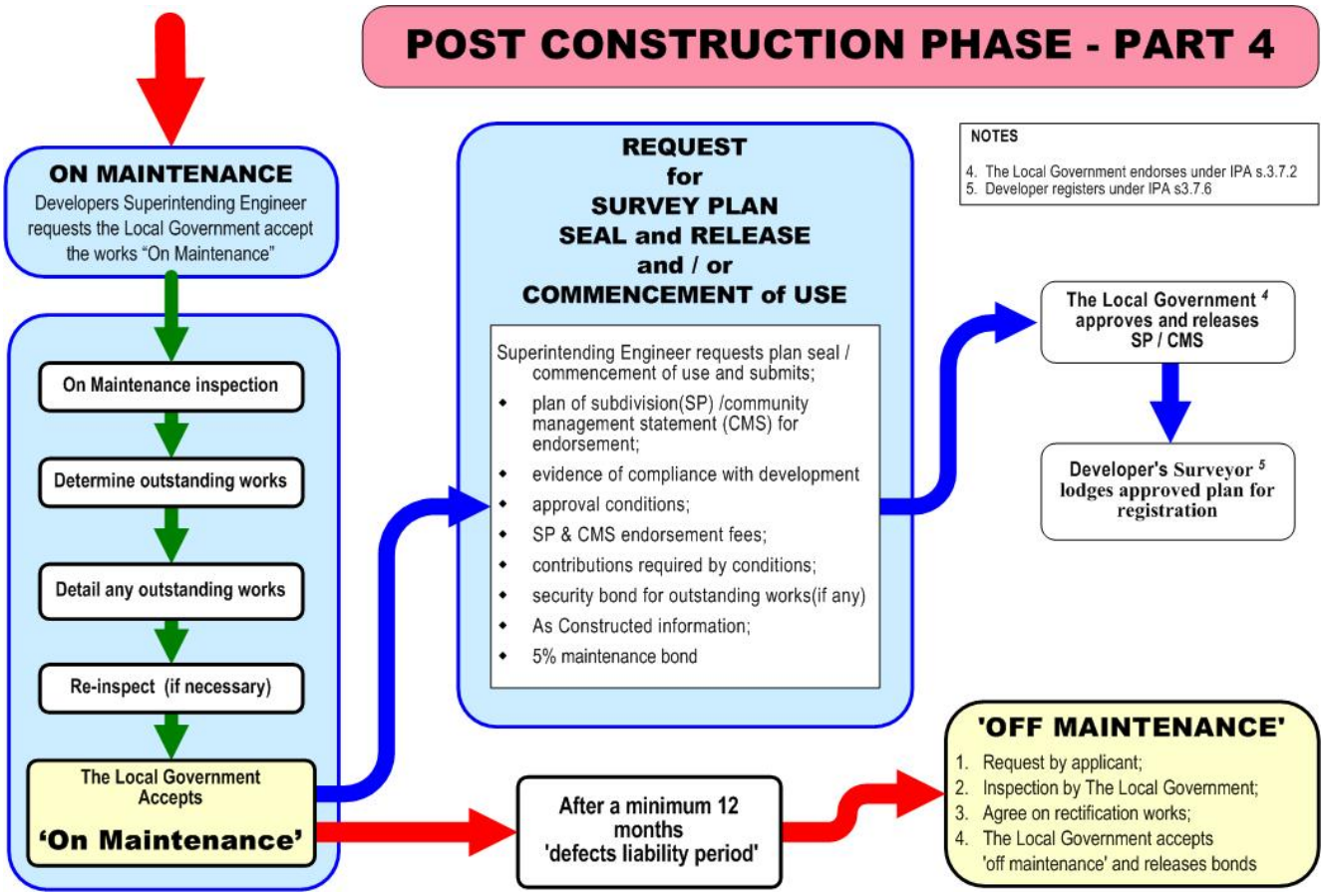
(1) The Local Government has adopted AUS-SPEC - Development Specification Series (Burnett Shire Council's version) as desired minimum standards for development works within the Shire.

(2) The specifications listed in Table 3—Construction Specifications of the Policy

(3) Where the 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 other than those adopted specifications.

(4) Departures from the Local Government's Specifications are to be clearly identified in the application for operational works with justification for the use of the alternative standard.

4 POST CONSTRUCTION



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

(1) In all instances the Local Government representative for dealing with Operational Works is the Director, Planning and Development Department.

(2) The Supervising Engineer / Consultant is to provide 5 working days notice to the Local Government and agree on a suitable time for an "On Maintenance" inspection.

(3) The Contractor, Supervising Engineer/Consultant and the Local Government's Development Engineer or his/her representative will be required to attend the "On Maintenance" inspection.

(4) The Local Government will check the digital As Constructed information and confirm it's approval or non approval with the Supervising Engineers / consultants.

(5) If the work has not been accepted or has been partially accepted, a further inspection will be required to confirm outstanding works as complete.

(6) On-maintenance Inspection and On-maintenance Submission Check Lists are provided as Appendices 6 and 7.to the Policy

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 has the facility to draw upon maintenance security bonds to recover costs associated with un-maintained works.

