# Checklist for Landscape Plans and Design Reports

November 2024





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# **1.0 Introduction**

This Checklist has been prepared by the Christchurch City Council to assist landscape architects in the preparation of landscape plans and design reports.

In most cases, a 'Yes' or 'Not Applicable' response is required.

Where a 'Yes' response is indicated, be sure to include evidence of this in the submission. If not provided, the submission is not able to be progressed.

To enable efficient plan acceptance processing, please complete this Checklist in full then submit:

- □ This completed Checklist, and
- □ All supporting documentation

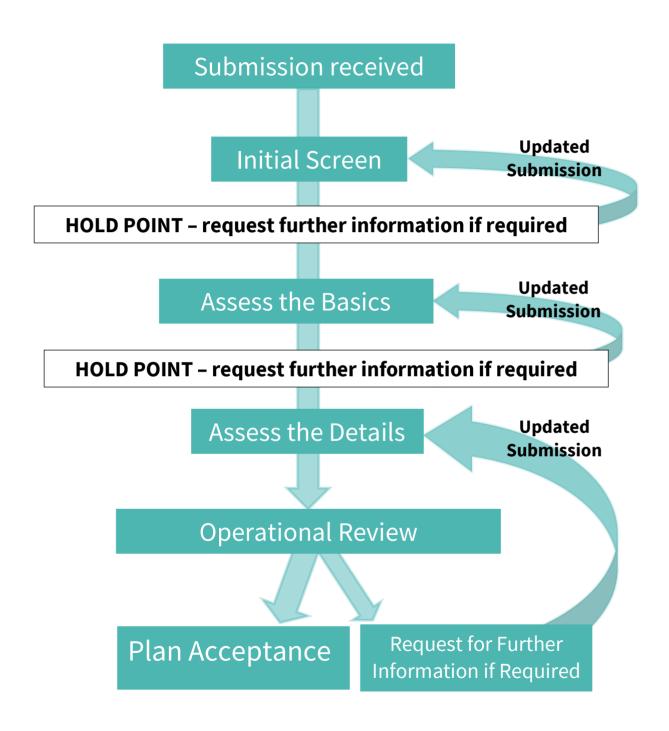
To <a>landscape.approval@ccc.govt.nz</a>

For clarification around any requirements, contact us via the email address above or phone 941-7171.

We welcome you to share your feedback, comments, concerns and suggestions in relation to this document. Please send to *landscape.approval@ccc.govt.nz* 



# 2.0 Review Process for Landscape Plans and Design Reports



Checklist for Landscape Plans and Design Reports November 2024



# 3.0 Submission Details

#### 3.1 Submitted By

Company Name	:	Click or tap here to enter text.
Contact Name	:	Click or tap here to enter text.
Designation	:	Click or tap here to enter text.
Phone	:	Click or tap here to enter text.
Email	:	Click or tap here to enter text.
Date Submitted	:	Click or tap to enter a date.

#### 3.2 Developer

Company Name	:	Click or tap here to enter text.
Contact Name	:	Click or tap here to enter text.
Email	:	Click or tap here to enter text.

#### 3.3 Site Address

Click or tap here to enter text.

#### **3.4** RMA Number, Subdivision Name (+ Stage if applicable)

Click or tap here to enter text.

#### 3.5 Types of Assets

Tick all applicable

□ Local Purpose Utility Reserve – with drainage assets	□ Trees
□ Local Purpose Utility Reserve – access/other	🗆 Garden Beds
□ Recreation Reserve	Play equipment
□ Riparian planting of an existing waterway	Engineered structures

# 4.0 Initial Screen

- 1. Yes  $\Box$  Design Report provided
- 2. Yes  $\Box$  Planting Plan provided (including the appropriate level of detail)

3.	3. Consent Conditions Requirements provided (where applicable)							
	a.	Standa	ard landscaping / greenspace conditions	Required □	Provided □			
	b.	Manag	ement / Restoration Plan (list all that is require	d)				
		i.	Click or tap here to enter text.					
		ii.	Click or tap here to enter text.					
		iii.	Click or tap here to enter text.					
		iv.	Click or tap here to enter text.					
		۷.	Click or tap here to enter text.					
		vi.	Click or tap here to enter text.					
		vii.	Click or tap here to enter text.					
		viii.	Click or tap here to enter text.					

