



COUNTY OF RIVERSIDE
 TRANSPORTATION DEPARTMENT – LANDSCAPE SECTION
 4080 LEMON STREET, 8TH FLOOR
 RIVERSIDE, CALIFORNIA 92501
 (951) 955-6767 FAX (951) 955-1891

Landscape Plan Check List
LMD / CFD / CSA Projects
 AS OF 05-12-15

(Plans Comply)
 (Revise and resubmit) IP/ PP _____ Date: _____ Submittal: _____

Cover Sheet

- Name and contact information for applicant, owner and landscape architect
- Vicinity map (1/2 mile radius)
- Index map with sheet layout and numbering
- Total landscape area in square feet
- Provide the following statement with applicant’s signature and date: “I agree to comply with the requirements of Ordinance No. 859 and submit a complete Landscape Documentation Package. Should the ordinance be revised, these plans may be subject to change based on the updated ordinance”
- Provide a note stating that the contractor and/or owner is responsible for submitting a soil analysis report and documentation verifying implementation of its recommendations
- If the project requires RCTD approval (County ROW), provide the following:
 - Section, Township, Range listed
 - Ordinance 499 – Encroachment permit note
 - The following note: “The contractor shall be responsible for the clearing of the proposed work area, and relocation costs of all utilities. Permittee must inform County of construction schedule at least 48 hours prior to beginning construction.
 - Phone: (951) 955-6790 for permit cases (C.U., P.U., or Voluntary), Cabazon and area west.
 - Phone: (951) 955-6885 for Parcel Maps and Tract Maps.
 - Phone: (760) 342-8267 for Permit cases east of Cabazon.
 - If a median is required, but is deferred to a future builder, the following note must be on cover sheet: “An amount of \$ _____ has been placed into account #20000-3130100000-230106 for future construction of median (or facility type) on (street name or location) which is not feasible to build at this time.
- Maintenance quantities shown on cover sheet, broken out in categories as follows:
 - Median quantities - even if built in future
 - Parkway quantities (3:1 or less slope gradient)
 - Slope quantities (greater than 3:1 slope gradient)
- Each category above (as applicable) shall include the following maintenance data:

<input type="radio"/> Quantity of trees	<input type="radio"/> Linear Feet of PVC Rail Fence
<input type="radio"/> Quantity of palms	<input type="radio"/> Quantity of Water Meters
<input type="radio"/> Square Feet of Shrub Area	<input type="radio"/> Quantity of Irrigation Pumps
<input type="radio"/> Square Feet of Groundcover Area (dense groundcover areas don’t require frequent mulch replacement)	<input type="radio"/> Square Feet of Mulch at 3” Depth (list D.G. and bark on separate lines)
<input type="radio"/> Square Feet of D.G. Trail	<input type="radio"/> Square Feet of Mulch at 2” Depth (list D.G. and bark on separate lines)
- On cover sheet, place the following note: Inspection schedule shall be determined at pre-construction meeting with Landscape Inspector. (Minimum 48-hour notice required for pre-construction meeting.)
- On cover sheet, place the following note: Flow sensing and communication functionality with Central Control shall be verified prior to turnover
- On cover sheet, place the following note: “Contact County representative Mark Hughes at (951) 955-6767 to start minimum 90-day plant establishment period.” (Actual establishment may take longer than 90 days.)

Maintenance Responsibility

- Maintenance Entity indicated and noted on cover sheet “Continued Landscape maintenance provided by _____ per agreement dated _____”. (Enter the name of entity and date of agreement in the blank spaces as applicable)
 - If unknown, or if a special district, contact Mark Hughes 951-955-6767
 - HOA not allowed within County R.O.W. (in-tract R.O.W. may be allowed on a per case basis)
 - (Medians cannot be privately maintained; they must be in a maintenance district).
- Maintenance District signature block, if applicable
- Perpetual maintenance agreement or letter from district accepting maintenance. (Except CFD or LMD; verify in-house)
- FYI, for final submittal, plans wet signed by maintenance district must be submitted for County signature / processing
- County standard maintenance specs used.

