

## CHECKLIST FOR THE LODGEMENT OF APPLICATION FOR A SUBDIVISION WORKS CERTIFICATE

This checklist has been prepared to assist you with the lodgement of your application by ensuring that you have provided all the necessary details. This will help prevent delays in the processing of your application.

Please refer to Council's '[Infrastructure design standards](#)' (IDS) for more detail, if required.

**Subdivision detail** **Applicant Office**

|                    |  |  |
|--------------------|--|--|
| <b>MASTER PLAN</b> | Plan shall include proposed subdivision pattern, including the number of lots and the location of roads. |  |
|--------------------|--|--|

**Additional details**

|                 |   |  |
|-----------------|---|--|
| <b>SERVICES</b> | Provide details of public authorities with regards to the provisions of utility services to lots created (this information may be presented in an ancillary master plan). |  |
|-----------------|---|--|

**Plans**

|                                   |  |  |
|-----------------------------------|--|--|
| <b>DETAILED ENGINEERING PLANS</b> | <p>Engineering plans shall be provided for the following matters:</p> <ul style="list-style-type: none"> <li>• earth works</li> <li>• road works</li> <li>• road pavement</li> <li>• road furnishings</li> <li>• storm water drainage</li> <li>• water supply works</li> <li>• sewage works</li> <li>• landscaping works</li> <li>• erosion control works</li> </ul> <p>Plans shall be prepared in accordance with Council's engineering specifications. Please include a completed copy of the attached IDS design checklists and forms (Appendix E).</p> |  |
|-----------------------------------|--|--|

**Cost of works breakdown**

|                                |  |  |
|--------------------------------|--|--|
| <b>COST OF WORKS BREAKDOWN</b> | Have you supplied a cost breakdown for subdivision and associated works? |  |
|--------------------------------|--|--|

**General requirements** **Applicant Office**

1. You will need to lodge your Subdivision Works Certificate on the [NSW Planning Portal](#)
2. You will need to prepare all of your supporting documents as separate PDFs and upload them as attachments with your subdivision certificate on the [NSW Planning Portal](#).
3. Have you read '[Plans](#)' under 'Step 3' on our web page?
4. Have all **pre-subdivision works certificate conditions** of consent been met?
5. Has the applicant, owner or any person with a **financial interest** in this application made a **donation** to a councillor or Council employee in the past two years?
6. Have all registered owners signed the '**owners consent**' form?
7. The application is **fully completed**.

**Privacy Statement:** The information on this form is being collected by Council for purposes associated with processing your application. Access to this information is limited to relevant Council officers and it may be disclosed to any other government agency outside of Council as required by legislation. Supply of this information is required to enable accurate information to be provided. Your application may not be accepted or processed due to a lack of information. The information will be stored securely in Council's systems. Visit [www.esc.nsw.gov.au/privacy](http://www.esc.nsw.gov.au/privacy) for more information.



# **Infrastructure Design Standard**

# Infrastructure Design Standard

## 20 Appendix E – Design checklists and forms

# Infrastructure Design Standard

## 20.1 Design Engineer's Checklist #1 Construction Certificate

| Design Engineer's Checklist #1 Construction Certificate  |                    |                        |  |
|--|--------------------|------------------------|--|
| To be submitted with request for DETAILED design approval  |                    |                        |  |
| Development:   |                    | Stage:                 |  |
| Development Consent number:  |                    | Consultants reference: |  |
| Consultant's representative:   |                    | No. of plans in set    |  |
| ITEM   | Y/N/NA/<br>COMMENT | INITIAL                |  |
| <b>General design requirements</b>   |                    |                        |  |
| The detailed design is in accordance with the development consent conditions and the approved plan, and physical design features incorporated on construction plans. |                    |                        |  |
| Plan of subdivision has been certified at the time of this submission?   |                    |                        |  |
| The detailed design is in accordance with the plan for certification?  |                    |                        |  |
| Easement locations and widths are in accordance with certified plan?   |                    |                        |  |
| The detailed design is in accordance with Council's IDS.   |                    |                        |  |
| Environmental protection during development construction has been considered and requirements are documented (eg erosion protection, silt migration etc.)            |                    |                        |  |
| Revegetation requirements have been considered and are documented.   |                    |                        |  |
| Protection of water bodies and waterways has been considered and requirements are documented.  |                    |                        |  |
| List approvals already received from other service authorities.  |                    |                        |  |
| <b>General plan requirements</b>   |                    |                        |  |
| Drawing list is presented.   |                    |                        |  |
| Council nominated drawings numbers are shown.  |                    |                        |  |
| Locality plan is presented.  |                    |                        |  |
| North arrow is shown on all layout plans and detailed plans (should be shown up or to left).   |                    |                        |  |
| All plans have correct scales shown.   |                    |                        |  |
| All plans have comprehensive legends.  |                    |                        |  |
| Do plans include standard notes? Are they applicable and clear?  |                    |                        |  |
| Plans clearly show allotment layout, with allotments numbered and dimensioned, and reserves and easements are clearly identified.                                    |                    |                        |  |
| Limit of works is shown on all layout plans in set.  |                    |                        |  |
| Dams, wells, depressions and watercourses are identified and fill requirements identified.   |                    |                        |  |
| Existing fill areas are shown.   |                    |                        |  |
| Existing features and structures are shown.  |                    |                        |  |
| Existing service locations and poles are shown.  |                    |                        |  |
| Existing trees are shown. Does design attempt to retain trees?   |                    |                        |  |
| Existing native vegetation is shown and suitably specified? Does design attempt to retain significant native vegetation?   |                    |                        |  |

