RANCH PLAN

PLANNED COMMUNITY-WIDE

ALTERNATIVE DEVELOPMENT STANDARDS

For Use By:
RMV Community Development, LLC
OC Public Works (OC Engineering and OC Planning)
Orange County Fire Authority

March 14, 2007
Amended August 12, 2008
Amended September 14, 2011
Amended December 14, 2011
Amended March 15, 2012
Amended July 24, 2013
Amended November 14, 2014
Amended May 27, 2015
## A. Public Street Rights-of-Way:

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### Ranch Plan Alternative Development Standards Approvals Summary

Latest Amendment: May 27, 2015

| G-4 | 4-inch Vertical Curb & Gutter on Private Streets | 128 | Subdivision Committee, County Chief Engineer | 3/14/07 |
| G-6 | Grated Inlets Catch Basins on Private Streets | 129 | County Chief Engineer | 3/6/07 |
| G-7 | Reduced Local Depression on Private Streets | 131 | County Chief Engineer | 3/6/07 |
| G-8 | Reduced Local Depression on Public Streets | 133 | County Chief Engineer | 3/6/07 |
| G-9 | Rolled Curb on Private Streets | 134 | County Chief Engineer | 3/6/07 | County Chief Engineer | 9/14/11 |
| G-10 | Grated Inlets Catch Basins With Rolled Curb on Private Streets | 136 | County Chief Engineer | 3/6/07 |
| G-11 | Reduced Local Depression With Rolled Curb on Private Streets | 138 | County Chief Engineer | 3/6/07 | County Chief Engineer | 9/14/11 |
| G-12 | Modified Curb Ramp (Type 5) | 140 | County Chief Engineer | 3/6/07 |
| G-13 | Pedestrian Crossing at Drainage Swale on Private Streets | 142 | County Chief Engineer | 3/6/07 |
| G-14 | Corner Curb Ramp With Ribbon Curb on Private Streets | 144 | County Chief Engineer | 3/6/07 | County Chief Engineer | 9/14/11 |
| G-15 | Single Sided Parking on Double Loaded Private Streets | 146 | County Chief Engineer | 9/14/11 |

### J. Neighborhood Electric Vehicles

| J-1 | NEV Intersection Treatments | 147 | Subdivision Committee, County Chief Engineer | 8/12/08 |
| J-2 | NEV Signage | 149 | Subdivision Committee, County Chief Engineer | 8/12/08 |
| J-3 | Class I Off-Street NEV Trail | 155 | Subdivision Committee, County Chief Engineer | 8/12/08 |
| J-4 | Class II On-Street NEV Lane | 158 | Subdivision Committee, County Chief Engineer | 8/12/08 |
| J-5 | Class III NEV Route | 167 | Subdivision Committee, County Chief Engineer | 8/12/08 |
| J-6 | NEV Parking Associated with Recreation, Neighborhood Center, Urban Activity Center, Business Park, and Community Facility Uses | 168 | Subdivision Committee, County Chief Engineer | 8/12/08 |
This document is the comprehensive statement of alternative development standards for the Ranch Plan Planned Community. These Planned Community-wide site development standards were first approved by the County Chief Engineer March 8, 2007 and as appropriate, approved by the Orange County Fire Authority as part of the Ranch Plan Fire Protection Program.

These alternative development standards are intended to provide an improved sense of community, an improved built environment, and improved natural environment and were approved based upon the findings required by the Planning Commission ensuring that the result would be an equivalent or better project than that previously approved for the Ranch Plan Planned Community.

Many of these proposed Ranch Plan Alternative Development Standards have already been approved by the Planning Commission, Subdivision Committee, County Chief Engineer and Orange County Fire Authority, and are at work in the Ladera Ranch Planned Community. These previously approved ADS that are already at work in Ladera Ranch are highlighted in this text as such: At Work in Ladera.

Prior to approval of these alternative development standards the Planning Commission made the following findings (as required by General Regulation 25 of the Ranch Plan P.C. Program Text) regarding approval of each Planned Community-wide alternative development standard.

A. The use or project proposed is consistent with the General Plan.

B. The use, activity and improvement(s) proposed by the application are consistent with the provisions of the Zoning Code.

C. The approval of the permit application is in compliance with the requirements of the California Environmental Quality Act (including previously certified EIR 555 addressing the project).

D. The location, size, design and operating characteristics of the proposed use will not create significant noise, traffic or other conditions or situations that may be objectionable, detrimental or incompatible with other permitted uses in the vicinity.

E. The application will not result in conditions or circumstances contrary to public health, safety and general welfare.

F. The alternative development standard(s) will result in an equivalent or better project in terms of adverse impacts and public benefits to the immediate and surrounding community.
A. Public Street Rights-of-Way
Some components of the Ranch Plan neighborhood village design philosophy require modifications to Public Street Rights-of-Way development standards in the Ranch Plan Planned Community Text and to appropriate County Standard Plans. These modifications include reduced street widths, increased landscaped parkway widths, the introduction of landscaped medians and raised planters, road design techniques which reduce the grading impacts of arterial highways and other unique design solutions identified by the following Items #A-1 through A-36.

A-1. 36-Foot Double Loaded Streets (Up to 800 ADT) At Work in Ladera
Per the approval of the County Chief Engineer, modify County Standard Plan 1107 to allow 36-foot wide (curb-face to curb-face) public local streets to increase from the present standard of 500 up to 800 average daily trips (ADT). This standard would apply on public local streets with residential frontage on both sides, 10-foot wide travel lanes, 8-foot wide parking areas on each side. Parkway widths would be provided per County Standard Plan 1107 unless modified by Modified Site Development Standard #A-5.

Project Benefits:

- A residential village ambiance with less uninterrupted hardscape, less impervious surfaces and more street adjacent parkways.
- A reduction in urban runoff.
- Equivalent ease of circulation and traffic safety due to traffic calming.

Performance Standards:

- This standard shall be allowed only if the following traffic calming criteria are met:
  a. Street length where this standard would apply would be limited to 1,000 feet.
  b. To be used primarily on cul-de-sacs and curvilinear streets.
  c. This standard would apply only when there are curb separated sidewalks and street trees to act as friction in slowing down traffic.
A-2a. **Residential Local Streets 30-feet Wide from to 400 to 1,200 ADT**

Per the approval of the County Chief Engineer, modify County Standard Plan 1107 to allow 30-foot wide (curb-face to curb-face) public residential local streets with traffic levels between 400 and 1,200 average daily trips (ADT).

Performance Standards:

a. Only allowed on local residential streets with traffic levels between 400 and 1,200 ADT

b. Residential frontage and driveways on one side only

c. Appropriate decorative signage designating "no parking" areas (meeting code requirements per the Sheriff’s approval), shall be located every 200 feet.

Project Benefits:

- A residential village ambiance with less hardscape.

- Equivalent ease of circulation and traffic safety.

- Equivalent access for fire and emergency vehicles.
RESIDENTIAL LOCAL

25 MPH MINIMUM DESIGN SPEED
DRIVEWAYS ALLOWED ONE SIDE ONLY
ADT 400–1200
A-2b. **Single Sided Parking on Double Loaded Streets** At Work in Ladera

Per the approval of the County Chief Engineer, modify County Standard Plan 1107 to allow 30-foot wide (curb-face to curb-face) public residential local streets with traffic levels of up to 200 average daily trips (ADT). This modified standard would apply on public local streets with residential frontage both sides. Parkway widths would be provided per County Standard Plan 1107 unless modified by Modified Site Development Standard #A-5.

Performance Standards:

a. Residential parking to be provided per the Orange County Zoning Code.

b. Appropriate decorative signage designating "no parking" areas (meeting code requirements per the Sheriff’s approval), shall be located every 200 feet.

c. Driveway parking of at least 18 feet in length is provided at each home site on any affected street.

d. Larger lots (at least 6,000 square feet or wider than 60 feet), thereby reducing the demand for off-street parking spaces per acre served by the affected streets.

e. Only allowed on local residential streets with less than 200 ADT

Project Benefits:

- A residential village ambiance with less uninterrupted hardscape.
- Traffic calming due to increased landscaping serving as "friction" along the residential roadway.
- Equivalent ease of circulation and traffic safety.
- Equivalent access for fire and emergency vehicles.
A-2c. **Single Sided Parking on Residential Local Streets up to 400 ADT**
Per the approval of the County Chief Engineer, modify County Standard Plan 1107 to allow 28-foot wide (curb-face to curb-face) public residential local streets with traffic levels of up to 400 average daily trips (ADT).

Performance Standards:

a. Only allowed on local residential streets with less than 400 ADT

b. Residential frontage and driveways on one side only

c. Appropriate decorative signage designating "no parking" areas (meeting code requirements per the Sheriff’s approval), shall be located every 200 feet.

Project Benefits:

- A residential village ambiance with less hardscape.

- Equivalent ease of circulation and traffic safety.

- Equivalent access for fire and emergency vehicles.
RESIDENTIAL LOCAL
25 MPH MINIMUM DESIGN SPEED
DRIVEWAYS ALLOWED ONE SIDE ONLY
ADT < 400

THE RANCH PLAN ALTERNATIVE DEVELOPMENT STANDARDS
STREET SECTIONS
RESIDENTIAL LOCAL

March 6, 2007
A-3  **Rolled-Curb Streets**

Per the approval of the County Chief Engineer and Orange County Fire Authority, modify County Standard Plan 1107 to allow public local residential street with 6-inch rolled curbs (see ADS G-9 for detail, Standard Plan 1201). Measured from 6-inches back of curb the rolled curb streets shall be the same width as vertical curb streets. Utilizing Orange County Fire Authority methodology (Flowline-to-flowline) the rolled curb streets may be one foot less in width than typically required, due to automatic sprinklers being required in the entire Ranch Plan planned community:

- 35-foot wide double loaded local residential street
- 27-foot wide single loaded local residential street

Performance Standards:

- Automatic fire sprinklers throughout entire neighborhood.

Project Benefits:

- A rural village aesthetic
- Equivalent drainage when compared to vertical curbs.
- Equivalent long-term maintenance cost for County of Orange.
A-4. **Neighborhood Entries At Work in Ladera**
Per the approval of the County Chief Engineer and Orange County Fire Authority, modify County Standard Plan 1107 to allow neighborhood entryways with traffic levels of up to 800 ADT. No parking would be allowed along neighborhood entryways, so emergency access may be accommodated by the two separate travel lanes of a width to accommodate breakdowns. In cases where the parkway adjacent to neighborhood entryways exceeds the standard 8-foot width, or where special landscape treatments are proposed, the Master Maintenance Corporation (HOA) will be responsible for maintenance.

Project Benefits:

- Equivalent or better access for fire and emergency vehicles.
- Equivalent ease of circulation and traffic safety.

Performance Standards:

- Superior aesthetic appearance.
- Only allowed on local residential streets with less than 800 ADT.
- Design speed of 25 miles per hour.
- Appropriate signage and striping must be provided.
A-5. **Residential Parkways At Work in Ladera** (Modified)
Per the approval of the County Chief Engineer, modify County Standard Plan 1107 to allow up to 17-foot parkways on public local residential streets. In cases where the parkway adjacent to local residential streets exceeds the standard 8-foot width, or where special landscape treatments are proposed, the Master Homeowners Association will be responsible for maintenance.

Project Benefits:

- A residential neighborhood ambiance with less uninterrupted hardscape.
- Safer pedestrian circulation.
- Traffic calming due to increased landscaping serving as "friction" along the residential roadway.
- Equivalent or better parkway maintenance by the homeowners association.
- Equivalent ease of circulation and traffic safety.
- Equivalent or better access for fire and emergency vehicles.
- Equivalent or better long-term cost to County due to on-going maintenance being provided by homeowners association.

A-6. **Secondary Medians At Work in Ladera**
Per the approval of the County Chief Engineer, modify County Standard Plans 1105 and 1114 to allow raised landscaped medians within secondary arterial rights-of-way and to allow medians to vary in width so long as County design standards are maintained at approaches to intersections and a minimum median width of 10-foot is maintained. Landscaping within raised medians shall be maintained by the Master Homeowners Association.

Project Benefits:

- Traffic calming.
- A residential village ambiance with less uninterrupted hardscape.

Performance Standards:

- Equivalent or better access for fire and emergency vehicles.
- Equivalent or better parking serving surrounding residential neighborhoods.
- Equivalent pedestrian and vehicular ease of circulation and safety.
- Equivalent or better long-term cost to County due to on-going maintenance being provided by homeowners association.
- See ADS A-32 for raised median within collector roads.
RESIDENTIAL PARKWAY

THE RANCH PLAN ALTERNATIVE DEVELOPMENT STANDARDS
A-7. Raised Landscape Islands within Residential Streets At Work in Ladera (Modified)
Per the approval of the County Chief Engineer and Orange County Fire Authority, modify County Standard Plan 1107 to allow raised, landscaped islands within public local residential street rights-of-way, including in the center of public cul-de-sacs (see Alternative Development Standard A-19) and within the roadway of public residential streets. See Exhibits on following pages.

Project Benefits:

- Traffic calming.
- A residential village ambiance with less uninterrupted hardscape.
- Equivalent or better access for fire and emergency vehicles.
- Equivalent ease of circulation and traffic safety.
- Equivalent or better long-term cost to County due to on-going maintenance being provided by homeowners association.

Performance Standards:

- Maximum landscape island length of three residential lots.
- Only allowed on local residential streets with less than 500 ADT.
- Regularly occurring such that the drivers are not “surprised.”
- Design speed of 25 miles per hour.
- Parking accessibility and travel path for lots adjacent to island must be adequately maintained.
- Appropriate signage, including no-parking signage, and striping must be provided.
- Adequate maneuvering must be demonstrated for all driveways backing onto streets adjacent to raised landscape islands.
A-8. **2:1 Slopes in Public Road Rights-of-Way At Work in Ladera**

Per the approval of the County Chief Engineer, modify County Standard Plan 1107 to allow slopes not to exceed a 2:1 ratio in parkways within the rights-of-way of public streets, where sufficient pedestrian and utility access is provided.

**Project Benefits:**

- A better blending of the residential village with the surrounding natural topography by incorporating the sloping terrain into roadway rights-of-way.
- Equivalent pedestrian and vehicular ease of circulation and safety.
- Equivalent or better long-term cost to County due to on-going maintenance being provided by homeowners association.
A-9. **Tapered Streets At Work in Ladera**

Per the approval of the County Chief Engineer and Orange County Fire Authority, modify County Standard Plan 1107 to allow limited stretches of 24-foot wide roadways on both single loaded and double loaded public local residential streets (see Exhibits on following pages).

Project Benefits:

- Traffic calming.
- An enhanced residential village ambiance due to a decrease in paved area within the neighborhood.
- A reduction in urban runoff due to the reduction in paved area.
- Equivalent access for fire and emergency vehicles.
- Equivalent or better ease of circulation and traffic safety.
- Equivalent or better on-going maintenance costs.

Performance Standards:

- Tapered street landscaped areas would be allowed only after the following criteria are met, thereby resulting in equivalent vehicular safety and circulation, off-street parking and access for fire and emergency vehicles:
  
  a. Maximum taper length of 100 feet, not including transition areas.

  b. On single-loaded streets, minimum street width is 30-feet.

  c. Maximum spacing to be no closer than 1,000 lineal feet on any street. Tapers allowed closer than 1,000 feet if located on a separate street.

  d. No parking is allowed along 24-foot street width sections. Appropriate decorative signage designating "no parking" areas shall be installed at the beginning and end of each taper.

  e. Provide for street drainage per current County standards.

  f. Only allowed on local residential streets with less than 500 ADT.

  g. Prior to the issuance of any precise grading permits, the applicant shall provide evidence of adequate parking meeting the requirements of the Orange County Zoning Code and the Ranch Plan Planned Community Development Regulations in a manner meeting the approval of the Manager, Current Planning. Should revisions within the right-or-way be deemed necessary by the Manager, Current Planning, the applicant shall make the necessary changes administratively, in a manner meeting the approval of the Manager, Subdivision and Grading Services.
THE RANCH PLAN ALTERNATIVE DEVELOPMENT STANDARDS

TAPERED STREETS
SINGLE LOADED

March 14, 2007
A-11. **Curb Returns at Each Residential Driveway** *At Work in Ladera*

Per the approval of the County Chief Engineer, allow specialized standard plans for curb cuts at each driveway, as long as there is no curb adjacent sidewalk.

**Project Benefits:**

- Compliance with County standards for drainage of public streets.
- Equivalent cost of on-going maintenance.
A. **Attached Single Family, Planned Concept and Multi-Family Residential:**
Per the approval of the County Chief Engineer, allow the requirement for sidewalks on both sides of local public streets in Attached Single Family, Planned Concept Detached and Multi-Family residential neighborhoods to be waived in limited instances based upon one of the following criteria being evident:

Performance Standards:

a. Internal access to community pedestrian circulation system
b. Direct access to community pedestrian circulation system
c. Parallel community pedestrian circulation and/or trail system

Project Benefits:

- Additional landscaping and yard area.

B. **Conventional Single Family:**
Per the approval of the Subdivision Committee and the County Chief Engineer, allow the requirement for sidewalks on both sides of local public streets in Conventional Single Family to be waived in limited instances where the street is predominantly single loaded but a limited stretch that is double loaded, but no 2:1 slopes will be allowed in areas with less than standard sidewalks.

Performance Standards:

- These Sidewalk standards would apply in Conventional Single Family Detached neighborhoods only if three (3) of the following criteria are evident:
  
  a. 8 or fewer homes would have been served by directly by the sidewalk
  b. 100 average daily trips or less on the adjacent roadway
  c. Double loaded portion without sidewalk would not exceed 250 feet.
  d. Pedestrian circulation (community trail system link) immediately adjacent

Project Benefits:

- More usable front yard space for homeowners.
  - A residential village ambiance.
  - Equivalent impact on public health, safety & general welfare.
  - Equivalent or better cost of on-going sidewalk maintenance.
A-14. **Alternative Paving Materials**

**At Work in Ladera** Per the approval of the County Chief Engineer, modify County Standard Plan #1805 to allow the following paving material options (or some other treatment as approved by the County) within the curb-to-curb section of public street rights-of-way:

- Pavers (maintained by Master Homeowners Assoc.)
- Integral color
- Patterned
- Texture
- \( \sqrt{\text{Scored}} \)
- \( \sqrt{\text{Washed}} \)
- \( \sqrt{\text{Stamped}} \)
- \( \sqrt{\text{Exposed aggregate}} \)
- \( \sqrt{\text{Sand blasted}} \)
- \( \sqrt{\text{Etched}} \)
- \( \sqrt{\text{Embossed}} \)
- \( \sqrt{\text{Broomed}} \)
- \( \sqrt{\text{Troweled}} \)

These paving options would be allowed at the end of cul-de-sacs, Community Gateways per the exhibit above, Trail Crossings per the exhibit to the right, and Village & Neighborhood entries and Intersections on the following page. All corners will meet ADA guidelines.

**Performance Criteria:**
Mid-block neighborhood trail crossings shall be allowed only when:

- Less than 5,000 ADT is projected
- Appropriate pedestrian protection is in place (i.e., signage, movement triggered lighting, raised pedestrian plateau, etc.)

**Project Benefits:**

- Traffic calming due to change in color and texture of roadway.
- A stronger community image by visually linking paving materials to materials used in neighborhood signs and hardscape.
- Equivalent or better impact on public health, safety & general welfare because crosswalk is more easily identifiable.
- Equivalent or better long-term cost to County due to on-going maintenance being provided by homeowners association unless agreed to separately between the developer and the County.
A-16. **Grade Separations Between Opposite Travel Lanes on Arterial Highways** At Work in Ladera

Per the approval of the County Chief Engineer, modify arterial roadway median standards to allow grade separations between opposite travel lanes.

Performance Standards:
- These grade separated travel lane standards would apply only if all of the following criteria are evident:
  - a. Not to exceed 2:1 slope.
  - b. Not to exceed 10 feet in elevation change.

Project Benefits:
- Opposite travelways designed as stand-alone roads where necessary to reduce earthwork, thereby allowing a less intrusive natural open space feel.
- Equivalent impact on public health, safety & general welfare.
- Equivalent on-going median maintenance by master maintenance corporation (HOA).
* WHEN METAL BEAM GUARD RAIL IS USED, 3' WIDTH SHALL BE INCREASED IN CONFORMANCE WITH CALTRANS STANDARD PLAN A77C3
A-18. **Modified Knuckle At Work in Ladera**
Per the approval of the County Chief Engineer and Orange County Fire Authority, modify County Standard Plan 1112 to allow reduced curb return radii at knuckles, as shown on following page:

Project Benefits:

- Traffic calming.
- Equivalent access for fire and emergency vehicles.
- Equivalent or better ease of circulation and traffic safety.
- Equivalent or better on-going maintenance costs.

Performance Criteria: The modified knuckle must still conform to County criteria regarding:

- Parking
- Lot frontage
- Guest parking
- Normal traffic movements
*Note: No parking allowed on the inside radius curve 25' prior to beginning of curve (BC), through the curve, and 25' past end of curve (EC)
A-19. **Cul-de-Sacs with Raised Landscape Median At Work in Ladera** (Modified)

Per the approval of the County Chief Engineer and Orange County Fire Authority, modify County Standard Plans 1107 and 1113 to allow raised landscaped medians in the center of cul-de-sacs. Raised landscape medians in the center of cul-de-sacs shall be allowed only when all of the following criteria are met:

**Project Benefits:**

- Traffic calming.
- An enhanced residential village ambiance due to a decrease in paved area within the neighborhood.
- A reduction in urban runoff due to the reduction in paved area.
- Equivalent access for fire and emergency vehicles.
- Equivalent or better ease of circulation and traffic safety.
- Equivalent or better on-going maintenance costs.

**Performance Standards for Standard 38-foot Radius Cul-de-Sac**

- a. Maximum 14-foot radius rock/paving stone apron, allowing for full weight of fire apparatus (4’ wide, sloping up to height of 7”).

- b. Maximum 20-foot radius landscaped median.

- c. Trees allowed in landscaped median shall have a mature canopy diameter of 34-feet or less. The appropriate landscape maintenance authority shall keep the canopy height outside the curb line of the median trimmed to at least 14-feet.

- d. Ground cover in landscaped median shall be of a type which will not damage fire apparatus tires.

- e. Special landscaped median designed to allow a modified “3-point” hammerhead configuration whereby all but the largest OCFA vehicles could perform a “3-point” turn in front of the landscaped island (38’ outside turning radius).

- f. Minimum 20-foot fire lane must provide access to each driveway on the cul-de-sac.

- g. Sprinklers are required for each home (including attic spaces) on the cul-de-sac street.

- h. Parking is allowed around the cul-de-sac.

* Landscape median may be increased if cul-de-sac bulb is larger than standard 38-foot radius.
THE RANCH PLAN ALTERNATIVE DEVELOPMENT STANDARDS

Cul-de-Sacs with Raised Landscape Median

March 14, 2007
A-20. Alternative Neighborhood Sidewalk Detail • Curb-Separated Walkway

At Work in Ladera  Per the approval of the Subdivision Committee and the County Chief Engineer, modify Standard Plan 1205 to allow special curb-separated sidewalk details, as shown below:

1. Scoreline patterns to start at driveway edges.
2. Paved surfaces - 4” min. thick concrete walks to receive light broom finish, 6” min. thick concrete driveway approaches to receive medium – heavy broom finish, per P.F.R.D. Std. Plan 1205.
3. Driveway surface to receive medium broom finish.
4. On driveways narrower than 15.0’ in width, reduce walk and driveway approach scoreline pattern to three (3) equal modules. On driveways wider than 18.0’ in width, increase walk and driveway approach scoreline pattern to five (5) equal modules.
5. Sidewalk scorelines to occur evenly spaced at 3’-4” min., 4’-6” max. measured along the centerline scoreline (between driveways), weakened plane joints to occur per P.F.R.D. Std. Plans 112-0, Note 3.
   - scorelines to be 1” min. depth, tooli'd with 1/8” radius edger.
   - “zip strips” are not to be used at weakened plane joints locations.
6. Curb return radius to be 4.0’ per Ladera Ranch Alternative Development Standard #A-11
7. Locate sub-drains and curb cores cuts beneath weakened plane joints.
8. Width of parkway as indicated on plans.
A-21. **Alternative Neighborhood Sidewalk Detail • Curb-Adjacent Walkway**

*At Work in Ladera*  Per the approval of the Subdivision Committee and the County Chief Engineer, modify Standard Plan 1205 to allow special curb-adjacent sidewalk details, as shown below:

Performance Criteria:

- Curb adjacent walk to occur at end of cul-de-sac conditions only when driveway approaches and/or utilities interfere with curb-separated walks.
A-22. **Alternative Driveway Approaches in Cul-de-Sac Conditions**

Per the approval of the Subdivision Committee and the County Chief Engineer, modify Standard Plan 1205 to allow special driveway approaches in cul-de-sac conditions, as shown below:

**Performance Criteria:**

- Curb adjacent walk to occur at end of cul-de-sac conditions only when driveway approaches and/or utilities interfere with curb-separated walks.

- Allowed in conjunction with ADS A-19.

