ANNOTATED

AGENDA

CITY OF ANTIOCH PLANNING COMMISSION

ANTIOCH COUNCIL CHAMBERS
200 "H" STREET

WEDNESDAY, JANUARY 16, 2019

6:30 P.M.

NO PUBLIC HEARINGS WILL BEGIN AFTER 10:00 P.M.

UNLESS THERE IS A VOTE OF THE PLANNING COMMISSION

TO HEAR THE MATTER

DUE TO LACK OF QUORUM NO MEETING WAS HELD.

APPEAL

All items that can be appealed under 9-5.2509 of the Antioch Municipal Code must be appealed within five (5) working days of the date of the decision. The final appeal date of decisions made at this meeting is 5:00 p.m. on **THURSDAY, JANUARY 24, 2019.**

If you wish to speak, either during "public comments" or during an agenda item, fill out a Speaker Request Form and place in the Speaker Card Tray. This will enable us to call upon you to speak. Each speaker is limited to not more than 3 minutes. During public hearings, each side is entitled to one "main presenter" who may have not more than 10 minutes. These time limits may be modified depending on the number of speakers, number of items on the agenda or circumstances. No one may speak more than once on an agenda item or during "public comments". Groups who are here regarding an item may identify themselves by raising their hands at the appropriate time to show support for one of their speakers.

ROLL CALL **6:30 P.M.**

Commissioners Parsons, Chair
Turnage, Vice Chair
Zacharatos
Motts
Martin
Schneiderman
Soliz

PLEDGE OF ALLEGIANCE

PUBLIC COMMENTS

CONSENT CALENDAR

All matters listed under Consent Calendar are considered routine and are recommended for approval by the staff. There will be one motion approving the items listed. There will be no separate discussion of these items unless members of the Commission, staff or the public request specific items to be removed from the Consent Calendar for separate action.

1. **APPROVAL OF MINUTES**: **December 5, 2018** **STAFF REPORT**

* * * END OF CONSENT CALENDAR * * *

NEW PUBLIC HEARINGS

2. **Z-18-10 - Revisions to the Nonconforming Uses and Structures Ordinance –** The City of Antioch is proposing to update Title 9, Chapter 5, Article 30 of the City of Antioch Zoning Ordinance regulating the alteration, enlargement, continuation or restoration of nonconforming uses and structures. The ordinance update is categorically exempt from CEQA. **STAFF REPORT**

3. **Z-18-11 - Water Efficient Landscape Ordinance –** The City of Antioch is proposing to adopt an Ordinance that would adopt, by reference the Model Water Efficient Landscape Ordinance drafted and distributed by the State of California Department of Water Resources. **STAFF REPORT**

NEW ITEM

4. **AR-18-10 – Nelson Ranch Unit 3 –** K. Hovnanian requests Design Review approval for phase 3 of the Nelson Ranch subdivision, which includes 100 units. The Design Review application consists of four plans with multiple floor plan options with three design schemes and associated landscaping plans. This project has been determined to be exempt from CEQA. **STAFF REPORT**

ORAL COMMUNICATIONS

WRITTEN COMMUNICATIONS

Planning Commissioner Training Budget

COMMITTEE REPORTS

ADJOURNMENT

Notice of Availability of Reports

This agenda is a summary of the discussion items and actions proposed to be taken by the Planning Commission. For almost every agenda item, materials have been prepared by the City staff for the Planning Commission's consideration. These materials include staff reports which explain in detail the item before the Commission and the reason for the recommendation. The materials may also include resolutions or ordinances which are proposed to be adopted. Other materials, such as maps and diagrams, may also be included. All of these materials are available at the Community Development Department located on the 2nd floor of City Hall, 200 "H" Street, Antioch, California, 94509, between the hours of 8:00 a.m. and 5:00 p.m. Monday through Friday for inspection and copying (for a fee) or on our website at:
https://www.antiochca.gov/fc/community-development/planning/Project-Pipeline.pdf
Copies are also made available at the Antioch Public Library for inspection. Questions on these materials may be directed to the staff member who prepared them, or to the Community Development Department, who will refer you to the appropriate person.

Notice of Opportunity to Address the Planning Commission

The public has the opportunity to address the Planning Commission on each agenda item. You may be requested to complete a yellow Speaker Request form. Comments regarding matters not on this Agenda may be addressed during the "Public Comment" section on the agenda.

Accessibility

The meetings are accessible to those with disabilities. Auxiliary aids will be made available for persons with hearing or vision disabilities upon request in advance at (925) 779-7009 or TDD (925) 779-7081.

CITY OF ANTIOCH
PLANNING COMMISSION

Regular Meeting **December 5, 2018**
6:30 p.m. **City Council Chambers**

Chair Parsons called the meeting to order at 6:30 P.M. on Wednesday, December 5, 2018 in the City Council Chambers. She stated that all items that can be appealed under 9-5.2509 of the Antioch Municipal Code must be appealed within five (5) working days of the date of the decision. The final appeal date of decisions made at this meeting is 5:00 P.M. on Wednesday, December 12, 2018.

ROLL CALL

Present:	Commissioners Schneiderman, Motts, Martin, Soliz, Zacharatos, and Chair Parsons
Absent:	Vice Chair Turnage
Staff:	Director of Community Development, Forrest Ebbs Captain, Tony Morefield Project Manager, Ken Warren Planning Manager, Alexis Morris Associate Planner, Kevin Scudero Contract Planner, Cindy Gnos Interim City Attorney, David Richie Minutes Clerk, Kitty Eiden

PLEDGE OF ALLEGIANCE

PUBLIC COMMENTS

None.

CONSENT CALENDAR

1. Approval of Minutes: **October 17, 2018**
November 7, 2018

On motion by Commissioner Zacharatos, seconded by Commissioner Martin, the Planning Commission approved the minutes of October 17, 2018 and November 7, 2018, as presented. The motion carried the following vote:

AYES:	***Schneiderman, Motts, Martin, Soliz Zacharatos and Parsons***
NOES:	***None***
ABSTAIN:	***None***
ABSENT:	***Turnage***

NEW PUBLIC HEARING

2. Z-18-08 – 211 & 215 West 19th Street Rezone – Lloyd Arnold requests Planning Commission approval to rezone the properties at 211 and 215 West 19th Street (APN's 067-264-011, 067-264-002) from Single Family Residential (R-6) to Convenience Commercial (C-1).

Associate Planner Scudero presented the staff report dated November 30, 2018 recommending the Planning Commission approve the resolution recommending that the City Council approve the proposed rezone of 211 and 215 West 19th Street (APN's 067-264-011, 067-264-002) (Z-18-08).

Chair Parsons opened and closed the public hearing with no members of the public requesting to speak.

RESOLUTION NO. 2018-30

On motion by Commissioner Zacharatos, seconded by Commissioner Soliz, the Planning Commission approved the resolution recommending that the City Council approve the proposed rezone of 211 and 215 West 19th Street (APN's 067-264-011, 067-264-002) (Z-18-08). The motion carried the following vote:

AYES:	***Schneiderman, Motts, Martin, Soliz, Zacharatos and Parsons***
NOES:	***None***
ABSTAIN:	***None***
ABSENT:	***Turnage***

3. PDP-18-02 – Creekside Vineyards PDP – GBN Partners requests review of a preliminary development plan, which is not an entitlement, of a proposal to develop approximately 50 acres or a 158-acre site into a residential community of approximately 220 residential units. The units could be market rate or age-restricted for seniors. The project site is located southwest of the intersection of Heidorn Ranch Road and Old Sand Creek Road, south of the approved Vineyards at Sand Creek (a.k.a. Promenade) project within the Sand Creek Focus Area. The site is identified by the following Contra Costa County Assessor's Parcel Numbers (APN: 057-050-024).

Contract Planner Gnos presented the staff report dated November 30, 2018 recommending the Planning Commission provide feedback to staff regarding the proposal and to provide direction to the applicant for the Final Development Plan submittal.

In response to Commissioner Motts, Contract Planner Gnos clarified that the change in the MLDR designation would allow for a mix of senior and market rate housing. She

stated it would be possible to have a designation for larger lot sizes on the market rate product and single story/smaller lots on the senior portion.
In response to Commissioner Martin, Planning Manager Morris reported that the nearest high school was Dozier Libby Medical High School and when this item was a development application, it would be routed to all school districts so they could provide feedback. She clarified that Hillcrest Avenue would have a bus stop and the exact location would be determined by Tri Delta transit. She noted this would be a gated community so if they wanted a senior shuttle, the developer would have to work directly with Tri Delta Transit.

In response to Chair Parsons, Planning Manager Morris explained that staff had made recommendations on the plan to the applicant and Planning Commission. She noted the applicant, being on an aggressive schedule, asked for the meeting this evening which limited the time that they could work with the applicant on the recommendations or revisions. She further noted it was a preliminary process and it would not be fruitful to ask them to revise plans prior to this meeting because the Planning Commission may or may not agree with staff's recommendations.

In response to Commissioner Schneiderman, Contract Planner Gnos stated the CEQA analysis had not been done yet; however, when the Aviano project changed from senior to single family, the increase in traffic did not significantly change the levels of service.

Planning Manager Morris added that the City had market rate single family products smaller than 5000 to 6000 square foot lots and the most recent entitled were approximately 5000 square foot.

In response to Commissioner Soliz, Planning Manager Morris clarified that this gated community would be required to have an HOA that would be responsible for maintaining the park facilities. Additionally, she noted new residential development would be required to annex into the Police Community Facilities District.

Chair Parsons opened the public hearing.

Matt Beinke, GBN Partners representing the applicant thanked staff for bringing the project to the Commission this evening. He noted their goal was to get direction from the Planning Commission so they could begin the application process. He explained this was another phase of the Vineyards at Sand Creek and the process was to mimic that analysis, vision, design and planning. He stated that they would rather do an analysis for both senior and market rate so all questions regarding the impacts could be answered thoroughly.

In response to Commissioner Motts, Mr. Beinke stated that he believed one-third of the project would be market rate on the smaller lots, and the balance would be active adult. He explained that with regards to I Street, they would have to meet with the neighboring property owner to determine how to move forward with a gate for the area. With regards

to the location and size of the public use area, he noted at this point it was somewhat arbitrary as the market rate product may slightly change it.

Chair Parsons stated she believed this project was an extension of what had already been approved and she liked that it would be consistent.

Lewis Broschard, Deputy Fire Chief and Interim Fire Marshall for Contra Costa County, thanked staff for providing copies of their letter to the Commission and staff this evening. He expressed concern with the plans for development in the Sand Creek Focus area because fire, EMS protection, and infrastructure was not adequate to serve future development in the area. He noted a funding mechanism was needed to cover the ongoing cost of personnel and equipment.

In response to Commissioner Martin, Chief Broschard explained that they were limited in what they could require by the California Fire Code or California Building Code; however, they could make recommendations to exceed those requirements. He noted current codes were years behind current issues and trends. He further noted they were willing to speak with developers on innovative ideas that may not be code requirements but would be best practices to mitigate issues.

Commissioner Martin stated his concern was for the area east of the project noting there was no access readily available.

Chief Broschard stated this was a preliminary design and he believed the developer would recognize that certain access points needed to be addressed in future plans.

In response to Commissioner Zacharatos, Director of Community Development Ebbs commented that The Ranch Initiative included an offer of dedication for a fire station and the City collected a fire facilities fee on every building permit issued. He noted that development could move forward without a fire station; however, it was in everyone's interest to have a station in the area. He explained that the location for the proposed fire station was just to the northwest of this project.

Chief Broschard explained that the station was approximately one and a half miles away and travel time was two and a half minutes. He noted currently the closest station was on Folsom Drive, approximately three and a half miles away.

In response to Commissioner Soliz, Director of Community Development Ebbs stated that it would be possible to meter development based on when infrastructure is built; however, there would need to be a really good reason to meter development.

Chair Parsons closed the public hearing.

Commissioner Motts stated he believed the fire station and staffing of the facility was a problem; however, he would recommend a political fix to raise funds for the project. He

noted he felt this project was an extension of what was already approved. He further noted he would like to see the senior housing component. He voiced his support for the staff recommendations.
Commissioner Martin recommended the following items be addressed:

- Access issue for the fire district
- Location for trash receptacles on narrow lots
- Discussion on the pipeline that runs through the property and potential impacts
- If changed to MLDR, the senior portion of housing should be single story
- Larger park facilities to serve an MLDR project
- Sidewalks on both sides of the street

Commissioner Martin stated he liked all of staff's recommendations and thanked them for doing a thorough job. He noted he felt it was an excellent location for all senior housing. He expressed concern if "I" Street was continued down, there would not be enough room for an extension and agreed that no gate should be built if it was extended.

Commissioner Zacharatos concurred with Commissioner Martin that sidewalks were necessary on both sides of the street and the public recreational area should be enlarged. She supported staff's recommendations and acknowledged their thoroughness.

Commissioner Soliz stated he was impressed with staff's work on the project. He voiced concern regarding public safety as it related to fire service and power lines in the area. He agreed that access issues needed to be resolved for the Fire District. He supported sidewalks on both sides of the street. He discussed the importance of preserving the hillsides. He commented that he looked forward to seeing this project come back with additional modifications.

Commissioner Schneiderman voiced her support for sidewalks on both sides of the street and expanding park facilities. She suggested traffic calming measures on the larger stretches of roads.

Commissioner Motts suggested expanding the public use and open space area and moving it so that it would be adjacent to Sand Creek.

Chair Parsons stated she believed it was a great project. She stated she felt the County needed to address the fire district issues and she hoped that those issues would be resolved by the time this development came to fruition. She wished the applicant luck and stated she looked forward to the project moving forward.

4. **General Plan Update** – The City of Antioch proposes to amend the General Plan to reflect the recent amendments to the Antioch Municipal Code to address Cannabis Businesses. Specifically, the City seeks to amend Table 4.A – Appropriate Land Use Types to include a new land use category of Cannabis

Business with reference to the Antioch Municipal Code. Additional minor text amendments may also be considered.

Director of Community Development Ebbs presented the staff report dated November 30, 2018 recommending the Planning Commission adopt the resolution recommending approval of an amendment to the General Plan to reflect the recent amendments to the Antioch Municipal Code to address Cannabis Businesses. He distributed a revised map for the Eastern Waterfront Employment Focus Area and recommended the Planning Commission adopt the resolution with the substitutions recommended by staff this evening.

Chair Parsons opened and closed the public hearing with no members of the public requesting to speak.

In response to Commissioner Martin, Director of Community Development Ebbs stated that they were not confident the changes that the Housing Bill regarding transit oriented development adjacent to BART stations would have an impact in Antioch.

Chair Parsons stated she believed the Hillcrest Specific Plan should have already been put in motion.

In response to Commissioner Soliz, Director of Community Development Ebbs clarified that they were trying to correct the General Plan and Zoning to eliminate conflicts and provide clarity. He noted this action would insert cannabis business into the business park areas, where the cannabis overlay occurred and clarify that it was Council's intent to entertain applications. He commented that those applications would still have to come to the Planning Commission prior to going to Council.

Commissioner Soliz stated that he believed the reason Wightman Lane was rezoned was because residents on Phillips Lane were not interested in becoming part of the sanitation district as it was expanding.

In response to Commissioner Soliz, Director of Community Development Ebbs stated this change would have no impact with their involvement with the sanitation or sewer district.

RESOLUTION NO. 2018-31

On motion by Commissioner Martin, seconded by Commissioner Motts, the Planning Commission adopted the resolution recommending approval of an amendment to the General Plan to reflect the recent amendments to the Antioch Municipal Code to address Cannabis Businesses plus minor additional changes including the new document pages 4.9 – 4.14 and 4-32 as presented this evening by staff. The motion carried the following vote:

AYES: ***Schneiderman, Motts, Martin, Soliz, Zacharatos and Parsons***

NOES: ***None***
ABSTAIN: ***None***
ABSENT: ***Turnage***

ORAL COMMUNICATIONS

In response to Commissioner Motts, Director of Community Development Ebbs stated that he would be ordering binders for the Planning Commission and they should be available in approximately 30-days.

Commissioner Motts wished everyone a Merry Christmas.

On behalf of the Commission, Chair Parsons wished everyone a Merry Christmas and Happy Holiday.

WRITTEN COMMUNICATIONS

None.

COMMITTEE REPORTS

Commissioner Motts reported that the last Transplan meeting had been cancelled.

ADJOURNMENT

Chair Parsons adjourned the Planning Commission at 7:57 P.M.

Respectfully Submitted,
Kitty Eiden

STAFF REPORT TO THE PLANNING COMMISSION
FOR CONSIDERATION AT THE MEETING OF JANUARY 16, 2019

Submitted by: Alexis Morris, Planning Manager

Date: January 11, 2019

Subject: Repeal and Replace Nonconforming Uses and Structures Ordinance (Z-18-10)

RECOMMENDATION

It is recommended that the Planning Commission approve the attached resolution (Attachment A) recommending City Council repeal and replace Title 9, Chapter 5, Article 30 of the City of Antioch Zoning Ordinance.

CEQA

Pursuant to CEQA Guidelines sections 15060(c)(2) and 15061(b)(3), the proposed amendments to the Antioch Municipal Code are exempt from CEQA because it can be seen with certainty to have no possibility of a physical change to the environment or a significant impact on the environment.

ANALYSIS

Nonconforming uses and structures are generally land uses and buildings that were lawful before amendments or updates to the zoning code, but which would be prohibited or regulated differently under the current zoning code. Uses or structures that were illegal or unpermitted at the time they were established are not considered nonconforming. It is the policy of the city to discourage the long-term continuance or expansion of nonconforming uses and structures and to establish processes for their eventual elimination.

The City of Antioch's current ordinance regulating the enlargement, re-establishment and alteration of nonconforming uses and structures was adopted in 1994 (Attachment B). The ordinance permits the use and maintenance of nonconforming structures, but is intended to regulate their being moved, altered, or enlarged in a manner that would increase the discrepancy between existing conditions and zoning standards. The ordinance also prohibits the replacement of nonconforming structures that are destroyed or damaged more than 50% of their replacement value.

Over the past several years it has become apparent that the restrictions on replacing damaged or destroyed nonconforming structures has become problematic for owners of older single family homes in commercial areas. Many banks have used the prohibition

on rebuilding destroyed nonconforming homes to justify denying loans for refinancing a home or for new purchases. In some cases, this has led to homeowners being unable to sell their homes to a residential buyer. Furthermore, these homes are often not desirable for a commercial buyer because the conversion of a residential home is cost prohibitive compared to occupying a vacant commercial space.

While the city would like to discourage the long term continuance of nonconforming uses, the goal is not to create blight due to the abandonment of nonconforming buildings. Therefore, staff has prepared a new ordinance (Exhibit 1 to Attachment A) to address the issues discussed above, as well as to make other improvements to the regulations. The proposed ordinance includes: more clearly defining nonconforming uses and structures; creating policies specifically for nonconforming parcels and lots; providing more flexibility for expanding or replacing nonconforming single family homes; and, including exemptions for historic structures. The proposed ordinance also includes policies for properties that are nonconforming upon annexation to the city, which the previous ordinance did not address.

The proposed ordinance will still prohibit the replacement of destroyed nonconforming commercial structures and encourage the discontinuance of nonconforming uses over time. However, it provides more flexibility for nonconforming single family homes by allowing them to be replaced if they are destroyed, provided they do not expand the original home or add additional units (Section 9-5.3006(B) of the proposed ordinance). Staff believes that this provision should address lenders' concerns regarding the risks related to loans for nonconforming homes. Staff believes that these homes would be replaced by conforming uses and structures over time as the land becomes more valuable for commercial uses than residential uses.

ATTACHMENTS

A. Resolution
B. Current Nonconforming Uses and Structures Ordinance

ATTACHMENT "A"

RESOLUTION NO. 2019-**

RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF ANTIOCH RECOMMENDING THAT THE CITY COUNCIL REPEAL AND REPLACE TITLE 9, CHAPTER 5, ARTICLE 30 OF THE CITY OF ANTIOCH ZONING ORDINANCE

WHEREAS, the Planning Commission of the City of Antioch did receive an application from the City of Antioch requesting to repeal and replace Section 9-5.30-*Nonconforming Uses and Structures* of the Zoning Ordinance (Z-18-10); and,

WHEREAS, Pursuant to CEQA Guidelines sections 15060(c)(2) and 15061(b)(3), the proposed amendments to the Antioch Municipal Code are exempt from CEQA because it can be seen with certainty to have no possibility of a physical change to the environment or a significant impact on the environment; and,

WHEREAS, the Planning Commission duly gave notice of public hearing as required by law; and,

WHEREAS, on January 16, 2019, the Planning Commission duly held a public hearing on the matter, and received and considered evidence, both oral and documentary.

NOW, THEREFORE BE IT RESOLVED that the Planning Commission, after reviewing the staff report and considering testimony offered, does hereby recommend that the City Council **ADOPT** the attached ordinance (Exhibit 1) updating regulations for Nonconforming Uses and Structures (Z-18-10).

* * * * * * * *

I HEREBY CERTIFY the foregoing resolution was duly adopted by the Planning Commission of the City of Antioch, County of Contra Costa, State of California, at a regular meeting of said Planning Commission held on the 16th day of January, 2019, by the following vote:

AYES:
NOES:
ABSENT:
ABSTAIN:

_____
Forrest Ebbs
Secretary to the Planning Commission

A1

EXHIBIT 1

ORDINANCE NO.-**

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ANTIOCH REPEALING AND REPLACING TITLE 9, CHAPTER 5, ARTICLE 30 OF THE CITY OF ANTIOCH ZONING ORDINANCE

SECTION 1. Findings. The Antioch City Council hereby finds, determines and declares as follows:

A. The City of Antioch holds the right to make and enforce all laws and regulations not in conflict with general laws, and the City holds all rights and powers established by state law.

B. On October 24, 1994, the City Council adopted Ordinance No. 897-C-S regulating nonconforming uses and structures in the City of Antioch.

C. The Planning Commission conducted a duly noticed public hearing on January 16, 2019 at which time a resolution was approved to initiate and recommend to the City Council that this ordinance be adopted. The City Council held a duly noticed public hearing on _____ at which time all interested persons were allowed to address the Council regarding adoption of this ordinance.

D. The City Council finds that the public necessity requires the proposed zoning ordinance in order to regulate nonconforming structures, uses and parcels; said amendments are not detrimental to properties within Antioch, and that the proposed zoning ordinance amendment is in conformance with the Antioch General Plan.

SECTION 2. Title 9, Chapter 5, Article 30, *NONCONFORMING USES AND STRUCTURES* is hereby repealed and replaced with the following language:

9-5.3001 Purpose.

(A) This article provides regulations for nonconforming uses, structures, and parcels that were lawful before the adoption or amendment of the zoning code, but which would be prohibited, regulated, or restricted differently under the terms of this article or future amendments.

(B) It is the intent of the city to discourage the long-term continuance of nonconformities, providing for their eventual elimination, while allowing them to continue to exist under the conditions identified in this article.

(C) Any use, structure, or physical improvement which was established or constructed in violation of the applicable zoning regulations in effect at the time of establishment or construction and which does not conform to the applicable regulations of this Title is not a nonconforming use or structure, and the use or structure is in violation of this Title.

9-5.3002 Applicability.

Nonconforming uses, structures, and parcels may be continued, transferred, or sold only in compliance with the provisions of this chapter.

(A) *Nonconforming Uses*. A use of land and/or a structure that was legally established and has been maintained prior to the adoption or amendment of this Title, but the use is no longer allowed in the applicable zoning district or the use has not been granted a permit(s) required by the applicable zoning district, or the use is not operated in conformance with applicable performance standards in the zoning code.

(B) *Nonconforming Structures*. A structure or physical improvement that was legally constructed prior to the adoption or amendment of this Title or the city's adopted design guidelines, but does not conform to the development standards in AMC 9-5.601 (Height and Area Regulations and Table).

(C) *Nonconforming Parcels/Lots*. A parcel that was legally created prior to the adoption or amendment of this zoning code, but does not comply with the current requirements for lot area, width, depth, or other applicable requirements of this zoning code.

9-5.3003 Nonconforming Uses and Nonconforming Structures.

A nonconforming use and/or a nonconforming use of a structure may continue to exist, including transfers of ownership; provided, that its continuation shall comply with the requirements of this section.

(A) *Nonconforming Uses*. A nonconforming use may be continued or replaced; provided, that:

(1) The use shall not be enlarged or expanded in size or capacity, or extended to occupy a greater area of land or building floor area than it legally occupied before it became nonconforming.

(2) The use shall not be intensified so that the hours of operation are extended, the number of employees are increased, the occupancy capacity is increased, the volume of traffic or noise generated by the use is increased, or a greater amount of parking is required.

(3) The use may be replaced with another nonconforming use of a similar classification or a less intensive use in compliance with subsection (A)(2) of this section.

(4) Nonconforming uses within a multi-tenant commercial or industrial center or complex may be established or replaced by another similar nonconforming use when the Director of Community Development finds:

(a) That the new nonconforming use is, as per § 9-5.38, a similar classification to or less intensive than the use previously allowed in the center or complex;

(b) That the nonconforming use will not adversely affect or be materially detrimental to adjoining properties; and

(c) That the use of the entire center or complex has not been vacant or discontinued for a period of one year or more.

(5) An existing use that is authorized by a previously approved use permit, but is not allowed by the zoning code in its current location, may continue to exist in compliance with the original permit approval and shall be deemed nonconforming.

(6) A use lawfully existing without an administrative use permit or use permit that would be required by the Title to have such a permit approval in compliance with § 9-5.38 shall be allowed to operate to the extent that it previously operated (e.g., maintains the same site area boundaries, hours of operation, etc.) and shall be deemed nonconforming.

(B) Nonconforming Structures. A nonconforming structure may be expanded, enlarged, repaired and maintained as follows:

(1) *Expansion and Enlargement*. Nonconforming structures may be enlarged or extended to occupy a greater area of land or building floor area; provided, that any expansion or enlargement complies with all applicable requirements of this zoning code and does not increase the degree of nonconformity.

(2) *Repair, Maintenance and Additional Improvements*. A nonconforming single-family dwelling or duplex may be maintained and repaired at the discretion of the owner. Nonconforming multifamily and nonresidential structures may be maintained, repaired and improved as follows:

(a) Repairs, Maintenance and Additional Improvements up to 50 Percent of the Value of the Structure.

i. No structural alterations are allowed except as set forth in subsection (B)(3) of this section.

ii. The cost of the work done during any 12-month period shall not exceed 50 percent of the value of the structure as determined by the building official in compliance with the applicable building code.

(b*) Repairs, Maintenance and Additional Improvements Greater Than 50 Percent of the Value of the Structure*. Repairs, maintenance and additional improvements performed within a 12-month period, having a total cost greater than 50 percent of the value of the structure, may be authorized through administrative use permit approval; provided, that the review authority finds that the work will be a benefit to the city and the surrounding area.

(3) *Seismic Retrofitting, Building and Fire Code Compliance*. Repairs, alterations or reconstruction to reinforce unreinforced masonry structures necessary to comply with building code and fire code requirements shall be allowed; provided, that the work is exclusively to comply with applicable earthquake safety standards and the building code and fire code.

(4) For purposes of this subsection, the cost of any required foundation work shall not be counted within the 50 percent limitation.

9-5.3004 Loss of Nonconforming Status.

The nonconforming status of a use, structure or physical improvements shall terminate under the following conditions:

(A) *Discontinuance.*

(1) If the nonconforming use of land, a nonconforming use of a conforming structure, a conforming use of a nonconforming structure, or use of nonconforming physical improvements is discontinued for a continuous period of 365 calendar days or more, all rights to legal nonconforming status shall terminate.

(2) The Director of Community Development shall base a determination of discontinuance on evidence including the removal of equipment, furniture, machinery, structures, or other components of the nonconformity, disconnected or discontinued utilities, or no business license, business receipts or records to document continued operation.

(3) Without further action by the city, any further use of the land, structure or physical improvements shall comply with all of the regulations of the applicable zoning district and all other applicable provisions of this zoning code and city-adopted design guidelines.

(B) *Destruction*. Except for single-family, duplex and multifamily structures as provided by § 9-5.3006 (B), nonconforming status shall terminate if a nonconforming structure, conforming structure occupied by a nonconforming use or nonconforming physical improvements are involuntarily damaged or destroyed by earthquake, explosion, fire, or other calamity, except as follows:

(1) *Less Than 50 Percent*. If the cost of repairing or replacing the damaged portion of the nonconforming structure or physical improvements is 50 percent or less of the assessed value immediately before the involuntary damage, the structure or physical improvements may be restored to the same size, and the use continued as before; provided, that permits have been obtained and the restoration work is started within 180 days of the date of the damage, and the work is continuously pursued to completion within 12 months from the date building permits were issued.

(2) Greater Than 50 Percent. If the cost of repairing or replacing the damaged portion of the nonconforming structure or physical improvements is greater than 50 percent of the assessed value immediately prior to the involuntary damage, neither the structure nor the physical improvement shall be reconstructed, repaired, or restored, except in conformity with the requirements of the applicable zoning district.

9-5.3005 Nonconforming Parcels.

(A) *Legal Building Site*. A nonconforming parcel that does not comply with the applicable area, width, or depth requirements of the zoning code shall be considered a legal building site if it meets at least one of the following criteria, as documented to the satisfaction of the Director of Community Development with evidence furnished by the applicant.

(1) *Approved Subdivision*. The parcel was created by a recorded subdivision;

(2) *Individual Parcel Legally Created By Deed*. The parcel is under one ownership and of record, and was legally created by a recorded deed before the effective date of the zoning amendment that made the parcel nonconforming;

(3) *Variance or Lot Line Adjustment*. The parcel was approved through a variance procedure or resulted from a lot line adjustment; or

(4) *Partial Government Acquisition*. The parcel was created in compliance with the provisions of this zoning code, but was made nonconforming when a portion was acquired by a governmental entity so that the parcel size is decreased not more than 20 percent and the yard facing a public right-of-way was decreased not more than 50 percent.

(B) *Subdivision or Lot Line Adjustment*.

(1) No subdivision or lot line adjustment shall be approved that would increase the nonconformity of an existing parcel.

(2) No subdivision or lot line adjustment shall be approved for a parcel that contains a nonconforming use on the parcel.

9-5.3006 Exemptions.

(A) *Historic Structures*. Nonconforming structures of historical significance may be altered or enlarged without conforming to the zoning district requirements, provided the historic structure is:

(1) Designated by the city as an historic site or structure as listed in the general plan;

(2) Designated as a California State Historic Landmark or a National Register Site; and

(3) Proposed to be altered or enlarged in such a way that once completed the entire structure represents an authentic replica of the original structure.

(B) *Nonconforming Residential Structures*.

(1) Nonconforming single-family, duplex and multifamily dwelling units that have been involuntarily damaged or destroyed by earthquake, explosion, fire, flood, wind, or other calamity, may be reconstructed or replaced with a new structure using the same development standards applied to the damaged or destroyed structure (e.g., building footprint, building height, density standards, number of dwelling units, setbacks, and square footage), provided:

(a) The applicant provides sufficient documentation supporting the claim that the damage or destruction occurred involuntarily;

(b) There is no expansion of the gross floor area or number of dwelling units;

(c) The replacement structure complies with the building code, and will not be detrimental to the public health, safety, or welfare or materially injurious to the properties or improvements in the immediate vicinity of the replacement structure; and

(d) A building permit is issued no later than 12 months after the date of destruction, and construction is diligently pursued to completion.

(2) If the preceding requirements are not met, the replacement structure shall comply with all of the regulations of the applicable zoning district in effect on the date of application for a building permit.

(C) *Nonconforming Upon Annexation*. Nonconforming uses, structures, and/or physical improvements which lawfully exist on the date the property is annexed to the city, and which do not conform to this Title and the city's adopted design guidelines, may continue to exist and, upon annexation, shall be deemed nonconforming and subject to the provisions of this article.

(D) *Approved Uses, Structures and Physical Improvements Not Yet Established or Constructed*.

(1) A use, structure or physical improvements for which a planning or building permit was approved and issued, but not yet established or construction completed before the effective date of the ordinance codified in this article, may be completed, provided the work is diligently pursued to completion.

(2) If upon establishment or completion, a use, structure or physical improvements, referenced in subsection (D)(1) of this section, or parts thereof, are not in compliance with the zoning code, they shall be deemed to be nonconforming and shall thereafter be subject to the provisions of this article.

(3) For the purpose of this section, the provisions of Chapter 8-1 AMC (Building Code) shall govern the determination of whether the permit has been exercised in a timely manner.

9-5.3007 Nuisance Abatement and Enforcement.

(A) *Violations*. Uses, structures and physical improvements which do not comply with the applicable provisions of this zoning code when established are violations of this Title and are subject to the regulations of this Code.

(B) *Continuance of Public Nuisances Prohibited*. The provisions of this chapter do not allow, and shall not be interpreted to allow, the continuance of a use, structure or physical improvement which is deemed a public nuisance, or which is prohibited or otherwise made unlawful, in whole or in part, by this Code(including any adopted building code or fire code) or by laws enacted by the state or federal government which are applicable to the city.

(C*) Enforcement*. In the event that a nonconforming use, structure or physical improvement is found to constitute a public nuisance, appropriate action shall be taken by the city in compliance with the municipal code. Any violation of the zoning code can be deemed to be evidence of a public nuisance.

SECTION 4. CEQA.

Pursuant to CEQA Guidelines sections 15060(c)(2) and 15061(b)(3), the proposed amendments to the Antioch Municipal Code are exempt from CEQA because it can be

seen with certainty to have no possibility of a physical change to the environment or a significant impact on the environment.

SECTION 5. Publication; Effective Date.

This Ordinance shall take effect and be enforced thirty (30) days from and after the date of its adoption by the City Council at a second reading and shall be posted and published in accordance with the California Government Code.

SECTION 6. Severability.

Should any provision of this Ordinance, or its application to any person or circumstance, be determined by a court of competent jurisdiction to be unlawful, unenforceable or otherwise void, that determination shall have no effect on any other provision of this Ordinance or the application of this Ordinance to any other person or circumstance and, to that end, the provisions hereof are severable.

* * * * * *

I HEREBY CERTIFY that the foregoing ordinance was introduced at a regular meeting of the City Council of the City of Antioch held on the ___ day of ___ and passed and introduced at a regular meeting thereof, held on the ___ day of _____ _____, by the following vote:

AYES:

NOES:

ABSENT:

Sean Wright, Mayor of the City of Antioch

ATTEST:

Arne Simonsen, City Clerk of the City of Antioch

ATTACHMENT "B"

ATTACHMENT B

ARTICLE 30: NONCONFORMING USES AND STRUCTURES

§ 9-5.3001 PURPOSE.

This chapter is intended to limit the number and extent of nonconforming uses by regulating their enlargement, their re-establishment after abandonment, and their alteration or restoration after destruction of the structure they occupy. While permitting the use and maintenance of nonconforming structures, this chapter is intended to regulate their being moved, altered, or enlarged in a manner that would increase the discrepancy between existing conditions and the standards prescribed in this chapter and by prohibiting their restoration after destruction.

(Ord. 897-C-S, passed 10-25-94)

§ 9-5.3002 CONTINUATION AND MAINTENANCE.

(A) A use, lawfully occupying a structure or a site on the effective date of the chapter codified in this title, or of amendments thereto, that does not conform with the use regulations for the district in which the use is located shall be deemed to be a nonconforming use and may be continued, except as otherwise provided in this chapter.

(B) A structure, lawfully occupying a site on the effective date of the chapter codified in this title, or of amendments thereto, that does not conform with the development standards for that zone shall be deemed to be a nonconforming structure and may be used and maintained, except as otherwise provided in this chapter.

(C) Ordinary maintenance and repairs may be made to any nonconforming structure provided no structural alteration is made and provided such work does not exceed 15% of the reasonable value of the structure in any one-year period. Other modifications and structural alterations may be made to non-conforming buildings provided a use permit is first secured in each case issued by the Zoning Administrator.

(D) The Council shall have the authority to cause the amortization of nonconforming structures by establishing a time schedule of amortization for each such building.

(E) A use or structure that would otherwise be defined as a non-conforming use or structure pursuant to the provisions of division (A) or (B), above respectively, shall be permitted to continue in the same manner as if it conformed to the use regulations and development standards of the district in which the use or structure is located upon approval of a use permit. Such use permit shall be subject to the following findings.

(1) Granting of the use permit and permitting the otherwise non-conforming use or structure to continue in the same manner as if it conformed to the use regulations and development standards of the district in which the use or structure is located will not significantly impact or impair the use and enjoyment of adjacent properties.

(2) Sufficient conditions have been placed on the use permit to require the property upon which the otherwise non-conforming use or structure is located to be upgraded to meet as closely as the city determines to be feasible the use regulations and development standards of the district in which the use or structure is located.

(3) Sufficient conditions have been placed on the use permit to require the ongoing performance of the otherwise non-conforming use and/or maintenance of the otherwise non-conforming structure to continue meeting the provisions set forth in divisions (1) and (2) above.

(Ord. 897-C-S, passed 10-25-94; Am. Ord. 1064-C-S, passed 12-13-05)

§ 9-5.3003 ALTERATIONS AND ENLARGEMENTS.

(A) No structure partially occupied by a non-conforming use shall be moved, altered, or enlarged in such a way as to permit the enlargement of the space occupied by the nonconforming use.

(B) No nonconforming structure shall be altered or reconstructed so as to increase the discrepancy between existing conditions and the standards for front yards, side yards, rear yards, height of structure, distances between structures, driveways, courts, or usable open space prescribed in the regulations for the district in which the structure is located. No nonconforming structure shall be moved or enlarged unless the new location or enlargement shall conform to the standards for front yards, side yards, rear yards, height of structure, maximum allowable floor area, distances between structures, driveways, courts or usable open space prescribed in the regulations for the district in which the structure is located.

(Ord. 897-C-S, passed 10-25-94) Penalty, see § 9-5.2904

§ 9-5.3004 NONCONFORMING USES WITH PREVIOUSLY APPROVED USE PERMITS.

A nonconforming use established under a previously approved use permit which undergoes a change of ownership or tenancy may only be allowed to continue upon the approval of a supplemental use permit. The supplemental use permit shall be reviewed in the manner outlined in this chapter for use permits.

(Ord. 897-C-S, passed 10-25-94)

§ 9-5.3005 ABANDONMENT.

A nonconforming use that is discontinued or changed to a conforming use for a continuous period of 180 calendar days or more shall not be re-established, and the use of the structure or site thereafter shall be in conformity with the regulations for the district in which it is located, provided that this section shall not apply to nonconforming dwelling units. Abandonment or discontinuance shall include cessation of a use regardless of intent to resume the use.

(Ord. 897-C-S, passed 10-25-94)

§ 9-5.3006 RESTORATION OF A DAMAGED STRUCTURE.

(A) Whenever a structure that does not comply with the standards for development in that zone in which the structure is located, or the use of which does not conform with the regulations for the district in which it is located, is destroyed by fire or other calamity, to the extent of 50% of replacement value or

less, the structure may be restored and the nonconforming use may be resumed, provided that restoration is started within six months and diligently pursued to completion. If damage is more than 50% of replacement value, the structure shall not be restored except in full conformity with the regulations for the district in which it is located, and the nonconforming use shall not be resumed.

(B) The extent of damage or partial destruction shall be based upon the ratio of the estimated cost of restoring the structure to its condition prior to such damage to the estimated cost of duplicating the entire structure as it existed prior thereto. Estimates for this purpose shall be made by or shall be reviewed and approved by the Chief Building Official.

(Ord. 897-C-S, passed 10-25-94)

§ 9-5.3007 NEW OCCUPANCY ON NONCONFORMING SITE.

(A) An applicant for a permit in a C, M, RT, RTC, or RTT District for occupancy of a site or structure that is nonconforming due to lack of screening of mechanical equipment, required walls or fences to screen parking, required paving for driveways, or required planting areas, shall present a schedule for elimination or substantial reduction of these nonconformities over a period not exceeding five years. The Zoning Administrator may require that priority be given to elimination of non-conformities that have significant adverse impacts on surrounding properties and shall not require a commitment to remove nonconformities that have minor impact and would be costly to eliminate due to the configuration of the site and the location of existing structures.

(B) A nonconforming building or site, may be occupied by a less intensive nonconforming use or structure without removal of development standard nonconformities if approved by a Zoning Administrator use permit.

(Ord. 897-C-S, passed 10-25-94)

STAFF REPORT TO THE PLANNING COMMISSION
FOR CONSIDERATION AT THE MEETING OF JANUARY 16, 2019

Submitted by: Forrest Ebbs, Community Development Director

Date: January 10, 2019

Subject: Water Efficient Landscape Ordinance

RECOMMENDATION

It is recommended that the Planning Commission take the following actions:

1. Adopt the resolution recommending approval of an ordinance to amend the Antioch Municipal Code to adopt, by reference, the State of California Model Water Efficient Landscape Ordinance.

REQUEST

Staff requests that Title 9, Chapter 5 of the Municipal Code (Zoning Ordinance) be amended to include a new Section that adopts, by reference, the State of California Model Water Efficient Landscape Ordinance.

BACKGROUND

In September 2006, the State of California adopted the Water Conservation in Landscaping Act of 2006 (AB 1881), which became Government Code Article 10.8 [65591-65599]. As of January 1, 2010, all local jurisdictions were required to have implemented this law. As part of this effort, the California Department of Water Resources (DWR) drafted and distributed a Model Water Efficient Landscape Ordinance to assist local agencies with the implementation of this new law. In 2015, Executive Order B-29-15 required that DWR update the 2010 Model Water Efficient Landscape Ordinance to further increase water conservation.

The City of Antioch has generally required that major development projects comply with the Model Water Efficient Landscape Ordinance through project-specific conditions of approval. However, the City has never formally adopted the ordinance or drafted its own comparable version. Absent this action, the State law automatically requires compliance with the Model Water Efficient Landscape Ordinance. Staff recommends adoption of an ordinance that adopts, by reference, the DWR Model Water Efficient Landscape Ordinance. Through this action, the City will better comply with State law and will be better able to enforce the required provisions.

PROPOSAL

Staff is proposing to insert a new section into the Zoning Ordinance that would adopt, by reference, the DWR Model Water Efficient Landscape Ordinance. This approach will allow for simpler implementation and, should DWR change the Model Ordinance in the future, the City would not need to update its ordinance.

The proposed text is as follows:

> 9-5.1006 Adoption of the Model Water Efficient Landscape Ordinance.
> The "Model Water Efficient Landscape Ordinance" of the state of California, as contained in California Code of Regulations Title 23 Waters, Division 2 Department of Water Resources, Chapter 2.7 Model Water Efficient Landscape Ordinance, Section 490 et seq., is hereby adopted by reference as the water efficient landscape ordinance of the City of Antioch, as the same may be amended from time to time, as if set out in full in this chapter.

A copy of the Model Water Efficient Landscape Ordinance is attached and is available at: https://water.ca.gov/Programs/Water-Use-And-Efficiency/Urban-Water-Use-Efficiency/Model-Water-Efficient-Landscape-Ordinance

ANALYSIS

The adoption of this Ordinance will require that the City invest in new processes and programs to fully comply with State law and implement its requirements. Presently, neither the Planning, Building Inspection Services, or Engineering functions robustly address water efficient landscaping and the City is likely out of full compliance with these State requirements. The Model Water Efficient Landscape Ordinance, when implemented, will impose new requirements including, but not limited to, the following:

- A comprehensive Landscape Documentation Package is required for the following types of projects:
  - New construction projects with an aggregate landscape area equal to or greater than 500 square feet requiring a building or landscape permit, plan check or design review.
  - Rehabilitated landscape projects with an aggregate landscape area equal to or greater than 2,500 square feet requiring a building permit or landscape permit, plan check, or design review.
  - Cemeteries and existing landscape areas are largely exempt.
- The Landscape Documentation Package must demonstrate that the landscaping achieves several complex conservation goals through the submittal of the following documents:
  - Water Efficient Landscape Worksheet
  - Soil Management Report
  - Landscape Design Plan
  - Irrigation Design Plan

    - Grading Design Plan
    - Irrigation Schedule
- Once the Landscape Documentation Package is submitted and approved by the Community Development Department, and installed, an independent audit is required to demonstrate compliance with the approved Package.
    - Special audit provisions apply to landscapes installed before December 1, 2015.
- Public Education is required by the Ordinance.
- The City is required to submit an annual report to the Department of Water Resources describing the City's compliance and achievements over the prior year.

With the adoption of this local ordinance, Community Development Department staff intends on improving processes to more completely comply with the State law and all of its provisions.

CEQA

This action is exempt under Section 15307 of the CEQA Guidelines, as it is an action of a regulatory agency for the protection of natural resources.

ATTACHMENTS

A. Resolution with Ordinance
B. Model Water Efficient Landscape Ordinance

ATTACHMENT "A"

PLANNING COMMISSION
RESOLUTION NO. 2019-**

RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF ANTIOCH RECOMMENDING TO THE CITY COUNCIL ADOPTION OF AN ORDINANCE TO ADOPT, BY REFERENCE, THE CALIFORNIA DEPARTMENT OF WATER RESOURCES MODEL WATER EFFICIENT LANDSCAPE ORDINANCE

WHEREAS, the Water Conservation in Landscaping Act of 2006 (AB 1881) required implementation of new regulations to promote and achieve water conservation in new development and existing landscapes; and,

WHEREAS, the Department of Water Resources drafted and distributed a Model Water Efficient Landscape Ordinance in 2010 and made revisions in 2015; and,

WHEREAS, local agencies are required to comply with AB 1881 either through production and adoption of a local ordinance or through adoption of the Model Water Efficient Landscape Ordinance; and,

WHEREAS, the City of Antioch's adoption of the Model Water Efficient Landscape Ordinance will better achieve compliance with AB 1881 and will promote and achieve water conservation; and,

WHEREAS, this action is exempt under CEQA Section 15307 as an action by a regulatory agency for protection of natural resources; and,

WHEREAS, on January 16, 2019, the Planning Commission duly held a public hearing on the matter, and received and considered evidence, both oral and written.

NOW THEREFORE BE IT FURTHER RESOLVED that the Planning Commission does hereby recommend to the City Council APPROVAL of the draft Ordinance (Exhibit A) to amend Title 9, Chapter 5 of the Antioch Municipal Code (Zoning Ordinance).

* * * * * * * * * * * * * * * * *

I HEREBY CERTIFY that the foregoing resolution was passed and adopted by the Planning Commission of the City of Antioch at a regular meeting thereof held on the 16th day of January, 2019.

AYES:
NOES:
ABSENT:
ABSTAIN:

_____
FORREST EBBS
Secretary to the Planning Commission

EXHIBIT A

ORDINANCE NO. ____

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ANTIOCH AMENDING THE ZONING ORDINANCE TO ADOPT, BY REFERENCE, THE STATE MODEL WATER EFFICIENT LANDSCAPE ORDINANCE

The City Council of the City of Antioch does ordain as follows:

SECTION 1:

The City Council determined on _____, that, pursuant to Section 15307 of the Guidelines of the California Environmental Quality Act, the project does not have the potential for causing a significant effect on the environment because it will preserve natural resources.

SECTION 2:

At its regular meeting of January 16, 2019, the Planning Commission recommended that the City Council adopt the Ordinance to amend the Title 9, Chapter 5 of the Antioch Municipal Code (Zoning Ordinance) to adopt, by reference, the State Water Efficient Landscape Ordinance.

SECTION 3:

Section 9-5.1006 is hereby added to Title 9, Chapter 5 of the Antioch Municipal Code (Zoning Ordinance) as follows:

9-5.1006 Adoption of the Model Water Efficient Landscape Ordinance.

Applicability. The “Model Water Efficient Landscape Ordinance” of the state of California, as contained in California Code of Regulations Title 23 Waters, Division 2 Department of Water Resources, Chapter 2.7 Model Water Efficient Landscape Ordinance, Section 490 et seq., is hereby adopted by reference as the water efficient landscape ordinance of the City of Antioch, as the same may be amended from time to time, as if set out in full in this chapter.

SECTION 4:

Severability. If any section, subsection, provision or part of this ordinance, or its application to any person or circumstance, is held to be unconstitutional or otherwise invalid, the remainder of this ordinance, and the application of such provision to other

person or circumstances, shall not be affected thereby and shall remain in full force and effect and, to that end, the provisions of this ordinance are severable.

SECTION 5:

This ordinance shall take effect and be enforced thirty (30) days from and after the date of its adoption and shall be published once within fifteen (15) days upon passage and adoption in a newspaper of general circulation printed and published in the City of Antioch.

* * * * * * *

I HEREBY CERTIFY that the forgoing ordinance was introduced and adopted at a regular meeting of the City Council of the City of Antioch, held on the _____ of _____, 2018, and passed and adopted at a regular meeting thereof, held on the _____ of _____, 2019, by the following vote:

AYES:
NOES:
ABSENT:

_____
Mayor of the City of Antioch

ATTEST:

_____
City Clerk of the City of Antioch

ATTACHMENT "B"

thirtieth day thereafter (Register 86, No. 23). For prior history, see Register 85, No. 26; 81, Nos. 40 and 38; and 80, No. 7.

Chapter 2.7. Model Water Efficient Landscape Ordinance

§ 490. Purpose.

(a) The State Legislature has found:

(1) that the waters of the state are of limited supply and are subject to ever increasing demands;

(2) that the continuation of California's economic prosperity is dependent on the availability of adequate supplies of water for future uses;

(3) that it is the policy of the State to promote the conservation and efficient use of water and to prevent the waste of this valuable resource;

(4) that landscapes are essential to the quality of life in California by providing areas for active and passive recreation and as an enhancement to the environment by cleaning air and water, preventing erosion, offering fire protection, and replacing ecosystems lost to development;

(5) that landscape design, installation, maintenance and management can and should be water efficient;

(6) that Section 2 of Article X of the California Constitution specifies that the right to use water is limited to the amount reasonably required for the beneficial use to be served and the right does not and shall not extend to waste or unreasonable method of use.

(b) Consistent with the legislative findings, the purpose of this model ordinance is to:

(1) promote the values and benefits of landscaping practices that integrate and go beyond the conservation and efficient use of water;

(2) establish a structure for planning, designing, installing, maintaining and managing water efficient landscapes in new construction and rehabilitated projects by encouraging the use of a watershed approach that requires cross–sector collaboration of industry, government and property owners to achieve the many benefits possible;

(3) establish provisions for water management practices and water waste prevention for existing landscapes;

(4) use water efficiently without waste by setting a Maximum Applied Water Allowance as an upper limit for water use and reduce water use to the lowest practical amount;

(5) promote the benefits of consistent landscape ordinances with neighboring local and regional agencies;

(6) encourage local agencies and water purveyors to use economic incentives that promote the efficient use of water, such as implementing a tiered–rate structure; and

(7) encourage local agencies to designate the necessary authority that implements and enforces the provisions of the Model Water Efficient Landscape Ordinance or its local landscape ordinance.

(c) Landscapes that are planned, designed, installed, managed and maintained with the watershed based approach can improve California's environmental conditions and provide benefits and realize sustainability goals. Such landscapes will make the urban environment resilient in the face of climatic extremes. Consistent with the legislative findings and purpose of the Ordinance, conditions in the urban setting will be improved by:

(1) Creating the conditions to support life in the soil by reducing compaction, incorporating organic matter that increases water retention, and promoting productive plant growth that leads to more carbon storage, oxygen production, shade, habitat and esthetic benefits.

(2) Minimizing energy use by reducing irrigation water requirements, reducing reliance on petroleum based fertilizers and pesticides, and planting climate appropriate shade trees in urban areas.

(3) Conserving water by capturing and reusing rainwater and graywater wherever possible and selecting climate appropriate plants that need minimal supplemental water after establishment.

(4) Protecting air and water quality by reducing power equipment use and landfill disposal trips, selecting recycled and locally sourced materi-

B1

als, and using compost, mulch and efficient irrigation equipment to prevent erosion.

