

Infrastructure Design Standard 2022 – Amendments Summary

This summary highlights amendments made for the April 2022 version, when compared to the December 2018 version. Grammar corrections are not included.

Clause references are to the new version unless stated otherwise.

Additional amendments are dated August 2022 and highlighted in yellow.

Additional amendments are dated November 2022 and highlighted in amber.

Additional amendments are dated March 2023 and highlighted in green.

Part/Clause	Paragraph	Amendment Details	Date
All	Improvement	<b>Hyperlinks</b> URLS updated to reference the correct documents	April 2022
All	Improvement	<b>Reference Documents</b> Missing or incorrect reference documents corrected. Dates removed to avoid incorrectly referencing an outdated document.	April 2022
All	Improvement	<b>Tables and Figures</b> Links are provided in the Table of Contents page	April 2022
All except 3,11 and 12	Reference deleted and replaced	<b>Christchurch City District Plan (City Plan)</b> References to Christchurch City District Plan (City Plan) removed and replaced with Christchurch District Plan.	April 2022
1,5,6 and 7	Reference deleted and replaced	<b>The Christchurch Replacement District Plan (District Plan)</b> References to Christchurch City District Plan (City Plan) removed as this was replaced by the Christchurch District Plan.	April 2022
1.2	Updated	<b>Coverage of IDS updates</b> Included the coverage of IDS 2022 update	April 2022
1.3, 8.3	Updated	<b>Document Purpose</b> The parts of the IDS are intended to be read together as one document.	April 2022
1.5	Addition	<b>New Abbreviation</b> NCR – Non-Conformance Report	April 2022

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2.4	Updated	<b>Reticulation</b> Updated the ownership of the residential pressure sewer system laterals.	April 2022
2.5.6	Updated	<b>Road name signs</b> Change of requirement of the manufacture and erection of new nameplates, post and roundabout chevron signage.	April 2022
2 – Appendix I-4 Figure 5	Updated	<b>Services legend</b> Updated the stormwater (SW) legend to Green – RGB (107,255,48)	April 2022
2 – Appendix I-4 and Figure 6	Updated	<b>Landscape draughting symbols</b> Updated requirements for landscape draughting and symbols	April 2022
2 – Appendix I-5, I-13 Figure 12 and Figure 13	Updated	<b>Appendix I-5</b> Added the new requirements for labelling new wastewater and stormwater assets. <b>Appendix I-13</b> Updated Figure 13 – showing new layout of a WS plan. Updated Figure 14 – showing the new labelling of the news wastewater mains and laterals.	November 2022
2 – Appendix I Figure 7	Updated	<b>Typical plant list</b> New list for shrub and riparian planting and the trees	April 2022
2 – Appendix I-13 Figure 13	Updated	<b>Water Supply drawing</b> Updated the drawing with the new SW service legend.	April 2022
2 – Appendix I-13 Figure 17	Updated	<b>Landscape planting drawing</b> Updated the drawing with the new landscape draughting symbols.	April 2022
2 and 3	Updated	<b>Professional organisation’s name</b> Changed IPENZ to EngNZ (Engineering New Zealand).	April 2022
3 Appendix XIV – 2. Air Testing	Deleted	<b>Testing conditions</b> Deleted the testing for DN600.	April 2022
4.3.6	Updated	<b>Requirement for the detailing of the rockfall protection works</b> This work is be completed only by an Approved Geoprofessional.	April 2022
4.4.1	Addition	<b>Add new bullet point</b>	April 2022