(3) Examples of elements of work that may require a greater than twelve (12) months period are—

a. Erosion prone areas

b. Grassed drainage areas

(4) The Local Government's maintenance period requirements relate to the Developer and not the Contractor.

(5) The Developer will not be responsible for the repair of third party damage to infrastructure within public property that is caused by vandalism or theft during the maintenance period.

(6) The maintenance of the works is to be kept to a standard, which allows the works to remain functional in relation to the design intent throughout the maintenance period.

(7) Costs in excess of the maintenance bond incurred by the Local Government in carrying such works will be recovered by legal means.

4.3 MAINTENANCE SECURITY BOND

(1) The maintenance security bond will be worded to include its purpose and state the full and unconditional draw down facility of the Local Government.

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

4.4.1 Off Maintenance Requirements

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

4.4.2 "Off-Maintenance" Inspection

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

(2) 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.

(3) 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) Ultimate care should be taken to ensure that bonds are appropriately addressed when transferring property between owners before development is completed.

(2) A typical bond letter paragraph for a security bond may read—

(3) "To secure infrastructure works associated with Burnett Shire Council development permit approval number ……..

(4) Or, for a maintenance bond

(5) "To provide a maintenance bond for approved infrastructure works associated with Burnett Shire Council approval number ....."

(6) It is important to note that the submission of a bond is to secure a contract between the Local Government and the Developer.

(7) Maintenance bonds secure not only the maintenance of constructed infrastructure but also the rectification of design errors or omissions and the establishment and maintenance of revegetation works.

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.

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.

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.

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.

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.

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)of the Policy.

4.8 CONTRIBUTIONS

(1) When submitting payment of contributions it is important for the Developer to accompany the payment with a formal written request for the reduction or release of any other bonds which may have been submitted and which can now be released.

4.9 SEALING THE PLANS OF SURVEY

(1) Basic requirements for sealing the survey plan are sets out in Chapter 3, Part 7 of the Integrated Planning Act 1997.

(2) These requirements indicate the plan is to—-

a. Be suitable for lodgement in the office of the relevant registering authority;

b. Be certified by a licensed surveyor;

c. Be accompanied by a copy of a certificate of completion of the pegged and closed survey; and

d. Be accompanied by the appropriate fee.

e. Have all outstanding rates and charges levied by the Local Government or expenses that are a charge over the land under any Act.

(3) Unless otherwise agreed by the Local Government, standard easement formatted documents are to be prepared by the Local Government's solicitors at the Developer's cost.

(4) Transfers and registration of the Survey Plan/s are to be completed at the Developer's cost by the Developer's solicitors in conjunction with the Local Government's solicitors.

5 FILLING OF LAND

5.1 INTRODUCTION

(1) Correct land and allotment filling control reduces the chance of slippage and damage due to settlement of land.

(2) Generally landscaping mounds, top dressing for lawns, shaping around existing buildings and local government parklands is exempt from the majority of conditions in this part of the policy.

(3) This part of the Policy is to be read in conjunction with the Storm Water Management Policy which applies to works related to land-

a. Within 100m of a dominant wetland ecosystem (inc. 50m buffer); a sub-dominant wetland ecosystem (inc. 50m buffer); or an area that may contain wetlands (inc. 50m buffer); or

b. Within 100m of a watercourse.

5.2 PURPOSE

(1) It is not intended to relate to the placement and compaction of material where such work is carried out as an integral part of a development process that is subject to some other *acceptable* quality control system.

(2) In particular, the policy has no influence on—

a. The requirements of the Building Code of Australia and associated standards;

b. Filling for or incidental to "Building Work" as defined in Section the *Integrated Planning Act, 1997* (IPA); or

c. The construction of "Development Infrastructure Items" as defined in of the IPA and where such works are subject to control under some other code or standard; or

d. Filling in relation to landscape features.

5.3 OBJECTIVES

(1) The objective of the guidelines is to establish a set of conditions to regulate the placement of fill material on land within the Shire.

5.4 APPLICATIONS FOR APPROVAL TO COMMENCE FILLING

5.4.1 MINIMUM INFORMATION REQUIREMENTS

(1) The application is to include, as a minimum, a plan showing property description, property boundaries, extent and location of proposed fill, source and quality of fill material, *method of filling, testing and testing frequencies,* existing surface levels, proposed finished surface levels, batter slopes, method of storm water drainage and any existing easements or underground services in the vicinity of the fill.

5.4.2 BONDS

(1) The purpose of the bond is to give surety that work will be completed to Policy requirements where it considered that there might be some risk of non-compliance due to factors such as the size of the operation, difficult topography or environmental impact. If a developer fails to satisfy the requirements of the policy, Council may apply the bond to have the work completed to those requirements. Where a bond is so applied, the amount of any unexpended bond will be returned to the owner.

(2) In land developments where a maintenance bond is applicable to all operational works including land filling, no separate bond for filling is required.