Christchurch City Council

- c. Yes  $\Box$  Recreation Reserve with a Development Contributions offset (<\$250k)
- d. Yes  $\Box$  Establishment Period 24 months
- e. Yes 🗆 Establishment Period 12 months
- f. Yes  $\Box$  Establishment Period Other Click or tap here to enter text.
- g. Yes  $\Box\,$  Consistency with a Landscape Concept Plan specified in the consent
- h. Yes 🗆 Approval or input required from land drainage planner and/or ecologist
- i. Yes  $\Box$  Protection of existing trees or vegetation report and/or TPMP
- j. Yes  $\Box$  Landscaping not being vested but requires design acceptance
- k. Yes 🗆 Other applicable conditions Click or tap here to enter text.

Checklist for Landscape Plans and Design Reports November 2024



- 4. Ecological Report provided?
  - □ Not Applicable
  - $\Box$  Yes
  - □ Draft provided that requires ecologist input
- 5. Report or Tree Protection Management Plan (TPMP) provided for the retention and/or protection of existing trees/vegetation on site or within an adjoining site?
  - □ Not Applicable

 $\Box$  Yes

- $\hfill\square$  Draft provided that requires arboriculture or ecology input
- 6. Cost schedule for a Recreation Reserve Development Contributions offset provided?
  - □ Not Applicable

□ Yes (cost schedule includes soft landscaping supply, planting and establishment; grass establishment (mowing only); and hard landscaping supply and installation).

- a. Does the cost schedule exceed a total amount of \$250,000?
  - 🗆 No
  - 🗆 Yes

□ Yes, yet the amount is quite close and could be met with minor design amendments

## For CCC use only

**Outcome of Initial Screen Assessment** 

Any Consent conditions relevant to landscape design that do not appear to be complied with?

- 🗌 Yes
- 🗌 No

#### Infrastructure Provision Agreement (IPAO for land drainage assets)?

□ Not Applicable

🗆 Yes

- **Pass** proceed to next section (Basic Requirements)
  - PLR entries set up
  - Notified of outcome on Click or tap to enter a date.
- Acceptance Criteria to be met Submitter, Developer and Subdivision Engineer have been notified via email on Click or tap to enter a date.



# 5.0 Basic Requirements

## 5.1 Plans

#	GENERAL	Yes	N/A	Comment
5.1.1	A site location plan for the subdivision and relevant stages provided.			
5.1.2	Plans are correctly labelled and cross-referenced and cite the correct RMA number.			
5.1.3	North Point and a readable plan scale at A3 (e.g. plan view at 1:200, with cross sections at 1:50 or 1:100).			
5.1.4	Reserves are labelled with Lot number, size (m <sup>2</sup> ) and proposed classification ( <i>e.g. Recreation,</i> <i>Local Purpose Utility</i> ).			
5.1.5	Key dimensions are shown on the plans (e.g. berm widths where trees are located, utility service setbacks, 6m radius circle around light poles, pathway widths, garden bed dimensions).			
5.1.6	Area (m <sup>2</sup> ) of garden beds and lawn areas are labelled or listed.			
5.1.7	Cross section details are provided (e.g. street trees, basins/wetlands, waterways, landscape buffer strips).			
5.1.8	Topography: post-civil slopes and cross-sections are provided.			
5.1.9	Any landscaping that is not being vested is indicated clearly on the plan (e.g. with a note saying "Council approval required but not to be vested" or similar).			



