



**LANDSCAPE CHECKLIST
LANDSCAPE MANUAL
APPENDIX B
P-25(B)**

Development Services

Planning Division
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The following are excerpts from the requirements found in the body of the City of Carlsbad Landscape Manual Policies and Requirements. They do not necessarily encompass the entire extent of each requirement, but rather represent the essence of each item. When clarification is needed, the plan preparer should refer to the main text of the landscape manual for the complete requirement.

This checklist must be photocopied, filled out, signed and submitted with plans.

PROJECT NAME: _____
PROJECT NUMBER: _____
 (CT, SDP, etc.)

TYPE OF PLANS (check all that apply)

- | | | | |
|--|---|--------------------------------------|---------------------------------------|
| <input type="checkbox"/> Private Project | <input type="checkbox"/> Public Project | <input type="checkbox"/> Medians | <input type="checkbox"/> Streetscapes |
| <input type="checkbox"/> Habitat Restoration | <input type="checkbox"/> Recycled Water | <input type="checkbox"/> Model Homes | <input type="checkbox"/> Trails |
| <input type="checkbox"/> Fire Protection Plans | <input type="checkbox"/> Slope Revegetation | <input type="checkbox"/> _____ | <input type="checkbox"/> _____ |

YES	N/A	GENERAL REQUIREMENTS	Reference
		Submittals contain all required information and conform to the applicable formats.	All Sections
		Submittals conform to the plan size and format requirements.	Section 3.B.2 Section 4.B.3
		Plans prepared by licensed landscape architect, civil engineer, architect, or other qualified professional licensed by the state.	Section 3.B.1 Section 4.B.1
		24" x 36" standard City title sheet with Planning Division title block is used and all information provided.	Section 4.B.3
		24" x 36" standard City recycled water title sheet is used and all information provided when recycled water is being proposed for use.	
		24" x 36" standard City of Carlsbad 'D' sheets with Planning Division title block.	
		Plans drawn at 1"=20' (unless otherwise approved by the City).	
		Planting and irrigation plans drawn on 50% screen of civil engineer grading plan.	Section 3.B.2 Section 4.B.3
		Each plan sheet provided with bar scale, north arrow and graphic key for multiple sheet projects.	Section 3.B.3 Section 4.B.3
		Existing and proposed grades and drainage elements shown.	Section 3.B.3 Section 4.H.1
		All elements on approved landscape concept plan shown. (check all that apply) <input type="checkbox"/> existing features <input type="checkbox"/> recreational areas <input type="checkbox"/> play structures <input type="checkbox"/> hardscape <input type="checkbox"/> outdoor eating areas <input type="checkbox"/> water features <input type="checkbox"/> outdoor structures <input type="checkbox"/> employee eating areas <input type="checkbox"/> Site furniture <input type="checkbox"/> drinking fountains <input type="checkbox"/> other: _____ <input type="checkbox"/> other: _____	Section 3.C.9 Sections 4.B.2 and 4.H.1
		Property lines, right-of-ways, existing and proposed easements shown and labeled.	Section 3.B.3
		Vehicular sight lines shown and labeled (<i>CalTrans</i> and 25 foot sight distance triangle).	
		Storm water treatment systems shown and labeled.	Section 3.C.8
		Show and label impervious and pervious pavement.	

YES	N/A	WATER EFFICIENT LANDSCAPE	Reference
		General	
		Provide for all requirements of the Water Efficient Landscape Ordinance If N/A , indicate why:	Section 3.D Sections 4.D and 4.E
		Hydrozone diagram.	Section 3.D.3 Section 4.E.1
		Water Efficient Ordinance certification statement.	Section 3.B.2 Section 4.B.3
		MAWA calculations provided.	Section 3.D.4 Section 4.E.2
		ETWU calculations provided on City forms and total does not exceed MAWA.	Section 3.D.5 Section 4.E.2 Appendix E
		Water Efficient Landscape Worksheet provided on City form.	Appendix E
		Plants with similar cultural requirements of exposure, soils and water needs are grouped together in hydrozones.	Section 4.D.1
		3" layer of mulch applied on all exposed soil surfaces excluding turf grass or direct seeding applications.	Section 4.D.2
		Irrigation circuits organized into hydrozones.	Section 4.K.4
		Irrigation system designed to prevent runoff, overspray, low-head drainage.	
		Where irrigation is located within 24 inches of an impermeable surface overhead irrigation is not permitted and low volume or subsurface irrigation is used (unless water flows from impermeable surface into the landscape area).	
		Soils Management Report	
		If a grading plan is not required by the City, submit Soil Analysis Report & Recommendations – Incorporate soils recommendations into plans.	Section 4.F
		If a grading plan is required by the City, submit Soil Analysis Report & Recommendations with Certificate of Completion.	Section 4.F Section 8.D.2
		Analysis of soil that includes information on soil texture, soil infiltration rate, pH, total soluble salts, sodium, and percent organic matter with recommendations on soil amendments and mulch provided. Recommended amendments incorporated into plans.	Section 4.F