# Infrastructure Design Standard

| ITEM  | Y/N/NA/<br>COMMENT | INITIAL |
|---|--------------------|---------|
| <b>Road layout plans</b>  |                    |         |
| Datum shown to AHD.   |                    |         |
| Scales are in accordance with the IDS requirements.   |                    |         |
| PSM's and TBM's marked on plans. SSM to be moved.   |                    |         |
| Proposed service locations and offsets are tabulated.   |                    |         |
| All required service conduit locations are indicated on the plans.  |                    |         |
| Footpaths minimum width of 1.5 m, and located at correct offset.  |                    |         |
| Shared paths minimum width of 2.5 m, and location clearly shown.  |                    |         |
| Kerb crossings are at appropriate locations and fully documented.   |                    |         |
| Vehicle crossings are shown on plans.   |                    |         |
| All vehicle crossings cater for standard car.   |                    |         |
| Are any crossings located over easements?   |                    |         |
| All turning movements have been checked in accordance with IDS, and intersections designed accordingly.   |                    |         |
| Street names are shown on plans and have Council approval.  |                    |         |
| Road widths between inverts of kerbs are nominated.   |                    |         |
| Kerb profiles are nominated.  |                    |         |
| <b>Street name signage, linemarking, and traffic control plans</b>  |                    |         |
| Locations and type of all new signage is shown on plans, and comply with Australian Standards.  |                    |         |
| Any existing signage to be removed or relocated is shown on plans.  |                    |         |
| Locations and type of all linemarking is shown on plans, and comply with Australian Standards.  |                    |         |
| Any existing linemarking to be removed is shown on plans.   |                    |         |
| Traffic calming devices are designed and documented in accordance with Austroads and any RMS supplement to those guidelines and the IDS, and as per approved plans. |                    |         |
| Limit of works of roads include temporary turning area if required. "No Road" signage or hazard markers to be provided unless otherwise agreed with Council.        |                    |         |
| <b>Road longitudinal sections</b>   |                    |         |
| Road names are shown on longitudinal sections.  |                    |         |
| Scales are in accordance with the IDS requirements.   |                    |         |
| Datum RL to AHD shown.  |                    |         |
| Natural surface profile and levels shown at crown.  |                    |         |
| Design surface profile and levels shown at crown.   |                    |         |
| Levels have been checked by design engineer and (i) comply with the IDS, and (ii) match into existing.  |                    |         |
| Depth of cut/fill to crown is shown.  |                    |         |
| Design surface profile and levels shown at left and right back of kerb (including high and low points).   |                    |         |