#	TREES and PLANTS	Yes	N/A	Comment
5.1.10	Existing trees located on or directly adjacent to the site are identified, and their retention or removal is indicated.			
5.1.11	Tree schedules are provided with species, quantity, grade (container size).			
5.1.12	Tree and tree pit cross sections and dimensions are provided, and tree planting locations in relation to berm widths, utility services, root barrier, finished soil profile and groundwater tables are shown where applicable.			
5.1.13	Plant schedules provide species, quantity, spacings and grades.			
5.1.14	Detailed plant set-out plans are provided for amenity planting areas (recreation reserve, link reserves, road landscaping) with appropriate setbacks from paths, fences, etc.			
5.1.15	Any hatched areas of mass planting have notes on the plan that indicate the density and spacing of plants. A sample area drawing showing the proposed layout may be required to confirm compliance.			
5.1.16	CPTED and sightlines compliant. (Note: roundabouts/intersections tree locations and plant species will comply with visibility requirements when mature.)			
5.1.17	Mulch types, grades and depths are identified.			
5.1.18	Edge treatments are identified.			
5.1.19	No pest species are proposed.			



#	WATERWAYS and DRAINAGE	Yes	N/A	Comment
5.1.20	Proposed works to existing waterways are shown clearly with cross-sections, including slopes and contours, channel widths, depths, meander and ecological features, and water levels (low flow and flood levels), trees / planted areas and soil depths.			
5.1.21	New land drainage assets (stormwater basins, new drains and swales, constructed wetlands) are shown clearly with cross sections, including slopes and contours, engineered/structurally important areas, soil depths, trees/planted areas, channel widths and depths, meander and ecological features, and water levels (low flow and flood levels).			
5.1.22	Planting profiles and vegetation zones are shown ( <i>examples in</i> <i>WWDG Fig 11.3-11.5, IDS Pt 10</i> <i>Appx I</i> ).			
5.1.23	Details are consistent with the consent conditions, Management / Restoration Plan where applicable.			
5.1.24	Landscaping demonstrates compatibility with the engineering design ( <i>IDS 10.9.4</i> ).			
5.1.25	Mulch types clearly identified and appropriate for the locations.			



#	HARD LANDSCAPING	Yes	N/A	Comment
5.1.26	Play equipment plans show equipment types and manufacturers, fall zones, safety and surface material, edge treatments and drainage. ( <i>This applies to both off-the-shelf</i> <i>and bespoke items</i> ).			
5.1.27	Engineered structures that require a building consent or exemption are identified and structural drawings are provided with the plan set.			
5.1.28	Hard surfaces and structures (e.g. paths, boundary fencing, bollards, furniture, gates, handrails) - location, materials including surface treatments, dimensions and elevations are shown.			
5.1.29	Demonstrates that drainage requirements for the site have been addressed.			



## 5.2 Design Report

## Section Below Not Applicable $\ \square$

#	BASELINE	Yes	N/A	Comment
5.2.1	Existing landform, trees/vegetation, waterbodies, and drainage patterns are described.			
5.2.2	Characteristics, values (e.g. social, cultural, ecological, historic) and uses of the site are identified and described in relation to the design.			
5.2.3	Existing sub-soil characteristics, finished ground conditions, groundwater tables and applicable mitigation are described.			

#	CIVIL WORKS	Yes	N/A	Comment
5.2.4	Demonstrates that the engineering	and la	ndsca	pe designs are compatible, e.g:
	Berm widths and utility service locations allow for trees			
	Adequate soil volume/depths for long term tree/plant growth			
	Depths to groundwater			
	Cut and fill areas and fill materials/methods considered			
	Appropriate final levels			
	Landform and slopes, drainage and overland flow			
	Paths considered, structural integrity of			
	Confirmation that engineered bunds will allow for landscape planting where required, and any planting will not compromise structural of bunds integrity in the long term			
	Confirmation of adequate access, maneuverability and structural loading for maintenance vehicles.			