Water District

- Water supply - specify potable, well, or recycled on legend, and whether meter is proposed or existing
- Verify if recycled water is available or will be provided in the future. If so, plans shall be designed and processed accordingly.
- Water District standard notes if recycled water
- Water district signature block if recycled water. (Plans must have district approval/signature prior to County approval.)
- CVWD signature block and standard notes (both recycled and potable), unless directed otherwise by CVWD.
- For final submittal, plans wet signed by CVWD must be submitted for County signature / processing (recycled and potable)

All Sheets

- Current 24”x36” County Standard Title Block (strike through or delete non-applicable signature blocks)
- Tract / PM / CU/ PP / PU / MS / IP (as applicable)
- Project Name and Street Name(s)
- Space for County File number
- If areas are shown outside ROW, note above signature block “Approval by the Transportation Department is for work in the road right-of-way only”. (Not applicable if area outside of ROW is to be CFD or LMD maintained.)
- Minimum 0.12” lettering height (all text, including legends, notes, specs, details, etc.)
- Dimensions (centerline to curb, centerline to ROW, ROW to ROW)
- Label ROW, sidewalk, curb
- Station numbers shown on street centerlines
- Sheet numbering
- No 30 or 40 scale drawings used for LMD/CFD projects.

General

- If first submitted after January 1, 2009, provide written verification that plans comply with approved Planning Department Landscape Concept Plan and also meet Conditions of Approval
- Provide a copy of the project grading plans and street improvement plans, including water and sewer plans, for reference. If these plans are not required, verify in written response.
- Construction cost estimate for bonding
- Ordinance 461 – Standard 401 sidewalks and parkways
- Ordinance 461 – Standard 404 meandering sidewalks and parkways.
- Ordinance 461 – Standard 817 - If sidewalks are meandering, applicant should make sure dry utility consultant is aware of tree and sidewalk configurations.
- Ordinance 461 – Standard 405 multi-purpose trails
- No monuments in ROW
- Boulder locations appropriate for sight distance zones, pedestrians, cyclists, etc.

Medians

- Ordinance 461 – Standard 113, compliant maintenance walk shown on plans (24” wide measured from face of curb)
- Median hardscape shall be cobblestone river rock, 4”-12” dia. and grouted with a min. thickness 4”; or 4” min. thickness colored concrete stamped pattern. Color shall be red tone or other contrasting colors with approval of Trans. Dept.
- Planting and Irrigation is required for medians 5’ wide or greater unless sight distance restricts planting. Median noses and transitions from turn lanes may be hardscape material.
- Trees shall be offset 6’ min. from curb face (modified local streets shall be offset 3.5’ min. from curb face)
- Trees shall be chosen from median width categories per the County of Riverside California Friendly Plant List. Large-scale trees with large diameter trunks at maturity are not allowed in medians. The list can be downloaded from <http://rctlma.org/trans/Land-Development/Special-Assessment-Districts/Landscape-Guidelines-and-Standards>
- Tree ‘clear trunk height’ shall be 5’ minimum above finish grade for viewing under foliage canopy of tree. If mature spread dia. of tree extends beyond curb faces, there shall be 17’ min. clearance above road to the branching / foliage.
- Max. shrub height at maturity in sight lines shall be 24” above finish grade (or less depending on vertical curve sight visibility restrictions)
- Fixed objects such as boulders should not be located in medians. (Monument signs may be allowed on a per case basis with Transportation approval.)