(5) Protecting existing habitat and creating new habitat by choosing local native plants, climate adapted non–natives and avoiding invasive plants. Utilizing integrated pest management with least toxic methods as the first course of action.

NOTE: Authority cited: Section 65593, Government Code; and sections 11 and 30, Governor's Exec. Order No. B–29–15 (April 1, 2015). Reference: Sections 65591, 65593 and 65596, Government Code; and section 11, Governor's Exec. Order No. B–29–15 (April 1, 2015).

HISTORY

1. New chapter 2.7 (sections 490–495) filed 7–31–92; operative 7–31–92 (Register 92, No. 32).
2. Amendment of section and NOTE filed 9–10–2009; operative 9–10–2009 pursuant to Government Code section 11343.4 (Register 2009, No. 37).
3. Amendment of subsections (a)(4) and (b)(1)–(2), new subsections (c)–(c)(5) and amendment of NOTE filed 9–15–2015; operative 9–15–2015. Exempt from OAL review and submitted to OAL for printing only pursuant to Governor's Executive Order No. B–29–15 (4–1–2015) (Register 2015, No. 38).

§ 490.1. Applicability.

(a) After December 1, 2015, and consistent with Executive Order No. B–29–15, this ordinance shall apply to all of the following landscape projects:

(1) new construction projects with an aggregate landscape area equal to or greater than 500 square feet requiring a building or landscape permit, plan check or design review;

(2) rehabilitated landscape projects with an aggregate landscape area equal to or greater than 2,500 square feet requiring a building or landscape permit, plan check, or design review;

(3) existing landscapes limited to Sections 493, 493.1 and 493.2; and

(4) cemeteries. Recognizing the special landscape management needs of cemeteries, new and rehabilitated cemeteries are limited to Sections 492.4, 492.11, and 492. 12; and existing cemeteries are limited to Sections 493, 493.1, and 493.2.

(b) For local land use agencies working together to develop a regional water efficient landscape ordinance, the reporting requirements of this ordinance shall become effective December 1, 2015 and the remainder of this ordinance shall be effective no later than February 1, 2016.

(c) Any project with an aggregate landscape area of 2,500 square feet or less may comply with the performance requirements of this ordinance or conform to the prescriptive measures contained in Appendix D.

(d) For projects using treated or untreated graywater or rainwater captured on site, any lot or parcel within the project that has less than 2500 sq. ft. of landscape and meets the lot or parcel's landscape water requirement (Estimated Total Water Use) entirely with treated or untreated graywater or through stored rainwater captured on site is subject only to Appendix D section (5).

(e) This ordinance does not apply to:

(1) registered local, state or federal historical sites;

(2) ecological restoration projects that do not require a permanent irrigation system;

(3) mined–land reclamation projects that do not require a permanent irrigation system; or

(4) existing plant collections, as part of botanical gardens and arboretums open to the public.

NOTE: Authority cited: Section 65595, Government Code; and sections 11 and 30, Governor's Exec. Order No. B–29–15 (April 1, 2015). Reference: Section 65596, Government Code; and section 11, Governor's Exec. Order No. B–29–15 (April 1, 2015).

HISTORY

1. New section filed 9–10–2009; operative 9–10–2009 pursuant to Government Code section 11343.4 (Register 2009, No. 37).
2. Amendment of section and NOTE filed 9–15–2015; operative 9–15–2015. Exempt from OAL review and submitted to OAL for printing only pursuant to Governor's Executive Order No. B–29–15 (4–1–2015) (Register 2015, No. 38).

§ 491. Definitions.

The terms used in this ordinance have the meaning set forth below:

(a) "applied water" means the portion of water supplied by the irrigation system to the landscape.

(b) "automatic irrigation controller" means a timing device used to remotely control valves that operate an irrigation system. Automatic irrigation controllers are able to self–adjust and schedule irrigation events using either evapotranspiration (weather–based) or soil moisture data.

(c) "backflow prevention device" means a safety device used to prevent pollution or contamination of the water supply due to the reverse flow of water from the irrigation system.

(d) "Certificate of Completion" means the document required under Section 492.9.

(e) "certified irrigation designer" means a person certified to design irrigation systems by an accredited academic institution, a professional trade organization or other program such as the US Environmental Protection Agency's WaterSense irrigation designer certification program and Irrigation Association's Certified Irrigation Designer program.

(f) "certified landscape irrigation auditor" means a person certified to perform landscape irrigation audits by an accredited academic institution, a professional trade organization or other program such as the US Environmental Protection Agency's WaterSense irrigation auditor certification program and Irrigation Association's Certified Landscape Irrigation Auditor program.

(g) "check valve" or "anti–drain valve" means a valve located under a sprinkler head, or other location in the irrigation system, to hold water in the system to prevent drainage from sprinkler heads when the sprinkler is off.

(h) "common interest developments" means community apartment projects, condominium projects, planned developments, and stock cooperatives per Civil Code Section 1351.

(i) "compost" means the safe and stable product of controlled biologic decomposition of organic materials that is beneficial to plant growth.

(j) "conversion factor (0.62)" means the number that converts acre–inches per acre per year to gallons per square foot per year.

(k) "distribution uniformity" means the measure of the uniformity of irrigation water over a defined area.

(l) "drip irrigation" means any non–spray low volume irrigation system utilizing emission devices with a flow rate measured in gallons per hour. Low volume irrigation systems are specifically designed to apply small volumes of water slowly at or near the root zone of plants.

(m) "ecological restoration project" means a project where the site is intentionally altered to establish a defined, indigenous, historic ecosystem.

(n) "effective precipitation" or "usable rainfall" (Eppt) means the portion of total precipitation which becomes available for plant growth.

(o) "emitter" means a drip irrigation emission device that delivers water slowly from the system to the soil.

(p) "established landscape" means the point at which plants in the landscape have developed significant root growth into the soil. Typically, most plants are established after one or two years of growth.

(q) "establishment period of the plants" means the first year after installing the plant in the landscape or the first two years if irrigation will be terminated after establishment. Typically, most plants are established after one or two years of growth. Native habitat mitigation areas and trees may need three to five years for establishment.

(r) "Estimated Total Water Use" (ETWU) means the total water used for the landscape as described in Section 492.4.

(s) "ET adjustment factor" (ETAF) means a factor of 0.55 for residential areas and 0.45 for non–residential areas, that, when applied to reference evapotranspiration, adjusts for plant factors and irrigation efficiency, two major influences upon the amount of water that needs to be applied to the landscape. The ETAF for new and existing (non–rehabilitated) Special Landscape Areas shall not exceed 1.0. The ETAF for existing non–rehabilitated landscapes is 0.8.

B2

(t) "evapotranspiration rate" means the quantity of water evaporated from adjacent soil and other surfaces and transpired by plants during a specified time.

(u) "flow rate" means the rate at which water flows through pipes, valves and emission devices, measured in gallons per minute, gallons per hour, or cubic feet per second.

(v) "flow sensor" means an inline device installed at the supply point of the irrigation system that produces a repeatable signal proportional to flow rate. Flow sensors must be connected to an automatic irrigation controller, or flow monitor capable of receiving flow signals and operating master valves. This combination flow sensor/controller may also function as a landscape water meter or submeter.

(w) "friable" means a soil condition that is easily crumbled or loosely compacted down to a minimum depth per planting material requirements, whereby the root structure of newly planted material will be allowed to spread unimpeded.

(x) "Fuel Modification Plan Guideline" means guidelines from a local fire authority to assist residents and businesses that are developing land or building structures in a fire hazard severity zone.

(y) "graywater" means untreated wastewater that has not been contaminated by any toilet discharge, has not been affected by infectious, contaminated, or unhealthy bodily wastes, and does not present a threat from contamination by unhealthful processing, manufacturing, or operating wastes. "Graywater" includes, but is not limited to, wastewater from bathtubs, showers, bathroom washbasins, clothes washing machines, and laundry tubs, but does not include wastewater from kitchen sinks or dishwashers. Health and Safety Code Section 17922.12.

(z) "hardscapes" means any durable material (pervious and non–pervious).

(aa) "hydrozone" means a portion of the landscaped area having plants with similar water needs and rooting depth. A hydrozone may be irrigated or non–irrigated.

(bb) "infiltration rate" means the rate of water entry into the soil expressed as a depth of water per unit of time (e.g., inches per hour).

(cc) "invasive plant species" means species of plants not historically found in California that spread outside cultivated areas and can damage environmental or economic resources. Invasive species may be regulated by county agricultural agencies as noxious species. Lists of invasive plants are maintained at the California Invasive Plant Inventory and USDA invasive and noxious weeds database.

(dd) "irrigation audit" means an in–depth evaluation of the performance of an irrigation system conducted by a Certified Landscape Irrigation Auditor. An irrigation audit includes, but is not limited to: inspection, system tune–up, system test with distribution uniformity or emission uniformity, reporting overspray or runoff that causes overland flow, and preparation of an irrigation schedule. The audit must be conducted in a manner consistent with the Irrigation Association's Landscape Irrigation Auditor Certification program or other U.S. Environmental Protection Agency "Watersense" labeled auditing program.

(ee) "irrigation efficiency" (IE) means the measurement of the amount of water beneficially used divided by the amount of water applied. Irrigation efficiency is derived from measurements and estimates of irrigation system characteristics and management practices. The irrigation efficiency for purposes of this ordinance are 0.75 for overhead spray devices and 0.81 for drip systems.

(ff) "irrigation survey" means an evaluation of an irrigation system that is less detailed than an irrigation audit. An irrigation survey includes, but is not limited to: inspection, system test, and written recommendations to improve performance of the irrigation system.

(gg) "irrigation water use analysis" means an analysis of water use data based on meter readings and billing data.

(hh) "landscape architect" means a person who holds a license to practice landscape architecture in the state of California Business and Professions Code, Section 5615.

(ii) "landscape area" means all the planting areas, turf areas, and water features in a landscape design plan subject to the Maximum Applied Water Allowance calculation. The landscape area does not include footprints of buildings or structures, sidewalks, driveways, parking lots, decks, patios, gravel or stone walks, other pervious or non–pervious hardscapes, and other non–irrigated areas designated for non–development (e.g., open spaces and existing native vegetation).

(jj) "landscape contractor" means a person licensed by the state of California to construct, maintain, repair, install, or subcontract the development of landscape systems.

(kk) "Landscape Documentation Package" means the documents required under Section 492.3.

(*ll*) "landscape project" means total area of landscape in a project as defined in "landscape area" for the purposes of this ordinance, meeting requirements under Section 490.1.

(mm) "landscape water meter" means an inline device installed at the irrigation supply point that measures the flow of water into the irrigation system and is connected to a totalizer to record water use.

(nn) "lateral line" means the water delivery pipeline that supplies water to the emitters or sprinklers from the valve.

(oo) "local agency" means a city or county, including a charter city or charter county, that is responsible for adopting and implementing the ordinance. The local agency is also responsible for the enforcement of this ordinance, including but not limited to, approval of a permit and plan check or design review of a project.

(pp) "local water purveyor" means any entity, including a public agency, city, county, or private water company that provides retail water service.

(qq) "low volume irrigation" means the application of irrigation water at low pressure through a system of tubing or lateral lines and low–volume emitters such as drip, drip lines, and bubblers. Low volume irrigation systems are specifically designed to apply small volumes of water slowly at or near the root zone of plants.

(rr) "main line" means the pressurized pipeline that delivers water from the water source to the valve or outlet.

(ss) "master shut–off valve" is an automatic valve installed at the irrigation supply point which controls water flow into the irrigation system. When this valve is closed water will not be supplied to the irrigation system. A master valve will greatly reduce any water loss due to a leaky station valve.

(tt) "Maximum Applied Water Allowance" (MAWA) means the upper limit of annual applied water for the established landscaped area as specified in Section 492.4. It is based upon the area's reference evapotranspiration, the ET Adjustment Factor, and the size of the landscape area. The Estimated Total Water Use shall not exceed the Maximum Applied Water Allowance. Special Landscape Areas, including recreation areas, areas permanently and solely dedicated to edible plants such as orchards and vegetable gardens, and areas irrigated with recycled water are subject to the MAWA with an ETAF not to exceed 1.0. MAWA = (ETo) (0.62) [(ETAF x LA) + ((1–ETAF) x SLA)]

(uu) "median" is an area between opposing lanes of traffic that may be unplanted or planted with trees, shrubs, perennials, and ornamental grasses.

(vv) "microclimate" means the climate of a small, specific area that may contrast with the climate of the overall landscape area due to factors such as wind, sun exposure, plant density, or proximity to reflective surfaces.

(ww) "mined–land reclamation projects" means any surface mining operation with a reclamation plan approved in accordance with the Surface Mining and Reclamation Act of 1975.

(xx) "mulch" means any organic material such as leaves, bark, straw, compost, or inorganic mineral materials such as rocks, gravel, or decomposed granite left loose and applied to the soil surface for the beneficial purposes of reducing evaporation, suppressing weeds, moderating soil temperature, and preventing soil erosion.

(yy) "new construction" means, for the purposes of this ordinance, a new building with a landscape or other new landscape, such as a park, playground, or greenbelt without an associated building.

(zz) "non–residential landscape" means landscapes in commercial, institutional, industrial and public settings that may have areas designated for recreation or public assembly. It also includes portions of common areas of common interest developments with designated recreational areas.

(aaa) "operating pressure" means the pressure at which the parts of an irrigation system are designed by the manufacturer to operate.

(bbb) "overhead sprinkler irrigation systems" or "overhead spray irrigation systems" means systems that deliver water through the air (e.g., spray heads and rotors).

(ccc) "overspray" means the irrigation water which is delivered beyond the target area.

(ddd) "parkway" means the area between a sidewalk and the curb or traffic lane. It may be planted or unplanted, and with or without pedestrian egress.

(eee) "permit" means an authorizing document issued by local agencies for new construction or rehabilitated landscapes.

(fff) "pervious" means any surface or material that allows the passage of water through the material and into the underlying soil.

(ggg) "plant factor" or "plant water use factor" is a factor, when multiplied by ETo, estimates the amount of water needed by plants. For purposes of this ordinance, the plant factor range for very low water use plants is 0 to 0.1, the plant factor range for low water use plants is 0.1 to 0.3, the plant factor range for moderate water use plants is 0.4 to 0.6, and the plant factor range for high water use plants is 0.7 to 1.0. Plant factors cited in this ordinance are derived from the publication "Water Use Classification of Landscape Species". Plant factors may also be obtained from horticultural researchers from academic institutions or professional associations as approved by the California Department of Water Resources (DWR).

(hhh) "project applicant" means the individual or entity submitting a Landscape Documentation Package required under Section 492.3, to request a permit, plan check, or design review from the local agency. A project applicant may be the property owner or his or her designee.

(iii) "rain sensor" or "rain sensing shutoff device" means a component which automatically suspends an irrigation event when it rains.

(jjj) "record drawing" or "as–builts" means a set of reproducible drawings which show significant changes in the work made during construction and which are usually based on drawings marked up in the field and other data furnished by the contractor.

(kkk) "recreational area" means areas, excluding private single family residential areas, designated for active play, recreation or public assembly in parks, sports fields, picnic grounds, amphitheaters or golf course tees, fairways, roughs, surrounds and greens.

(*lll*) "recycled water," "reclaimed water," or "treated sewage effluent water" means treated or recycled waste water of a quality suitable for nonpotable uses such as landscape irrigation and water features. This water is not intended for human consumption.

(mmm) "reference evapotranspiration" or "ETo" means a standard measurement of environmental parameters which affect the water use of plants. ETo is expressed in inches per day, month, or year as represented in Appendix A, and is an estimate of the evapotranspiration of a large field of four– to seven–inch tall, cool–season grass that is well watered. Reference evapotranspiration is used as the basis of determining the Maximum Applied Water Allowances so that regional differences in climate can be accommodated.

(nnn) "Regional Water Efficient Landscape Ordinance" means a local Ordinance adopted by two or more local agencies, water suppliers and other stakeholders for implementing a consistent set of landscape provisions throughout a geographical region. Regional ordinances are strongly encouraged to provide a consistent framework for the landscape industry and applicants to adhere to.

(ooo) "rehabilitated landscape" means any relandscaping project that requires a permit, plan check, or design review, meets the requirements of Section 490.1, and the modified landscape area is equal to or greater than 2,500 square feet.

(ppp) "residential landscape" means landscapes surrounding single or multifamily homes.

(qqq) "run off" means water which is not absorbed by the soil or landscape to which it is applied and flows from the landscape area. For example, run off may result from water that is applied at too great a rate (application rate exceeds infiltration rate) or when there is a slope.

(rrr) "soil moisture sensing device" or "soil moisture sensor" means a device that measures the amount of water in the soil. The device may also suspend or initiate an irrigation event.

(sss) "soil texture" means the classification of soil based on its percentage of sand, silt, and clay.

(ttt) "Special Landscape Area" (SLA) means an area of the landscape dedicated solely to edible plants, recreational areas, areas irrigated with recycled water, or water features using recycled water.

(uuu) "sprinkler head" or "spray head" means a device which delivers water through a nozzle.

(vvv) "static water pressure" means the pipeline or municipal water supply pressure when water is not flowing.

(www) "station" means an area served by one valve or by a set of valves that operate simultaneously.

(xxx) "swing joint" means an irrigation component that provides a flexible, leak–free connection between the emission device and lateral pipeline to allow movement in any direction and to prevent equipment damage.

(yyy) "submeter" means a metering device to measure water applied to the landscape that is installed after the primary utility water meter.

(zzz) "turf" means a ground cover surface of mowed grass. Annual bluegrass, Kentucky bluegrass, Perennial ryegrass, Red fescue, and Tall fescue are cool–season grasses. Bermudagrass, Kikuyugrass, Seashore Paspalum, St. Augustinegrass, Zoysiagrass, and Buffalo grass are warm–season grasses.

(aaaa) "valve" means a device used to control the flow of water in the irrigation system.

(bbbb) "water conserving plant species" means a plant species identified as having a very low or low plant factor.

(cccc) "water feature" means a design element where open water performs an aesthetic or recreational function. Water features include ponds, lakes, waterfalls, fountains, artificial streams, spas, and swimming pools (where water is artificially supplied). The surface area of water features is included in the high water use hydrozone of the landscape area. Constructed wetlands used for on–site wastewater treatment or stormwater best management practices that are not irrigated and used solely for water treatment or stormwater retention are not water features and, therefore, are not subject to the water budget calculation.

(dddd) "watering window" means the time of day irrigation is allowed.

(eeee) "WUCOLS" means the Water Use Classification of Landscape Species published by the University of California Cooperative Extension and the Department of Water Resources 2014.

NOTE: Authority cited: Section 65595, Government Code; and sections 11 and 30, Governor's Exec. Order No. B–29–15 (April 1, 2015). Reference: Sections 65592 and 65596, Government Code; and section 11, Governor's Exec. Order No. B–29–15 (April 1, 2015).

HISTORY

1. New section filed 7–31–92; operative 7–31–92 (Register 92, No. 32).
2. Amendment of section and NOTE filed 9–10–2009; operative 9–10–2009 pursuant to Government Code section 11343.4 (Register 2009, No. 37).
3. Amendment of section and NOTE filed 9–15–2015; operative 9–15–2015. Exempt from OAL review and submitted to OAL for printing only pursuant to Governor's Executive Order No. B–29–15 (4–1–2015) (Register 2015, No. 38).

§ 492. Provisions for New Construction or Rehabilitated Landscapes.

(a) A local agency may designate by mutual agreement, another agency, such as a water purveyor, to implement some or all of the requirements contained in this ordinance. Local agencies may collaborate with water purveyors to define each entity's specific responsibilities relating to this ordinance.

NOTE: Authority cited: Section 65595, Government Code; and sections 11 and 30, Governor's Exec. Order No. B–29–15 (April 1, 2015). Reference: Section 65596,

B4

Government Code; and section 11, Governor's Exec. Order No. B–29–15 (April 1, 2015).

HISTORY

1. New section filed 7–31–92; operative 7–31–92 (Register 92, No. 32).
2. Amendment of section heading, repealer and new section and amendment of NOTE filed 9–10–2009; operative 9–10–2009 pursuant to Government Code section 11343.4 (Register 2009, No. 37).
3. Amendment of section and NOTE filed 9–15–2015; operative 9–15–2015. Exempt from OAL review and submitted to OAL for printing only pursuant to Governor's Executive Order No. B–29–15 (4–1–2015) (Register 2015, No. 38).

§ 492.1. Compliance with Landscape Documentation Package.

(a) Prior to construction, the local agency shall:

(1) provide the project applicant with the ordinance and procedures for permits, plan checks or design reviews;

(2) review the Landscape Documentation Package submitted by the project applicant;

(3) approve or deny the Landscape Documentation Package;

(4) issue a permit or approve the plan check or design review for the project applicant; and

(5) upon approval of the Landscape Documentation Package, submit a copy of the Water Efficient Landscape Worksheet to the local water purveyor.

(b) Prior to construction, the project applicant shall:

(1) submit a Landscape Documentation Package to the local agency.

(c) Upon approval of the Landscape Documentation Package by the local agency, the project applicant shall:

(1) receive a permit or approval of the plan check or design review and record the date of the permit in the Certificate of Completion;

(2) submit a copy of the approved Landscape Documentation Package along with the record drawings, and any other information to the property owner or his/her designee; and

(3) submit a copy of the Water Efficient Landscape Worksheet to the local water purveyor.

NOTE: Authority cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

HISTORY

1. New section filed 9–10–2009; operative 9–10–2009 pursuant to Government Code section 11343.4 (Register 2009, No. 37).

§ 492.2. Penalties.

(a) A local agency may establish and administer penalties to the project applicant for non–compliance with the ordinance to the extent permitted by law.

NOTE: Authority cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

HISTORY

1. New section filed 9–10–2009; operative 9–10–2009 pursuant to Government Code section 11343.4 (Register 2009, No. 37).

§ 492.3. Elements of the Landscape Documentation Package.

(a) The Landscape Documentation Package shall include the following six (6) elements:

(1) project information;

(A) date

(B) project applicant

(C) project address (if available, parcel and/or lot number(s))

(D) total landscape area (square feet)

(E) project type (e.g., new, rehabilitated, public, private, cemetery, homeowner–installed)

(F) water supply type (e.g., potable, recycled, well) and identify the local retail water purveyor if the applicant is not served by a private well

(G) checklist of all documents in Landscape Documentation Package

(H) project contacts to include contact information for the project applicant and property owner

(I) applicant signature and date with statement, "I agree to comply with the requirements of the water efficient landscape ordinance and submit a complete Landscape Documentation Package".

(2) Water Efficient Landscape Worksheet;

(A) hydrozone information table

(B) water budget calculations

1. Maximum Applied Water Allowance (MAWA)
2. Estimated Total Water Use (ETWU)

(3) soil management report;

(4) landscape design plan;

(5) irrigation design plan; and

(6) grading design plan.

NOTE: Authority cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

HISTORY

1. New section filed 9–10–2009; operative 9–10–2009 pursuant to Government Code section 11343.4 (Register 2009, No. 37).

§ 492.4. Water Efficient Landscape Worksheet.

(a) A project applicant shall complete the Water Efficient Landscape Worksheet in Appendix B which contains information on the plant factor, irrigation method, irrigation efficiency, and area associated with each hydrozone. Calculations are then made to show that the evapotranspiration adjustment factor (ETAF) for the landscape project does not exceed a factor of 0.55 for residential areas and 0.45 for non–residential areas, exclusive of Special Landscape Areas. The ETAF for a landscape project is based on the plant factors and irrigation methods selected. The Maximum Applied Water Allowance is calculated based on the maximum ETAF allowed (0.55 for residential areas and 0.45 for non–residential areas) and expressed as annual gallons required. The Estimated Total Water Use (ETWU) is calculated based on the plants used and irrigation method selected for the landscape design. ETWU must be below the MAWA.

(1) In calculating the Maximum Applied Water Allowance and Estimated Total Water Use, a project applicant shall use the ETo values from the Reference Evapotranspiration Table in Appendix A. For geographic areas not covered in Appendix A, use data from other cities located nearby in the same reference evapotranspiration zone, as found in the CIMIS Reference Evapotranspiration Zones Map, Department of Water Resources, 1999.

(b) Water budget calculations shall adhere to the following requirements:

(1) The plant factor used shall be from WUCOLS or from horticultural researchers with academic institutions or professional associations as approved by the California Department of Water Resources (DWR). The plant factor ranges from 0 to 0.1 for very low water using plants, 0.1 to 0.3 for low water use plants, from 0.4 to 0.6 for moderate water use plants, and from 0.7 to 1.0 for high water use plants.

(2) All water features shall be included in the high water use hydrozone and temporarily irrigated areas shall be included in the low water use hydrozone.

(3) All Special Landscape Areas shall be identified and their water use calculated as shown in Appendix B.

(4) ETAF for new and existing (non–rehabilitated) Special Landscape Areas shall not exceed 1.0.

NOTE: Authority cited: Section 65595, Government Code; and sections 11 and 30, Governor's Exec. Order No. B–29–15 (April 1, 2015). Reference: Section 65596, Government Code; and section 11, Governor's Exec. Order No. B–29–15 (April 1, 2015).

HISTORY

1. New section filed 9–10–2009; operative 9–10–2009 pursuant to Government Code section 11343.4 (Register 2009, No. 37).
2. Amendment of section and NOTE filed 9–15–2015; operative 9–15–2015. Exempt from OAL review and submitted to OAL for printing only pursuant to Governor's Executive Order No. B–29–15 (4–1–2015) (Register 2015, No. 38).

§ 492.5. Soil Management Report.

(a) In order to reduce runoff and encourage healthy plant growth, a soil management report shall be completed by the project applicant, or his/her designee, as follows:

(1) Submit soil samples to a laboratory for analysis and recommendations.

(A) Soil sampling shall be conducted in accordance with laboratory protocol, including protocols regarding adequate sampling depth for the intended plants.

(B) The soil analysis shall include:

1. soil texture;
2. infiltration rate determined by laboratory test or soil texture infiltration rate table;
3. pH;
4. total soluble salts;
5. sodium;
6. percent organic matter; and
7. recommendations.

(C) In projects with multiple landscape installations (i.e. production home developments) a soil sampling rate of 1 in 7 lots or approximately 15% will satisfy this requirement. Large landscape projects shall sample at a rate equivalent to 1 in 7 lots.

(2) The project applicant, or his/her designee, shall comply with one of the following:

(A) If significant mass grading is not planned, the soil analysis report shall be submitted to the local agency as part of the Landscape Documentation Package; or

(B) If significant mass grading is planned, the soil analysis report shall be submitted to the local agency as part of the Certificate of Completion.

(3) The soil analysis report shall be made available, in a timely manner, to the professionals preparing the landscape design plans and irrigation design plans to make any necessary adjustments to the design plans.

(4) The project applicant, or his/her designee, shall submit documentation verifying implementation of soil analysis report recommendations to the local agency with Certificate of Completion.

NOTE: Authority cited: Section 65595, Government Code; and sections 11 and 30, Governor's Exec. Order No. B–29–15 (April 1, 2015). Reference: Section 65596, Government Code; and section 11, Governor's Exec. Order No. B–29–15 (April 1, 2015).

HISTORY

1. New section filed 9–10–2009; operative 9–10–2009 pursuant to Government Code section 11343.4 (Register 2009, No. 37).
2. Amendment of subsection (a)(1)(B), new subsection (a)(1)(C) and amendment of NOTE filed 9–15–2015; operative 9–15–2015. Exempt from OAL review and submitted to OAL for printing only pursuant to Governor's Executive Order No. B–29–15 (4–1–2015) (Register 2015, No. 38).

§ 492.6. Landscape Design Plan.

(a) For the efficient use of water, a landscape shall be carefully designed and planned for the intended function of the project. A landscape design plan meeting the following design criteria shall be submitted as part of the Landscape Documentation Package.

(1) Plant Material

(A) Any plant may be selected for the landscape, providing the Estimated Total Water Use in the landscape area does not exceed the Maximum Applied Water Allowance. Methods to achieve water efficiency shall include one or more of the following:

1. protection and preservation of native species and natural vegetation;
2. selection of water–conserving plant, tree and turf species, especially local native plants;
3. selection of plants based on local climate suitability, disease and pest resistance;
4. selection of trees based on applicable local tree ordinances or tree shading guidelines, and size at maturity as appropriate for the planting area; and
5. selection of plants from local and regional landscape program plant lists.
6. selection of plants from local Fuel Modification Plan Guidelines.

(B) Each hydrozone shall have plant materials with similar water use, with the exception of hydrozones with plants of mixed water use, as specified in Section 492.7(a)(2)(D).

(C) Plants shall be selected and planted appropriately based upon their adaptability to the climatic, geologic, and topographical conditions of the project site. Methods to achieve water efficiency shall include one or more of the following:

1. use the Sunset Western Climate Zone System which takes into account temperature, humidity, elevation, terrain, latitude, and varying degrees of continental and marine influence on local climate;
2. recognize the horticultural attributes of plants (i.e., mature plant size, invasive surface roots) to minimize damage to property or infrastructure [e.g., buildings, sidewalks, power lines]; allow for adequate soil volume for healthy root growth; and
3. consider the solar orientation for plant placement to maximize summer shade and winter solar gain.

(D) Turf is not allowed on slopes greater than 25% where the toe of the slope is adjacent to an impermeable hardscape and where 25% means 1 foot of vertical elevation change for every 4 feet of horizontal length (rise divided by run x 100 = slope percent).

(E) High water use plants, characterized by a plant factor of 0.7 to 1.0, are prohibited in street medians.

(F) A landscape design plan for projects in fire–prone areas shall address fire safety and prevention. A defensible space or zone around a building or structure is required per Public Resources Code Section 4291(a) and (b). Avoid fire–prone plant materials and highly flammable mulches. Refer to the local Fuel Modification Plan guidelines.

(G) The use of invasive plant species, such as those listed by the California Invasive Plant Council, is strongly discouraged.

(H) The architectural guidelines of a common interest development, which include community apartment projects, condominiums, planned developments, and stock cooperatives, shall not prohibit or include conditions that have the effect of prohibiting the use of low–water use plants as a group.

(2) Water Features

(A) Recirculating water systems shall be used for water features.

(B) Where available, recycled water shall be used as a source for decorative water features.

(C) Surface area of a water feature shall be included in the high water use hydrozone area of the water budget calculation.

(D) Pool and spa covers are highly recommended.

(3) Soil Preparation, Mulch and Amendments

(A) Prior to the planting of any materials, compacted soils shall be transformed to a friable condition. On engineered slopes, only amended planting holes need meet this requirement.

(B) Soil amendments shall be incorporated according to recommendations of the soil report and what is appropriate for the plants selected (see Section 492.5).

(C) For landscape installations, compost at a rate of a minimum of four cubic yards per 1,000 square feet of permeable area shall be incorporated to a depth of six inches into the soil. Soils with greater than 6% organic matter in the top 6 inches of soil are exempt from adding compost and tilling.

(D) A minimum three inch (3″) layer of mulch shall be applied on all exposed soil surfaces of planting areas except in turf areas, creeping or rooting groundcovers, or direct seeding applications where mulch is contraindicated. To provide habitat for beneficial insects and other wildlife, up to 5 % of the landscape area may be left without mulch. Designated insect habitat must be included in the landscape design plan as such.

(E) Stabilizing mulching products shall be used on slopes that meet current engineering standards.

(F) The mulching portion of the seed/mulch slurry in hydro–seeded applications shall meet the mulching requirement.

(G) Organic mulch materials made from recycled or post–consumer shall take precedence over inorganic materials or virgin forest products unless the recycled post–consumer organic products are not locally available. Organic mulches are not required where prohibited by local Fuel Modification Plan Guidelines or other applicable local ordinances.

(b) The landscape design plan, at a minimum, shall:

B6

(1) delineate and label each hydrozone by number, letter, or other method;

(2) identify each hydrozone as low, moderate, high water, or mixed water use. Temporarily irrigated areas of the landscape shall be included in the low water use hydrozone for the water budget calculation;

(3) identify recreational areas;

(4) identify areas permanently and solely dedicated to edible plants;

(5) identify areas irrigated with recycled water;

(6) identify type of mulch and application depth;

(7) identify soil amendments, type, and quantity;

(8) identify type and surface area of water features;

(9) identify hardscapes (pervious and non–pervious);

(10) identify location, installation details, and 24–hour retention or infiltration capacity of any applicable stormwater best management practices that encourage on–site retention and infiltration of stormwater. Project applicants shall refer to the local agency or regional Water Quality Control Board for information on any applicable stormwater technical requirements. Stormwater best management practices are encouraged in the landscape design plan and examples are provided in Section 492.16.

(11) identify any applicable rain harvesting or catchment technologies as discussed in Section 492.16 and their 24–hour retention or infiltration capacity;

(12) identify any applicable graywater discharge piping, system components and area(s) of distribution;

(13) contain the following statement: "I have complied with the criteria of the ordinance and applied them for the efficient use of water in the landscape design plan"; and

(14) bear the signature of a licensed landscape architect, licensed landscape contractor, or any other person authorized to design a landscape. (See Sections 5500.1, 5615, 5641, 5641.1, 5641.2, 5641.3, 5641.4, 5641.5, 5641.6, 6701, 7027.5 of the Business and Professions Code, Section 832.27 of Title16 of the California Code of Regulations, and Section 6721 of the Food and Agriculture Code.).

NOTE: Authority cited: Section 65595, Government Code; and sections 11 and 30, Governor's Exec. Order No. B–29–15 (April 1, 2015). Reference: Section 65596, Government Code; Section 1351, Civil Code; and section 11, Governor's Exec. Order No. B–29–15 (April 1, 2015).

HISTORY

1. New section filed 9–10–2009; operative 9–10–2009 pursuant to Government Code section 11343.4 (Register 2009, No. 37).
2. Amendment of section and NOTE filed 9–15–2015; operative 9–15–2015. Exempt from OAL review and submitted to OAL for printing only pursuant to Governor's Executive Order No. B–29–15 (4–1–2015) (Register 2015, No. 38).

§ 492.7. Irrigation Design Plan.

(a) This section applies to landscaped areas requiring permanent irrigation, not areas that require temporary irrigation solely for the plant establishment period. For the efficient use of water, an irrigation system shall meet all the requirements listed in this section and the manufacturers' recommendations. The irrigation system and its related components shall be planned and designed to allow for proper installation, management, and maintenance. An irrigation design plan meeting the following design criteria shall be submitted as part of the Landscape Documentation Package.

(1) System

(A) Landscape water meters, defined as either a dedicated water service meter or private submeter, shall be installed for all non–residential irrigated landscapes of 1,000 sq. ft. but not more than 5,000 sq.ft. (the level at which Water Code 535 applies) and residential irrigated landscapes of 5,000 sq. ft. or greater. A landscape water meter may be either:

1. a customer service meter dedicated to landscape use provided by the local water purveyor; or

2. a privately owned meter or submeter.

(B) Automatic irrigation controllers utilizing either evapotranspiration or soil moisture sensor data utilizing non–volatile memory shall be required for irrigation scheduling in all irrigation systems.

(C) If the water pressure is below or exceeds the recommended pressure of the specified irrigation devices, the installation of a pressure regulating device is required to ensure that the dynamic pressure at each emission device is within the manufacturer's recommended pressure range for optimal performance.

1. If the static pressure is above or below the required dynamic pressure of the irrigation system, pressure–regulating devices such as inline pressure regulators, booster pumps, or other devices shall be installed to meet the required dynamic pressure of the irrigation system.

2. Static water pressure, dynamic or operating pressure, and flow reading of the water supply shall be measured at the point of connection. These pressure and flow measurements shall be conducted at the design stage. If the measurements are not available at the design stage, the measurements shall be conducted at installation.

(D) Sensors (rain, freeze, wind, etc.), either integral or auxiliary, that suspend or alter irrigation operation during unfavorable weather conditions shall be required on all irrigation systems, as appropriate for local climatic conditions. Irrigation should be avoided during windy or freezing weather or during rain.

(E) Manual shut–off valves (such as a gate valve, ball valve, or butterfly valve) shall be required, as close as possible to the point of connection of the water supply, to minimize water loss in case of an emergency (such as a main line break) or routine repair.

(F) Backflow prevention devices shall be required to protect the water supply from contamination by the irrigation system. A project applicant shall refer to the applicable local agency code (i.e., public health) for additional backflow prevention requirements.

(G) Flow sensors that detect high flow conditions created by system damage or malfunction are required for all on non–residential landscapes and residential landscapes of 5000 sq. ft. or larger.

(H) Master shut–off valves are required on all projects except landscapes that make use of technologies that allow for the individual control of sprinklers that are individually pressurized in a system equipped with low pressure shut down features.

(I) The irrigation system shall be designed to prevent runoff, low head drainage, overspray, or other similar conditions where irrigation water flows onto non–targeted areas, such as adjacent property, non–irrigated areas, hardscapes, roadways, or structures.

(J) Relevant information from the soil management plan, such as soil type and infiltration rate, shall be utilized when designing irrigation systems.

(K) The design of the irrigation system shall conform to the hydrozones of the landscape design plan.

(L) The irrigation system must be designed and installed to meet, at a minimum, the irrigation efficiency criteria as described in Section 492.4 regarding the Maximum Applied Water Allowance.

(M) All irrigation emission devices must meet the requirements set in the American National Standards Institute (ANSI) standard, American Society of Agricultural and Biological Engineers'/International Code Council's (ASABE/ICC) 802–2014 "Landscape Irrigation Sprinkler and Emitter Standard, All sprinkler heads installed in the landscape must document a distribution uniformity low quarter of 0.65 or higher using the protocol defined in ASABE/ICC 802–2014.

(N) It is highly recommended that the project applicant or local agency inquire with the local water purveyor about peak water operating demands (on the water supply system) or water restrictions that may impact the effectiveness of the irrigation system.

(O) In mulched planting areas, the use of low volume irrigation is required to maximize water infiltration into the root zone.

(P) Sprinkler heads and other emission devices shall have matched precipitation rates, unless otherwise directed by the manufacturer's recommendations.

(Q) Head to head coverage is recommended. However, sprinkler spacing shall be designed to achieve the highest possible distribution uniformity using the manufacturer's recommendations.

(R) Swing joints or other riser–protection components are required on all risers subject to damage that are adjacent to hardscapes or in high traffic areas of turfgrass.

B7

(S) Check valves or anti–drain valves are required on all sprinkler heads where low point drainage could occur.

(T) Areas less than ten (10) feet in width in any direction shall be irrigated with subsurface irrigation or other means that produces no runoff or overspray.

(U) Overhead irrigation shall not be permitted within 24 inches of any non–permeable surface. Allowable irrigation within the setback from non–permeable surfaces may include drip, drip line, or other low flow non–spray technology. The setback area may be planted or unplanted. The surfacing of the setback may be mulch, gravel, or other porous material. These restrictions may be modified if:

1. the landscape area is adjacent to permeable surfacing and no runoff occurs; or

2. the adjacent non–permeable surfaces are designed and constructed to drain entirely to landscaping; or

3. the irrigation designer specifies an alternative design or technology, as part of the Landscape Documentation Package and clearly demonstrates strict adherence to irrigation system design criteria in Section 492.7 (a)(1)(I). Prevention of overspray and runoff must be confirmed during the irrigation audit.

(V) Slopes greater than 25% shall not be irrigated with an irrigation system with a application rate exceeding 0.75 inches per hour. This restriction may be modified if the landscape designer specifies an alternative design or technology, as part of the Landscape Documentation Package, and clearly demonstrates no runoff or erosion will occur. Prevention of runoff and erosion must be confirmed during the irrigation audit.

(2) Hydrozone

(A) Each valve shall irrigate a hydrozone with similar site, slope, sun exposure, soil conditions, and plant materials with similar water use.

(B) Sprinkler heads and other emission devices shall be selected based on what is appropriate for the plant type within that hydrozone.

(C) Where feasible, trees shall be placed on separate valves from shrubs, groundcovers, and turf to facilitate the appropriate irrigation of trees. The mature size and extent of the root zone shall be considered when designing irrigation for the tree.

(D) Individual hydrozones that mix plants of moderate and low water use, or moderate and high water use, may be allowed if:

1. plant factor calculation is based on the proportions of the respective plant water uses and their plant factor; or

2. the plant factor of the higher water using plant is used for calculations.

(E) Individual hydrozones that mix high and low water use plants shall not be permitted.

(F) On the landscape design plan and irrigation design plan, hydrozone areas shall be designated by number, letter, or other designation. On the irrigation design plan, designate the areas irrigated by each valve, and assign a number to each valve. Use this valve number in the Hydrozone Information Table (see Appendix B Section A). This table can also assist with the irrigation audit and programming the controller.

(b) The irrigation design plan, at a minimum, shall contain:

(1) location and size of separate water meters for landscape;

(2) location, type and size of all components of the irrigation system, including controllers, main and lateral lines, valves, sprinkler heads, moisture sensing devices, rain switches, quick couplers, pressure regulators, and backflow prevention devices;

(3) static water pressure at the point of connection to the public water supply;

(4) flow rate (gallons per minute), application rate (inches per hour), and design operating pressure (pressure per square inch) for each station;

(5) recycled water irrigation systems as specified in Section 492.14;

(6) the following statement: "I have complied with the criteria of the ordinance and applied them accordingly for the efficient use of water in the irrigation design plan"; and

(7) the signature of a licensed landscape architect, certified irrigation designer, licensed landscape contractor, or any other person authorized to design an irrigation system. (See Sections 5500.1, 5615, 5641, 5641.1, 5641.2, 5641.3, 5641.4, 5641.5, 5641.6, 6701, 7027.5 of the Business and Professions Code, Section 832.27 of Title16 of the California Code of Regulations, and Section 6721 of the Food and Agricultural Code.)

NOTE: Authority cited: Section 65595, Government Code; and sections 11 and 30, Governor's Exec. Order No. B–29–15 (April 1, 2015). Reference: Section 65596, Government Code; and section 11, Governor's Exec. Order No. B–29–15 (April 1, 2015).

HISTORY

1. New section filed 9–10–2009; operative 9–10–2009 pursuant to Government Code section 11343.4 (Register 2009, No. 37).
2. Amendment of section and NOTE filed 9–15–2015; operative 9–15–2015. Exempt from OAL review and submitted to OAL for printing only pursuant to Governor's Executive Order No. B–29–15 (4–1–2015) (Register 2015, No. 38).

§ 492.8. Grading Design Plan.

(a) For the efficient use of water, grading of a project site shall be designed to minimize soil erosion, runoff, and water waste. A grading plan shall be submitted as part of the Landscape Documentation Package. A comprehensive grading plan prepared by a civil engineer for other local agency permits satisfies this requirement.

(1) The project applicant shall submit a landscape grading plan that indicates finished configurations and elevations of the landscape area including:

(A) height of graded slopes;

(B) drainage patterns;

(C) pad elevations;

(D) finish grade; and

(E) stormwater retention improvements, if applicable.

(2) To prevent excessive erosion and runoff, it is highly recommended that project applicants:

(A) grade so that all irrigation and normal rainfall remains within property lines and does not drain on to non–permeable hardscapes;

(B) avoid disruption of natural drainage patterns and undisturbed soil; and

(C) avoid soil compaction in landscape areas.

(3) The grading design plan shall contain the following statement: "I have complied with the criteria of the ordinance and applied them accordingly for the efficient use of water in the grading design plan" and shall bear the signature of a licensed professional as authorized by law.

NOTE: Authority cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

HISTORY

1. New section filed 9–10–2009; operative 9–10–2009 pursuant to Government Code section 11343.4 (Register 2009, No. 37).

§ 492.9. Certificate of Completion.

(a) The Certificate of Completion (see Appendix C for a sample certificate) shall include the following six (6) elements:

(1) project information sheet that contains:

(A) date;

(B) project name;

(C) project applicant name, telephone, and mailing address;

(D) project address and location; and

(E) property owner name, telephone, and mailing address;

(2) certification by either the signer of the landscape design plan, the signer of the irrigation design plan, or the licensed landscape contractor that the landscape project has been installed per the approved Landscape Documentation Package;

(A) where there have been significant changes made in the field during construction, these "as–built" or record drawings shall be included with the certification;

(B) A diagram of the irrigation plan showing hydrozones shall be kept with the irrigation controller for subsequent management purposes.

(3) irrigation scheduling parameters used to set the controller (see Section 492.10);

(4) landscape and irrigation maintenance schedule (see Section 492.11);

(5) irrigation audit report (see Section 492.12); and

B8

(6) soil analysis report, if not submitted with Landscape Documentation Package, and documentation verifying implementation of soil report recommendations (see Section 492.5).

(b) The project applicant shall:

(1) submit the signed Certificate of Completion to the local agency for review;

(2) ensure that copies of the approved Certificate of Completion are submitted to the local water purveyor and property owner or his or her designee.

(c) The local agency shall:

(1) receive the signed Certificate of Completion from the project applicant;

(2) approve or deny the Certificate of Completion. If the Certificate of Completion is denied, the local agency shall provide information to the project applicant regarding reapplication, appeal, or other assistance.

NOTE: Authority cited: Section 65595, Government Code; and sections 11 and 30, Governor's Exec. Order No. B–29–15 (April 1, 2015). Reference: Section 65596, Government Code; and section 11, Governor's Exec. Order No. B–29–15 (April 1, 2015).

HISTORY

1. New section filed 9–10–2009; operative 9–10–2009 pursuant to Government Code section 11343.4 (Register 2009, No. 37).
2. New subsection (a)(2)(B) and amendment of NOTE filed 9–15–2015; operative 9–15–2015. Exempt from OAL review and submitted to OAL for printing only pursuant to Governor's Executive Order No. B–29–15 (4–1–2015) (Register 2015, No. 38).

§ 492.10. Irrigation Scheduling.

(a) For the efficient use of water, all irrigation schedules shall be developed, managed, and evaluated to utilize the minimum amount of water required to maintain plant health. Irrigation schedules shall meet the following criteria:

(1) Irrigation scheduling shall be regulated by automatic irrigation controllers.

(2) Overhead irrigation shall be scheduled between 8:00 p.m. and 10:00 a.m. unless weather conditions prevent it. If allowable hours of irrigation differ from the local water purveyor, the stricter of the two shall apply. Operation of the irrigation system outside the normal watering window is allowed for auditing and system maintenance.

(3) For implementation of the irrigation schedule, particular attention must be paid to irrigation run times, emission device, flow rate, and current reference evapotranspiration, so that applied water meets the Estimated Total Water Use. Total annual applied water shall be less than or equal to Maximum Applied Water Allowance (MAWA). Actual irrigation schedules shall be regulated by automatic irrigation controllers using current reference evapotranspiration data (e.g., CIMIS) or soil moisture sensor data.

(4) Parameters used to set the automatic controller shall be developed and submitted for each of the following:

(A) the plant establishment period;

(B) the established landscape; and

(C) temporarily irrigated areas.

(5) Each irrigation schedule shall consider for each station all of the following that apply:

(A) irrigation interval (days between irrigation);

(B) irrigation run times (hours or minutes per irrigation event to avoid runoff);

(C) number of cycle starts required for each irrigation event to avoid runoff;

(D) amount of applied water scheduled to be applied on a monthly basis;

(E) application rate setting;

(F) root depth setting;

(G) plant type setting;

(H) soil type;

(I) slope factor setting;

(J) shade factor setting; and

(K) irrigation uniformity or efficiency setting.

NOTE: Authority cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

HISTORY

1. New section filed 9–10–2009; operative 9–10–2009 pursuant to Government Code section 11343.4 (Register 2009, No. 37).

§ 492.11. Landscape and Irrigation Maintenance Schedule.

(a) Landscapes shall be maintained to ensure water use efficiency. A regular maintenance schedule shall be submitted with the Certificate of Completion.

(b) A regular maintenance schedule shall include, but not be limited to, routine inspection; auditing, adjustment and repair of the irrigation system and its components; aerating and dethatching turf areas; topdressing with compost, replenishing mulch; fertilizing; pruning; weeding in all landscape areas, and removing obstructions to emission devices. Operation of the irrigation system outside the normal watering window is allowed for auditing and system maintenance.

(c) Repair of all irrigation equipment shall be done with the originally installed components or their equivalents or with components with greater efficiency.

(d) A project applicant is encouraged to implement established landscape industry sustainable Best Practices for all landscape maintenance activities.

NOTE: Authority cited: Section 65595, Government Code; and sections 11 and 30, Governor's Exec. Order No. B–29–15 (April 1, 2015). Reference: Section 65596, Government Code; and section 11, Governor's Exec. Order No. B–29–15 (April 1, 2015).

HISTORY

1. New section filed 9–10–2009; operative 9–10–2009 pursuant to Government Code section 11343.4 (Register 2009, No. 37).
2. Amendment of section and NOTE filed 9–15–2015; operative 9–15–2015. Exempt from OAL review and submitted to OAL for printing only pursuant to Governor's Executive Order No. B–29–15 (4–1–2015) (Register 2015, No. 38).

§ 492.12. Irrigation Audit, Irrigation Survey, and Irrigation Water Use Analysis.

(a) All landscape irrigation audits shall be conducted by a local agency landscape irrigation auditor or a third party certified landscape irrigation auditor. Landscape audits shall not be conducted by the person who designed the landscape or installed the landscape.

(b) In large projects or projects with multiple landscape installations (i.e. production home developments) an auditing rate of 1 in 7 lots or approximately 15% will satisfy this requirement.

(c) For new construction and rehabilitated landscape projects installed after December 1, 2015, as described in Section 490.1:

(1) the project applicant shall submit an irrigation audit report with the Certificate of Completion to the local agency that may include, but is not limited to: inspection, system tune–up, system test with distribution uniformity, reporting overspray or run off that causes overland flow, and preparation of an irrigation schedule, including configuring irrigation controllers with application rate, soil types, plant factors, slope, exposure and any other factors necessary for accurate programming;

(2) the local agency shall administer programs that may include, but not be limited to, irrigation water use analysis, irrigation audits, and irrigation surveys for compliance with the Maximum Applied Water Allowance.

NOTE: Authority cited: Section 65595, Government Code; and sections 11 and 30, Governor's Exec. Order No. B–29–15 (April 1, 2015). Reference: Section 65596, Government Code; and section 11, Governor's Exec. Order No. B–29–15 (April 1, 2015).

HISTORY

1. New section filed 9–10–2009; operative 9–10–2009 pursuant to Government Code section 11343.4 (Register 2009, No. 37).
2. Amendment of section and NOTE filed 9–15–2015; operative 9–15–2015. Exempt from OAL review and submitted to OAL for printing only pursuant to Governor's Executive Order No. B–29–15 (4–1–2015) (Register 2015, No. 38).

§ 492.13. Irrigation Efficiency.

(a) For the purpose of determining Estimated Total Water Use, average irrigation efficiency is assumed to be 0.75 for overhead spray devices and 0.81 for drip system devices.

NOTE: Authority cited: Section 65595, Government Code; and sections 11 and 30, Governor's Exec. Order No. B–29–15 (April 1, 2015). Reference: Section 65596,

B9

Government Code; and section 11, Governor's Exec. Order No. B–29–15 (April 1, 2015).

HISTORY

1. New section filed 9–10–2009; operative 9–10–2009 pursuant to Government Code section 11343.4 (Register 2009, No. 37).
2. Amendment of section and NOTE filed 9–15–2015; operative 9–15–2015. Exempt from OAL review and submitted to OAL for printing only pursuant to Governor's Executive Order No. B–29–15 (4–1–2015) (Register 2015, No. 38).

§ 492.14. Recycled Water.

(a) The installation of recycled water irrigation systems shall allow for the current and future use of recycled water.

(b) All recycled water irrigation systems shall be designed and operated in accordance with all applicable local and State laws.

(c) Landscapes using recycled water are considered Special Landscape Areas. The ET Adjustment Factor for new and existing (non–rehabilitated) Special Landscape Areas shall not exceed 1.0.