#	EXISTING TREES / VEGETATION	Yes	N/A	Comment
5.2.5	Identifies all existing trees/vegetation within and adjacent to the site including trees/vegetation to be removed, and trees/vegetation to be retained and protected.			
5.2.6	Demonstrates that protection of trees and vegetation to be retained is compliant ( <i>CSS Part 1 Section</i> 22.0 applies to all trees and vegetation), and consent/approvals for any tree/vegetation removals on CCC land have been obtained.			
5.2.7	For any existing trees to be retained within and adjacent to the site: an arboricultural assessment produced by a qualified arborist is provided ( <i>IDS 10.4.2</i> ), a Tree Protection Management Plan (TPMP) prepared in accordance with the CSS Part 1 Section 22.3.2 is <u>either</u> : provided ( <i>can be combined with report</i> <i>above</i> ); <u>or</u> the provision and certification of a TPMP is identified as a hold point prior to the commencement of works within the protection zones of the trees; and, the presence of a supervising arborist during the works is confirmed. ( <i>Note: IDS and CSS requirements</i> <i>apply regardless of whether a</i> <i>resource consent is required, and</i> <i>the Tree Policy also applies to any</i> <i>trees on CCC land</i> ).			



#	PROPOSED TREES and PLANTS	Yes	N/A	Comment
5.2.8	Functional and aesthetic considerations are outlined.			
5.2.9	Demonstrates appropriate tree and plant use for the site, and compliance with consent conditions, IDS and WWDG.			
5.2.10	Identifies correct ecological district and describes how eco-sourcing requirements will be implemented where applicable. ( <i>Plants from</i> <i>outside of the ecological district</i> <i>need to be accepted by Council's</i> <i>Biodiversity team</i> ).			
5.2.11	Potential effects on infrastructure, utilities, boundary encroachment, shading, site use and maintenance are identified in relation to tree/plant dimensions and shapes at maturity.			
5.2.12	Confirms compliance with the IDS minimum setback distances for trees and plants ( <i>e.g. kerbs, paths,</i> <i>services, lights, intersections etc</i> ).			
5.2.13	Tree pit designs described in detail, with reference to mitigations where required due engineering, earthworks, soil conditions, groundwater levels and drainage.			
5.2.14	Mulch types and edge treatments are identified.			



#	SAFETY and ACCESSIBILITY	Yes	N/A	Comment
5.2.16	Demonstrates an understanding that the Consent Holder must manage its own obligations in relation to the site under the Health and Safety at Work Act 2015 and associated regulations.			
5.2.17	Demonstrates that any structures are to be compliant and accessible ( <i>Parks and Waterways</i> <i>Access Policy</i> ).			
5.2.18	Pathway widths and surface treatments relate to the anticipated use, and mobility access has been provided.			
5.2.19	For engineered structures that require a building consent or exemption, a PS1 Producer Statement is provided that confirms compliance with the Building Code.			
5.2.20	Play equipment: Choice is justified – who will use it, why this particular equipment? Confirms compliance with NZS 5828:2015 and the Parks and Waterways Access Policy. For bespoke play equipment, NZS 5828:2015 design certification and PS1 Producer Statement are provided.			



#	WATERWAYS and DRAINAGE	Yes	N/A	Comment
5.2.21	Demonstrates compliance with the consent conditions, IDS, CSS, WWDG and the Parks and Waterways Access Policy.			
5.2.22	Confirmation that the plant selection and locations are appropriate for the anticipated water levels and low flow and flood water levels.			
5.2.23	Access to inlets/outlets/ scruffy domes has been provided for maintenance purposes, including for maintenance vehicles where applicable.			