5.4.3 DRAINAGE

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

5.4.4 INSPECTIONS

(1) Contact Council's Development Engineer for inspection 2 days prior to commencement of fill.

5.5 RETAINING WALLS

(1) Contact Council's Development Engineer to confirm whether an Operational Works Application is required for proposed retaining walls.

5.6 COMPLIANCE WITH STANDARDS

(1) Contact Council's Development Engineer for inspection 2 days prior to commencement of fill.

5.6.2 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).

5.6.3 BATTERS

(1) 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.

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

5.6.4 EXISTING SERVICES

(1) It is essential that all existing infrastructure and environmental issues be recorded as part of the request

5.6.5 COMPACTION

(1) Relative compaction for cohesive soils are to be determined in accordance with AS 1289 5.4.1. Density index for cohesion-less soils are to be determined in accordance with AS 1289 5.6.1.

(2) Acceptance of tests is to be on a "not one to fail" basis by achieving minimum specified dry density ratio by initial testing or retesting after remedial action on failed areas.

(3) Testing is to be carried out by a testing service having NATA certification for soil testing.

(4) Testing of coarse granular material for which the above density tests do not apply, may be tested by proof rolling in accordance with AS 3798-1996 section 5.4.

(5) Testing frequency is to be as per Table 8.1 – AS 3798-1996 or as by the Supervising Engineer and agreed to by the relevant officer.

5.6.6 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 risk of flooding on upstream or downstream properties.

5.7 SUPERVISION, TESTING AND CERTIFICATION

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

5.8 EXTRACT FROM A.S. 3798-1996 — "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS"

(1) These guidelines refer to the determination of relative compaction using a direct method. However, where an indirect method is used, e.g. Perth sand penetrometer (AS 1298.F3.3), some interpretation of the guidelines may be required.

(2) Tests in areas of uncertain compaction and re-tests of failed areas are to be carried out. These are additional to the testing recommended in Table 3 below.

(3) Where the geotechnical testing authority has been engaged at Level 2 or Level 3, it may be acceptable to test more than one layer per site visit, by excavating to the test level.

(4) Implies hand-operated or small equipment.

(5) Frequency of testing pavements in confined or large areas may be reviewed at time of specifications.

Table 3—Frequency of Field Density Tests

TYPE OF EARTHWORKS	FREQUENCY OF TESTS (SEE NOTE 2)
Type 1 Large Scale Operations. (e.g. subdivisions, large industrial lots, road embankments) (greater than 1500m^2)	Not less than - (a) 1 test per layer of 200 mm thickness per material type per 2500 m^2; or (b) 1 test per 500 m^3 distributed reasonably evenly throughout full depth and area; or (c) 3 tests per visit; whichever requires the most tests.
Type 2 Small Scale Operations. (e.g. individual residential lots) (500 m^2 to 1500 m^2) (area covered by each layer of fill)	Not less than - (a) 1 test per layer of 200 mm thickness (see note 3) per 1000 m^2; or 2500 mm or (b) 1 test per 200 m^3 distributed reasonably evenly throughout full depth and area; or (c) 1 test per lot per layer; whichever requires the most tests.
Type 3 Concentrated Operations. (e.g. back filling of small farm dams, gullies and similar)	Not less than - (a) 1 test per 100 m^3 distributed reasonably evenly throughout full depth and area; or (b) 1 test per layer or 200 mm thickness (se note 3) per 500 m^2; or (c) 3 tests per visit; whichever requires the most tests.
Type 4 Confined Operations. (e.g. filling behind structures) (see note 4)	1 test per 2 layers per 50m^2
Pavements. (see note 5)	(a) 1 test per layer per 25 lineal metres for 2-lane roads. (b) 1 test per layer per 1000 m^2 for carparks. (c) 3 tests per layer. (d) 3 tests per visit Whichever requires the most tests.
Trenches	1 test per 2 layers per 40 linear metres.

5.9 SUMMARY - FILLING OF LAND REQUIREMENTS

Table 4—Summary of filling of land requirements

Classification	Fill
Prohibited Elements	Organic materials, toxic or contaminated matter, metals, plastic, builders debris, deleterious matter - as defined in clause 5.6.2(1)a, 5.6.2(1)b and 5.6.2(1)c
Action Required	IDAS Application
Are Fees Payable?	Yes -refer to adopted Fees and Charges Schedule.
Retaining Wall: over to 1.0 metre high	Building application and fees (not affected by the policy)
Retaining Wall: Up to 1.0 metre high	IDAS application required. (Operational Works)
Is drainage to be provided?	As required by Clause.5.6.6
Batter Requirements:	i) To facilitate use of conventional equipment ii) Recommended max. batter: 1.4 iii) Max. uncertified batter: 1.3 iv) Not to obstruct drainage. v) Not to spill on to adjoining land
Where Public Utility Service (eg. water, sewerage, power, gas, phone) are to be covered, what action is to be taken?	Consult with Authority and negotiate approval. For Authorities other than Council, send copy of approval with application.
Is compaction necessary?	Yes. Per clauses 5.6.2(1)d and 5.7

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	Department of Natural Resources and Mines
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