A-24. **Storm Drain Pipes at Less Than 30” Minimum Cover Within Public Streets**

Per the approval of the County Chief Engineer, modify Local Drainage Manual, Chapter 1, Design Criteria, to allow storm drain pipes at less than 30” minimum cover within public streets.
A-27. **Public Street Transition at Parking Lot Turnaround**

Per the approval of the County Chief Engineer and Orange County Fire Authority, modify Standard Plan 1107 to allow Public Street Transition at Parking Lot Turnaround, as shown on the following page:

**Project Benefits:**

- Combines a cul-de-sac / turnaround function at the end of a public street with a private parking lot entry.

- Equivalent access for fire and emergency vehicles.

- Equivalent or better ease of circulation and traffic safety.

**Performance Standards:**

- Parking is not allowed along 20-foot street width sections. Appropriate decorative signage designating "no parking" areas (meeting code requirements per law enforcement approval), shall be located every 200 feet.

- Provide for street drainage per current County standards.
A-28. **Traffic Calming Islands**

Per the approval of the County Chief Engineer and Orange County Fire Authority, modify Standard Plan 1107 to allow traffic calming islands, as shown on the following page:

**Project Benefits:**

- An enhanced residential village ambiance due to increased landscaping and lower travel speeds within the neighborhood.
- Equivalent access for fire and emergency vehicles.
- Equivalent or better ease of circulation and traffic safety.

**Performance Standards:**

1. Applicant/engineer must meet with County Traffic Engineering staff for conceptual approval of use of ADS A-28 prior to roadway engineering.

2. Should only be used where there is an expectation that roadway geometry will encourage/allow travel speeds in excess of the design speed and that revisions to the geometry will not address the problem.

3. Allowed only on residential streets of 400 Average Daily Trips (ADT) or less.

4. Not allowed to occur after a vehicle has the ability to build up speed (for example, not allowed after a straightaway, sweeping curve, or sustained downgrade of 1,250-feet or more).

5. Not allowed on “through streets” – best located on streets serving local residential traffic.

6. Sequential spacing with other traffic calming islands, knuckles, T-intersections, etc. is important – best located so as to minimize “surprises” and minimize the ability of vehicles to build up speed.

7. Appropriate signage is required. Striping is optional.

8. Length of island not to exceed 150 feet.
ARMOR PAVEMENT (A.P.):

1. MUST BE CAPABLE OF SUPPORTING OCFA EQUIPMENT TRAFFIC (68,000 LB).
2. MAY BE STAMPED OR TEXTURED ASPHALT CONCRETE (AC) OR PORTLAND CEMENT CONCRETE (PCC); GROUTED RIVER ROCKS OR COBBLES; OR OTHER PAVEMENT MATERIAL AS APPROVED BY COUNTY.
3. SURFACE TEXTURE SHALL HAVE VISUALLY—OBVIOUS VERTICAL RELIEF (E.G., BUMPS, RUMBLE STRIPS, DEEPLY AND WIDELY INCISED PATTERN STAMPING, PROTRUDING COBBLES, ETC.) SUFFICIENT TO SIGNIFICANTLY DISCOURAGE AUTOMOBILE TRAFFIC, WHILE FUNCTIONING AS ARMOR FOR TRUCK AND OCFA EQUIPMENT RUN-OUT.
A-32a. **Residential Collector With Median**  
Per the approval of the County Chief Engineer, modify Standard Plan 1107, as shown on the following page:

**Project Benefits:**

- Traffic calming.
- An enhanced residential village ambiance due to a perceived decrease in paved area as seen from the intersection looking into the neighborhood.
- Equivalent access for fire and emergency vehicles.
- Equivalent or better ease of circulation and traffic safety.

**Performance Criteria:**

- No parking is allowed along 20-foot street width sections. Appropriate decorative signage designating "no parking" areas (meeting code requirements per law enforcement approval), shall be located every 200 feet.
- 1,200 to 6,000 ADT allowed
- Cross over drives every 850 feet to allow OCFA vehicles to turn around, per the following criteria: 4" dropped curb, paving or grass-crete to withstand 68,000 pounds with 90% compaction, inside turning radii 17-feet and outside turning radii 38-feet or greater.
- Parking pockets every 500' to allow for landscape maintenance vehicles, per the following criteria: 4" dropped curb, 4.5-feet deep, 25-feet long, paving or grass-crete (no weight limit).
- Residential Collectors with median with 20-foot street width sections not allowed within 100-feet of Fuel Modification/Wildland Interface Area (see Attachment 6).
- Curb to Curb width shall be increased to allow on-street parking adjacent to uses such as parks, multi-family residences and schools.
RESIDENTIAL COLLECTOR WITH MEDIAN

35 MPH MINIMUM DESIGN SPEED
ACCESS BY LOCAL STREETS OR PRIVATE COMMON DRIVEWAYS
ADT 1200–6000

** STREET WIDTH TO BE INCREASED WHERE ON-STREET PARKING IS NECESSARY
A-32b. **Reduced Width Residential Collector (With No Median)**
Per the approval of the County Chief Engineer, modify Standard Plan 1107, as shown on the following page:

**Project Benefits:**

- Traffic calming.
- An enhanced residential village ambiance due to a decrease in paved area as seen from the intersection looking into the neighborhood.
- A reduction in urban runoff due to the reduction in paved area.
- Equivalent or better parking serving surrounding residential neighborhoods.
- Equivalent access for fire and emergency vehicles.
- Equivalent or better ease of circulation and traffic safety.

**Performance Criteria:**

- No parking is allowed along 36-foot street width sections. Appropriate decorative signage designating "no parking" areas (meeting code requirements per law enforcement approval), shall be located every 200 feet.
- 1,200 to 3,000 ADT allowed
- Parking pockets every 500’ to allow for landscape maintenance vehicles, per the following criteria: 4” dropped curb, 4.5-feet deep, 25-feet long, paving or grass-crete (no weight limit).
- Curb to Curb width shall be increased to allow on-street parking adjacent to uses such as parks, multi-family residences and schools.
RESIDENTIAL COLLECTOR
35 MPH MINIMUM DESIGN SPEED
ACCESS BY LOCAL STREETS OR PRIVATE COMMON DRIVEWAYS
ADT 1200—6000

** STREET WIDTH TO BE INCREASED WHERE ON-STREET PARKING IS NECESSARY
Residential Local With Median
Per the approval of the County Chief Engineer, modify Standard Plan 1107, as shown on the following page:

Project Benefits:

- Traffic calming.

- An enhanced residential village ambiance due to a perceived decrease in paved area as seen from the intersection looking into the neighborhood.

- Equivalent or better parking serving surrounding residential neighborhoods.

- Equivalent access for fire and emergency vehicles.

- Equivalent or better ease of circulation and traffic safety.

Performance Criteria:

- No parking is allowed along 20-foot street width sections in areas with no residential frontage. Appropriate decorative signage designating "no parking" areas (meeting code requirements per law enforcement approval), shall be located every 200 feet.

- Residential single-family home driveway frontage would be allowed in limited locations, with 22-foot width to allow backing distance and on-street parking.

- 500 to 1,200 ADT allowed

- Parking accessibility and travel path for lots adjacent to island must be adequately maintained.

- Appropriate signage and striping must be provided.

- Adequate maneuvering must be demonstrated for all driveways backing onto streets adjacent to raised landscape islands.

- Maximum un-interrupted continuous length not to exceed 500 feet.
RESIDENTIAL LOCAL WITH MEDIAN

25 MPH MINIMUM DESIGN SPEED
DRIVEWAYS ALLOWED BOTH SIDES
ADT 500–1200
A-34. **Arterial Highway Bridges**

- **Open Median**
  Per the approval of the County Chief Engineer, modify Standard Plans 1100, 1102, 1104 and 1106 for all highway classifications to allow open medians and grade separations between bridge lanes, as shown on the following pages:

**Project Benefits:**

- Traffic calming.

- An enhanced rural ambiance due to a decreased paved area and increased aesthetics and views.

- A reduction in urban runoff due to the reduction in paved area.

- Equivalent access for fire and emergency vehicles.

- Equivalent or better ease of circulation and traffic safety.

**Performance Criteria:**

- Comply with Standard Plans 1100, 1102, 1104 and 1106 in all other aspects.
PRINCIPAL ARTERIAL HIGHWAY BRIDGE
OPEN MEDIAN ALTERNATIVE

THE RANCH PLAN ALTERNATIVE DEVELOPMENT STANDARDS

PRINCIPAL ARTERIAL HIGHWAY BRIDGE
OPEN MEDIAN ALTERNATIVE

March 6, 2007
MAJOR ARTERIAL HIGHWAY BRIDGE
OPEN MEDIAN ALTERNATIVE
SECONDARY ARTERIAL HIGHWAY BRIDGE OPEN MEDIAN ALTERNATIVE

CALTRANS TYPE 7
A-35.  **Arterial Highway Median and Parkway Widths**

Per the approval of the County Chief Engineer, modify Standard Plans 1100, 1101, 1103, 1105 and 1107 for all highway classifications to allow varying median and parkway widths, as shown on the following pages:

Project Benefits:

- Traffic calming.
- An enhanced rural ambiance due to an increase landscape area within arterial highway rights-of-way.
- Equivalent access for fire and emergency vehicles.
- Equivalent or better ease of circulation and traffic safety.

Performance Criteria:

- Comply with Standard Plans 1100, 1101, 1103, 1105 and 1107 in all other aspects.
ARterial HIGHway MEDIAN & PARKWAY WIDTHS

* 9’ MIN. – PRINCIPAL & MAJOR
  8’ MIN. – PRIMARY & SECONDARY
A-36. **Ribbon Curb**

Per the approval of the County Chief Engineer, modify Standard Plans 120-1-OC and 1107 to allow ribbon curbs consistent with County Standard Plans 1108, 1109 and 1110, as shown on the following page:

**Project Benefits:**

- A semi-rural village ambiance.
- Compliance with Water Quality Mitigation Measures of EIR 589 (certified by the Board of Supervisors on November 8, 2004).
- Equivalent on-going maintenance costs.
- Equivalent access for fire and emergency vehicles.
- Equivalent or better ease of circulation and traffic safety.

**Performance Criteria:**

- Allowed on Local Residential Streets only.
- Parkways to be maintained by Master Maintenance Corporation, not the County of Orange.
- Storm drainage shall be addressed to the satisfaction of the Director, RDMD (or designee) per approved drainage improvement plans and an approved Water Quality Management Plan.
RIBBON CURB

MAY BE USED IN PUBLIC
AND PRIVATE STREETS

THE RANCH PLAN ALTERNATIVE DEVELOPMENT STANDARDS

RIBBON CURB
A-37. **Model Home Trap Fencing (New)**
Per the approval of the County Chief Engineer, modify County Standard Plan 1801 (Item #22) to allow the following model home trap fencing solutions in order to avoid the need for double sidewalks (i.e., a private sidewalk inside the model trap fencing, and parallel public sidewalk outside the trap fencing):

a. **Mid-Block Crossing:** If homes are anticipated to be sold and occupied on the same street as the model home complex, AND there is a demand for pedestrian access that may conflict with the trap fencing restriction on the sidewalk in front of the model home complex, BUT a public sidewalk is available on the other side of the street, then an ADA-compliant pathway shall be provided (see dashed line across the street below), thereby allowing pedestrians to safely cross the street either at a driveway location or a Sidewalk Access Ramp (per the detail below) and use the alternative parallel sidewalk. The midblock crosswalk shall be accompanied by temporary advance warning signage for vehicles.
b. **Parallel Pedestrian Path:** If homes are anticipated to be sold and occupied on the same street as the model home complex, AND there is a demand for pedestrian access that may conflict with the trap fencing restriction on the sidewalk in front of the model home complex, but there is NO public sidewalk available on the other side of the street, THEN an ADA compliant pedestrian pathway shall be provided within the street adjacent to the curb. No parking shall be allowed, and pedestrians would divert from the sidewalk and safely enter and exit the parallel pedestrian path at either a driveway location or a Sidewalk Access Ramp (per the exhibit above).

c. **No Sidewalk Required:** If homes are NOT anticipated to be sold and occupied on the same street as the model homes, OR if there is NO demand for pedestrian access that may conflict with the trap fencing restriction on the sidewalk in front of the model home complex, then no public sidewalk is required in front of the model home complex.

**Performance Standards:**
- Prior to Certificates of Occupancy converting the model homes to their ultimate residential use, all trap fencing would be removed and pedestrians would have full access to the sidewalk in front of the model home complex.
- When pedestrians must be in the street (per scenarios “a” and “b” above), the street shall be cap paved (either a full street cap, or a feathered transition from the gutter to the asphalt in the vicinity of the striped crosswalk instead of a full street cap) such that there are no vertical impediments (i.e., no "lip" where the curb meets the street), thereby ensuring an ADA compliant pedestrian pathway.
- Any pedestrian pathways in the street (i.e., scenarios “a” and “b” above) shall be striped.
- Appropriate signage shall include, but not be limited to, the following:
  - "Pedestrian Crossing" for scenario “a” above
  - "No Parking, Pedestrian Path" for scenario “b” above
  - "No Pedestrian Access" for scenario “c” above
  - "No Parking" for instances where trap fencing or construction fencing is immediately adjacent to the curb face.

**Project Benefits:**
- Eliminates the need for double sidewalks.
- Allows for increased landscaping in front yards.
- Requires less impervious hardscape and impervious surface.
- Reduces urban runoff.
- Results in equivalent pedestrian safety.
Chapter B
B. Intersections
Some components of the Ranch Plan neighborhood village design philosophy require modifications to Public Street Intersection development standards in the Ranch Plan Planned Community Text and to appropriate County Standard Plans. These modifications include special residential intersection designs, limited tree planting in sightlines, modified sidewalk treatments at arterial intersections and other unique design solutions identified by the following Items #B-1 through B-8.

B-1. **Tapered Intersection At Work in Ladera**
Per the approval of the County Chief Engineer and Orange County Fire Authority, allow special residential intersection treatments at three-way and four-way intersections of local residential public streets, as shown on the following pages.

**Project Benefits:**

- Traffic calming.
- An enhanced residential village ambiance due to a perceived decrease in paved area as seen from the intersection looking into the neighborhood.
- Equivalent access for fire and emergency vehicles.
- Equivalent or better ease of circulation and traffic safety.

**Performance Criteria:**

- No parking is allowed along 20-foot street width sections in areas without residential frontage. Appropriate decorative signage designating "no parking" areas (meeting code requirements per law enforcement approval), shall be located every 200 feet.
- 800 ADT on through streets, 500 ADT on intersecting streets.
- County turning radius template must be met for CA Legal-65 vehicles.
- Additional County staff review required prior to implementation near a drop-off zone for a school or other high peak-hour traffic generating uses.
Per the approval of the Subdivision Committee and the County Chief Engineer, allow landscaping in intersection sight line "limited use area" zone in the limited instances identified below.

Performance Standards:

a. Trees are allowed to be planted per OC Standard Plan 1700 (as augmented by ADS C-6), but no closer than 30 feet on center provided standard sight distance is given.

b. Maximum height of plant material allowed to be 30 inches on residential streets and 18 inches for streets classified as collectors or higher provided standard sight distance is provided.

Project Benefits:

• A strengthened residential village ambiance due to enhanced landscaping at controlled intersections.

• Equivalent or better pedestrian and vehicular ease of circulation and safety.

• Equivalent or better on-going maintenance costs.
B-3. **Alternative Corner Sidewalks at Arterial Intersections**

At Work in Ladera

Per the approval of the Subdivision Committee, modify County Standard Plan 1111 to allow special corner sidewalk and landscape treatments at arterial intersections. All planting within right-of-way and limited use area is subject to approval per ADS B-2. All landscape and hardscape within the right-of-way is to be maintained by the Master Homeowners Association. All corner treatments shall meet current American Disability Act requirements.

Project Benefits:

- A strengthened residential village ambiance due to enhanced landscaping and hardscape treatments at arterial intersections.
- Equivalent or better impacts on public health, safety and general welfare.
- Equivalent or better impacts on the immediately adjacent property and other permitted uses in the vicinity.

---

B-5. **Controlled Intersection Warrants**

At Work in Ladera

Per the approval of the County Chief Engineer, allow controlled intersections per the following performance criteria:

Performance Criteria:

- Traffic signals may be allowed per CalTrans Estimated Traffic Warrant criteria
- Stop signs may be allowed per County All-way Stop Warrant (using estimated traffic volume)
- Controlled intersections may be allowed earlier than typical County practice, based on an agreement between the landowner & County regarding maintenance costs.

Project Benefits:

- Traffic calming & an increase in vehicular and pedestrian safety in the short term.
- Equivalent on-going maintenance costs to the County.
B-6. **Roundabouts**

Per the approval of the County Chief Engineer and Orange County Fire Authority (OCFA), the following are for the construction of single-lane, three-way or four-way roundabouts.

**Project Benefits:**

- Improved traffic flow.
- A strengthened residential village ambiance due to enhanced landscaping at the roundabout intersection.
- Equivalent or better impacts on public health, safety and general welfare.
- Equivalent or better impacts on the immediately adjacent property and other permitted uses in the vicinity.

**Performance Standards:**

1. Applicant/engineer must meet with County staff to determine appropriate design speed.
2. Typical dimensions are identified on the Roundabout Dimension Table (see Sheet 3 of 11).
3. Intersection angles less than a 75-degree or greater than 105-degree are not allowed.
4. Multiple lanes may be allowed only based on detailed review by County Chief Engineer, per appropriate capacity analysis methodology.
5. Neighborhood Electrical Vehicle (NEV) access: Allowed in traffic lane at or below roundabout design speeds of 25 miles per hour (assuming approaching streets are 35 mph or lower).
6. “Autoturn” software (or equivalent) shall be used to confirm maneuverability of CA Legal-65 vehicles (moving vans, sod-hauling trucks, etc.), which in turn ensures maneuverability by largest OCFA emergency vehicles and the largest trash hauling vehicles.
7. Line-of-sight issues addressed per Roundabout Sight Distance, sheet 4 of 11. Required sight distance dimensions based on design speed of approach roadway per County standards.
8. Provide roundabout illumination per illuminance levels in Exhibit 8-2 of the NCHRP Report 672 *Roundabouts: An Informational Guide* or Table 1 of the IES DG-19-08 *Design Guide for Roundabout Lighting*.
9. Bikes are allowed in traffic lane. Bike Ramps to sidewalks shall not be provided unless directed by the County.
10. Provide traversable truck apron capable of supporting OCFA emergency vehicles (68,000 pounds) (see Roundabout Details, Sheet 8 of 11),
NOTES:

1. LOCAL DEPRESSIONS FOR CATCH BASINS WITHIN 150' OF RIGHT EDGE OF ROUNDABOUT CIRCULATORY ROADWAY SHALL BE DESIGNED NOT TO EXCEED THE WIDTH OF THE GUTTER.

2. THE GUTTER PAN SHALL REMAIN OUTSIDE THE VEHICLE TRACKING WHEEL PATH WITHIN 150' OF RIGHT EDGE OF ROUNDABOUT CIRCULATORY ROADWAY, INCLUDING THE ROUNDABOUT CIRCULATORY ROADWAY.

3. NO LOCAL DEPRESSIONS FOR CATCH BASINS WITHIN SPLITTER ISLAND.

THE RANCH PLAN ALTERNATIVE DEVELOPMENT STANDARDS

ROUNDABOUT WITHOUT MEDIANS ON APPROACHING ROADWAYS

TRAVERSABLE TRUCK APRON. SEE SHEET 8
NON-TRAVERSABLE HARDSCAPE

SPLITTER ISLAND LENGTH SHOULD BE BETWEEN 50'-100' FOR SPEEDS 40 MPH OR LESS. A 100' LENGTH IS PREFERRED. FOR SPEEDS GREATER THAN 40 MPH THE SPLITTER ISLAND LENGTH SHOULD BE BETWEEN 150'-200'. A 200' LENGTH IS PREFERRED.

END BIKE LANE PRIOR TO ROUNDABOUT, TYPICAL
NOTES:

1. THE GUTTER PAN SHALL REMAIN OUTSIDE THE VEHICLE TRACKING WHEEL PATH WITHIN 150’ OF RIGHT EDGE OF ROUNDABOUT CIRCULATORY ROADWAY, INCLUDING THE ROUNDABOUT CIRCULATORY ROADWAY.

2. NO LOCAL DEPRESSIONS FOR CATCH BASINS WITHIN RAISED MEDIAN WITHIN 150’ OF RIGHT EDGE OF ROUNDABOUT CIRCULATORY ROADWAY.

THE RANCH PLAN ALTERNATIVE DEVELOPMENT STANDARDS

ROUNDABOUT WITH MEDIANS ON APPROACHING ROADWAYS
## Roundabout Dimensions

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Description</th>
<th>Round About Without Median</th>
<th>Round About Without Median</th>
<th>Round About With Median</th>
<th>Round About With Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Diameter</td>
<td>100'</td>
<td>120'</td>
<td>120'</td>
<td>140'</td>
</tr>
<tr>
<td>B</td>
<td>Curb Setback</td>
<td>3'</td>
<td>3'</td>
<td>3'</td>
<td>3'</td>
</tr>
<tr>
<td>C</td>
<td>Circulating Pavement Width</td>
<td>20'</td>
<td>20'</td>
<td>20'</td>
<td>20'</td>
</tr>
<tr>
<td>C'</td>
<td>Circulating Lane Width</td>
<td>16'</td>
<td>16'</td>
<td>16'</td>
<td>16'</td>
</tr>
<tr>
<td>D</td>
<td>Traverseable Truck Apron</td>
<td>7' – 10'</td>
<td>7' – 10'</td>
<td>7' – 10'</td>
<td>7' – 10'</td>
</tr>
<tr>
<td>E'</td>
<td>Approach Lane Width</td>
<td>12'</td>
<td>12’</td>
<td>12’</td>
<td>12’</td>
</tr>
<tr>
<td>F</td>
<td>Entry Radius</td>
<td>50’ – 100’</td>
<td>50’ – 100’</td>
<td>50’ – 100’</td>
<td>50’ – 100’</td>
</tr>
<tr>
<td>G</td>
<td>X-Walk Setback</td>
<td>See Note 1</td>
<td>See Note 1</td>
<td>See Note 1</td>
<td>See Note 1</td>
</tr>
<tr>
<td>H</td>
<td>Radius</td>
<td>2’</td>
<td>2’</td>
<td>2’</td>
<td>2’</td>
</tr>
<tr>
<td>I</td>
<td>Exit Radius</td>
<td>100’ – 200’</td>
<td>100’ – 200’</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>J</td>
<td>X-Walk Width</td>
<td>10’</td>
<td>10’</td>
<td>10’</td>
<td>10’</td>
</tr>
<tr>
<td>K</td>
<td>Approach Radius</td>
<td>–</td>
<td>–</td>
<td>600’</td>
<td>600’</td>
</tr>
<tr>
<td>L</td>
<td>Radius</td>
<td>3’</td>
<td>3’</td>
<td>3’</td>
<td>3’</td>
</tr>
<tr>
<td>M</td>
<td>Departure Lane Width</td>
<td>16’ Min.</td>
<td>16’ Min.</td>
<td>16’ Min.</td>
<td>16’ Min.</td>
</tr>
<tr>
<td>N</td>
<td>Curb Setback</td>
<td>1’</td>
<td>1’</td>
<td>1’</td>
<td>1’</td>
</tr>
<tr>
<td>O</td>
<td>Exit Radius</td>
<td>–</td>
<td>–</td>
<td>100’ – 200’</td>
<td>100’ – 200’</td>
</tr>
<tr>
<td>W</td>
<td>Roadway Width</td>
<td>20’</td>
<td>20’</td>
<td>18’ – 20’</td>
<td>18’ – 20’</td>
</tr>
</tbody>
</table>

**Notes:**
1. Crosswalk setbacks should be 35 to 40 feet from the outside edge of the circulating roadway for collector roads. In cases where the roundabout is in the vicinity of a school campus, recreational, or commercial area, crosswalk setbacks should be 40 to 50 feet from the outside edge of the circulating roadway. Setbacks for secondary highways should be 40 to 50 feet from the outside edge of the circulating roadway.

---

**The Ranch Plan Alternative Development Standards**

**Roundabout Dimension Table**
SIGHT DISTANCE LENGTH
INTERSECTION SIGHT DISTANCE

<table>
<thead>
<tr>
<th>SPEED (mph)</th>
<th>L1 &amp; L2 (ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>115</td>
</tr>
<tr>
<td>20</td>
<td>150</td>
</tr>
<tr>
<td>25</td>
<td>185</td>
</tr>
<tr>
<td>30</td>
<td>225</td>
</tr>
<tr>
<td>35</td>
<td>260</td>
</tr>
</tbody>
</table>

L1  SIGHT DISTANCE FROM DRIVER'S EYE TO APPROACHING VEHICLE FROM THE LEFT; USE SPEED OF APPROACH.
L2  SIGHT DISTANCE FROM DRIVERS EYE TO APPROACHING VEHICLE IN ROUNDABOUT; USE DESIGN SPEED OF ROUNDABOUT.