# Infrastructure Design Standard

| ITEM  | Y/N/NA/<br>COMMENT | INITIAL |
|---|--------------------|---------|
| <b>Road longitudinal sections</b> continued   |                    |         |
| Gradings as + or – percent to two (2) decimal places shown in direction of chainages.   |                    |         |
| Grades have been checked by design engineer and (i) comply with the IDS, and (ii) match into existing.<br>Min. grade..... ; % Max. grade.....; % Match existing .....   |                    |         |
| All vertical curve lengths and I.P values are shown.  |                    |         |
| Vertical curve levels are shown at maximum intervals of 10m   |                    |         |
| Minimum kerb grades are achieved.   |                    |         |
| Levels and grades given on long sections have been checked by the design engineer.  |                    |         |
| Check levels and grades match into existing abutting roadworks.   |                    |         |
| Minimum length of vertical curve for >1% grade change to be 15 m (except on kerb returns).  |                    |         |
| External road grading for future stages to extend a min. of 100m  |                    |         |
| Vertical curves and longitudinal grades provide satisfactory sight distances for standard roads, particularly at intersections.   |                    |         |
| Coordination of vertical and horizontal curves has desirable design outcome?  |                    |         |
| Is vertical curve entirely within or outside horizontal curve?  |                    |         |
| <b>Road cross-sections</b>  |                    |         |
| Design engineer has checked that cross-sections agree with longitudinal sections.   |                    |         |
| Datum is shown on every cross-section.  |                    |         |
| Scales comply with IDS.   |                    |         |
| Road names and chainage references are shown.   |                    |         |
| Natural and design levels are given at: <ul style="list-style-type: none"> <li>• Back of kerb</li> <li>• Lip of kerb</li> <li>• Crown</li> <li>• Property lines</li> <li>• Front of footpath</li> <li>• Table drain inverts (where applicable)</li> <li>• Top and toe of batters (where applicable).</li> </ul> |                    |         |
| All crossfalls are in accordance with the IDS: - pavements - nature strips - footpaths – batters.   |                    |         |
| <b>Typical cross-sections and traffic/road details</b>  |                    |         |
| Typical cross-sections are presented in accordance with Appendix B –Information shown on plans and requirements of this IDS   |                    |         |
| Typical cross-sections note road name and chainage references, if applicable  |                    |         |
| Profile and geometry of design surface grades are shown as % or 1 in X and comply with IDS requirements   |                    |         |
| Details of road pavement construction, including materials, compaction and type of seal are shown.  |                    |         |

# Infrastructure Design Standard

| ITEM   | Y/N/NA/<br>COMMENT | INITIAL |
|--|--------------------|---------|
| <b>Typical cross-sections and traffic/road details</b> continued   |                    |         |
| Details of footpath construction, including materials, compaction and seal are shown, or standard drawing noted. |                    |         |
| Typical alignment of services, subsoil drainage and landscaping are shown.                                       |                    |         |
| Kerb and channel types are nominated.  |                    |         |
| Kerb and channel construction is detailed or standard drawings noted.  |                    |         |
| <b>Intersection, cul- de- sac and curve details</b>  |                    |         |
| Road names are shown.  |                    |         |
| Road chainages are shown.  |                    |         |
| Intersection details are shown at correct scales in accordance with IDS.   |                    |         |
| At least four kerb levels are given on every kerb radial.  |                    |         |
| Tangent point levels and chainages align with longitudinal and cross sections.                                   |                    |         |
| Set-out details are shown including angle, radii and tangent points.   |                    |         |
| Design surface contours are shown to AHD at 50 mm maximum intervals.   |                    |         |
| Back of kerb levels are shown to AHD.  |                    |         |
| Footpath levels are shown.   |                    |         |
| Location of low points are shown.  |                    |         |
| Services (inc drainage) are shown in detail.   |                    |         |
| Landscaping is shown in detail.  |                    |         |
| Footpath and kerb crossings are shown in detail.   |                    |         |
| <b>Drainage layout plans</b>   |                    |         |
| Design engineer has checked that drainage design is in accordance with AR & R                                    |                    |         |
| Datum shown to AHD   |                    |         |
| Scales are in accordance with IDS requirements   |                    |         |
| PSM's and TBM's marked on plans to AHD   |                    |         |
| Finished surface levels are shown where the natural surface is altered.  |                    |         |
| Plans clearly show allotment layout, with allotments numbered and reserves and easements are clearly identified. |                    |         |
| 1:100 year flood levels shown.   |                    |         |
| Road names are shown.  |                    |         |
| Plans shown layout of proposed drainage systems with offset from property boundaries.                            |                    |         |
| Pipe materials and diameters are shown.  |                    |         |
| Design engineer has checked that drainage design in accordance with AR&R.  |                    |         |
| Datum shown to AHD.  |                    |         |
| Overland flow path is shown and outfall has Council approval.  |                    |         |