NOTE: Authority cited: Section 65595, Government Code; and sections 11 and 30, Governor's Exec. Order No. B–29–15 (April 1, 2015). Reference: Section 65596, Government Code; and section 11, Governor's Exec. Order No. B–29–15 (April 1, 2015).

HISTORY

1. New section filed 9–10–2009; operative 9–10–2009 pursuant to Government Code section 11343.4 (Register 2009, No. 37).
2. Amendment of section and NOTE filed 9–15–2015; operative 9–15–2015. Exempt from OAL review and submitted to OAL for printing only pursuant to Governor's Executive Order No. B–29–15 (4–1–2015) (Register 2015, No. 38).

§ 492.15. Graywater Systems.

(a) Graywater systems promote the efficient use of water and are encouraged to assist in on–site landscape irrigation. All graywater systems shall conform to the California Plumbing Code (Title 24, Part 5, Chapter 16) and any applicable local ordinance standards. Refer to § 490.1 (d) for the applicability of this ordinance to landscape areas less than 2,500 square feet with the Estimated Total Water Use met entirely by graywater.

NOTE: Authority cited: Section 65595, Government Code; and sections 11 and 30, Governor's Exec. Order No. B–29–15 (April 1, 2015). Reference: Section 65596, Government Code; and section 11, Governor's Exec. Order No. B–29–15 (April 1, 2015).

HISTORY

1. New section filed 9–10–2009; operative 9–10–2009 pursuant to Government Code section 11343.4 (Register 2009, No. 37).
2. Renumbering of former section 492.15 to 492.16, new section 492.15 and amendment of NOTE filed 9–15–2015; operative 9–15–2015. Exempt from OAL review and submitted to OAL for printing only pursuant to Governor's Executive Order No. B–29–15 (4–1–2015) (Register 2015, No. 38).

§ 492.16. Stormwater Management and Rainwater Retention.

(a) Stormwater management practices minimize runoff and increase infiltration which recharges groundwater and improves water quality. Implementing stormwater best management practices into the landscape and grading design plans to minimize runoff and to increase on–site rainwater retention and infiltration are encouraged.

(b) Project applicants shall refer to the local agency or Regional Water Quality Control Board for information on any applicable stormwater technical requirements.

(c) All planted landscape areas are required to have friable soil to maximize water retention and infiltration. Refer to § 492.6(a)(3).

(d) It is strongly recommended that landscape areas be designed for capture and infiltration capacity that is sufficient to prevent runoff from impervious surfaces (i.e. roof and paved areas) from either: the one inch, 24–hour rain event or (2) the 85th percentile, 24–hour rain event, and/or additional capacity as required by any applicable local, regional, state or federal regulation.

(e) It is recommended that storm water projects incorporate any of the following elements to improve on–site storm water and dry weather runoff capture and use:

- Grade impervious surfaces, such as driveways, during construction to drain to vegetated areas.
- Minimize the area of impervious surfaces such as paved areas, roof and concrete driveways.
- Incorporate pervious or porous surfaces (e.g., gravel, permeable pavers or blocks, pervious or porous concrete) that minimize runoff.
- Direct runoff from paved surfaces and roof areas into planting beds or landscaped areas to maximize site water capture and reuse.
- Incorporate rain gardens, cisterns, and other rain harvesting or catchment systems.
- Incorporate infiltration beds, swales, basins and drywells to capture storm water and dry weather runoff and increase percolation into the soil.
- Consider constructed wetlands and ponds that retain water, equalize excess flow, and filter pollutants.

NOTE: Authority cited: Section 65595, Government Code; and sections 11 and 30, Governor's Exec. Order No. B–29–15 (April 1, 2015). Reference: Section 65596, Government Code; and section 11, Governor's Exec. Order No. B–29–15 (April 1, 2015).

HISTORY

1. New section filed 9–10–2009; operative 9–10–2009 pursuant to Government Code section 11343.4 (Register 2009, No. 37).
2. Renumbering of former section 492.16 to section 492.17 and renumbering of former section 492.15 to new section 492.16, including amendment of section heading, section and NOTE, filed 9–15–2015; operative 9–15–2015. Exempt from OAL review and submitted to OAL for printing only pursuant to Governor's Executive Order No. B–29–15 (4–1–2015) (Register 2015, No. 38).

§ 492.17. Public Education.

(a) Publications. Education is a critical component to promote the efficient use of water in landscapes. The use of appropriate principles of design, installation, management and maintenance that save water is encouraged in the community.

(1) A local agency or water supplier/purveyor shall provide information to owners of permitted renovations and new, single–family residential homes regarding the design, installation, management, and maintenance of water efficient landscapes based on a water budget.

(b) Model Homes. All model homes that are landscaped shall use signs and written information to demonstrate the principles of water efficient landscapes described in this ordinance.

(1) Signs shall be used to identify the model as an example of a water efficient landscape featuring elements such as hydrozones, irrigation equipment, and others that contribute to the overall water efficient theme. Signage shall include information about the site water use as designed per the local ordinance; specify who designed and installed the water efficient landscape; and demonstrate low water use approaches to landscaping such as using native plants, graywater systems, and rainwater catchment systems.

(2) Information shall be provided about designing, installing, managing, and maintaining water efficient landscapes.

NOTE: Authority cited: Section 65595, Government Code; and sections 11 and 30, Governor's Exec. Order No. B–29–15 (April 1, 2015). Reference: Section 65596, Government Code; and section 11, Governor's Exec. Order No. B–29–15 (April 1, 2015).

HISTORY

1. New section filed 9–10–2009; operative 9–10–2009 pursuant to Government Code section 11343.4 (Register 2009, No. 37).
2. Renumbering of former section 492.17 to new section 492.18 and renumbering of former section 492.16 to new section 492.17, including amendment of section and NOTE, filed 9–15–2015; operative 9–15–2015. Exempt from OAL review and submitted to OAL for printing only pursuant to Governor's Executive Order No. B–29–15 (4–1–2015) (Register 2015, No. 38).

§ 492.18. Environmental Review.

(a) The local agency must comply with the California Environmental Quality Act (CEQA), as appropriate.

NOTE: Authority cited: Section 21082, Public Resources Code; and sections 11 and 30, Governor's Exec. Order No. B–29–15 (April 1, 2015). Reference: Sections 21080 and 21082, Public Resources Code; and section 11, Governor's Exec. Order No. B–29–15 (April 1, 2015).

HISTORY

1. Renumbering of former section 492.17 to new section 492.18, including amendment of NOTE, filed 9–15–2015; operative 9–15–2015. Exempt from OAL review and submitted to OAL for printing only pursuant to Governor's Executive Order No. B–29–15 (4–1–2015) (Register 2015, No. 38).

B10

§ 493. Provisions for Existing Landscapes.

(a) A local agency may by mutual agreement, designate another agency, such as a water purveyor, to implement some or all of the requirements contained in this ordinance. Local agencies may collaborate with water purveyors to define each entity's specific responsibilities relating to this ordinance.

NOTE: Authority cited: Section 65595, Government Code; and sections 11 and 30, Governor's Exec. Order No. B–29–15 (April 1, 2015). Reference: Section 65596, Government Code; and section 11, Governor's Exec. Order No. B–29–15 (April 1, 2015).

HISTORY

1. New section filed 7–31–92; operative 7–31–92 (Register 92, No. 32).
2. Repealer and new section and amendment of NOTE filed 9–10–2009; operative 9–10–2009 pursuant to Government Code section 11343.4 (Register 2009, No. 37).
3. Amendment of section and NOTE filed 9–15–2015; operative 9–15–2015. Exempt from OAL review and submitted to OAL for printing only pursuant to Governor's Executive Order No. B–29–15 (4–1–2015) (Register 2015, No. 38).

§ 493.1. Irrigation Audit, Irrigation Survey, and Irrigation Water Use Analysis.

(a) This section, 493.1, shall apply to all existing landscapes that were installed before December 1, 2015 and are over one acre in size.

(1) For all landscapes in 493.1 (a) that have a water meter, the local agency shall administer programs that may include, but not be limited to, irrigation water use analyses, irrigation surveys, and irrigation audits to evaluate water use and provide recommendations as necessary to reduce landscape water use to a level that does not exceed the Maximum Applied Water Allowance for existing landscapes. The Maximum Applied Water Allowance for existing landscapes shall be calculated as: MAWA = (0.8) (ETo) (LA) (0.62).

(2) For all landscapes in 493.1(a), that do not have a meter, the local agency shall administer programs that may include, but not be limited to, irrigation surveys and irrigation audits to evaluate water use and provide recommendations as necessary in order to prevent water waste.

(b) All landscape irrigation audits shall be conducted by a certified landscape irrigation auditor.

NOTE: Authority cited: Section 65595, Government Code; and sections 11 and 30, Governor's Exec. Order No. B–29–15 (April 1, 2015). Reference: Section 65596, Government Code; and section 11, Governor's Exec. Order No. B–29–15 (April 1, 2015).

HISTORY

1. New section filed 9–10–2009; operative 9–10–2009 pursuant to Government Code section 11343.4 (Register 2009, No. 37).
2. Amendment of subsection (a) and NOTE filed 9–15–2015; operative 9–15–2015. Exempt from OAL review and submitted to OAL for printing only pursuant to Governor's Executive Order No. B–29–15 (4–1–2015) (Register 2015, No. 38).

§ 493.2. Water Waste Prevention.

(a) Local agencies shall prevent water waste resulting from inefficient landscape irrigation by prohibiting runoff from leaving the target landscape due to low head drainage, overspray, or other similar conditions where water flows onto adjacent property, non–irrigated areas, walks, roadways, parking lots, or structures. Penalties for violation of these prohibitions shall be established locally.

(b) Restrictions regarding overspray and runoff may be modified if:

(1) the landscape area is adjacent to permeable surfacing and no runoff occurs; or

(2) the adjacent non–permeable surfaces are designed and constructed to drain entirely to landscaping.

NOTE: Authority cited: Section 65594, Government Code. Reference: Section 65596, Government Code.

HISTORY

1. New section filed 9–10–2009; operative 9–10–2009 pursuant to Government Code section 11343.4 (Register 2009, No. 37).

§ 494. Effective Precipitation.

(a) A local agency may consider Effective Precipitation (25% of annual precipitation) in tracking water use and may use the following equation to calculate Maximum Applied Water Allowance:

MAWA= (ETo – Eppt) (0.62) [(0.55 x LA) + (0.45 x SLA)] for residential areas.

MAWA= (ETo–EPPT) (0.62) [(0.45 x LA) + (0.55 x SLA)] for non–residential areas.

NOTE: Authority cited: Section 65595, Government Code; and sections 11 and 30, Governor's Exec. Order No. B–29–15 (April 1, 2015). Reference: Section 65596, Government Code; and section 11, Governor's Exec. Order No. B–29–15 (April 1, 2015).

HISTORY

1. Repealer and new section; new NOTE and new Appendices A–C filed 9–10–2009; operative 9–10–2009 pursuant to Government Code section 11343.4 (Register 2009, No. 37).
2. Amendment of section and NOTE filed 9–15–2015; operative 9–15–2015. Exempt from OAL review and submitted to OAL for printing only pursuant to Governor's Executive Order No. B–29–15 (4–1–2015) (Register 2015, No. 38).

§ 495. Reporting.

(a) Local agencies shall report on implementation and enforcement by December 31, 2015. Local agencies responsible for administering individual ordinances shall report on their updated ordinance, while those agencies developing a regional ordinance shall report on their existing ordinance. Those agencies crafting a regional ordinances shall also report on their new ordinance by March 1, 2016. Subsequently, reporting for all agencies will be due by January 31st of each year. Reports shall be submitted to the Department of Water Resources.

(b) Local agencies are to address the following:

(1) State whether you are adopting a single agency ordinance or a regional agency alliance ordinance, and the date of adoption or anticipated date of adoption.

(2) Define the reporting period. The reporting period shall commence on December 1, 2015 and the end on December 28, 2015. For local agencies crafting regional ordinances with other agencies, there shall be an additional reporting period commencing on February 1, 2016 and ending on February 28, 2016. In subsequent years, all local agency reporting will be for the calendar year.

(3) State if using a locally modified Water Efficient Landscape Ordinance (WELO) or the MWELO. If using a locally modified WELO, how is it different than MWELO, is it at least as efficient as MWELO, and are there any exemptions specified?

(4) State the entity responsible for implementing the ordinance.

(5) State number and types of projects subject to the ordinance during the specified reporting period.

(6) State the total area (in square feet or acres) subject to the ordinance over the reporting period, if available.

(7) Provide the number of new housing starts, new commercial projects, and landscape retrofits during the reporting period.

(8) Describe the procedure for review of projects subject to the ordinance.

(9) Describe actions taken to verify compliance. Is a plan check performed; if so, by what entity? Is a site inspection performed; if so, by what entity? Is a post–installation audit required; if so, by whom?

(10) Describe enforcement measures.

(11) Explain challenges to implementing and enforcing the ordinance.

(12) Describe educational and other needs to properly apply the ordinance.

NOTE: Authority cited: Section 65595, Government Code; and sections 11 and 30, Governor's Exec. Order No. B–29–15 (April 1, 2015). Reference: Section 65596, Government Code; and section 11, Governor's Exec. Order No. B–29–15 (April 1, 2015).

HISTORY

1. New section filed 9–15–2015; operative 9–15–2015. Exempt from OAL review and submitted to OAL for printing only pursuant to Governor's Executive Order No. B–29–15 (4–1–2015) (Register 2015, No. 38). For prior history, see Register 2009, No. 37.

Appendix A. Reference Evapotranspiration (ETo) Table

Appendix A - Reference Evapotranspiration (ETo) Table*													
County and City	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual ETo
ALAMEDA													
Fremont	1.5	1.9	3.4	4.7	5.4	6.3	6.7	6.0	4.5	3.4	1.8	1.5	47.0
Livermore	1.2	1.5	2.9	4.4	5.9	6.6	7.4	6.4	5.3	3.2	1.5	0.9	47.2
Oakland	1.5	1.5	2.8	3.9	5.1	5.3	6.0	5.5	4.8	3.1	1.4	0.9	41.8
Oakland Foothills	1.1	1.4	2.7	3.7	5.1	6.4	5.8	4.9	3.6	2.6	1.4	1.0	39.6
Pleasanton	0.8	1.5	2.9	4.4	5.6	6.7	7.4	6.4	4.7	3.3	1.5	1.0	46.2
Union City	1.4	1.8	3.1	4.2	5.4	5.9	6.4	5.7	4.4	3.1	1.5	1.2	44.2
ALPINE													
Markleeville	0.7	0.9	2.0	3.5	5.0	6.1	7.3	6.4	4.4	2.6	1.2	0.5	40.6
AMADOR													
Jackson	1.2	1.5	2.8	4.4	6.0	7.2	7.9	7.2	5.3	3.2	1.4	0.9	48.9
Shanandoah Valley	1.0	1.7	2.9	4.4	5.6	6.8	7.9	7.1	5.2	3.6	1.7	1.0	48.8
BUTTE													
Chico	1.2	1.8	2.9	4.7	6.1	7.4	8.5	7.3	5.4	3.7	1.7	1.0	51.7
Durham	1.1	1.8	3.2	5.0	6.5	7.4	7.8	6.9	5.3	3.6	1.7	1.0	51.1
Gridley	1.2	1.8	3.0	4.7	6.1	7.7	8.5	7.1	5.4	3.7	1.7	1.0	51.9
Oroville	1.2	1.7	2.8	4.7	6.1	7.6	8.5	7.3	5.3	3.7	1.7	1.0	51.5
CALAVERAS													
San Andreas	1.2	1.5	2.8	4.4	6.0	7.3	7.9	7.0	5.3	3.2	1.4	0.7	48.8
COLUSA													
Colusa	1.0	1.7	3.4	5.0	6.4	7.6	8.3	7.2	5.4	3.8	1.8	1.1	52.8
Williams	1.2	1.7	2.9	4.5	6.1	7.2	8.5	7.3	5.3	3.4	1.6	1.0	50.8
CONTRA COSTA													
Brentwood	1.0	1.5	2.9	4.5	6.1	7.1	7.9	6.7	5.2	3.2	1.4	0.7	48.3
Concord	1.1	1.4	2.4	4.0	5.5	5.9	7.0	6.0	4.8	3.2	1.3	0.7	43.4
Courtland	0.9	1.5	2.9	4.4	6.1	6.9	7.9	6.7	5.3	3.2	1.4	0.7	48.0
Martinez	1.2	1.4	2.4	3.9	5.3	5.6	6.7	5.6	4.7	3.1	1.2	0.7	41.8
Moraga	1.2	1.5	3.4	4.2	5.5	6.1	6.7	5.9	4.6	3.2	1.6	1.0	44.9
Pittsburg	1.0	1.5	2.8	4.1	5.6	6.4	7.4	6.4	5.0	3.2	1.3	0.7	45.4
Walnut Creek	0.8	1.5	2.9	4.4	5.6	6.7	7.4	6.4	4.7	3.3	1.5	1.0	46.2
DEL NORTE													
Crescent City	0.5	0.9	2.0	3.0	3.7	3.5	4.3	3.7	3.0	2.0	0.9	0.5	27.7
EL DORADO													
Camino	0.9	1.7	2.5	3.9	5.9	7.2	7.8	6.8	5.1	3.1	1.5	0.9	47.3
FRESNO													
Clovis	1.0	1.5	3.2	4.8	6.4	7.7	8.5	7.3	5.3	3.4	1.4	0.7	51.4
Coalinga	1.2	1.7	3.1	4.6	6.2	7.2	8.5	7.3	5.3	3.4	1.6	0.7	50.9
Firebaugh	1.0	1.8	3.7	5.7	7.3	8.1	8.2	7.2	5.5	3.9	2.0	1.1	55.4
FivePoints	1.3	2.0	4.0	6.1	7.7	8.5	8.7	8.0	6.2	4.5	2.4	1.2	60.4
Fresno	0.9	1.7	3.3	4.8	6.7	7.8	8.4	7.1	5.2	3.2	1.4	0.6	51.1
Fresno State	0.9	1.6	3.2	5.2	7.0	8.0	8.7	7.6	5.4	3.6	1.7	0.9	53.7
Friant	1.2	1.5	3.1	4.7	6.4	7.7	8.5	7.3	5.3	3.4	1.4	0.7	51.3
Kerman	0.9	1.5	3.2	4.8	6.6	7.7	8.4	7.2	5.3	3.4	1.4	0.7	51.2
Kingsburg	1.0	1.5	3.4	4.8	6.6	7.7	8.4	7.2	5.3	3.4	1.4	0.7	51.6
Mendota	1.5	2.5	4.6	6.2	7.9	8.6	8.8	7.5	5.9	4.5	2.4	1.5	61.7
Orange Cove	1.2	1.9	3.5	4.7	7.4	8.5	8.9	7.9	5.9	3.7	1.8	1.2	56.7
Panoche	1.1	2.0	4.0	5.6	7.8	8.5	8.3	7.3	5.6	3.9	1.8	1.2	57.2
Parlier	1.0	1.9	3.6	5.2	6.8	7.6	8.1	7.0	5.1	3.4	1.7	0.9	52.0

Appendix A - Reference Evapotranspiration (ETo) Table*													
County and City	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual ETo
FRESNO													
Reedley	1.1	1.5	3.2	4.7	6.4	7.7	8.5	7.3	5.3	3.4	1.4	0.7	51.3
Westlands	0.9	1.7	3.8	6.3	8.0	8.6	8.6	7.8	5.9	4.3	2.1	1.1	58.8
GLENN													
Orland	1.1	1.8	3.4	5.0	6.4	7.5	7.9	6.7	5.3	3.9	1.8	1.4	52.1
Willows	1.2	1.7	2.9	4.7	6.1	7.2	8.5	7.3	5.3	3.6	1.7	1.0	51.3
HUMBOLDT													
Eureka	0.5	1.1	2.0	3.0	3.7	3.7	3.7	3.7	3.0	2.0	0.9	0.5	27.5
Ferndale	0.5	1.1	2.0	3.0	3.7	3.7	3.7	3.7	3.0	2.0	0.9	0.5	27.5
Garberville	0.6	1.2	2.2	3.1	4.5	5.0	5.5	4.9	3.8	2.4	1.0	0.7	34.9
Hoopa	0.5	1.1	2.1	3.0	4.4	5.4	6.1	5.1	3.8	2.4	0.9	0.7	35.6
IMPERIAL													
Brawley	2.8	3.8	5.9	8.0	10.4	11.5	11.7	10.0	8.4	6.2	3.5	2.1	84.2
Calipatria/Mulberry	2.4	3.2	5.1	6.8	8.6	9.2	9.2	8.6	7.0	5.2	3.1	2.3	70.7
El Centro	2.7	3.5	5.6	7.9	10.1	11.1	11.6	9.5	8.3	6.1	3.3	2.0	81.7
Holtville	2.8	3.8	5.9	7.9	10.4	11.6	12.0	10.0	8.6	6.2	3.5	2.1	84.7
Meloland	2.5	3.2	5.5	7.5	8.9	9.2	9.0	8.5	6.8	5.3	3.1	2.2	71.6
Palo Verde II	2.5	3.3	5.7	6.9	8.5	8.9	8.6	7.9	6.2	4.5	2.9	2.3	68.2
Seeley	2.7	3.5	5.9	7.7	9.7	10.1	9.3	8.3	6.9	5.5	3.4	2.2	75.4
Westmoreland	2.4	3.3	5.3	6.9	8.7	9.6	9.6	8.7	6.9	5.0	3.0	2.2	71.4
Yuma	2.5	3.4	5.3	6.9	8.7	9.6	9.6	8.7	6.9	5.0	3.0	2.2	71.6
INYO													
Bishop	1.7	2.7	4.8	6.7	8.2	10.9	7.4	9.6	7.4	4.8	2.5	1.6	68.3
Death Valley Jct	2.2	3.3	5.4	7.7	9.8	11.1	11.4	10.1	8.3	5.4	2.9	1.7	79.1
Independence	1.7	2.7	3.4	6.6	8.5	9.5	9.8	8.5	7.1	3.9	2.0	1.5	65.2
Lower Haiwee Res.	1.8	2.7	4.4	7.1	8.5	9.5	9.8	8.5	7.1	4.2	2.6	1.5	67.6
Oasis	2.7	2.8	5.9	8.0	10.4	11.7	11.6	10.0	8.4	6.2	3.4	2.1	83.1
KERN													
Arvin	1.2	1.8	3.5	4.7	6.6	7.4	8.1	7.3	5.3	3.4	1.7	1.0	51.9
Bakersfield	1.0	1.8	3.5	4.7	6.6	7.7	8.5	7.3	5.3	3.5	1.6	0.9	52.4
Bakersfield/Bonanza	1.2	2.2	3.7	5.7	7.4	8.2	8.7	7.8	5.7	4.0	2.1	1.2	57.9
Bakersfield/Greenlee	1.2	2.2	3.7	5.7	7.4	8.2	8.7	7.8	5.7	4.0	2.1	1.2	57.9
Belridge	1.4	2.2	4.1	5.5	7.7	8.5	8.6	7.8	6.0	3.8	2.0	1.5	59.2
Blackwells Corner	1.4	2.1	3.8	5.4	7.0	7.8	8.5	7.7	5.8	3.9	1.9	1.2	56.6
Buttonwillow	1.0	1.8	3.2	4.7	6.6	7.7	8.5	7.3	5.4	3.4	1.5	0.9	52.0
China Lake	2.1	3.2	5.3	7.7	9.2	10.0	11.0	9.8	7.3	4.9	2.7	1.7	74.8
Delano	0.9	1.8	3.4	4.7	6.6	7.7	8.5	7.3	5.4	3.4	1.4	0.7	52.0
Famoso	1.3	1.9	3.5	4.8	6.7	7.6	8.0	7.3	5.5	3.5	1.7	1.3	53.1
Grapevine	1.3	1.8	3.1	4.4	5.6	6.8	7.6	6.8	5.9	3.4	1.9	1.0	49.5
Inyokern	2.0	3.1	4.9	7.3	8.5	9.7	11.0	9.4	7.1	5.1	2.6	1.7	72.4
Isabella Dam	1.2	1.4	2.8	4.4	5.8	7.3	7.9	7.0	5.0	3.2	1.7	0.9	48.4
Lamont	1.3	2.4	4.4	4.6	6.5	7.0	8.8	7.6	5.7	3.7	1.6	0.8	54.4
Lost Hills	1.6	2.2	3.7	5.1	6.8	7.8	8.7	7.8	5.7	4.0	2.1	1.6	57.1
McFarland/Kern	1.2	2.1	3.7	5.6	7.3	8.0	8.3	7.4	5.6	4.1	2.0	1.2	56.5
Shafter	1.0	1.7	3.4	5.0	6.6	7.7	8.3	7.3	5.4	3.4	1.5	0.9	52.1
Taft	1.3	1.8	3.1	4.3	6.2	7.3	8.5	7.3	5.4	3.4	1.7	1.0	51.2
Tehachapi	1.4	1.8	3.2	5.0	6.1	7.7	7.9	7.3	5.9	3.4	2.1	1.2	52.9
KINGS													
Caruthers	1.6	2.5	4.0	5.7	7.8	8.7	9.3	8.4	6.3	4.4	2.4	1.6	62.7

Appendix A - Reference Evapotranspiration (ETo) Table*

County and City	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual ETo
KINGS													
Corcoran	1.6	2.2	3.7	5.1	6.8	7.8	8.7	7.8	5.7	4.0	2.1	1.6	57.1
Hanford	0.9	1.5	3.4	5.0	6.6	7.7	8.3	7.2	5.4	3.4	1.4	0.7	51.5
Kettleman	1.1	2.0	4.0	6.0	7.5	8.5	9.1	8.2	6.1	4.5	2.2	1.1	60.2
Lemoore	0.9	1.5	3.4	5.0	6.6	7.7	8.3	7.3	5.4	3.4	1.4	0.7	51.7
Stratford	0.9	1.9	3.9	6.1	7.8	8.6	8.8	7.7	5.9	4.1	2.1	1.0	58.7
LAKE													
Lakeport	1.1	1.3	2.6	3.5	5.1	6.0	7.3	6.1	4.7	2.9	1.2	0.9	42.8
Lower Lake	1.2	1.4	2.7	4.5	5.3	6.3	7.4	6.4	5.0	3.1	1.3	0.9	45.4
LASSEN													
Buntingville	1.0	1.7	3.5	4.9	6.2	7.3	8.4	7.5	5.4	3.4	1.5	0.9	51.8
Ravendale	0.6	1.1	2.3	4.1	5.6	6.7	7.9	7.3	4.7	2.8	1.2	0.5	44.9
Susanville	0.7	1.0	2.2	4.1	5.6	6.5	7.8	7.0	4.6	2.8	1.2	0.5	44.0
LOS ANGELES													
Burbank	2.1	2.8	3.7	4.7	5.1	6.0	6.6	6.7	5.4	4.0	2.6	2.0	51.7
Claremont	2.0	2.3	3.4	4.6	5.0	6.0	7.0	7.0	5.3	4.0	2.7	2.1	51.3
El Dorado	1.7	2.2	3.6	4.8	5.1	5.7	5.9	5.9	4.4	3.2	2.2	1.7	46.3
Glendale	2.0	2.2	3.3	3.8	4.7	4.8	5.7	5.6	4.3	3.3	2.2	1.8	43.7
Glendora	2.0	2.5	3.6	4.9	5.4	6.1	7.3	6.8	5.7	4.2	2.6	2.0	53.1
Gorman	1.6	2.2	3.4	4.6	5.5	7.4	7.7	7.1	5.9	3.6	2.4	1.1	52.4
Hollywood Hills	2.1	2.2	3.8	5.4	6.0	6.5	6.7	6.4	5.2	3.7	2.8	2.1	52.8
Lancaster	2.1	3.0	4.6	5.9	8.5	9.7	11.0	9.8	7.3	4.6	2.8	1.7	71.1
Long Beach	1.8	2.1	3.3	3.9	4.5	4.3	5.3	4.7	3.7	2.8	1.8	1.5	39.7
Los Angeles	2.2	2.7	3.7	4.7	5.5	5.8	6.2	5.9	5.0	3.9	2.6	1.9	50.1
Monrovia	2.2	2.3	3.8	4.3	5.5	5.9	6.9	6.4	5.1	3.2	2.5	2.0	50.2
Palmdale	2.0	2.6	4.6	6.2	7.3	8.9	9.8	9.0	6.5	4.7	2.7	2.1	66.2
Pasadena	2.1	2.7	3.7	4.7	5.1	6.0	7.1	6.7	5.6	4.2	2.6	2.0	52.3
Pearblossom	1.7	2.4	3.7	4.7	7.3	7.7	9.9	7.9	6.4	4.0	2.6	1.6	59.9
Pomona	1.7	2.0	3.4	4.5	5.0	5.8	6.5	6.4	4.7	3.5	2.3	1.7	47.5
Redondo Beach	2.2	2.4	3.3	3.8	4.5	4.7	5.4	4.8	4.4	2.8	2.4	2.0	42.6
San Fernando	2.0	2.7	3.5	4.6	5.5	5.9	7.3	6.7	5.3	3.9	2.6	2.0	52.0
Santa Clarita	2.8	2.8	4.1	5.6	6.0	6.8	7.6	7.8	5.8	5.2	3.7	3.2	61.5
Santa Monica	1.8	2.1	3.3	4.5	4.7	5.0	5.4	5.4	3.9	3.4	2.4	2.2	44.2
MADERA													
Chowchilla	1.0	1.4	3.2	4.7	6.6	7.8	8.5	7.3	5.3	3.4	1.4	0.7	51.4
Madera	0.9	1.4	3.2	4.8	6.6	7.8	8.5	7.3	5.3	3.4	1.4	0.7	51.5
Raymond	1.2	1.5	3.0	4.6	6.1	7.6	8.4	7.3	5.2	3.4	1.4	0.7	50.5
MARIN													
Black Point	1.1	1.7	3.0	4.2	5.2	6.2	6.6	5.8	4.3	2.8	1.3	0.9	43.0
Novato	1.3	1.5	2.4	3.5	4.4	6.0	5.9	5.4	4.4	2.8	1.4	0.7	39.8
Point San Pedro	1.1	1.7	3.0	4.2	5.2	6.2	6.6	5.8	4.3	2.8	1.3	0.9	43.0
San Rafael	1.2	1.3	2.4	3.3	4.0	4.8	4.8	4.9	4.3	2.7	1.3	0.7	35.8
MARIPOSA													
Coulterville	1.1	1.5	2.8	4.4	5.9	7.3	8.1	7.0	5.3	3.4	1.4	0.7	48.8
Mariposa	1.1	1.5	2.8	4.4	5.9	7.4	8.2	7.1	5.0	3.4	1.4	0.7	49.0
Yosemite Village	0.7	1.0	2.3	3.7	5.1	6.5	7.1	6.1	4.4	2.9	1.1	0.6	41.4
MENDOCINO													
Fort Bragg	0.9	1.3	2.2	3.0	3.7	3.5	3.7	3.7	3.0	2.3	1.2	0.7	29.0
Hopland	1.1	1.3	2.6	3.4	5.0	5.9	6.5	5.7	4.5	2.8	1.3	0.7	40.9

Appendix A - Reference Evapotranspiration (ETo) Table*													
County and City	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual ETo
MENDOCINO													
Point Arena	1.0	1.3	2.3	3.0	3.7	3.9	3.7	3.7	3.0	2.3	1.2	0.7	29.6
Sanel Valley	1.0	1.6	3.0	4.6	6.0	7.0	8.0	7.0	5.2	3.4	1.4	0.9	49.1
Ukiah	1.0	1.3	2.6	3.3	5.0	5.8	6.7	5.9	4.5	2.8	1.3	0.7	40.9
MERCED													
Kesterson	0.9	1.7	3.4	5.5	7.3	8.2	8.6	7.4	5.5	3.8	1.8	0.9	55.1
Los Banos	1.0	1.5	3.2	4.7	6.1	7.4	8.2	7.0	5.3	3.4	1.4	0.7	50.0
Merced	1.0	1.5	3.2	4.7	6.6	7.9	8.5	7.2	5.3	3.4	1.4	0.7	51.5
MODOC													
Modoc/Alturas	0.9	1.4	2.8	3.7	5.1	6.2	7.5	6.6	4.6	2.8	1.2	0.7	43.2
MONO													
Bridgeport	0.7	0.9	2.2	3.8	5.5	6.6	7.4	6.7	4.7	2.7	1.2	0.5	43.0
MONTEREY													
Arroyo Seco	1.5	2.0	3.7	5.4	6.3	7.3	7.2	6.7	5.0	3.9	2.0	1.6	52.6
Castroville	1.4	1.7	3.0	4.2	4.6	4.8	4.0	3.8	3.0	2.6	1.6	1.4	36.2
Gonzales	1.3	1.7	3.4	4.7	5.4	6.3	6.3	5.9	4.4	3.4	1.9	1.3	45.7
Greenfield	1.8	2.2	3.4	4.8	5.6	6.3	6.5	6.2	4.8	3.7	2.4	1.8	49.5
King City	1.7	2.0	3.4	4.4	4.4	5.6	6.1	6.7	6.5	5.2	2.2	1.3	49.6
King City-Oasis Rd.	1.4	1.9	3.6	5.3	6.5	7.3	7.4	6.8	5.1	4.0	2.0	1.5	52.7
Long Valley	1.5	1.9	3.2	4.1	5.8	6.5	7.3	6.7	5.3	3.6	2.0	1.2	49.1
Monterey	1.7	1.8	2.7	3.5	4.0	4.1	4.3	4.2	3.5	2.8	1.9	1.5	36.0
Pajaro	1.8	2.2	3.7	4.8	5.3	5.7	5.6	5.3	4.3	3.4	2.4	1.8	46.1
Salinas	1.6	1.9	2.7	3.8	4.8	4.7	5.0	4.5	4.0	2.9	1.9	1.3	39.1
Salinas North	1.2	1.5	2.9	4.1	4.6	5.2	4.5	4.3	3.2	2.8	1.5	1.2	36.9
San Ardo	1.0	1.7	3.1	4.5	5.9	7.2	8.1	7.1	5.1	3.1	1.5	1.0	49.0
San Juan	1.8	2.1	3.4	4.6	5.3	5.7	5.5	4.9	3.8	3.2	2.2	1.9	44.2
Soledad	1.7	2.0	3.4	4.4	5.5	5.4	6.5	6.2	5.2	3.7	2.2	1.5	47.7
NAPA													
Angwin	1.8	1.9	3.2	4.7	5.8	7.3	8.1	7.1	5.5	4.5	2.9	2.1	54.9
Carneros	0.8	1.5	3.1	4.6	5.5	6.6	6.9	6.2	4.7	3.5	1.4	1.0	45.8
Oakville	1.0	1.5	2.9	4.7	5.8	6.9	7.2	6.4	4.9	3.5	1.6	1.2	47.7
St Helena	1.2	1.5	2.8	3.9	5.1	6.1	7.0	6.2	4.8	3.1	1.4	0.9	44.1
Yountville	1.3	1.7	2.8	3.9	5.1	6.0	7.1	6.1	4.8	3.1	1.5	0.9	44.3
NEVADA													
Grass Valley	1.1	1.5	2.6	4.0	5.7	7.1	7.9	7.1	5.3	3.2	1.5	0.9	48.0
Nevada City	1.1	1.5	2.6	3.9	5.8	6.9	7.9	7.0	5.3	3.2	1.4	0.9	47.4
ORANGE													
Irvine	2.2	2.5	3.7	4.7	5.2	5.9	6.3	6.2	4.6	3.7	2.6	2.3	49.6
Laguna Beach	2.2	2.7	3.4	3.8	4.6	4.6	4.9	4.9	4.4	3.4	2.4	2.0	43.2
Santa Ana	2.2	2.7	3.7	4.5	4.6	5.4	6.2	6.1	4.7	3.7	2.5	2.0	48.2
PLACER													
Auburn	1.2	1.7	2.8	4.4	6.1	7.4	8.3	7.3	5.4	3.4	1.6	1.0	50.6
Blue Canyon	0.7	1.1	2.1	3.4	4.8	6.0	7.2	6.1	4.6	2.9	0.9	0.6	40.5
Colfax	1.1	1.5	2.6	4.0	5.8	7.1	7.9	7.0	5.3	3.2	1.4	0.9	47.9
Roseville	1.1	1.7	3.1	4.7	6.2	7.7	8.5	7.3	5.6	3.7	1.7	1.0	52.2
Soda Springs	0.7	0.7	1.8	3.0	4.3	5.3	6.2	5.5	4.1	2.5	0.7	0.7	35.4
Tahoe City	0.7	0.7	1.7	3.0	4.3	5.4	6.1	5.6	4.1	2.4	0.8	0.6	35.5
Truckee	0.7	0.7	1.7	3.2	4.4	5.4	6.4	5.7	4.1	2.4	0.8	0.6	36.2

Appendix A - Reference Evapotranspiration (ETo) Table*													
County and City	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual ETo
PLUMAS													
Portola	0.7	0.9	1.9	3.5	4.9	5.9	7.3	5.9	4.3	2.7	0.9	0.5	39.4
Quincy	0.7	0.9	2.2	3.5	4.9	5.9	7.3	5.9	4.4	2.8	1.2	0.5	40.2
RIVERSIDE													
Beaumont	2.0	2.3	3.4	4.4	6.1	7.1	7.6	7.9	6.0	3.9	2.6	1.7	55.0
Blythe	2.4	3.3	5.3	6.9	8.7	9.6	9.6	8.7	6.9	5.0	3.0	2.2	71.4
Cathedral City	1.6	2.2	3.7	5.1	6.8	7.8	8.7	7.8	5.7	4.0	2.1	1.6	57.1
Coachella	2.9	4.4	6.2	8.4	10.5	11.9	12.3	10.1	8.9	6.2	3.8	2.4	88.1
Desert Center	2.9	4.1	6.4	8.5	11.0	12.1	12.2	11.1	9.0	6.4	3.9	2.6	90.0
Elsinore	2.1	2.8	3.9	4.4	5.9	7.1	7.6	7.0	5.8	3.9	2.6	1.9	55.0
Indio	**3.1**	3.6	6.5	8.3	10.5	11.0	10.8	9.7	8.3	5.9	3.7	2.7	83.9
La Quinta	2.4	2.8	5.2	6.5	8.3	8.7	8.5	7.9	6.5	4.5	2.7	2.2	66.2
Mecca	2.6	3.3	5.7	7.2	8.6	9.0	8.8	8.2	6.8	5.0	3.2	2.4	70.8
Oasis	2.9	3.3	5.3	6.1	8.5	8.9	8.7	7.9	6.9	4.8	2.9	2.3	68.4
Palm Desert	2.5	3.4	5.3	6.9	8.7	9.6	9.6	8.7	6.9	5.0	3.0	2.2	71.6
Palm Springs	2.0	2.9	4.9	7.2	8.3	8.5	11.6	8.3	7.2	5.9	2.7	1.7	71.1
Rancho California	1.8	2.2	3.4	4.8	5.6	6.3	6.5	6.2	4.8	3.7	2.4	1.8	49.5
Rancho Mirage	2.4	3.3	5.3	6.9	8.7	9.6	9.6	8.7	6.9	5.0	3.0	2.2	71.4
Ripley	2.7	3.3	5.6	7.2	8.7	8.7	8.4	7.6	6.2	4.6	2.8	2.2	67.8
Salton Sea North	2.5	3.3	5.5	7.2	8.8	9.3	9.2	8.5	6.8	5.2	3.1	2.3	71.7
Temecula East II	2.3	2.4	4.1	4.9	6.4	7.0	7.8	7.4	5.7	4.1	2.6	2.2	56.7
Thermal	2.4	3.3	5.5	7.6	9.1	9.6	9.3	8.6	7.1	5.2	3.1	2.1	72.8
Riverside UC	2.5	2.9	4.2	5.3	5.9	6.6	7.2	6.9	5.4	4.1	2.9	2.6	56.4
Winchester	2.3	2.4	4.1	4.9	6.4	6.9	7.7	7.5	6.0	3.9	2.6	2.1	56.8
SACRAMENTO													
Fair Oaks	1.0	1.6	3.4	4.1	6.5	7.5	8.1	7.1	5.2	3.4	1.5	1.0	50.5
Sacramento	1.0	1.8	3.2	4.7	6.4	7.7	8.4	7.2	5.4	3.7	1.7	0.9	51.9
Twitchell Island	1.2	1.8	3.9	5.3	7.4	8.8	9.1	7.8	5.9	3.8	1.7	1.2	57.9
SAN BENITO													
Hollister	1.5	1.8	3.1	4.3	5.5	5.7	6.4	5.9	5.0	3.5	1.7	1.1	45.1
San Benito	1.2	1.6	3.1	4.6	5.6	6.4	6.9	6.5	4.8	3.7	1.7	1.2	47.2
San Juan Valley	1.4	1.8	3.4	4.5	6.0	6.7	7.1	6.4	5.0	3.5	1.8	1.4	49.1
SAN BERNARDINO													
Baker	2.7	3.9	6.1	8.3	10.4	11.8	12.2	11.0	8.9	6.1	3.3	2.1	86.6
Barstow NE	2.2	2.9	5.3	6.9	9.0	10.1	9.9	8.9	6.8	4.8	2.7	2.1	71.7
Big Bear Lake	1.8	2.6	4.6	6.0	7.0	7.6	8.1	7.4	5.4	4.1	2.4	1.8	58.6
Chino	2.1	2.9	3.9	4.5	5.7	6.5	7.3	7.1	5.9	4.2	2.6	2.0	54.6
Crestline	1.5	1.9	3.3	4.4	5.5	6.6	7.8	7.1	5.4	3.5	2.2	1.6	50.8
Lake Arrowhead	1.8	2.6	4.6	6.0	7.0	7.6	8.1	7.4	5.4	4.1	2.4	1.8	58.6
Lucerne Valley	2.2	2.9	5.1	6.5	9.1	11.0	11.4	9.9	7.4	5.0	3.0	1.8	75.3
Needles	3.2	4.2	6.6	8.9	11.0	12.4	12.8	11.0	8.9	6.6	4.0	2.7	92.1
Newberry Springs	2.1	2.9	5.3	8.4	9.8	10.9	11.1	9.9	7.6	5.2	3.1	2.0	78.2
San Bernardino	2.0	2.7	3.8	4.6	5.7	6.9	7.9	7.4	5.9	4.2	2.6	2.0	55.6
Twentynine Palms	2.6	3.6	5.9	7.9	10.1	11.2	11.2	10.3	8.6	5.9	3.4	2.2	82.9
Victorville	2.0	2.6	4.6	6.2	7.3	8.9	9.8	9.0	6.5	4.7	2.7	2.1	66.2
SAN DIEGO													
Chula Vista	2.2	2.7	3.4	3.8	4.9	4.7	5.5	4.9	4.5	3.4	2.4	2.0	44.2
Escondido SPV	2.4	2.6	3.9	4.7	5.9	6.5	7.1	6.7	5.3	3.9	2.8	2.3	54.2
Miramar	2.3	2.5	3.7	4.1	5.1	5.4	6.1	5.8	4.5	3.3	2.4	2.1	47.1

Appendix A - Reference Evapotranspiration (ETo) Table*													
County and City	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual ETo
SAN DIEGO													
Oceanside	2.2	2.7	3.4	3.7	4.9	4.6	4.6	5.1	4.1	3.3	2.4	2.0	42.9
Otay Lake	2.3	2.7	3.9	4.6	5.6	5.9	6.2	6.1	4.8	3.7	2.6	2.2	50.4
Pine Valley	1.5	2.4	3.8	5.1	6.0	7.0	7.8	7.3	6.0	4.0	2.2	1.7	54.8
Ramona	2.1	2.1	3.4	4.6	5.2	6.3	6.7	6.8	5.3	4.1	2.8	2.1	51.6
San Diego	2.1	2.4	3.4	4.6	5.1	5.3	5.7	5.6	4.3	3.6	2.4	2.0	46.5
Santee	2.1	2.7	3.7	4.5	5.5	6.1	6.6	6.2	5.4	3.8	2.6	2.0	51.1
Torrey Pines	2.2	2.3	3.4	3.9	4.0	4.1	4.6	4.7	3.8	2.8	2.0	2.0	39.8
Warner Springs	1.6	2.7	3.7	4.7	5.7	7.6	8.3	7.7	6.3	4.0	2.5	1.3	56.0
SAN FRANCISCO													
San Francisco	1.5	1.3	2.4	3.0	3.7	4.6	4.9	4.8	4.1	2.8	1.3	0.7	35.1
SAN JOAQUIN													
Farmington	1.5	1.5	2.9	4.7	6.2	7.6	8.1	6.8	5.3	3.3	1.4	0.7	50.0
Lodi West	1.0	1.6	3.3	4.3	6.3	6.9	7.3	6.4	4.5	3.0	1.4	0.8	46.7
Manteca	0.9	1.7	3.4	5.0	6.5	7.5	8.0	7.1	5.2	3.3	1.6	0.9	51.2
Stockton	0.8	1.5	2.9	4.7	6.2	7.4	8.1	6.8	5.3	3.2	1.4	0.6	49.1
Tracy	1.0	1.5	2.9	4.5	6.1	7.3	7.9	6.7	5.3	3.2	1.3	0.7	48.5
SAN LUIS OBISPO													
Arroyo Grande	2.0	2.2	3.2	3.8	4.3	4.7	4.3	4.6	3.8	3.2	2.4	1.7	40.0
Atascadero	1.2	1.5	2.8	3.9	4.5	6.0	6.7	6.2	5.0	3.2	1.7	1.0	43.7
Morro Bay	2.0	2.2	3.1	3.5	4.3	4.5	4.6	4.6	3.8	3.5	2.1	1.7	39.9
Nipomo	2.2	2.5	3.8	5.1	5.7	6.2	6.4	6.1	4.9	4.1	2.9	2.3	52.1
Paso Robles	1.6	2.0	3.2	4.3	5.5	6.3	7.3	6.7	5.1	3.7	2.1	1.4	49.0
San Luis Obispo	2.0	2.2	3.2	4.1	4.9	5.3	4.6	5.5	4.4	3.5	2.4	1.7	43.8
San Miguel	1.6	2.0	3.2	4.3	5.0	6.4	7.4	6.8	5.1	3.7	2.1	1.4	49.0
San Simeon	2.0	2.0	2.9	3.5	4.2	4.4	4.6	4.3	3.5	3.1	2.0	1.7	38.1
SAN MATEO													
Hal Moon Bay	1.5	1.7	2.4	3.0	3.9	4.3	4.3	4.2	3.5	2.8	1.3	1.0	33.7
Redwood City	1.5	1.8	2.9	3.8	5.2	5.3	6.2	5.6	4.8	3.1	1.7	1.0	42.8
Woodside	1.8	2.2	3.4	4.8	5.6	6.3	6.5	6.2	4.8	3.7	2.4	1.8	49.5
SANTA BARBARA													
Betteravia	2.1	2.6	4.0	5.2	6.0	5.9	5.8	5.4	4.1	3.3	2.7	2.1	49.1
Carpenteria	2.0	2.4	3.2	3.9	4.8	5.2	5.5	5.7	4.5	3.4	2.4	2.0	44.9
Cuyama	2.1	2.4	3.8	5.4	6.9	7.9	8.5	7.7	5.9	4.5	2.6	2.0	59.7
Goleta	2.1	2.5	3.9	5.1	5.7	5.7	5.4	5.4	4.2	3.2	2.8	2.2	48.1
Goleta Foothills	2.3	2.6	3.7	5.4	5.3	5.6	5.5	5.7	4.5	3.9	2.8	2.3	49.6
Guadalupe	2.0	2.2	3.2	3.7	4.9	4.6	4.5	4.6	4.1	3.3	2.4	1.7	41.1
Lompoc	2.0	2.2	3.2	3.7	4.8	4.6	4.9	4.8	3.9	3.2	2.4	1.7	41.1
Los Alamos	1.8	2.0	3.2	4.1	4.9	5.3	5.7	5.5	4.4	3.7	2.4	1.6	44.6
Santa Barbara	2.0	2.5	3.2	3.8	4.6	5.1	5.5	4.5	3.4	2.4	1.8	1.8	40.6
Santa Maria	1.8	2.3	3.7	5.1	5.7	5.8	5.6	5.3	4.2	3.5	2.4	1.9	47.4
Santa Ynez	1.7	2.2	3.5	5.0	5.8	6.2	6.4	6.0	4.5	3.6	2.2	1.7	48.7
Sisquoc	2.1	2.5	3.8	4.1	6.1	6.3	6.4	5.8	4.7	3.4	2.3	1.8	49.2
Solvang	2.0	2.0	3.3	4.3	5.0	5.6	6.1	5.6	4.4	3.7	2.2	1.6	45.6
SANTA CLARA													
Gilroy	1.3	1.8	3.1	4.1	5.3	5.6	6.1	5.5	4.7	3.4	1.7	1.1	43.6
Los Gatos	1.5	1.8	2.8	3.9	5.0	5.6	6.2	5.5	4.7	3.2	1.7	1.1	42.9
Morgan Hill	1.5	1.8	3.4	4.2	6.3	7.0	7.1	6.0	5.1	3.7	1.9	1.4	49.5
Palo Alto	1.5	1.8	2.8	3.8	5.2	5.3	6.2	5.6	5.0	3.2	1.7	1.0	43.0