#	MAINTENANCE and QUALITY ASSURANCE	Yes	N/A	Comment
5.2.24	Identifies and describes the hold points for supply and planting, including: Checks CSS Pt 7 ss. 4.3 & 4.4; eco-sourcing (where applicable); protections for existing trees/vegetation garden beds and tree pit construction (correct tree pit soils and lightly compacted); root barrier installation (where required) planting checks – correct planting depth, mulch, stakes and ties			
5.2.25	Describes establishment maintenance activities, the required frequency and duration, and reporting processes in accordance with CSS Part 7, 14.			
5.2.26	Demonstrates that future maintenance requirements have been provided for in the design (e.g. species choice, provision of maintenance access, adequate space for mowing around trees in reserves)			

## For CCC use only

## Outcome of Basic Requirements Assessment

- □ **Pass** proceed to next section (Details)
- Acceptance Criteria to be met Submitter, Developer and Subdivision Engineer have been notified via email on Click or tap to enter a date.
  - Record of Review and Feedback completed

Checklist for Landscape Plans and Design Reports November 2024



## 6.0 Plan Details

Landscape plans and accompanying design reports that are submitted for acceptance must contain sufficient information to assess compliance with:

- The consent conditions
- Infrastructure Design Standard (IDS)
- Construction Standard Specification (CSS)
- Waterways, Wetland and Drainage Guide (WWDG) where applicable
- Parks and Waterways Access Policy

The 6.2 Checklist table below lists common (not all) requirements and identifies some of the common issues that arise with certain plant and tree species.

The use of this table by the landscape approvals team ensures that all potential issues are identified and communicated to the operations teams when submissions are sent to them for feedback.

The design report must explain and justify any non-compliances. A non-compliance may be confirmed to be acceptable following review by operations teams and ecologists; or they may suggest alternatives or mitigation.

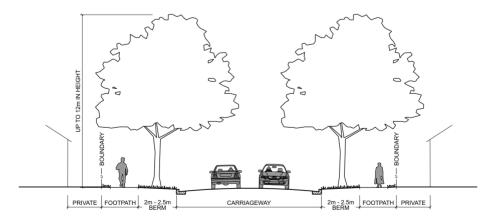
## 6.1 References – Street Trees

#### 6.1.1 Streetscape design

IDS 10.9.4 Compatibility with engineering design requires that engineering and earthworks designs must facilitate healthy tree and plant growth and ensure that the potential for future conflicts and damage to infrastructure are avoided, and IDS 10.9.14 Innovative street planting layouts allows for alternative design proposals.

When selecting and locating trees, make allowance for each tree to grow healthily for an expected life of at least 50 years without unduly compromising services, safety or amenities, or causing excessive boundary encroachments or shading. Also, space trees sufficiently far apart to allow healthy development of mature canopies (IDS 10.9.6).

The typical subdivision street layout drawings show various mature tree sizes and canopy shapes to assist designers with determining appropriate choices, for example:



MEDIUM TREES

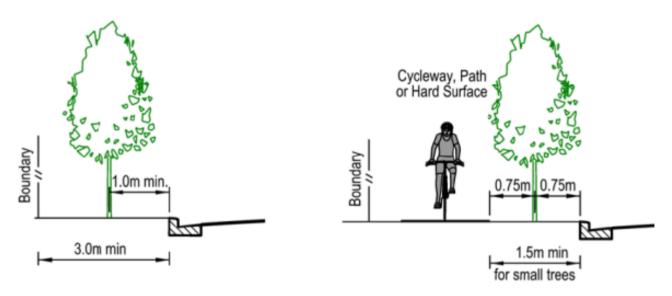


#### 6.1.2 Street tree planting berm widths and setbacks

The table below shows the various tree size classes, and their minimum berm widths and minimum setback distances from footpaths and back of kerbs for each size.

