



Certification Report

Responsible Department: Infrastructure Delivery Department
Responsible Section: Design Services
Responsible Officer: Manager Design Services

Design Certificate

Project title:	
Documentation no:	
Designer:	

I certify that the documentation noted above represents a design for which the attached design checklists provide a valid record.

I certify that this design conforms to current Australian or International standards, relevant legislation, industry guidelines, Council's design specifications, Council's current DCP and specific instructions received with the exception of departures cited in the attached design checklists.

I certify that this design will not significantly impact on the environmental factors of the area as interpreted under part IV of the NSW Environmental Planning and Assessment Act.

I certify that this design is in strict compliance with the development consent conditions and where a variance to the consent is found, written confirmation has been received from Council approving of the variance prior to the lodgement of Design Drawings (this includes designs for staged construction).

I certify that all structural/civil/hydraulic elements have been designed by a suitably qualified and experienced Chartered Professional Engineer.

Date:	
Contact phone:	
Contact postal address:	
Design Engineer/Surveyor:	
Qualifications:	
ABN:	

Documentation of Existing Site Features – Design Checklist

Responsible Department: Infrastructure Delivery Department

Responsible Section: Design Services

Responsible Officer: Manager Design Services

Checkpoints

Initial and date the following checkpoints or tick box if not applicable.

		By	Date	NA
1.1	Check detail survey by site inspection for existing drainage./...../.....	<input type="checkbox"/>
1.2	Check detail survey by site inspection for existing property descriptions, boundaries and accesses./...../.....	<input type="checkbox"/>
1.3	Check detail survey of contours as representative of site terrain./...../.....	<input type="checkbox"/>
1.4	Document trees and significant environmental features affected by the works./...../.....	<input type="checkbox"/>
1.5	Document significant features to heritage within the works boundaries./...../.....	<input type="checkbox"/>
1.6	Document existing public and private property likely to be affected by the design./...../.....	<input type="checkbox"/>
1.7	Document survey (of contours and features) and benchmarks of the site and up to 3 metres within neighbouring lots./...../.....	<input type="checkbox"/>

Non-conformance

Describe any special features of the project and document any variations from Council or State Government Authority requirements.

Horizontal Road Alignment - Design Checklist

Responsible Department: Infrastructure Delivery Department

Responsible Section: Design Services

Responsible Officer: Manager Design Services

Checkpoints

Initial and date the following checkpoints or tick box if not applicable.

		By	Date	NA
2.1	Check that alignment is compatible with design speeds./..../....	<input type="checkbox"/>
2.2	Check that alignment is adequate in relation to clearance of roadside hazards./..../....	<input type="checkbox"/>
2.3	Check that there is adequate horizontal sight distance for drivers and pedestrians./..../....	<input type="checkbox"/>
2.4	Check that there is minimum conflict with existing services./..../....	<input type="checkbox"/>
2.5	Check that road widths and lanes conform to traffic design requirements of Council, Austroads and relevant Australian Standards./..../....	<input type="checkbox"/>
2.6	Check that bridge alignment is compatible with the road alignment./..../....	<input type="checkbox"/>
2.7	Check for adequate pedestrian, pram, bicycle and parking provisions./..../....	<input type="checkbox"/>
2.8	Check for adequate provision for large vehicles such as buses, garbage trucks and emergency vehicles./..../....	<input type="checkbox"/>
2.9	Check that intersections conform to the turning requirements of design traffic, including emergency vehicles./..../....	<input type="checkbox"/>
2.10	Check adequate pavement width tapers and merges./..../....	<input type="checkbox"/>
2.11	Identify and resolve any levels of conflict with existing utility services./..../....	<input type="checkbox"/>
2.12	Document horizontal road alignment set out data./..../....	<input type="checkbox"/>
2.13	Check provision of superelevation and superelevation development lengths./..../....	<input type="checkbox"/>
2.14	Check adequate sight distance for corners./..../....	<input type="checkbox"/>
2.15	Check adequate overtaking sight distance and manoeuvre sight distance./..../....	<input type="checkbox"/>
2.16	Check widening of lanes on curves./..../....	<input type="checkbox"/>

Non-conformance

Describe any special features of the project and document any variations from Council or State Government Authority requirements.

Vertical Road Alignment - Design Checklist

Responsible Department: Infrastructure Delivery Department

Responsible Section: Design Services

Responsible Officer: Manager Design Services

Checkpoints

Initial and date the following checkpoints or tick box if not applicable.