Appendix A - Reference Evapotranspiration (ETo) Table*													
County and City	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual ETo
SANTA CLARA													
San Jose	1.5	1.8	3.1	4.1	5.5	5.8	6.5	5.9	5.2	3.3	1.8	1.0	45.3
SANTA CRUZ													
De Laveaga	1.4	1.9	3.3	4.7	4.9	5.3	5.0	4.8	3.6	3.0	1.6	1.3	40.8
Green Valley Rd	1.2	1.8	3.2	4.5	4.6	5.4	5.2	5.0	3.7	3.1	1.6	1.3	40.6
Santa Cruz	1.5	1.8	2.6	3.5	4.3	4.4	4.8	4.4	3.8	2.8	1.7	1.2	36.6
Watsonville	1.5	1.8	2.7	3.7	4.6	4.5	4.9	4.2	4.0	2.9	1.8	1.2	37.7
Webb	1.8	2.2	3.7	4.8	5.3	5.7	5.6	5.3	4.3	3.4	2.4	1.8	46.2
SHASTA													
Burney	0.7	1.0	2.1	3.5	4.9	5.9	7.4	6.4	4.4	2.9	0.9	0.6	40.9
Fall River Mills	0.6	1.0	2.1	3.7	5.0	6.1	7.8	6.7	4.6	2.8	0.9	0.5	41.8
Glenburn	0.6	1.0	2.1	3.7	5.0	6.3	7.8	6.7	4.7	2.8	0.9	0.6	42.1
McArthur	0.7	1.4	2.9	4.2	5.6	6.9	8.2	7.2	5.0	3.0	1.1	0.6	46.8
Redding	1.2	1.4	2.6	4.1	5.6	7.1	8.5	7.3	5.3	3.2	1.4	0.9	48.8
SIERRA													
Downieville	0.7	1.0	2.3	3.5	5.0	6.0	7.4	6.2	4.7	2.8	0.9	0.6	41.3
Sierraville	0.7	1.1	2.2	3.2	4.5	5.9	7.3	6.4	4.3	2.6	0.9	0.5	39.6
SISKIYOU													
Happy Camp	0.5	0.9	2.0	3.0	4.3	5.2	6.1	5.3	4.1	2.4	0.9	0.5	35.1
MacDoel	1.0	1.7	3.1	4.5	5.9	7.2	8.1	7.1	5.1	3.1	1.5	1.0	49.0
Mt Shasta	0.5	0.9	2.0	3.0	4.5	5.3	6.7	5.7	4.0	2.2	0.7	0.5	36.0
Tule lake FS	0.7	1.3	2.7	4.0	5.4	6.3	7.1	6.4	4.7	2.8	1.0	0.6	42.9
Weed	0.5	0.9	2.0	2.5	4.5	5.3	6.7	5.5	3.7	2.0	0.9	0.5	34.9
Yreka	0.6	0.9	2.1	3.0	4.9	5.8	7.3	6.5	4.3	2.5	0.9	0.5	39.2
SOLANO													
Benicia	1.3	1.4	2.7	3.8	4.9	5.0	6.4	5.5	4.4	2.9	1.2	0.7	40.3
Dixon	0.7	1.4	3.2	5.2	6.3	7.6	8.2	7.2	5.5	4.3	1.6	1.1	52.1
Fairfield	1.1	1.7	2.8	4.0	5.5	6.1	7.8	6.0	4.8	3.1	1.4	0.9	45.2
Hastings Tract	1.6	2.2	3.7	5.1	6.8	7.8	8.7	7.8	5.7	4.0	2.1	1.6	57.1
Putah Creek	1.0	1.6	3.2	4.9	6.1	7.3	7.9	7.0	5.3	3.8	1.8	1.2	51.0
Rio Vista	0.9	1.7	2.8	4.4	5.9	6.7	7.9	6.5	5.1	3.2	1.3	0.7	47.0
Suisun Valley	0.6	1.3	3.0	4.7	5.8	7.0	7.7	6.8	5.3	3.8	1.4	0.9	48.3
Winters	0.9	1.7	3.3	5.0	6.4	7.5	7.9	7.0	5.2	3.5	1.6	1.0	51.0
SONOMA													
Bennett Valley	1.1	1.7	3.2	4.1	5.5	6.5	6.6	5.7	4.5	3.1	1.5	0.9	44.4
Cloverdale	1.1	1.4	2.6	3.4	5.0	5.9	6.2	5.6	4.5	2.8	1.4	0.7	40.7
Fort Ross	1.2	1.4	2.2	3.0	3.7	4.5	4.2	4.3	3.4	2.4	1.2	0.5	31.9
Healdsburg	1.2	1.5	2.4	3.5	5.0	5.9	6.1	5.6	4.5	2.8	1.4	0.7	40.8
Lincoln	1.2	1.7	2.8	4.7	6.1	7.4	8.4	7.3	5.4	3.7	1.9	1.2	51.9
Petaluma	1.2	1.5	2.8	3.7	4.6	5.6	4.6	5.7	4.5	2.9	1.4	0.9	39.6
Santa Rosa	1.2	1.7	2.8	3.7	5.0	6.0	6.1	5.9	4.5	2.9	1.5	0.7	42.0
Valley of the Moon	1.0	1.6	3.0	4.5	5.6	6.6	7.1	6.3	4.7	3.3	1.5	1.0	46.1
Windsor	0.9	1.6	3.0	4.5	5.5	6.5	6.5	5.9	4.4	3.2	1.4	1.0	44.2
STANISLAUS													
Denair	1.0	1.9	3.6	4.7	7.0	7.9	8.0	6.1	5.3	3.4	1.5	1.0	51.4
La Grange	1.2	1.5	3.1	4.7	6.2	7.7	8.5	7.3	5.3	3.4	1.4	0.7	51.2
Modesto	0.9	1.4	3.2	4.7	6.4	7.7	8.1	6.8	5.0	3.4	1.4	0.7	49.7
Newman	1.0	1.5	3.2	4.6	6.2	7.4	8.1	6.7	5.0	3.4	1.4	0.7	49.3
Oakdale	1.2	1.5	3.2	4.7	6.2	7.7	8.1	7.1	5.1	3.4	1.4	0.7	50.3

Appendix A - Reference Evapotranspiration (ETo) Table*													
County and City	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual ETo
STANISLAUS													
Patterson	1.3	2.1	4.2	5.4	7.9	8.6	8.2	6.6	5.8	4.0	1.9	1.3	57.3
Turlock	0.9	1.5	3.2	4.7	6.5	7.7	8.2	7.0	5.1	3.4	1.4	0.7	50.2
SUTTER													
Nicolaus	0.9	1.6	3.2	4.9	6.3	7.5	8.0	6.9	5.2	3.4	1.5	0.9	50.2
Yuba City	1.3	2.1	2.8	4.4	5.7	7.2	7.1	6.1	4.7	3.2	1.2	0.9	46.7
TEHAMA													
Corning	1.2	1.8	2.9	4.5	6.1	7.3	8.1	7.2	5.3	3.7	1.7	1.1	50.7
Gerber	1.0	1.8	3.5	5.0	6.6	7.9	8.7	7.4	5.8	4.1	1.8	1.1	54.7
Gerber Dryland	0.9	1.6	3.2	4.7	6.7	8.4	9.0	7.9	6.0	4.2	2.0	1.0	55.5
Red Bluff	1.2	1.8	2.9	4.4	5.9	7.4	8.5	7.3	5.4	3.5	1.7	1.0	51.1
TRINITY													
Hay Fork	0.5	1.1	2.3	3.5	4.9	5.9	7.0	6.0	4.5	2.8	0.9	0.7	40.1
Weaverville	0.6	1.1	2.2	3.3	4.9	5.9	7.3	6.0	4.4	2.7	0.9	0.7	40.0
TULARE													
Alpaugh	0.9	1.7	3.4	4.8	6.6	7.7	8.2	7.3	5.4	3.4	1.4	0.7	51.6
Badger	1.0	1.3	2.7	4.1	6.0	7.3	7.7	7.0	4.8	3.3	1.4	0.7	47.3
Delano	1.1	1.9	4.0	4.9	7.2	7.9	8.1	7.3	5.4	3.2	1.5	1.2	53.6
Dinuba	1.1	1.5	3.2	4.7	6.2	7.7	8.5	7.3	5.3	3.4	1.4	0.7	51.2
Lindcove	0.9	1.6	3.0	4.8	6.5	7.6	8.1	7.2	5.2	3.4	1.6	0.9	50.6
Porterville	1.2	1.8	3.4	4.7	6.6	7.7	8.5	7.3	5.3	3.4	1.4	0.7	52.1
Visalia	0.9	1.7	3.3	5.1	6.8	7.7	7.9	6.9	4.9	3.2	1.5	0.8	50.7
TUOLUMNE													
Groveland	1.1	1.5	2.8	4.1	5.7	7.2	7.9	6.6	5.1	3.3	1.4	0.7	47.5
Sonora	1.1	1.5	2.8	4.1	5.8	7.2	7.9	6.7	5.1	3.2	1.4	0.7	47.6
VENTURA													
Camarillo	2.2	2.5	3.7	4.3	5.0	5.2	5.9	5.4	4.2	3.0	2.5	2.1	46.1
Oxnard	2.2	2.5	3.2	3.7	4.4	4.6	5.4	4.8	4.0	3.3	2.4	2.0	42.3
Piru	2.8	2.8	4.1	5.6	6.0	6.8	7.6	7.8	5.8	5.2	3.7	3.2	61.5
Port Hueneme	2.0	2.3	3.3	4.6	4.9	4.9	4.9	5.0	3.7	3.2	2.5	2.2	43.5
Thousand Oaks	2.2	2.6	3.4	4.5	5.4	5.9	6.7	6.4	5.4	3.9	2.6	2.0	51.0
Ventura	2.2	2.6	3.2	3.8	4.6	4.7	5.5	4.9	4.1	3.4	2.5	2.0	43.5
YOLO													
Bryte	0.9	1.7	3.3	5.0	6.4	7.5	7.9	7.0	5.2	3.5	1.6	1.0	51.0
Davis	1.0	1.9	3.3	5.0	6.4	7.6	8.2	7.1	5.4	4.0	1.8	1.0	52.5
Esparto	1.0	1.7	3.4	5.5	6.9	8.1	8.5	7.5	5.8	4.2	2.0	1.2	55.8
Winters	1.7	1.7	2.9	4.4	5.8	7.1	7.9	6.7	5.3	3.3	1.6	1.0	49.4
Woodland	1.0	1.8	3.2	4.7	6.1	7.7	8.2	7.2	5.4	3.7	1.7	1.0	51.6
Zamora	1.1	1.9	3.5	5.2	6.4	7.4	7.8	7.0	5.5	4.0	1.9	1.2	52.8
YUBA													
Browns Valley	1.0	1.7	3.1	4.7	6.1	7.5	8.5	7.6	5.7	4.1	2.0	1.1	52.9
Brownsville	1.1	1.4	2.6	4.0	5.7	6.8	7.9	6.8	5.3	3.4	1.5	0.9	47.4

* The values in this table were derived from:

1) California Irrigation Management Information System (CIMIS);
2) Reference EvapoTranspiration Zones Map, UC Dept. of Land, Air & Water Resources and California Dept of Water Resources 1999; and
3) Reference Evapotranspiration for California, University of California, Department of Agriculture and Natural Resources (1987) Bulletin 1922;
4) Determining Daily Reference Evapotranspiration, Cooperative Extension UC Division of Agriculture and Natural Resources (1987), Publication Leaflet 21426

HISTORY

1. New Appendix A filed 9–10–2009; operative 9–10–2009 pursuant to Government Code section 11343.4 (Register 2009, No. 37).
2. Repealer and new Appendix A filed 9–15–2015; operative 9–15–2015. Exempt from OAL review and submitted to OAL for printing only pursuant to Governor's Executive Order No. B–29–15 (4–1–2015) (Register 2015, No. 38).

Appendix B — Sample Water Efficient Landscape Worksheet.

WATER EFFICIENT LANDSCAPE WORKSHEET

This worksheet is filled out by the project applicant and it is a required element of the Landscape Documentation Package.

Reference Evapotranspiration (ETo) _____

Hydrozone # /Planting Description[a]	Plant Factor (PF)	Irrigation Method[b]	Irrigation Efficiency (IE)[c]	ETAF (PF/IE)	Landscape Area (sq. ft.)	ETAF x Area	Estimated Total Water Use (ETWU)[e]
Regular Landscape Areas							
				Totals	(A)	(B)	
Special Landscape Areas							
				1			
				1			
				1			
				Totals	(C)	(D)	
						ETWU Total	
					Maximum Allowed Water Allowance (MAWA)[e]		

[a] ***Hydrozone #/Planting Description***
E.g.
1.) front lawn
2.) low water use plantings
3.) medium water use planting

[b] ***Irrigation Method***
overhead spray or drip

[c] ***Irrigation Efficiency***
0.75 for spray head
0.81 for drip

[d] ***ETWU*** (Annual Gallons Required) =
Eto x 0.62 x ETAF x Area
where 0.62 is a conversion factor that converts acre-inches per acre per year to gallons per square foot per year.

[e] ***MAWA (Annual Gallons Allowed)*** = *(Eto) (0.62) [(ETAF x LA) + ((1-ETAF) x SLA)]*
where 0.62 is a conversion factor that converts acre-inches per acre per year to gallons per square foot per year, LA is the total landscape area in square feet, SLA is the total special landscape area in square feet, and ETAF is .55 for residential areas and 0.45 for non-residential areas.

ETAF Calculations

Regular Landscape Areas

Total ETAF x Area	(B)
Total Area	(A)
Average ETAF	**B ÷ A**

Average ETAF for Regular Landscape Areas must be 0.55 or below for residential areas, and 0.45 or below for non-residential areas.

All Landscape Areas

Total ETAF x Area	(B+D)
Total Area	(A+C)
Sitewide ETAF	**(B+D) ÷ (A+C)**

HISTORY

1. New Appendix B filed 9–10–2009; operative 9–10–2009 pursuant to Government Code section 11343.4 (Register 2009, No. 37).
2. Repealer and new Appendix B filed 9–15–2015; operative 9–15–2015. Exempt from OAL review and submitted to OAL for printing only pursuant to Governor's Executive Order No. B–29–15 (4–1–2015) (Register 2015, No. 38).

Appendix C — Sample Certificate of Completion.

CERTIFICATE OF COMPLETION

This certificate is filled out by the project applicant upon completion of the landscape project.

PART 1. PROJECT INFORMATION SHEET

Date		
Project Name		
Name of Project Applicant	Telephone No.	
	Fax No.	
Title	Email Address	
Company	Street Address	
City	State	Zip Code

Project Address and Location:

Street Address		Parcel, tract or lot number, if available.
City		Latitude/Longitude (optional)
State	Zip Code	

Property Owner or his/her designee:

Name	Telephone No.	
	Fax No.	
Title	Email Address	
Company	Street Address	
City	State	Zip Code

Property Owner

"I/we certify that I/we have received copies of all the documents within the Landscape Documentation Package and the Certificate of Completion and that it is our responsibility to see that the project is maintained in accordance with the Landscape and Irrigation Maintenance Schedule."

_____

Property Owner Signature Date

Please answer the questions below:

1. Date the Landscape Documentation Package was submitted to the local agency_____
2. Date the Landscape Documentation Package was approved by the local agency_____
3. Date that a copy of the Water Efficient Landscape Worksheet (including the Water Budget Calculation) was submitted to the local water purveyor_____

PART 2. CERTIFICATION OF INSTALLATION ACCORDING TO THE LANDSCAPE DOCUMENTATION PACKAGE

"I/we certify that based upon periodic site observations, the work has been completed in accordance with the ordinance and that the landscape planting and irrigation installation conform with the criteria and specifications of the approved Landscape Documentation Package."

Signature*	Date	
Name (print)	Telephone No.	
	Fax No.	
Title	Email Address	
License No. or Certification No.		
Company	Street Address	
City	State	Zip Code

*Signer of the landscape design plan, signer of the irrigation plan, or a licensed landscape contractor.

PART 3. IRRIGATION SCHEDULING

Attach parameters for setting the irrigation schedule on controller per ordinance Section 492.10.

PART 4. SCHEDULE OF LANDSCAPE AND IRRIGATION MAINTENANCE

Attach schedule of Landscape and Irrigation Maintenance per ordinance Section 492.11.

PART 5. LANDSCAPE IRRIGATION AUDIT REPORT

Attach Landscape Irrigation Audit Report per ordinance Section 492.12.

PART 6. SOIL MANAGEMENT REPORT

Attach soil analysis report, if not previously submitted with the Landscape Documentation Package per ordinance Section 492.6.

Attach documentation verifying implementation of recommendations from soil analysis report per ordinance Section 492.6.

HISTORY

1. New Appendix C filed 9–10–2009; operative 9–10–2009 pursuant to Government Code section 11343.4 (Register 2009, No. 37).
2. Repealer and new Appendix C filed 9–15–2015; operative 9–15–2015. Exempt from OAL review and submitted to OAL for printing only pursuant to Governor's Executive Order No. B–29–15 (4–1–2015) (Register 2015, No. 38).

Appendix D — Prescriptive Compliance Option.

(a) This appendix contains prescriptive requirements which may be used as a compliance option to the Model Water Efficient Landscape Ordinance.

(b) Compliance with the following items is mandatory and must be documented on a landscape plan in order to use the prescriptive compliance option:

(1) Submit a Landscape Documentation Package which includes the following elements:

(A) date

(B) project applicant

(C) project address (if available, parcel and/or lot number(s))

(D) total landscape area (square feet), including a breakdown of turf and plant material

(E) project type (e.g., new, rehabilitated, public, private, cemetery, homeowner–installed)

(F) water supply type (e.g., potable, recycled, well) and identify the local retail water purveyor if the applicant is not served by a private well

(G) contact information for the project applicant and property owner

(H) applicant signature and date with statement, "I agree to comply with the requirements of the prescriptive compliance option to the MWELO".

(2) Incorporate compost at a rate of at least four cubic yards per 1,000 square feet to a depth of six inches into landscape area (unless contra–indicated by a soil test);

(3) Plant material shall comply with all of the following;

(A) For residential areas, install climate adapted plants that require occasional, little or no summer water (average WUCOLS plant factor 0.3) for 75% of the plant area excluding edibles and areas using recycled water; For non–residential areas, install climate adapted plants that require occasional, little or no summer water (average WUCOLS plant factor 0.3) for 100% of the plant area excluding edibles and areas using recycled water;

(B) A minimum three inch (3″) layer of mulch shall be applied on all exposed soil surfaces of planting areas except in turf areas, creeping or rooting groundcovers, or direct seeding applications where mulch is contraindicated.

(4) Turf shall comply with all of the following:

(A) Turf shall not exceed 25% of the landscape area in residential areas, and there shall be no turf in non–residential areas;

(B) Turf shall not be planted on sloped areas which exceed a slope of 1 foot vertical elevation change for every 4 feet of horizontal length;

(C) Turf is prohibited in parkways less than 10 feet wide, unless the parkway is adjacent to a parking strip and used to enter and exit vehicles. Any turf in parkways must be irrigated by sub–surface irrigation or by other technology that creates no overspray or runoff.

(5) Irrigation systems shall comply with the following:

(A) Automatic irrigation controllers are required and must use evapotranspiration or soil moisture sensor data and utilize a rain sensor.

(B) Irrigation controllers shall be of a type which does not lose programming data in the event the primary power source is interrupted.

(C) Pressure regulators shall be installed on the irrigation system to ensure the dynamic pressure of the system is within the manufacturers recommended pressure range.

(D) Manual shut–off valves (such as a gate valve, ball valve, or butterfly valve) shall be installed as close as possible to the point of connection of the water supply.

(E) All irrigation emission devices must meet the requirements set in the ANSI standard, ASABE/ICC 802–2014. "Landscape Irrigation Sprinkler and Emitter Standard," All sprinkler heads installed in the landscape must document a distribution uniformity low quarter of 0.65 or higher using the protocol defined in ASABE/ICC 802–2014.

(F) Areas less than ten (10) feet in width in any direction shall be irrigated with subsurface irrigation or other means that produces no runoff or overspray.

(6) For non–residential projects with landscape areas of 1,000 sq. ft. or more, a private submeter(s) to measure landscape water use shall be installed.

(c) At the time of final inspection, the permit applicant must provide the owner of the property with a certificate of completion, certificate of installation, irrigation schedule and a schedule of landscape and irrigation maintenance.

HISTORY

1. New Appendix D filed 9–15–2015; operative 9–15–2015. Exempt from OAL review and submitted to OAL for printing only pursuant to Governor's Executive Order No. B–29–15 (4–1–2015) (Register 2015, No. 38).

B23

STAFF REPORT TO THE PLANNING COMMISSION
FOR CONSIDERATION AT THE MEETING OF JANUARY 16, 2019

Prepared by: Zoe Merideth, Associate Planner

Approved by: Alexis Morris, Planning Manager

Date: January 11, 2019

Subject: **Nelson Ranch Unit 3 Design Review**

RECOMMENDATION

It is recommended that the Planning Commission approve AR-18-10, subject to the conditions in the attached resolution.

REQUEST

The applicant, K. Hovnanian Homes, requests Design Review approval of architecture for the third phase of the Nelson Ranch subdivision, known as Riverview at Monterra.

ENVIRONMENTAL

Pursuant to the California Environmental Quality Act (CEQA) and City implementing procedures, this project has been deemed to be consistent with CEQA Article 12, Section 15182 (a), Residential Projects Pursuant to a Specific Plan, and an additional environmental document is not required per CEQA Article 11, Section 15162.

BACKGROUND

The Nelson Ranch residential development, now known as Monterra, contains 369 lots ranging in size from a minimum of 6,000 square feet to a maximum of 23,000 square feet. The project consists of three phases, Stonetree, Oakridge, and Riverview. The entire project's Use Permit was approved by the Planning Commission on May 19, 2004. On October 13, 2004, the Design Review Board (DRB) approved landscaping and other common area improvements such as retaining and sound walls. The home architecture for the first two phases, Stonetree and Oakridge, was reviewed and approved by the DRB on May 24, 2006. On June 27, 2007, the DRB approved front yard landscape plans and two subdivision monument signs for Stonetree and Oakridge. On February 9, 2010, the City Council approved modifications to the home sizes of the Stonetree product to better meet market demands at the time. Subsequently, Stonetree and Oakridge were constructed at Monterra. The physical improvements are in place for all 100 lots of the third phase, Riverview, and the developer, K. Hovnanian, is seeking design review approval for the architecture of the homes.

ANALYSIS

Issue #1: Project Overview

The Monterra development contains 369 lots on 145 acres. Over 11 acres are passive open space and 30 acres are used for street right-of-way. The Monterra development currently features two built products – Stonetree and Oakridge, which were built by Standard Pacific Homes. Each product was built with four models, each with a variety of elevations. During the construction of the first two phases, the grading, streets, sidewalks, infrastructure, and common area landscaping were constructed and installed for all three phases. The applicant is proposing a third product, Riverview, which integrates into the existing products. Through the course of the design review process, the applicant revised the submittal in order to meet the City's Citywide Design Guidelines and to create a seamless transition between the existing products and the proposed product.

Issue #2: Architecture

The applicant is proposing four home plans ranging in size from 2,029 to 2,796 square feet of base livable space. The plans have been plotted on each lot, as indicated in Attachment B. Each plan includes three architectural styles, Spanish, Cottage, and

Italianate (see Attachment C for floor plans and elevations). Additionally, the color and materials binder will be provided at the Planning Commission meeting for review.

The applicant has incorporated a number of design features that help integrate this product with the two, existing products. First, when available, the third car garage has been proposed to be a side loaded garage. This helps to maintain the two-car garage design with a side load garage of the existing products and meet the Citywide Design Guidelines that require garage massing be reduced and not dominate the streetscape. Second, the applicant has proposed roof lines that mirror the previous products. For example, the proposed Italianate elevations feature hip roofs, similar to Stonetree's French Country elevations. Third, the tall, prominent entry features proposed by the applicant on many plans mirror the existing two story entry features found on some of the existing homes. Last, the proposed color palette features neutral earth tones, with pops of green-grays and brown-reds that coordinate with the existing colors and materials in the development.

The applicant is proposing standard garage doors without glazing for all elevations. As an option, homeowners would be able to purchase a garage door with glazing. The glazing option is shown in some of the elevations throughout the plan set. The glazing would be rectangular panels at the top of the garage door, with a different rectangular pattern for each elevation.

Each proposed plan is discussed individually and in more detail below.

Plan 5031

Plan 5031 is a one-story home with four bedrooms, two baths, and a two-car garage, with the option to add a single-car side load garage or en suite bedroom and bathroom. If the optional features are selected, then similar windows and details from the front of the elevation will be placed on the front of the garage/en suite to maintain the architectural look of the home. An optional covered patio in the rear of the home is also available. A summary of the three proposed architectural styles is provided below:

- Spanish: An arched entry way with decorative gables and a deep-set window with shutters are featured on this elevation.
- Cottage: An arched entryway and soffit with a prominent gable and stone detailing are found on the front elevation. The roof plan includes varied rooflines.
- Italianate: The design features a varied, hipped roof. The front elevation includes a portico with decorative stone veneer that is carried through the front elevation and wraps around the right elevation to the fence line. Staff has included a recommended condition of approval that the height of the stone veneer be lowered to the height of the front window, as in Plan 5033, to give a more balanced look to the elevation and better match the stone veneer on the existing homes in the development.

Plan 5033

Plan 5033 is a one-story home with four bedrooms, two baths, and a two-car garage, with the option to add a single-car side load garage to the front of the home as in Plan 5031. Another option removes a bedroom and replaces it with an independent living unit that is discussed in Issue #4 below. An optional covered patio is also available.

Proposed architectural styles:

- Spanish: An arched entry way with decorative gables and a deep-set window with shutters are featured on this elevation.
- Cottage: An arched portico and soffit with a prominent gable and stone detailing are included on the front elevation. The plan includes varied rooflines with a dormer above the garage, which breaks up the massing of the roof.
- Italianate: The design features a prominent, hipped roof. The front elevation includes a portico with decorative stone veneer that is carried through the front elevation and wraps around the right elevation.

Plan 4571

Plan 4571 is a two-story home with four bedrooms and 2.5 baths as a base, with options up to six bedrooms and four bathrooms. The plan features a three car garage. Options also allow for a covered patio or covered patio with a covered balcony to be added to the rear elevation. For homes that do not take advantage of the balcony options, staff has included a recommended condition of approval that the rear single window shutter be removed and the outside windows on the right side of the elevation have shutters added to them instead.

Proposed architectural styles:

- Spanish: The front elevation features a prominent entry way and a gabled roof. Decorative shutters have been added to the front elevation for greater detail.
- Cottage: An arched entryway and soffits add interest to the elevation. Dormers with shutters have been added above the garage. Stone veneer frames the two-car garage and the side load garage.
- Italianate: The design features a hipped roof. The front elevation includes decorative stone veneer at the entryway that is carried through the front elevation and wraps around the side elevations.

Plan 5036

Plan 5036 is a two-story home with four bedrooms and 2.5 baths as a base, with options up to five bedrooms and 3.5 bathrooms. The plan features a two car garage. Options also allow for a covered patio or covered patio with a covered balcony to be added to the rear elevation.

Proposed architectural styles:

- Spanish: The front elevation features a prominent entry way and a gabled roof. Decorative shutters have been added to the front elevation for greater detail.
- Cottage: An arched, stone portico extends past the front elevation, which is continued on the lower portion of the entire front elevation.
- Italianate: The design features a prominent hipped roof. The front elevation includes a prominent, rounded, stone portico and decorative veneer along the front elevation.

Issue #3: Landscaping

Each plan features a distinct front yard landscaping plan. All plans include at least one tree and multiple medium and small shrubs. The front yard plant palette is composed of drought-tolerant species, and, in order to meet current irrigation standards, does not include lawn as the previous phases do. Nevertheless, many of the proposed trees and shrubs are the same as ones used in the previous phases, including: crape myrtle, Chinese pistache, strawberry tree, rosemary, lantana, olive, and heavenly bamboo. The use of the same species across all phases will help to provide a cohesive neighborhood design. In compliance with Antioch Municipal Code, front yards would not be planted with any trees smaller than 15 gallons, any shrubs smaller than five gallons, or any ground cover smaller than one gallon. The landscaping would not be planted in a way that interferes with clear visions zones as required by the Antioch Municipal Code. In order to comply with the Use Permit conditions of approval and the City's Street Tree list, staff has included a recommended condition of approval that the tree species' planted in the Tree Planting Easement should be selected from the City's Street Tree list.

Fencing details were not included in the submittal. Staff has added a recommended condition of approval that the fencing match the fencing of the other phases to create a cohesive design. Details of the fencing should be included with the building permit submittal.

Issue #4: Optional Accessory Dwelling Unit (Plan 5033)

Plan 5033 features an option that would create a junior accessory dwelling unit (junior ADU) within the main residence. In Antioch Municipal Code § 9-5.3805, a junior ADU is defined as "an accessory dwelling unit that is no more than 500 square feet in size and contained entirely within an existing single-family structure. A junior accessory dwelling unit may include separate sanitation facilities, or may share sanitation facilities with the existing structure." The proposed option has two variations: one with a solid wall separating the unit from the rest of the house and one with a door connecting the unit to the rest of the house. The units feature an exterior entrance, bedroom, bathroom, sitting area, and small kitchen area. Like all ADUs, the owners of homes with these units would be required to live in either the main residence or the junior ADU. Per the zoning code, a junior ADU requires processing an Administrative Use Permit (AUP) prior to the issuance of a building permit. The Conditions of Approval for the AUP would be recorded

against the property so future owners would be aware of the conditions, including the owner-occupancy requirements. As these homes would be production housing, K. Hovnanian Homes would process the AUPs prior to the construction of these homes as buyers purchase these options.

ATTACHMENTS

A: Resolution
B: Plotted Plans
C: Floor Plans and Elevations
D: Landscape Plans

ATTACHMENT "A"

RESOLUTION NO. 2019-**

RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF ANTIOCH APPROVING THE DESIGN REVIEW OF PHASE 3 OF THE NELSON RANCH DEVELOPMENT, KNOWN AS RIVERVIEW AT MONTERRA

WHEREAS, the City received a request from K. Hovnanian Homes for Design Review approval of Phase 3 of the Nelson Ranch Development, known as Riverview at Monterra (AR-18-10), for the development of 100 single-family homes and landscaping generally located at Goode Street and Wild Horse Road (multiple APNs); and,

WHEREAS, Pursuant to the California Environmental Quality Act (CEQA) and City implementing procedures, this project has been deemed to be consistent with CEQA Article 12, Section 15182 (a), Residential Projects Pursuant to a Specific Plan, and an additional environmental document is not required per CEQA Article 11, Section 15162; and,

WHEREAS, the Planning Commission on January 16, 2019, duly held a hearing, received and considered evidence, both oral and documentary; and,

NOW THEREFORE BE IT RESOLVED that the Planning Commission of the City of Antioch does hereby **APPROVE** the design review of Phase 3 of the Nelson Ranch Development, known as Riverview at Monterra, consisting of 100 single-family homes and landscaping generally located at Goode Street and Wild Horse Road (multiple APNs), subject to the following conditions:

A. GENERAL CONDITIONS

1. The applicant shall defend, indemnify, and hold harmless the City in any action brought by a third party to challenge the land use entitlement. In addition, if there is any referendum or other election action to contest or overturn these approvals, the applicant shall either withdraw the application or pay all City costs for such an election.

2. The project shall be implemented as indicated on the application form and accompanying materials provided to the City and in compliance with the Antioch Municipal Code, or as amended by the Planning Commission.

3. No building permit will be issued unless the plan conforms to the site plan as approved by the Planning Commission and the standards of the City.

4. This approval expires two years from the date of approval (expires January 16, 2021), unless a building permit has been issued and construction has diligently commenced thereon and has not expired, or an extension has been approved by the Zoning Administrator. Requests for extensions must be received in writing with

the appropriate fees prior to the expiration of this approval. No more than one one-year extension shall be granted.

5. City staff shall inspect the site for compliance with conditions prior to final inspection approval.

6. No permits or approvals, whether discretionary or mandatory, shall be considered if the applicant is not current on fees, reimbursement payments, and any other payments that are due.

B. CONSTRUCTION CONDITIONS

1. The use of construction equipment shall be restricted to weekdays between the hours of 8:00 a.m. and 5:00 p.m., or as approved in writing by the City Manager. Requests for alternative days/time may be submitted in writing to the City Engineer for consideration.

2. The project shall be in compliance with and supply all the necessary documentation for AMC 6-3.2: Construction and Demolition Debris Recycling.

3. Building permits shall be secured for all proposed construction associated with this facility, including any interior improvements not expressly evident on the plans submitted.

C. FIRE REQUIREMENTS

1. All requirements of the Contra Costa County Fire Protection District shall be met.

D. FEES

1. The applicant shall pay all fees as required by the City Council.

E. PROPERTY MAINTENANCE

1. The site shall be kept clean of all debris (boxes, junk, garbage, etc.) at all times.

2. No signs shall be installed on this site without prior City approval.

3. All chipped, broken and/or cracked curb, gutter, sidewalk and driveway approaches, whether existing or generated during construction, shall be repaired by applicant and approved by the City Engineer.

F. LANDSCAPING

1. Landscaping shall show immediate results and be permanently maintained.

2. The fifty-foot (50') clear vision sight triangle zone shall be shown on the landscape plans at all corner lots, per City code. No object greater than 3' in height shall appear in this zone.

G. PROJECT SPECIFIC CONDITIONS

1. This design review approval applies to the construction of 100 single-family homes, landscaping, fencing, and other associated improvements as depicted on the plans submitted to the City of Antioch on December 6, 2018.

2. All conditions of the planned development (PD-95-4) and use permit (UP-04-1) shall be complied with.

3. Prior to issuance of the 1st building permit, the applicant shall submit fencing plans, including elevations, that show fences that are substantially similar to the fencing in the other two project phases, for review and approval by the City of Antioch Community Development Department.

4. Prior to the issuance of the 1st building permit, the landscape plans shall be updated to show each lot having one street tree, from the City's Street Tree list, planted within the lot's Tree Planting Easement. Additionally, the tree shall comply with Planning Commission Resolution 2004-26 condition 48 E, which states, in relevant part, that the tree shall be planted no closer than 10 feet from the sidewalk and outside the clear vision zone.

5. The location and number of any additional gang mailboxes shall be reviewed and approved by the Engineering Division and the United States Post Office

6. All plans shall have the design treatments on the front elevations wrapped to the fence line on each side, at a minimum.

7. No two like elevations of the same plan shall be constructed side by side. Building plot plans submitted by the applicant shall indicate front elevation style (i.e. Spanish, Cottage, Italianate) to insure that no two identical plans are built adjacent to one another on the same street.

8. The houses shall feature rain gutters and downspouts, with the downspouts and runoff of water adjacent to the foundations being collected into an underground conduit and discharged as approved by the City Engineer. The design and location of these gutters and downspouts shall be complementary to the house that they are installed upon, as approved by staff.

9. On Plan 5031 Italianate option, the height of the stone veneer shall be lowered to match the height of the bottom of the front window, in the same manner as Plan 5033.

10. The rear elevations of Plan 4571 that do not take advantage of the covered balcony shall have the single window shutter removed. Instead, the windows on the right side of the elevation shall have shutters added to the two outer windows.

11. The right elevation, as labeled on the plans, of Plan 4571 shall not face a street.

12. Windows on all elevations shall be articulated with built out trim and sills, as required for the design, that are compatible with the architectural style of the building.

13. All driveways shall align with their respective driveway approaches. Existing and relocated (as necessary) driveway approaches shall be ADA compliant and shown on the landscape and civil improvement plans.

14. Maximum driveway slopes shall be thirteen percent (13%).

15. Any corner ramps that are not ADA compliant shall be replaced with corner ramps that are ADA compliant prior to the issuance of the building permit for the adjacent lot.

16. Stop signs, with street name signs attached, and stop bars shall be located at all minor streets, as approved by the City Engineer & per City standards.

* * * * * * * *

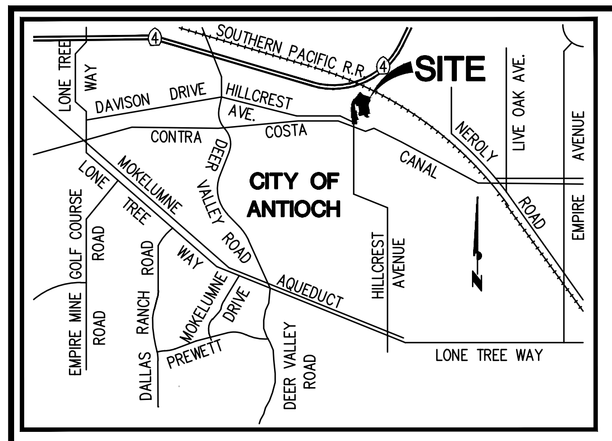
I HEREBY CERTIFY the foregoing resolution was duly adopted by the Planning Commission of the City of Antioch, County of Contra Costa, State of California, at a regular meeting of said Planning Commission held on the 16th day of January, 2019, by the following vote:

AYES:
NOES:
ABSENT:
ABSTAIN:

_____
FORREST EBBS,
SECRETARTY TO THE
PLANNING COMMISSION

ATTACHMENT "B"

K HOVNANIAN HOMES
NELSON RANCH 3
SUBDIVISION 8851
DEVELOPMENT PLAN
CITY OF ANTIOCH, CALIFORNIA



VICINITY MAP
NOT TO SCALE

NOTES

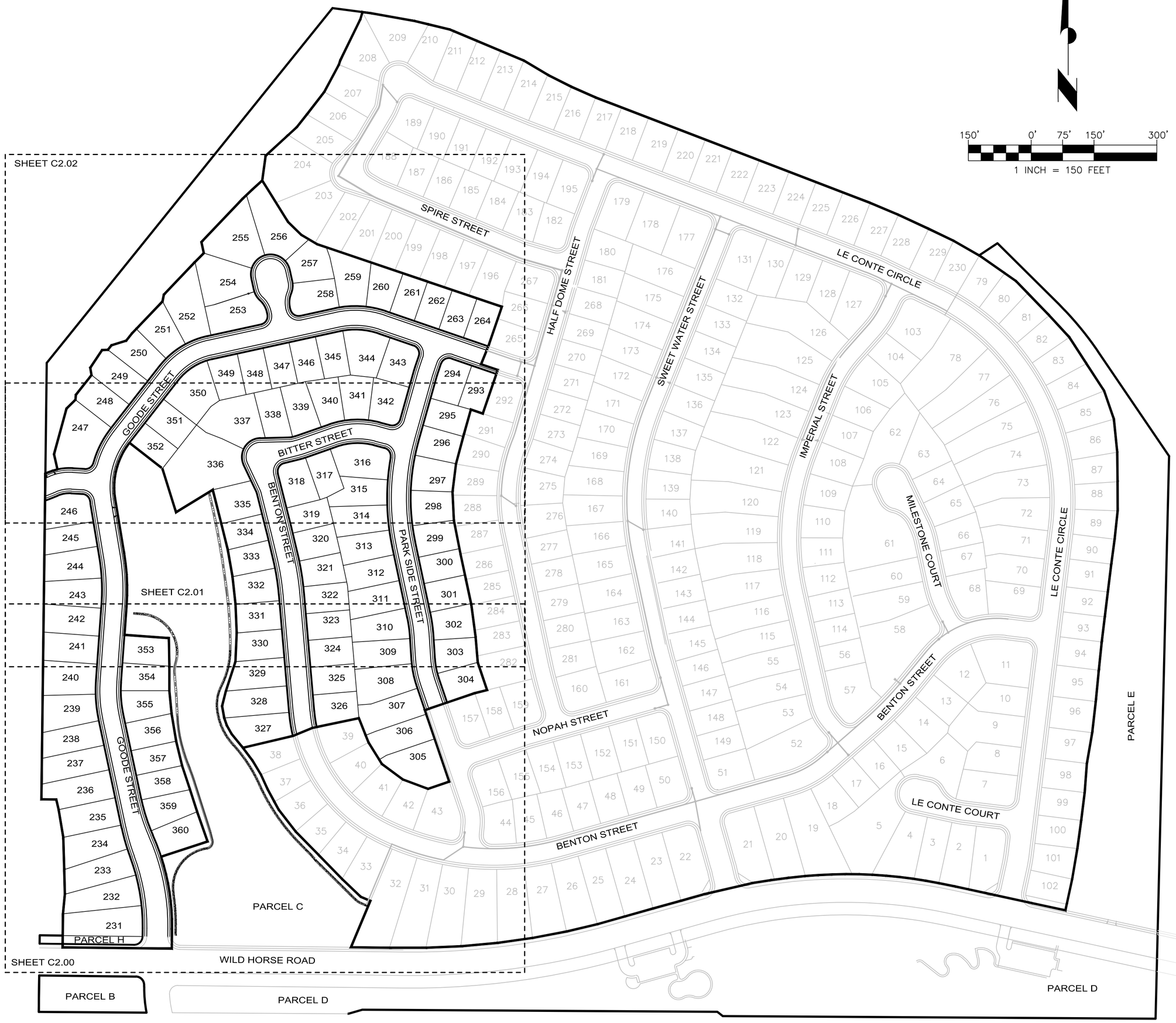
OWNER: K. HOVNANIAN HOMES
3721 DOUGLAS BLVD, SUITE 150
ROSEVILLE, CA 95661
916-945-5400

ENGINEER: dk CONSULTING
1931 SAN MIGUEL DRIVE, SUITE 100
WALNUT CREEK, CA 94596
925-932-6868
PROJECT MANAGER: STACEY GELLA

EXISTING ZONE: PD

NUMBER OF LOTS: 100

ON-STREET PARKING SPACES: 153
NUMBER OF DESIGNATED RV LOTS: 29



150' 0' 75' 150' 300'
1 INCH = 150 FEET

LEGEND

PROJECT BOUNDARY	
RIGHT OF WAY	
ADJACENT PROPERTY LINE	
EASEMENT LINE	
SETBACK	
RETAINING WALL	
PAD LIMIT	
MAJOR CONTOUR LINE	
MINOR CONTOUR LINE	
LOT NUMBER	232
WATER SERVICE	M
SEWER CLEANOUT	CO
DESIGNATED RV LOT	RV

PLAN	FLOORS	LIVABLE SF	BED DN	BED UP	ESUITE	GARAGE
5031	1	2,029	4	N/A	OPT (+215 SF)	2 (OPT 1-CAR)
5033	1	2,302	4	N/A	N/A	2 (OPT 1-CAR)
4571	2	2,599	0 (OPT 1)	4 (OPT 5)	OPT (+84 SF)	3 (2F; 1S)
5036	2	2,796	1 (OPT 2)	3 (OPT 4)	OPT (+420 SF)	2

B1

SHEET INDEX

NO.	DATE	DESCRIPTION	dk AGENCY

PRELIMINARY NOT FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER STACEY D. GELLA No. C 75679 DATE: CIVIL STATE OF CALIFORNIA

K HOVNANIAN HOMES
NELSON RANCH 3
DEVELOPMENT PLAN
CITY OF ANTIOCH
CALIFORNIA

CONSULTING
ENGINEERING - PLANNING - SURVEYING
1931 SAN MIGUEL DR., #100
WALNUT CREEK, CA 94596
PHONE: (925) 932-6868
PACIFICNETWORKS.COM

DATE: 10-10-18
SCALE: 1"=150'
DESIGNED BY: AMD
REVIEWED BY: SDG

COVER SHEET

C1.00
PAGE 1 OF 8

dk JOB NO: 10-1005-40

B2

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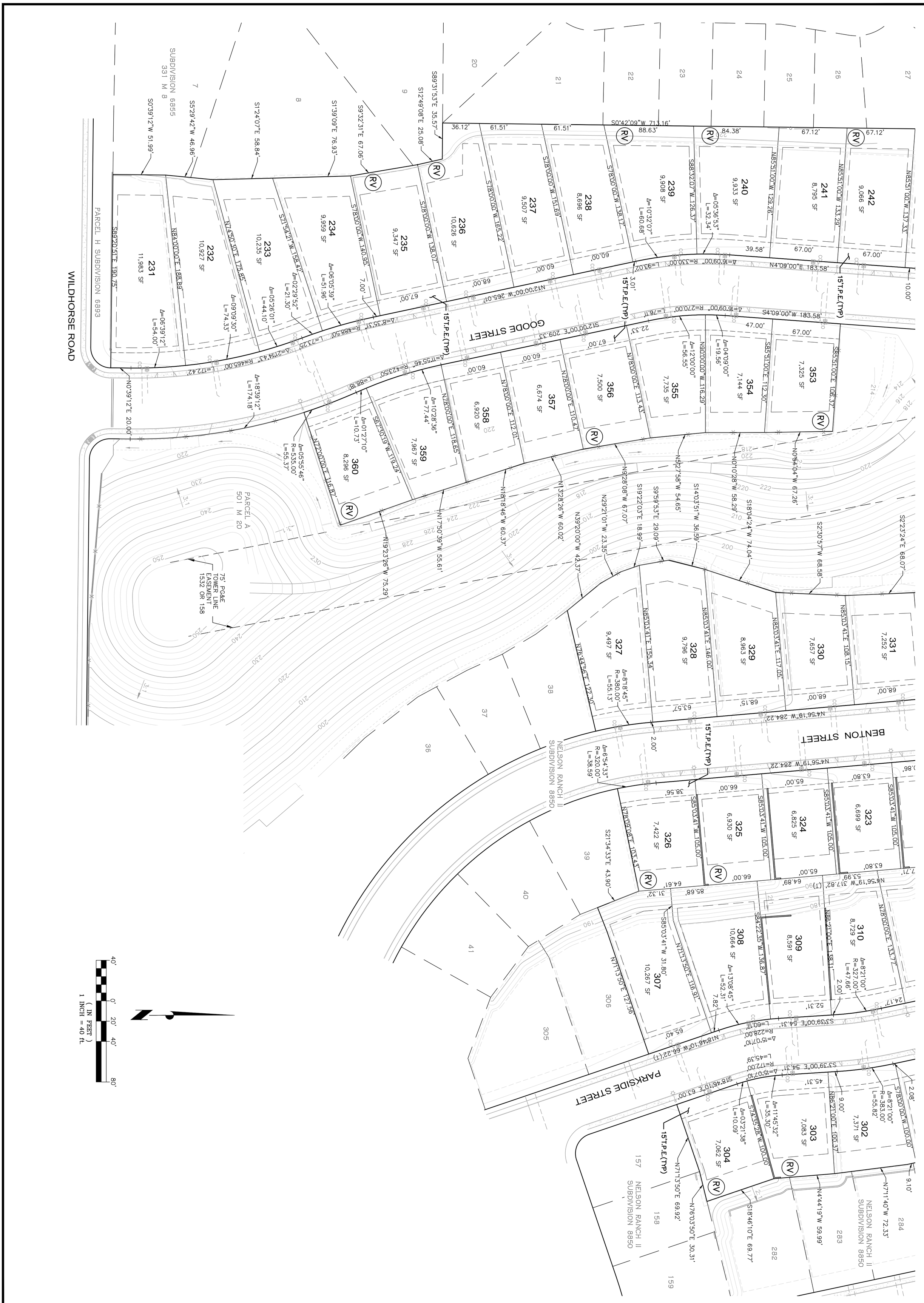

SHEET C2.01

SHEET C2.01

dk JOB NO: 10-1005-40

C2.00
PAGE 2 OF 8

SITE PLAN

SCALE: 1"=40'
DESIGNED BY: AMD
REVIEWED BY: SDG
DATE: 10-10-18

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1931 SAN MIGUEL DR., #100
WALNUT CREEK, CA 94596
PHONE: (925) 932-6868
DKCONSULTINGINC.COM

K HOVNANIAN HOMES

NELSON RANCH 3

DEVELOPMENT PLAN

CITY OF ANTIOCH CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
STACEY D. GELLA
No. C 75679
DATE:
CIVIL
STATE OF CALIFORNIA

NO.	DATE	DESCRIPTION	dk	AGENCY

PRELIMINARY NOT FOR CONSTRUCTION

B3

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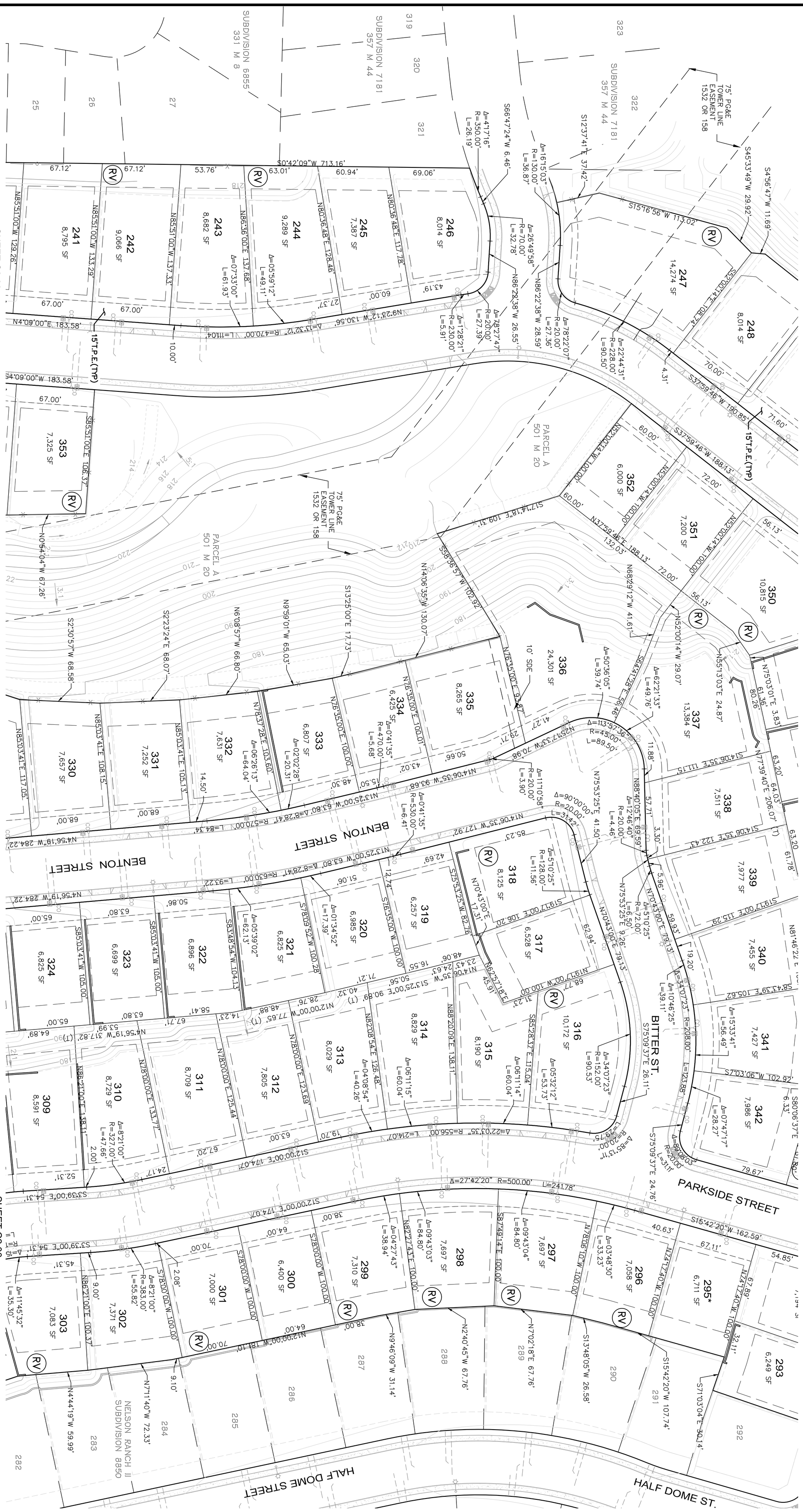

NO.	DATE	DESCRIPTION	dk	AGENCY

PRELIMINARY NOT FOR CONSTRUCTION

C2.01
PAGE 3 OF 8

SITE PLAN

SCALE: 1"=40'
DESIGNED BY: AMD
REVIEWED BY: SDG
DATE: 10-10-18

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DKCONSULTINGINC.COM

K HOVNANIAN HOMES
NELSON RANCH 3
DEVELOPMENT PLAN
CITY OF ANTIOCH CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
STACEY D. GELLA
No. C 75679
DATE:_____
CIVIL
STATE OF CALIFORNIA

dk JOB NO: 10-1005-40

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NELSON RANCH 3

K HOVNANIAN HOMES

DEVELOPMENT PLAN

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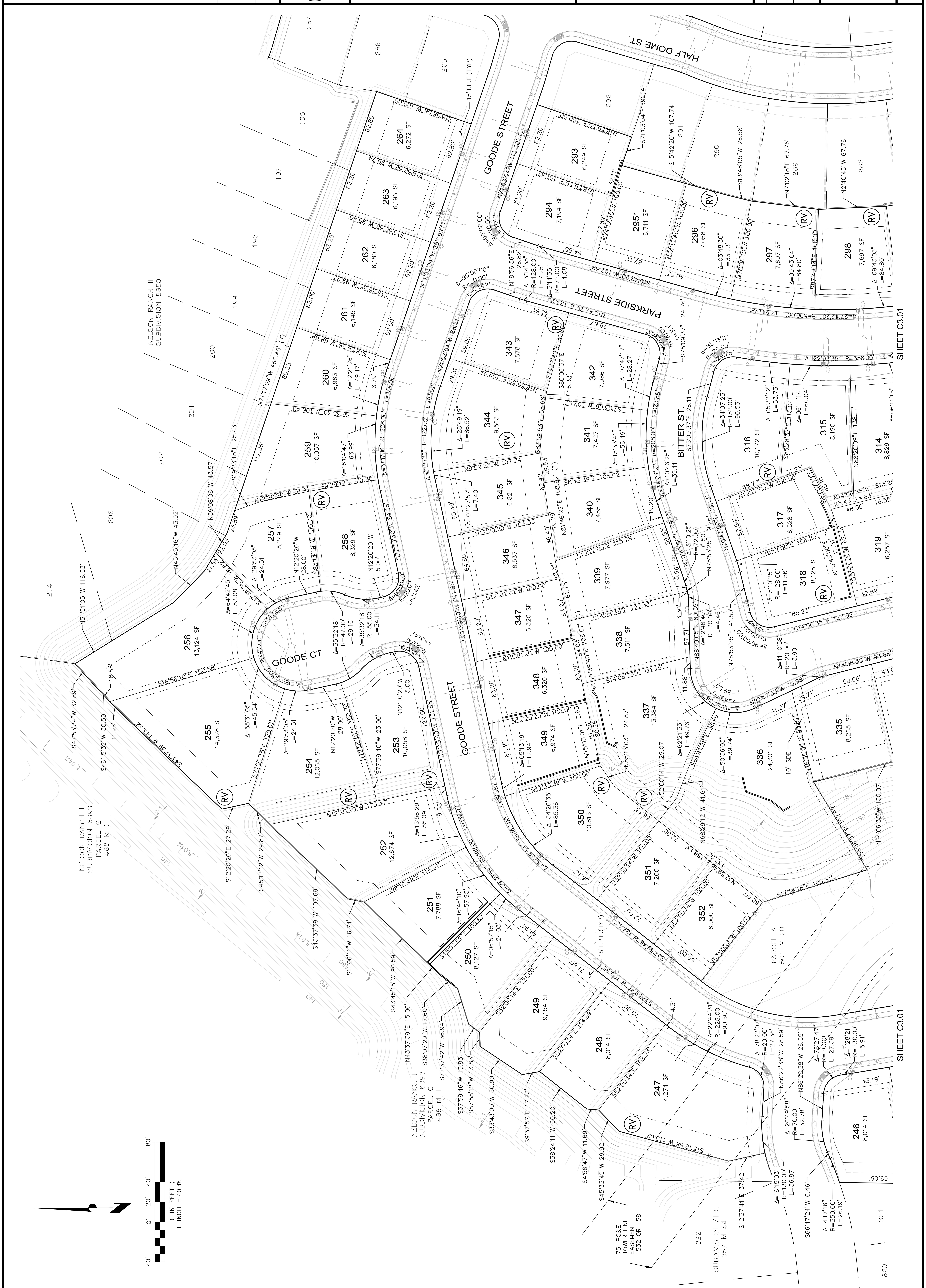
DATE: 10-10-18
SCALE: 1"=40'
DESIGNED BY: AMD
REVIEWED BY: SDG