YES	N/A	PLANTING AND DESIGN FEATURES	Reference
		General design	
		Invasive species shall not be added to a landscaped area.	Section 3.C.4
		No trees located within public utility easement. Avoid planting trees and large shrubs above or near utilities.	
		Trees minimum 15 gallon size (except on slopes 3:1 or steeper).	Section 3.C.6
		50% of shrubs minimum 5 gallon size (except on slopes 3:1 or steeper).	
		Woody shrubs planted over herbaceous ground cover to cover 60% of ground cover area.	
		Vehicular sight lines and views of pedestrian crossings, driveways, roadways and other vehicular travel ways maintained.	Sections 3.C.11 and 3.C.12
		Plants in a transitional area consist of a combination of site adaptive and compatible native and/or non-native species.	Section 3.C.7
		Evergreen plants used to screen unsightly elements and provide 100% screen within 2 years.	
		Appropriate plant palette and landscape design for: <input type="checkbox"/> Low Impact Development (LID). <input type="checkbox"/> Stormwater	Section 3.C.8

YES	N/A	PLANTING AND DESIGN FEATURES (continued)	Reference
		General technical	
		General planting notes, details and specifications.	Section 4.H.2
		Graphic representation and location of all existing plant material to remain and to be removed and proposed plant material to be installed.	Section 3.C.3 Section 4.H.1
		Trees over 12" in diameter identified by caliper size, type & label to be retained or removed.	Section 3.C.3
		Plant palette that lists all existing and proposed vegetation by common and botanical name and includes total quantities by container size and species.	Section 3.C.2 Section 4.H.1
		Areas permanently and solely dedicated to edible plants identified.	Section 4.H.1
		Seed mix information to include mix, rate, purity, germination, inoculation, fertilization, binder and mulch.	
		Trees staked or guyed.	Section 4.H.2
		Slope planting detail indicates the rear of planting pit shall be graded to Maximum 1:1 slope and slope covered with erosion control fabric.	
		Trees located within 5 feet of public sidewalks or other hardscape have root barriers.	Section 4.H.2 Section 6.B
		Streetscape requirements	
		One street tree per 40 feet of street frontage (planted on-center or grouped).	Section 6.B
		Street trees located on major or prime arterial roads designed to provide continuity with established street scene or Arterial Street Tree Themes.	Section 6.C Appendix D
		Street trees located: A minimum 3 feet outside of the public right of way. A minimum 7 feet away from sewer lines. So as not to conflict with public utilities. Outside of vehicular sight lines.	Section 6.B
		Street trees are located within the public right-of-way. If YES, state reason why:	Section 6.B
		Parking lots	
		Minimum 3% of parking area landscaped.	Section 3.C.13
		Trees provided at minimum rate of 1 tree per every 4 parking stalls.	
		Trees planted a minimum of 2 feet from back of curb.	
		5 foot wide planting strip next to through traffic lane.	
		4 foot clear landscaping in planters between double parking rows (where applicable).	
		Islands at the end of each parking row shall be used as planted area.	
		Minimum 8 foot wide perimeter landscape strip around parking facilities.	
		3 foot high screen around parking lots (berms, shrubs and/or walls).	
		Slope revegetation/erosion control	
		Slopes 6:1 or steeper and in excess of 8 feet in vertical height have: a) Standard #1 - cover crop and erosion control matting b) Standard #2 - ground cover from flats; 100% coverage within 1 year c) Standard #3 - low spreading shrubs (min. 1 gal.); 70% coverage d) Standard #4 - trees and/or large shrubs (min. 1 gal.); one plant/200 sf	Sections 7.A.1 and 7.A.2
		Slopes 6:1 or steeper and greater than 3 feet and up to 8 feet in vertical height have Standard #1, #2, and #3 above.	
		Slopes 6:1 or steeper and 3 feet or less in vertical height and adjacent to public walks or streets shall have Standard #1 above.	
		Slopes graded flatter than 6:1 have standard #1 above when they have one or more of the following conditions: a) Sheet graded pads not scheduled for improvements within 6 months of completion of rough grading. b) Potential erosion problem. c) Highly visible area.	
		Plant materials and seed mixes consist of a variety of long lived, low water requirement plant materials with root systems of varying depth.	Section 7.A.3