Tree Size Class	Mature Tree Height (m)	Minimum berm / planting area width	Minimum distance from kerb / footpath to centre of tree
Small	0 to 6	1.5m	0.75m
Medium	6 to 12	2.0m	1.0m
Large	12 to 20	2.5m	1.25m
Very Large	20+	3.0m	1.5m

#### IDS 10.9.11 Figure 3:



#### 6.1.3 Root barrier use

Root barrier should only be used when trees are near underground power cables, and at the following setback distances (IDS 10.9.11 Table 1):

Clearances from cable (to barrier) to tree					
Cable voltage (kV)	66	33	11	0.4	
Minimum tree clearance without barrier (m)	5.0	5.0	3.0	2.0	
Minimum tree clearance with barrier (m)	2.5	2.5	1.0	1.0	
Minimum cable to barrier clearance (m)	2.0	2.0	0.3	0.3	



## 6.2 Checklists

#	TREES *with reference to the <u>Planting Guide</u>	Yes	N/A	Comment
6.2.1	Berm widths and setbacks are sufficient for the proposed street trees ( <i>Ref: Street tree planting</i> <i>berm widths and setbacks table</i> <i>above and IDS 10.9.11</i> ).			
6.2.2	Street trees meet the <u>minimum</u> setbacks: 6.0m from light poles, pedestrian crossings and signs. 1.5m from stormwater laterals. power cables (IDS 10.9.11). 1.0m from other utilities. 3.0m from bus stops. 3.0m on upstream side and 2.0m on downstream side of driveways, or 6.0m for driveways on collector and arterial roads. Safe intersection sight distances (SISD).			
6.2.3	Tree pits are appropriate for the site and geotechnical conditions to ensure that the soil quality, volume, depth and drainage will be appropriate for successful tree establishment and long-term tree growth and development (CSS Part 7, 6.6).			
6.2.4	Root barrier is only included if and where required (typically for power cables only). Root barrier clearances comply with IDS 10.9.11 Table 1 and be installed outside of tree pits as per SD704. ( <i>Quality Assurance hold point</i> <i>identified in Design Report to</i> <i>confirm compliant installation</i> ).			
6.2.5	Park trees at maturity have adequate offsets from site boundaries, paths, structures, lighting and each other.			



#	GARDEN BEDS	Yes	N/A	Comment
6.2.6	Garden beds have minimum size of 8.0m², minimum width of 1.5m and minimum 300mm soil depth.			
6.2.7	Street gardens – plants will not exceed a maximum height of 0.6m at maturity where traffic visibility is required.			
6.2.8	No street gardens with tapered ends less than 700mm. Tapered ends of traffic islands less than 700mm width are hard surfaced, not planted.			
6.2.9	Where areas between garden beds or garden beds and trees are grassed, at least 3.0m clearance is provided to allow for mowers.			
6.2.10	Form / shape of garden beds – ends are square or rounded off with sufficient space for plants to grow to maturity (no narrow angular ends).			
6.2.11	Planting on slopes – the gradient does not exceed 1:3 and has appropriate plant spacings for the site and species.			
6.2.12	Plants in rain gardens are those listed in section 6 of the <u>Rain</u> garden design, construction and maintenance manual.			
6.2.13	There are no planted service strips less than 300mm wide between footpaths and property boundaries.			



#	ACCESS in RESERVES	Yes	N/A	Comment
6.2.14	Pedestrian access to reserves with a minimum of 1.2m wide access points every 50m, demarcated using 1.1m bollards (must be higher than the fence).			
6.2.15	Access to play equipment is at least 1.8m wide.			
6.2.16	Adequate vehicle accessways provided to reserves to allow for maintenance and emergency vehicles, including formed vehicle crossings and tracks with adequate loading capacity.			
6.2.17	Removable barriers to allow access but prevent unauthorised vehicles from entering reserves.			

#	LAWNS in RESERVES	Yes	N/A	Comment
6.2.18	Lawns are not less than 2.0 metres width at any point.			
6.2.19	Grassed slopes do not exceed a 1:4 gradient, and there is no significant change in grade that could cause scalping or missed areas by a mower.			
6.2.20	Sufficient mower access provided, minimum 2.5m wide. Think about how this will work in practice – the mower should not need to go through garden beds or drive back and forth for access.			
6.2.21	Sufficient drainage is confirmed as being provided and no areas will have ponding. Flood levels, overland flow, grades, drainage, etc., are to be confirmed by the landscape designer with input from the developer's engineer.			