ROUNDABOUT SIGHT DISTANCE

25 MPH MAXIMUM DESIGN SPEED

- AREA FREE OF SIGHT OBSTRUCTIONS
- AREA WITH MINIMAL SIGHT OBSTRUCTIONS
<table>
<thead>
<tr>
<th>SPEED (mph)</th>
<th>L3 (ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>77.0</td>
</tr>
<tr>
<td>20</td>
<td>112.4</td>
</tr>
<tr>
<td>25</td>
<td>152.7</td>
</tr>
<tr>
<td>30</td>
<td>197.8</td>
</tr>
<tr>
<td>35</td>
<td>247.8</td>
</tr>
<tr>
<td>40</td>
<td>302.7</td>
</tr>
<tr>
<td>45</td>
<td>362.5</td>
</tr>
<tr>
<td>50</td>
<td>427.2</td>
</tr>
<tr>
<td>55</td>
<td>496.7</td>
</tr>
</tbody>
</table>

L3 SIGHT DISTANCE FROM DRIVER’S EYE TO CROSSWALK AND/OR OUTSIDE EDGE OF THE CIRCULATORY ROADWAY.

ROUNDABOUT
SIGHT DISTANCE

AREA FREE OF SIGHT OBSTRUCTIONS
L4 SIGHT DISTANCE FROM DRIVER’S EYE RELATED TO CIRCULATORY ROADWAY STOPPING CONDITION BASED ON CIRCULATORY ROADWAY SPEED.

<table>
<thead>
<tr>
<th>SPEED (mph)</th>
<th>L4 (ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>46.4</td>
</tr>
<tr>
<td>15</td>
<td>77.0</td>
</tr>
<tr>
<td>20</td>
<td>112.4</td>
</tr>
</tbody>
</table>

ROUNDABOUT
SIGHT DISTANCE

AREA FREE OF SIGHT OBSTRUCTIONS
SECTION A-A
TYPICAL SECTION

PERIMETER LANDSCAPE AREA
6' MIN. LOW LEVEL LANDSCAPING
1' MAX LANDSCAPING HEIGHT

LINE OF SIGHT
LIMITED USE AREA

STREET LIGHT
OR FIRE HYDRANT

STRIPED CENTER
ISLAND EXTENSION

CIRCULATING
LANE WIDTH

TRUCK APRON
CURB PER
SHEET 8

UNLIMITED
PLANTING

ATTACHED SIDEWALK OR
DETACHED SIDEWALK WITH
PARKWAY. SEE SHEET 10 FOR
ATTACHED SIDEWALK AND
GUTTER AT ROUNDABOUT

CIRCULATING
PAVEMENT
WIDTH

TRUCK USE

CENTER ISLAND
LANDSCAPING

TRaversable TRUCK APRON
PER SHEET 8
TRUCK APRON DETAIL

NOTE:

1. TRAVERSABLE TRUCK APRON MUST BE CAPABLE OF SUPPORTING OCFA EQUIPMENT TRAFFIC (68,000 LB).
2. MAY BE STAMPED OR TEXTURED PORTLAND CEMENT CONCRETE (PCC); "DRIVEABLE GRASS/TURF BLOCK/GRASSCRETE/ GRASS PAVE"; CONCRETE PAVERS; OR OTHER PAVEMENT MATERIAL AS APPROVED BY COUNTY.
3. MEDIAN ISLAND LANDSCAPE SHALL BE DESIGNED WITH AREA DRAIN SYSTEM TO CAPTURE SURFACE DRAINAGE (TO BE SHOWN ON LANDSCAPE PLANS).
4. SOIL CONDITIONS WITHIN MEDIAN ISLAND MAY DETERMINE THE NEED FOR ADDITIONAL SUB-DRAIN SYSTEMS.
CONCRETE CURB, GUTTER, AND SIDEWALK AT ROUNDBOUFF

THE RANCH PLAN ALTERNATIVE DEVELOPMENT STANDARDS

ROUNDABOUT DETAILS

Page 72
AND ONE-WAY REFLECTIVE YELLOW MARKERS INSTALLED ON CURB.

TYPE N(CA)

NOTES:

1. SEE THE CALIFORNIA MANUAL ON TRAFFIC CONTROL DEVICES (CAMUTCD) FOR ADDITIONAL OPTIONAL SIGNS AND ADDITIONAL SIGNS REQUIRED FOR TWO LANE ROUNDABOUT APPROACHES.

2. NO ROADSIDE SIGNS SHALL BE INSTALLED WITHIN THE ROUNDABOUT TRAVERSABLE APRON.
NOTE:
SEE THE CALIFORNIA MANUAL ON TRAFFIC CONTROL DEVICES (CAMUTCD) FOR ADDITIONAL OPTIONAL STRIPING AND PAVEMENT MARKINGS.

4" WIDE WHITE STRIPE FOR PORTION OF STRIPE NOT ADJACENT TO SPLITTER ISLANDS

4" WIDE YELLOW STRIPE ALONG SPLITTER ISLAND

100' MIN.

4" WIDE DOUBLE YELLOW SPLITTER ISLAND TRANSITION STRIPE

SHARED LANE MARKING PER CALTRANS STANDARD PLAN A24A.

50' – 200'

6" WIDE WHITE BIKE LANE MERGE STRIPE PRIOR ROUNDABOUT

6" WIDE WHITE BIKE LANE STRIPE

4" WIDE DOUBLE YELLOW CENTER LINE STRIPE

THE RANCH PLAN ALTERNATIVE DEVELOPMENT STANDARDS

TYPICAL ONE LANE ROUNDABOUT APPROACH STRIPING

March 14, 2007
Modified:
September 14, 2011
Modified:
November 14, 2014

Page 74

ADS
B-6
Sheet 11 of 11
B-7. Alternative Residential Corner Ramp Condition • Tapered Intersection
   At Work in Ladera
   Per the approval of the Subdivision Committee and the County Chief Engineer, allow special
   ramp conditions on local street corners with tapers, as shown on the following exhibit:

B-8a. Residential Corner Ramp Condition • At Typical Intersection At Work in Ladera
   Per the approval of the Subdivision Committee and the County Chief Engineer, allow special
   ramp conditions on typical local street corners (without tapers), as shown on the following
   exhibit:
SECTION A-A

LESS THAN 8'-0" RAD=3'-0" MORE THAN AND EQUAL TO 8'-0" RAD=6'-0"

SEE RADIUS
NOTE ABOVE
CATCH BASIN WHERE OCCURS

LANDSCAPING IN THE "LIMITED USE AREA" WILL COMPLY WITH COUNTY STANDARD PLAN 1117

THE RANCH PLAN ALTERNATIVE DEVELOPMENT STANDARDS

RESIDENTIAL CORNER RAMP AT TAPERED INTERSECTION

Page 76
SECTION A-A

LESS THAN 8'-0" RAD=3'-0"
MORE THAN AND EQUAL TO 8'-0" RAD=6'-0"

SEE Radius
NOTE ABOVE
CATCH BASIN
WHERE OCCURS

3' RAD
(SCORE LINES
(TYP.)

LANDSCAPING IN THE "LIMITED
USE AREA" WILL COMPLY WITH
COUNTY STANDARD PLAN 1117

DETECTABLE WARNING
SURFACE PER COUNTY
STANDARD PLAN 1115

8.33% MAX

THE RANCH PLAN ALTERNATIVE DEVELOPMENT STANDARDS

RESIDENTIAL CORNER RAMP AT
TYPICAL INTERSECTION

March 14, 2007
Modified: September 14, 2011
B-9  **Modified Color of Curb Ramp Detectable Warning Surface**
Per the approval of the County Engineer, clarify that County Standard Plan 1115 may allow dark gray Curb Ramp Detectable Warning Surfaces within the Ranch Plan planned community, in addition to yellow (Federal Standard 595 B. Color No. 33538), per the June 30, 2007 report prepared by Westat for the Federal Highway Administration. ([http://www.access-board.gov/research/dw-fhwa/summary.htm](http://www.access-board.gov/research/dw-fhwa/summary.htm))

Performance Standards:

a. Only concrete curb ramps will be allowed to use the alternative dark gray Curb Ramp Detectable Warning Surfaces, based on demonstrable contrast effectiveness per the FHWA study data:

<table>
<thead>
<tr>
<th>Dark Gray</th>
</tr>
</thead>
</table>

b. Asphalt or brick curb ramps are not typical or currently contemplated within the Ranch Plan planned community. If curb ramps constructed of asphalt or brick (or another material) are deemed acceptable by OC Public Works, alternative detectable warning surface colors may be approved, but only on a case-by-case basis.

c. All other aspects of Standard Plan 1115 would remain in force, including but not limited to the following:
- Dimensions of Detectable Warning Surface
- Materials
- Size and shape of truncated domes
- Water absorption
- Slip, chemical, light exposure and freeze-thaw resistance
- Tensile and tear strength
- Smoke density
- Hardness, specific gravity and weight loss testing

Project Benefits:
- Equivalent handicap access and safety at curb ramps.
Chapter C
C. Landscape and Hardscape
Some components of the Ranch Plan neighborhood village design philosophy require modifications to Landscape and Hardscape development standards in the Ranch Plan Planned Community Text and to appropriate County Standard Plans. These modifications include reduced hardscape in medians and raised planters, modified tree lists and planting standards, private improvements in medians and rights-of-way and other unique design solutions identified by the following Items #C-1 through C-3.

C-1. Tree List and Planting Widths **At Work in Ladera**
Per the approval of the Subdivision Committee, modify County Standard Plan 1700 to allow the following additions or modifications to the street tree list and planting width standards. Trees marked by the asterisk (*) have been added to the County street tree list. Trees marked by two asterisks (**) are prohibited from being clustered in the fuel modification interface area by the Orange County Fire Authority.

<table>
<thead>
<tr>
<th>Species</th>
<th>County Minimum Planting Width (feet)</th>
<th>Ranch Plan Planting Width (feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albizia julibrissin**</td>
<td>14.0</td>
<td>6.5</td>
</tr>
<tr>
<td>Alnus rhombifolia</td>
<td>14.0</td>
<td>6.5</td>
</tr>
<tr>
<td>Eucalyptus species** (except Blue gum)</td>
<td>6.0</td>
<td>4.5</td>
</tr>
<tr>
<td>*Fraxinus velutina</td>
<td>N.A.</td>
<td>6.5</td>
</tr>
<tr>
<td>Pistacia chinensis*</td>
<td>6.0</td>
<td>4.5</td>
</tr>
<tr>
<td>*Platanus racemosa (Calif. sycamore)</td>
<td>N.A.</td>
<td>20.0</td>
</tr>
<tr>
<td><em>Prunus cerasifera</em>*</td>
<td>N.A.</td>
<td>4.5</td>
</tr>
<tr>
<td><em>Pyrus calleryana</em>*</td>
<td>N.A.</td>
<td>4.5</td>
</tr>
<tr>
<td>*Schinus molle (Calif. pepper)</td>
<td>N.A.</td>
<td>20.0</td>
</tr>
<tr>
<td>Quercus ilex (Holly oak)</td>
<td>6.0</td>
<td>4.5</td>
</tr>
<tr>
<td>Sapindus sebiferum</td>
<td>N.A.</td>
<td>5.0</td>
</tr>
<tr>
<td>Zelkova serrata</td>
<td>N.A.</td>
<td>6.5</td>
</tr>
</tbody>
</table>

Performance Standards:
- Tree species listed above followed by a check mark (\) must comply the following alternative **Planting Width** criteria:
  a. Adequate parkway tree irrigation must be provided, either from an irrigation line in the street right-of-way or a tree bubbler system connected to each individual residence.
  b. Adequate root barriers and staking must be provided.
  c. Root pruning practices must included in community maintenance specifications.
  d. Root pruning and tree trimming must be the responsibility of the Master Homeowners Association.

Project Benefits:
- Allows a diversity of tree species that blends with the surrounding Ranch Mission Viejo woodland environment.
- Equivalent or better impacts on public health, safety and general welfare.
- Equivalent or better impacts on the immediately adjacent property and other permitted uses in the vicinity.
C-2. **Hardscape in Medians and Raised Planters** At Work in Ladera

Per the approval of the County Chief Engineer, modify County Standard Plan 1114 *such* as to not require hardscape within medians of 6 feet or more in width on public arterial and collector streets or within raised planters in public local residential streets unless they are less than 3 feet in width. Median islands 3 feet or less in width will be paved with enhanced concrete or paver units. These modified standards are allowed when specially designed curb sections, drainage system and modified irrigation system are used to reduce damage from surface drainage per the following performance criteria:

Performance Standards:

- These **Reduced Hardscape** standards would apply only if all of the following criteria are evident:
  
  a. Positive drainage to the center of the median, if it is not a sloped median.
  
  b. Runoff to be collected in drainage devices.
  
  c. Irrigation system designed to eliminate overspray onto adjacent roadway (See Exhibit 8).
  
  d. Placement of plant material to not to obstruct flow of water to collection points.
  
  e. Plant materials list minimizes maintenance and water consumption.
  
  f. Curb and gutter allowed in superelevated roadway sections.
  
  g. Deep lift pavement/sub drain detail not required on the high side of median.

Project Benefits:

- A semi-rural village ambiance.

- Less uninterrupted hardscape and impervious surfaces.

- A reduction in urban runoff.

- Equivalent ease of circulation and traffic safety.
COUNTY STANDARD CURB AND GUTTER

PRIMARY DRAIN LINE

POSITIVE, UNINTERRUPTED FLOW TO DRAINAGE DEVICE

ATRIUM TYPE DRAINAGE DEVICE SPACING BASED UPON ROADWAY GRADE (MAX. 100' O.C. / MIN. 50' O.C.)

COUNTY STANDARD CURB AND GUTTER

ATRIUM TYPE DRAINAGE DEVICE (size & type based on hydraulic flows) SPACING BASED UPON ROADWAY GRADE (MAX. 100' O.C. / MIN. 50' O.C.)

PRIMARY DRAIN LINE

2'-0"

4'-0"

POSITIVE, UNINTERRUPTED FLOW TO DRAINAGE DEVICE

SLOPE VARIES: 5:1 TYPICAL / 2:1 MAXIMUM

NATURAL SWALE WITH INLETS TO DRAIN SYSTEM ON A REGULAR INTERVAL

5' BUBBLER/DRIP IRRIGATION ZONE ON MEDIANS 15' OR LESS IN WIDTH. (NO OVERHEAD SPRAY IRRIGATION TO OCCUR IN THIS ZONE.)

OVERHEAD SPRAY IRRIGATION ALLOWED IF MEDIAN EXCEEDS 15' IN WIDTH.

2'-0" MIN.
C-3. **Private Improvements in At Work in Ladera Medians and Rights-of-Way**

Per the approval of the Subdivision Committee and the County Chief Engineer, allow private improvements within public street rights-of-way as shown on the exhibit at right. Private signage improvements allowed within public arterial rights-of-way include thematic community, village or neighborhood entry monumentation and thematic landscaping. Design elements would not occur within intersection sightlines or limited use areas.

**Project Benefits:**

- A consistent thematic landscape and hardscape identity throughout the community.
- Equivalent or better impacts on public health, safety and general welfare.
- Equivalent or better impacts on the immediately adjacent property and other permitted uses in the vicinity.
- Equivalent or better on-going maintenance costs.
C-5. **Trees Planted Within Fifty Feet of Intersection**

Per the approval of the Subdivision Committee and the County Chief Engineer, modify County Standard Plan 1700 (Planting Criteria 1.a – Horizontal Plane) to allow trees to be planted within fifty (50) feet from an intersecting street measured from the intersecting right-of-way lines.

Performance Standards:

- This modification shall be allowed if the following criteria are met:
  
  a. Limited planting of trees and landscaping within fifty (50) feet allowed as long as these plantings do not obstruct the line-of-sight for approaching vehicles (see ADS B-2).

  b. The following species of trees are allowed to be planted between 5-feet to 10-feet of each residential driveway because they are not anticipated to grow to an eventual diameter greater than 18-inches:

  - From OC Std Plan 1700 Street Tree List:
    1. Agonis flexuosa (Australian Willow, Peppermint)
    2. Alnus rhombifolia (White Alder)
    3. Bauhinia baaleana (King Orchid Tree)
    4. Koelreuteria bipinnata (Chinese Lantern Tree)
    5. Lagerstroemia indica (Crape Myrtle)
    6. Liquidambar styraciflua (American Sweet Gum)
    7. Magnolia grandiflora (Southern Magnolia)
    8. Malaleuca quinquenervia (Cajeput Tree)
    9. Pittosporum viridiflorum (Cape Pittosporum)
   10. Platanus acerifolia (London Plane Tree)
   11. Podocarpus gracilior (Fern Pine)
   12. Quercus ilex (Holly Oak)
   13. Tristania conferta (Brisbane Box)
   14. Umbellularia Californica (California Bay Laurel)

  - From ADS C-6 Street Tree List:
   1. Citrus sp. (Varies)
   2. Elaeocarpus decipiens (Japanese Blueberry Tree)
   3. Jacaranda mimosifolia (Jacaranda)
   4. Koelreuteria bipinnata (Chinese Flame Tree)
   5. Lagerstroemia hybrid (“Muskogee”, Crape Myrtle)
   6. Lagerstroemia hybrid (“Natchez”, Crape Myrtle)
   7. Laurus nobilis (Sweet Bay)
   8. Podocarpus henkelii (Long Leafed Yellow Wood)
   9. Podocarpus macrophyllus (Yew Pine)
  11. Ulmus parvifolia (“Sempervirens”, Evergreen Chinese Elm)

  c. The homeowners association would be responsible for maintenance.

Project Benefits:

- A strengthened residential village ambiance due to enhanced landscaping.
- Equivalent or better on-going maintenance costs.
C-6  **Additional Parkway and Street Median Trees**

Per the approval of the Director, OC Planning and the County Chief Engineer, allow an expansion of County Standard Plan 1700 (Parkway and Street Median Trees) to allow the following species to be planted in public rights-of-way within the Ranch Plan. All planting requirements in Standard Plan 1700 shall be followed. This ADS allows the Landscape Architect to choose from the addition species listed on the ADS C-6 exhibit, based on site suitability.

NOTE: Placement of trees within roundabout medians regulated by ADS B-6, Sheet 7 of 11

**Performance Standards:**

a) Additional Standard Plan 1700 Parkway and Street Median Trees (see exhibit on next page) within the rights-of-way of public local streets and arterial highways, as reviewed and approved by the Orange County Fire Authority.

b) The Ranch Plan shall only allow Trees from Standard 1700 that are allowed by Ranch Plan Fire Protection Program Section C.4 and C.8.A.

c) The street trees allowed in parkways by ADS C-6 will not result in any portion of the trunk being located within 24” of curb-face. If any individual tree planted within the parkway eventually grows to a diameter whereby the trunk is 24-inches from the curb-face, the maintenance contractor shall remove that individual tree.

**Project Benefits:**

- Increased water conservation.

C-7  **Additional Drought Tolerant Plants**

Per the approval of the Director, OC Planning and the County Chief Engineer, allow an expansion of County Standard Plan 1701 (Drought Tolerant Plant List) to add the trees, vines, shrubs, grasses and succulents to the list of species allowed within public rights-of-way within the Ranch Plan. As stated in Standard Plan 1701, the objective is to provide landscaping which is aesthetic initially and will retain its aesthetic appeal with time, yet is lower in maintenance and water requirements than traditional planting. It is required that a landscape plan be developed by a licensed Landscape Architect, and that selections from the list on the ADS C-7 exhibit be made be made by the Landscape Architect based on site suitability as long as the species selected are in compliance with Orange County Fire Authority requirements.

Drought tolerance refers to the degree to which a plant is adapted to arid or abnormal low rainfall conditions. Drought tolerant plants native to Southern California typically do not need supplemental irrigation, with the exception of plant establishment.

Addition to Standard Plan 1701 also allows inclusion as part of Standard Plan 1700 (Street Tree List), as the County of Orange is supportive of native and drought tolerant species within public road rights-of-way.

**Performance Standards:**

a) Allow within the rights-of-way of public local streets and arterial highways

**Project Benefits:**

- Increased water conservation.
<table>
<thead>
<tr>
<th>BOTANICAL NAME</th>
<th>COMMON NAME</th>
<th>Type</th>
<th>Height</th>
<th>Spread</th>
<th>Minimum Planter Width from face of curb, and ongoing compliance with Performance Standard C-6 (c)</th>
<th>Spacing</th>
<th>Special Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Citrus sp.</td>
<td>Varies</td>
<td>E</td>
<td>20</td>
<td>20</td>
<td>5</td>
<td>20</td>
<td>Nitrogen Fertilizer</td>
</tr>
<tr>
<td>Dracaena draco</td>
<td>Dragon Tree</td>
<td>E</td>
<td>20</td>
<td>20</td>
<td>10</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Elaeocarpus decipiens</td>
<td>Japanese Blueberry Tree</td>
<td>E</td>
<td>40</td>
<td>15</td>
<td>5</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Jacaranda mimosifolia</td>
<td>Jacaranda</td>
<td>D</td>
<td>35</td>
<td>20</td>
<td>5</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Koelreuteria bipinnata</td>
<td>Chinese Flame Tree</td>
<td>D</td>
<td>30</td>
<td>30</td>
<td>6</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>Lagerstroemia hybrid</td>
<td>'Muskogee'</td>
<td>D</td>
<td>25</td>
<td>12</td>
<td>5</td>
<td>12</td>
<td>Mildew resistant.</td>
</tr>
<tr>
<td>Lagerstroemia hybrid 'Natchez'</td>
<td>Crape Myrtle</td>
<td>D</td>
<td>25</td>
<td>12</td>
<td>5</td>
<td>12</td>
<td>Mildew resistant.</td>
</tr>
<tr>
<td>Laurus nobilis</td>
<td>Sweet Bay</td>
<td>E</td>
<td>20</td>
<td>20</td>
<td>5</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Platanus racemosa</td>
<td>California Sycamore</td>
<td>D</td>
<td>80</td>
<td>60</td>
<td>10 or 20</td>
<td>40</td>
<td>If planted in medians of roadways, this species shall be planted at least 5' from the face of curb</td>
</tr>
<tr>
<td>Podocarpus henkelii</td>
<td>Long Leafed Yellow Wood</td>
<td>E</td>
<td>40</td>
<td>18</td>
<td>5</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>Podocarpus macrophyllus</td>
<td>Yew Pine</td>
<td>E</td>
<td>30</td>
<td>12</td>
<td>5</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>'Bradford'</td>
<td>Bradford Pear</td>
<td>D</td>
<td>50</td>
<td>30</td>
<td>5</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>Quercus agrifolia</td>
<td>Coastal Live Oak</td>
<td>E</td>
<td>40</td>
<td>50</td>
<td>6</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>Quercus engelmannii</td>
<td>Mesa Oak</td>
<td>E</td>
<td>60</td>
<td>50</td>
<td>5 or 14</td>
<td>40</td>
<td>If planted in medians of roadways, this species shall be planted at least 5' from the face of curb</td>
</tr>
<tr>
<td>Quercus virginiana</td>
<td>Southern Live Oak</td>
<td>E</td>
<td>60</td>
<td>120</td>
<td>5</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>&quot;Sempervirens&quot;</td>
<td>Evergreen Chinese Elm</td>
<td>E</td>
<td>40+</td>
<td>30+</td>
<td>4</td>
<td>30</td>
<td></td>
</tr>
</tbody>
</table>

**RANCH PLAN ALTERNATIVE DEVELOPMENT STANDARDS**

**ADDITIONAL STANDARD PLAN 1700 PARKWAY AND STREET MEDIAN TREES**
Placement of trees within Roundabout Medians regulated by ADS B-6, Sheet 7 of 11

**ADS**

**C-6**

Sheet 1 of 1
<table>
<thead>
<tr>
<th>BOTANICAL NAME</th>
<th>COMMON NAME</th>
<th>Type</th>
<th>Qualities</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bougainvillea</td>
<td>San Diego Red</td>
<td>Vine</td>
<td>LSW, FR</td>
<td>Prune late winter.</td>
</tr>
<tr>
<td>Clytostoma callisetegioides</td>
<td>Violet Trumpet Vine</td>
<td>Vine</td>
<td>MSW</td>
<td></td>
</tr>
<tr>
<td>Distictus buccinatoria</td>
<td>Blood Red Trumpet Vine</td>
<td>Vine</td>
<td>MSW</td>
<td>Prune late winter.</td>
</tr>
<tr>
<td>Hibbertia scandens</td>
<td>Guinea Gold Vine</td>
<td>Vine</td>
<td>MSW</td>
<td>Prune late winter.</td>
</tr>
<tr>
<td>Pandorea pandorana</td>
<td>Wonga Wonga Vine</td>
<td>Vine</td>
<td>MSW</td>
<td></td>
</tr>
<tr>
<td>Wisteria sinensis</td>
<td>Chinese Wisteria</td>
<td>Vine</td>
<td>MSW</td>
<td></td>
</tr>
<tr>
<td>Agapanthus africanus</td>
<td>'Desert Carpet'</td>
<td>Shrub</td>
<td>NSW, FR</td>
<td></td>
</tr>
<tr>
<td>Alyogyne huegeli</td>
<td>Blue Hibiscus</td>
<td>Shrub</td>
<td>LSW</td>
<td></td>
</tr>
<tr>
<td>Anigozanthus 'Bush Gold'</td>
<td>Kangaroo Paw</td>
<td>Shrub</td>
<td>LSW</td>
<td></td>
</tr>
<tr>
<td>Anigozanthus 'Harmony'</td>
<td>Kangaroo Paw</td>
<td>Shrub</td>
<td>LSW</td>
<td></td>
</tr>
<tr>
<td>Bougainvillea 'Raspberry Ice'</td>
<td>Bougainvillea</td>
<td>Shrub</td>
<td>LSW, FR</td>
<td></td>
</tr>
<tr>
<td>Bougainvillea 'San Diego Red'</td>
<td>Bougainvillea</td>
<td>Shrub</td>
<td>LSW, FR</td>
<td></td>
</tr>
<tr>
<td>Buddlejia davidii x weyeriana</td>
<td>Butterfly Bush</td>
<td>Shrub</td>
<td>MSW, FR</td>
<td></td>
</tr>
</tbody>
</table>
## ADDITIONAL STANDARD PLAN 1701 DROUGHT TOLERANT PLANTS