YES	N/A	IRRIGATION	Reference
		General	
		General irrigation notes, details and specifications.	
		Illustrate location, type and size of all components of the irrigation system.	
		Legend explaining all symbols with manufacturer, precipitation rate, g.p.m's, radii of each sprinkler type and detail reference.	Section 4.K.3
		All equipment sized, their control valve size and station number provided and gallon per minute stated. Pipe sizes indicated.	
		Pressure loss calculation provided for worst case valve with minimum 10% residual provided.	Section 4.K.3 Section 7.B.2
		Designed for use of recycled water (excluding private residential or front yards of individually metered condos) (current or future). If exempted from this requirement, provide documentation from the Carlsbad Municipal Water District (CMWD) Engineer.	Section 3.D.1 Section 4.K.2
		Irrigation provided to fire suppression areas where applicable.	Sections 5.C, 5.D and 5.E
		Point of connection/backflow	
		Separate water service for landscaping (except residential projects under 4 units).	
		Water meters shown with type (recycled or potable), sizes noted, static pressure provided, and maximum flow rate in gallons per minute with design operating pressure.	Section 4.K.3
		Water meter location shall coincide with locations provided by the public improvement plans. Note the street station number on the irrigation plan.	Section 4.K.3 Section 7.B.2
		Pipe between meter and backflow is copper.	
		Backflow preventers provided per code and/or City standards.	Section 4.K.5
		Backflow testing notes.	
		Pressure regulation	
		Pressure regulating valves used when pressure exceeds 60 psi at the valve.	
		Pressure regulating device used when pressure exceeds 80 psi at POC.	Section 4.K.5
		Pressure differential within circuits less than 20%	
		Controller	
		Automatic controller capable of dual or multiple programming and multiple cycle start capacity.	
		Equipped with rain shut-off (weather based system or soil moisture detection).	Section 4.K.5
		Valves	
		Manual shut-off valve at water supply.	
		Manual shutoff valves installed between each zone of system and water supply.	
		Gallons per minute provided for each remote control valve.	
		Quick couplers installed at a maximum of 150 feet along mainline.	Section 4.K.5
		Lug type quick couplers for potable water.	
		Check valves to prevent low head drainage.	
		Serviceable check valves where elevation differential may cause low head drainage.	
		Pipe/sleeves	
		Water velocities in pipe at 5 feet per second or less.	
		All pipe below grade (18" minimum for main and 12" for laterals).	
		PVC mains Class 315 (2" or larger) or Schedule 40 (1-1/2" or smaller).	
		PVC lateral Class 200 (except for 1/2" shall be schedule 40).	
		Sleeves under improvements (Sch. 80 under roads minimum 36" cover; Sch. 40 other than under roads minimum 18" cover) 2 times the line size.	Section 4.K.5
		Sleeves provided for control wires under improvements.	
		Thrust blocks on mains at direction changes on mains 3" and larger.	
		Irrigation designed to apply water at a rate not exceeding the infiltration rate of the soil.	Section 4.K.4
		Irrigation in transitional areas designed to prevent overspray or runoff from entering adjacent native habitat area that is not irrigated.	Section 4.K.4
		Mainline located outside of right-of-way unless otherwise approved by City.	
		Identify each area irrigated with recycled water, gray water and other non-potable water.	Section 4.K.3

YES	N/A	IRRIGATION (continued)	Reference
		Sprinkler heads	
		Matched precipitation rates within each control valve circuit.	Section 4.K.5
		Spacing in turfgrass not to exceed 50% of diameter.	
		Spacing of stream sprays, rotors or impacts not to exceed 50% of diameter.	
		Pop-ups used where sprinklers located within 10 feet of any pedestrian use.	
		Pop-ups or drip used in public right-of-way.	
		Risers over 12" above grade staked.	
		Deep watering device	
		Trees in turfgrass irrigated with deep watering device.	Section 4.K.5
		Recycled water use	
		Physical separation provided between recycled and potable water use.	Section 4.K.2
		Include peak watering window calculation with 8 hour or less window.	
		All equipment is marked for recycled water use.	
		2 layers of warning tape above mainline.	
		Quick couplers have reverse ACME threads.	
		Dual distribution system (potable/recycled).	
		Install signs: "Recycled Water – Do Not Drink"	
		Slope revegetation/erosion control	
		Water service located within ownership boundaries of property owner.	Section 7.B.2
		All slopes requiring planting have permanent automatic irrigation systems.	
		On-grade pipe not allowed unless approved by City.	
		Master control valve (normally closed) provided for projects with over 50,000 square feet of slopes. Master valve located at point of connection.	
		Separate circuits top, bottom, and middle of slopes.	
		Level plantings areas 5 foot or greater in width and adjacent to roads or wall are irrigated separately from slopes.	
		Precipitation rate not to exceed 0.75 inches per hour on slopes greater than 25%.	Section 4.K.4 Section 7.B.2