#	PATHS and TRACKS in RESERVES	Yes	N/A	Comment
6.2.22	Pedestrian-only paths are 1.5-2m wide.			
6.2.23	Shared path widths at least 2.5m. (This must be increased to at least 3m wide if expected to be high use).			
6.2.24	Confirmation that maintenance vehicles tracks have adequate access and maneuvering widths and are constructed to allow for maintenance vehicle weights. Access tracks need to be designed to allow for anticipated loads; to be confirmed by the landscape designer with input from the developer's engineer.			
6.2.25	Sufficient drainage is confirmed as provided and no ponding areas. Flood levels, overland flow, grades, drainage, etc., are to be confirmed by the landscape designer with input from the developer's engineer.			
6.2.26	Paths that are more than 25mm above or below the surrounding ground surface have appropriate edging.			
6.2.27	Vegetation will not encroach onto paths and tracks.			
6.2.28	Cross-slopes on paths do not exceed 1:50.			
6.2.29	Accessible tracks are at least 1.5m wide and have no abrupt changes in level more than 200mm.			
6.2.30	Accessible tracks provide an average of five passing widths for every 100-metre length. Passing widths are at least 1.8m wide.			
6.2.31	Any ramps on accessible tracks have a maximum gradient of 1:12.			



#	PATHS and TRACKS in RESERVES	Yes	N/A	Comment
6.2.32	Where the gradient of a ramp exceeds 1:20, landings of at least 1.2m length are provided every nine metres.			
6.2.33	Where the gradient is between 1:33 and 1:20, landings of at least 1.2m length are provided every 18 metres.			
6.2.34	Accessible piers and jetties are at least 1.8m wide.			
6.2.35	Any gradients that exceed 1:20 have handrails provided.			
6.2.36	Handrails are fixed at between 840- 900mm from the ground. They continue 300mm past the end of the ramp or stairway, and the ends are turned down so as not to form a hazard.			
6.2.37	Boardwalks - boards are at a 90° angle to the direction of travel, with 6-10mm gaps.			
6.2.38	Boardwalks that exceed a 1:33 slope are coated with a slip- resistant product.			
6.2.39	Steps have a maximum rise of 180mm and a minimum tread of 310mm, and a slight slope (1%) downwards to allow drainage.			



#	FURNITURE and STRUCTURES	Yes	N/A	Comment
6.2.40	On a path less than 1km long, there is one seat provided every 100-200m.			
6.2.41	On a path more than 1km long, there is one seat provided every 200-250m.			
6.2.42	Seats can be 300-520mm high, but a height of 450mm is preferable.			
6.2.43	Seats are set back at least 540mm from the edge of access routes to preserve pathway width.			
6.2.44	There is a minimum 900mm wide surfaced accessible space next to each seat.			
6.2.45	Seats have back rests and arms.			
6.2.46	Tables are 755-775mm above ground level, with seats 280- 320mm below the tabletop. There is a clear space between the ground and the table, at least 675mm high and 800mm wide.			
6.2.47	There is a minimum 1500mm wide surfaced maneuvering area at the end of tables.			
6.2.48	Fences over 1.2m height are at least 80% open / transparent.			
6.2.49	Bollards comply with SD714, SD715 and SD716.			
6.2.50	Bollards in lawns have a minimum 100mm wide (preferably 150mm wide) mow strip around the base to avoid mower damage.			
6.2.51	Signs have a mounting height 700-1700mm from ground level.			
6.2.52	Information boards are easy to look at for children, and adults both sitting and standing.			