### LEGEND

<table>
<thead>
<tr>
<th>Type</th>
<th>Qualities</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSW</td>
<td>No Summer Water</td>
<td>FR - Fire Retarding</td>
</tr>
<tr>
<td>LSW</td>
<td>Low Summer Water</td>
<td>CT - Clay Tolerant</td>
</tr>
<tr>
<td>MSW</td>
<td>Med. Summer Water</td>
<td></td>
</tr>
</tbody>
</table>

### BOTANICAL NAME

<table>
<thead>
<tr>
<th>COMMON NAME</th>
<th>Type</th>
<th>Qualities</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buxus japonica 'Green Beauty'</td>
<td>Shrub</td>
<td>MSW</td>
<td></td>
</tr>
<tr>
<td>Japanese Boxwood</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Callistemon viminalis 'Little John'</td>
<td>Shrub</td>
<td>LSW, FR</td>
<td></td>
</tr>
<tr>
<td>Dwarf Bottlebrush</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cistus x hybridus</td>
<td>Shrub</td>
<td>LSW, FR</td>
<td></td>
</tr>
<tr>
<td>White Rockrose</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clivia miniata</td>
<td>Shrub</td>
<td>MSW</td>
<td>Poisonous if ingested.</td>
</tr>
<tr>
<td>Kaffir Lily</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coleonema pulchrum</td>
<td>Shrub</td>
<td>MSW</td>
<td></td>
</tr>
<tr>
<td>Breath of Heaven</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Convolvulus sabatius</td>
<td>Shrub</td>
<td>LSW</td>
<td></td>
</tr>
<tr>
<td>Ground Morning Glory</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cotoneaster horizontalis</td>
<td>Shrub</td>
<td>MSW</td>
<td></td>
</tr>
<tr>
<td>Rock Cotoneaster</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cotoneaster microphyllus</td>
<td>Shrub</td>
<td>MSW</td>
<td></td>
</tr>
<tr>
<td>Rockspray Cotoneaster</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dianella caerulea 'Casitas Springs'</td>
<td>Shrub</td>
<td>MSW</td>
<td></td>
</tr>
<tr>
<td>Gray Paroo Lily</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dianella tasmanica 'Variegata'</td>
<td>Shrub</td>
<td>LSW</td>
<td></td>
</tr>
<tr>
<td>White Striped Tasman Lily</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dietes bicolor</td>
<td>Shrub</td>
<td>MSW, FR</td>
<td></td>
</tr>
<tr>
<td>Fortnight Lily</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Euonymus japonicus 'Microphyllus'</td>
<td>Shrub</td>
<td>MSW, FR</td>
<td></td>
</tr>
<tr>
<td>Box-Leaf Euonymus</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hemerocallis species</td>
<td>Shrub</td>
<td>MSW, FR</td>
<td></td>
</tr>
<tr>
<td>Daylily</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heuchera sanguinea</td>
<td>Ground Cover</td>
<td>LSW</td>
<td>O.C. native.</td>
</tr>
<tr>
<td>Coral Bells</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## ADDITIONAL STANDARD PLAN 1701 DROUGHT TOLERANT PLANTS

<table>
<thead>
<tr>
<th>BOTANICAL NAME</th>
<th>COMMON NAME</th>
<th>Type</th>
<th>Qualities</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lavandula angustifolia</td>
<td>English Lavender</td>
<td>Shrub</td>
<td>LSW, FR</td>
<td></td>
</tr>
<tr>
<td>Lavandula stoechas</td>
<td>Spanish Lavander</td>
<td>Shrub</td>
<td>LSW, FR</td>
<td></td>
</tr>
<tr>
<td>Lavatera maritima</td>
<td>Tree Mallow</td>
<td>Shrub</td>
<td>LSW</td>
<td></td>
</tr>
<tr>
<td>Leptospermum scoparium 'Gaiety Girl'</td>
<td>New Zealand Tea Tree</td>
<td>Shrub</td>
<td>LSW</td>
<td>Flowers attract bees.</td>
</tr>
<tr>
<td>Ligustrum japonicum 'Texanum'</td>
<td>Wax Leaf Privet</td>
<td>Shrub</td>
<td>MSW, FR</td>
<td></td>
</tr>
<tr>
<td>Lonicera japonica 'Halliana'</td>
<td>Japanese Honeysuckle</td>
<td>Ground Cover</td>
<td>MSW, FR</td>
<td></td>
</tr>
<tr>
<td>Myoporum parvifolium</td>
<td>No Common Name</td>
<td>Ground Cover</td>
<td>MSW, FR</td>
<td></td>
</tr>
<tr>
<td>Nandina domestica 'Harbour Dwarf'</td>
<td>Heavenly Bamboo</td>
<td>Shrub</td>
<td>MSW</td>
<td></td>
</tr>
<tr>
<td>Nandina domestica 'Gulf Stream'</td>
<td>Heavenly Bamboo</td>
<td>Shrub</td>
<td>MSW</td>
<td></td>
</tr>
<tr>
<td>Pelargonium peltatum</td>
<td>Ivy Geranium</td>
<td>Ground Cover</td>
<td>MSW, FR</td>
<td></td>
</tr>
<tr>
<td>Phormium tenax 'Apricot Queen'</td>
<td>Flax</td>
<td>Shrub</td>
<td>MSW</td>
<td></td>
</tr>
<tr>
<td>Phormium tenax 'Bronze Baby'</td>
<td>Flax</td>
<td>Shrub</td>
<td>MSW</td>
<td></td>
</tr>
<tr>
<td>Phormium tenax 'Jack Spratt'</td>
<td>Flax</td>
<td>Shrub</td>
<td>MSW</td>
<td></td>
</tr>
<tr>
<td>Phormium tenax 'Maori Maiden'</td>
<td>Flax</td>
<td>Shrub</td>
<td>MSW</td>
<td></td>
</tr>
</tbody>
</table>
### ADDITIONAL STANDARD PLAN 1701 DROUGHT TOLERANT PLANTS

**LEGEND**
- NSW - No Summer Water
- LSW - Low Summer Water
- MSW - Med. Summer Water
- FR - Fire Retarding
- CT - Clay Tolerant

<table>
<thead>
<tr>
<th>BOTANICAL NAME</th>
<th>COMMON NAME</th>
<th>Type</th>
<th>Qualities</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phormium tenax 'Tom Thumb'</td>
<td>Flax</td>
<td>Shrub</td>
<td>MSW</td>
<td>Carefully head back &amp; trim. Does not look good sheared.</td>
</tr>
<tr>
<td>Pittosporum t. 'Crème de Mint'</td>
<td>Variegated Dwarf Tobira</td>
<td>Shrub</td>
<td>MSW</td>
<td>Carefully head back &amp; trim. Does not look good sheared.</td>
</tr>
<tr>
<td>Pittosporum t. 'Variegata'</td>
<td>Variegated Tobira</td>
<td>Shrub</td>
<td>MSW</td>
<td>Carefully head back &amp; trim. Does not look good sheared.</td>
</tr>
<tr>
<td>Pittosporum t. 'Wheeler's Dwarf'</td>
<td>Wheelers Dwarf</td>
<td>Shrub</td>
<td>MSW</td>
<td></td>
</tr>
<tr>
<td>Pittosporum tenuifolium 'Silver Sheen'</td>
<td>No Common Name</td>
<td>Shrub</td>
<td>MSW</td>
<td></td>
</tr>
<tr>
<td>Podocarpus gracilior</td>
<td>Fern Pine</td>
<td>Shrub</td>
<td>MSW</td>
<td></td>
</tr>
<tr>
<td>Podocarpus henkelii</td>
<td>Long Leafed Yellowood</td>
<td>Shrub</td>
<td>MSW</td>
<td></td>
</tr>
<tr>
<td>Podocarpus macrophyllus 'maki'</td>
<td>Shrubby Yew Pine</td>
<td>Shrub</td>
<td>MSW</td>
<td>Very adaptable.</td>
</tr>
<tr>
<td>Pyracantha koidzumii 'Santa Cruz Prostrata'</td>
<td>Firethorn</td>
<td>Shrub</td>
<td>MSW, FR</td>
<td>Prune out erect branches to maintain compact.</td>
</tr>
<tr>
<td>Raphheolipis indica 'Ballerina'</td>
<td>Indian Hawthorn (Pink)</td>
<td>Shrub</td>
<td>MSW, FR</td>
<td></td>
</tr>
<tr>
<td>Raphheolipis indica 'Clara'</td>
<td>Indian Hawthorn (White)</td>
<td>Shrub</td>
<td>MSW, FR</td>
<td></td>
</tr>
<tr>
<td>Raphheolipis indica 'Pinkie'</td>
<td>Indian Hawthorn (Pink)</td>
<td>Shrub</td>
<td>MSW, FR</td>
<td></td>
</tr>
<tr>
<td>Rosa banksiae</td>
<td>Lady Banks Rose</td>
<td>Shrub</td>
<td>MSW</td>
<td>Disease resistant.</td>
</tr>
<tr>
<td>Rosa 'Flower Carpet'</td>
<td>Flower Carpet Rose (Tesslar)</td>
<td>Shrub</td>
<td>MSW</td>
<td>Prune at end of dormant season.</td>
</tr>
</tbody>
</table>

### RANCH PLAN ALTERNATIVE DEVELOPMENT STANDARDS
### ADDITIONAL STANDARD PLAN 1701 DROUGHT TOLERANT PLANTS

**LEGEND**
- NSW - No Summer Water
- LSW - Low Summer Water
- MSW - Med. Summer Water
- FR - Fire Retarding
- CT - Clay Tolerant

<table>
<thead>
<tr>
<th>BOTANICAL NAME</th>
<th>COMMON NAME</th>
<th>Type</th>
<th>Qualities</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rosmarinus officinalis 'Arp'</td>
<td>Rosemary</td>
<td>Shrub</td>
<td>LSW</td>
<td></td>
</tr>
<tr>
<td>Rosmarinus officinalis 'Huntington Carpet'</td>
<td>Rosemary</td>
<td>Ground Cover</td>
<td>LSW</td>
<td></td>
</tr>
<tr>
<td>Rosmarinus officinalis 'Tuscan Blue'</td>
<td>Rosemary</td>
<td>Shrub</td>
<td>LSW</td>
<td></td>
</tr>
<tr>
<td>Salvia greggii</td>
<td>Autumn Sage</td>
<td>Shrub</td>
<td>LSW, FR</td>
<td>Cut back hard before Spring.</td>
</tr>
<tr>
<td>Salvia leucantha</td>
<td>Mexican Bush Sage</td>
<td>Shrub</td>
<td>LSW</td>
<td></td>
</tr>
<tr>
<td>Strelitzia reginae</td>
<td>Star Jasmine</td>
<td>Shrub</td>
<td>MSW, FR</td>
<td></td>
</tr>
<tr>
<td>Tulbaghia species</td>
<td>Society Garlic</td>
<td>Shrub</td>
<td>MSW</td>
<td></td>
</tr>
<tr>
<td>Viburnum suspensum</td>
<td>Sandankwa Viburnum</td>
<td>Shrub</td>
<td>MSW</td>
<td>Susceptible to pests.</td>
</tr>
<tr>
<td>Viburnum tinus</td>
<td>Laurustinus</td>
<td>Shrub</td>
<td>LSW</td>
<td>Susceptible to pests.</td>
</tr>
<tr>
<td>Westfringia fruticosa</td>
<td>Coast Rosemary</td>
<td>Shrub</td>
<td>MSW, FR</td>
<td></td>
</tr>
<tr>
<td>Xylosma congestum 'Compacta'</td>
<td>Compact Shiny Xylosma</td>
<td>Shrub</td>
<td>MSW, FR</td>
<td>Sharp leaves.</td>
</tr>
<tr>
<td>Yucca aloifolia</td>
<td>Spanish Bayonet</td>
<td>Shrub</td>
<td>LSW, FR</td>
<td></td>
</tr>
<tr>
<td>Yucca elephantipes</td>
<td>Giant Yucca</td>
<td>Shrub</td>
<td>NSW, FR</td>
<td></td>
</tr>
</tbody>
</table>
### ADDITIONAL STANDARD PLAN 1701 DROUGHT TOLERANT PLANTS

**LEGEND**
- NSW - No Summer Water
- LSW - Low Summer Water
- MSW - Med. Summer Water
- FR - Fire Retarding
- CT - Clay Tolerant

<table>
<thead>
<tr>
<th>BOTANICAL NAME</th>
<th>COMMON NAME</th>
<th>Type</th>
<th>Qualities</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yucca filamentosa</td>
<td>Adam's Needle</td>
<td>Shrub</td>
<td>LSW, FR</td>
<td></td>
</tr>
<tr>
<td>Yucca filamentosa 'Bright Edge'</td>
<td>Adam's Needle</td>
<td>Shrub</td>
<td>LSW, FR</td>
<td></td>
</tr>
<tr>
<td>Yucca flaccida</td>
<td>Yucca</td>
<td>Shrub</td>
<td>LSW, FR</td>
<td></td>
</tr>
<tr>
<td>Yucca flaccida 'Golden Sword'</td>
<td>Golden Sword Yucca</td>
<td>Shrub</td>
<td>LSW, FR</td>
<td></td>
</tr>
<tr>
<td>Yucca gloriosa</td>
<td>Spanish Dagger</td>
<td>Shrub</td>
<td>LSW, FR</td>
<td></td>
</tr>
<tr>
<td>Yucca recurvifolia (Y. pendula)</td>
<td>Yucca</td>
<td>Shrub</td>
<td>NSW, FR</td>
<td></td>
</tr>
<tr>
<td>Yucca rigida</td>
<td>Blue Yucca</td>
<td>Shrub</td>
<td>LSW, FR</td>
<td></td>
</tr>
<tr>
<td>Carex praegracilis</td>
<td>Western Meadow Sedge</td>
<td>Grass</td>
<td>MSW</td>
<td><strong>Takes moderate foot traffic.</strong> Mow to 4&quot; periodically.</td>
</tr>
<tr>
<td>Carex divulsa</td>
<td>Berkeley Sedge</td>
<td>Grass</td>
<td>MSW</td>
<td></td>
</tr>
<tr>
<td>Festuca californica</td>
<td>California Fescue</td>
<td>Grass</td>
<td>LSW</td>
<td></td>
</tr>
<tr>
<td>Festuca mairei</td>
<td>Maire's Fescue</td>
<td>Grass</td>
<td>MSW</td>
<td></td>
</tr>
<tr>
<td>Festuca ovina glauca</td>
<td>Common Blue Fescue</td>
<td>Grass</td>
<td>MSW</td>
<td></td>
</tr>
<tr>
<td>Festuca ovina glauca 'Elijah Blue'</td>
<td>Dwarf Blue Fescue</td>
<td>Grass</td>
<td>MSW</td>
<td><strong>Good turf replacement.</strong></td>
</tr>
<tr>
<td>Festuca rubra 'Molate Blue'</td>
<td>Molate Red Fescue</td>
<td>Grass</td>
<td>MSW</td>
<td></td>
</tr>
</tbody>
</table>

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**RANCH PLAN ALTERNATIVE DEVELOPMENT STANDARDS**

**ADDITIONAL STANDARD PLAN 1701 DROUGHT TOLERANT PLANTS**

**ADS**
- C-7
  - Sheet 6 of 11
### Additional Standard Plan 1701 Drought Tolerant Plants

<table>
<thead>
<tr>
<th>Botanical Name</th>
<th>Common Name</th>
<th>Type</th>
<th>Qualities</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Miscanthus sinensis 'Gracillimus'</td>
<td>Maiden Grass</td>
<td>Grass</td>
<td>LSW</td>
<td></td>
</tr>
<tr>
<td>Miscanthus transmorrisonensis</td>
<td>Evergreen Miscanthus</td>
<td>Grass</td>
<td>LSW</td>
<td></td>
</tr>
<tr>
<td>Muhlenbergia capillaris 'Regal Mist'</td>
<td>Pink Muhly</td>
<td>Grass</td>
<td>LSW</td>
<td></td>
</tr>
<tr>
<td>Muhlenbergia rigens</td>
<td>Deer Grass</td>
<td>Grass</td>
<td>LSW</td>
<td></td>
</tr>
<tr>
<td>Muhlenbergia rigida 'Nashville'</td>
<td>Purple Muhly Grass</td>
<td>Grass</td>
<td>LSW</td>
<td></td>
</tr>
<tr>
<td>Nasella tenuissima (Stipa)</td>
<td>Mexican Feather Grass</td>
<td>Grass</td>
<td>LSW</td>
<td></td>
</tr>
<tr>
<td>Pennisetum messiacum</td>
<td>Red Bunny Tails</td>
<td>Grass</td>
<td>MSW</td>
<td>Cut back to ground in winter.</td>
</tr>
<tr>
<td>Pennisetum orientale</td>
<td>Fountain Grass</td>
<td>Grass</td>
<td>MSW</td>
<td>管理体系呈现。</td>
</tr>
<tr>
<td>Pennisetum setaceum 'Red Riding Hood'</td>
<td>Dwarf Purple Fountain Grass</td>
<td>Grass</td>
<td>MSW</td>
<td>Cut back to ground in winter.</td>
</tr>
<tr>
<td>Pennisetum setaceum 'Rubrum'</td>
<td>Purple Fountain Grass</td>
<td>Grass</td>
<td>MSW</td>
<td>Cut back to ground in winter.</td>
</tr>
<tr>
<td>Aeonium arboreum 'Atropurpureum'</td>
<td>No Common Name</td>
<td>Succulent</td>
<td>LSW</td>
<td></td>
</tr>
<tr>
<td>Aeonium arboreum 'Zwartkop'</td>
<td>No Common Name</td>
<td>Succulent</td>
<td>LSW</td>
<td></td>
</tr>
<tr>
<td>Aeonium haworthii</td>
<td>Pinwheel</td>
<td>Succulent</td>
<td>LSW</td>
<td></td>
</tr>
<tr>
<td>Aeonium 'Pseudotabulaeforme'</td>
<td>No Common Name</td>
<td>Succulent</td>
<td>LSW</td>
<td></td>
</tr>
</tbody>
</table>

### Ranch Plan Alternative Development Standards

**Additional Standard Plan 1701**

**Drought Tolerant Plants**

**Legend**

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### ADDITIONAL STANDARD PLAN 1701 DROUGHT TOLERANT PLANTS

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<th>Type</th>
<th>Qualities</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aeonium urbicum</td>
<td>Dinner Plate</td>
<td>Succulent</td>
<td>LSW</td>
<td></td>
</tr>
<tr>
<td>Agave Americana</td>
<td>Century Plant</td>
<td>Succulent</td>
<td>LSW, FR</td>
<td></td>
</tr>
<tr>
<td>Agave americana 'Variegata'</td>
<td>Variegated Century Plant</td>
<td>Succulent</td>
<td>LSW, FR</td>
<td></td>
</tr>
<tr>
<td>Agave attenuata</td>
<td>No Common Name</td>
<td>Succulent</td>
<td>NSW, FR</td>
<td></td>
</tr>
<tr>
<td>Agave vilmoriniana</td>
<td>Octopus Agave</td>
<td>Succulent</td>
<td>NSW, FR</td>
<td></td>
</tr>
<tr>
<td>Agave vilmoriniana 'Variegata'</td>
<td>Variegated Octopus Agave</td>
<td>Succulent</td>
<td>NSW, FR</td>
<td></td>
</tr>
<tr>
<td>Aloe striata</td>
<td>Coral Aloe</td>
<td>Succulent</td>
<td>NSW, FR</td>
<td></td>
</tr>
<tr>
<td>Aloe vera</td>
<td>Medicinal Aloe</td>
<td>Succulent</td>
<td>NSW, FR</td>
<td></td>
</tr>
<tr>
<td>Crassula arborescens</td>
<td>Silver Dollar Plant</td>
<td>Succulent</td>
<td>NSW, FR</td>
<td></td>
</tr>
<tr>
<td>Crassula ovata</td>
<td>Jade Plant</td>
<td>Succulent</td>
<td>NSW, FR</td>
<td></td>
</tr>
<tr>
<td>Dasyliirion quadrangulatum (D. longissima)</td>
<td>Mexican Grass Tree</td>
<td>Shrub</td>
<td>NSW, FR</td>
<td>Needs well drained soils.</td>
</tr>
<tr>
<td>Dasyliirion wheeleri</td>
<td>Desert Spoon</td>
<td>Shrub</td>
<td>NSW, FR</td>
<td>Needs well drained soils.</td>
</tr>
<tr>
<td>Echeveria elegans</td>
<td>Hens and Chicks</td>
<td>Succulent</td>
<td>NSW</td>
<td>Needs well drained soils.</td>
</tr>
<tr>
<td>Echeveria 'Blue Curls'</td>
<td>No Common Name</td>
<td>Succulent</td>
<td>NSW</td>
<td></td>
</tr>
</tbody>
</table>
### ADDITIONAL STANDARD PLAN 1701 DROUGHT TOLERANT PLANTS

**LEGEND**
- NSW - No Summer Water
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- MSW - Med. Summer Water

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<th>Type</th>
<th>Qualities</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Euphorbia tirucalli 'Rosea' Firesticks</td>
<td>Shrub</td>
<td>LSW</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graptopetalum paraguayense Ghost Plant</td>
<td>Succulent</td>
<td>LSW</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hesperaloe parviflora Red Yucca</td>
<td>Shrub</td>
<td>LSW, FR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kalanchoe luciae (K. thrysiflora) Paddle Plant</td>
<td>Succulent</td>
<td>LSW</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sedum dendroideum Stonecrop</td>
<td>Succulent</td>
<td>NSW, FR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sedum nussbaumerianum Stonecrop</td>
<td>Succulent</td>
<td>NSW, FR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sedum spurium Stonecrop</td>
<td>Succulent</td>
<td>LSW, FR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sedum reflexum Stonecrop</td>
<td>Succulent</td>
<td>LSW, FR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sempervivum arachnoideum Cobweb Houseleek</td>
<td>Succulent</td>
<td>LSW, FR</td>
<td>Needs well drained soils.</td>
<td></td>
</tr>
<tr>
<td>Sempervivum tectorum Hen and Chickens</td>
<td>Succulent</td>
<td>LSW</td>
<td>Needs well drained soils.</td>
<td></td>
</tr>
<tr>
<td>Senecio mandraliscae No Common Name</td>
<td>Succulent</td>
<td>NSW</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senecio talinoides 'Jolly Gray' No Common Name</td>
<td>Succulent</td>
<td>NSW</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senecio radicans String of Bananas</td>
<td>Succulent</td>
<td>LSW, CT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senecio rowleyanas String of Pearls</td>
<td>Succulent</td>
<td>LSW, CT</td>
<td>Poisonus if ingested.</td>
<td></td>
</tr>
</tbody>
</table>

### RANCH PLAN ALTERNATIVE DEVELOPMENT STANDARDS

**ADDITIONAL STANDARD PLAN 1701 DROUGHT TOLERANT PLANTS**

**ADS**

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Sheet 9 of 11
### ADDITIONAL STANDARD PLAN 1701 DROUGHT TOLERANT PLANTS

<table>
<thead>
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<th>Remarks</th>
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</thead>
<tbody>
<tr>
<td>Alnus rhombifolia</td>
<td>White Alder</td>
<td>Tree</td>
<td>MSW, FR, CT</td>
<td></td>
</tr>
<tr>
<td>Baccharis 'Centennial'</td>
<td></td>
<td>Shrub</td>
<td>LSW, FR</td>
<td></td>
</tr>
<tr>
<td>Baccharis pilularis 'Pigeon Point'</td>
<td></td>
<td>Shrub</td>
<td>LSW, FR</td>
<td></td>
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<tr>
<td>Lupinus arboreus</td>
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<td>Shrub</td>
<td>NSW</td>
<td></td>
</tr>
<tr>
<td>Lupinus bicolor</td>
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<td>Shrub</td>
<td>NSW, FR</td>
<td></td>
</tr>
<tr>
<td>Lupinus nanus</td>
<td></td>
<td>Shrub</td>
<td>NSW</td>
<td></td>
</tr>
<tr>
<td>Nasella lepida</td>
<td></td>
<td>Grass</td>
<td>NSW, FR</td>
<td></td>
</tr>
<tr>
<td>Platanus racemosa</td>
<td></td>
<td>Tree</td>
<td>LSW, FR, CT</td>
<td></td>
</tr>
<tr>
<td>Quercus ilex</td>
<td>Holly Oak</td>
<td>Tree</td>
<td>LSW, FR</td>
<td></td>
</tr>
<tr>
<td>Quercus kelloggii</td>
<td>California Black Oak</td>
<td>Tree</td>
<td>LSW</td>
<td></td>
</tr>
<tr>
<td>Rosa californica</td>
<td>California Wild Rose</td>
<td>Shrub</td>
<td>LSW</td>
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</tbody>
</table>

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**RANCH PLAN ALTERNATIVE DEVELOPMENT STANDARDS**

**ADDITIONAL STANDARD PLAN 1701 DROUGHT TOLERANT PLANTS**

**ADS**

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<thead>
<tr>
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<th>Qualities</th>
<th>Remarks</th>
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</thead>
<tbody>
<tr>
<td>Salvia apiana</td>
<td>White Sage</td>
<td>Shrub</td>
<td>NSW</td>
<td></td>
</tr>
<tr>
<td>Sedum spathulifolium</td>
<td>Stonecrop</td>
<td>Ground Cover</td>
<td>NSW</td>
<td></td>
</tr>
<tr>
<td>Sisyrinchium bellum</td>
<td>Blue Eyed Grass</td>
<td>Grass</td>
<td>LSW, FR</td>
<td></td>
</tr>
<tr>
<td>Yucca whipplei</td>
<td>Our Lord's Candle</td>
<td>Shrub</td>
<td>LSW, FR</td>
<td></td>
</tr>
</tbody>
</table>
C-8 Turfgrass Irrigation in Parkways

Per the approval of the Director, OC Planning and the County Chief Engineer, allow an interpretation of the County of Orange Model Water Efficient Ordinance Guidelines that allows spray nozzles in limited circumstances within parkways.