SITE PLAN

C2.02
PAGE 4 OF 8

dk JOB NO: 10-1005-40



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B4

B5

F:\PROJECTS\2001\011005-40 KHOV\DWG\DEVELOPMENT PLAN\05-FIT LIST-0105.DWG 10/10/2018

5.0' INTERIOR SIDE YARD SETBACK
20.0' FRONT YARD SETBACK
20.0' REAR YARD SETBACK
5.0' INTERIOR SIDE YARD SETBACK
10.0' STREET SIDE YARD SETBACK
RIGHT OF WAY

PLAN 4571 2 STORY (4BR-3CAR) NO BALCONY

PLAN 4571 2 STORY (4BR-3CAR)

PLAN 5031 1 STORY (4BR-2CAR)

PLAN 5031 1 STORY (4BR-3CAR)

PLAN 5033 1 STORY (4BR-2CAR)

PLAN 5033 1 STORY (4BR-3CAR)

PLAN 5036 2 STORY (4BR-2CAR)

PARKING SPACE (1 PER LOT)

EXTRA PARKING SPACES

153 TOTAL ON-STREET PARKING SPACES

SHEET C3.01

SHEET C3.01

C3.00
PAGE 5 OF 8

DEVELOPMENT PLAN

DATE: 10-10-18
SCALE: 1"=40'
DESIGNED BY: AMD
REVIEWED BY: SDG

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1931 SAN MIGUEL DR., #100
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K HOVNANIAN HOMES

NELSON RANCH 3

DEVELOPMENT PLAN

CITY OF ANTIOCH CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
STACEY D. GELLA
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STATE OF CALIFORNIA

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B6

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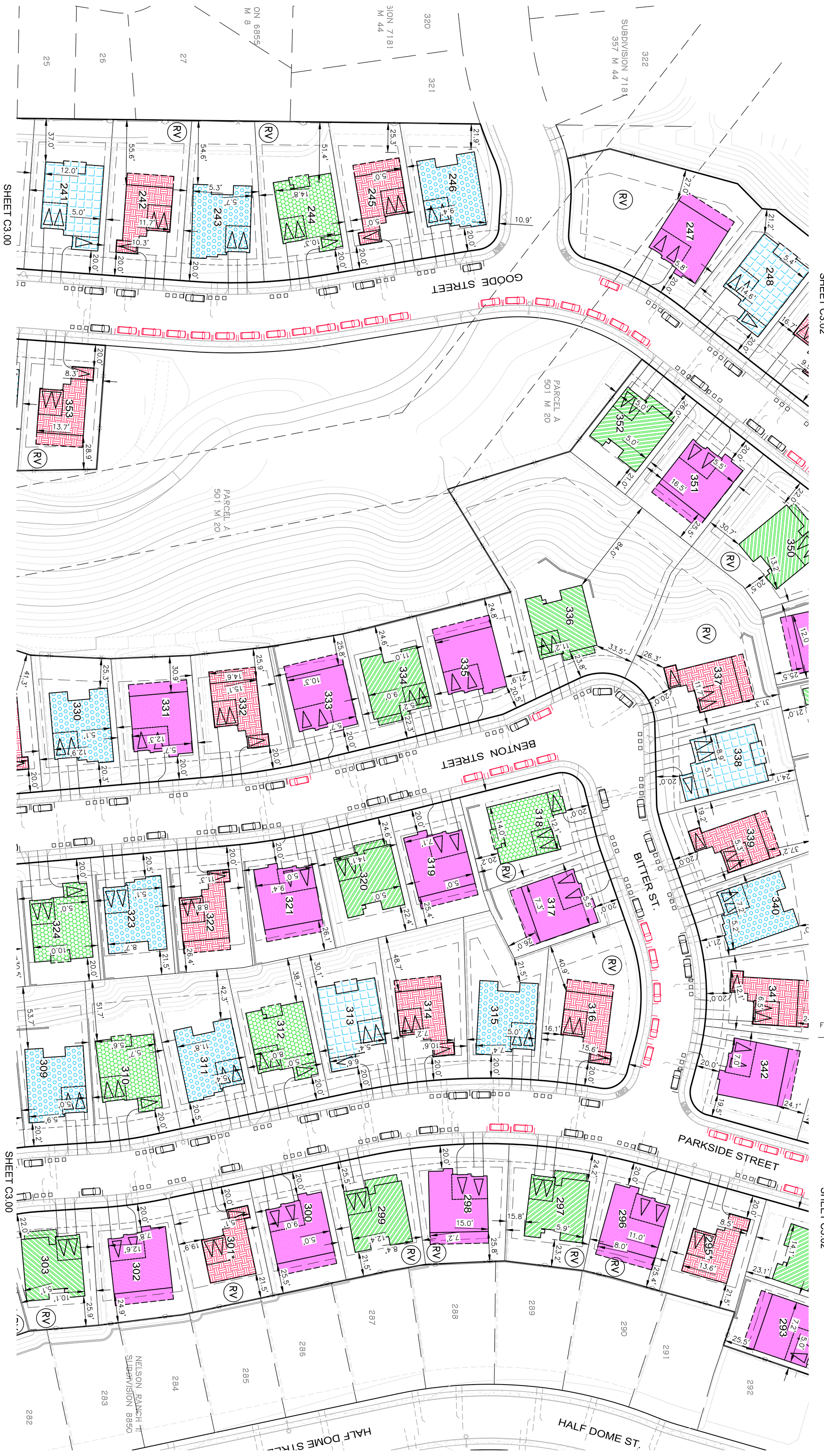

C3.01
PAGE 6 OF 8

DEVELOPMENT PLAN

SCALE: 1"=40'
DESIGNED BY: AMD
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DATE: 10-10-18

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NELSON RANCH 3

DEVELOPMENT PLAN

CITY OF ANTIOCH CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER STACEY D. GELLA No. C 75679 DATE: CIVIL STATE OF CALIFORNIA

NO.	DATE	DESCRIPTION	dk	AGENCY

PRELIMINARY NOT FOR CONSTRUCTION

dk JOB NO: 10-1005-40

B7

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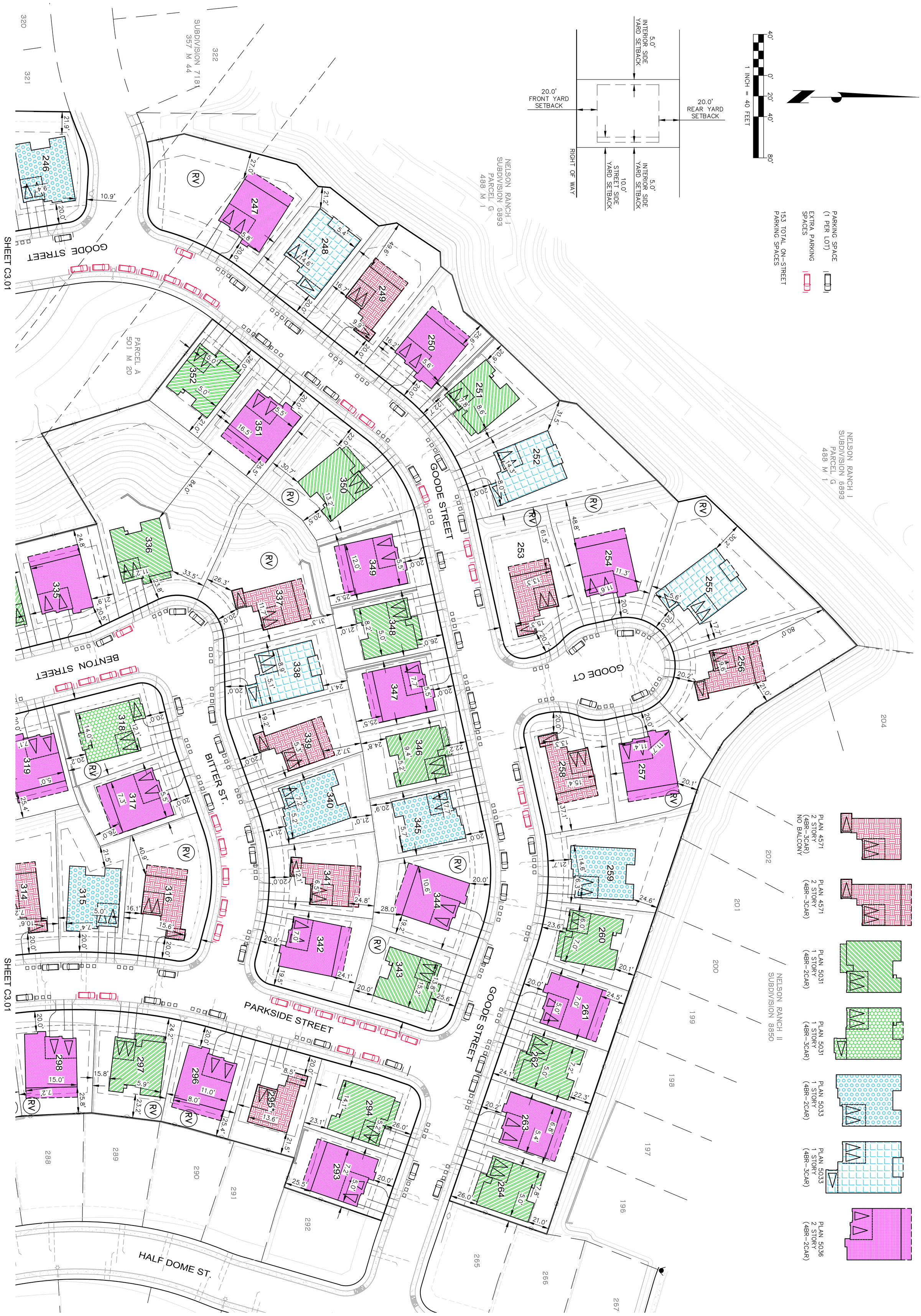

C3.02
PAGE 7 OF 8

DEVELOPMENT PLAN

SCALE: 1"=40'
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REVIEWED BY: SDG
DATE: 10-10-18

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DEVELOPMENT PLAN

CITY OF ANTIOCH CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER STACEY D. GELLA No. C 75679 DATE:_____ CIVIL STATE OF CALIFORNIA

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dk JOB NO: 10-1005-40

PRELIMINARY NOT FOR CONSTRUCTION

B8

F:\PROJECTS\2001\011005-40 KHOV\DWG\DEVELOPMENT PLAN\04-FAR CHART-0105.DWG 10/10/2018

LOT NO	RV	DWY LOC	PLAN NO.	SQUARE FOOTAGE OF BULDING FOOTPRINT	SQUARE FOOTAGE OF LOT	LOT COVERAGE	SQUARE FOOTAGE OF HARDSCAPE (DWY+PATIO)	LANDSCAPE COVERAGE	PLAN 5031 (3-CAR GARAGE)	PLAN 5031 (2-CAR GARAGE)	PLAN 5033 (3-CAR GARAGE)	PLAN 5033 (2-CAR GARAGE)	PLAN 4571 (3-CAR GARAGE)	PLAN 5036
231		R	4571 3-CAR	1,881	11,983	16%	1298	73%					X	X
232		R	4571 3-CAR	1,881	10,927	17%	1250	71%	X				X	X
233		L	5031 3-CAR	2,749	10,235	27%	869	65%	X				X	X
234		L	5033 3-CAR	3,084	9,959	31%	993	59%	X				X	X
235	RV	L	4571 3-CAR	1,881	9,347	20%	1236	67%	X				X	X
236	RV	R	5033 3-CAR	3,084	10,626	29%	924	62%	X				X	X
237		L	4571 3-CAR	1,881	9,507	20%	1236	67%	X				X	X
238		R	5031 3-CAR	2,749	8,696	32%	857	59%	X				X	X
239	RV	L	5033 3-CAR	3,084	9,908	31%	918	60%	X				X	X
240	RV	R	4571 3-CAR	1,881	9,933	19%	1236	69%	X				X	X
241		L	5033 3-CAR	3,084	8,795	35%	933	54%	X				X	X
242	RV	R	4571 3-CAR	1,881	9,066	21%	1236	66%	X				X	X
243		R	5033 2-CAR	2,831	8,682	33%	474	62%	X				X	X
244	RV	L	4571 3-CAR	1,881	9,289	20%	1252	66%	X				X	X
245		R	5033 3-CAR	3,084	7,387	42%	923	46%	X				X	X
246		L	5031 3-CAR	2,749	8,014	34%	847	55%	X				X	X
247	RV	L	5036 2-CAR	2,518	14,274	18%	1126	74%	X				X	X
248		L	5033 3-CAR	3,084	8,014	38%	922	50%	X				X	X
249		L	4571 3-CAR	1,881	9,154	21%	1235	66%	X				X	X
250		L	5036 2-CAR	2,518	8,127	31%	1123	55%	X				X	X
251		L	5031 2-CAR	2,472	7,788	32%	621	60%	X				X	X
252		L	5033 3-CAR	3,084	12,674	24%	914	68%	X				X	X
253	RV	R	4571 3-CAR	1,881	10,058	19%	1167	70%	X				X	X
254	RV	L	5036 2-CAR	2,518	12,065	21%	1110	70%	X				X	X
255	RV	R	5033 3-CAR	3,084	14,328	22%	892	72%	X				X	X
256		L	4571 3-CAR	1,881	13,124	14%	1183	77%					X	X
257		R	5036 2-CAR	2,518	8,249	31%	1101	56%		X				X
258	RV	L	4571 3-CAR	1,881	8,329	23%	1164	63%	X	X	X			X
259		R	5033 2-CAR	2,831	10,057	28%	479	67%	X	X		X		X
260		L	5031 2-CAR	2,472	6,963	36%	637	55%	X	X				X
261		R	5036 2-CAR	2,518	6,145	41%	1117	41%	X	X				X
262		L	5031 2-CAR	2,472	6,180	40%	648	50%	X	X				X
263		R	5036 2-CAR	2,518	6,196	41%	1115	41%	X	X				X
264		L	5031 2-CAR	2,472	6,272	39%	677	50%	X	X				X
293		L	5036 2-CAR	2,518	6,249	40%	1118	42%	X	X				X
294		L	5031 2-CAR	2,472	7,194	34%	677	56%	X	X				X
295		R	4571 3-CAR	2,831	6,711	42%	706	47%	X	X				X
296	RV	L	5036 2-CAR	2,518	7,058	36%	1116	49%	X	X				X
297	RV	R	5031 2-CAR	2,472	7,697	32%	663	59%	X	X				X
298	RV	L	5036 2-CAR	2,518	7,697	33%	1130	53%	X	X				X
299	RV	R	5031 2-CAR	2,472	7,310	34%	674	57%	X	X				X
300		R	5036 2-CAR	2,518	6,400	39%	1108	43%	X	X				X
301	RV	R	4571 3-CAR	1,881	7,000	27%	706	63%	X	X			X	X
302		R	5036 2-CAR	2,518	7,371	34%	1109	51%	X	X				X
303	RV	L	5031 2-CAR	2,472	7,083	35%	612	56%	X	X				X
304	RV	L	5036 2-CAR	2,518	7,062	36%	1119	48%	X	X				X
307		R	5033 3-CAR	3,084	10,267	30%	925	61%	X	X	X	X	X	X
308		L	5031 3-CAR	2,749	10,664	26%	847	66%	X	X	X	X	X	X
309		R	5033 2-CAR	2,831	8,591	33%	476	62%	X	X	X	X	X	X
310		L	5031 3-CAR	2,749	8,729	31%	887	58%	X	X	X	X	X	X
311		R	5033 2-CAR	2,831	8,709	33%	481	62%	X	X	X	X	X	X
312		L	5031 3-CAR	2,749	7,805	35%	855	54%	X	X	X	X	X	X
313		R	5033 3-CAR	3,084	8,029	38%	921	50%	X	X	X	X	X	X
314		L	4571 3-CAR	1,881	8,829	21%	1233	65%	X	X	X	X	X	X
315		R	5033 2-CAR	2,831	8,190	35%	463	60%	X	X	X	X	X	X
316	RV	L	4571 3-CAR	1,881	10,172	18%	1233	69%	X	X	X	X	X	X
317		R	5036 2-CAR	2,518	6,528	39%	1115	44%	X	X	X	X	X	X
318	RV	L	5031 3-CAR	2,749	8,125	34%	847	56%	X	X	X	X	X	X
319		L	5036 2-CAR	2,518	6,257	40%	1126	42%	X	X	X	X	X	X
320		R	5031 2-CAR	2,472	6,985	35%	655	55%	X	X	X	X	X	X
321		L	5036 2-CAR	2,518	6,825	37%	1112	47%	X	X	X	X	X	X
322		R	4571 3-CAR	1,881	6,896	27%	1237	55%	X	X	X	X	X	X
323		R	5033 2-CAR	2,831	6,699	42%	481	51%	X	X	X	X	X	X
324		R	5031 3-CAR	2,749	6,825	40%	857	47%	X	X	X	X	X	X
325	RV	R	5036 2-CAR	2,518	6,930	36%	1093	48%	X	X	X	X	X	X
326	RV	L	5033 2-CAR	2,831	7,422	38%	487	55%	X	X	X	X	X	X
327		R	4571 3-CAR	1,881	9,497	20%	1234	67%	X	X	X	X	X	X
328		L	5033 3-CAR	3,084	9,796	31%	921	59%	X	X	X	X	X	X
329		L	4571 3-CAR	1,881	8,963	21%	1236	65%	X	X	X	X	X	X
330		L	5033 2-CAR	2,831	7,657	37%	478	57%	X	X	X	X	X	X
331		L	5036 2-CAR	2,518	7,252	35%	1114	50%	X	X	X	X	X	X
332		L	4571 3-CAR	1,881	7,631	25%	1253	59%	X	X	X	X	X	X
333		L	5036 2-CAR	2,518	6,807	37%	1114	47%	X	X	X	X	X	X
334		R	5031 2-CAR	2,472	6,425	38%	616	52%	X	X	X	X	X	X
335		L	5036 2-CAR	2,518	8,265	30%	1131	56%	X	X	X	X	X	X
336		L	5031 2-CAR	2,472	24,301	10%	699	87%					X	X
337	RV	R	4571 3-CAR	1,881	13,384	14%	1205	77%	X	X				X
338		L	5033 3-CAR	3,084	7,511	41%	872	47%	X	X	X	X		X
339		R	4571 3-CAR	1,881	7,977	24%	1234	61%	X	X		X		X
340		L	5033 2-CAR	2,831	7,455	38%	471	56%	X	X				X
341		R	4571 3-CAR	1,881	7,427	25%	1228	58%	X	X				X
342		L	5036 2-CAR	2,518	7,986	32%	1102	55%	X	X				X
343	RV	R	5031 2-CAR	2,472	7,878	31%	671	60%	X	X				X
344	RV	L	5036 2-CAR	2,518	9,563	26%	1182	61%	X	X				X
345		R	5033 2-CAR	2,831	6,821	42%	473	52%	X	X				X
346		L	5031 2-CAR	2,472	6,537	38%	617	53%	X	X				X
347		R	5036 2-CAR	2,518	6,320	40%	1115	43%	X	X				X
348		R	5031 2-CAR	2,472	6,320	39%	677	50%	X	X				X
349		R	5036 2-CAR	2,518	6,974	36%	1115	48%	X	X				X
350	RV	L	5031 2-CAR	2,472	10,815	23%	707	71%	X	X				X
351		R	5036 2-CAR	2,518	7,200	35%	1115	50%	X	X				X
352		R	5031 2-CAR	2,472	6,000	41%	677	48%	X	X				X
353	RV	R	4571 3-CAR	1,881	7,325	26%	1236	57%	X	X				X
354		L	5033 2-CAR	2,831	7,144	40%	475	54%	X	X				X
355		R	5031 3-CAR	2,749	7,735	36%	877	53%	X	X				X
356	RV	L	5036 2-CAR	2,518	7,500	34%	1115	52%	X	X				X
357		R	5033 2-CAR	2,831	6,674	42%	499	50%	X	X				X
358		L	4571 3-CAR	1,881	6,920	27%	1236	55%	X	X				X
359		R	5033 3-CAR	3,084	7,967	39%	966	49%	X	X				X
360	RV	L	4571 3-CAR	1,881	8,296	23%	1236	62%	X	X				X

dk JOB NO: 10-1005-40

C4.00
PAGE 8 OF 8

FIT LIST CHART

DESIGNED BY: AMD
REVIEWED BY: SDG

DATE: 10-10-18

CONSULTING
ENGINEERING · PLANNING · SURVEYING
1931 SAN MIGUEL DR., #100
WALNUT CREEK, CA 94596
PHONE: (925) 932-6868
DKCONSULTINGINC.COM

K HOVNANIAN HOMES

NELSON RANCH 3

DEVELOPMENT PLAN

CITY OF ANTIOCH CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
STACEY D. GELLA
No. C 75679
DATE:_____
CIVIL
STATE OF CALIFORNIA

NO.	DATE	DESCRIPTION	dk	AGENCY

PRELIMINARY NOT FOR CONSTRUCTION

ATTACHMENT "C"

October 16, 2018

C1

KHovnanian Homes

RIVERVIEW at MONTERRA

ANTIOCH, CALIFORNIA

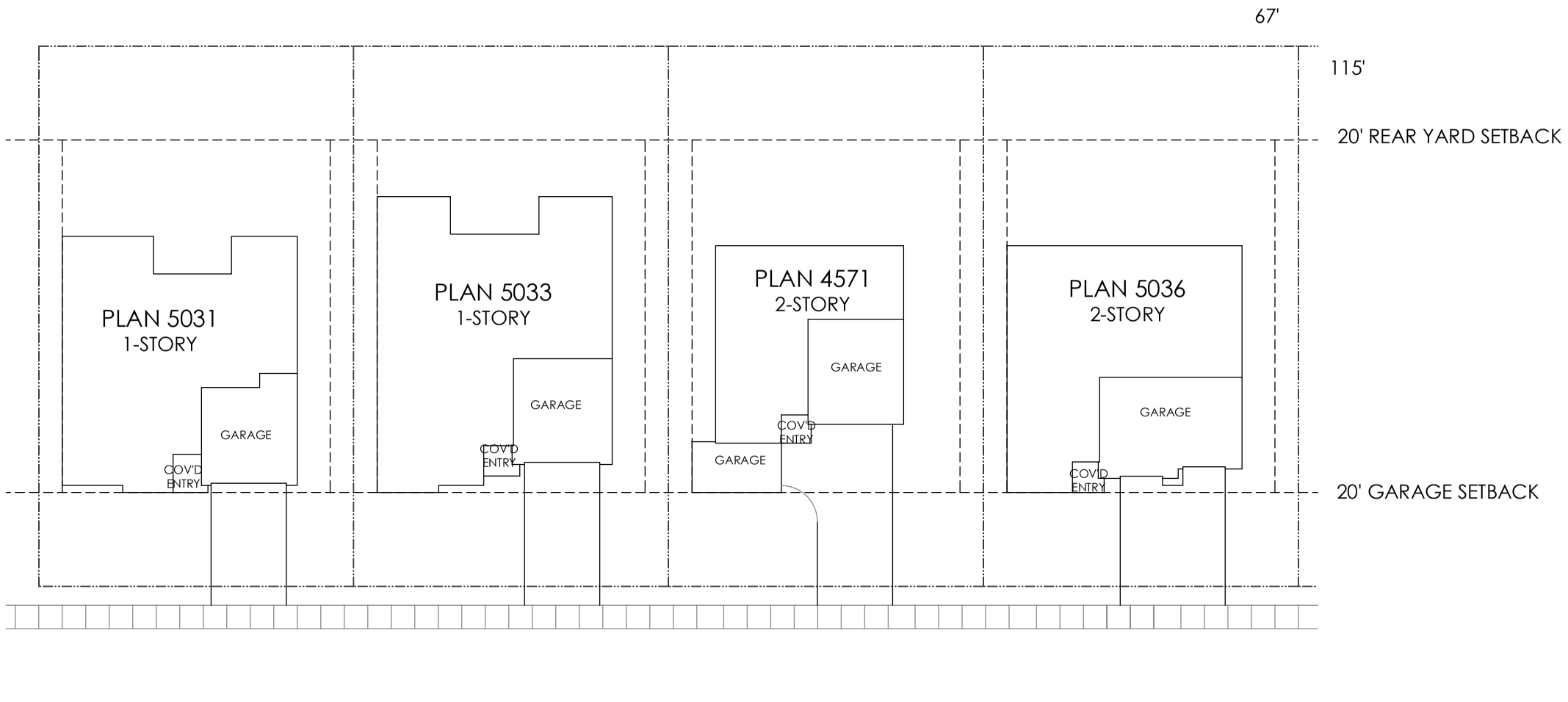
DESIGN REVIEW - 11.01.2018

NCD - Riverview @ Monterra - Antioch, CA

50' Ascend Series *(100) 62' x 110' Lots:*

	Floors	Livable SF	Width	Bed Dn	Bed Up	Bath	Nook	Dining	Den	Loft	Esuite	Esuite+	HOVHub	HOVHall	Laundry	Garage	Patio
Plan 1 *5031*	*1*	*2,029*	*50'*	4	***N/A***	2	1	***N/A***	OPT	***N/A***	OPT (+215 sf)	***N/A***	***N/A***	1	DN	2 (opt 1-car)	*Optional*
Plan 2 *5033*	*1*	*2,302*	*50'*	4	***N/A***	2	1	***N/A***	1	***N/A***	***N/A***	OPT	OPT	1	DN	2 (opt 1-car)	*Optional*
Plan 3 *4571*	*2*	*2,599*	*45'*	0 (opt 1)	4 (opt 5) (Owner's Up)	2.5	1	***N/A***	1	1	OPT (+84 sf)	***N/A***	OPT	***N/A***	UP	3 (2F; 1S)	*Optional*
Plan 4 *5036*	*2*	*2,796*	*50'*	1 (opt 2) (Owner's Dn)	3 (opt 4)	2.5	1	***N/A***	1	1	OPT (+420 sf)	***N/A***	***N/A***	*1*	DN	2	*Optional*

October 16, 2018



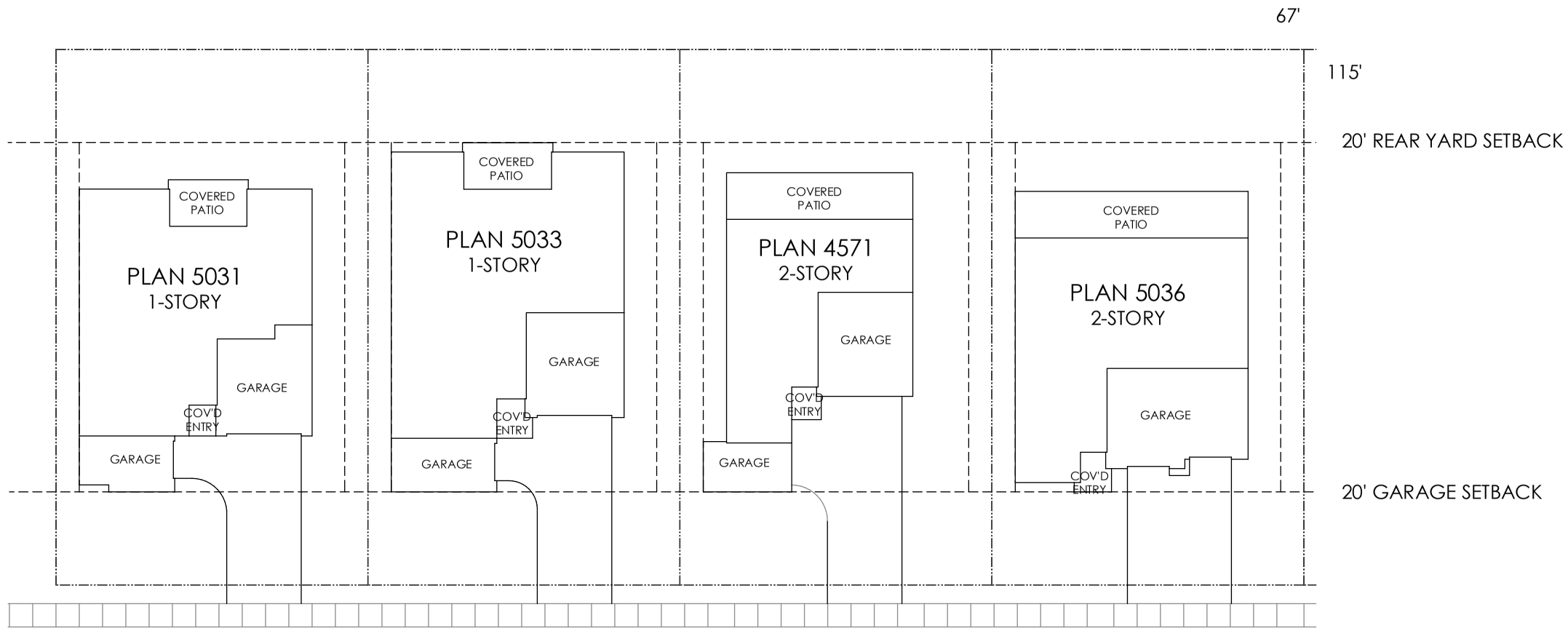
C3

KHovnanian® Homes

FACADE ARTICULATION EXHIBIT
50' PRODUCT | 67x115 LOT SIZE
SCALE: 1" = 20'-0"

RIVERVIEW at MONTERRA
NCD - ANTIOCH, CALIFORNIA
11.01.2018

October 16, 2018



C4

KHovnanian® Homes

FACADE ARTICULATION EXHIBIT
50' PRODUCT | 67x115 LOT SIZE
SCALE: 1" = 20'-0"

RIVERVIEW at MONTERRA
NCD - ANTIOCH, CALIFORNIA
11.01.2018

PLAN 5031
ITALIANATE

PLAN 5033
SPANISH

PLAN 4571
COTTAGE

PLAN 5036
ITALIANATE

PLAN 5033
COTTAGE

C5

October 16, 2018

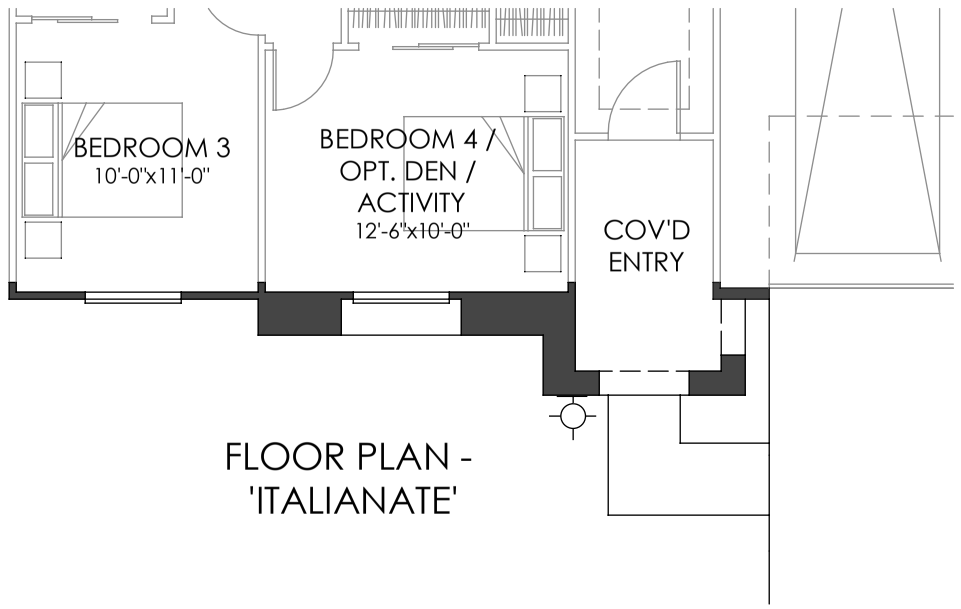
SERIES WIDTH
45' | 50'

LIV. SF:	**2,029**
PLAN WIDTH:	**50'**
PLAN #:	5031
SCALE:	1/8" = 1'-0"
NAME:	PLAN 1

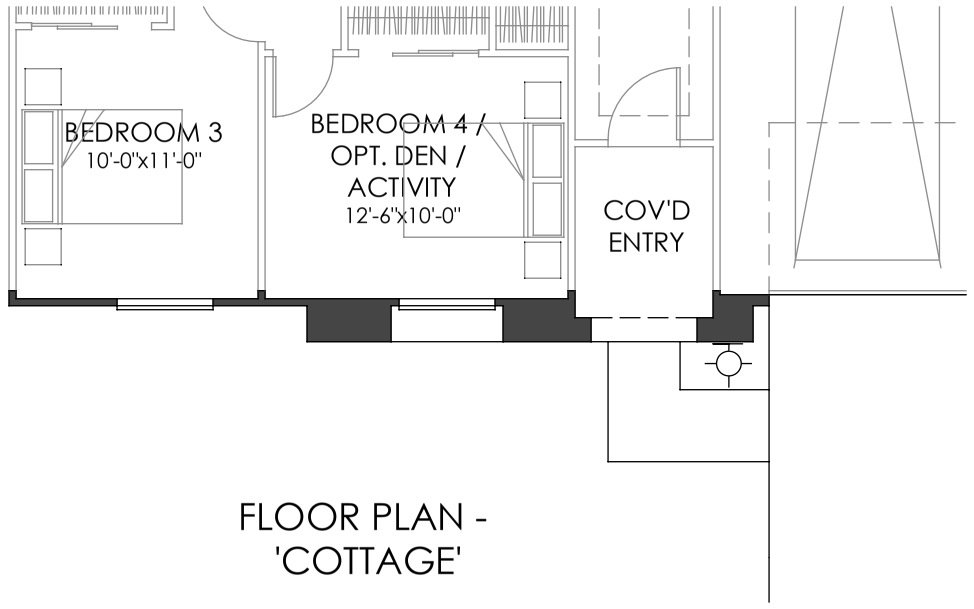
VITAL STATS

BEDROOM	4
BATH	2
CAR	2
CEILING	9'

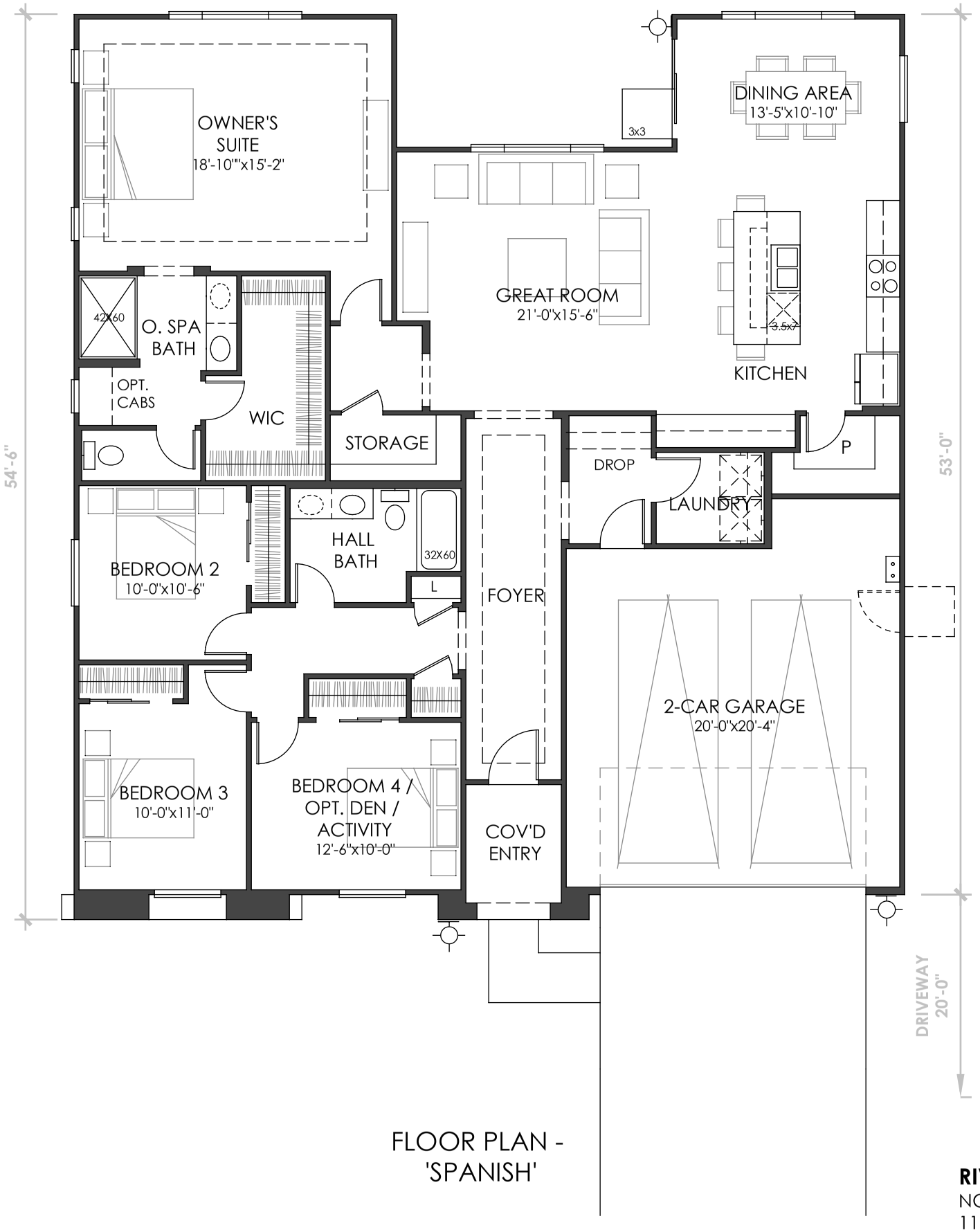
INDICATES EXTERIOR W.P.
COACH LIGHT, PER SPECS.



FLOOR PLAN -
'ITALIANATE'



FLOOR PLAN -
'COTTAGE'

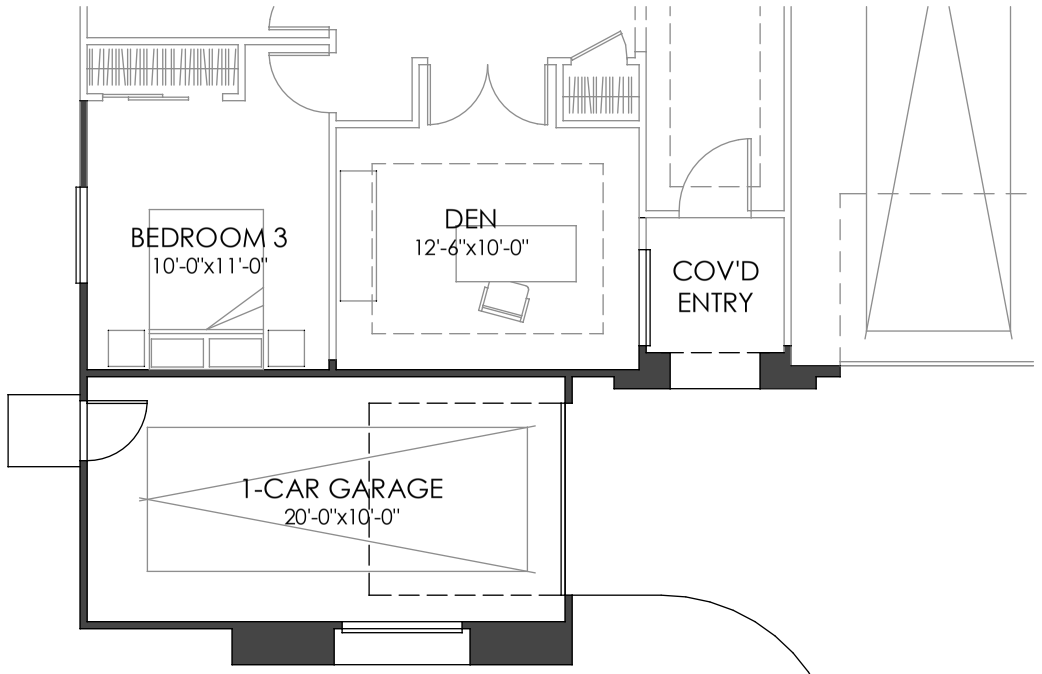


FLOOR PLAN -
'SPANISH'

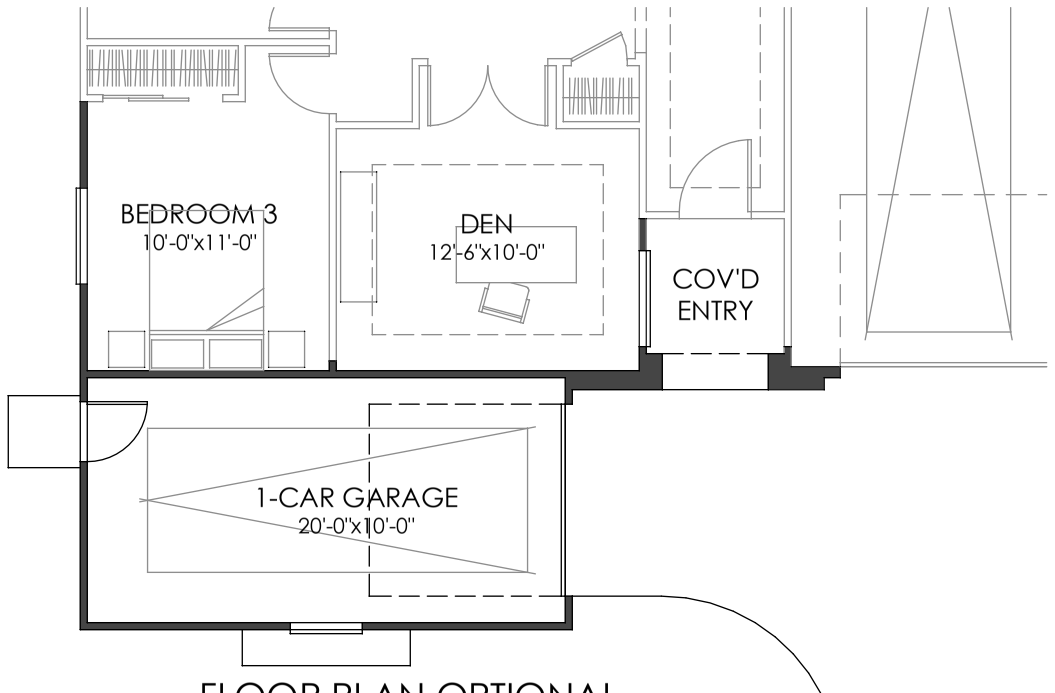
C9

KHovnanian® Homes

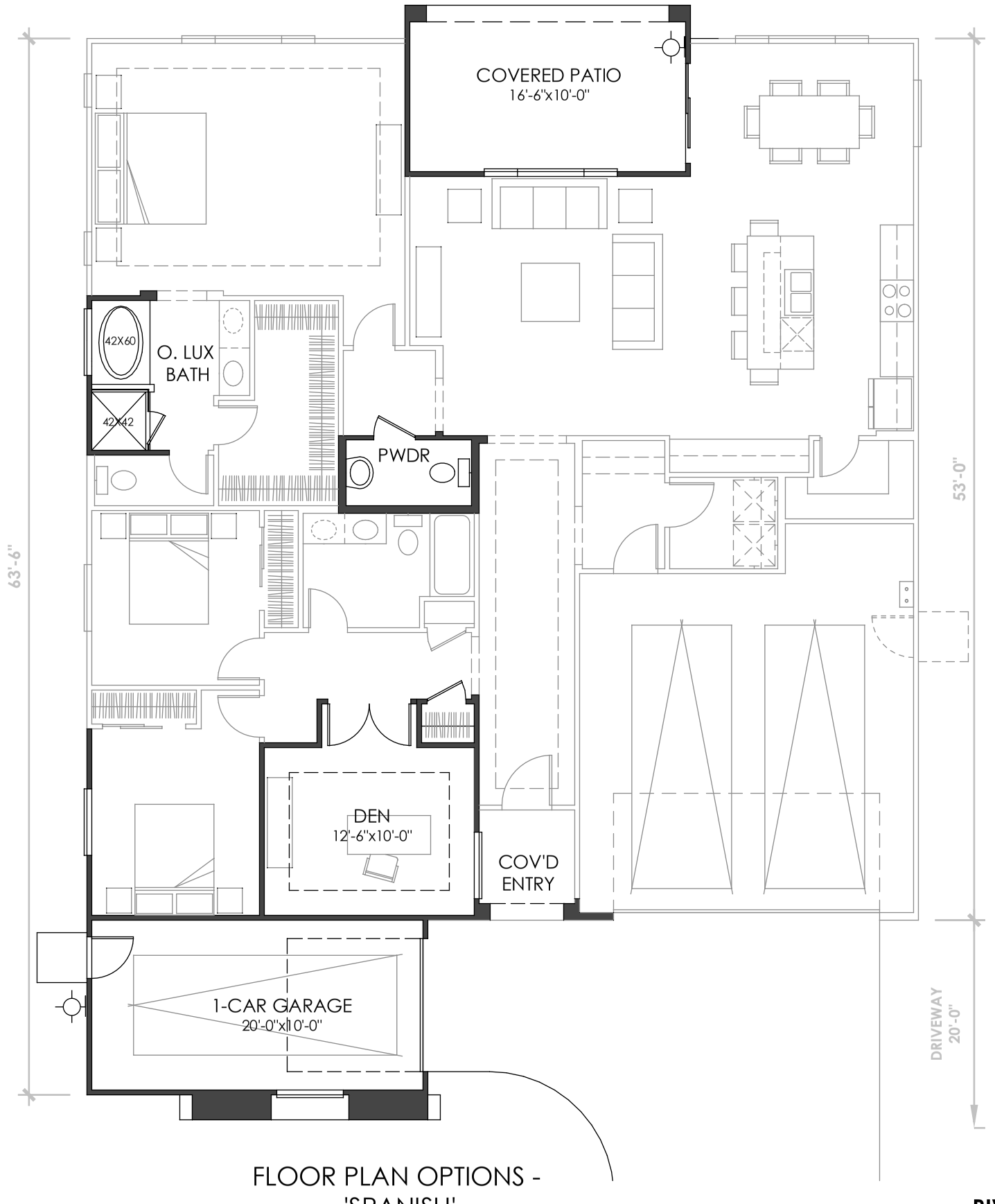
October 16, 2018



FLOOR PLAN OPTIONAL
SIDE ENTRY GARAGE-
'ITALIANATE'
(+215 SQ FT)



FLOOR PLAN OPTIONAL
SIDE ENTRY GARAGE-
'COTTAGE'
(+215 SQ FT)



FLOOR PLAN OPTIONS -
'SPANISH'

SERIES WIDTH
45' | 50'

LIV. SF:	**2,029**
PLAN WIDTH:	**50'**
PLAN #:	5031
SCALE:	1/8" = 1'-0"
NAME:	PLAN 1

VITAL STATS

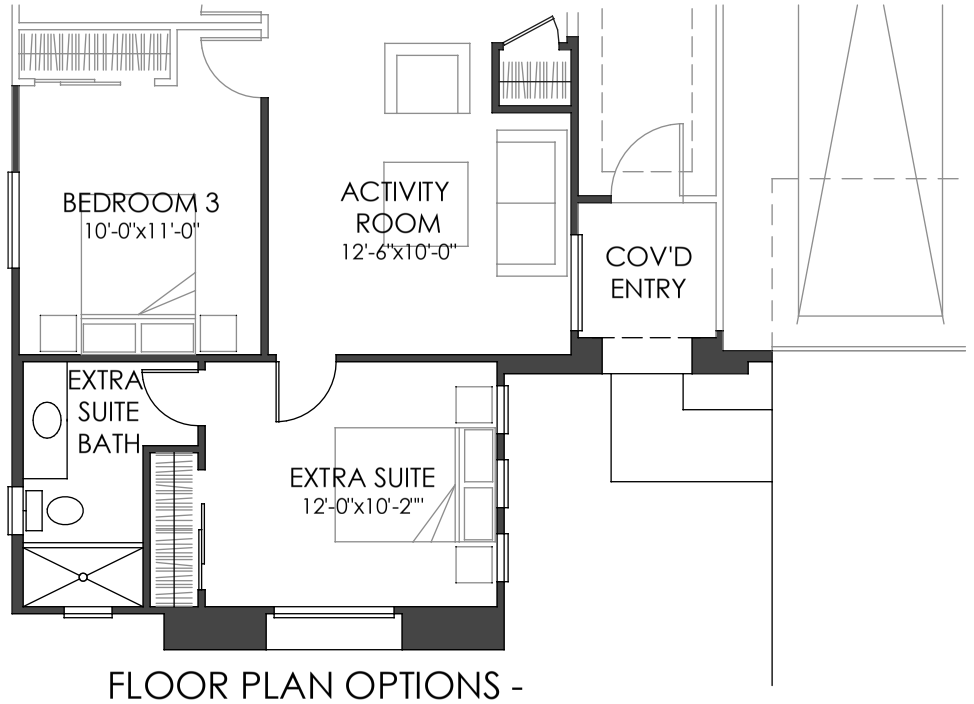
BEDROOM	4
BATH	2
CAR	2
CEILING	9'

INDICATES EXTERIOR W.P.
COACH LIGHT, PER SPECS.