# Infrastructure Design Standard

| ITEM  | Y/N/NA/<br>COMMENT | INITIAL |
|---|--------------------|---------|
| <b>Drainage layout plans</b> continued  |                    |         |
| Kerb and channel and footpath is depressed where overland flow path leaves road pavement.   |                    |         |
| Subsurface drains, house drains and property inlets are shown.  |                    |         |
| Pits are at appropriate locations (eg away from kerb returns, vehicle crossings, kerb crossings etc.).  |                    |         |
| Pit spacing is 80m maximum.   |                    |         |
| Pit capacity checked by design engineer.  |                    |         |
| Double SEP"s at confined low points only.   |                    |         |
| Change in angle is not greater than 90°..   |                    |         |
| Pits/headwalls are numbered.  |                    |         |
| Set-out point of pits is clearly shown on legend.   |                    |         |
| Footpath spoon drains have adequate outfall.  |                    |         |
| Back of kerb drainage (eg roundabout kerbs) has adequate outfall.   |                    |         |
| All existing fences, buildings, trees etc shown in path of overland flows.  |                    |         |
| All proposed fences, buildings, trees etc shown in path of overland flows.  |                    |         |
| Existing or proposed open earth drains, dams, watercourses, boreholes, sink holes, wells and springs within the area are shown.   |                    |         |
| Extent of required erosion protection is shown at headwalls and other structures.   |                    |         |
| Drop structures are shown.  |                    |         |
| All properties have identified drainage discharge points (to underground drainage systems for industrial and commercial developments, and residential wherever possible). |                    |         |
| <b>Drainage longitudinal sections</b>   |                    |         |
| Longitudinal sections are prepared for all legs of drainage and for open drains and nominated overland flow paths   |                    |         |
| Scales are in accordance with the IDS   |                    |         |
| Comprehensive legend to be shown  |                    |         |
| Datum RL to AHD shown   |                    |         |
| Drainage line numbers names are shown on longitudinal sections.   |                    |         |
| Drainage line chainages are shown on longitudinal sections.   |                    |         |
| Lengths of drainage sections do not exceed 80m  |                    |         |
| Pipe diameter, class and grade is shown for all legs of drainage.   |                    |         |
| Pipe classes have been determined with consideration to construction loads, not just final cover. Cross-check compaction requirements in documentation.                   |                    |         |
| Pipes with steep grades are documented to include anchor blocks.  |                    |         |
| Pit number and pit type is shown.   |                    |         |
| Pit type matches capacity requirements.   |                    |         |
| Any special pits are fully documented.  |                    |         |
| Internal pit dimensions are shown   |                    |         |
| Pit inlet and outlet levels are shown   |                    |         |



# Infrastructure Design Standard

| ITEM   | Y/N/NA/<br>COMMENT | INITIAL |
|--|--------------------|---------|
| <b>Drainage longitudinal sections</b> continued  |                    |         |
| Depths of pits to invert levels are shown.   |                    |         |
| Finished top of pit levels and finished surface level adjacent to pits are shown.  |                    |         |
| Pit lid type and class are shown.  |                    |         |
| Origin/destination pits for inlet and outlets.   |                    |         |
| Junction line numbers are noted.   |                    |         |
| Design pipes are plotted on longitudinal section.  |                    |         |
| Hydraulic grade line is plotted and levels given.  |                    |         |
| Check that maximum depth in roadway is 500mm (ie., at invert).   |                    |         |
| Check that depth x flow factor is acceptable.  |                    |         |
| Required 150mm freeboard to kerb invert is achieved for minor storms.  |                    |         |
| Energy losses in drainage system are accounted for.  |                    |         |
| Crosses with other services are plotted and clearances nominated (street names should be referred to identify crossings).  |                    |         |
| Design flows are shown (litres/second).  |                    |         |
| Design velocities are shown (metres/second) and comply with Manual.  |                    |         |
| FCR backfill is specified under road pavements, footpaths, crossovers and building lines.  |                    |         |
| The location and type of special backfill requirements are noted (eg to prevent piping of backfill material).  |                    |         |
| Design is in accordance with AS 3725 and its commentary.   |                    |         |
| <b>Open drains</b>   |                    |         |
| Shape of drain is suitable for maintenance.  |                    |         |
| Drain is accessible from both sides and all weather tracks provided  |                    |         |
| Depth of floodways is shown on cross-sections and less than 1.5m   |                    |         |
| Scour velocities and siltation were both checked in determining longitudinal grades.   |                    |         |
| Grade control / drop structures are fully documented.  |                    |         |
| Low flow pipe has been provided in accordance with the Specification.  |                    |         |
| Outfall structures are provided and energy dissipators provided if needed.   |                    |         |
| 500mm minimum freeboard is achieved.   |                    |         |
| <b>Detail plans</b>  |                    |         |
| Non-standard drainage structures are fully detailed for construction<br>- headwalls - drop structures - erosion protection at outlet structures - erosion protection for batters where needed.   |                    |         |
| Non-standard pits are fully documented including reinforcement and pit lid details.  |                    |         |
| Structural details of all retaining walls are shown, as well as details of natural surface levels and design surface levels, foundation requirements, drainage requirements, and type of finish. |                    |         |