Parkway landscapes require the predominant planting of turfgrass to more safely withstand pedestrian traffic. In most cases, turf parkway widths will vary between five and eight feet.

Section 2.5 part A.1(q) of the County of Orange Model Water Efficient Ordinance Guidelines (2010) indicate the following:

(q) Narrow or irregularly shaped areas, including turf, less than eight (8) feet in width in any direction shall be irrigated with subsurface irrigation, a low volume irrigation system, or another water-efficient technology.

Irrigating turfgrass with sub-surface irrigation is extremely costly, difficult to install, and impractical due to low head drainage issues, clogging of emitters by turfgrass roots, and damage to piping during aeration.

Standard irrigation spray heads at smaller radii are difficult to manufacture with a matched precipitation rate consistent with their larger spray head counterparts due to the low flow and small orifice requirements. The common result is misting, clogging, and spray drift that cause overspray and runoff conditions.

In 2010, The Toro Company produced a nozzle with a patented technology to allow a larger, more uniform droplet at a much lower precipitation rate. This creates improved and more efficient application of irrigation water without misting and drift. Matched precipitation continues to occur after a 25% radius reduction. These nozzles will work with most pop up bodies.

Performance Standards:

- Turf parkways between five and eight feet wide will be irrigated with Toro Precision™ nozzles, (or subsequently available nozzle products matching the performance criteria) using the 5 and 8 foot nozzles – available in nine separate patterns including 60, 90, 120, 180, and 360 degrees.
- Head layout will consist of 50% diameter coverage
- Hardscape connections will not occur with angles less than 60 degrees to eliminate overspray at corners.
- Pop up spray bodies must be 6 inches in height and contain pressure regulation and anti-drain valves capable of 14 feet of head
- Pop up spray bodies must be installed 4 inches from hardscape to allow edging and root pruning.

Project Benefits:

Allows the option to use of pedestrian friendly turfgrass in parkway landscapes with an improved application of irrigation.
Chapter D
D-2 Conventional Single Family Courtyard Home with 5’ Rear Setback
Allow a modified 5-foot rear yard setback for conventional single-family detached residential dwellings units, when an outdoor side yard courtyard, provides an equal or greater amount of outdoor livable square footage area.

Project Benefits:
• Equal or better usable outdoor living area, with more privacy

Performance Standards:

1. Residential D-2 Lots may only be adjacent to other Residential D-2 lots when rear lots adjoin.

2. Residential dwelling separation with adjacent rear lots:
When an ADS D-2 dwelling is located adjacent to the rear property line of either another ADS D-2 dwelling (minimum 5’ Rear Setback), certain minimum rear dwelling separation distances must be maintained in accordance with the following criteria:

(a) A minimum of 15’ dwelling separation must be maintained between rear adjacent dwellings located on separate building sites.

   i. As measured from any point of the dwelling structure across the rear lot line to the closest dwelling.

(b) An average of 20’ dwelling separation must be maintained between rear adjacent dwellings when multiple rear lots adjoin.

   i. Calculate the average rear setback for each dwelling by measuring the width of the structure at particular distances. For instance, a dwelling with a 5-foot setback for 25 feet and a 10-foot setback for 25 feet would have an average 7.5-foot rear setback for that individual dwelling.

   ii. Next, calculate the total average of all the rear setbacks along the entire string of rear-adjacent dwellings by adding the rear separation distances between dwellings along the multiple adjoining rear lots (minimum 15 feet and using the calculation above for setback distances) and dividing by the number of dwelling separations.

   (c) The applicant shall provide appropriate tables and exhibits that demonstrate compliance with the above criteria.

3. Minimum interior courtyard area shall exceed 350 square feet (with a minimum width dimension of 15 feet), as measured from the courtyard footprint. Projections into the courtyard area shall be limited to eaves, cornices, and balconies. Other architectural features (fireplaces, built-in barbecues, etc.) may be included in the 350 square foot calculation if for the benefit of the outdoor living space. In most cases a 350 square-foot courtyard would exceed the net loss of backyard square footage due to revised rear setback (5-foot multiplied by the width of yard). Overhead coverings are permitted as defined in (a) and (b) below.

   (a) A maximum of 25% of the courtyard shall be allowed to be roofed.
(b) Lattice and trellis coverings shall be allowed to cover up to 50% of the courtyard area. This 50% coverage limitation includes both roofed and trellis coverage area.

4. ADS D-2 dwellings shall be located within reasonable walking distance of a wide range of public and private trail, open space and recreation uses (above and beyond the Local Park Code requirements).

5. The use of this Alternative Development Standard will be limited to Planning Area 1.
THE RANCH PLAN ALTERNATIVE DEVELOPMENT STANDARDS

Courtyard Homes Exhibit

Average 20' Separation
Minimum 15' Separation

Courtyard Area
Dwelling Separation
D-3. Reduced “Senior Citizen” Parking
Per the approval of the Planning Commission, allow the following modifications to Zoning Code Section 7-9-145.3 regarding parking requirements for Senior Citizen (55+) housing. An additional detailed parking analysis would only be required if an applicant requests deviations from the following parking standards.

a. Requirements for “Senior Citizen” Dwellings with 2-Car Garages:
   i. Conventional Single-Family Detached Dwellings
   ii. Planned Concept Detached Dwellings
   iii. Multiple-Family Dwellings

The Off-Street Parking Regulations of the County of Orange Zoning Code requires a two-car garage for each single-family detached dwelling unit (Section 7-9-145.3(d)(1)). In addition to the two covered spaces, a third guest space in the driveway serving that unit will be provided along with additional, on-street parking where permitted, at the standard of 0.2 guest spaces per unit. Alternatively, in cases where the driveway is of insufficient length (less than 17 feet) to adequately accommodate a vehicle space, the guest space requirement may be provided as permitted on-street parking at a higher standard of 0.5 spaces per unit.

At least 75% of all Senior Citizen Dwelling two-car garages must be side-by-side. The remaining 25% may be end-to-end (tandem) garages, with both spaces counted fully towards meeting the two-garage-space-per-unit requirement.

Parking for attached dwelling units (more than one dwelling per building site) is based upon either bedroom counts or square footage (Section 7-9-145.3(d)(2 and 3)).

For all “Senior Citizen” dwellings with dedicated two-car garages (single-family or multiple family), this proposed Alternative Development Standard would require an additional parking requirement of 0.2 spaces (if a driveway space is provided) or 0.5 (if no driveway space is provided), which would address “guest” parking and all other incidental additional needs of the nearby “Senior Citizen” dwellings.

Conventional Single Family and Planned Concept Detached Dwelling projects in compliance with this ADS are also understood to be in compliance with County Standard Plan 1107, as modified to allow local streets with residential frontage and driveways on both sides, but parking on one side only:

- 28-foot wide streets (curb-face to curb-face) with traffic levels of up to 200 average daily trips (ADT).
- 30-foot wide streets (curb-face to curb-face) with traffic levels of from 200 to 500 average daily trips (ADT).
Performance Standards:

- Senior Citizen (55+) dwellings only, as defined by the Ranch Plan PC Program Text Section IV (Senior Citizen Housing).
- Two garage spaces required per dwelling (no driveway space required)
- At the tentative tract map level (and site development permit level for Planned Concept Detached Dwellings and Multiple-Family Dwellings) the applicant must demonstrate to OC Planning staff that 0.2 or 0.5 additional required parking spaces per dwelling (including guest spaces) are provided either in a driveway (at least 17’ length behind back-of-sidewalk), or on-street within 200’ of the dwelling. This parking tabulation shall be based on 22-foot long parallel parking space lengths, as required by Zoning Code Section 7-9-145.5 design requirements, working within the constraints of 16-foot wide driveway aprons, fire hydrants, corner curb returns, etc.

Project Benefits:

- A residential village ambiance with less uninterrupted hardscape.
- Less pavement results in better water quality through percolation (due to less impervious surface) and a more livable micro-climate (less heat gain due to pavement near homes).
- Equivalent ease of circulation and traffic safety.
- Equivalent access for fire and emergency vehicles.

b. Parking Requirements for “Senior Citizen” Multiple-Family Dwellings Without Dedicated Garages:
   i. Multiple-Family Dwellings served by Parking in Common
   ii. Independent Units in Continuing Care Retirement Community (CCRC) Projects

For all “Senior Citizen” multiple-family dwellings without dedicated garages, this proposed Alternative Development Standard would require 1.25 parking spaces per dwelling unit, which includes guest, visitor and staff parking.

Performance Standards:

- Senior Citizen (55+) dwellings only, as defined by the Ranch Plan PC Program Text Section IV (Senior Citizen Housing).

Project Benefits:

- A residential village ambiance with less uninterrupted hardscape.
- Less pavement results in better water quality through percolation (due to less impervious surface) and a more livable micro-climate (less heat gain due to pavement near homes).
- Equivalent ease of circulation and traffic safety.
- Equivalent access for fire and emergency vehicles.
c. **Senior Living Facilities**: Parking for the following types of Senior Living Facilities and Continuing Care Retirement Communities (CCRC) units (also known as managed care) would be calculated per the Equivalent Dwelling Unit calculations in Zoning Code Section 7-9-141.3(d):

   i. **Assisted Living**
   
   ii. **Memory Care**
   
   iii. **Skilled Nursing**
   
   iv. **Two or more of the above facility types when combined within Continuing Care Retirement Community (CCRC) Projects**

Required parking is the summation of the individual requirements per unit type (including guest, visitor and staff parking) in any and all of the above categories, as follows:

- 2 or more bedrooms in the unit: 1 space per unit
- 1 bedroom in the unit: 0.5 spaces per unit
- 0 bedrooms in the unit: 0.25 spaces per unit
- Medical care rooms: No requirement when provided in an integrated setting with the above units

It is noted that independent living units may also be a part of a CCRC project. In that instance, independent living units are further added to the requirement summation, described above, at a ratio of 1.25 spaces per unit as stipulated for “Senior Citizen” multiple-family dwellings without dedicated 2-Car Garages (see ADS item D-3 “b” on previous page).
D-4a. **Planned Concept Detached Dwellings Setbacks**
The OC Planning Commission approved ADS D-4 on December 14, 2011, further defining Planned Community Program Text Section III.A.2.d.6 setbacks requirements for Planned Concept Detached Dwellings.

1) Minimum Building Setback Requirements:
   a) Front:
      i. Where primary (front-door) access is from a street, twelve (12) feet minimum from the back of street curb or three (3) feet from the property line/street right-of-way, whichever is greater; except for garages, which have their own standards.
         1. Unit #1, Exhibit D4a-1: Detached Cluster Configuration with Lane Access
         2. Unit #1, Exhibit D4a-2: Detached Cluster Configuration with Paseo Access
         3. Units #1 and #4X, Exhibit D4a-3: Detached Cluster Configuration with Courtyard Access
         4. Units #2 and #3, Exhibit D4a-4: Detached Cluster Configuration with Street Access, Garage Facing the Lane
      ii. Where primary (front-door) access to individual dwelling units is from a private drive or alley, the front setback shall be a minimum of fifteen (15) feet from the centerline of the alley or five (5) feet to the primary accessway, whichever is greater.
         1. Unit #2, Exhibit D4-1: Detached Cluster Configuration with Lane Access
      iii. Where primary (front-door) access to individual dwelling units is from a motor court; the front, side and rear setbacks are often difficult to determine. In these instances, the wall that includes the front door shall be deemed the “front wall” of that dwelling, a minimum ten (10) foot building separation (five (5) setback on each side of property line) shall be maintained from any portion of that front wall to all surrounding residences, with all applicable front doors opening onto a minimum 15-foot by 18-foot driveway area dedicated to that dwelling.
         1. Unit #3, Exhibit D4a-1: Detached Cluster Configuration with Lane Access
         2. Units #2 and #3, Exhibit D4a-2: Detached Cluster Configuration with Paseo Access
         3. Unit #4, Exhibit D4a-3: Detached Cluster Configuration with Courtyard Access
   b) Rear: Minimum five (5) feet from property line, or if there is no individual building site property line, from the boundary of the private use common area. Notwithstanding, if the rear setback is adjacent to an alley, then the setbacks shall be three (3) feet to the property line or fourteen (14) feet to the centerline, whichever is more restrictive.
   c) Side: Eight (8) foot minimum for one side only, or eight (8) feet
aggregate total for both sides. Building separation shall be eight (8) feet and the following criteria shall be met:

(1) Building articulation is incorporated into the development.
(2) Stepped and undulating building massing is provided on at least one third (1/3) of the units.
(3) A functional usable outdoor area of at least 120 square feet must be provided.
(4) Privacy issues are addressed through zero (0) lot line plotting, reciprocal easements and/or window placement.
(5) Any encroachments into the setback area shall leave a minimum three (3) foot path along the building (excluding roofs and roof eaves).

d) Side abutting street: Five (5) feet minimum from property line.
e) Patios: No attached or detached covered patio shall be located closer than three (3) feet to a property line, as measured from the nearest supports for the structure. For a corner lot, the minimum setback from any patio structure (as measured from each street-side property line) shall be increased to five (5) feet. Covered patios may be completely screened, including all exterior walls and ceilings, with fully ventilating screening material.
f) Projections into required setbacks: Eaves, cornices, chimneys, outside staircases, balconies, media niches and other similar architectural features may project four (4) feet into any required front, rear or side setback or within one (1) foot of the property line, whichever produces the least projection into the setback. Any such projections into the setbacks must be consistent with applicable fire and building codes regarding separation of structures. In addition, where primary (front-door) access to individual dwelling units is from a private drive or alley (Section 1)a)i. above) second-story cantilevered architectural elements not to exceed 50% of the frontage on any given private drive alley, may project three (3) feet into required front setbacks, for a second story front setback of twelve (12) feet from the centerline of the alley.

Performance Standards:
• Irrigated landscaping required within private drives, alleys and motorcourts.
• Roll-up garage doors with remote-controlled openers.
• Five (5) foot setback from front-doors on private drives, alleys and motorcourts to the primary accessway, which shall be identified on the Site Development Permit and Precise Grading Plan.
• Building separation must comply with California Residential Code.

Project Benefits:
• Increased residential density.
• Equivalent ease of circulation and traffic safety.
• Equivalent access for fire and emergency vehicles.
**D4a - Detached Cluster Configuration with Lane Access**

* Per Ranch Plan Planned Community Program Text Section III.A.2.d.6(c) and Exhibit D4-5

Exhibit D4a- 1
D4a - Detached Cluster Configuration with Paseo Access

* Per Ranch Plan Planned Community Program Text Section III.A.2.d.6(c) and Exhibit D4-5

Exhibit D4a - 2
D4a - Detached Cluster Configuration with Courtyard Access

* Per Ranch Plan Planned Community Program Text Section III.A.2.d.6)c) and Exhibit D4-5

Exhibit D4a - 3

D4a - Detached Cluster Configuration with Street Access, Garage Facing the Lane

* Per Ranch Plan Planned Community Program Text Section III.A.2.d.6)c) and Exhibit D4-5

Exhibit D4a - 4
Four (4) Feet Setback

Zero Lot Line Setback

D4a - Side Property Line Options
D-4b. **Conventional Single-Family Detached Dwellings Setbacks**  
The OC Planning Commission approved ADS D-4b on May 27, 2015, further defining Planned Community Program Text Section III.A.1.d.5 setbacks requirements for Conventional Single-Family Detached Dwellings.

5) Minimum Building Setback Requirements (See color-coded exhibit D4b-1):
   a) Green: Five (5) feet minimum from any property line abutting a street; except for garages, which have their own standards.
      i. Where primary (front-door) access to individual dwelling units is from a motorcourt (Private Alley Drive per ADS G-3), the setback shall be a minimum of fifteen (15) feet from the centerline of the motorcourt (Private Alley Drive) or five (5) feet to the face-of-curb (Private Alley Drive), whichever is greater. (See Exhibit D4b-1)
   b) Green: Ten (10) feet minimum for one side only, or ten (10) feet aggregate total for both sides.
      i. Green abutting street: Five (5) feet minimum from property line.
      ii. Side abutting motorcourt (Private Alley Drive) shall conform with ADS G-3. (See Exhibit D4b-1)
   c) Red: Ten (10) feet minimum from property line to building. Notwithstanding, if the setback (Blue) is adjacent to an alley, the setbacks shall be three (3) feet to the property-line or fourteen (14) feet to the centerline, whichever is more restrictive.
   d) Patios: No attached or detached covered patio shall be located closer than three (3) feet to a property line, as measured from the nearest structural supports. For a corner lot, the minimum setback from any patio structure (as measured from each street-side property line) shall be increased to five (5) feet. Covered patios may be completely screened, including all exterior walls and ceilings, with fully ventilating screening material.
   e) Projections into required setbacks: Eaves, cornices, chimneys, outside staircases, balconies, media niches and other similar architectural features may project four (4) feet into any required setback or within one (1) foot of the property line, whichever produces the least projection into the setback. Any such projections into the setbacks must be consistent with applicable fire and building codes regarding separation of structures.

Performance Standards:
- Submittal of an informational exhibit with the Tentative Tract Map mirroring the setbacks shown on Exhibit D4b-1, with a condition of approval on the Tentative Tract Map requiring specific setbacks to be shown on the Precise Grading Plan prior to recordation of a Final Tract Map.
- Roll-up garage doors with remote-controlled openers.

Project Benefits:
- Increased residential density.
- Equivalent ease of circulation and traffic safety.
- Equivalent access for fire and emergency vehicles.
Residential Street (public or private)

LEGEND:
Minimum Building Setbacks:

- **10-FEET**
- **5- FEET**
- **PER RANCH PLAN PC PROGRAM TEXT**
  SECTION III.A.1.d.5(d): “Three (3) feet to
  the property line or fourteen (14) feet to the
  centerline, whichever is more restrictive”

- **PROPERTY LINES**
- **CENTER LINE**

Scale: 1” = 32'

Exhibit D4b - 1
D-5. **17-Foot Driveways**
Per the approval of the Planning Commission, define all residential Garage and Carport Placement minimum setbacks contained in the Ranch Plan PC Text (driveway requirements in Conventional Single Family Detached Dwellings, Planned Concept Detached Dwellings, Multiple-Family Dwellings, Estate Dwellings, Senior Housing and Home Based Business Enclaves), as follows:

“The minimum setback for the point of entry into a garage or carport shall be seven (7) feet or less, or seventeen (17) feet assuming a roll-up garage door) or more from the back of sidewalk or, if there is no sidewalk, from the back of curb. Garage structures may be constructed with no minimum setback from any side or rear property line not abutting a street.”

Performance Standards:
- Roll-up garage doors with remote-controlled openers

Project Benefits:
- Increased residential density.

D-6. **Multiple-Family Dwellings – Minimum Distance Between Buildings**
Per the approval of the Planning Commission, allow the following addition to Section III.A.3.d.5):

Minimum Distance Between Buildings: Fifteen (15) feet at a maximum building height of forty (40) feet. However, the internal distance requirement may be reduced to ten (10) feet at a maximum building height of thirty-five (35) feet and may be further reduced to eight (8) feet at a maximum building height of one-story at setback, stepping back to two-stories no closer than 12 feet (see diagram below).

Performance Standards:
- In situations where the 8-foot distance is used, window placement in the affected buildings should be considered to maximize privacy.

Project Benefits:
- Increased density in a single-family setting provides for more housing choices.
D-7. **Recreation Uses Setbacks**  
Per the approval of the Planning Commission, allow building setbacks from property lines for Recreation Uses (such as parks, pools, clubhouses and trails) to be reduced to five (5) feet if the primary reason the recreation use is on a separate lot is to allow for homeowners association maintenance of the recreational facilities.

**Performance Standards:**
- Recreational use surrounded by residential uses that would be utilizing the recreation facilities.

**Project Benefits:**
- Increased compatibility between residential and recreational uses.

D-8. **Planned Concept Residential Lots Greater than 3,000 Square Feet**  
Ranch Plan PC Program Text Section III.A.2.d.(2) is revised to delete the following text: “... and lots less than 3,000 square feet. If lot sizes are greater than 3,000 square feet, regardless of density, Conventional Single Family standards (Section III.A.1) shall apply.” Therefore, Planned Concept Single-Family Detached Dwellings are allowed on lots in excess of 3,000 square feet. NOTE: This ADS allows an alternative standard that remains in compliance with the “Greater than 8.0 dwelling units per acre” requirement in Section III.A.2.d.(2) “Planned Concept Detached Dwellings - Net density” and the definition of Planned Concept Detached Dwellings in the Planned Community Program Text (Section IV. Definitions “P”).

**Performance Standards:**
- Compliance with all other applicable aspects of Ranch Plan PC Program Text Section III.A.2. requires, but is not limited to following:
  - Remainder of Section III.A.2.d.(2) requires “Net Density: Greater than eight (8.0) dwelling units per acre …”
  - Public and private open space must be clearly delineated on the Site Development Permit and Precise Grading plans.

**Project Benefit:**
- The increased lot size allows increased private usable open space.
D-9. **Planned Concept Detached Dwellings Parking (Bedroom Count)**

Parking for Planned Concept Detached Dwellings to be provided per the bedroom-count parking generation method (OC Zoning Code Section 7-9-145.3(d)(2 and 3).

Performance Standards:

- Compliance with all other aspects of Ranch Plan PC Program Text Section III.A.2 (Planned Concept Detached Dwellings Site Development Standards), including a density greater than 8.0 dwelling units per acre and lot sizes less than 3,000 square feet (unless modified by ADS D-8).
- Located on a private alley, drive or motor court, not a public residential street.
- For public streets, up to 20% of the total required (non-guest) parking is allowed on the street. However, on-street parking (including both required and guest parking) shall not exceed 75% of the street’s available parking capacity.
- For private streets, up to 25% of the total required (non-guest) parking is allowed on the street. However, on-street parking (including both required and guest parking) shall not exceed 90% of the street’s available parking capacity.
- If adjacent surrounding land uses utilize on-street parking to meet their own parking requirements, that on-street parking capacity shall not be utilized by the new development. For example, if an adjacent development utilizes 50% of a private street’s available parking capacity, then the new development can only utilize the remaining 40% of that private street’s available parking capacity.

Project Benefits:

- Increased housing choices in price range affordable to “first-time” and “move-down” homebuyers.
- Equivalent compliance with all aspects of Ranch Plan PC Program Text Section III.K. and OC Zoning Code Section 7-9-145 (Off-Street Parking).
- Equivalent ease of circulation and traffic safety.
- Equivalent access for fire and emergency vehicles.
D-10. **Bedroom Definition to Determine Parking Requirements**

Clarification of what is classified as a bedroom, for the purposes of determining parking requirements per OC Zoning Code Section 7-9-145.3.(d)(2) to apply to all Ranch Plan housing types as follows:

Notes:
1. For purposes of determining parking requirements per OC Zoning Code Section 7-9-145.3(d)(2), rooms such as dens, studies or sewing rooms may be exempted from being considered a bedroom per performance standards below.
2. This ADS is not a modification to the Zoning Code 7-9-23(B) definition of bedroom, nor the Ranch Plan PC Program Text Section IV. Definitions (B), but rather clarification for determination of parking requirements for site development standards for Off Street Parking.

Performance Standards:
- Rooms with less than 70 square foot of interior space shall NOT be classified as a bedroom.
- Rooms with more than 70 square foot of interior space with no closet nor bathroom provided directly opening into a room shall NOT be classified as a bedroom.
- Clearly labeled “Not a Bedroom” on submitted plans.

Project Benefits:
- Provides clarity for applicants and staff when determining required parking.