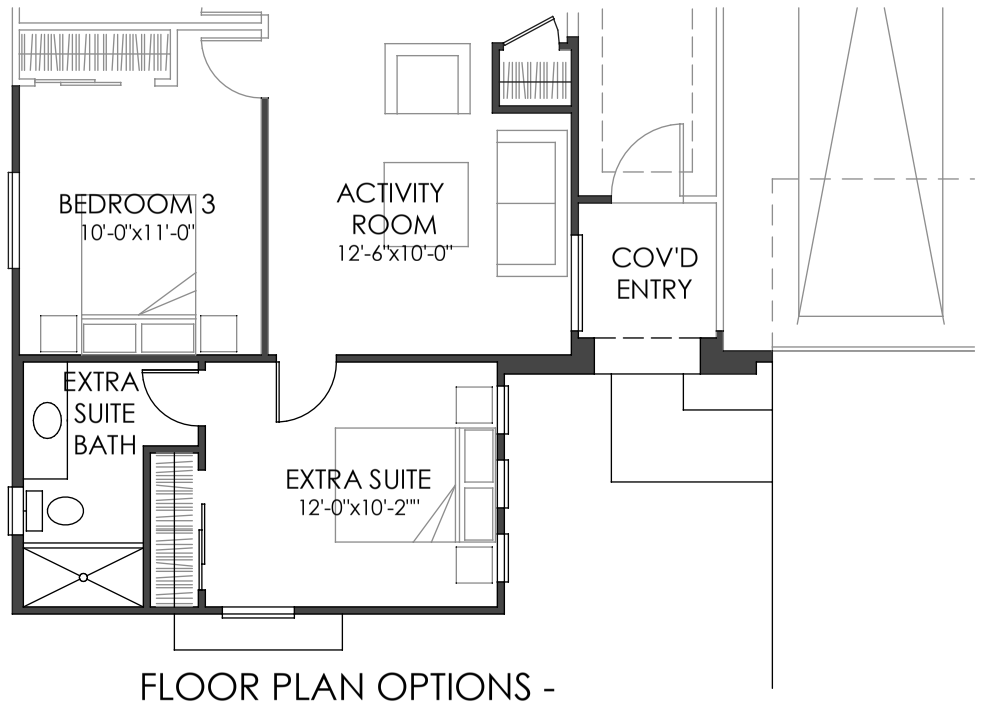
C7

KHovnanian® Homes

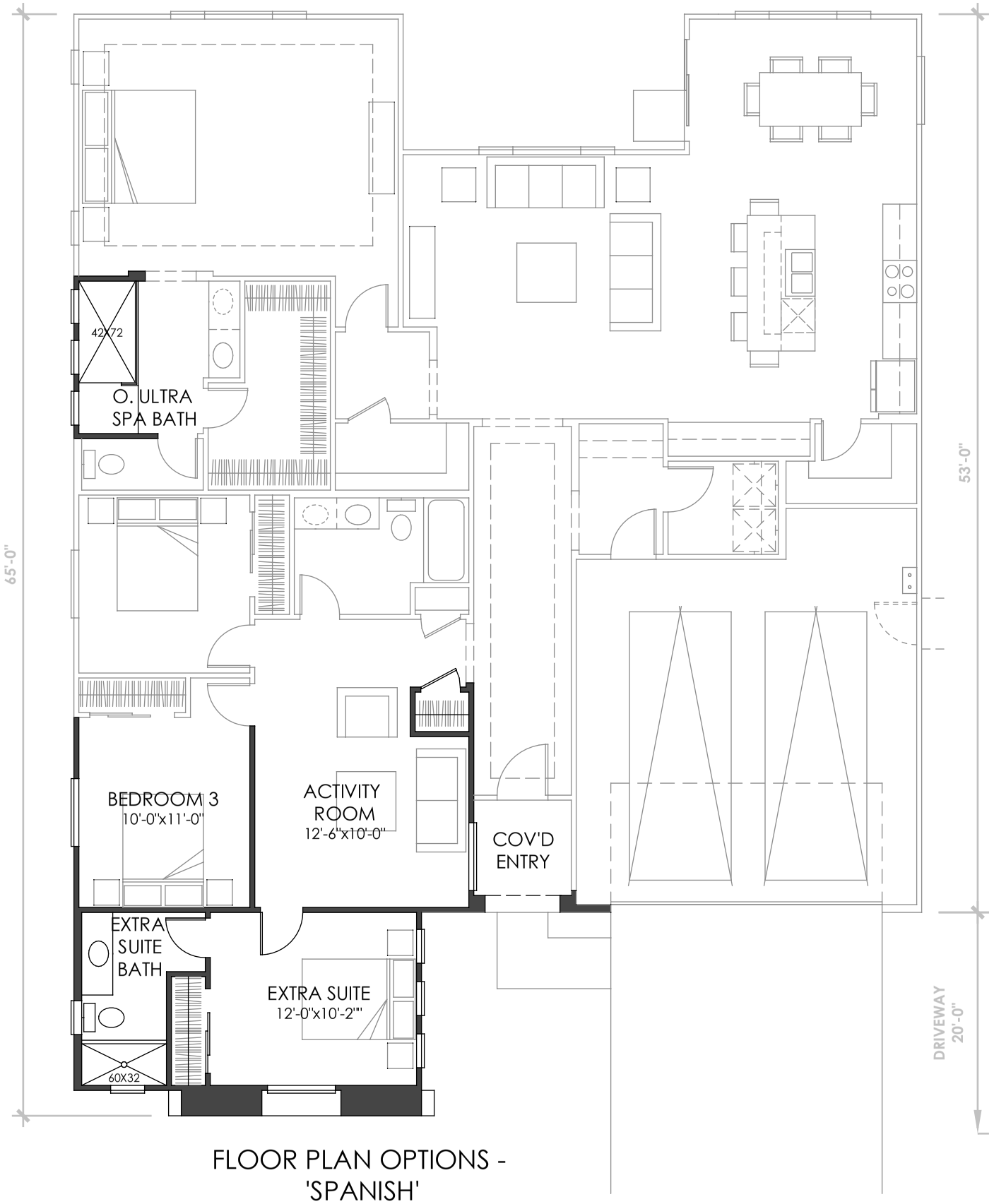
October 16, 2018



FLOOR PLAN OPTIONS -
'ITALIANATE'
(+215 SQ FT)



FLOOR PLAN OPTIONS -
'COTTAGE'
(+215 SQ FT)



FLOOR PLAN OPTIONS -
'SPANISH'
(+215 SQ FT)

SERIES WIDTH
45' | 50'

LIV. SF:	**2,029**
PLAN WIDTH:	**50'**
PLAN #:	5031
SCALE:	1/8" = 1'-0"
NAME:	PLAN 1

VITAL STATS

BEDROOM	4
BATH	2
CAR	2
CEILING	9'

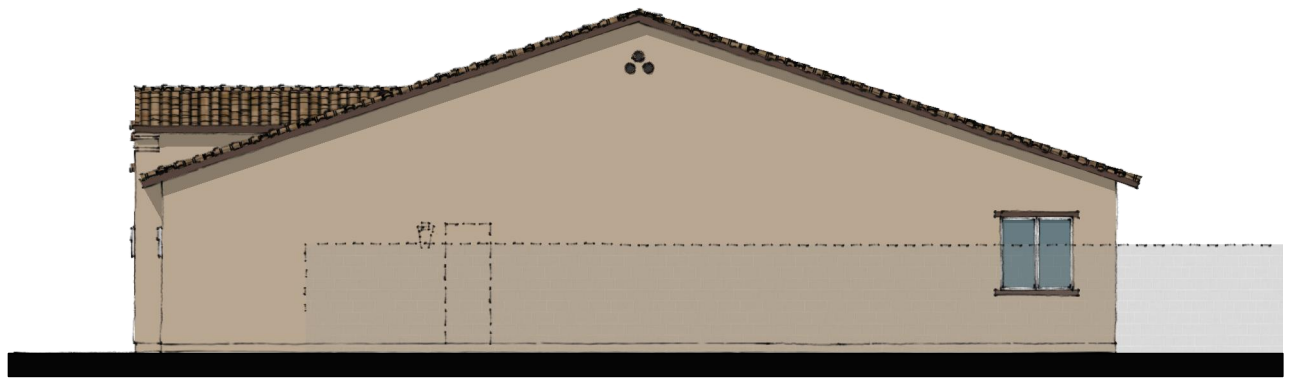
INDICATES EXTERIOR W.P.
COACH LIGHT, PER SPECS.

C8

KHovnanian® Homes

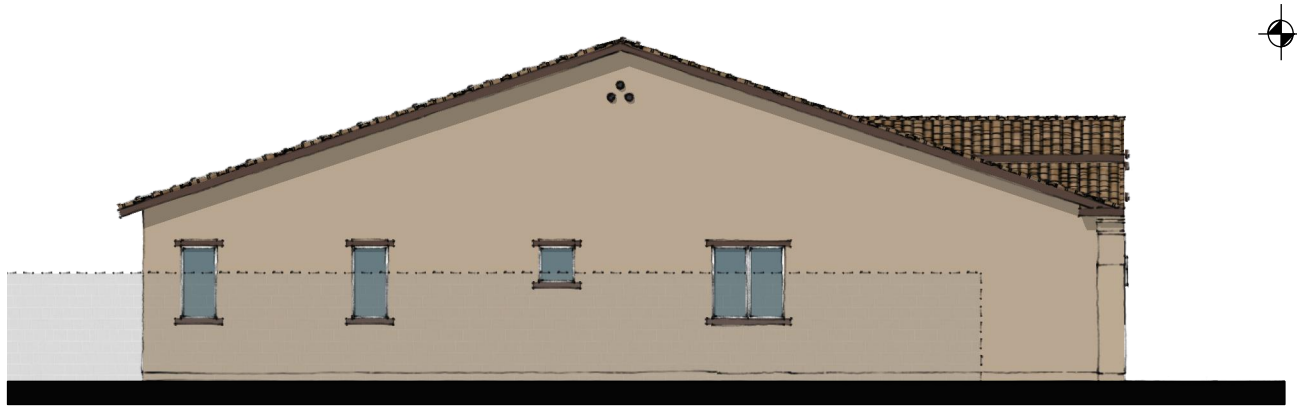
October 16, 2018

'SPANISH'
FRONT VIEW: N.T.S.



RIGHT ELEVATION
SCALE: 3/32" = 1'-0"

REAR ELEVATION
SCALE: 3/32" = 1'-0"



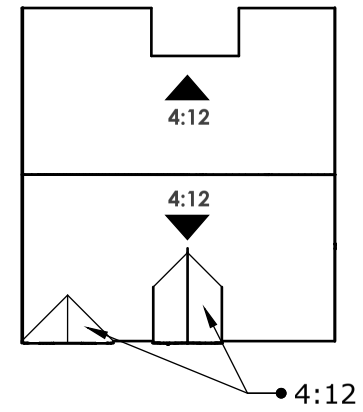
LEFT ELEVATION
SCALE: 3/32" = 1'-0"

T.O. RIDGE
19'-1"

FRONT ELEVATION
SCALE: 3/32" = 1'-0"

SERIES WIDTH
50'

LIV. SF:	**2,029 SF**
PLAN WIDTH:	**50'**
PLAN #:	5031
SPANISH	



ROOF PLAN
SCALE: N.T.S.

STYLE LEGEND:

1 PROMINENT GABLES
2 CONCRETE 'S' TILES
3 0" RAKES AND 12" EAVES
4 DECORATIVE GABLE DETAILS
5 DECORATIVE SHUTTERS

C9

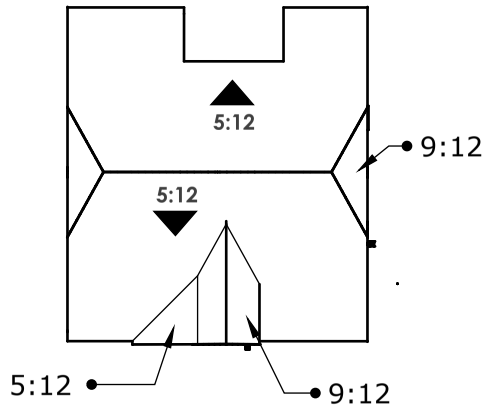
KHovnanian® Homes

October 16, 2018

'COTTAGE'
FRONT VIEW: N.T.S.

SERIES WIDTH
50'

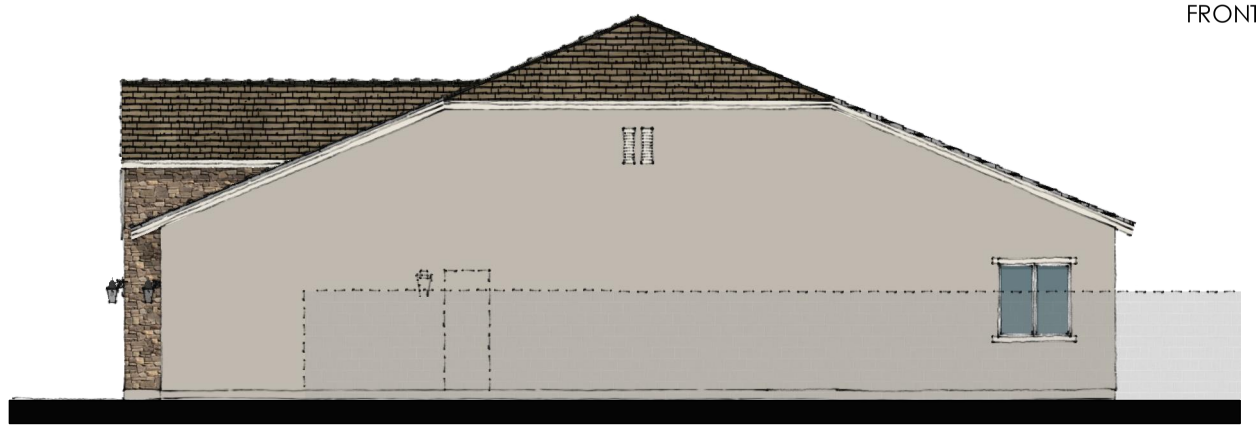
LIV. SF:	**2,029 SF**
PLAN WIDTH:	**50'**
PLAN #:	5031
COTTAGE	



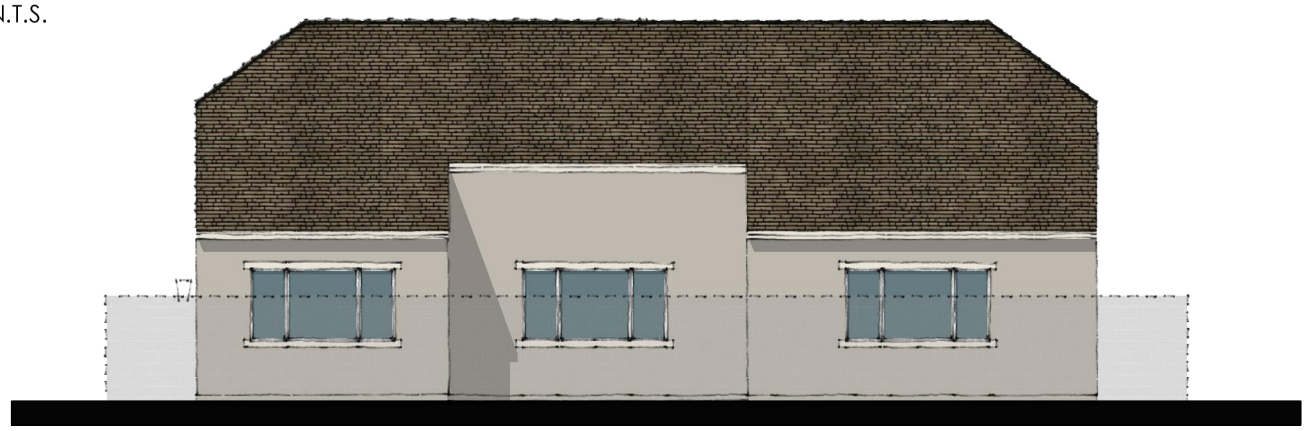
ROOF PLAN
SCALE: N.T.S.

STYLE LEGEND:

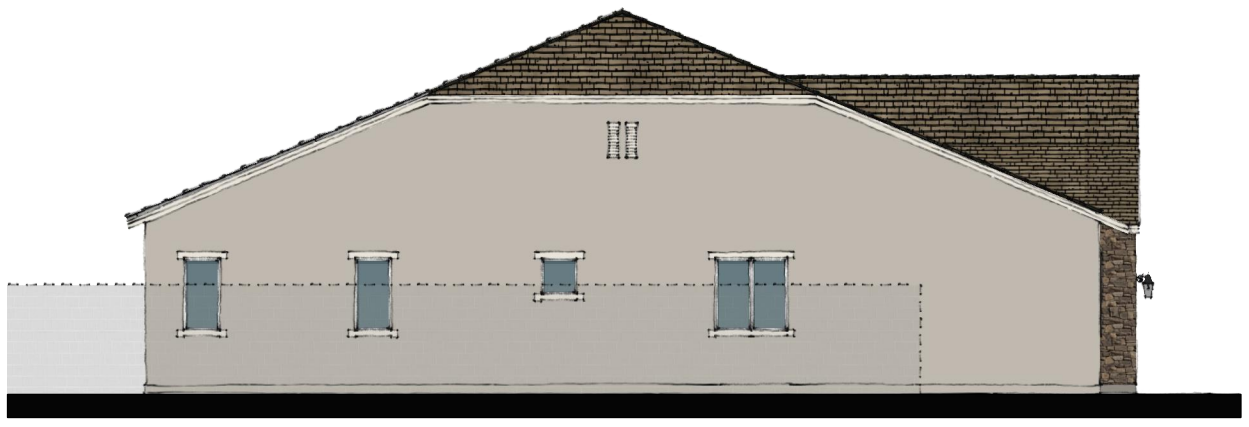
1 PROMINENT GABLES
2 CONCRETE FLAT TILES
3 0"/12" RAKES AND 12" EAVES
4 DECORATIVE GABLE DETAILS
5 DECORATIVE SHUTTERS
6 ARCHED SOFFITS
7 DECORATIVE STONE VENEER



RIGHT ELEVATION
SCALE: 3/32" = 1'-0"



REAR ELEVATION
SCALE: 3/32" = 1'-0"



LEFT ELEVATION
SCALE: 3/32" = 1'-0"

T.O. RIDGE
18'-5"

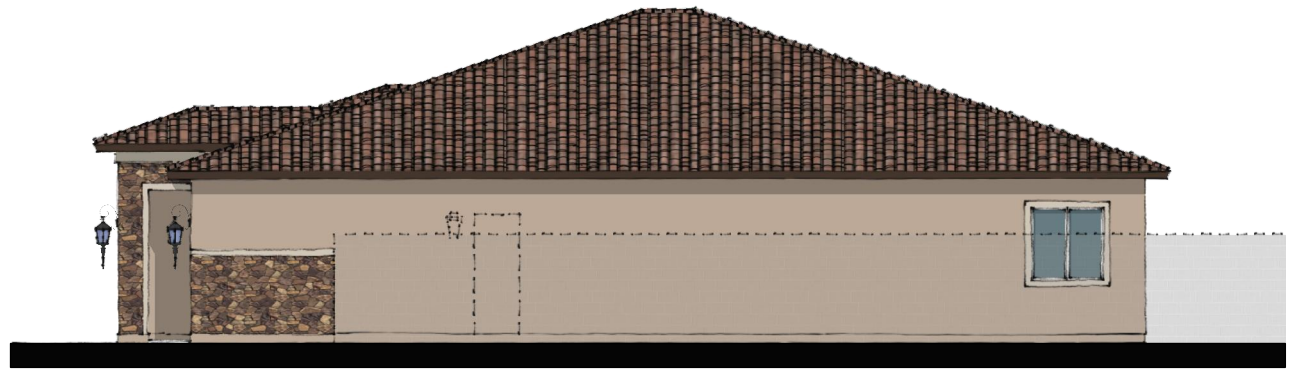
FRONT ELEVATION
SCALE: 3/32" = 1'-0"

C10

KHovnanian® Homes

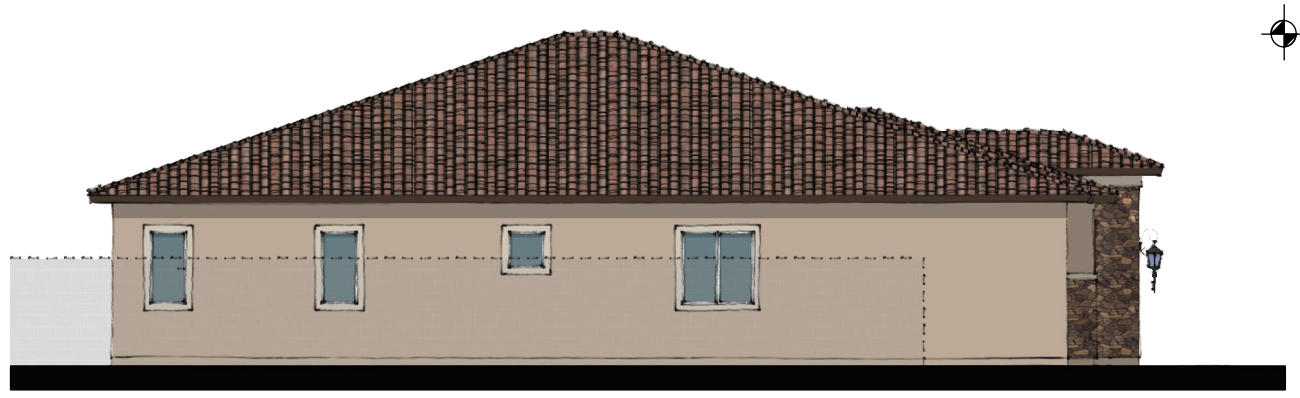
October 16, 2018

'ITALIANATE'
FRONT VIEW: N.T.S.



RIGHT ELEVATION
SCALE: 3/32" = 1'-0"

REAR ELEVATION
SCALE: 3/32" = 1'-0"



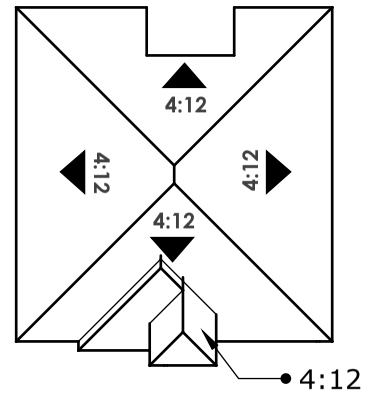
LEFT ELEVATION
SCALE: 3/32" = 1'-0"

T.O. RIDGE
18'-3"

FRONT ELEVATION
SCALE: 3/32" = 1'-0"

SERIES WIDTH
50'

LIV. SF:	**2,029 SF**
PLAN WIDTH:	**50'**
PLAN #:	5031
ITALIANATE	



ROOF PLAN
SCALE: N.T.S.

STYLE LEGEND:

1 PROMINENT HIPS
2 CONCRETE 'S' TILES
3 16" EAVES
4 DECORATIVE SHUTTERS
5 DECORATIVE STONE VENEER

C11

KHovnanian® Homes

October 16, 2018

SERIES WIDTH
50'

LIV. SF:	**2,029 SF**
PLAN WIDTH:	**50'**
PLAN #:	5031
OPT. SIDE LOAD GARAGE	

LEFT ELEVATION
SCALE: 3/32" = 1'-0"

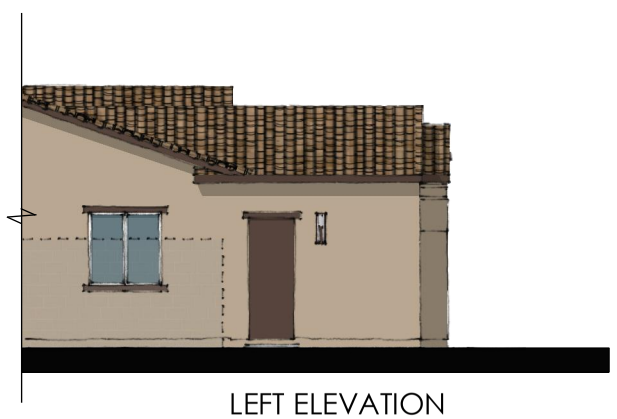
FRONT VIEW- 'ITALIANATE'

RIGHT ELEVATION
SCALE: 3/32" = 1'-0"

LEFT ELEVATION
SCALE: 3/32" = 1'-0"

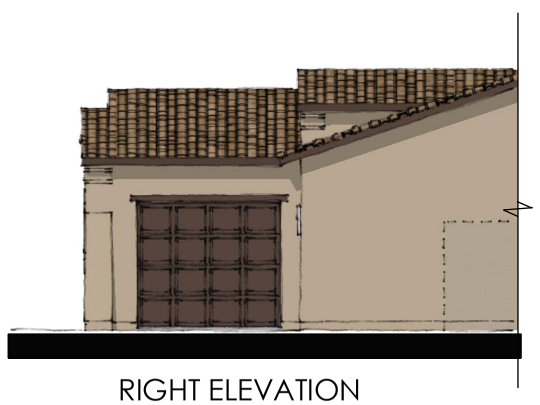
FRONT VIEW - 'COTTAGE'

RIGHT ELEVATION
SCALE: 3/32" = 1'-0"



LEFT ELEVATION
SCALE: 3/32" = 1'-0"

FRONT VIEW - 'SPANISH'



RIGHT ELEVATION
SCALE: 3/32" = 1'-0"

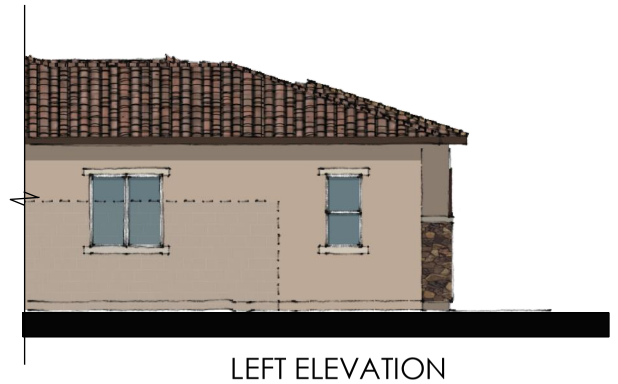
C12

KHovnanian® Homes

October 16, 2018

SERIES WIDTH
50'

LIV. SF:	**2,029 SF**
PLAN WIDTH:	**50'**
PLAN #:	5031
OPT. EXTRA SUITE	



LEFT ELEVATION
SCALE: 3/32" = 1'-0"

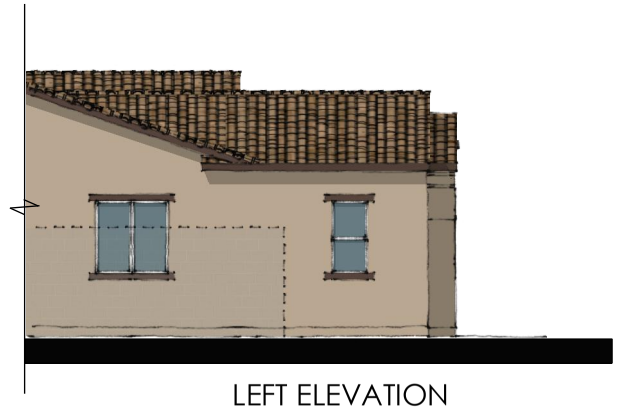
FRONT VIEW- 'ITALIANATE'

RIGHT ELEVATION
SCALE: 3/32" = 1'-0"

LEFT ELEVATION
SCALE: 3/32" = 1'-0"

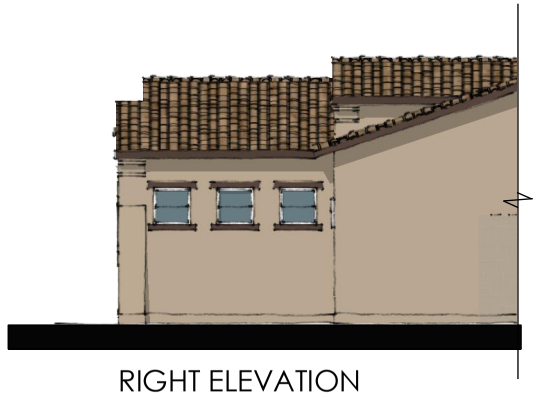
FRONT VIEW - 'COTTAGE'

RIGHT ELEVATION
SCALE: 3/32" = 1'-0"



LEFT ELEVATION
SCALE: 3/32" = 1'-0"

FRONT VIEW - 'SPANISH'



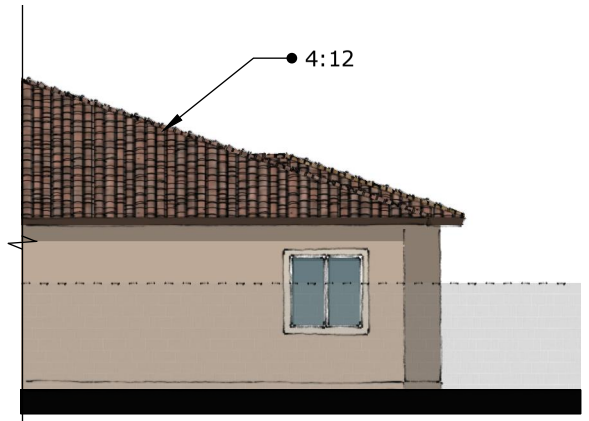
RIGHT ELEVATION
SCALE: 3/32" = 1'-0"

C13

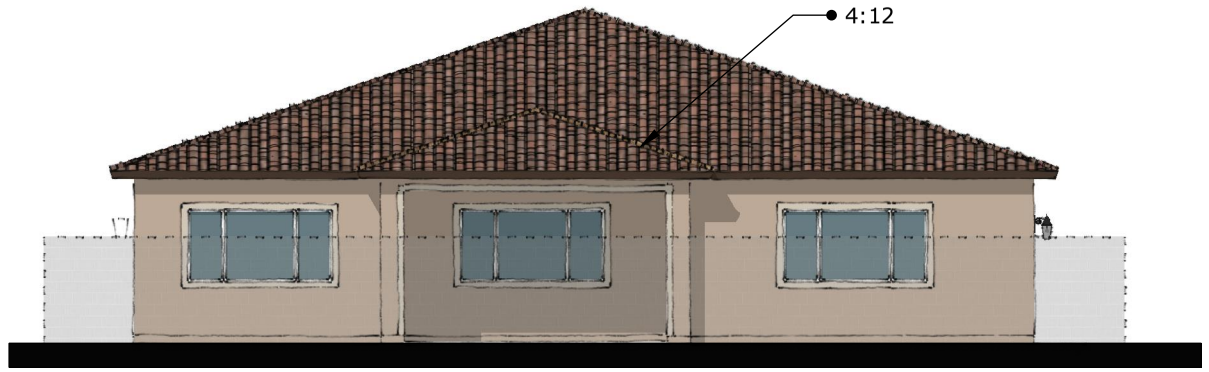
KHovnanian® Homes

SERIES WIDTH
50'

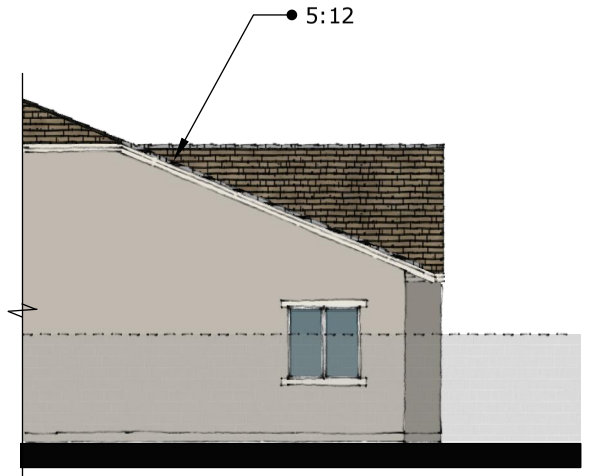
LIV. SF:	**2,029 SF**
PLAN WIDTH:	**50'**
PLAN #:	5031
OPT. COVERED PATIO	



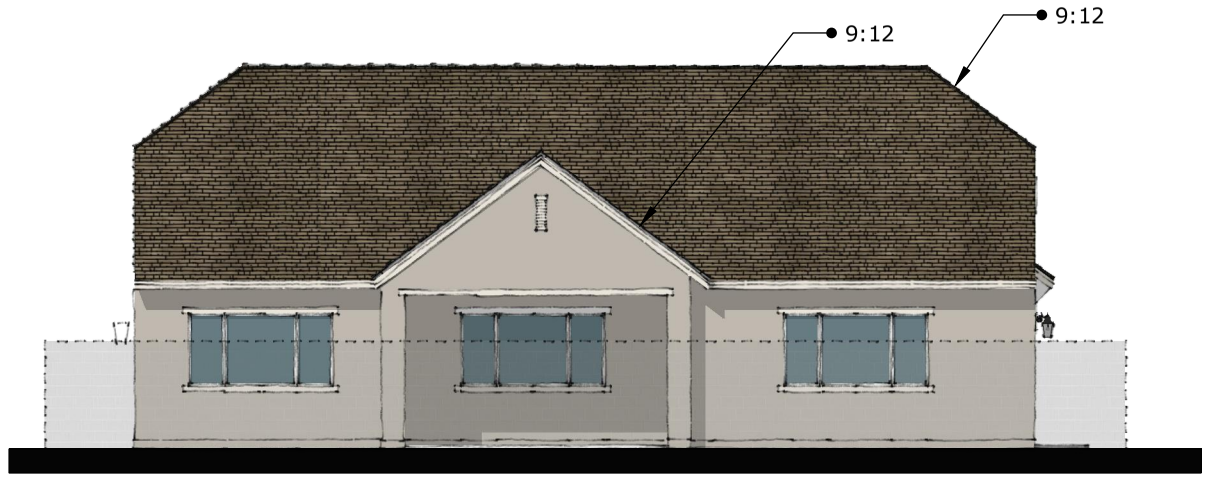
RIGHT ELEVATION
SCALE: 3/32" = 1'-0"



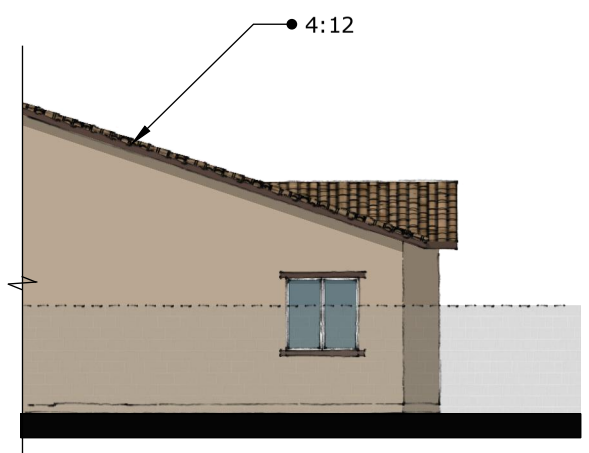
REAR ELEVATION - 'ITALIANATE'
SCALE: 3/32" = 1'-0"



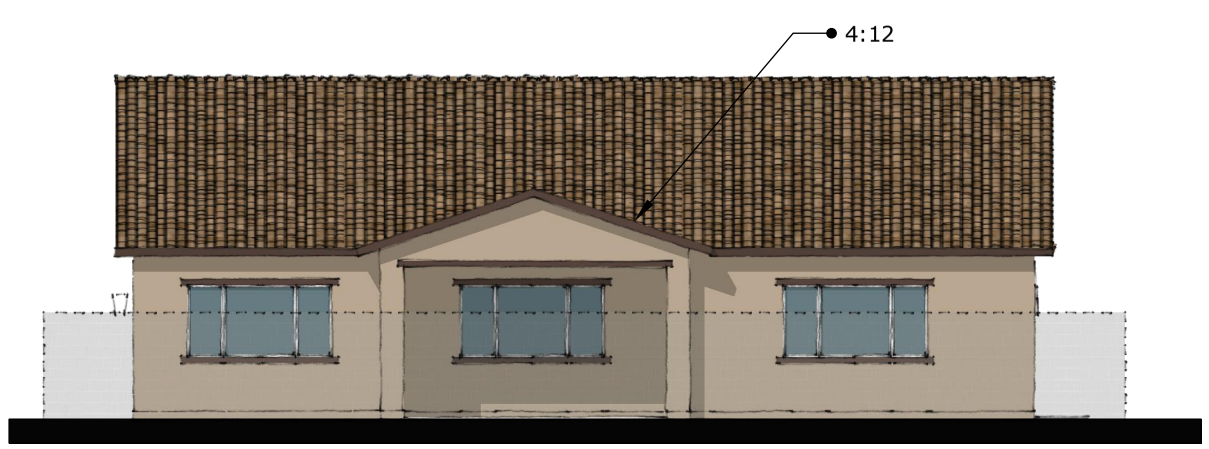
RIGHT ELEVATION
SCALE: 3/32" = 1'-0"



REAR ELEVATION - 'COTTAGE'
SCALE: 3/32" = 1'-0"



RIGHT ELEVATION
SCALE: 3/32" = 1'-0"

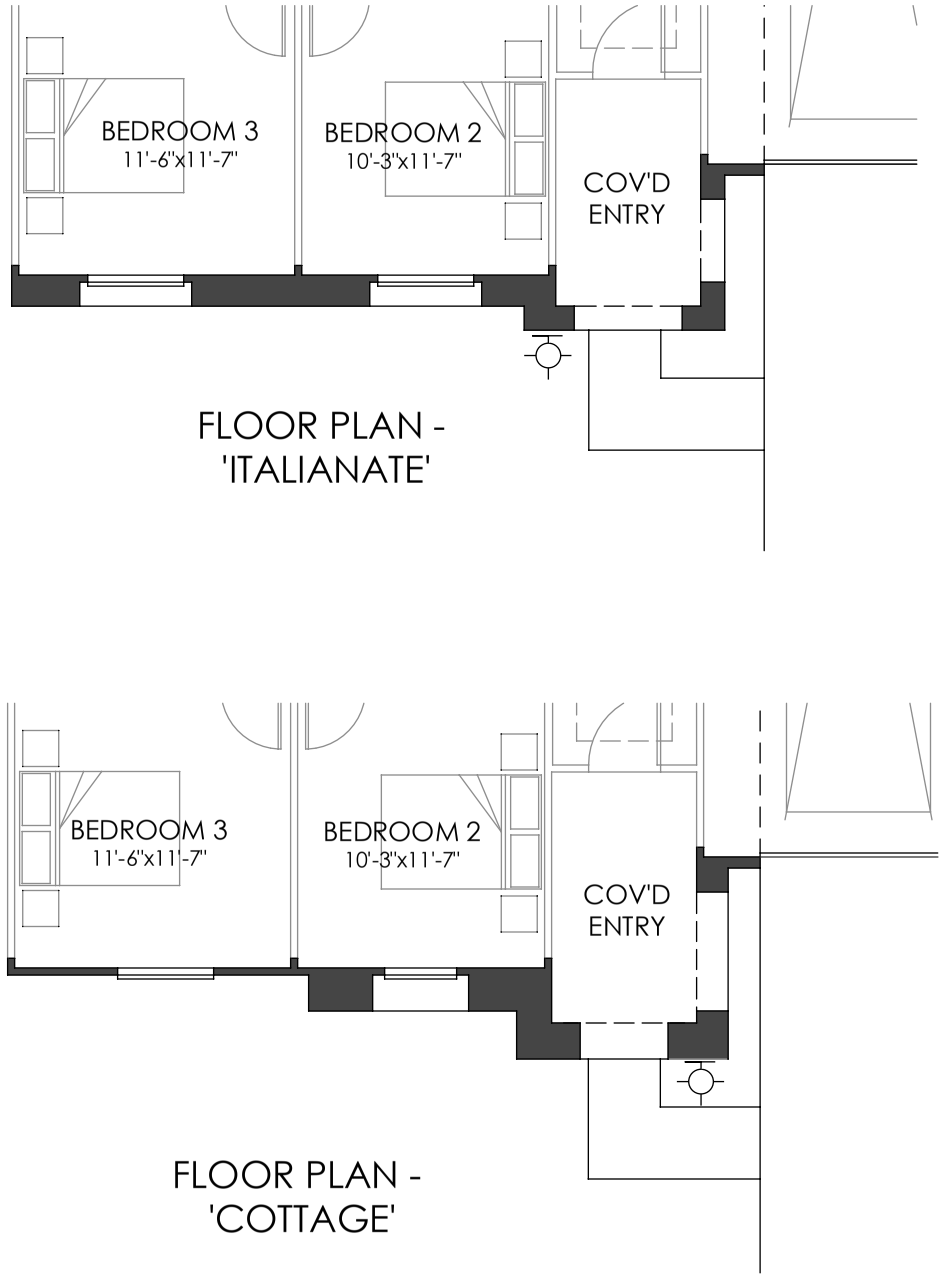


REAR ELEVATION - 'SPANISH'
SCALE: 3/32" = 1'-0"

C14

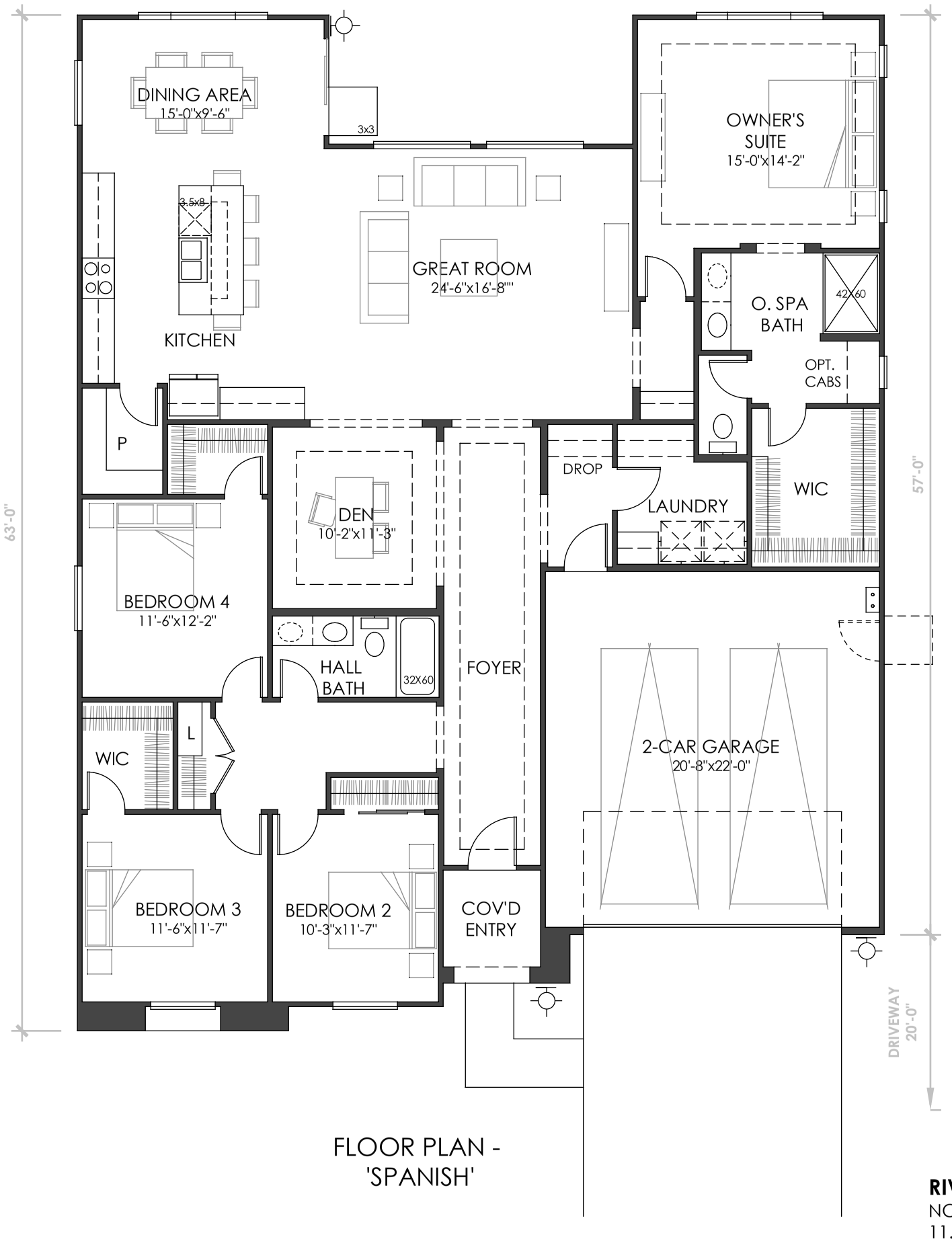
KHovnanian Homes

October 16, 2018



FLOOR PLAN -
'ITALIANATE'

FLOOR PLAN -
'COTTAGE'



FLOOR PLAN -
'SPANISH'

SERIES WIDTH
45' | 50'

LIV. SF:	**2,302**
PLAN WIDTH:	**50'**
PLAN #:	5033
SCALE:	1/8" = 1'-0"
NAME:	PLAN 2

VITAL STATS

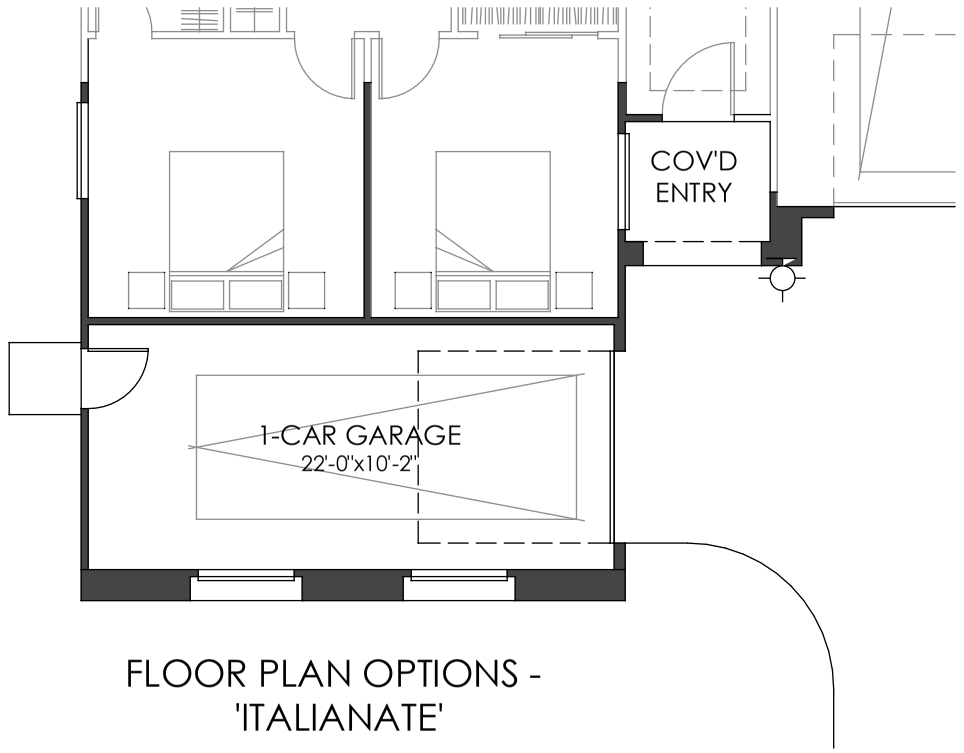
BEDROOM	4
BATH	2
CAR	2
CEILING	9'

INDICATES EXTERIOR W.P.
COACH LIGHT, PER SPECS.

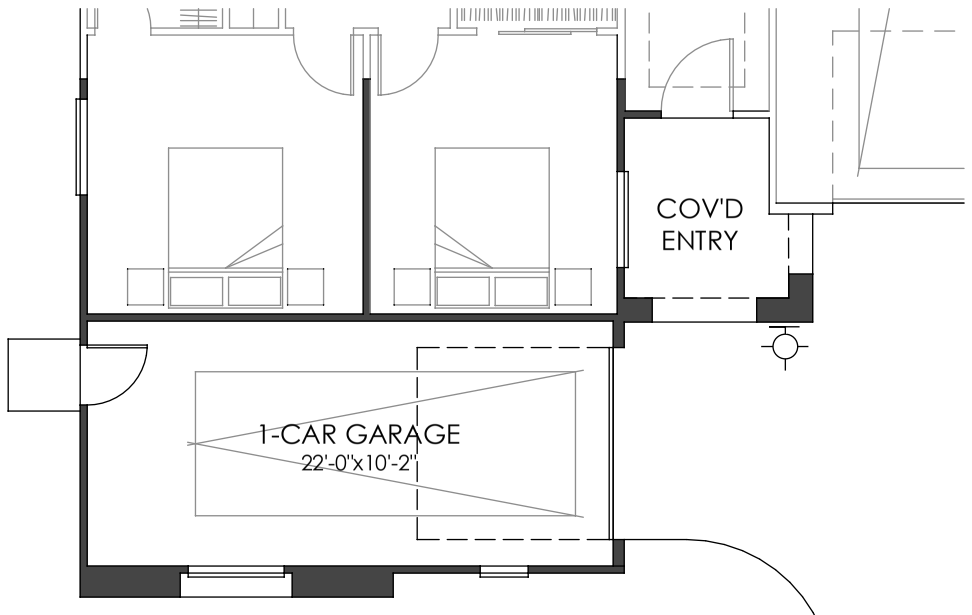
C15

KHovnanian® Homes

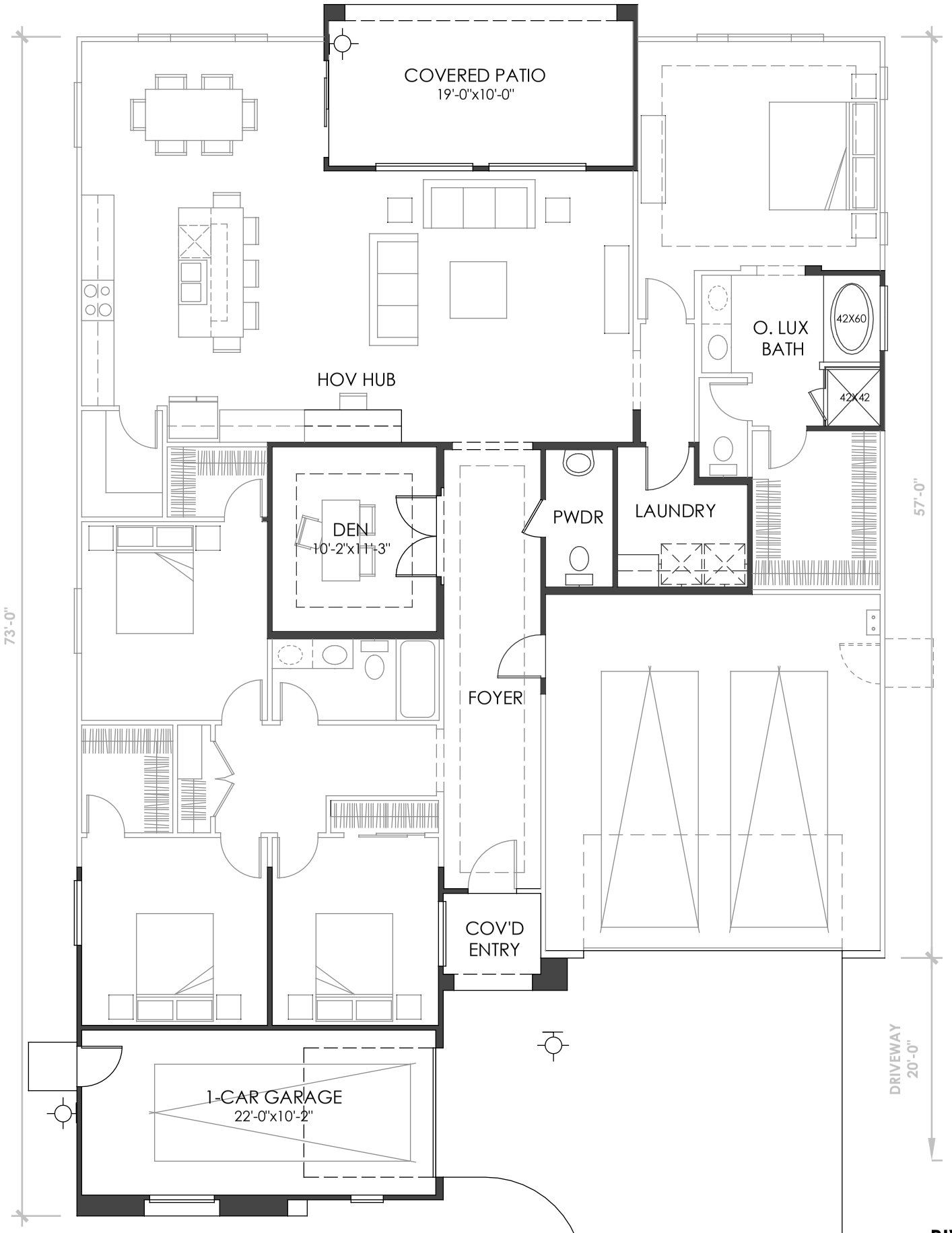
October 16, 2018



FLOOR PLAN OPTIONS -
'ITALIANATE'



FLOOR PLAN OPTIONS -
'COTTAGE'



FLOOR PLAN OPTIONS -
'SPANISH'

SERIES WIDTH
45' | 50'

LIV. SF:	**2,302**
PLAN WIDTH:	**50'**
PLAN #:	5033
SCALE:	1/8" = 1'-0"
NAME:	PLAN 2

VITAL STATS

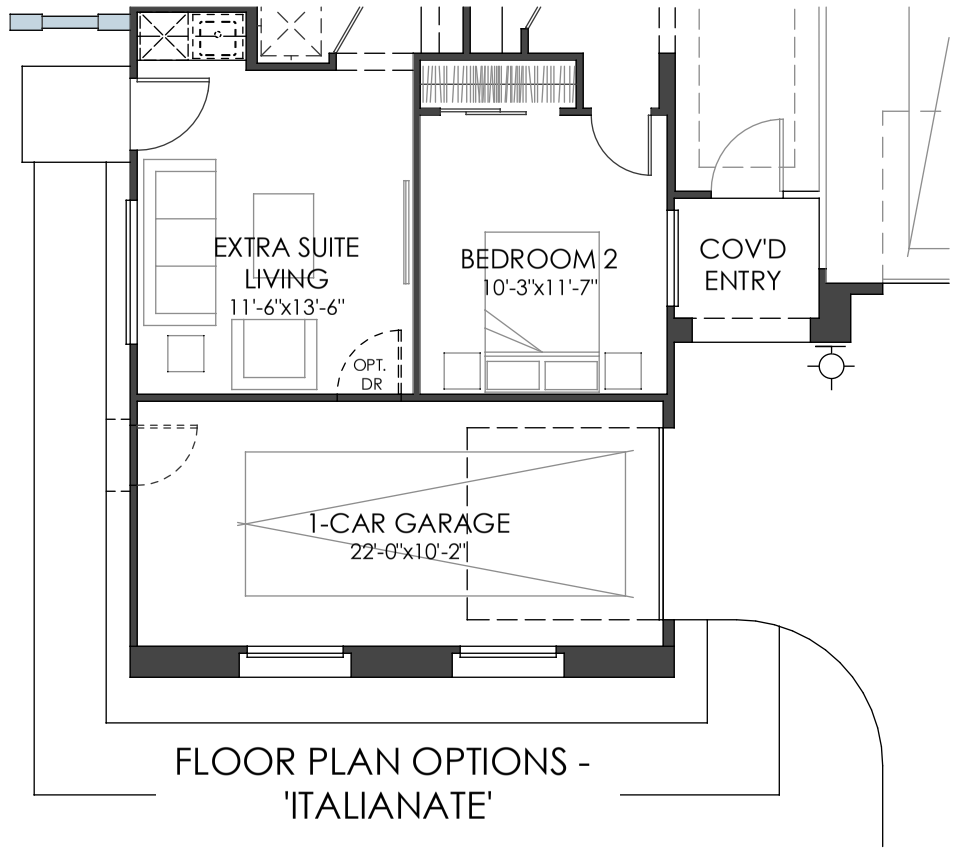
BEDROOM	4
BATH	2
CAR	2
CEILING	9'

INDICATES EXTERIOR W.P.
COACH LIGHT, PER SPECS.