YES	N/A	MEDIANS	Reference
		General	
		Median layout in conformance with the "Arterial Median Layout"	Section 6.D.2
		Landscaping within medians are subject to specific irrigation and/or planting requirements. Contact the Parks and Recreation Department for informational materials	Sections 6.D.4 and 6.E.1
		Installation details conform to the "Public Project Landscape Details" available through the Parks and Recreation Department	Section 6.D.4
		Plants installed in accordance with the San Diego Regional Standard Drawings	Section 8.A.3
		Planting	
		Median planting conforms to the Streetscape Program requirements.	Section 6.D.4 Appendix D
		Trees and shrubs as specified in the "Arterial Street Themes"	Section 6.D.4
		Trees 24" box size minimum; one or more per planter.	
		Shrubs 5 gallon minimum size.	Section 6.D.3
		Shrub spacing such that 100% coverage occurs within 1 year.	
		Soil suitable for plant growth and free of harmful substances or deleterious materials.	
		Irrigation	
		Irrigation is metered separately from private parkway irrigation	Section 6.E.1
		Irrigation equipment conforms to the Parks and Recreation Department approved equipment list.	
		Controllers and backflow devices shall be located 2 feet inside the public right-of-way in the planting area.	
		Controllers installed in separate steel locking enclosures. Enclosures have "CITY OF CARLSBAD MEDIAN IRRIGATION" stenciled with 2" high white letters on side facing street.	
		No irrigation circuit spans separate islands.	
		No irrigation circuit spans more than 5 planters.	
		Irrigation system consists of pop-up overhead spray heads servicing the shrubs and deep watering devices (bubbler inside a drain pipe) servicing trees	
		Quick couplers installed minimum of 150 feet on center or at minimum every third median planter.	

YES	N/A	MEDIANS (continued)	Reference
		Construction	
		Concrete layout in conformance with Arterial Median Layout.	
		Concrete color and pattern as specified under Arterial Landscape Themes and as approved by the Parks and Recreation Director.	Section 6.D.2
		Plans specify a 10'x10' square sample.	
		Concrete a minimum of 560-C-3250 with 6/6 – 10x10 welded wire mesh.	
		Finish grade in medians shall be 2 inches below concrete.	Section 6.D.3

YES	N/A	FIRE PROTECTION	Reference
		Fire hydrant locations shown and labeled.	Section 3.E.2
		Rear yard setbacks and all fire zones shown and labeled. Plant and irrigation design provided that meets fire suppression requirements.	Section 3.E.2 Sections 5.C, 5.D and 5.E
		Emergency/maintenance access shown and labeled.	Section 3.E.2
		Maintenance responsibility and schedule of frequency specified.	
		Street widths dimensioned.	
		Fencing returns attached to a structure and/or fencing located within the drip line of the eaves constructed with noncombustible materials if located within 100 feet of undisturbed native areas.	Section 5.B.5

YES	N/A	HABITAT RESTORATION	Reference
		Plan scale no smaller than 1" = 40'.	Section 4.C.4
		Plans incorporate recommendations contained in "Guidelines for Preserve Management", "Guidelines for Habitat Creation and Restoration", and "Guidelines for Riparian and Wetland Buffers".	
		Restoration Plan.	
		Long Term Maintenance, Monitoring, and Reporting Plan.	
		Landscape and Irrigation Plans (See Planting and Irrigation – Sections 3 and 4).	
		Property Analysis Record (PAR).	

YES	N/A	CONSTRUCTION PLAN	Reference
		General landscape construction, notes, details and specifications.	Section 4.1
		Graphic representation and layout of all landscape construction elements to be installed.	
		Aspects of landscape construction shown on architects', engineers' or other plans is indicated on the landscape plans and references plans and sheet numbers where occurs.	
		Fountains/water features shall have recirculating systems.	Section 4.D.3
		Fountains, decorative pools and ponds shall utilize recycled water if available.	Section 3.C.9
		Detailed description of each water feature included in the landscape area.	
		All signage including monuments require separate permits. If signage is included on the plans a note is to be added as follows: "All project signage and monuments shall require a separate permit under the city of Carlsbad signage review process."	Section 4.1
		Model homes	
		Educational signage with text specified.	Section 4.D.4

YES	N/A	GRADING DESIGN (For projects that do not require approval of a grading plan and an as-built grading plan or previously approved grading plan does not exist)	Reference
		Elevations, slope heights, drainage patterns, pad elevations, storm water management and finish grades shown.	Section 4.J
		Plans indicate positive drainage away from structures and termination in approved drainage system.	
		Grading designed for efficient use of water, minimizing soil erosion, runoff and water waste.	
		Grading designed to comply with best management practices.	
		Integrates Low Impact Development (LID) features. If YES, briefly describe types:	Section 3.C.8

PLAN PREPARER: _____
COMPANY NAME: _____
DATE: _____