		By	Date	NA
3.1	Check that grades conform to maximum and minimum requirements as per Austroads guides./..../....	<input type="checkbox"/>
3.2	Check that vertical clearances to bridges and services conform to standards./..../....	<input type="checkbox"/>
3.3	Check that there is adequate vertical sight distance for drivers and pedestrians./..../....	<input type="checkbox"/>
3.4	Check that there is adequate cover to drainage structures or services./..../....	<input type="checkbox"/>
3.5	Check that there is adequate vertical alignment for disposal of surface drainage from properties and road./..../....	<input type="checkbox"/>
3.6	Check that grades and levels conform to 1:100 year flood levels (or required planning flood return frequency)./..../....	<input type="checkbox"/>
3.7	Check that vertical alignment is compatible with property access./..../....	<input type="checkbox"/>
3.8	Check that gradients on intersecting roads do not exceed the cross slope of the through pavement and are no greater than 3% at give way and stop signs./..../....	<input type="checkbox"/>
3.9	Check that there is acceptable sight distance for all accesses to roundabouts (or systems for reducing speed are provided)./..../....	<input type="checkbox"/>
3.10	Check that alignment coordination with horizontal alignment is in conformance with the Austroads design guides./..../....	<input type="checkbox"/>
3.11	Identify and resolve conflict with existing public utility services./..../....	<input type="checkbox"/>
3.12	Document vertical road alignment set out data on the longitudinal sections./..../....	<input type="checkbox"/>

Non-conformance

Describe any special features of the project and document any variations from Council or State Government Authority requirements.

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Road Cross-Section - Design Checklist

Responsible Department: Infrastructure Delivery Department

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Responsible Officer: Manager Design Services

Checkpoints

Initial and date the following checkpoints or tick box if not applicable.

		By	Date	NA
4.1	Document complete dimensions on typical cross-sections./..../....	<input type="checkbox"/>
4.2	Document kerb & gutter, road safety barrier and surface drainage on typical cross-sections./..../....	<input type="checkbox"/>
4.3	Document batter slopes and batter treatment where appropriate./..../....	<input type="checkbox"/>
4.4	Document pavement description and surface treatment including geotechnical reference./..../....	<input type="checkbox"/>
4.5	Document property boundaries, service allocations and location of known existing underground services and pathway treatments./..../....	<input type="checkbox"/>
4.6	Document cross-sections to define all variations and width transitions./..../....	<input type="checkbox"/>
4.7	Document cross-sections allowing for assessment of impact of road level on adjoining property./..../....	<input type="checkbox"/>
4.8	Verify the stability of embankment slopes, batters and retaining walls as satisfactory./..../....	<input type="checkbox"/>
4.9	Check that cross section reference level conforms with vertical road alignment./..../....	<input type="checkbox"/>

Non-conformance

Describe any special features of the project and document any variations from Council or State Government Authority requirements.

Road and Interallotment Drainage - Design Checklist

Responsible Department: Infrastructure Delivery Department

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Checkpoints

Initial and date the following checkpoints or tick box if not applicable.

		By	Date	NA
5.1	Document existing surface drainage and upstream catchments./...../.....	<input type="checkbox"/>
5.2	Check that hydrological data is current./...../.....	<input type="checkbox"/>
5.3	Make hydrologic and hydraulic design calculations available for audit./...../.....	<input type="checkbox"/>
5.4	Check that underground drainage and structures do not conflict with public utility services./...../.....	<input type="checkbox"/>
5.5	Check that the designed drainage lines are compatible with existing incoming lines and outgoing lines./...../.....	<input type="checkbox"/>
5.6	Document pipeline length, type, size, class and bedding requirements for each drainage line./...../.....	<input type="checkbox"/>
5.7	Check that height of fill over drainage lines is within practical and allowable limits./...../.....	<input type="checkbox"/>
5.8	Document drainage provisions for local depressions, e.g. median areas or areas adjacent to fills./...../.....	<input type="checkbox"/>
5.9	Check that the effect of headwater and back-up water on private property is satisfactory and non-intrusive./...../.....	<input type="checkbox"/>
5.10	Document subsurface drainage by line and level if required./...../.....	<input type="checkbox"/>
5.11	Document batter drains for fills and cuttings if required./...../.....	<input type="checkbox"/>
5.12	Consider the height and energy level of downstream drainage including exit velocity./...../.....	<input type="checkbox"/>
5.13	Locate drainage structures and flow paths to ensure safe vehicular and pedestrian transit./...../.....	<input type="checkbox"/>
5.14	Document drainage structure number, set out, type and pipe on the drainage plans and schedule of drainage elements./...../.....	<input type="checkbox"/>
5.15	Identify emergency overland flow paths to minimise impact on private property./...../.....	<input type="checkbox"/>
5.16	Check that road drainage conforms with Council's drainage design criteria./...../.....	<input type="checkbox"/>