D-11. **Single Family Detached On-Street Parking**

Guest parking for Conventional Single-Family Detached Dwellings and Planned Concept Detached Dwellings may be provided on public and private streets, modifying OC Zoning Code Section 7-9-145.3.(d)(4) within the Ranch Plan planned community.

Performance Standards:
- All required parking spaces must be shown on a parking exhibit for entire project site as part of the Site Development Permit Plans:
  - Guest parking must be located within 200 feet of each unit.
  - For Conventional Single-Family Detached Dwellings, the parking exhibit must be provided as part of the Model Site Development Permit Plans.
  - For Planned Concept Detached Dwellings, the parking exhibit must be provided as part of the site-wide Site Development Permit plans.

Project Benefit:
- Provides clarity for applicants and staff when determining required parking.
D-12. **Single-Car Garages for Single-Family Detached Homes**

Single-car garages (a minimum 10 feet in width and 20 feet in length of unobstructed area) are allowed to serve Planned Concept, Conventional Single-family Detached or Duplex (per ADS D-14) dwellings less than 1,300 square feet.

**Performance Standards:**
- Dwelling units of less than 1,300 square feet must still comply with all other aspects of Ranch Plan PC Program Text Section III.K. (Off-Street Parking) and OC Zoning Code Section 7-9-145.3 (Residential off-street parking requirements) – this ADS simply allows one garage space and one uncovered space rather than two covered parking spaces.
- If garage is served by alley or parking court, parking spaces necessary to meet the parking requirements (on-street or off-street) must be provided within 200 feet of dwelling.
- If garage is served by public or private street, one driveway parking space (17-foot in length from the back of sidewalk), may be counted toward the unit’s designated parking requirement.
- All required parking spaces must be shown on a parking exhibit for entire project site as part of the Site Development Permit Plans:
  - Guest parking must be located within 200 feet of each unit.
  - For Conventional Single-Family Detached Dwellings, the parking exhibit must be provided as part of the Model Site Development Permit Plans.
  - For Planned Concept Detached Dwellings, the parking exhibit must be provided as part of the site-wide Site Development Permit plans.

**Project Benefits:**
- Increased housing choices in price range affordable to “first-time” and “move-down” homebuyers.
- Equivalent compliance with all aspects of Ranch Plan PC Program Text Section III.K. and OC Zoning Code Section 7-9-145 (Off-Street Parking).
- Equivalent ease of circulation and traffic safety.
- Equivalent access for fire and emergency vehicles.

D-13. **Tandem Parking**

Full parking credit allowed for tandem garage spaces (11’ x 40’) in up to 50% of project-wide dwellings for residential units located off of motorcourts and alleys.

**Performance Standards:**
- Compliance with all other aspects of Ranch Plan PC Program Text Section III.K. and OC Zoning Code Section 7-9-145 (Off-Street Parking).
- Garage spaces only, not driveway spaces.

**Project Benefits:**
- Equivalent compliance with all aspects of Ranch Plan PC Program Text Section III.K. and OC Zoning Code Section 7-9-145 (Off-Street Parking).
- Equivalent ease of circulation and traffic safety.
- Equivalent access for fire and emergency vehicles.
D-14. **Two-Family Residences (Duplexes)**
Two-family (duplex) residences allowed in Planned Concept Detached Dwellings neighborhoods per approval of a Site Development Permit (added as item “j” to the listing in Ranch Plan PC Program Text Section III.A.2.a.3).

**Performance Standard:**
- Compliance with all other applicable aspects of Ranch Plan PC Program Text Section III.A.2.

**Project Benefit:**
- Increased housing choices in price range affordable to “first-time” and “move-down” homebuyers.

**Notes:**
- Not a modification to the Zoning Code or PC Program Text “Permitted Uses”, but rather an ADS per PC Program Text General Note 25.
- Duplex dwellings are classified by OC Zoning Code as “R3” Residential, a type of single family dwelling consistent with the California Residential Code definitions of “Building” and “Dwelling”.

D-15. **“Off-Site” Garages for Single-Family Detached Homes**
Required covered parking spaces (including the provisions of ADS D-9) serving Conventional Single-Family or Planned Concept residential may be located on a separate building site (see exhibit on following page).

**Performance Standards:**
- Unattached garages shall be located within 200-foot walking distance of each specific dwelling unit being served.
- Compliance with all other aspects of Ranch Plan PC Program Text Section III.K. and OC Zoning Code Section 7-9-145 (Off-Street Parking), including but not limited to maneuverability requirements and compliance with California Disabled Access Requirements (ADA).
- Prior to builder “B” tentative tract map approval applicant shall clarify ownership of proposed off-site garage area and compliance with appropriate setbacks through appropriate methods to insure that the garage remains associated with the appropriate unit and is used as parking (e.g., CC&Rs).

**Project Benefits:**
- Increased housing choices in price range affordable to “first-time” and “move-down” homebuyers.
- Equivalent ease of circulation and traffic safety.
- Equivalent access for fire and emergency vehicles.
D15 - “Off-Site” Garages Serving Single Family Detached Residential Units

* Per Ranch Plan Planned Community Program Text Section III.A.2.d.6(c) and Exhibit D4-5

Exhibit D15

July 24, 2013
D-16. **Reduced Neighborhood Center Setback**  
Ranch Plan PC Program Text Section III.C.1.d.(3)(c) "Minimum Building Setbacks" for neighborhood retail uses may be reduced to zero on collector streets similar to the setback for Commercial Local Streets, as defined by Orange County Highway Design Manual (see exhibit below).

Note:
• Only applicable adjacent to Neighborhood Commercial uses, not Urban Activity Center or Business Park uses.

Performance Standards:
• Street shall have posted speed of 35 miles per hour or less.
• Parking lot provided at rear of building.

Project Benefits:
• Vintage main street ambiance.
• Equivalent access for fire and emergency vehicles.
Chapter G

RANCH PLAN
Planned Community-Wide
Alternative Development Standards
G. Private Street Rights-Of-Way & Intersections

G-1. Rural Local Street
Per the approval of the County Chief Engineer, modify County Standard Plan 1110 and to allow the following Rural Local Street standards.

Performance Standards:

1. Only applicable in residential neighborhoods served by local residential streets with less than 500 ADT, no through traffic, less than 50 dwelling units total and a gross density of 2 dwelling units per acre or less.

2. Per the approval of the County Chief Engineer and Orange County Fire Authority, modify County Standard Plan 1107 to allow local residential street with 6-inch rolled curbs (see ADS G-9 for detail, Standard Plan 1201). Measured from 6-inches back of curb the rolled curb streets shall be the same width as vertical curb streets. Utilizing Orange County Fire Authority measurement techniques (Flowline-to-flowline) the rolled curb streets may be one foot less in width than typically required, due to automatic sprinklers being required in the entire Ranch Plan planned community:

   - 35-foot wide double loaded local residential street
   - 27-foot wide single loaded local residential street

3. Tapers longer than those allowed per Alternative Development Standard A-9, resulting in a minimum travelway width of 24 feet, would only be allowed per Alternative Development Standard G-2 below:

4. No sidewalks required, if alternative trail provided, with access every 500 feet.

5. A storm drain shall be constructed when longitudinal flow exceeds capacity of the maximum size ditch which can be constructed wholly within the street right of way.

6. Roadside drainage swales on 24-foot wide travel-ways with ribbon curbs would be allowed only after the following criteria are met:
   b. Private local residential streets with less than 200 ADT and a percent grade of less than 8%.
   d. The flow velocity in the swales shall be non-erosive (less than approximately 6 feet per second).
   e. Master Maintenance Corporation (HOA) maintenance required.
   f. Landscaping will include low groundcover and trees.
Project Benefits:

- A semi-rural village ambiance.
- Equivalent drainage of private streets.
- Equivalent on-going maintenance costs.

G-2. **Modified Private Parking Standards**

Per the approval of the Subdivision Committee and the County Chief Engineer, modify County Standard Plan 1107 to allow extensive chicanes or tapers (minimum travelway width of 24 feet per Alternative Development Standard A-9) with on-street parking in periodic parallel parking areas, sometimes on the opposite side of the street.

Performance Standards:

- This modification shall be allowed only if the following criteria are met:
  
  a. Private residential streets with less than 500 ADT, and less than 400 ADT when single loaded street parking is on opposite side of street.

  b. Off-street parking for four cars, with a minimum of two spaces in the garage and the remainder in the driveway with accessibility to one garage space (to be verified prior to approval of street improvement plans). Residential lots are part of one developer built project, not individual custom lots.

  c. On-street guest parking for 0.5 cars per dwelling unit (to be verified prior to issuance of a precise grading permit).

  d. Compliance with Ranch Plan Fire Protection Program Section B.1.e.

  e. Larger lots (at least 6,600 square feet or frontage of 60 feet), also reducing the demand for off-street parking spaces per acre served by the effected streets.

Project Benefits:

- A residential village ambiance with less uninterrupted hardscape.
- Traffic calming due to increased landscaping serving as "friction" along the residential roadway.
- Equivalent parking per dwelling and ease of circulation and traffic safety.
- Equivalent access for fire and emergency vehicles.
G-3a. **Private Alley Drive Allowing Emergency Vehicle Access**

Per the approval of the County Chief Engineer and Orange County Fire Authority, allow for emergency access in private alleys, as shown on the Exhibit below:

**Project Benefits:**

- An enhanced ambiance due in the alley-load areas of the neighborhood, due to the ability to plant trees and other landscaping outside of the maneuvering area.

- Equivalent access for fire and emergency vehicles.

- Equivalent or better ease of circulation and traffic safety.

**Performance Criteria:**

- County turning radius template for large vehicles must be met.

- One rescue window serving each dwelling unit from alley, addressing location of mature trees and OCFA ladder access to rescue window.

- See Exhibit for the following plan-specific criteria:
  1) Shape and length of landscaped peninsula to allow garaged car to begin to turn wheel as soon as possible (“Autoturn” software or equivalent may be used to confirm maneuverability)

  2) Trees may be located anywhere within this landscaped peninsula, as long as canopy does not impact OCFA emergency access (13’ 6” vertical clearance within 20’ OCFA accessway, plus ladder access to rescue window).

  3) Neighborhood Electrical Vehicles (NEVs) of 9-foot in length or less may park perpendicularly in front of garage doors.

  4) Full sized autos may parallel park in front of garage doors, but no credit shall be granted for these spaces.

  5) 16-foot garage door.
Alleys, Private Drives and Courts
(Emergency Access Required)
G-3b. **Private Alley Drive With No Requirement for Emergency Vehicle Access**
Per the approval of the County Chief Engineer and Orange County Fire Authority, allow for private alleys (where no emergency vehicle access is required, as shown on the Exhibit below):

Project Benefits:

- Traffic calming.
- An enhanced ambiance due in the alley-load areas of the neighborhood, due to the ability to plant trees and other landscaping outside of the maneuvering area.
- A reduction in urban runoff due to the reduction in paved area.
- Equivalent or better ease of circulation and traffic safety.

Performance Criteria:

- County turning radius template for large vehicles must be met (no emergency vehicle access required)
NO TREE OVERHANG ALLOWED
WITHIN 20'-0" X 13'-6" ENVELOPE
(BASED OF ANTICIPATED MATURE TREE ENVELOPE)

20'-0"
EMERGENCY ACCESS

2'-0" CURB
AND GUTTER

8'-0"
PLANTER

6"

8'-6"
DRIVE APRON

6"

17'-0"
PAVED SURFACE

6"

20'-0"
ALLEY FLOWLINE TO FLOWLINE

8'-6"
8'-6"
DRIVE APRON

5'-0"
BUILDING FACE TO TREE
G-4. **4-inch Vertical Curb & Gutter on Private Streets At Work in Ladera**

Per the approval of the Subdivision Committee and the County Chief Engineer, modify County Standard Plans 1108-1110 and 1201 per dimensions as shown on Exhibit below:

Performance Standards:

4” vertical curb and gutter use shall be restricted to the following conditions:

a. Used on local residential neighborhood streets (not intended for collector streets) with homes loaded onto roadway.

b. Drainage system shall be designed to meet County Design requirements. The reduced hydraulic capacity of 4” high curbs shall require supplemental inlets to the underground storm drainage system.

c. Curb cores through 4” vertical curb shall not be allowed and instead a behind-the-curb drainage system shall be required.

Project Benefits:

- A residential village ambiance.

- Equivalent or better drainage of private streets.
Grated Inlets Catch Basins on Private Streets At Work in Ladera
Per the approval of the County Chief Engineer, modify County Standard Plan 1304 (Inlet Type IV) and APWA Standard Plan 303-1 (Curbside Grating Catch Basin).

Performance Standards:

1. Grated Inlet Catch Basins will only be used where the following criteria are met:
   a. Private streets with ramped curbs per ADS G-3.
   b. County Standard Cast Nodular Iron Grate (Bicycle Proof) is used per County Standard Plan 1307 (Miscellaneous Inlet Details and Notes)
   c. Drainage design meets County Design requirements for grate inlets accounting for clogging.
   d. In sump conditions, grates may only be used as a secondary overflow device.

2. Master Homeowners Association responsible for verifying clog-free condition prior to rainy season and following each storm event.

Project Benefits:

- Integrates easily with ramped curb used in rural residential village
- Grated inlets improve drainage on steeper hillside streets.
- Restricts trash from entering storm drain system.
THE RANCH PLAN ALTERNATIVE DEVELOPMENT STANDARDS

Grated Inlet Catch Basins on Private Streets

G-6
G-7. **Reduced Local Depression on Private Streets** At Work in Ladera
Per the approval of the County Chief Engineer, modify County Standard Plan 1308 (Local Depression):

**Performance Standards:**

1. Reduced Local Depression will only be used where the following criteria are met:
   a. Private streets with ramped curbs per ADS G-3.
   b. At sump conditions where primary flood conveyance facility is a curb opening catch basin per County Standard Plan 1301 or 1302 (Inlet Type I or II).
   c. Drainage design meeting County Design requirements taking reduced local depression into account.
   d. May be used in combination with grated inlet to reduce trash entering storm drain system.

**Project Benefits:**

- Integrates easily with ramped curb used in private rural residential village.
- Reduced impact to street sections, especially at 24 foot tapers.
- Higher degree of flood protection provided at low points with curb opening catch basin.
THE RANCH PLAN ALTERNATIVE DEVELOPMENT STANDARDS

Reduced Local Depression on Private Streets

March 6, 2007
G-8. Reduced Local Depression on Public Streets At Work in Ladera
Per the approval of the County Chief Engineer, modify County Standard Plan 1308 (Local Depression):

Performance Standards:

1. Reduced Local Depression will only be used where the following criteria are met:
   a. Public streets with standard curbs.
   b. At curb opening catch basin per County Standard Plan 1301 or 1302 (Inlet Type I or II).
   c. Drainage design meeting County Design requirements taking reduced local depression into account.
   d. May be used in either a flow-by or sump condition.

Project Benefits:

- Reduced impact to street sections, especially at 24 foot tapers.
G-9. **Rolled Curb on Private Streets** At Work in Ladera
Per the approval of the County Chief Engineer, modify County Standard Plans 1108-1110 and 1201 per dimensions as shown on exhibit on following page.

Performance Standards:

1. 5-inch and 6-inch rolled curb hydraulic capacity shall be equivalent to or greater than standard vertical curb.

2. 4-inch rolled curb use shall be restricted to the following conditions:
   
   a. Local residential neighborhood streets (not intended for collector streets) with homes loaded onto roadway.

   b. Drainage system shall be designed to meet County Design requirements. The reduced hydraulic capacity of 4-inch high curb shall require supplemental inlets to the underground storm drainage system.

   c. Curb cores through 4-inch rolled curb shall not be allowed. Instead, a behind-the-curb drainage system shall be required.

Project Benefits:

- A rural residential village ambiance
- Equivalent or better drainage of private streets
- The 4-inch high rolled curb improves vehicular access to driveways.
Note: Curb cores through 4" Rolled curb shall not be allowed and instead a behind-the-curb drainage system shall be required.

4" ROLLED CURB & GUTTER

5" ROLLED CURB & GUTTER

6" ROLLED CURB & GUTTER
G-10. Grated Inlet Catch Basins With Rolled Curb on Private Streets At Work in Ladera

Per the approval of the County Chief Engineer, modify County Standard Plans 1304 (Inlet Type IV), APWA Standard Plan 303-1 (Curbside Grating Catch Basin), and ADS G-6 (Grated Inlet Catch Basins on Private Streets) as shown on exhibit on following page.

Performance Standards:

1. Grated Inlet Catch Basins will only be used where the following criteria are met:

   a. Private streets with rolled curbs per ADS G-9

   b. Use County Standard Cast Nodular Iron Grate (Bicycle Proof) per County Standard Plan 1307 (Miscellaneous Inlet Details and Notes)

   c. Drainage design meeting County Design requirements for grate inlets accounting for clogging (50% clogging at sumps, 25% clogging at flow-by conditions with 80-85% interception).

   d. In sump conditions may only be used as a secondary overflow device.

2. Master Maintenance Corporate (HOA) responsible for verifying clog-free condition prior to rainy season and following each storm event.

Project Benefits:

- Integrates easily with rolled curb used in private rural residential village.

- Grated inlets improve drainage on steeper hillside streets

- Restricts trash from entering storm drain system.
THE RANCH PLAN ALTERNATIVE DEVELOPMENT STANDARDS

Grated Inlet Catch Basins
With Rolled Curb on Private Streets

ADS
G-10

March 6, 2007
Page 137
G-11. **Reduced Local Depression With Rolled Curb on Private Streets At Work in Ladera**
Per the approval of the County Chief Engineer, modify County Standard Plans 1308 (Local Depression), and ADS G-7 (Reduced Local Depression on Private Streets) as shown on exhibit on following page.

Performance Standards:

a. Private streets with rolled curbs per ADS G-9

b. At sump conditions where primary flood conveyance facility is a curb opening catch basin per County Standard Plan 1301 or 1302 (Inlet Type I or II).

c. Drainage design meeting County Design requirements taking reduced local depression into account.

Project Benefits:

- Integrates easily with rolled curb used in private rural residential village.
- Reduced impact to street sections, especially at 24-foot tapers
- Curb opening catch basin provides higher degree of flood protection at low points than otherwise would be provided with a rolled curb and grated inlet.
G-12. **Modified Curb Ramp (Type 5) At Work in Ladera**
Per the approval of the County Chief Engineer, modify County Standard Plans 1115 (Curb Ramps) per dimensions as shown on exhibit on following page.

Performance Standards:

a. Used with 4-inch, 5-inch or 6-inch rolled curb per ADS G-9, ribbon curb per ADS A-36, or standard curbs.

Project Benefits:

- Reduced footprint compared to standard Type 5 ramp.
- Works equally well with narrow or wide parkways.
- Adaptable to any curb type.
THE RANCH PLAN ALTERNATIVE DEVELOPMENT STANDARDS

Modified Curb Ramp
County Standard Plan 1115 (Type 5)

MODIFIED TYPE 5 CURB RAMP FOR MIN 5' WIDE PARKWAY
MID-BLOCK LOCATIONS ONLY
PER PF&RD STD PLAN 1115 (TYPE 5)
G-13. **Pedestrian Crossing at Drainage Swale on Private Streets.** At Work in Ladera

Per the approval of the County Chief Engineer, create a unique standard pedestrian crossing at drainage swales on private streets, per dimensions as shown on exhibit on following page.

Performance Standards:

1. Used with ADS A-36 ribbon curb at mid-block locations

2. Pedestrian crossing’s use shall be restricted to the following conditions:
   
a. Used on local residential neighborhood streets (not intended for collector streets)

   b. Drainage system shall be designed to meet County Design requirements. A minimum 8-inch diameter culvert shall be provided to convey flows through the pedestrian crossing. In any case, the responsible engineer shall verify the culvert is adequate to prevent ponding an overtopping of the pedestrian crossing in the drainage swale.

Project Benefits:

- A rural residential village ambiance.
- Equivalent or better drainage of private streets.
- Provides pedestrian access across drainage swales where driveways may not be present.
THE RANCH PLAN ALTERNATIVE DEVELOPMENT STANDARDS

Pedestrian Crossing at Drainage Swale on Private Street

March 6, 2007
G-14. **Corner Curb Ramp With Ribbon Curb on Private Streets**  
*At Work in Ladera*

Per the approval of the County Chief Engineer, create a unique standard corner curb ramp with ribbon curb on private streets, per dimensions as shown on exhibit on following page.

Performance Standards:

1. Used with ADS A-36 ribbon curb at middle of curb returns.

2. Curb ramp’s use shall be restricted to the following conditions:
   
   a. Used on local residential neighborhood streets (not intended for collector streets)

   b. Drainage systems (swales and catch basins) shall be designed to meet County Design requirements. Inlets shall be provided (as needed) prior to curb ramp to prevent excessive ponding and overtopping the curb ramp.

Project Benefits:

- A rural residential village ambiance.

- Equivalent or better drainage of private streets.

- Ease of pedestrian circulation from sidewalk to curb return.
G-15. **Single Sided Parking on Double Loaded Private Streets**

Per the approval of the County Engineer, modify County Standard Plan 1107 to allow 30-foot wide (curb-face to curb-face) private residential local streets with traffic levels of up to 200 average daily trips (ADT). This modified standard would apply on public local streets with residential frontage both sides. Parkway widths would be provided per County Standard Plan 1107 unless modified by Alternative Development Standard #A-5.

**Performance Standards:**

a. Residential parking to be provided per the Orange County Zoning Code.

b. Appropriate decorative signage designating "no parking" areas (meeting code requirements per the Sheriff’s approval), shall be located every 200 feet.

c. Driveway parking of at least 18 feet in length is provided at each home site on any affected street.

d. Lot sizes of at least 5,000 square feet or wider than 50 feet), thereby reducing the demand for off-street parking spaces per acre served by the effected streets.

e. Only allowed on local residential streets with less than 200 ADT

**Project Benefits:**

- A residential village ambiance with less uninterrupted hardscape.
- Traffic calming due to increased landscaping serving as "friction" along the residential roadway.
- Equivalent ease of circulation and traffic safety.
- Equivalent access for fire and emergency vehicles.
Chapter J
J. Neighborhood Electric Vehicles

A unique aspect of the Ranch Plan is the integration of low-speed Neighborhood Electric Vehicles (NEV) throughout the fabric of the community. NEVs provide an alternative to the automobile for short trips. NEV usage would be accommodated by a network of paths connecting neighborhoods with shopping, parks, and, community facilities. NEV paths would be largely off-street; however, on-street paths and NEV intersection crossings would exist.

Senate Bill No. 956, approved by the Governor October 10, 2007, authorizes the County of Orange to establish a neighborhood electric vehicle transportation plan for the Ranch Plan Planned Community. This Chapter J of the Alternative Development Standards includes elements of the Ranch Plan neighborhood electric vehicle transportation plan. As required by Senate Bill No. 956, Section 1965.2(b), these elements of the NEV transportation plan have been reviewed by, and comments received from, the Orange County Transportation Authority, the California Highway Patrol, and the California Department of Transportation.

The facility nomenclature for NEVs mimics those of bicycles, namely: Class I is an off-street path, Class II is a striped on-street lane, and on a Class III route NEVs share a travel lane with automobiles (see Exhibits J-1A, J-1B, J-1C, J-1D, J-2A, J-2B, J-3A, J-3B, J-3C, J-3D, J-3E, J-4A, and J-4B). NEV roadway designation types are as described below:

- **Class I** NEV facilities typically provide for a separate right-of-way for the exclusive use of NEVs, away from automobile traffic. Class I NEV trails may be shared with pedestrians and bicyclists in certain circumstances, such as local connections, commercial centers, or in an environmentally constrained right-of-way. Additional width may be required in locations where the Class I trail includes high NEV usage and bicycle and/or pedestrian traffic.
**Class II** NEV facilities provide for a separate striped lane adjacent to roadways, with regulated speeds equal to 55 miles per hour or less.

**Class III** NEV facilities provide for shared use by NEVs and conventional vehicle traffic on streets. Roadways with Class III facilities will have regulated speeds of 25 miles per hour or less.

*Note: These illustrations are intended to show the classifications of NEV/Bike facilities and are to be used for informational purposes only. See the following Exhibits for additional details.*
This chapter addresses the following design aspects of NEV activity: intersection treatments, signage, striping, widths, maximum grades, etc. Additional details or situations should be based on typical highway and bikeway design principals.

J-1 NEV Intersection Treatments

Per the approval of the Subdivision Committee and the County Chief Engineer, modify County Standard Plans 1107 and 1111 to allow NEV treatments to be included in public intersections.

The following four main NEV intersection treatments have been identified for potential inclusion in Planning Area 1 of the Ranch Plan:

- Exhibit J-1A – details intersection treatments of Class I to Class I NEV connections.
- Exhibit J-1B – details intersection treatments of Class I to Class II NEV connections.
- Exhibit J-1C – details intersection treatments that provide Class II to Class II and Class II to Class III NEV connections.
- Exhibit J-1D – details treatments at roundabouts with Class II NEV lanes.