# Infrastructure Design Standard

| ITEM   | Y/N/NA/<br>COMMENT | INITIAL |
|--|--------------------|---------|
| <b>Detail plans</b> continued  |                    |         |
| Structural details of all retaining walls are shown, as well as details of natural surface levels and design surface levels, foundation requirements, drainage requirements, and type of finish. |                    |         |
| Drainage pump stations fully documented.   |                    |         |
| Layout and details of power installation documented.   |                    |         |
| Details of any estate entrance structures, including structural details, location details and method of finish.  |                    |         |
| Traffic calming devices are fully detailed to ensure construction is in accordance with design requirements (eg splitter islands, chicanes, speed humps, roundabout construction).               |                    |         |
| <b>Lot filling plans</b>   |                    |         |
| Natural surface contours are shown with 100 mm max. intervals.   |                    |         |
| Design surface contours are shown with 100 mm max. intervals.  |                    |         |
| Finished surface levels are shown and all allotments have minimum 1:100 grade toward low point.  |                    |         |
| Proposed fill in excess of 300mm is clearly denoted on plans.  |                    |         |
| Material and compaction requirements are fully documented to relevant Australian Standard in either plans or specification.  |                    |         |
| Extent of lot filling, top and toe of batters and retaining walls all noted.   |                    |         |
| <b>Drainage detention and treatment</b>  |                    |         |
| Computations are provided to verify the volume of the basin.   |                    |         |
| Erosion protection is fully documented.  |                    |         |
| Inlet structures are fully documented.   |                    |         |
| Overflow is identified and appropriate.  |                    |         |
| Freeboard is achieved.   |                    |         |
| Wetland plantings have alternative source of water for establishing plants and for periodic dry spells.  |                    |         |
| <b>Master services plans</b>   |                    |         |
| Plans show numbered allotments, road reserves and road carriageways.   |                    |         |
| Street light types are nominated for approval.   |                    |         |
| ALL underground service alignments are shown, including non-essential services such as raw water and irrigation lines.   |                    |         |
| ALL major aboveground features are shown such as street lights, power supply pillars, fencing, landscaping etc.  |                    |         |
| <b>Landscaping plans</b>   |                    |         |
| Detailed irrigation layout plans is provided showing valves, controllers, pipe material and sizes, alignments, nozzle details, and backflow devices.   |                    |         |
| Planting schedule is included, including size of plants.   |                    |         |
| Location of major plantings is clearly shown.  |                    |         |

# Infrastructure Design Standard

| ITEM   | Y/N/NA/<br>COMMENT | INITIAL |
|--|--------------------|---------|
| <b>Landscaping plans</b> continued   |                    |         |
| Planting requirements are documented including dimension of hole, root barrier, backfill, mulch, stakes, tree grates, tree guards and stakes details   |                    |         |
| Details of any trees or vegetation to be removed.  |                    |         |
| Street furniture and signage is detailed including type, colour, location and installation.  |                    |         |
| Lighting details   |                    |         |
| Supply and installation details of playground equipment  |                    |         |
| Path, bollard and fencing construction details   |                    |         |
| Location of any services within landscaped areas   |                    |         |
| Open water bodies to cross reference to other detention basin or drainage plans.   |                    |         |
| <b>Associated documents</b>  |                    |         |
| If required, a TMAR was prepared and accompanies this submission.  |                    |         |
| If required, a TIAR was prepared and accompanies this submission.  |                    |         |
| If required, a Road Safety Audit Report was prepared and accompanies this submission.  |                    |         |
| Note any deviations between the proposed design and the recommendations within the Road Safety Audit report.   |                    |         |
| Hydrological calculations are provided for whole of catchment and partial areas if relevant, and 100yr ARI design flows calculated at critical points. (Method nominated and assumptions clearly stated ARI's in accordance with Manual) |                    |         |
| Hydraulic calculations are provided for above and underground drainage, for major and minor storm events. (Method nominated and assumptions clearly stated. Roughness coefficients nominated).   |                    |         |
| Copy of geotechnical reports are provided with submission.   |                    |         |
| Road pavement design is provided with submission.  |                    |         |
| Quality assurance sections are included in specification.  |                    |         |
| Risk assessment report is provided for drainage detention and treatment infrastructure.  |                    |         |

The plans, specifications and associated documents provided with this submission for detailed design approval have been prepared in accordance with the relevant Sections of the Council's IDS. All of the above checklist items have been initialled as correct and complete, or marked N/A (not applicable) as appropriate.

Signed \_\_\_\_\_

Dated: \_\_\_\_\_