		By	Date	NA
5.17	Check that interallotment drains conform with Council's pipe size and pits specification and Australian Rainfall and Runoff (AR&R) rainfall data./...../.....	<input type="checkbox"/>
5.18	Document appropriate land stabilisation and velocity controls to pipe systems, open channels and embankments./...../.....	<input type="checkbox"/>
5.19	For flood controlled allotments ensure the floor height controls are compatible with road and drainage levels as specified by Council's planning department./...../.....	<input type="checkbox"/>

Non-conformance

Describe any special features of the project and document any variations from Council or State Government Authority requirements.

Signs and Markings - Design Checklist

Responsible Department: Infrastructure Delivery Department

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Checkpoints

Initial and date the following checkpoints or tick box if not applicable.

		By	Date	NA
6.1	Conform to the documented Traffic Management Plan./...../.....	<input type="checkbox"/>
6.2	Document sign types, sizes, locations and support structure details to conform with AS 1742 (all parts), Transport for NSW Supplements and Transport for NSW Sign Register./...../.....	<input type="checkbox"/>
6.3	Document pavement linemarking, pavement marking type and set out to conform to AS 1742.2, Transport for NSW Supplements and Transport for NSW delineation guidelines./...../.....	<input type="checkbox"/>
6.4	Document signs and linemarking to conform to Council's policies/...../.....	<input type="checkbox"/>

Non-conformance

Describe any special features of the project and document any variations from Council or State Government Authority requirements.

Pavement Design - Design Checklist

Responsible Department: Infrastructure Delivery Department

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Responsible Officer: Manager Design Services

Checkpoints

Initial and date the following checkpoints or tick box if not applicable.

		By	Date	NA
7.1	Document pavement design and surface treatment on the typical road and/or pathway cross-sections. Document any variations on the specific cross-sections./...../.....	<input type="checkbox"/>
7.2	Check that the pavement design conforms to Council's requirements and specifications./...../.....	<input type="checkbox"/>
7.3	Assess geotechnical data and keep records of design calculations for pavement design recommendations./...../.....	<input type="checkbox"/>

Non-conformance

Describe any special features of the project and document any variations from Council or State Government Authority requirements.

Bridge/Major Culvert Design - Design Checklist

Responsible Department: Infrastructure Delivery Department

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Checkpoints

Initial and date the following checkpoints or tick box if not applicable.

		By	Date	NA
8.1	Check that the design engineer is a suitably qualified and experienced Chartered Professional Engineer./..../....	<input type="checkbox"/>
8.2	Assess geotechnical data for adequacy and keep records./..../....	<input type="checkbox"/>
8.3	Check that the type and functional dimensions of the bridge conform to AS 5100 series, AS 4100, AS 3600, AS 1684 series, AS/NZS 1170 series and AS/NZS 5131./..../....	<input type="checkbox"/>
8.4	Document the type and class of all materials./..../....	<input type="checkbox"/>
8.5	Keep records of all significant design calculations and make available for audit./..../....	<input type="checkbox"/>
8.6	Check that the exit velocity for flow on the downstream side of the structure will not cause scour erosion./..../....	<input type="checkbox"/>

Non-conformance

Describe any special features of the project and document any variations from Council or State Government Authority requirements.

Erosion and Sedimentation Control Plans (ESCP) - Design Checklist

Responsible Department: Infrastructure Delivery Department
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Responsible Officer: Manager Design Services

Checkpoints

Initial and date the following checkpoints or tick box if not applicable.