Project Benefits:

- Reduction in fossil fuel use and greenhouse gases throughout the Ranch Plan Planned Community due to:
  - Reduction of auto trips.
  - Reduction of auto miles traveled.
- Provides alternative forms of transportation, with ease of circulation and direct connectivity, between land uses.
- Promotes a sense of community.
- Provides protected crossings for NEV users at intersections.
- Complies with current law, which allows NEVs to use roadways with a regulated speed limit of 35 miles per hour or less.
Performance Standards:

- Applies to signalized, unsignalized, and roundabout intersections where NEV accommodation may be desirable.

- Applies to all roadways and intersections with Class I or II NEV lanes or Class III NEV roadways.

- Crossings may require special paving.

- Crossings may require NEV loop detectors (or similar actuation detector).

- Crossings require NEV-specific signage, as described in ADS section J-2.

- NEVs may cross a roadway with a regulated speed limit of greater than 35 miles per hour, if the crossing begins and ends: on a roadway with a regulated speed limit of 35 miles per hour or less, on a roadway with Class II on-street lanes, on a roadway with an adjacent Class I off-street facility, and occurs at an intersection of approximately 90 degrees.

- NEVs shall not cross an uncontrolled intersection (i.e., no traffic signal) with any state highway (this applies only to Ortega Highway, State Route 74), unless the intersection has been approved and authorized by the California Highway Patrol.
LEGEND

- NEV Loop Detector (at signalized intersections)
- NEV Route
- Bollards
- Distinctive Paving (to be consistent with paving used elsewhere in the community and may include: pavers, colored concrete, scoring patterns, different finishes, striping, etc.)

NOTES:

- NEV Prohibited sign to be used when necessary.
- Tracking of NEV lane through intersection used as needed.
- Similar design would apply to intersections with four automobile approaches.
- Crosswalk ramps should be 8 feet wide to accommodate a two-way NEV facility.
- All ramps to meet minimum ADA standards as indicated on RDMD Std. Plan 1115.
LEGEND

- NEV Loop Detector
  (at signalized intersections)
- NEV Route
- Bollards

NOTES:
- * Striped crosswalks only needed if intersection is signalized
- ** Tracking of NEV lane through intersection used only if needed based on geometry
- *** NEV Prohibited sign to be used when necessary
- All ramps to meet minimum ADA standards as indicated in RDMD Std. Plan 1115.
- Crosswalk ramps should be 6 feet wide to accommodate a two-way NEV facility. A reduced 6-foot wide ramp could be used in constrained locations of one-way NEV travel with direct routes to and from the curb ramp.
CLASS II INTERSECTION TREATMENT
APPLIES TO COMMUTER, COLLECTOR AND LOCAL ROADS

NOTES:
- All ramps to meet minimum ADA standards as indicated on RDMD Std. Plan 1115.
- Diagram intended to show different Intersection concepts.
- Concepts apply to signalized and stop-controlled Intersections.
J-2 NEV Signage

Per the approval of the Subdivision Committee and the County Chief Engineer, modify County Standard Plan 1409 to allow NEV-specific signage installations along public roadways.

NEV-specific signage would provide guidance to NEV users, motorists, pedestrians, and bicyclists. This signage should accompany the NEV facilities and NEV activity planned for the Ranch Plan Planned Community.

Project Benefits:

- Advise motorists of NEV activity and crossing locations in the community.
- Advise bicyclists of a shared NEV/bike lane.
- Direct NEV users to the appropriate travel routes and crossings.

Performance Standards:

- Signage should be applied at all locations deemed necessary during signing and striping design.
- Signage should be located at typical locations of standard bike route signage.
Title: Bike/NEV Lane Sign
Colors: Black on White
Notes: To be used on Class II (on-road) Bike & NEV lanes.

Title: NEV Community Sign
Colors: Black on White
Notes: To be used at entrance to community (when entering community from MPAH arterials).

Title: NEV Route Sign
Colors: White on Green
Notes: To be used on Class III NEV routes.
Title: NEV Prohibited Symbol Sign  
Colors: Red and Black on White  
Notes: To be used to indicate prohibited NEV areas.

Title: NEV Prohibited Written Sign  
Colors: Black on White  
Notes: To be used to indicate prohibited NEV areas.

Title: NEV Crossing Clarification Sign  
Colors: Black on Yellow  
Notes: To accompany and clarify the signs illustrated below.

Title: NEV Crossing Advisory Sign  
Colors: Black on Yellow  
Notes: To be used to advise motorists of upcoming NEV crossings.

Title: NEV Crosswalk Advisory Sign  
Colors: Black on Yellow  
Notes: To be used adjacent to NEV crossings.
J-3 Class I Off-Street NEV Trail

Per the approval of the Subdivision Committee and the County Chief Engineer, allow Class I off-street NEV trails that would connect land uses and planning areas in the Ranch Plan Community.

Off-street trails would provide a pleasant environment for NEV users away from general automobile traffic. The Class I NEV trails would often be located parallel and adjacent to the Countywide Bikeway, such as on the north side of San Juan Creek and near Cow Camp Road. In certain locations the trails may utilize utility access roads.

Class I NEV Trails are designed for the exclusive use of NEVs with the exception of the occasional maintenance vehicle. Class I NEV trails shall have a design speed of 25 miles per hour.

The following five exhibits detail the off-street NEV trails.

- Exhibit J-3A – Provides a section view of the Community’s shared NEV/bicycle/pedestrian trail section.
- Exhibit J-3B – Provides a plan view of the NEV trail sections.
- Exhibit J-3C – Details parallel NEV and Countywide Bikeway/Pedestrian trails.
- Exhibit J-3D – Details adjacent NEV and Countywide Bikeway/Pedestrian trails.
- Exhibit J-3E – Provides a description of the “turtle-style” raised pavement markers that would help to separate the NEV users from the bicyclists and pedestrians.

Project Benefits:

- Reduction in fossil fuel use and greenhouse gases throughout the Ranch Plan Planned Community due to:
  - Reduction of auto trips.
  - Reduction of auto miles traveled
- Provides alternative forms of transportation, with ease of circulation and direct connectivity, between land uses.
- Promotes a sense of community.
• Provides additional opportunities for residents to experience the park and creek area.

• Maintains bicycle and pedestrian facilities.

Performance Standards:

• Applies to all Class I off-street NEV trails.

• Signage, striping, and delineation of trails may be required.

Community Trail

Notes: - Trail may be shared by NEVs, bicyclists, and pedestrians.
- Off-street trail shown is not intended for application of Countywide regional Class I bicycle facilities.
- Refer to Exhibits J-3B to J-3D for regional Class I bicycle facilities.

Exhibit J-3A
Typical Class I NEV Trail Sections

Notes:  - NEV and bicycle trails may be separated by at least six feet (measured from edge of pavement) when a substantial grade does not exist.
  - Distance to reach a minimum six foot separation is based on a 25 mile per hour design speed and varies between 20 and 40 feet depending on whether one or both trails experience horizontal deflection.
  - EOP = edge of pavement
Section A-A (refer to Exhibit J-3B)

Typical Class I NEV Trail with Separated Parallel Class I Bikeway

Notes:  
- This section may be used when a NEV facility parallels a regional Class I bikeway.  
- Regional bikeway per County standards and pedestrian facilities per County standards.  
- Drainage culvert width is flexible and can vary depending on local conditions.  
- Center line or edgeline striping may be needed at sub-standard curves/widths/grades. 
- Minimum overhead clearance of 14 feet for NEV trail needed to accommodate maintenance vehicles.  
- Typical maximum grade of 6%.  
- Typical maximum grade of 12% at bridge undercrossings.
**Section B-B (refer to Exhibit J-3B)**

Typical Class I NEV Trail Adjacent to Class I Bikeway

Notes:
- All pavement marking delineators should follow Exhibit J-3E.
- Delineators should be used with a minimum 10-foot spacing.
- Drainage culvert width is flexible and can vary depending on local conditions.
- Edgeline striping may be needed at sub-standard curves/widths/grades.
- Edgeline striping (4 inch, white) may be used adjacent to delineators, in which case it should be striped at an outside distance 2 feet from delineator.

August 12, 2008
Delineator Detail – Modified Detail 38

Notes:  
- Marker detail from Caltrans Modified Detail 38 (Caltrans 2006 Standard Plan A20D).
- Refer to insert of Exhibit J-3D for placement details.
- Dimensions shown are approximate and can vary based on location.
- Delineators should be used with a minimum 10-foot spacing.
- Master association assumes maintenance.
- Edgeline striping may be needed at sub-standard curves/widths/grades.
- Edgeline striping (4 inch, white) may be used adjacent to delineators, in which case it should be striped at an outside distance 2 feet from delineator.
J-4  Class II On-Street NEV Lane

Per the approval of the County Chief Engineer, modify County Standard Plans 1107 and 1111 to allow a Class II NEV lane to be striped on appropriate roadways (7-foot minimum NEV travel lane, exclusive of the gutter area).

Class II NEV lanes would provide an on-street exclusive lane for NEV and bike users to travel within the Ranch Plan Community and between Class III roadways and Class I off-street trails (as shown in Exhibits J-3). Through signage and striping, Class II NEV lanes shall merge into Class III shared travel lanes immediately prior to entering roundabouts (ADS B-6).

Parking shall be prohibited within typical width Class II NEV/bike lanes. Where on-street parking is required on a designated NEV/bike lane additional width shall be provided.

NEV-specific striping would provide guidance to NEV users, motorists, and bicyclists. This signage should accompany the NEV facilities and NEV activity planned for the Ranch Plan Community.

Project Benefits:

• Advise motorists of NEV/bike-only travel lane.
• Advise bicyclists of a shared NEV/bike lane.
• Creates dedicated lane for NEV travel.

Performance Standards:

• Striping should be applied for all Class II (on-street) NEV lanes on roadways within the Ranch Plan Community.
Class II On-Street NEV/Bike Lane

Landscape Strip / Sidewalk | NEV/Bike Lane | Travel Lane | Travel Lane | NEV/Bike Lane | Landscape Strip / Sidewalk

Travelway 7’ (min.) 1.5’ (min.) NEV/Bike Gutter Lane (without parking)
Notes:

- Bike/NEV lane striping should be used in all appropriate locations, as indicated in the MUTCD.

- Striping placement and sizing should be consistent with MUTCD and adjacent locations.
J-5  **Class III NEV Route**

The California Vehicle Code allows NEVs to share the travelway with automobiles on all roadways with a speed limit of 35 miles per hour or less (CVC Section 2160.a). Therefore, shared automobile-NEV travel is legal on all roadways in the Ranch Plan Planned Community with speed limits of 35 miles per hour or less, unless specifically prohibited or supplanted by a Class II on-street lane.

The designation of a Class III NEV Route would be reserved for locations which provide continuity between other NEV facilities or to designate the preferred NEV route through a high demand corridor.

Project Benefits:

- Provides alternative forms of transportation, with ease of circulation and direct connectivity, between land uses.
- Promotes a sense of community.

Performance Standards:

- Roadways specifically identified as Class III NEV Routes will be signed in accordance with the NEV Route Sign shown on Figure ADS J-2A.
NEV Parking Associated with Recreation, Neighborhood Center, Urban Activity Center, Business Park, and Community Facility Uses

Per the approval of the Subdivision Committee, alternative provision of off-street parking is allowed in compliance with Ranch Plan Planned Community Program Text Section III.K and the Orange County Zoning Code Section 7-9-145.4(a), 7-9-145.5(a). A unique aspect of the Ranch Plan is the integration of NEVs throughout the fabric of the community. In order to further encourage NEV use:

- Two percent (2%) of all required non-residential parking within the Ranch Plan Planned Community (uses allowed by Ranch Plan Planned Community Program Text Sections III.B-F) may be provided by NEV spaces with a minimum of 3 NEV spaces per lot and maximum of 25 NEV spaces per applicable parking lot. The County of Orange and RMV understand that the parking criteria may be revisited as information about the NEV program and its function within the community are available and support changes to these standards.

- The size of all covered and uncovered off-street NEV parking spaces shall be a minimum clear unobstructed seven (7) feet in width and twelve (12) feet in length.

- For all portions of a parking lot where NEV spaces are located on both sides of a parking aisle, or where NEV spaces are located only on one side of a parking aisle, and no parking is located on the other side, any one-way parking aisle shall have a minimum width of thirteen (13) feet and any two-way parking aisle shall be a minimum width of sixteen (16) feet.

- For all portions of a parking lot where NEV spaces are located on the other side of a parking aisle from standard width parking spaces, the parking aisle widths shall be per Zoning Code Section 7-9-145.4.

Project Benefits:

- NEVs provide an alternative to the automobile for short trips.

- As a result, there is a reduction in fossil fuel use and greenhouse gases throughout the Ranch Plan Planned Community due to:
  - Reduction of auto trips.
  - Reduction of auto miles traveled.

- Encourages alternative forms of transportation, with ease of circulation and direct connectivity, between land uses.

Performance Standards:

- Applies only to non-residential uses located adjacent to, or served by, Class I, Class II, or Class III NEV facilities, as part of the network of paths, lanes, and travelways connecting residential neighborhoods with shopping, parks, offices, and community facilities.
Appendix

CERTIFICATION:

1. County of Orange (RDMD) (Date: March 6, 2007)
   Ranch Plan Community Wide Alternative Development Standards

2. Final Subdivision Committee Report (Date: March 14, 2007)
   Ranch Plan Planned Community Alternative Development Standards

3. Certification (Date: July 9, 2008)
   Ranch Plan Alternative Development Standards (ADS) Supplement #2: (Neighborhood Electric Vehicles)

4. Orange County Public Works Memorandum (Date: September 14, 2011)
   2011 Proposed Ranch Plan Alternative Development Standards (ADS) Additions (C-6, C-7, and C-8)

5. Orange County Public Works Memorandum (Date: September 14, 2011)
   2011 Proposed Ranch Plan Alternative Development Standards (ADS) Additions (B-6, B-7, B-8, B-9, G-9, G-11, G-14 and G-15)

6. Orange County Public Works Memorandum (Date: March 15, 2012)
   Ranch Plan Alternative Development Standards (ADS) Additions/Revisions (A-18 and A-37)

7. Orange County Planning Commission Summary Minutes (HD: July 24, 2013)

8. Orange County Public Works Memorandum (Date Signed: November 14, 2014)
   Ranch Plan Alternative Development Standards (ADS) Additions (B-6 and G-9)

9. Orange County Public Works Memorandum (Date Signed: March 10, 2015)
   Ranch Plan Alternative Development Standards (ADS) Additions C-6

10. Orange County Public Works Memorandum (Date: May 26, 2015, Signed May 29, 2015)
    Ranch Plan Alternative Development Standards (ADS) Additions (B-2 and C-5)


RANCH PLAN
Planned Community-Wide
Alternative Development Standards
Certification #1

County of Orange (RDMD)
(Date: March 6, 2007)
Ranch Plan Community Wide
Alternative Development Standards
DATE: March 6, 2007

TO: Orange County Subdivision Committee

FROM: Assistant Public Works Director/Chief Engineer

SUBJECT: RANCH PLAN COMMUNITY WIDE ALTERNATIVE DEVELOPMENT STANDARDS

I have reviewed the submitted Ranch Plan Alternative Development Standards that proposed alternatives to Orange County Standard Plans. These alternatives have been reviewed and are hereby approved for use throughout the Ranch Plan Planned Community, with a scheduled Subdivision Committee concurrence on March 14, 2007.

Please feel free to call me should you have any questions concerning this item.

Ignacio Ochoa

Attachment:
Alternative Development Standards

cc: Tim Neely, Director, Planning and Development Services
    Harry Persaud, Manager, Subdivision and Infrastructure Services
    Grant Anderson, Supervisor, Traffic Engineering
    Javier Soto, Manager, Road Design
Certification #2

Final Subdivision Committee Report
(Date: March 14, 2007)
Ranch Plan Planned Community
Alternative Development Standards
FINAL
SUBDIVISION COMMITTEE REPORT
PREPARED MARCH 14, 2007

HEARING DATE: March 14, 2007

SUBJECT: Ranch Plan Planned Community Alternative Development Standards

LANDOWNER: RMV Community Development, LLC (Rancho Mission Viejo)

LOCATION: Ranch Plan Planned Community

STAFF CONTACTS: Harry Persaud
Mark Esslinger

PHONE: (714) 834-5282
(714) 834-5049

PROPOSAL:

The attached alternative development standards (ADS) are proposed for the Ranch Plan development. The County supports these ADS because they are more appropriate for the unique character of the development proposed for Ranch Plan Planned Community. They have been reviewed by County staff (Subdivision & Infrastructure and Road Division) and approved by the Assistant Public Works Director/Chief Engineer.

ATTACHMENT:

Ranch Plan Planned Community Alternative Development Standards

CERTIFICATION:

I hereby certify that the Ranch Plan Planned Community Alternative Development Standards were approved by the Orange County Subdivision Committee on March 14, 2007.

Grant Anderson
Chairman, Subdivision Committee
Certification #3

Certification
(Date: July 9, 2008)
Ranch Plan Alternative Development Standards (ADS)
Supplement #2: (Neighborhood Electric Vehicles)
CERTIFICATION

I hereby certify that the Ranch Plan Planned Community Alternative Development Standards Supplement #2: Neighborhood Electric Vehicles was approved by the Orange County Subdivision Committee on July 9, 2008.

[Signature]

Grant Anderson
Chairman, Subdivision Committee
Certification #4

Orange County Public Works Memorandum
(Date: September 14, 2011)
2011 Proposed Ranch Plan Alternative Development Standards (ADS) Additions (C-6, C-7, and C-8)
Memorandum

DATE: September 14, 2011
TO: File/Records/OC Public Works
FROM: Rick Le Feuvre, Director, OC Planning, OC Public Works
      Ignacio Ochoa, P.E., Director/Chief Engineer, OC Engineering
SUBJECT: 2011 Proposed Ranch Plan Alternative Development Standards (ADS) Additions (C-6, C-7, C-8)

We have reviewed the submitted 2011 Ranch Plan Alternative Development Standards (ADS) Additions (C-6, C-7, and C-8). Three items listed below are proposed alternatives to both Orange County Standard Plans and previously approved Ranch Plan Community-Wide Alternative Development Standards dated March 14, 2007, amended on July 9, 2008 and August 12, 2008.

1. New C-6 – Additional Parkway and Street Median Trees: A proposal to broaden the list of trees allowed to be planted in parkways and medians.

2. New C-7 – Additional Drought Tolerant Plants: A proposal to broaden the palette of drought tolerant plants allowed to be planted in public rights-of-way.

3. New C-8 – Turfgrass Irrigation in Parkways: An important proposed clarification to Orange County’s 2010 Water Efficient Landscape Ordinance.

CERTIFICATION

I hereby certify that the subject 2011 Proposed Ranch Plan Alternative Development Standards (ADS) Additions, (C-6, C-7, and C-8) has been approved.

Rick LeFeuvre, Director, OC Public Works/OC Planning

Date: 9/14/11

Ignacio Ochoa, P.E., Director/Chief Engineer
OC Public Works/OC Engineering

Date: 9/14/11

c: Khalid Bazmi, Manager, OC Engineering/OC Road
   Isaac Alonso Rice, Manager, OC Engineering /OC Road
   Harry Persaud, Manager, Manager, OC Planning/OC Planned Communities
   David Shepherd, Manager, OC Planning/OC Planned Communities/Land Use Planned Communities
   Laree Brommer, Manager, OC Planning/OC Planned Communities/Land Use Planned Communities
Certification #5

Orange County Public Works Memorandum
(Date: September 14, 2011)
2011 Proposed Ranch Plan Alternative Development Standards (ADS) Additions (B-6, B-7, B-8, B-9, G-9, G-11, G-14 and G-15)
Memorandum

DATE: September 14, 2011
TO: File - Records/OC Public Works
FROM: Ignacio Ochoa, P.E., Director, Chief Engineer, OC Engineering
SUBJECT: 2011 Ranch Plan Alternative Development Standards (ADS) Additions, Revisions (B-6, B-7, B-8, B-9, G-9, G-11, G-14, and G-15)

I have reviewed the submitted 2011 Ranch Plan Alternative Development Standards (ADS) Additions, Revisions (B-6, B-7, B-8, B-9, G-9, G-11, G-14, and G-15). Eight items listed below are proposed alternatives to both Orange County Standard Plans and previously approved Ranch Plan Community-Wide Alternative Development Standards dated March 14, 2007, amended on July 9, 2008 and August 12, 2008.

1. B-6 – Roundabouts: A proposed modification to the roundabout concrete gutter detail to add a one-inch “batter” (Sheet 7 of 8), per the request of the Manager of Inspection Services.

2. B-7 – Alternative Residential Corner Ramp Condition – Tapered Intersection: A proposed modification to add a detectable warning surface, per County Standard Plan 1115, per the request of Manager, Inspection Services.

3. B-8 – Alternative Residential Corner Ramp Condition – Typical Intersection: A proposed modification to add a detectable warning device, per County Standard Plan 1115, per the request of Manager of Inspection Services.

4. B-9 – Modified Color of Curb Ramp Detectable Warning Surface: A proposed modification to allow alternative colors based on demonstrable effectiveness per FHWA study data.

5. G-9 – Rolled Curb on Private Streets: A proposed minor modification to add a one-inch “batter” to curb detail, per request of Manager of Inspection Services.

6. G-11 – Reduced Local Depression With Rolled Curb on Private Streets: A proposed minor modification to add an inlet protection bar, per request of Manager of Inspection Services.

7. G-14 – Corner Curb Ramp With Ribbon on Private Streets: A proposed minor modification to add a one-inch “batter” to curb detail, per request of Manager of Inspection Services.

8. New G-15 – Single Sided Parking on Double Loaded Private Streets: As presently allowed on public streets, per existing ADS A-2b, the ADS would simply clarify that this standard may also be applied to private streets.

These additions and revisions have been reviewed by the OC Public Works staff from OC Planning Division and OC Engineering Division.
CERTIFICATION

I hereby certify that the subject 2011 Ranch Plan Alternative Development Standards (ADS) additions and revisions 2011 (B-6, B-7, B-8, B-9, G-9, G-11, G-14, and G-15) are hereby approved for use throughout the Ranch Plan Planned Community.

Ignacio Ochoa, P.E., Director/Chief Engineer
OC Public Works/OC Engineering

Date: 9/14/11

cc: Rick LeFeuvre, Director, OC Planning  
Harry Persaud, Manager, OC Planning/OC Planned Communities  
David Shepherd, Manager, OC Planning/OC Planned Communities/Land Use Planned Communities  
Laree Brommer, Manager, OC Planning/OC Planned Communities/Land Use Planned Communities  
Khalid Bazmi, Manager, OC Road  
Isaac Alonso Rice, Manager, OC Road
Certification #6

Orange County Public Works Memorandum
(Date: March 15, 2012)
Ranch Plan Alternative Development Standards (ADS)
Additions/Revisions (A-18 and A-37)
DATE: March 15, 2012
TO: File - Records/OC Public Works
FROM: Ignacio G. Ochoa, P.E., Director/Chief Engineer, OC Engineering


1. A-18 – Modified Knuckle (Revised): Clarify that parking is allowed within the modified “knuckle” only along the outside curve. This is a modification to County Standard Plan 1112.

2. A-37 – Model Home Trap Fencing (New): Modify County Standard Plan 1801 (Item #22) to allow a model home solution that avoids the need for double sidewalks (i.e. private sidewalk inside model trap fencing, and parallel public sidewalk outside trap fencing).

These additions and revisions have been reviewed by the OC Public Works staff from OC Planning Division and OC Engineering Division.

CERTIFICATION

I hereby certify that the subject Ranch Plan Alternative Development Standards (ADS) additions and revisions A-18 and A37 are hereby approved for use throughout the Ranch Plan Planned Community.

Ignacio G. Ochoa, P.E.,
Director/Chief Engineer, OC Engineering

cc: Rick LeFeuvre, Director, OC Planning
    Harry Persaud, Manager, OC Planning/OC Planned Communities
    David Shepherd, Manager, OC Planning/OC Planned Communities/Land Use Planned Communities
    Laree Brommer, Manager, OC Planning/OC Planned Communities/Land Use Planned Communities
    Khalid Bazmi, Manager, OC Road
    Isaac Alonso Rice, Manager, OC Road
Certification #7

Orange County Planning Commission
Summary Minutes
(Hearing Date: July 24, 2013)
II. Roll Call

All commissioners were present.

III. Consent Item(s) – Minutes of July 10, 2013

The minutes of July 10, 2013 were moved for approval by Commissioner Adams and seconded by Commissioner Nguyen as submitted, and approved by a unanimous vote, with Commissioner Hall abstaining.

IV. Discussion Item(s)

ITEM #1 PUBLIC HEARING – PA130025 – OWNER/APPLICANT, RMV COMMUNITY DEVELOPMENT, LLC – LOCATION – RANCH PLAN PLANNED COMMUNITY – DISTRICT 5

Review and consider the proposed revision and additions to the existing Ranch Plan Planned Community-Wide Alternative Development Standards (ADS) to include nine (9) additional and one (1) revised ADS to the Zoning, Subdivision, and Planning Issues section.