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		Consideration of trees based on the Tree policy.	
4.6.2 and Appendix IV	Updated	<b>Liquefaction Information</b> Replaced the Liquefaction Resistance Index (Zoning) and Residential Zone Technical Categories by the Liquefaction Vulnerability Overview Map.	April 2022
5.9.5	Updated	<b>Building over pipelines</b> Updated the old Water Supply, Wastewater and Stormwater Bylaw 2014 to Water Supply and Wastewater Bylaw 2022.	
5.6.10, 5.13.3 6.2.2, 6.2.6, 6.5.5, 6.7, 6.8, 6.14, 6-Appendix III 7.7, 7.12.1 7 – Appendix II	Updated	<b>Updated requirements due to change from Liquefaction Resistance Index (LRI) to Liquefaction Vulnerability Categories (LVC)</b> Updated the LRI (zones) reference to Liquefaction vulnerability. Added the Vulnerability map website location.	August 2022
6.1	Addition	<b>New Reference Document</b> Odour and Corrosion Control Management Design Guideline	April 2022
6.2.5	Updated	<b>Design lifetime</b> Updated requirements	August 2022
6.2.6	Updated	<b>Table 1</b> Updated the LR zones to Liquefaction vulnerability areas.	August 2022
6.4.3	Updated	<b>Table 2</b> <ul style="list-style-type: none"> <li>Changed Net density in column 2 to Minimum net density.</li> <li>Added new note at the bottom of Table 2.</li> </ul>	August 2022
6.4.5	Updated	<b>Table 3</b> Deleted the Commercial Local (CL) zoning and replaced by Industrial Park (IP) zoning.	April 2022
6.5.3	Updated	<b>Equation 7</b> Added the definitions of P/A and ASF.	August 2022
6.5.3	Updated	<b>Equation 8</b>	April 2022

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		Deleted the definition of the daily peak flow (q) as there is no q in the equation.	
6.5.3	Added	<b>Equation 8</b> Added the definition of SCF.	August 2022
6.5.6	Updated	<b>Inverted siphons on sanitary sewers</b> Updated the requirements on the second paragraph	August 2022
6.6.2	Updated	<b>Reference and title change</b> Changed the reference to Biofilter to Odour Management.	April 2022
6.7	Updated and Deleted	<b>Wastewater Pumping Stations</b> <ul style="list-style-type: none"> <li>Updated the requirements of odour control in the wastewater pumping stations</li> <li>Deleted 6.7.1</li> </ul>	August 2022
6.8	Updated	<b>Pressure pipelines</b> Updated requirements of the rising main.	August 2022
6.9.2	Deleted	<b>Air valves</b> Removed the alternative conditions for the Pressure Sewer System (PSS) valve.	April 2022
6.9.3	Added	<b>Pressure sewer system requirement</b> <ul style="list-style-type: none"> <li>Definition of principal pressure sewer mains</li> <li>Maximum and minimum covers of pressure sewer mains and submains are updated</li> <li>Provision of mechanical protection</li> </ul>	April 2022
6.9.3	Updated and added	<b>Figures and requirement</b> <ul style="list-style-type: none"> <li>Updated Figure 3</li> <li>Added new Figure 4</li> <li>Updated the requirement in second to the last paragraph</li> </ul>	August 2022
6.9.4	Updated	<b>Isolation valves</b> Updated maximum number of properties from 50 to 20.	August 2022
6.9.5	Updated	<b>Detailing</b> Updated the reticulation detailing for the PSS boundary kits.	April 2022
6.9.5	Added	<b>Detailing</b>	August 2022

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		Added requirements in the last paragraph.	
6.11	Updated	<b>Change of clause name and content</b> Changed the Biofilter to Odour Treatment and updated the odour treatment requirement.	April 2022
6.11	Deleted	<b>Odour treatment</b> Deleted reference to lift stations.	August 2022
6.11, 6.1	Added	<b>Odour and Corrosion Management Design Guide</b> Added to the IDS web page - <a href="https://www.ccc.govt.nz/infrastructure-design-standards">Infrastructure Design Standards (IDS) : Christchurch City Council (ccc.govt.nz)</a>	November 2022
6.12.1	Added	<b>Sanitary junctions and laterals</b> Added a new requirement of the Water Supply and Wastewater Bylaw 2022	August 2022
6.13	Updated	<b>Material selection</b> Updated the requirements.	August 2022
6.13.2	Added	<b>Reducing waste</b> Added scopes of when to consider waste reduction	August 2022
6.13.5	Updated	<b>Sewers in commercial of industrial zones</b> Updated the requirements	August 2022
6.13.6	Updated	<b>Mitigation of H<sub>2</sub>S corrosion and odourous gases</b> Updated the requirements.	April 2022
6.13.7	Updated	<b>Steep gradients</b> Updated the requirements	August 2022
6.14.3	Deleted	<b>Scour</b> Updated the embedment and backfill materials for hillside areas.	August 2022
6.14.4	Updated	<b>Change in title and requirements</b> <ul style="list-style-type: none"> <li>• Changed title from Redundant infrastructure to Abandoned infrastructure.</li> <li>• Updated requirements</li> <li>• Updated numbering of Figure 4 to Figure 5 as a result of the new Figure 4 in clause 6.9.3</li> </ul>	August 2022
6.15	Updated	<b>Change in title and requirements</b>	August 2022