		By	Date	NA
9.1	Check that the ESCP and supporting design documents conform to the <i>0022 Control of erosion and sedimentation (Design)</i> worksection for the construction and operational phase and include: <ul style="list-style-type: none"> • Construction detail drawings. • Remedial action plans for areas requiring corrective action. /...../.....	<input type="checkbox"/>
9.2	Check that the Erosion and Sedimentation Control Plan conforms to development consent conditions and environmental legislation./...../.....	<input type="checkbox"/>
9.3	Check that the Erosion and Sedimentation Control Plan conforms to the <i>0022 Control of erosion and sedimentation (Design)</i> worksection./...../.....	<input type="checkbox"/>
9.4	Check that stormwater management conforms to the <i>0074 Stormwater drainage (Design)</i> worksection./...../.....	<input type="checkbox"/>

Non-conformance

Describe any special features of the project and document any variations from Council or State Government Authority requirements.

Water Supply - Design Checklist

Responsible Department: Infrastructure Delivery Department

Responsible Section: Design Services

Responsible Officer: Manager Design Services

Checkpoints

Initial and date the following checkpoints or tick box if not applicable.

		By	Date	NA
10.1	Check that the design engineer is a suitably qualified and experienced Chartered Professional Engineer./...../.....	<input type="checkbox"/>
10.2	Check that a practicing Registered Surveyor performed the survey./...../.....	<input type="checkbox"/>
10.3	Assess geotechnical data for adequacy and keep records./...../.....	<input type="checkbox"/>
10.4	Check that the type and functional dimensions of the reticulation, and any pump station, meet the NSW Public Works Advisory guidelines and the appropriate Australian Standards, and are compatible with WSA 03./...../.....	<input type="checkbox"/>
10.5	Document the type and class of all materials, fittings, joints, and plant and pumps special requirements for crossings and protection./...../.....	<input type="checkbox"/>
10.6	Keep records of all significant design calculations and make available for audit./...../.....	<input type="checkbox"/>
10.7	Check that the design conforms to requirements of all Statutory Authorities./...../.....	<input type="checkbox"/>
10.8	Check the design conforms to any development consent conditions./...../.....	<input type="checkbox"/>

Non-conformance

Describe any special features of the project and document any variations from Council or State Government Authority requirements.

Sewerage System - Design Checklist

Responsible Department: Infrastructure Delivery Department

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Responsible Officer: Manager Design Services

Checkpoints

Initial and date the following checkpoints or tick box if not applicable.

		By	Date	NA
11.1	Check that the design engineer is suitably experienced in the relevant field and who has or is eligible for NPER registration with Engineers Australia./...../.....	<input type="checkbox"/>
11.2	Check that a practicing registered Surveyor performed the survey./...../.....	<input type="checkbox"/>
11.3	Assess geotechnical data for adequacy and keep records./...../.....	<input type="checkbox"/>
11.4	Check that the type and functional dimensions of the reticulation and any pump station meet state Department of Public Works and Services guidelines and the appropriate Australian Standards, and are compatible with WSA 02 and WSA 07./...../.....	<input type="checkbox"/>
11.5	Document the type and class of all materials, fittings, joints, plant, pumps and special requirements for crossings and protection./...../.....	<input type="checkbox"/>
11.6	Keep records of all significant design calculations and make available for audit./...../.....	<input type="checkbox"/>
11.7	Check that the design conforms to requirements of all Statutory Authorities./...../.....	<input type="checkbox"/>
11.8	Check that the design conforms to development consent conditions./...../.....	<input type="checkbox"/>

Non-conformance

Describe any special features of the project and document any variations from Council or State Government Authority requirements.

Compilation of Drawings - Checklist

Responsible Department: Infrastructure Delivery Department

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Responsible Officer: Manager Design Services

Sequence of drawing sheets

The following sequence is acceptable to Council in the compilation of a full set of roadworks drawings.

Sheet No.	Topic
1	Development consent number (if applicable), project title, locality drawing and index of sheets.
2	General layout plan with contour details and extent of work.
3	Typical road cross-sections showing road widths, pavement (design) configuration, batter slopes, kerb and gutter types.
4	Plan and longitudinal section of each road showing set out data, road safety barrier locations, guide posts and services.
5	Drainage plan and schedule of drainage elements (pipelines and structures).
6	Drainage profiles.
7	Drainage structure details.
8	Road cross-sections.
9	Intersection layout details.
10	Pavement marking and signposting.
11	Erosion and sedimentation control concept plans (short term and long term treatment).
12	Structure details – bridges, retaining walls, etc.

Multiple sheets: A set of roadworks plans may require more than one sheet for each of the topics listed and may also require supplementary sheets for site specific details.

Scale: Nominate scales on all drawings.

North point: Show on all plan views.

References

- AUS-SPEC
- [Infrastructure Design Specifications 0010 Quality requirements for design.](#)