Irrigation Plans

- A note stating “Location of irrigation lines and symbols are diagrammatic. All irrigation shall be placed in planting areas except when crossing pavement.”
- A note stating “No low head drainage allowed.”
- 4” graphic scale, North arrow
- All irrigation equipment shown including POC info., meter, controller, valves
- Show connection to existing water line (half tone civil plans and label)
- Water meters and electrical meters cannot be mixed between two maintenance agencies
- Ordinance 461 – Standard 1103 Backflow preventers: lockable enclosure on concrete/quick pad. Vent must be located a minimum of 12” from the concrete/quickpad.
- Legend with details referenced
- Slopes greater than or equal to 4:1 shall be on grade UVR pipe. Slopes less than 4:1 shall be buried PVC pipe.
- All laterals and mains to be purple pipe to allow future conversion to recycled
- Type and size of irrigation pipe (pressure supply line and laterals)
- Min. mainline size =1-1/2” for LMD/CSA/CFD except @ end for QC=1 ¼”.
- Laterals placed, zoned properly
- Coverage / Point-to-Point drip layout is appropriate (Prior authorization required for use of alternative system design.)
- Valve call-outs with valve size, GPM provided and legible
- Verify planting and irrigation areas comply with each other
- Irrigation application method appropriate to site / plant material
- Use 2 GPH emitters, keep < 30 GPM.
- Trees and vines each irrigated separately from other plant material
- Check hydraulic calculations
- General notes per maintenance district (as applicable)
- Details and specifications per County Standards
- Booklet format specifications with signature blocks for project Landscape Architect and Maintenance District representative on cover may be used with prior approval
- Ordinance 859.3 (Summarized below; plans need to comply to entire ordinance)
 - A note stating “I agree to comply with the criteria of Ordinance No. 859.3 and to apply the criteria for the efficient use of water in the irrigation design plan.”
 - A note stating that prior to backfilling the party responsible for irrigation installation shall conduct a preliminary field inspection of the irrigation system

- A note stating that after project installation an audit shall be conducted by a certified irrigation auditor and findings stated in a report
 - Dedicated landscape meters for projects greater than 2,500 s.f. (except single family residences)
 - Water use calculations (reduced ETo of .50 per emergency drought measures for first submittals)
 - Smart Controller specified with access to real-time ET (minimum rating shall be light commercial)
 - ET Gage
 - Manual Shut off valve as close to POC as possible
 - Master Valve / Flow Sensor
 - Static Water Pressure
 - Pressure regulator (if needed)
 - Rain sensing device
- Also check the following:**
- A note stating "Contractor must contact Mark Hughes at least seventy-two (72) hours prior to conducting a pre-construction meeting".
 - A note stating "Prior to ordering any materials contractor shall provide submittals to CFD / LMD representative for review and approval as per specification requirements. Work shall not commence without approval from CFD or LMD for all submittal items."
 - CalSense Controller in CalSense SS Enclosure
 - Add "- F" option to controller when using flow sensor greater than 1"
 - Add "- F" option to controller with bypass master valve and flow sensor when flows are below or above recommended flow sensor limits
 - Add "- FL" option to controller when using more than (1) one controller on single water meter
 - Letter from Bob Moxley (760-580-9428) at Calsense with Controller spec on Calsense letterhead
 - A note stating "Contractor shall be responsible for contacting Calsense and CFD / LMD Representative for approval of all central control system equipment locations prior to installation".
 - A note stating "CalSense certification required prior to start of 90-day plant establishment period.
 - Flow Sensor minimum/maximum flow range within Calsense recommendations (minimum flow through valve 4 gpm)
 - A note stating "Prior to start of maintenance period irrigation controller shall be programmed to run off real time ET". If controller does not have ET gage, replace the words "real time" with "historic"
 - Stainless steel, powder coated electrical meter pedestal (provide model number and location on plan)
 - Electrical meter located within 50 feet of pump station and/or controller (if applicable)
- Anti-drain check valves
 - Hydrozones properly designated
 - No overhead irrigation within 24" of non-permeable surfaces. (No restrictions to method if adjacent to permeable surface with no runoff or overspray)
 - Use subsurface or low-volume irrigation for irregularly shaped areas, or areas less than 10 feet in width
 - Initial irrigation schedule & Established irrigation schedule
 - Note stating no overhead irrigation between 9 a.m. and 8 p.m.
- A note stating "Prior to start of maintenance period irrigation contractor shall provide pump certification on manufacturer's letter head to County Inspector"
 - Wire schedule for pump station
 - Pump start relay with conduit
 - Backflow painted forest green (potable) or purple (recycled) (protect test cocks and operable parts)
 - Backflow cage powdercoated forest green (potable) or purple (recycled)
 - V.I.T. quick pad for backflow enclosure
 - Check demand analysis
 - Pressure supply line layout and sleeves
 - Pipe / Sleeving / Conduit Sizing
 - Street sleeving detail
 - Spare wire boxes provided at ends
 - Moisture sensor provided in basin(s)
 - Check legend against details/ specifications
 - Check for missing details
 - Minimum (10) year warranty for irrigation control system specified
 - Minimum (5) year communication plan for central control system (GPRS) specified
 - Minimum (5) year warranty for irrigation spray bodies specified
 - Minimum (2) year warranty for irrigation rotary nozzles specified
 - Minimum (5) year warranty for irrigation rotor heads specified