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		<ul style="list-style-type: none"> <li>Changed title from Clearances to Clearances and Asset Protection</li> <li>Updated requirements</li> </ul>	
6.16.1	Updated	<b>Pipe bursting</b> Updated the requirements.	August 2022
6.16.2	Updated	<b>CIPP Lining</b> Updated the requirements.	August 2022
6.17	Added	<b>New clause added – 6.17 Pipe Ducts</b> Specified the new requirements.	August 2022
6.17 to 6.19	Updated	<b>Clause numbering updated</b> Updated clause 17 to 19 to clause 6.18 to 6.20 respectively due to the new clause added 6.17 – Pipe Ducts	August 2022
6 – Appendix III	Updated	<b>Wastewater Material Selection Table</b> <ul style="list-style-type: none"> <li>Updated the requirements.</li> <li>Deleted the title Table 10</li> </ul>	August 2022
7.2.5	Updated	<b>Supply alternatives</b> Deleted the first paragraph.	August 2022
7.4.1	Updated	<b>Design considerations</b> Added a new design consideration.	August 2022
7.4.4	Added	<b>New bullet points</b> New materials for use in contaminated sites.	April 2022
7.4.5	Updated	<b>Specific structural design</b> Updated requirements – first paragraph	April 2022
7.5.3	Added	<b>Design for restricted water supply areas</b> Added new requirement – last paragraph.	August 2022
7.5.5	Added	<b>Fire services</b> Added meeting the requirements of the Water Supply and Wastewater Bylaw 2022.	August 2022
7.6.2	Updated	<b>Change in title and requirements</b>	August 2022

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		<ul style="list-style-type: none"> <li>Change title from Standard main sizes to Standard main and submain sizes.</li> <li>Change in the acceptable DN sizes.</li> </ul>	
7.6.3	Updated	<b>Minimum pipe and fitting class</b> Change from PN15 to PN16.	August 2022
7.8	Updated	<b>Reticulation layout</b> Updated the requirements – first paragraph.	August 2022
7.8.1	Added	<b>New bullet point</b> Additional consideration for the general layout of the mains	April 2022
7.8.1	Updated	<b>Mains layout</b> Updated the requirements – last paragraph.	August 2022
7.8.3	Updated	<b>Reticulation in legal road</b> Updated the requirements – third paragraph.	August 2022
7.8.5	Updated	<b>Submains</b> Updated the requirements – first and last paragraphs.	August 2022
7.9.4	Updated	<b>Trenchless technology</b> Clarified that trenchless technology can be considered rather than can be used.	August 2022
7.9.5	Updated	<b>Cover over pipes</b> Updated the requirements.	August 2022
7.9.7	Updated	<b>Working around structures</b> Updated the requirements	August 2022
7.9.9	Added	<b>New clause</b> Added new clause 7.9.9 - Pipe Ducts	August 2022
7.9.10, 7.9.12	Updated	<b>Clause numbers</b> Updated due to the addition of new clause 7.9.9	August 2022
7.10 7.10.1, 7.10.4, 7.10.5	Updated	<b>Reticulated fittings</b> Updated the requirements.	August 2022