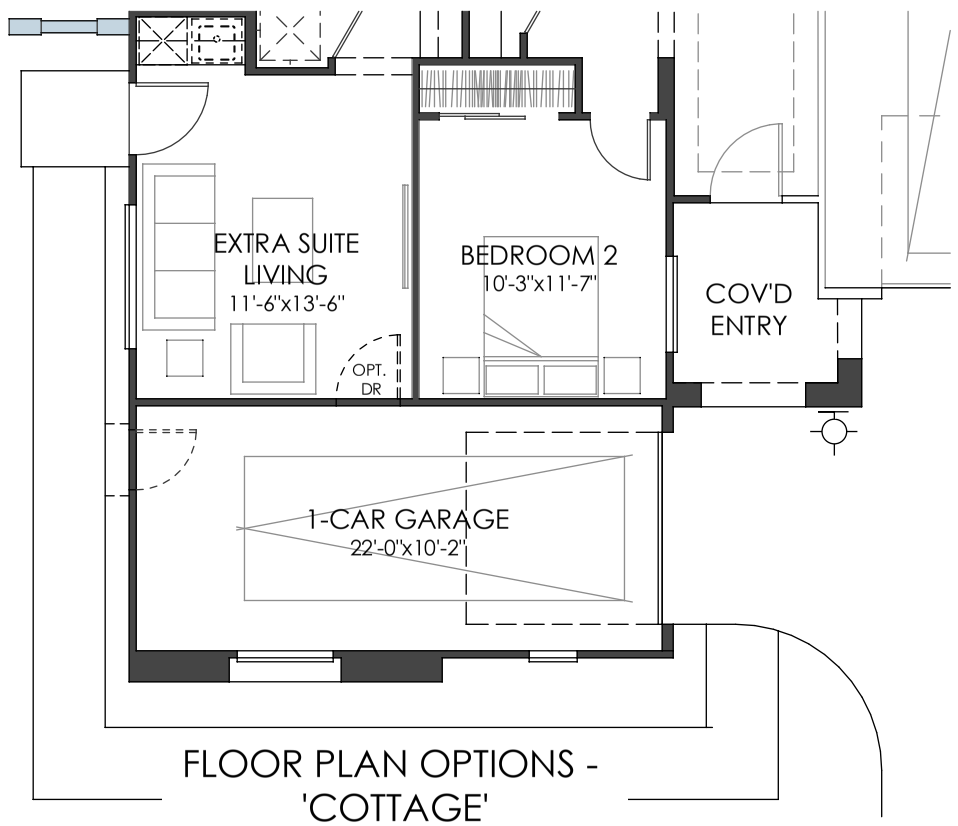
C16

KHovnanian® Homes

October 16, 2018



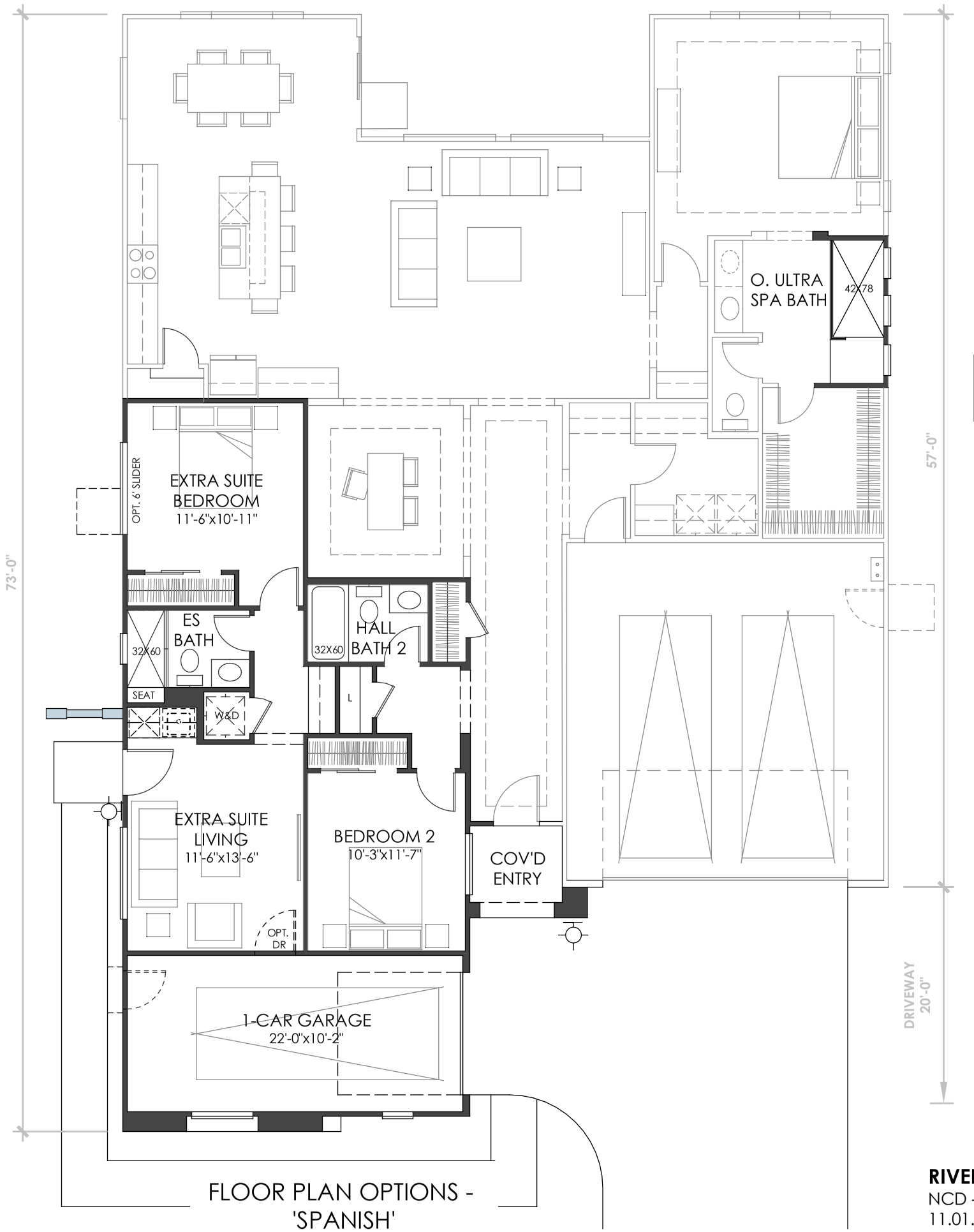
FLOOR PLAN OPTIONS -
'ITALIANATE'



FLOOR PLAN OPTIONS -
'COTTAGE'

C17

KHovnanian® Homes



FLOOR PLAN OPTIONS -
'SPANISH'

SERIES WIDTH
45' | 50'

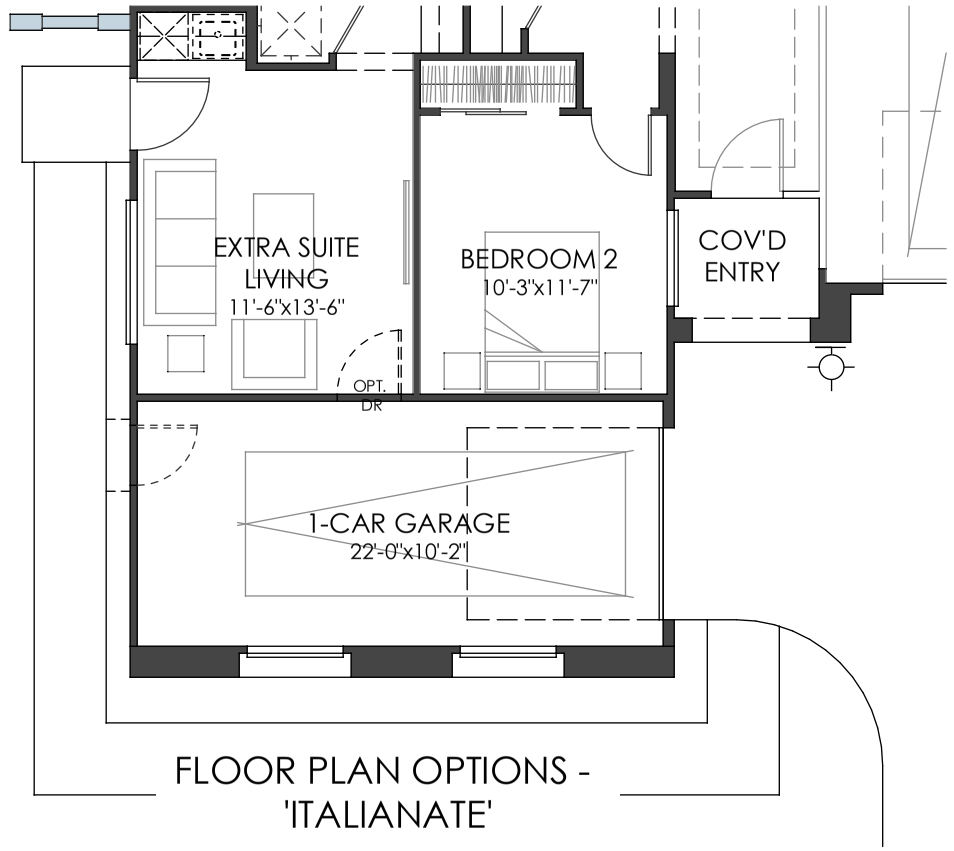
LIV. SF:	**2,302**
PLAN WIDTH:	**50'**
PLAN #:	5033
SCALE:	1/8" = 1'-0"
NAME:	PLAN 2

VITAL STATS

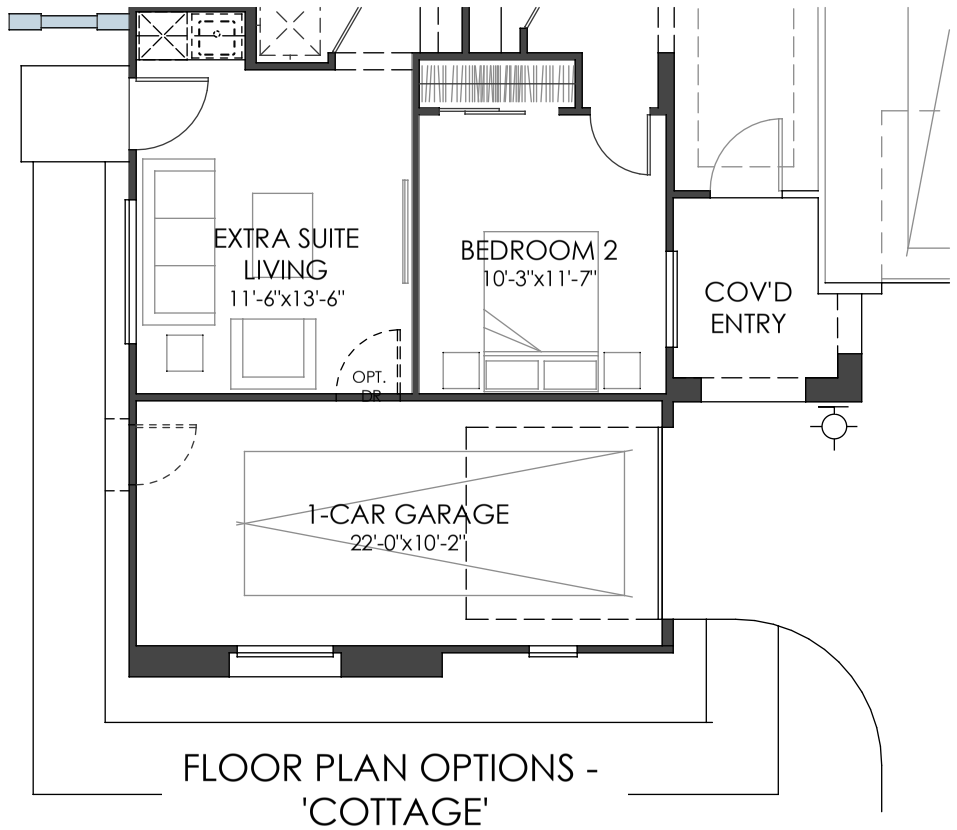
BEDROOM	4
BATH	2
CAR	2
CEILING	9'

INDICATES EXTERIOR W.P.
COACH LIGHT, PER SPECS.

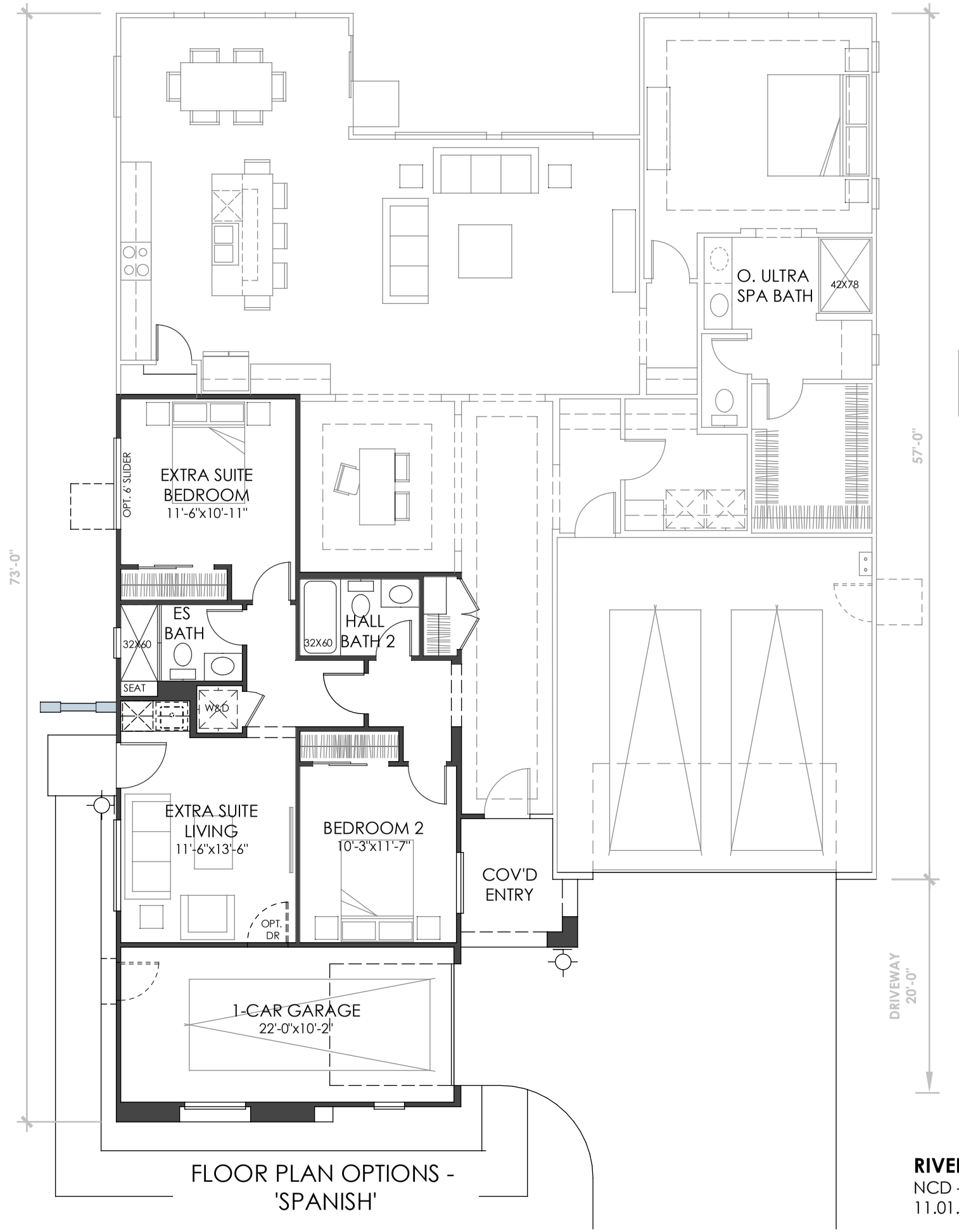
October 16, 2018



FLOOR PLAN OPTIONS -
'ITALIANATE'



FLOOR PLAN OPTIONS -
'COTTAGE'



FLOOR PLAN OPTIONS -
'SPANISH'

SERIES WIDTH
45' | 50'

LIV. SF:	**2,302**
PLAN WIDTH:	**50'**
PLAN #:	5033
SCALE:	1/8" = 1'-0"
NAME:	PLAN 2

VITAL STATS

BEDROOM	4
BATH	2
CAR	2
CEILING	9'

INDICATES EXTERIOR W.P.
COACH LIGHT, PER SPECS.

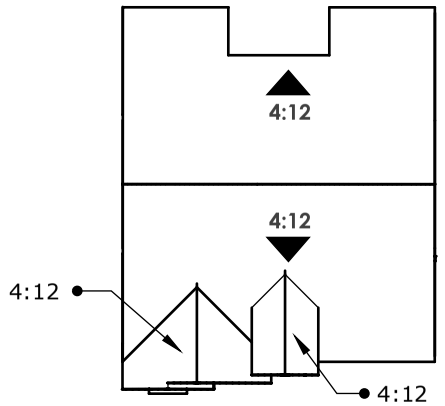
C18

KHovnanian® Homes

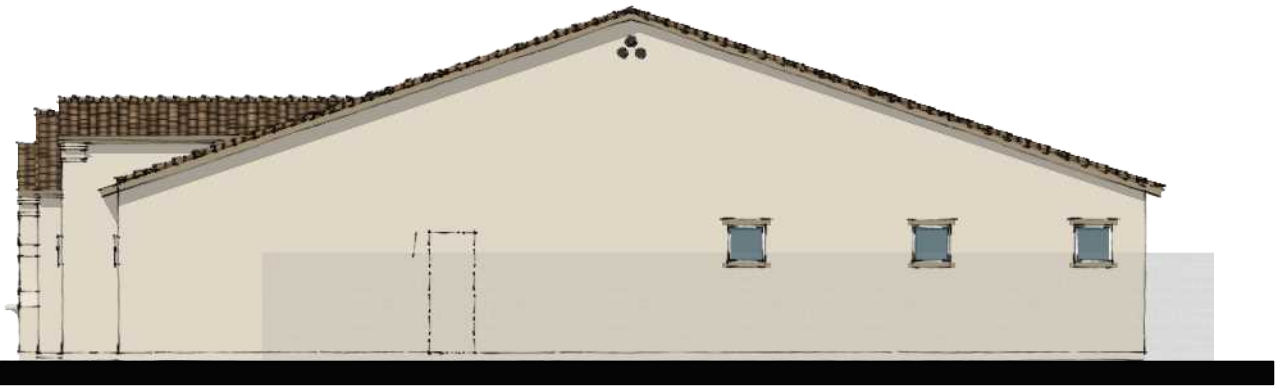
'SPANISH'
FRONT VIEW: N.T.S.

SERIES WIDTH
50'

LIV. SF:	**2,302 SF**
PLAN WIDTH:	**50'**
PLAN #:	5033
SPANISH	



ROOF PLAN
SCALE: N.T.S.



RIGHT ELEVATION
SCALE: 3/32" = 1'-0"

REAR ELEVATION
SCALE: 3/32" = 1'-0"

STYLE LEGEND:

1 PROMINENT GABLES
2 CONCRETE 'S' TILES
3 0" RAKES AND 12" EAVES
4 DECORATIVE GABLE DETAILS
5 DECORATIVE SHUTTERS

LEFT ELEVATION
SCALE: 3/32" = 1'-0"

T.O. RIDGE
19'-2"

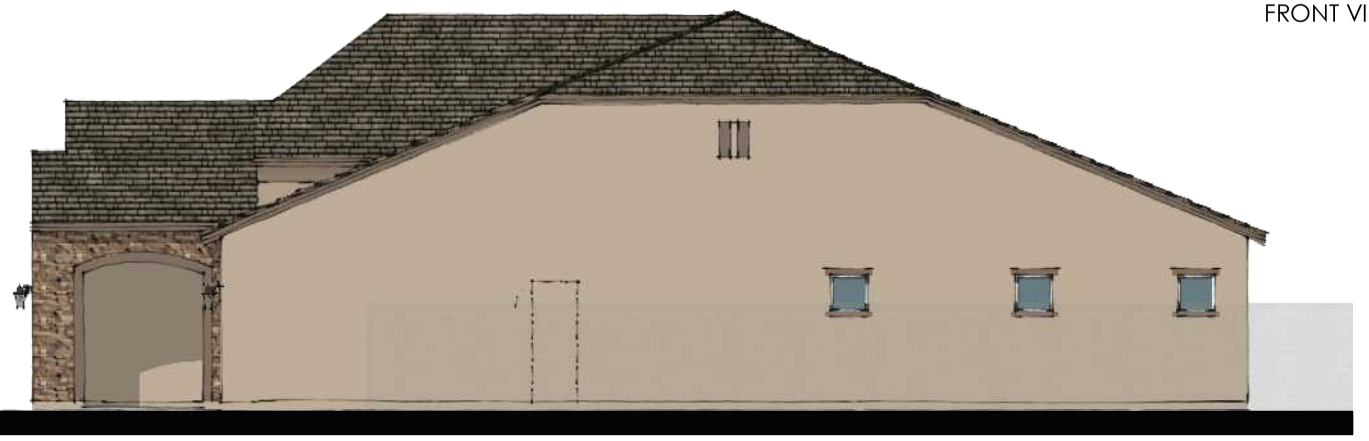
FRONT ELEVATION
SCALE: 3/32" = 1'-0"

C19

KHovnanian® Homes

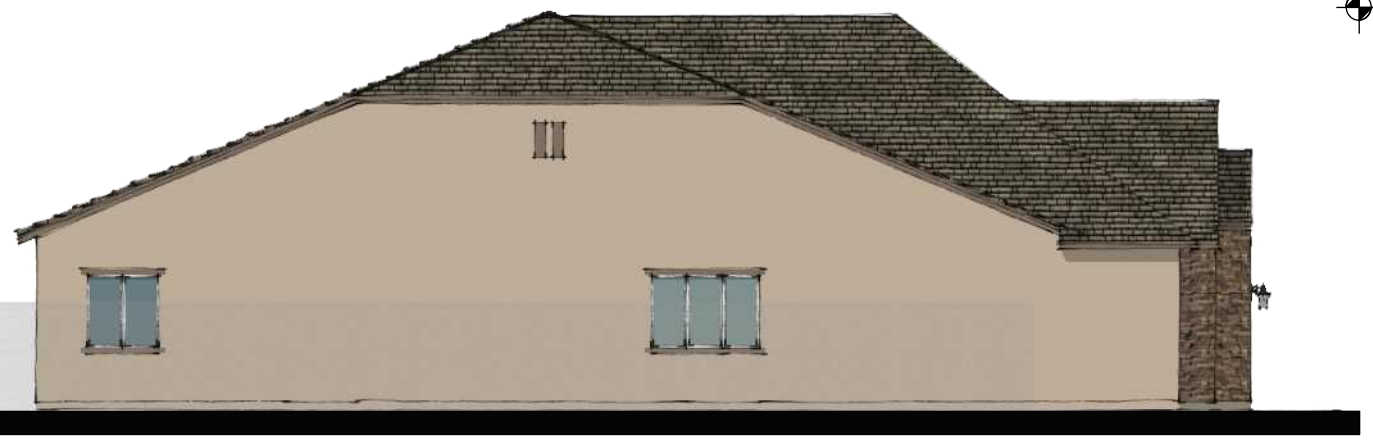
November 1, 2018

'COTTAGE'
FRONT VIEW: N.T.S.



RIGHT ELEVATION
SCALE: 3/32" = 1'-0"

REAR ELEVATION
SCALE: 3/32" = 1'-0"



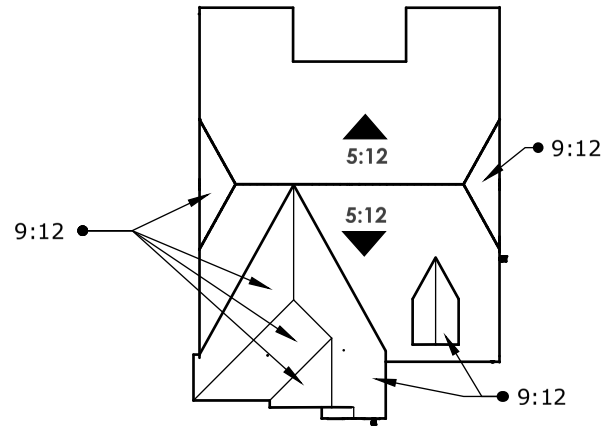
LEFT ELEVATION
SCALE: 3/32" = 1'-0"

T.O. RIDGE
19'-0"

FRONT ELEVATION
SCALE: 3/32" = 1'-0"

SERIES WIDTH
50'

LIV. SF:	**2,302 SF**
PLAN WIDTH:	**50'**
PLAN #:	5033
COTTAGE	



ROOF PLAN
SCALE: N.T.S.

STYLE LEGEND:

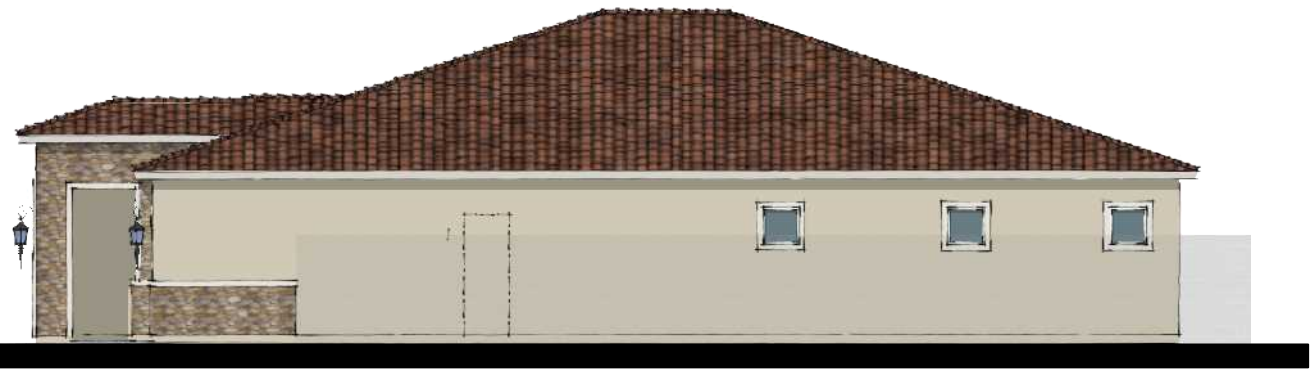
1 PROMINENT GABLES
2 CONCRETE FLAT TILES
3 0"/12" RAKES AND 12" EAVES
4 DECORATIVE GABLE DETAILS
5 DECORATIVE SHUTTERS
6 ARCHED SOFFITS
7 DECORATIVE STONE VENEER

C20

KHovnanian Homes

November 1, 2018

'ITALIANATE'
FRONT VIEW: N.T.S.



RIGHT ELEVATION
SCALE: 3/32" = 1'-0"

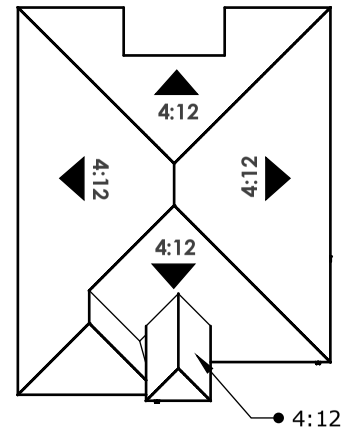
REAR ELEVATION
SCALE: 3/32" = 1'-0"

LEFT ELEVATION
SCALE: 3/32" = 1'-0"

FRONT ELEVATION
SCALE: 3/32" = 1'-0"

SERIES WIDTH
50'

LIV. SF:	**2,302 SF**
PLAN WIDTH:	**50'**
PLAN #:	5033
ITALIANATE	



ROOF PLAN
SCALE: N.T.S.

STYLE LEGEND:

1. PROMINENT HIPS
2. CONCRETE 'S' TILES
3. 16" EAVES
4. DECORATIVE SHUTTERS
5. DECORATIVE STONE VENEER

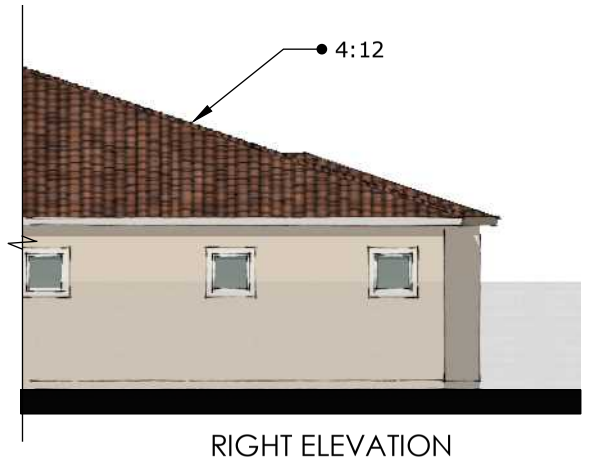
C21

KHovnanian® Homes

November 1, 2018

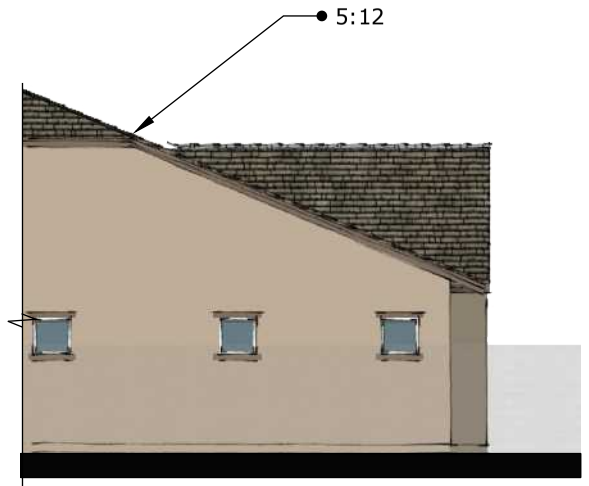
SERIES WIDTH
50'

LIV. SF:	**2,302 SF**
PLAN WIDTH:	**50'**
PLAN #:	5033
OPT. COVERED PATIO	

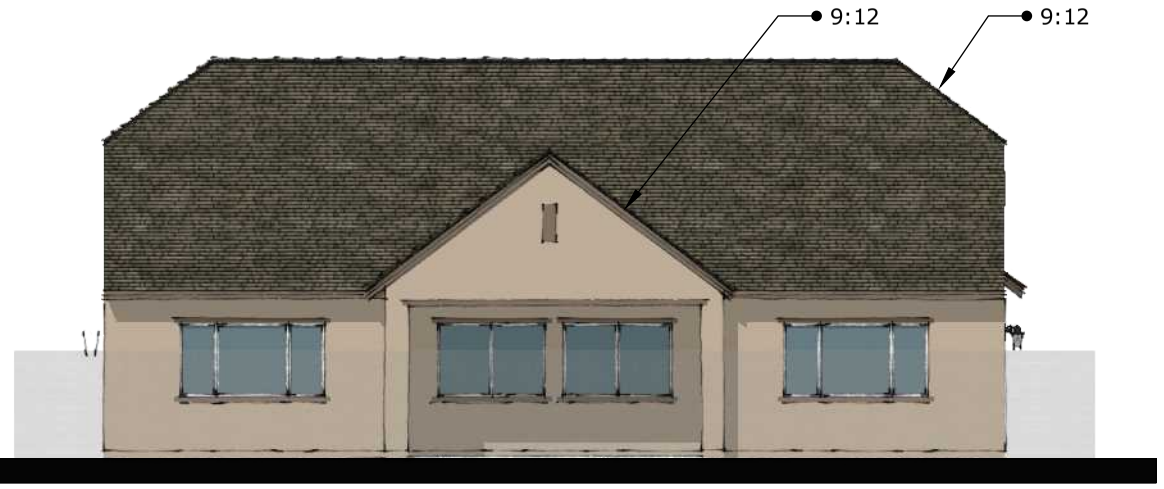


RIGHT ELEVATION
SCALE: 3/32" = 1'-0"

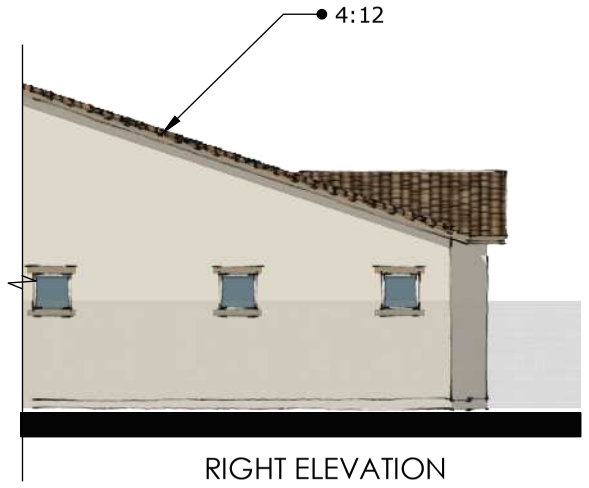
REAR ELEVATION - 'ITALIANATE'
SCALE: 3/32" = 1'-0"



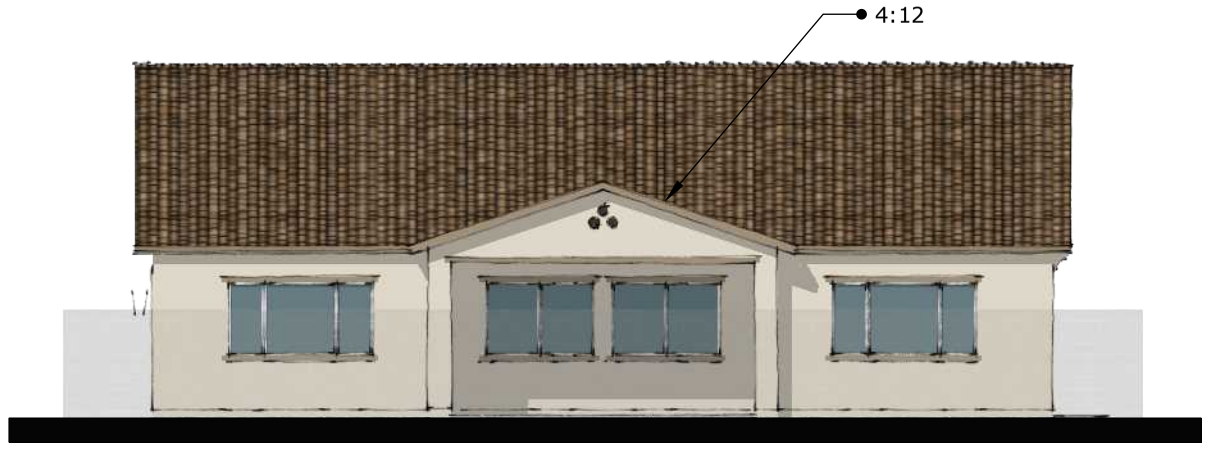
RIGHT ELEVATION
SCALE: 3/32" = 1'-0"



REAR ELEVATION - 'COTTAGE'
SCALE: 3/32" = 1'-0"



RIGHT ELEVATION
SCALE: 3/32" = 1'-0"



REAR ELEVATION - 'SPANISH'
SCALE: 3/32" = 1'-0"

C22

KHovnanian Homes

November 1, 2018

SERIES WIDTH
50'

LIV. SF:	**2,302 SF**
PLAN WIDTH:	**50'**
PLAN #:	5033
OPT. SIDE LOAD GARAGE	

LEFT ELEVATION
SCALE: 3/32" = 1'-0"

FRONT VIEW- 'ITALIANATE'

RIGHT ELEVATION
SCALE: 3/32" = 1'-0"

LEFT ELEVATION
SCALE: 3/32" = 1'-0"

FRONT VIEW - 'COTTAGE'

RIGHT ELEVATION
SCALE: 3/32" = 1'-0"

LEFT ELEVATION
SCALE: 3/32" = 1'-0"

FRONT VIEW - 'SPANISH'

RIGHT ELEVATION
SCALE: 3/32" = 1'-0"

C23

KHovnanian® Homes

December 4, 2018

SERIES WIDTH
50'

LIV. SF:	**2,302 SF**
PLAN WIDTH:	**50'**
PLAN #:	5033
OPT. EXTRA SUITE PLUS	

LEFT ELEVATION
SCALE: 3/32" = 1'-0"

FRONT VIEW- 'ITALIANATE'

RIGHT ELEVATION
SCALE: 3/32" = 1'-0"

LEFT ELEVATION
SCALE: 3/32" = 1'-0"

FRONT VIEW - 'COTTAGE'

RIGHT ELEVATION
SCALE: 3/32" = 1'-0"

LEFT ELEVATION
SCALE: 3/32" = 1'-0"

FRONT VIEW - 'SPANISH'

RIGHT ELEVATION
SCALE: 3/32" = 1'-0"

C24

KHovnanian® Homes

RIVERVIEW at MONTERRA
NCD - ANTIOCH, CALIFORNIA
12.03.2018

October 16, 2018

SERIES WIDTH
45' | 50'

LIV. SF:	**2,599**
PLAN WIDTH:	**45'**
PLAN #:	4571
SCALE:	1/8" = 1'-0"
NAME:	PLAN 3

VITAL STATS

BEDROOM	4
BATH	2.5
CAR	3
CEILING	9' | 9'

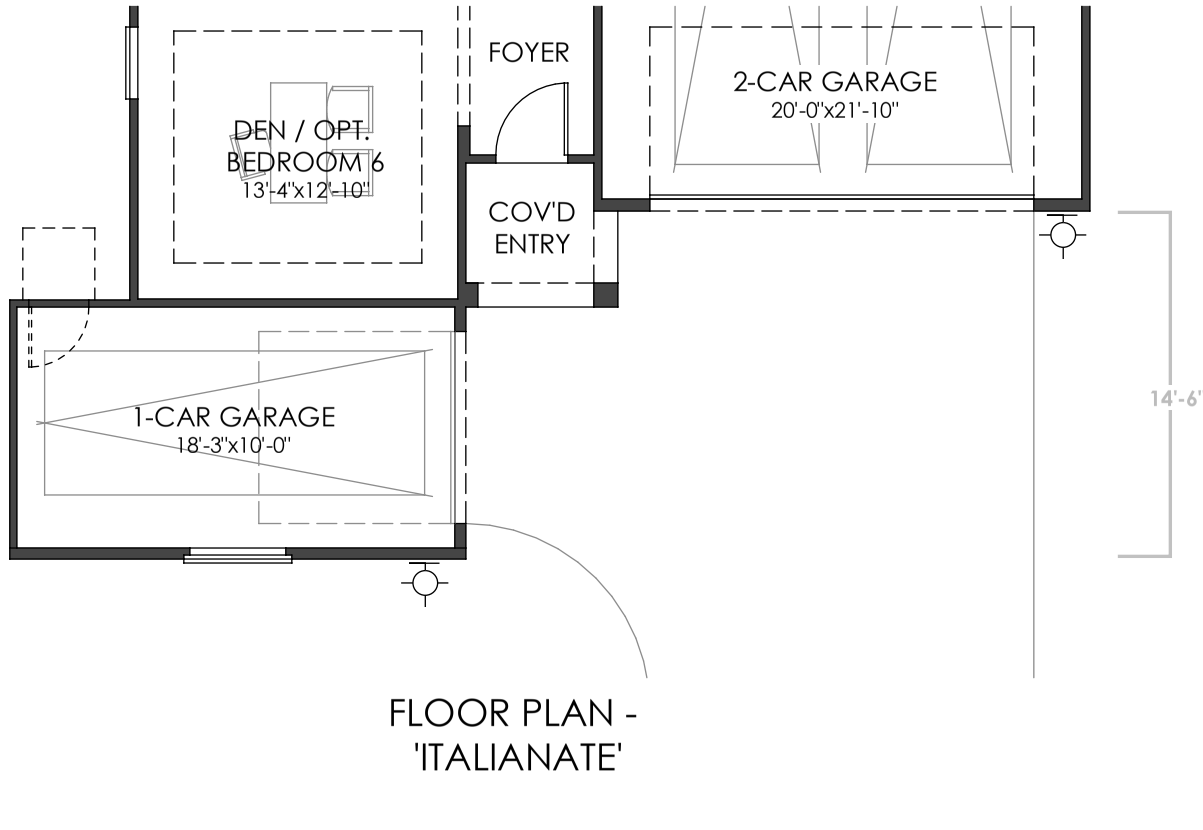
INDICATES EXTERIOR W.P. COACH LIGHT, PER SPECS.

FLOOR PLAN -
'SPANISH'

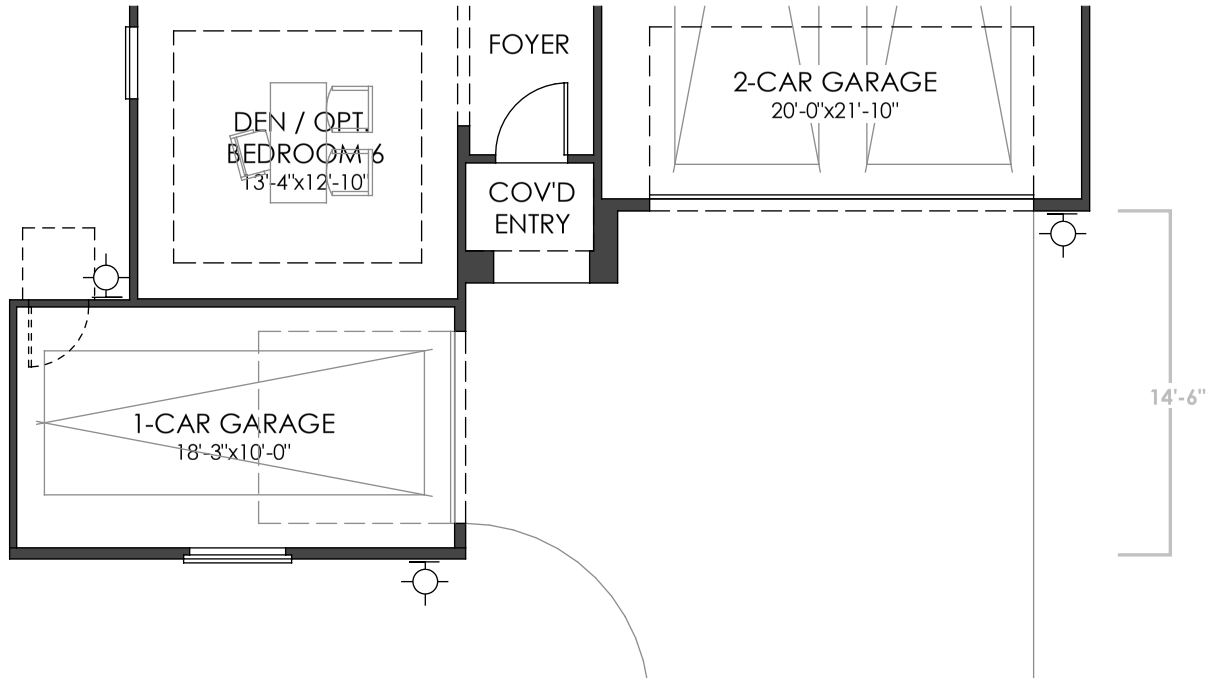
C25

KHovnanian® Homes

October 16, 2018



FLOOR PLAN -
'ITALIANATE'



FLOOR PLAN -
'COTTAGE'

SERIES WIDTH
45' | 50'

LIV. SF:	**2,599**
PLAN WIDTH:	**45'**
PLAN #:	4571
SCALE:	1/8" = 1'-0"
NAME:	PLAN 3

VITAL STATS

BEDROOM	4
BATH	2.5
CAR	3
CEILING	9' | 9'

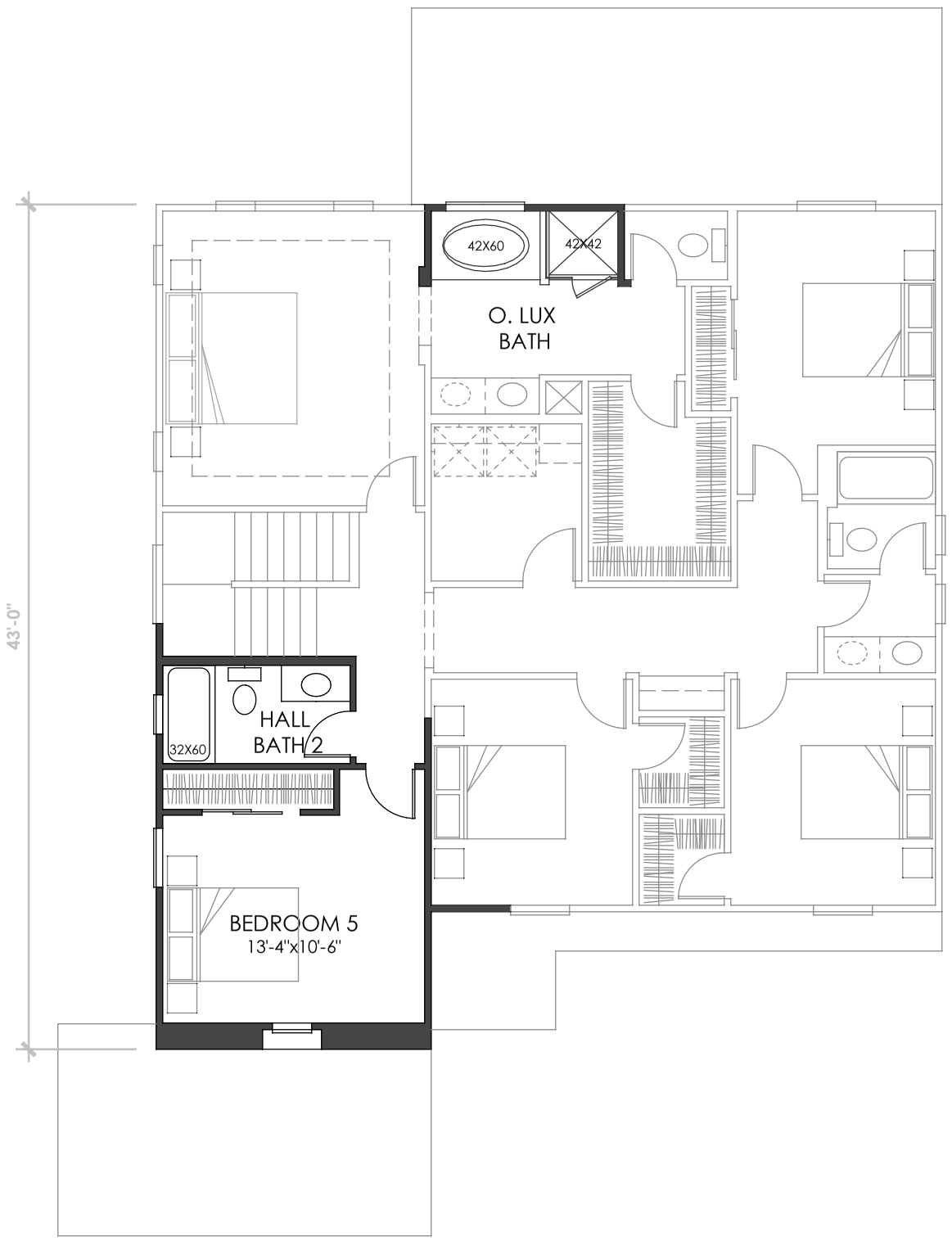
INDICATES EXTERIOR W.P.
COACH LIGHT, PER SPECS.