Recommended Action:

1. Receive staff report and public testimony as appropriate;

2. Find that proposed project (PA130025) is covered by Final EIR No. 589, previously certified on November 8, 2004, Addendum 1.0 certified July 26, 2006, Addendum 1.1 certified February 23, 2011, and the PA2 Addendum certified on March 27, 2013 as adequately satisfying the requirements of CEQA; and,

3. Approve revision to Alternative Development Standard (ADS) D-4 and create new ADS D-8 through D-16 (PA130025) for community-wide application within the Ranch Plan Planned Community subject to the attached Findings and Conditions of Approval.

The following is the action taken by the Orange County Planning Commission:

The first motion for Item #1 was made by Commissioner Hall and seconded by Commissioner Adams to find that proposed project is covered by Final EIR No. 589, previously certified on November 8, 2004, Addendum 1.0 certified July 26, 2006, Addendum 1.1 certified February 23, 2011, and the PA2 Addendum certified on March 27, 2013 as adequately satisfying the requirements of CEQA.

APPROVE ☒ OTHER ☐

DELETED ☐

The second motion for Item #1 was made by Commissioner Hall and seconded by Commissioner Adams to approve the revisions to the Alternative Development Standards (ADS) D-4 and create new ADS D-8 through D-16 for community-wide application within the Ranch Plan Planned Community, subject to the attached Findings and Conditions of Approval, and to the following changes:

1. ADS D-4.1-C shall be revised to strike the word “per” to read: “Building separation shall be eight (8) feet and the following criteria shall be met...”

2. ADS D-13 shall be revised to strike the words “each of the residential types” to read: “... project-wide dwelling units for residential units located off of motorcourts or alleys.”

APPROVE ☒ OTHER ☐
DELETED ☐


Vote Key: Y=Yes; N=No; A=Abstain; X=Excused

Special Notes: Laree Brommer, Manager of Planned Community Land Use Support with the County of Orange, presented the staff report and answered questions from the Planning Commission. Jay Bullock, the project agent for Rancho Mission Viejo, also answered questions.

V. Reports from OC Planning

a) Upcoming Agenda Items

August 14, 2013
Public Hearing – Zoning Code Amendment CA 11-02

b) Reports on Recent Actions of the Board of Supervisors

There is no report on recent actions, but there are a few items which will be going before the Board in the future, including some discussion about funding for the La Pata Road expansion project. The environmental consultants for affordable housing at the Ranch development will go through a selection process before the Board, at the upcoming meeting in August.

c) Major Decisions and Proposals of Staff

Some upcoming projects with OC Planning:
- The Esperanza Hills and Cielo Vista development in the unincorporated areas of Yorba Linda.
- The Preserve in San Juan, a 52-unit subdivision over by Ortega Highway, along the border of Riverside and Orange County.
At the last meeting, during the workshop for the Zoning Code Update, there was a representative from the Ladera Civic Council who spoke. This council had a meeting this past week with this as an agenda item, but staff has not heard anything from them.

d) Previous Commission or Commissioner Requests
None

e) Litigation
The writ for Saddlecrest was heard this past Friday and the judge indicated that there would be a ruling by 5:00 pm last night, but the County has not been updated as of yet.

Planning Commission Hearing adjourned at 2:51 p.m.
Certification #8

Orange County Public Works Memorandum
(Date Signed: November 14, 2014)
Ranch Plan Alternative Development Standards (ADS)
Additions (B-6 and G-9)
Memorandum

DATE: October 9, 2014
TO: File Records/ OC Public Works
FROM: Kevin Onuma, OC Infrastructure Programs Manager
SUBJECT: Ranch Plan Alternative Development Standards Revisions (B-6 and G-9)

We have reviewed the submitted Ranch Plan Alternative Development Standards (ADS) revisions to B-6 and G-9, as outlined below:

ADS B-6: Proposed update of previously approved B-6:

Page 1:
1. Revised B-6 first paragraph to clarify approvals are granted by the County Chief Engineer and Orange County Fire Authority (OCFA) for the construction of single-lane, three-way or four-way roundabouts.
2. Deleted previous performance standard #2.
3. Clarified intersection angles in performance standard #3 (previous performance standard #4).
4. Deleted armoring from performance standard #5 (previous performance standard #6).
5. Eliminated bike ramp requirement from performance standard #9 (previous performance standard #10).
6. Replaced previous performance standard #9 (new number #8) with “Provide roundabout…. An Informational Guide or Table 1 of the IES DG-19-08 Design Guide for Roundabout Lighting.”
7. Added new performance standard #10 “traversable truck apron shall support OCFA vehicles.”
8. Added new performance standard #11 “Roundabout signs and pavement delineation shall be per the latest edition of the California Manual on Uniform Traffic Control Devices (CAMUTCD).”

Sheet 1:
1. Removed outside OCFA vehicle apron and associated dimensions.
2. Provided new radii range for roundabout approach and departure.
3. Increased circulatory roadway pavement width to 20-ft to accommodate OCFA vehicles, including striped center island extension and associated dimensions.
4. Added splitter island detail.
5. Added splitter island length design criteria based on approach speeds.
6. Added Note: Local depressions for catch basins within 150’ of right edge of roundabout circulatory roadway shall be designed not to exceed the width of the gutter.

7. Added Note: The gutter pan shall remain outside the vehicle tracking wheel path within 150’ of right edge of roundabout circulatory roadway, including the roundabout circulatory roadway.

8. Added Note: No local depressions for catch basins within Splitter Island.

Sheet 2:
1. Removed outside OCFA vehicle apron and associated dimensions.
2. Provided new radii range for roundabout approach and departure to increase roundabout entry deflection.
3. Increased circulatory roadway pavement width to 20’ to accommodate OCFA vehicles, including striped center island extension and associated dimensions.
4. Added splitter island detail.
5. Added Note: Local depressions for catch basins within 150’ of right edge of roundabout circulatory roadway shall be designed not to exceed the width of the gutter and no local depressions allowed in raised median within 150’ of right edge of roundabout circulatory roadway.
6. Added Note: The gutter pan shall remain outside the vehicle tracking wheel path within 150’ of right edge of roundabout circulatory roadway, including the roundabout circulatory roadway.

Sheet 3: (Previous Sheet 5)
1. Revised and added new dimensions associated with updates to sheets 1 and 2.
2. Added crosswalk setback dimensions based on proximity to schools, recreational, commercial and secondary highway areas.

Sheet 4 (Previous Sheet 3):
1. Removed outside OCFA vehicle apron.
2. Revised roundabout layout to reflect changes on sheet 1.
3. Moved corner right-of-way lines outside the approach and departure sight distance areas.

Sheet 5 (New Sheet):
1. New sheet showing design criteria for roundabout approach stopping sight distance.

Sheet 6 (New Sheet):
1. New sheet showing design criteria for circulatory roadway stopping sight distance.

Sheet 7 (Previous Sheet 4):
1. Removed outside OCFA vehicle apron.
2. Updated typical section to reflect circulating pavement width to accommodate OCFA vehicles
3. Added striped roundabout center island extension.
4. Clarified circulating pavement width excludes gutter.
5. Added additional design criteria for planting height restrictions within the center islands.

Sheet 8 (Previous Sheet 6):
1. Changed detail title from “Wedge Curb detail” to “Truck Apron Detail”.
2. Revised detail to remove armored pavement and specified traversable truck apron pavement treatment must be capable of supporting OCFA vehicles.
3. Mirrored detail to match the section callouts on sheet 1 and 2.
4. Added Note 3: Median island landscape shall be designed with area drain system to capture surface drainage (to be shown on landscape plans).
5. Added Note 4: Soil conditions within median island may determine need for additional sub-drain systems.

Sheet 9 (Previous Sheet 7):
1. Revised detail to apply to concrete curb, gutter and sidewalk at roundabout only.
2. Removed outside OCFA vehicle apron “Concrete Gutter Detail”.

Sheet 10 (New Sheet):
1. Added new sheet showing typical one lane roundabout approach signs
2. Note: No roadside signs shall be installed within the roundabout traversable apron.

Sheet 11 (New Sheet):
1. Added new sheet showing typical one lane roundabout approach striping.

ADS G-9: Proposed addition of alternate four-inch (4”) rolled curb and gutter section for use within private streets.

These additions and revisions have been reviewed by OC Public Works staff from OC Planning and OC Infrastructure Programs, as well as the OC Fire Authority.

CERTIFICATION:

I hereby certify that the subject Ranch Plan Alternative Development Standards (ADS) revisions to B-6 and G-9 are hereby approved for use throughout the Ranch Plan Planned Community.

Kevin Onuma, P.E.  
Deputy Director, OC Public Works  
OC Infrastructure Programs Manager

c: Robyn Uptegraff, Assistant Director, OC Public Works  
Rose Fistrovic, OC Development Services/Land Development  
Isaac Alonso Rice, OC Traffic Engineer  
Rebecca Schade, OCFA
Certification #9

Orange County Public Works Memorandum
(Date Signed: March 10, 2015)
Ranch Plan Alternative Development Standards (ADS)
Additions C-6
Memorandum

DATE: March 5, 2015
TO: File Records / OC Public Works
FROM: Kevin Onuma, OC Infrastructure Programs Manager
SUBJECT: Ranch Plan Alternative Development Standards Revision C-6

We have reviewed the submitted Ranch Plan Alternative Development Standards (ADS) revision to C-6, as outlined below:

ADS C-6: Proposed update to previously approved C-6:

Page 1:
1. Added note that placement of trees within roundabout medians will be regulated by approved ADS B-6, Sheet 7 of 11.
2. Revised Performance Standard A to clarify that additional Standard Plan 1700 Parkway and Street Median Trees will have a separate exhibit and have been reviewed and approved by the Orange County Fire Authority.
3. Added Performance Standard that the Ranch Plan shall only allow Trees from Standard Plan 1700 that are allowed by the Ranch Plan Fire Protection Program Section C.4 and C.8.A.
4. Added Performance Standard that streets trees allowed in parkways by ADS C-6 will not result in any portion of the trunk being located within 24-inches of curb-face. If any individual tree planted within the parkway eventually grows to a diameter whereby the trunk is 24-inches from the curb-face, the maintenance contractor shall remove that individual tree.

Exhibit:
1. Added note that minimum planter widths are measured from face of curb and include on-going compliance with Performance Standard C-6(c).
2. Added note from Orange County Fire Authority that the Ranch Plan shall only allow trees from Standard Plan 1700 that are allowed by the Ranch Plan Fire Protection Program Section C.4 and C.8.A.1.
3. Added California Sycamore (Platanus racemosa) and Coastal Live Oak (Quercus agrifolia) to list of additional parkway and street median trees along with adding special conditions.
4. Revised Planting Width and Spacing for already approved Mesa Oak (Quercus engelmannii) along with adding special conditions.
5. Revised Spacing for already approved Southern Live Oak (Quercus virginiana) and Evergreen Chinese Elm (Ulmus parvifolia “Sempervirens”).
6. Added note that placement of trees within Roundabout Medians will be regulated by ADS B-6, Sheet 7 of 11.

These additions and revisions have been reviewed by OC Public Works staff from OC Development Services and OC Infrastructure Programs, as well as the OC Fire Authority.

CERTIFICATION:

I hereby certify that the subject Ranch Plan Alternative Development Standards (ADS) revision to C-6 is hereby approved for use throughout the Ranch Plan Planned Community.

Kevin Onuma, P.E.
Deputy Director, OC Public Works
OC Infrastructure Programs Manager

Date: 3/10/15

C: Robyn Uptegraff, Assistant Director, OC Public Works
Rose Fistrovic, OC Development Services / Land Development
Isaac Alonso Rice, OC Traffic Engineer
Rebecca Schade, OC Fire Authority
C-6  Additional Parkway and Street Median Trees
Per the approval of the Director, OC Planning and the County Chief Engineer, allow an expansion of County Standard Plan 1700 (Parkway and Street Median Trees) to allow the following species to be planted in public rights-of-way within the Ranch Plan. All planting requirements in Standard Plan 1700 shall be followed. This ADS allows the Landscape Architect to choose from the addition species listed on the ADS C-6 exhibit, based on site suitability.

NOTE: Placement of trees within roundabout medians regulated by ADS B-6, Sheet 7 of 11

Performance Standards:
a) Additional Standard Plan 1700 Parkway and Street Median Trees (see exhibit on next page) within the rights-of-way of public local streets and arterial highways, as reviewed and approved by the Orange County Fire Authority.
b) The Ranch Plan shall only allow Trees from Standard Plan 1700 that are allowed by Ranch Plan Fire Protection Program Section C.4 and C.8.A.
c) The street trees allowed in parkways by ADS C-6 will not result in any portion of the trunk being located within 24” of curb-face. If any individual tree planted within the parkway eventually grows to a diameter whereby the trunk is 24-inches from the curb-face, the maintenance contractor shall remove that individual tree.

Project Benefits:
- Increased water conservation.

C-7  Additional Drought Tolerant Plants
Per the approval of the Director, OC Planning and the County Chief Engineer, allow an expansion of County Standard Plan 1701 (Drought Tolerant Plant List) to add the trees, vines, shrubs, grasses and succulents to the list of species allowed within public rights-of-way within the Ranch Plan. As stated in Standard Plan 1701, the objective is to provide landscaping which is aesthetic initially and will retain its aesthetic appeal with time, yet is lower in maintenance and water requirements than traditional planting. It is required that a landscape plan be developed by a licensed Landscape Architect, and that selections from the list on the ADS C-7 exhibit be made be made by the Landscape Architect based on site suitability as long as the species selected are in compliance with Orange County Fire Authority requirements.

Drought tolerance refers to the degree to which a plant is adapted to arid or abnormal low rainfall conditions. Drought tolerant plants native to Southern California typically do not need supplemental irrigation, with the exception of plant establishment.

Addition to Standard Plan 1701 also allows inclusion as part of Standard Plan 1700 (Street Tree List), as the County of Orange is supportive of native and drought tolerant species within public road rights-of-way.

Performance Standards:
a) Allow within the rights-of-way of public local streets and arterial highways

Project Benefits:
- Increased water conservation.

Proposed Revision February 23, 2015
**ADDITIONAL STANDARD PLAN 1700 PARKWAY AND STREET MEDIAN TREES**

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<tr>
<th>BOTANICAL NAME</th>
<th>COMMON NAME</th>
<th>Type</th>
<th>Height</th>
<th>Spread</th>
<th>Minimum Planter Width from face of curb</th>
<th>Compliance</th>
<th>Spacing</th>
<th>Spacing</th>
<th>Special Conditions</th>
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<tbody>
<tr>
<td>Citrus sp.</td>
<td>Varieties</td>
<td>E</td>
<td>20</td>
<td>20</td>
<td>5</td>
<td>20</td>
<td>Nitrogen Fertilizer</td>
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<td></td>
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<tr>
<td>Dracaena draco</td>
<td>Dragon Tree</td>
<td>E</td>
<td>20</td>
<td>20</td>
<td>10</td>
<td>20</td>
<td></td>
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<tr>
<td>Elaeocarpus decipiens</td>
<td>Japanese Blueberry Tree</td>
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<td>40</td>
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<td>5</td>
<td>15</td>
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<tr>
<td>Lagerstroemia× hybrida 'Muskoge'</td>
<td>Crape Myrtle</td>
<td>D</td>
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<td>12</td>
<td>5</td>
<td>12</td>
<td>Mildew resistant.</td>
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<tr>
<td>Lagerstroemia× 'Natchez' Crape Myrtle</td>
<td>D</td>
<td>25</td>
<td>12</td>
<td>5</td>
<td>12</td>
<td>Mildew resistant.</td>
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<td>Platanus racemosa</td>
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<td>E</td>
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<td>12</td>
<td>5</td>
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<td>Pyrus calleryana</td>
<td>Bradford Pear</td>
<td>D</td>
<td>50</td>
<td>30</td>
<td>5</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quercus agrifolia</td>
<td>Coastal Live Oak</td>
<td>E</td>
<td>40</td>
<td>50</td>
<td>6</td>
<td>40</td>
<td>To be planted in parkways and medians without fronting residences</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quercus engelmannii</td>
<td>Mesa Oak</td>
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<td>60</td>
<td>50</td>
<td>5</td>
<td>40</td>
<td></td>
<td>40</td>
<td>If planted in medians of roadways, this species shall be planted at least 5’ from the face of curb</td>
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<tr>
<td>Quercus virginiana</td>
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<td>5</td>
<td>40</td>
<td></td>
<td>120</td>
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<tr>
<td>Ulmus parvifolia</td>
<td>'Weeping' Crape Myrtle</td>
<td>E</td>
<td>40+</td>
<td>30+</td>
<td>4</td>
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**RANCH PLAN ALTERNATIVE DEVELOPMENT STANDARDS**

**ADDITIONAL STANDARD PLAN 1700 PARKWAY AND STREET MEDIAN TREES**

Placement of trees within Roundabout Medians regulated by ADS B-6, Sheet 7 of 11

ADS C-6

Sheet 1 of 1

Proposed Revision February 23, 2015
Certification #10

Orange County Public Works Memorandum
(Date: May 26, 2015, Date Signed: May 29, 2015)
Ranch Plan Alternative Development Standards (ADS)
Additions (B-2 and C-5)
Memorandum

DATE: May 26, 2015
TO: File Records / OC Public Works
FROM: Kevin Onuma, OC Infrastructure Programs Manager
SUBJECT: Revisions to Ranch Plan Alternative Development Standards B-2 and C-5

We have reviewed the submitted revisions to Ranch Plan Alternative Development Standards (ADS) B-2 and C-5 as outlined below:

ADS B-2: Proposed revision to previously approved B-2:

Page 1:
1. Revised Performance Standard B to state “Trees are allowed to be planted per OC Standard Plan 1700 (as augmented by ADS C-6) but no closer than 30 feet on center provided standard sight distance is given.”
2. Revised Performance Standard C to state “Maximum height of plant material allowed to be up to 30 inches on residential streets and 18 inches for streets classified as collectors or higher provided standard sight distance is provided.”

Exhibit:
1. Revised to clarify line of sight and limited use areas.
2. Added exhibit for residential streets.

ADS C-5: Proposed revision to previously approved C-5:

Page 1:
1. Clarify Planting Criteria 1.a as “Horizontal Plane”
2. Add Performance Standard B which provides a planting list for trees that are not anticipated to grow to an eventual diameter greater than 18-inches. Trees found on these lists will be allowed to be planted between 5-feet and 10-feet of each residential driveway.

These additions and revisions have been reviewed by OC Public Works staff from OC Development Services and OC Infrastructure Programs.
CERTIFICATION:

I hereby certify that the subject Ranch Plan Alternative Development Standards (ADS) revision to B-2 and C-5 is hereby approved for use throughout the Ranch Plan Planned Community.

Kevin Onuma, P.E.
Deputy Director, OC Public Works
OC Infrastructure Programs Manager

Date: 5/29/15

C: Robyn Uptegraff, Assistant Director, OC Public Works
Colby Cataldi, Director, OC Development Services
Rose Fistrovic, OC Development Services / Land Development
Isaac Alonso Rice, OC Traffic Engineer
B-2. **Intersection Sight Line Standards (Standard Plan 1117)**

Per the approval of the Subdivision Committee and the County Chief Engineer, allow landscaping in intersection sight line "limited use area" zone in the limited instances identified below.

**Performance Standards:**

a. Trees are allowed to be planted per OC Standard Plan 1700 (as augmented by ADS C-6), but no closer than 30 feet on center provided standard sight distance is given.

b. Maximum height of plant material allowed to be 30 inches on residential streets and 18 inches for streets classified as collectors or higher provided standard sight distance is provided.

**Project Benefits:**

- A strengthened residential village ambiance due to enhanced landscaping at controlled intersections.
- Equivalent or better pedestrian and vehicular ease of circulation and safety.
- Equivalent or better on-going maintenance costs.

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May 12, 2015 Final
C-5. **Trees Planted Within Fifty Feet of Intersection**

Per the approval of the Subdivision Committee and the County Chief Engineer, modify County Standard Plan 1700 (Planting Criteria 1.a – Horizontal Plane) to allow trees to be planted within fifty (50) feet from an intersecting street measured from the intersecting right-of-way lines.

**Performance Standards:**

- This modification shall be allowed if the following criteria are met:
  
  a. Limited planting of trees and landscaping within fifty (50) feet allowed as long as these plantings do not obstruct the line-of-sight for approaching vehicles (see ADS B-2).
  
  b. The following species of trees are allowed to be planted between 5-feet to 10-feet of each residential driveway because they are not anticipated to grow to an eventual diameter greater than 18-inches:

    From OC Std Plan 1700 Street Tree List:
    1. Agonis flexuosa (Australian Willow, Peppermint)
    2. Alnus rhombifolia (White Alder)
    3. Bauhinia baleana (King Orchid Tree)
    4. Koelreuteria bipinnata (Chinese Lantern Tree)
    5. Lagerstroemia indica (Crape Myrtle)
    6. Liquidambar styraciflua (American Sweet Gum)
    7. Magnolia grandiflora (Southern Magnolia)
    8. Malaleuca quinquenervia (Cajeput Tree)
    9. Pittosporum viridiflorum (Cape Pittosporum)
   10. Platanus acerifolia (London Plane Tree)
   11. Podocarpus gracilior (Fern Pine)
   12. Quercus ilex (Holly Oak)
   13. Tristania conferta (Brisbane Box)
   14. Umbellularia Californica (California Bay Laurel)

    From ADS C-6 Street Tree List:
    1. Citrus sp. (Varies)
    2. Elaeocarpus decipiens (Japanese Blueberry Tree)
    3. Jacaranda mimosofolia (Jacaranda)
    4. Koelreuteria bipinnata (Chinese Flame Tree)
    5. Lagerstroemia hybrid (“Muskogee”, Crape Myrtle)
    6. Lagerstroemia hybrid (“Natchez”, Crape Myrtle)
    7. Laurus nobilis (Sweet Bay)
    8. Podocarpus henkelii (Long Leafed Yellow Wood)
    9. Podocarpus macrophyllus (Yew Pine)
   11. Ulmus parvifolia (“Sempervirens”, Evergreen Chinese Elm)

  
  c. The homeowners association would be responsible for maintenance.

**Project Benefits:**

- A strengthened residential village ambiance due to enhanced landscaping.
- Equivalent or better on-going maintenance costs.
Certification #11

Orange County Planning Commission
Summary Minutes
(Hearing Date: May 27, 2015)
II. Roll Call

All Commissioners were present.

III. Consent Item(s) – Minutes of May 13, 2015

The minutes of May 13, 2015 were moved for approval by Commissioner McCormick and seconded by Commissioner Adams with corrections to the hearing date and the date of the consent items, and approved by a unanimous vote. Commissioner McCormick abstained due to an excused absence.

IV. Discussion Item(s)

ITEM #1 PUBLIC HEARING - PA 150043- REVISIONS TO EXISTING RANCH PLAN PLANNED COMMUNITY ALTERNATIVE DEVELOPMENT STANDARDS (ADS) – APPLICANT- RMV COMMUNITY DEVELOPMENT, LLC- LOCATION – NORTH AND SOUTHEAST OF ORTEGA HIGHWAY, EAST OF ANTONIO PARKWAY, SOUTH OF THE PLANNED COMMUNITY OF COTO DE COZA - FIFTH DISTRICT

Recommended Action:

a. Receive staff report and public testimony as appropriate;

b. Find that proposed project (PA150043) is covered by Final EIR No. 589, previously certified on November 8, 2004, Addendum 1.0 certified July 26, 2006, Addendum 1.1 certified February 23, 2011, PA2 Addendum certified on March 27, 2013, and Addendum 3.1 certified February 25, 2015 as adequately satisfying the requirements of CEQA; and,

c. Approve revision to Alternative Development Standard (ADS) D-4, D-9, and D-12 for community-wide application within the Ranch Plan Planned Community subject to the attached Findings and Conditions of Approval

Special Notes: Rose Fistrovic and Richard Vuong, Land Use Managers, provided a presentation and answered questions for the Commission. Jay Bullock, representative of RMV thanked OC Traffic and especially Isaac Alonso-Rice, OC Traffic Manager.
The following is the action taken by the Orange County Planning Commission:
The motion for Item #1 was made by Commissioner McCormick and seconded by Commissioner Irons and was carried by a unanimous vote.

APPROVE ☒ OTHER □
DENIED □

Unanimous ☒ (1) Vacant (2) Adams: Y (3) Secor: Y (X) Irons: Y (5) McCormick: Y
Vote Key: Y=Yes; N=No; A=Abstain; X=Excused

V. Reports from OC Development Services

In response to Commissioner’s inquiry of Cielo Vista, Laree Brommer reported that Cielo Vista is going to meet with the City of Yorba Linda regarding future Annexation. The County is still waiting for topical responses and response to comments. Laree Brommer also reported that the Esperanza Hills project is scheduled to go before the Board of Supervisors on June 2, 2015.

a) Upcoming Agenda Items

June 10, 2015
No items scheduled

b) Reports on Recent Actions of the Board of Supervisors

1) Four Tract Maps within the Ranch Plan – June 16, 2015


c) Previous Commission or Commissioner Requests

• Staff continue outreach to Emerald Bay

e) Litigation

Saddle Crest Project- The Court of Appeal decision in favor of the County and the real party of interest is final and there has been no petition to the Supreme Court. Therefore, the Saddle Crest Developer will be preceding with their development approvals.

Public Comments

None
Planning Commission Hearing adjourned at 4:15 pm.