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7.10.6	Added	<b>Pressure reducing valves and check valves</b> Added new requirements – last paragraph.	August 2022
7.10.7	Updated	<b>Design requirement</b> Design for valves including in-line valves on mains with unrestrained joint.	April 2022
7.11	Updated	<b>Change in title and requirements</b> <ul style="list-style-type: none"> <li>• Changed Redundant infrastructure to Abandoned infrastructure.</li> <li>• Added new requirements.</li> </ul>	August 2022
7.12.1	Updated	<b>Material selection</b> Submains – only PE 80B	August 2022
7.12.2	Added	<b>Material specifications</b> Added PE in the fifth paragraph.	August 2022
7 – Appendix I	Added	<b>New bullet</b> Added new requirement – last bullet.	August 2022
8.1, 8.10	New References	<b>New Referenced Documents – Design added</b> <ul style="list-style-type: none"> <li>• New Zealand Heavy Haulage Association Road <i>Design Specifications for Over Dimensions Loads</i></li> <li>• Christchurch City Council <i>Waste Management Bylaw 2009 (Terms and Conditions)</i></li> <li>• Christchurch City Council <i>Regional Special Conditions (for Traffic Signals)</i></li> </ul>	April 2022
8.5	Added	<b>Off Road Linkages</b> Added a new requirement.	August 2022
8.10	Deleted	<b>Road Design</b> Removed Figures 6 and 7 and succeeding figure numbers adjusted.	April 2022
8.11.6	Updated	<b>Sub-clause name</b> Changed to Signalised Intersections.	April 2022
8.13.3	Updated	<b>Vertical alignment</b> New requirement - roadway crossing a waterway or a drainage path.	April 2022
8.15.1	Updated	<b>Footpath and vehicle crossing</b> New material requirement -Asphalt pavement type or provide an NCR for an alternative.	April 2022



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8.15.3	Updated	<b>Service strips</b> New requirement for the width of the service strip.	April 2022
8.15.9	Updated	<b>Residential crossing</b> Design in accordance with Christchurch District Plan and refer to CSS: Part 6 SD606.	April 2022
9.5.2	Added	<b>New bullet point</b> Tree planting – additional consideration when planning the location of the utilities	April 2022
9.6.2	Updated	<b>Corridor Access Request (CAR)</b> Replaced <a href="http://www.beforeudig.co.nz">www.beforeudig.co.nz</a> to <a href="http://www.myworksites.co.nz">www.myworksites.co.nz</a>	April 2022
10.1	Reference added	<b>New reference document</b> <ul style="list-style-type: none"> <li>• Ōtautahi Christchurch Climate Resilience Strategy (2021)</li> <li>• Tree Health and Maintenance (MIS313) Minimum Industry Standard (Arboriculture Australia 2020)</li> </ul>	April 2022
10.1	Reference added	<b>New reference document</b> Christchurch City Council Tree Planting Guide <a href="http://www.ccc.govt.nz/tree-planting-guide">www.ccc.govt.nz/tree-planting-guide</a>	March 2023
10.1, 10.6.9	References deleted	<b>Obsolete reference</b> Christchurch City Council Thinking About Fencing?	April 2022
10.2	Added	<b>New bullet point</b> <ul style="list-style-type: none"> <li>• Trees as critical infrastructure</li> </ul> <b>New applicable documents</b> <ul style="list-style-type: none"> <li>• District Plan</li> <li>• Tree Policy</li> </ul>	April 2022
10.2	Updated	<b>Last paragraph</b> Overall objectives to be incorporated into the initial concept for the development.	April 2022
10.3.2	Updated	<b>Design report</b> Updated the content requirement of the design report.	April 2022
10.3.4	Updated	<b>Engineer's report</b>	April 2022