#	WATERWAYS and DRAINAGE (all)	Yes	N/A	Comment
6.2.53	Outfalls that exceed one metre diameter have access for clearing by a truck with lifting gear.			
6.2.54	All intakes and outlets are accessible for maintenance.			
6.2.55	Trees and plants are consistent with the <u>Christchurch Ōtautahi</u> <u>Indigenous Ecosystems Plant List</u> .			
6.2.56	Within the flood zone specimen grade trees do not have large tree pits.			
6.2.57	Tree species within mass planting areas are a minimum grade of RX 2L. (Smaller grades can be used only if the robustness of plants can be verified).			
6.2.58	Sufficient shade expected that will control algae and weed growth, with larger species concentrated on the northern sides.			
6.2.59	<i>Cordyline spp.</i> are not located near intakes or outlets and are placed well away from grassed areas and property boundaries.			
6.2.60	No Carex spp. present within gravel low flow channels (Carex virgata can be planted minimum 500mm from the edge of a low flow channel or first flush basin).			
6.2.61	<i>Carex secta</i> is planted at least 700mm from the water's edge (can grow to 1.5m wide and impede flows).			
6.2.62	<i>Phormium tenax</i> is located at least 1.5m from any banks, at least 2m from any grassed areas and tracks, and well away from any intakes or outlets (can grow to 3m wide).			
6.2.63	Libertia grandiflora is not present.			



#	WATERWAYS and DRAINAGE (all)	Yes	N/A	Comment
6.2.64	<i>Juncus spp</i> . is only used where there is sufficient space. J. <i>pallidus</i> and J. <i>sarophorus</i> are not located where they may impede flow.			
6.2.65	There are no hybrids that might hybridise further with other plants (e.g. Hebe Emerald Green may hybridise with H. salicifolia).			
6.2.66	No ornamental or pest varieties.			

#	RIPARIAN ZONES	Yes	N/A	Comment
6.2.67	All riparian margins are planted to the water's edge, except where there are grassed areas required for access and maintenance.			
6.2.68	The first row of planting can grow up and overhang the edge for shade and a natural appearance.			
6.2.69	Trees not located too low in the channel (typically lower third of bank, dependent on water levels).			
6.2.70	A variety of edge treatments and in-stream features for habitat.			
6.2.71	Any rocks installed in the toe of the bank to be sufficiently submerged.			
6.2.72	Large boulders are submerged, with random placement and nooks in between for habitat.			
6.2.73	Rock is used only in small sections, not along the entire length.			
6.2.74	Smaller gravels are used in the bed. There are no large cobbles that could impede flow.			
6.2.75	Logs / tree stumps well anchored.			
6.2.76	Riparian planting has a <u>minimum</u> width of 3.0m. ( <i>If less than 3m,</i> <i>more shrubs/trees are required</i> ).			



#### Section Below Not Applicable $\Box$

#	BASINS and WETLANDS	Yes	N/A	Comment
6.2.77	Bank slopes are less than 1:6 where access is required.			
6.2.78	Trees are a mixture of large and smaller fast-growing species – especially on the northern and western sides.			
6.2.79	Trees are indigenous – no deciduous exotics are present.			
6.2.80	Garden beds are curved to mimic nature. There are no geometric patterns.			
6.2.81	Plants are grouped informally or spaced individually to produce a natural appearance, and plant spacings are between 1.5m and 0.5m centres, dependent on the species and site requirements.			
6.2.82	All grassed areas are mowable – confirm with engineers.			

## For CCC use only

#### **Outcome of Details Assessment**

□ **Pass** - proceed to next section (Operational Review)

Acceptance Criteria to be met - Submitter, Developer and Subdivision Engineer have been notified via email on Click or tap to enter a date.

• Record of Review and Feedback completed

## **Outcome of Operational Review**

Pass

- Acceptance Criteria to be met Submitter, Developer and Subdivision Engineer have been notified via email on Click or tap to enter a date.
  - Record of Review and Feedback completed