Planting Plans

- 4" graphic scale, North arrow
- Legend (show each plant water use factor per WUCOLS; identify WUCOLS zone)
- Show and label existing trees or shrubs to remain or to be removed. Identify trunk diameter of existing trees.
- Hardscape, walls etc... shown for reference with labels
- Permanent stormwater bmp's (swales, inlet structures, etc.) shown. If none, applicant to verify in written response.
- Show subsurface storm and sewer lines for reference / tree conflict check. (May be shown ½ tone.)
- Street Lights shown for reference/ tree conflict check (20' clearance required)
- Ordinance 461 – Standard 821 Sight Distance
 - No trees in sight distance zone
 - No shrubs over 12" height (at maturity) in sight distance zone
- Ordinance 461 – Standard 1101 Tree Exclusion Zone (10' if 74' or less ROW, 20' if >74' ROW)
- Ordinance 460 – trees minimum of 60 foot intervals, staked with 2-3 stakes and 6 tree ties. Use triple staking with 3" diameter stakes in high wind areas.
- Root barrier noted for trees within 6' (min.) of hardscape. Root barrier shall not encircle the tree rootball but shall be located at edge of hardscape and extend beyond center of tree a minimum of 5' in each direction.
- General notes per maintenance district (as applicable)
- Details and specifications per County Standards
- Booklet format specifications with signature blocks for project Landscape Architect and Maintenance District representative on cover may be used with prior approval
- Groundcover spacing detail provided
- Plant material types and locations
 - Check tree appropriate species (no Schinus or trees with damaging roots; appropriate for project micro-climate)
 - Check shrub species (non-invasive; no Pennisetum: appropriate for project micro-climate)
 - No turf allowed in ROW except where contiguous with recreational park turf area
- Slope plant spacing per Ordinance 457 and CBC erosion control requirements. Variances may be requested on a case by case basis.
 - Over 3 feet vertical - Groundcover plant material maximum 12" on center
 - Over 15 feet vertical – shrubs maximum 10' on center, trees 20' maximum on center, or a combination thereof
- 3" mulch (min.) noted for shrub beds and unplanted areas; 2" mulch in groundcover areas; stabilizing mulch for slopes
- Check for flammable plants and mulches. Show fuel modification zones within 200' of project. Indicate if project is in high fire hazard zone (pursuant to California Public Resources Code Section 4290 and County Ord. No. 695)
- Ordinance 859- Water efficient landscape (Summarized below, entire ordinance needs to be complied to)
 - Plants irrigated according to water use
 - Soil analysis
 - Plant Species
- Designation of hydrozones and area (square feet) for each hydrozone (may be shown on water use calculation)
- All Plant material must be shown with individual symbols.
- Indicate whether area includes any 'special' landscaping per 859.3 Section 3. (Edible plants, publicly accessible recreational area, or irrigated with recycled water). (Note: irrigation calculations should reflect special landscape areas.)
- Also check the following:**
 - Phormium must be 15 gal (to prevent theft)
 - Trees should have breather tubes
 - Verify mature widths of shrubs will not require excess trimming
 - Dripline of trees accurately reflect mature tree size.
 - Shrub and ground cover widths accurately reflect mature plant size.

- Verify no hydroseed (except for native restoration)
- Verify no Alyssum
- Verify no Myoporum on slopes over 4' high
- Verify no Dietes (high maintenance)
- No boulders in ROW
- Planting and irrigation limit of maintenance must be delineated with 6"x 6" concrete mow-curb

Caltrans Right of Way (if applicable)

Coversheet

- Add Note: County approval of landscape plans within Caltrans Rights-of-Way is only valid after Encroachment Permit has been issued by Caltrans, inclusive of these Landscape plans.

Irrigation Plans

- Isolation valve per Caltrans Standard, isolating all Caltrans irrigation from on-site irrigation.

Planting Plans

- No trees at mature width and height shall enter the roadway at any time.