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		Updated the requirement upon completion of physical works.	
10.3.5	Updated	<b>Drawings</b> Updated the requirements on landscape plans and planting drawings.	April 2022
10.4.2	Updated	<b>Existing vegetation</b> Updated the requirements.	April 2022
10.5.1	Updated	<b>Last paragraph</b> Updated the requirement of vesting the developed reserve to Council.	April 2022
10.5.2	Added	<b>New bullet points – factors to consider when designing reserves</b> <ul style="list-style-type: none"> <li>• 3<sup>rd</sup> - Compatibility between ground conditions/earthworks design, engineering design and planting design</li> <li>• 8<sup>th</sup> - Current and future tree planting sites</li> </ul>	April 2022
10.5.3	Updated	<b>Utilities</b> Clearance requirement of utility cables from current and future tree planting sites.	April 2022
10.5.7	Added	<b>New clause</b> Planting on slopes	April 2022
10.6.2	Updated	<b>Playground and play structures</b> Updated the entire clause.	April 2022
10.6.3	Updated	<b>Recreational hard surfaces, ball courts and skate-boarding facilities</b> Entire clause updated.	April 2022
10.6.8	Updated	<b>Drinking fountains</b> <ul style="list-style-type: none"> <li>• Changed the sub-clause name to Drinking fountains.</li> <li>• Requirements updated.</li> </ul>	April 2022
10.9.1	Added	<b>New bullet points</b> New requirements for functional planting design – last two bullets points.	April 2022
10.9.2	Updated	<b>Planting design</b> Updated the entire clause.	April 2022

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10.9.4	Updated	<b>Compatibility with engineering design</b> Updated the entire clause.	April 2022
10.9.5	Updated	<b>Species selection</b> <ul style="list-style-type: none"> <li>• Included turf species.</li> <li>• Updated the undesirable characteristic list of various plant species.</li> <li>• Included Tree Planting Guide link.</li> </ul>	April 2022
10.9.5	Updated	<b>Species selection</b> Added the Tree Planting guide link and content in paragraph 1 and the last paragraph.	March 2023
10.9.6	Updated	<b>Tree selection and placement</b> <ul style="list-style-type: none"> <li>• Updated the requirements.</li> <li>• Deleted Table 1.</li> <li>• Replaced the reference to the Tree Policy by CSS: Part 7.</li> </ul>	April 2022
10.9.6	Updated	<b>Tree selection and placement</b> Updated the requirements on representation of species in paragraph 2.	March 2023
10.9.8	Updated	<b>Revegetation, restoration and connection of habitats</b> Updated requirements in paragraphs 4 and 5 updated.	April 2022
10.9.10	Updated	<b>Location of trees in reserve</b> Updated the entire clause. Removed Figure 2 and adjusted the subsequent figure numbers in Part 10.	April 2022
10.9.11	Updated	<b>Location of trees in streets</b> Updated the requirements.	April 2022
10.9.12	Updated	<b>Protection of sightlines</b> Updated the requirements.	April 2022
10.9.14	Updated	<b>Strategically place group planting of trees</b> May also be required where ground conditions are not suitable for street tree establishment.	April 2022
10.11.1	Updated	<b>Establishment</b>	April 2022

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		Updated the requirements.	
10.11.3	Updated	<b>Presentation of reserves and streetscapes</b> <ul style="list-style-type: none"> <li>• Additional Council inspection – at the end of the establishment period.</li> <li>• Updated the minimum requirements of developed landscaped areas.</li> <li>• Deleted the last paragraph.</li> </ul>	April 2022
11.4.1	Updated	<b>Category P (local road and pedestrian area) lighting</b> <ul style="list-style-type: none"> <li>• Luminaires must be approved by Council, see Approved Materials list for street lighting.</li> <li>• Category P3NZ changed to PR4.</li> </ul>	April 2022
11.4.2	Updated	<b>Lighting category</b> Category P3NZ changed to PP3 and P4 to PP4.	April 2022
Part 11 Appendix I	Updated	<b>Table 1</b> Updated lighting category P3NZ to PR4 and P4 to PR5.	April 2022
12.2	Updated	<b>Asset classes maintained by more than one area of the Council</b> Updated the As- built template requirement.	April 2022
12.4.2, 12.4.3, 12.4.4	Updated	<b>Name change</b> Re-named Pickup sheet to CAT sheet.	April 2022
12.4.5	Updated	<b>Name change</b> Re-named Street CAT to Land Improvements Green Assets CAT.	April 2022
12.4.6	Updated	<b>Name change</b> Re-named Street CAT to Land Improvements CAT.	April 2022