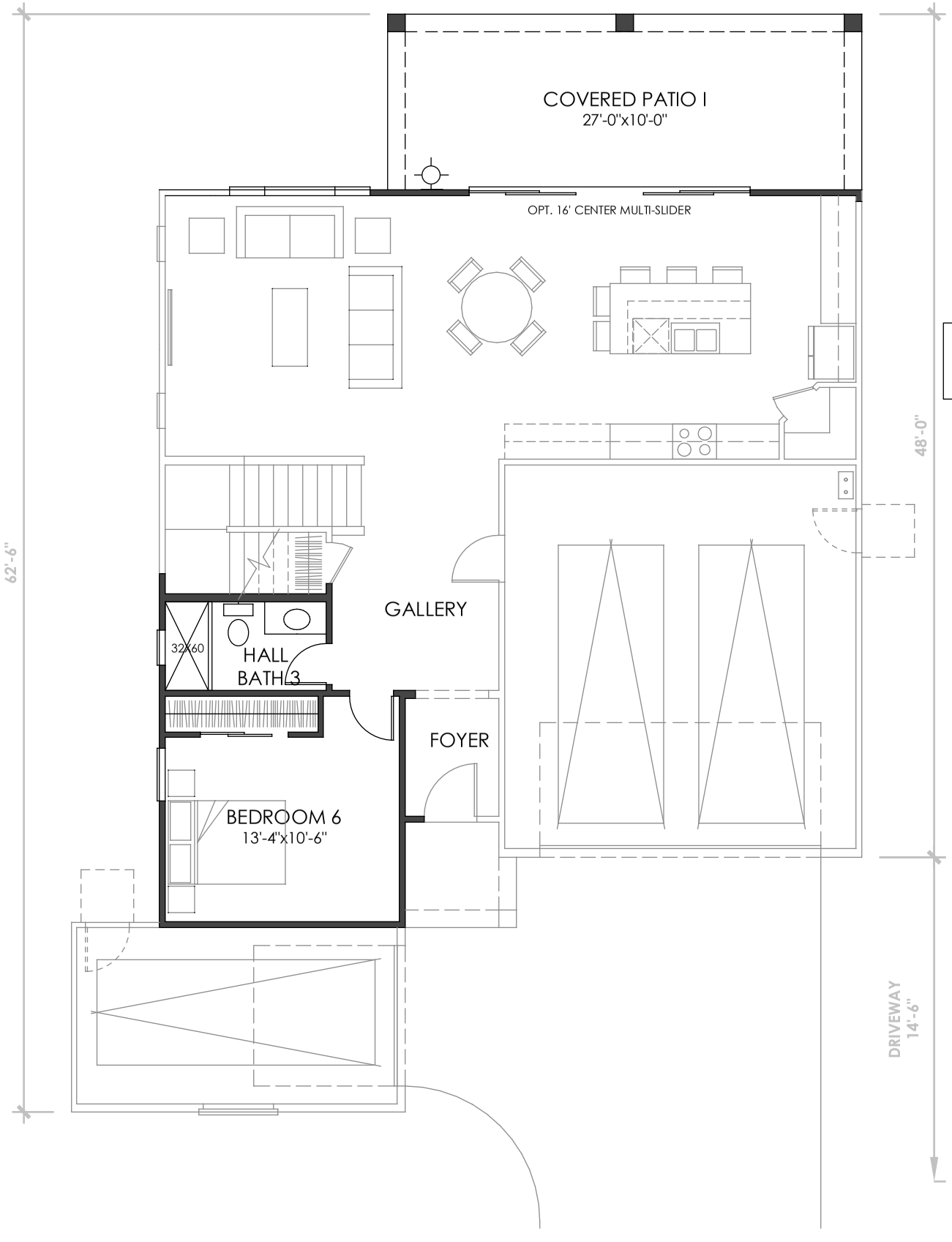
C26

KHovnanian® Homes

October 16, 2018

SERIES WIDTH
45' | 50'





LIV. SF:	**2,599**
PLAN WIDTH:	**45'**
PLAN #:	4571
SCALE:	1/8" = 1'-0"
NAME:	PLAN 3

VITAL STATS

BEDROOM	4
BATH	2.5
CAR	3
CEILING	9' | 9'

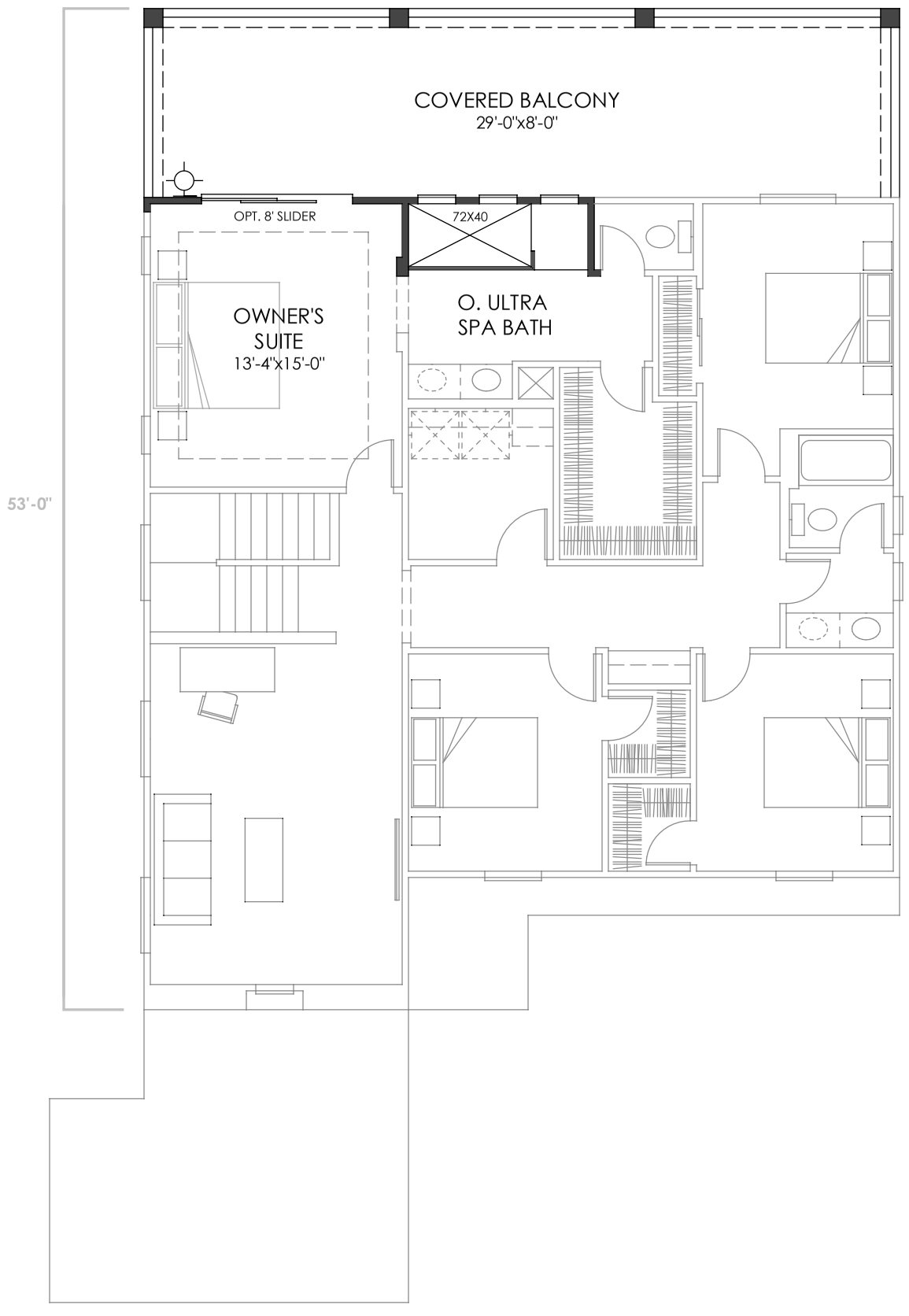
INDICATES EXTERIOR W.P. COACH LIGHT, PER SPECS.

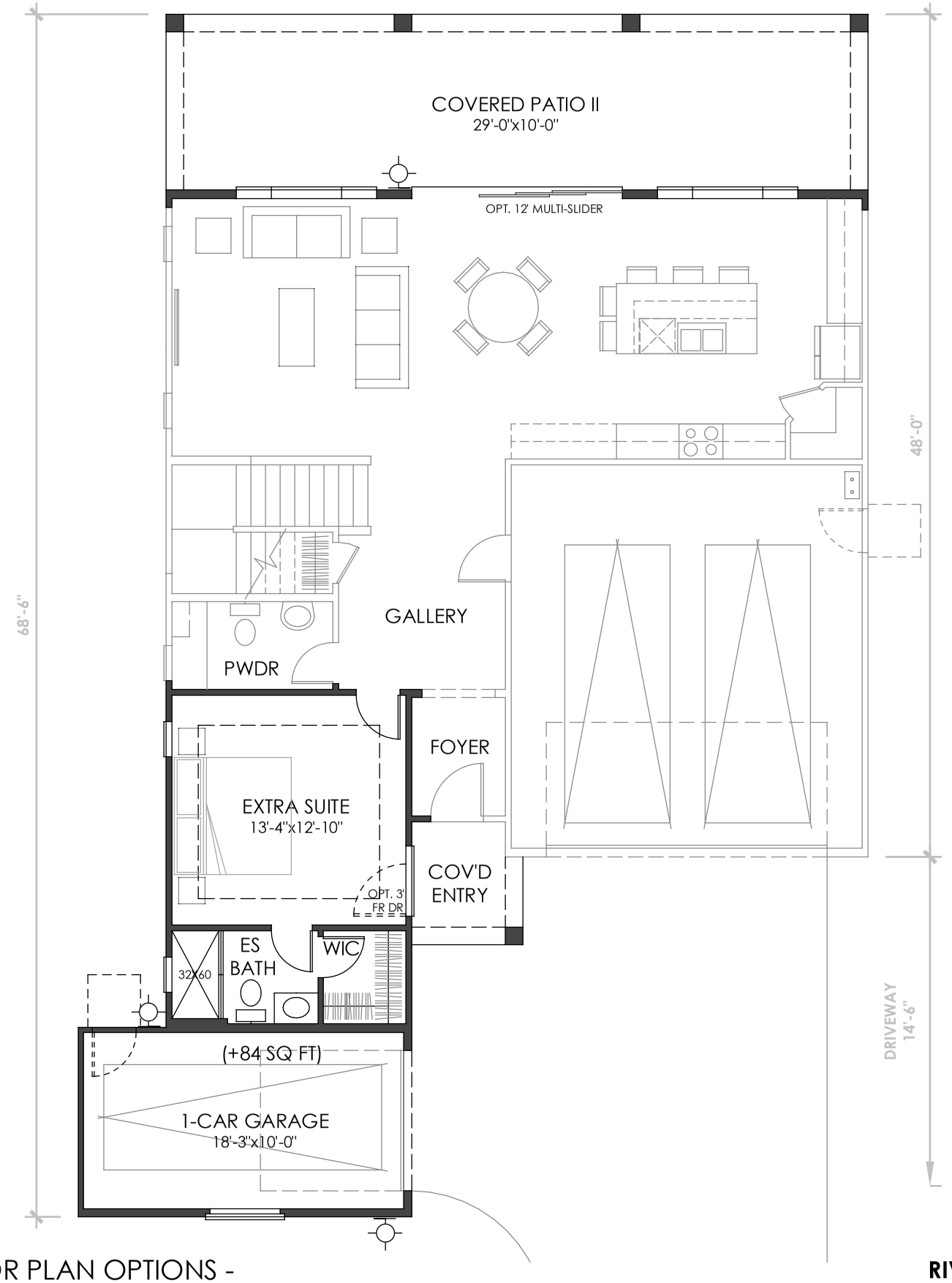
C27

KHovnanian® Homes

FLOOR PLAN OPTIONS -
ALL ELEVATIONS

October 16, 2018





SERIES WIDTH
45' | 50'

LIV. SF:	**2,599**
PLAN WIDTH:	**45'**
PLAN #:	4571
SCALE:	1/8" = 1'-0"
NAME:	PLAN 3

VITAL STATS

BEDROOM	4
BATH	2.5
CAR	3
CEILING	9' | 9'

INDICATES EXTERIOR W.P. COACH LIGHT, PER SPECS.

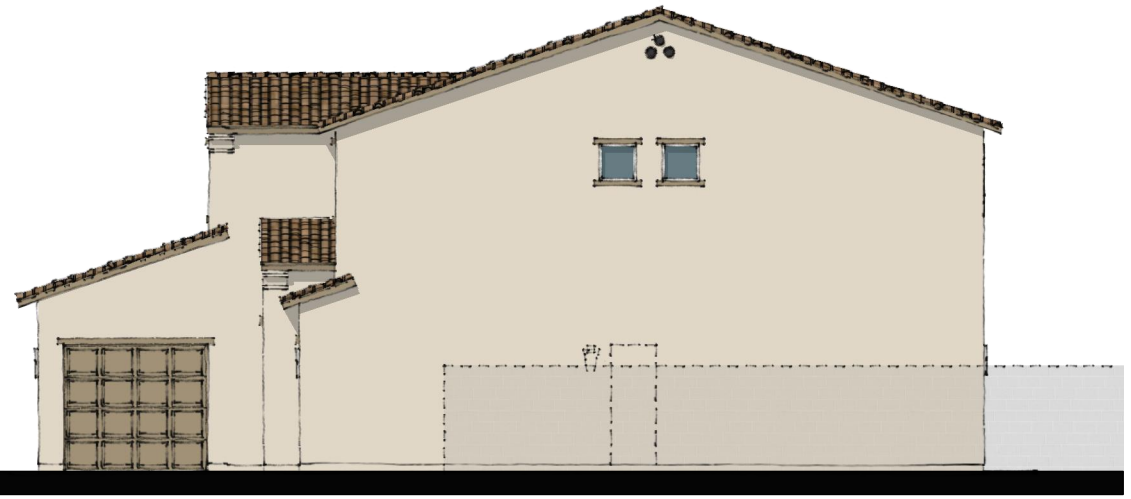
C28

KHovnanian® Homes

FLOOR PLAN OPTIONS -
ALL ELEVATIONS

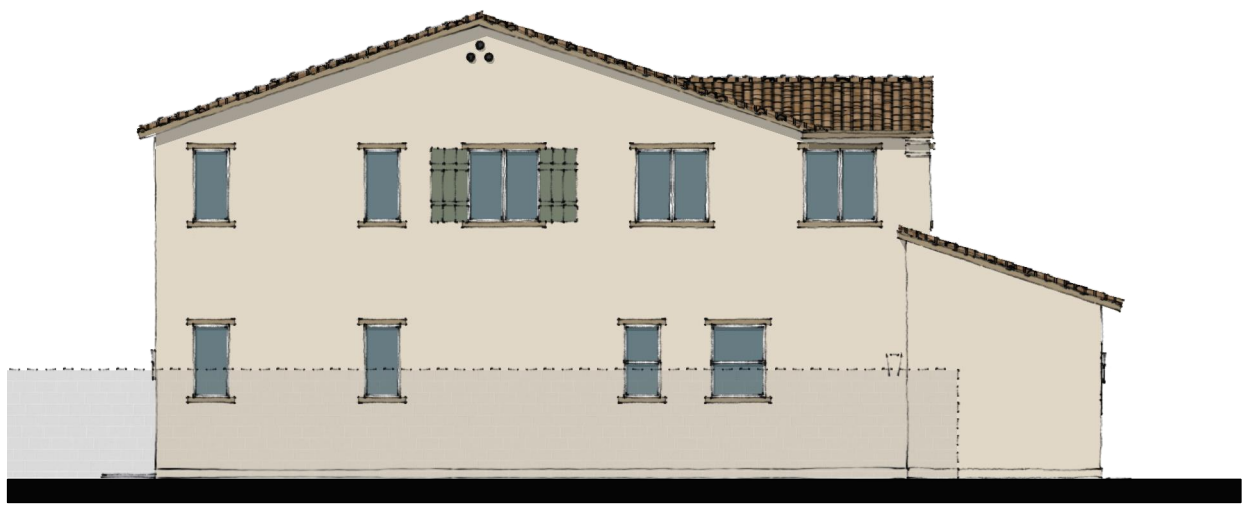
October 31, 2018

'SPANISH'
FRONT VIEW: N.T.S.



RIGHT ELEVATION
SCALE: 3/32" = 1'-0"

REAR ELEVATION
SCALE: 3/32" = 1'-0"



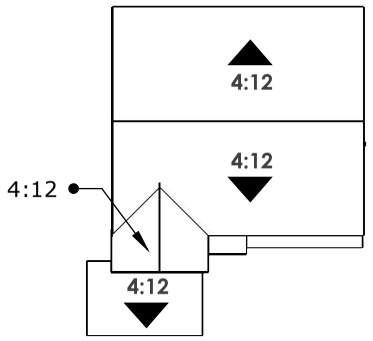
LEFT ELEVATION
SCALE: 3/32" = 1'-0"

T.O. RIDGE
25'-5"

FRONT ELEVATION
SCALE: 3/32" = 1'-0"

SERIES WIDTH
50'

LIV. SF:	**2,599 SF**
PLAN WIDTH:	**50'**
PLAN #:	4571
SPANISH	



ROOF PLAN
SCALE: N.T.S.

STYLE LEGEND:

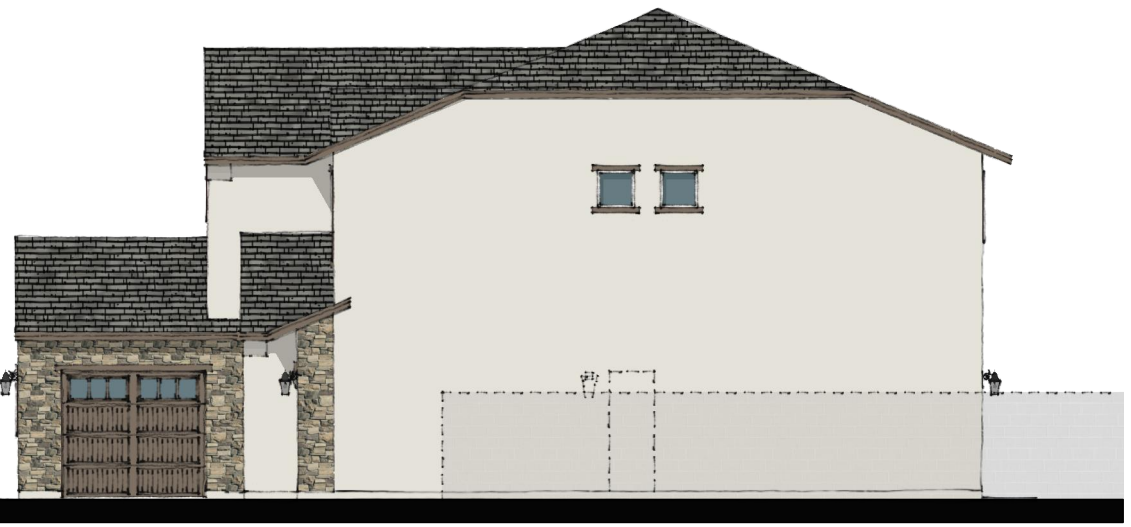
1 PROMINENT GABLES
2 CONCRETE 'S' TILES
3 0" RAKES AND 12" EAVES
4 DECORATIVE GABLE DETAILS
5 DECORATIVE SHUTTERS

C29

KHovnanian® Homes

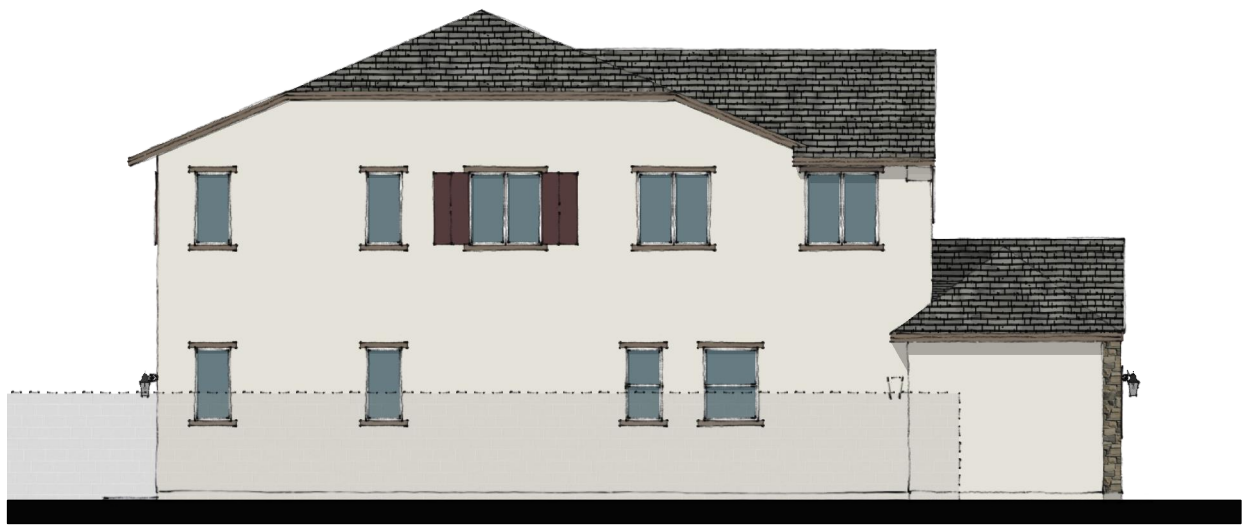
October 31, 2018

'COTTAGE'
FRONT VIEW: N.T.S.



RIGHT ELEVATION
SCALE: 3/32" = 1'-0"

REAR ELEVATION
SCALE: 3/32" = 1'-0"



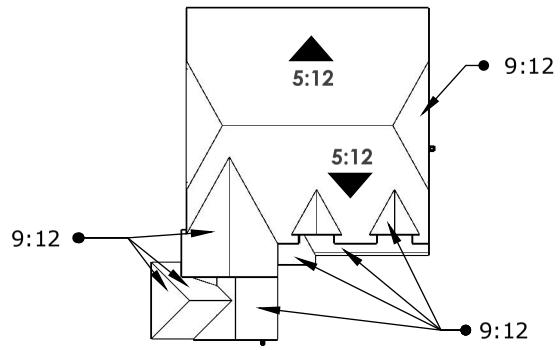
LEFT ELEVATION
SCALE: 3/32" = 1'-0"

T.O. RIDGE
26'-9"

FRONT ELEVATION
SCALE: 3/32" = 1'-0"

SERIES WIDTH
50'

LIV. SF:	**2,599 SF**
PLAN WIDTH:	**50'**
PLAN #:	4571
COTTAGE	



ROOF PLAN
SCALE: N.T.S.

STYLE LEGEND:

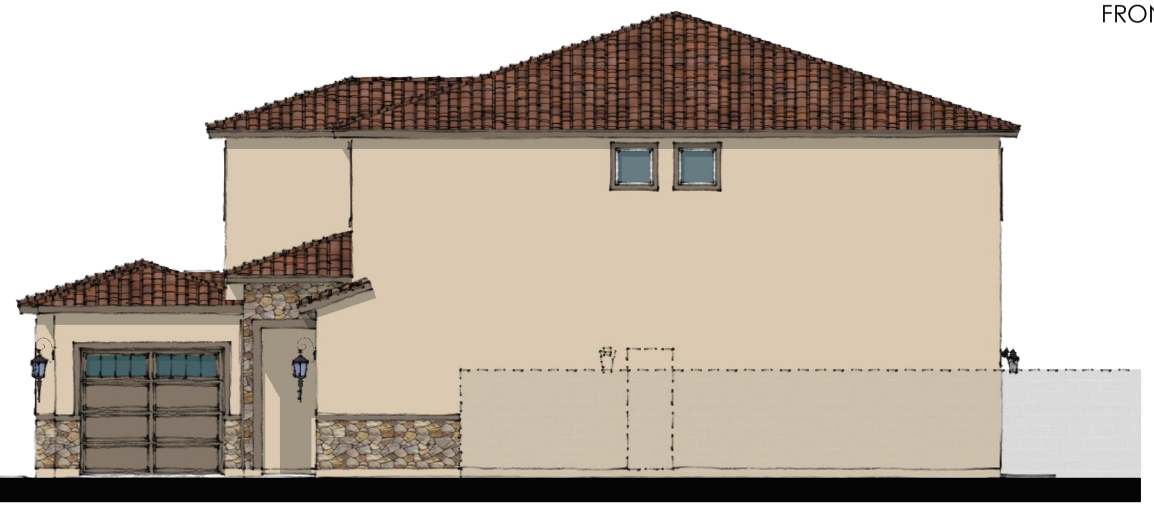
1. PROMINENT GABLES
2. CONCRETE FLAT TILES
3. 0"/12" RAKES AND 12" EAVES
4. DECORATIVE GABLE DETAILS
5. DECORATIVE SHUTTERS
6. ARCHED SOFFITS
7. DECORATIVE STONE VENEER

C30

KHovnanian Homes

October 31, 2018

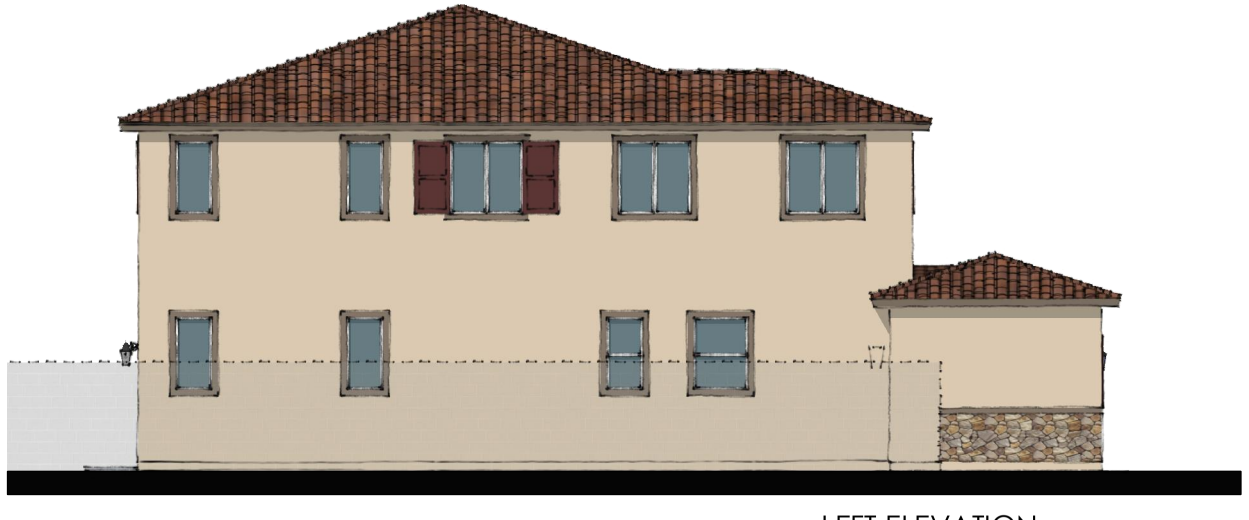
'ITALIANATE'
FRONT VIEW: N.T.S.



RIGHT ELEVATION
SCALE: 3/32" = 1'-0"

REAR ELEVATION
SCALE: 3/32" = 1'-0"

T.O. RIDGE
25'-5"

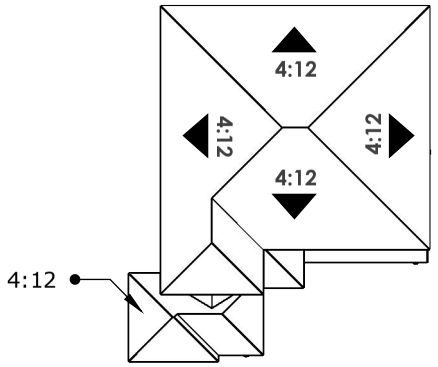


LEFT ELEVATION
SCALE: 3/32" = 1'-0"

FRONT ELEVATION
SCALE: 3/32" = 1'-0"

SERIES WIDTH
50'

LIV. SF:	**2,599 SF**
PLAN WIDTH:	**50'**
PLAN #:	4571
ITALIANATE	



ROOF PLAN
SCALE: N.T.S.

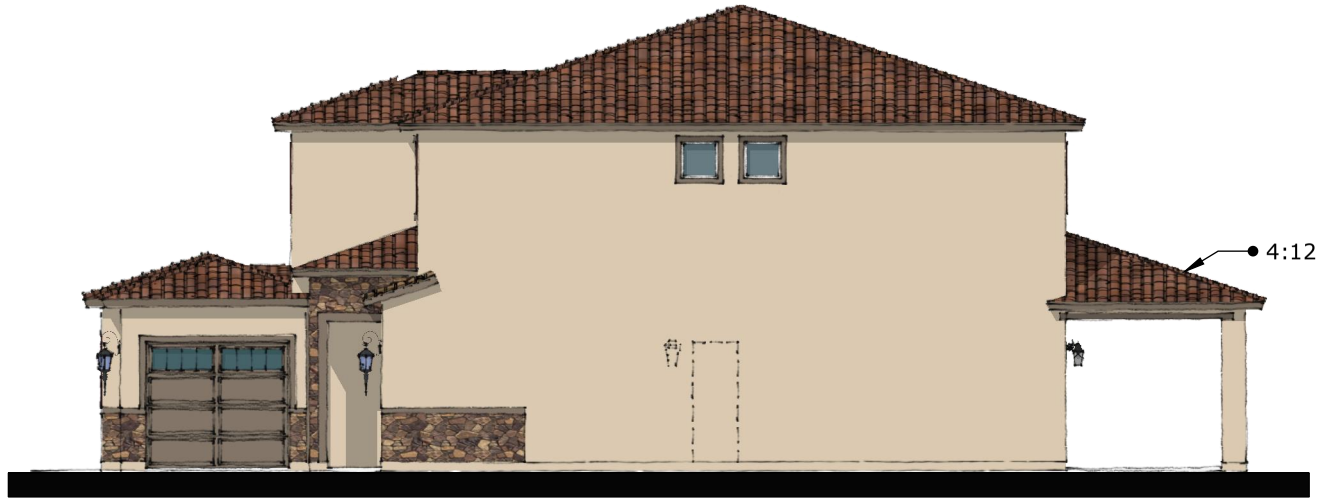
STYLE LEGEND:

1 PROMINENT HIPS
2 CONCRETE 'S' TILES
3 16" EAVES
4 DECORATIVE SHUTTERS
5 DECORATIVE STONE VENEER

C31

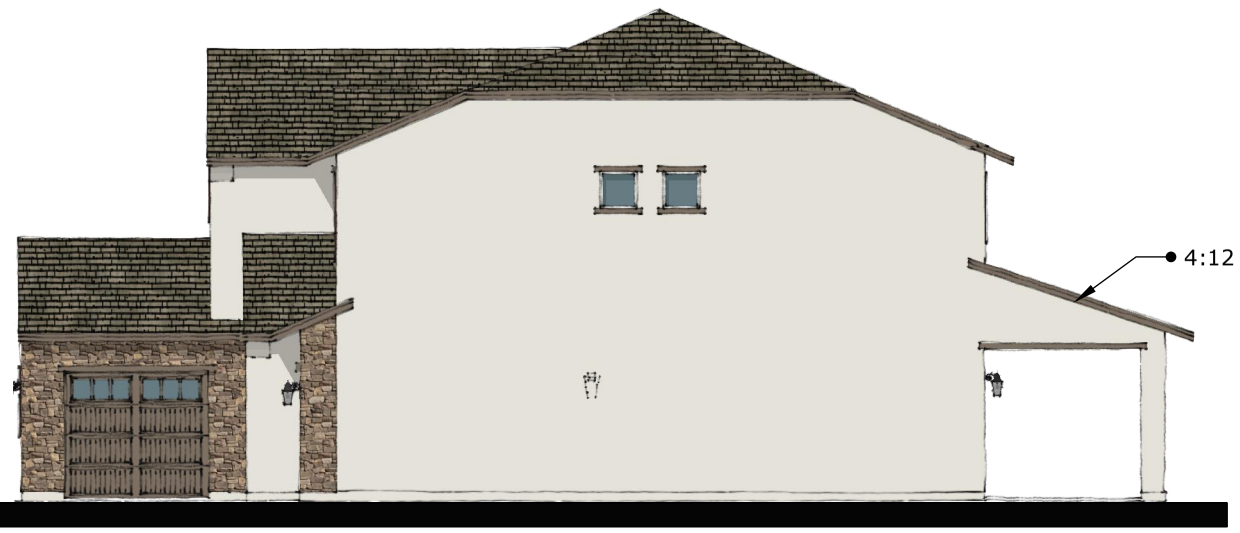
KHovnanian® Homes

October 31, 2018



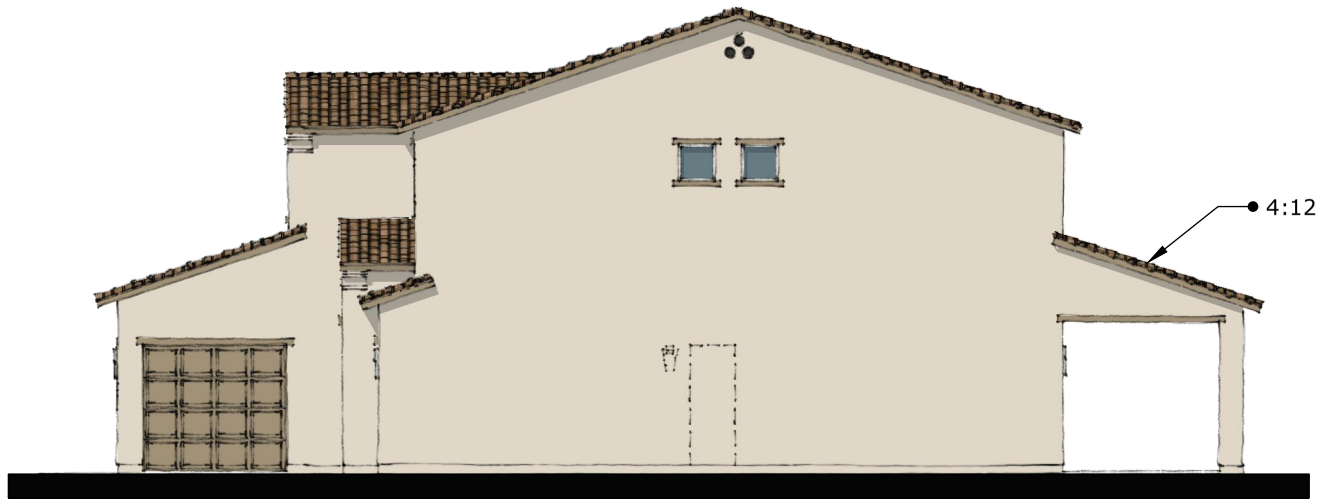
RIGHT ELEVATION
SCALE: 3/32" = 1'-0"

REAR ELEVATION - 'ITALIANATE'
SCALE: 3/32" = 1'-0"



RIGHT ELEVATION
SCALE: 3/32" = 1'-0"

REAR ELEVATION - 'COTTAGE'
SCALE: 3/32" = 1'-0"



RIGHT ELEVATION
SCALE: 3/32" = 1'-0"

REAR ELEVATION - 'SPANISH'
SCALE: 3/32" = 1'-0"

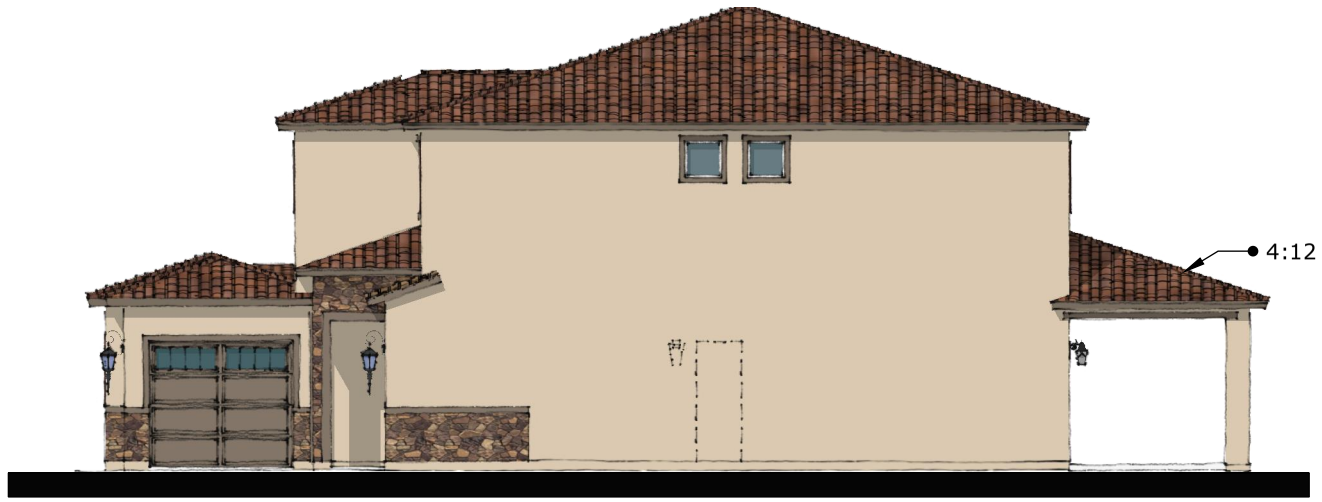
SERIES WIDTH
50'

LIV. SF:	**2,599 SF**
PLAN WIDTH:	**50'**
PLAN #:	4571
OPT. COVERED PATIO	

C32

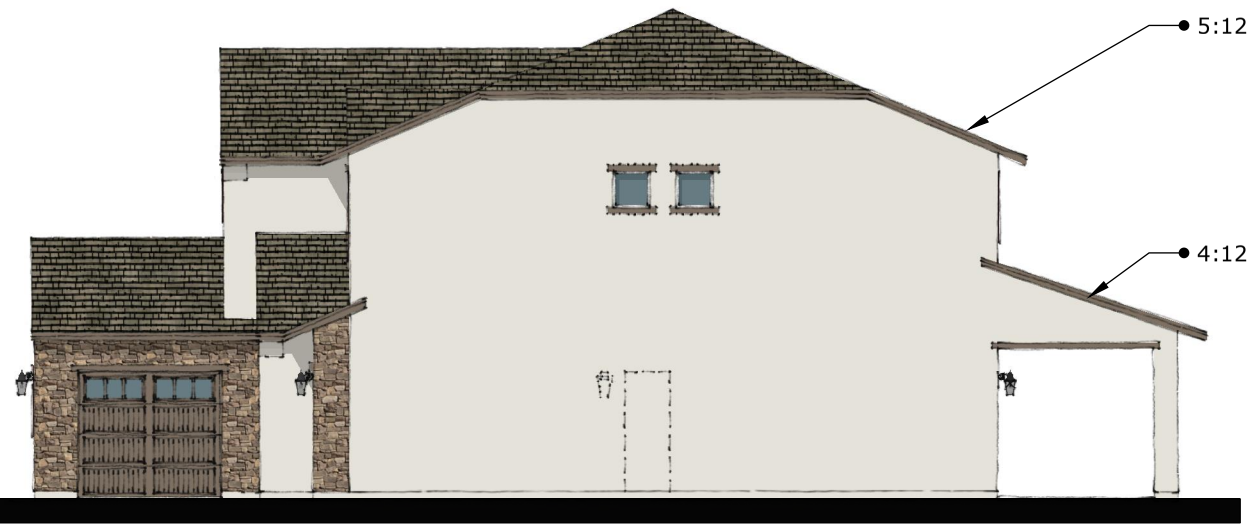
KHovnanian® Homes

October 31, 2018



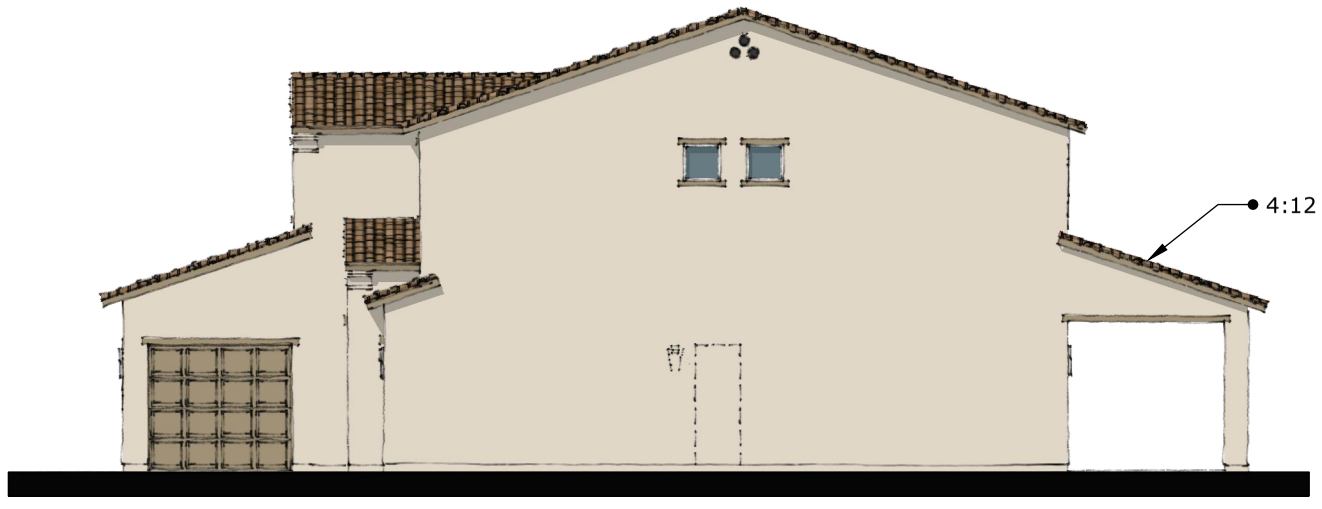
RIGHT ELEVATION
SCALE: 3/32" = 1'-0"

REAR ELEVATION - 'ITALIANATE'
SCALE: 3/32" = 1'-0"



RIGHT ELEVATION
SCALE: 3/32" = 1'-0"

REAR ELEVATION - 'COTTAGE'
SCALE: 3/32" = 1'-0"



RIGHT ELEVATION
SCALE: 3/32" = 1'-0"

REAR ELEVATION - 'SPANISH'
SCALE: 3/32" = 1'-0"

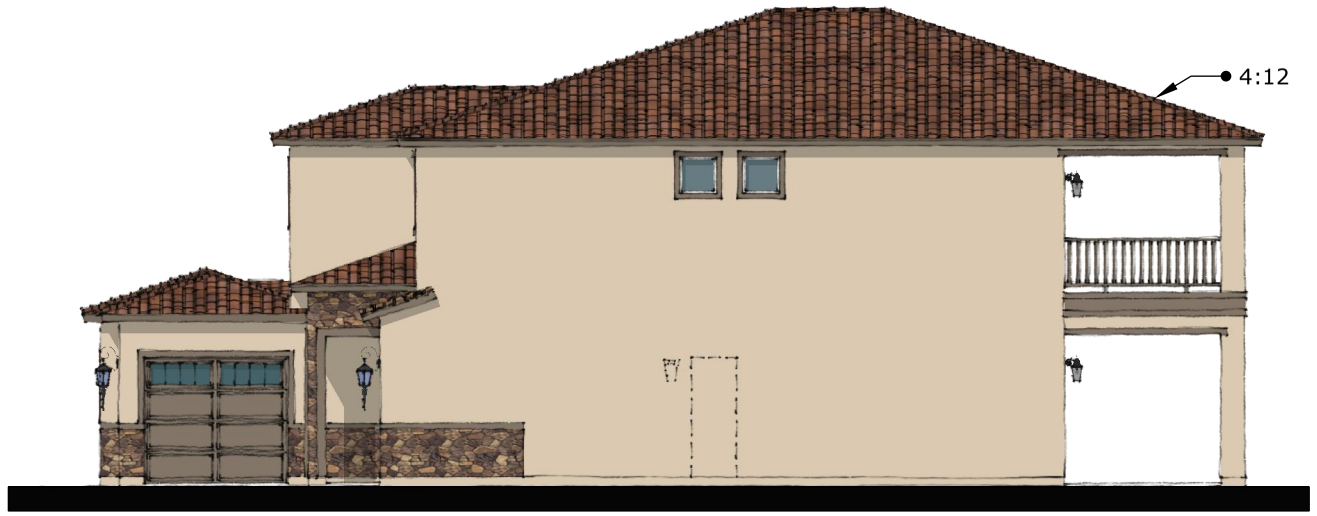
SERIES WIDTH
50'

LIV. SF:	**2,599 SF**
PLAN WIDTH:	**50'**
PLAN #:	4571
OPT. COVERED PATIO 2	

C33

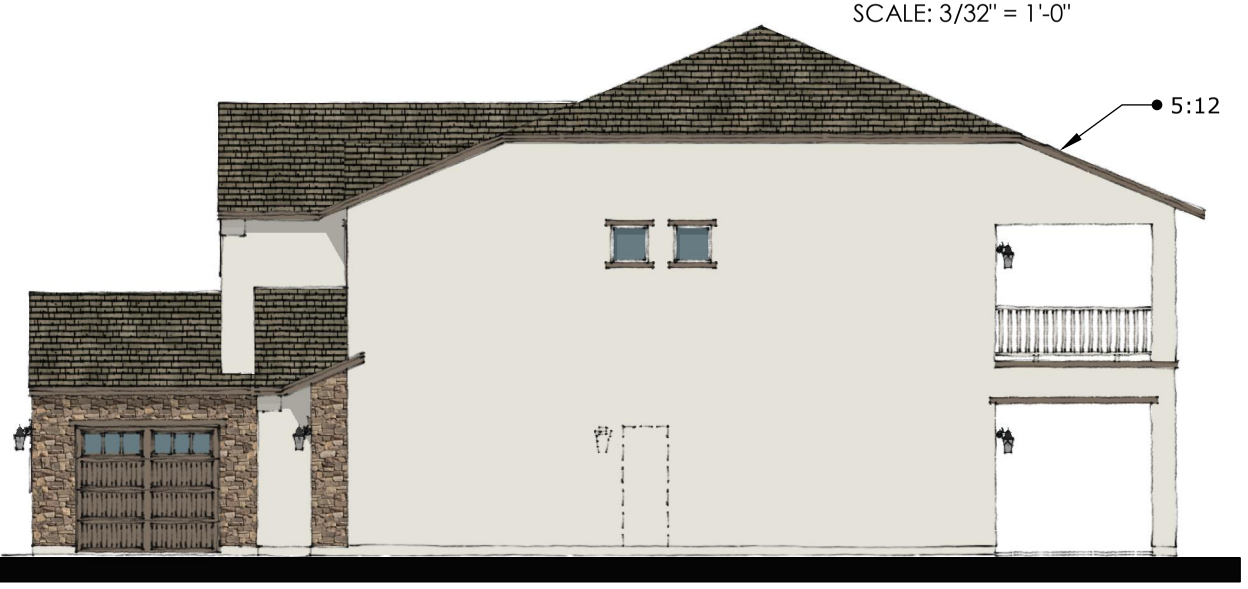
KHovnanian® Homes

October 31, 2018



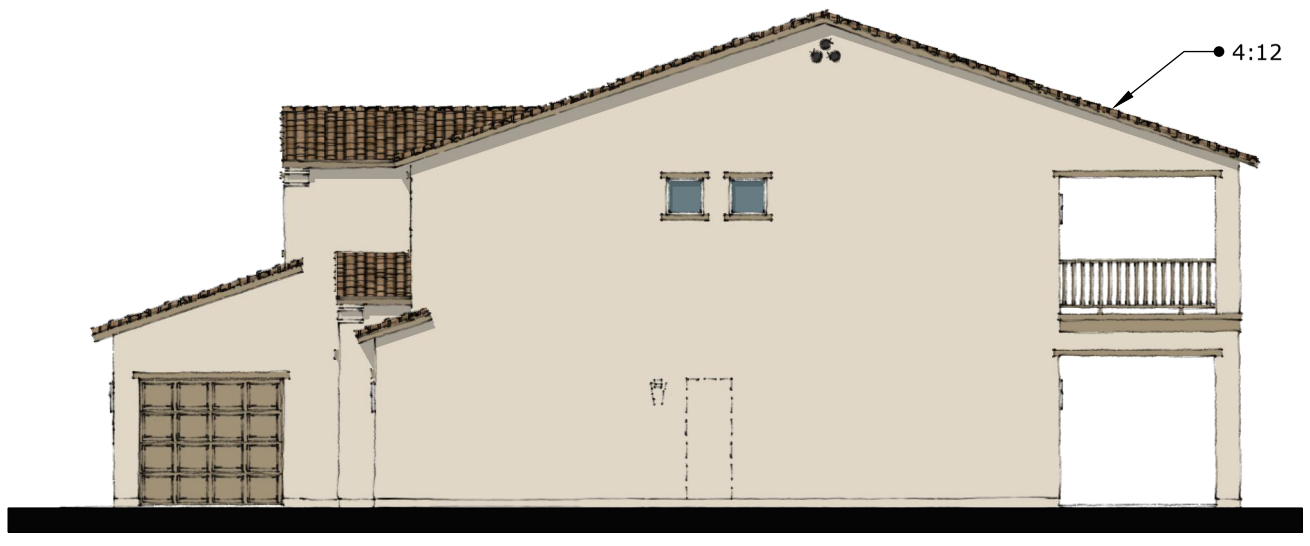
RIGHT ELEVATION
SCALE: 3/32" = 1'-0"

REAR ELEVATION - 'ITALIANATE'
SCALE: 3/32" = 1'-0"



RIGHT ELEVATION
SCALE: 3/32" = 1'-0"

REAR ELEVATION - 'COTTAGE'
SCALE: 3/32" = 1'-0"



RIGHT ELEVATION
SCALE: 3/32" = 1'-0"

REAR ELEVATION - 'SPANISH'
SCALE: 3/32" = 1'-0"

SERIES WIDTH
50'

LIV. SF:	**2,599 SF**
PLAN WIDTH:	**50'**
PLAN #:	4571
OPT. COVERED BALCONY	

C34

KHovnanian® Homes

October 31, 2018

LEFT ELEVATION
SCALE: 3/32" = 1'-0"

FRONT VIEW- 'ITALIANATE'

RIGHT ELEVATION
SCALE: 3/32" = 1'-0"

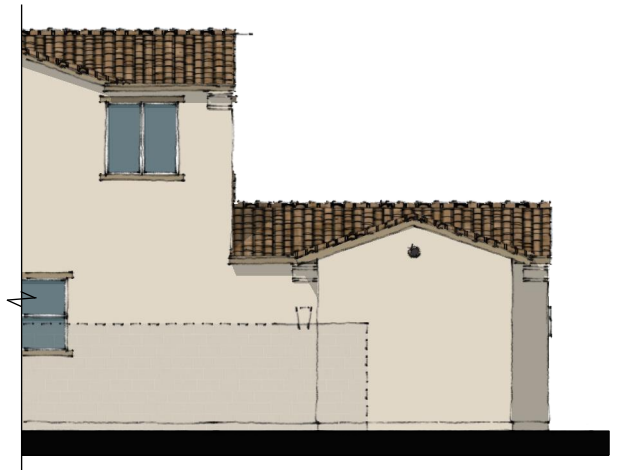
SERIES WIDTH
50'

LIV. SF:	**2,599 SF**
PLAN WIDTH:	**50'**
PLAN #:	4571
OPT. EXTRA SUITE	

LEFT ELEVATION
SCALE: 3/32" = 1'-0"

FRONT VIEW - 'COTTAGE'

RIGHT ELEVATION
SCALE: 3/32" = 1'-0"



LEFT ELEVATION
SCALE: 3/32" = 1'-0"

FRONT VIEW - 'SPANISH'

RIGHT ELEVATION
SCALE: 3/32" = 1'-0"

C35

KHovnanian® Homes

November 30, 2018

SERIES WIDTH
45' | 50'

LIV. SF:	**2,796**
PLAN WIDTH:	**50'**
PLAN #:	5036
SCALE:	1/8" = 1'-0"
NAME:	PLAN 4

VITAL STATS

BEDROOM	4
BATH	2.5
CAR	2
CEILING	9' | 9'

INDICATES EXTERIOR W.P. COACH LIGHT, PER SPECS.

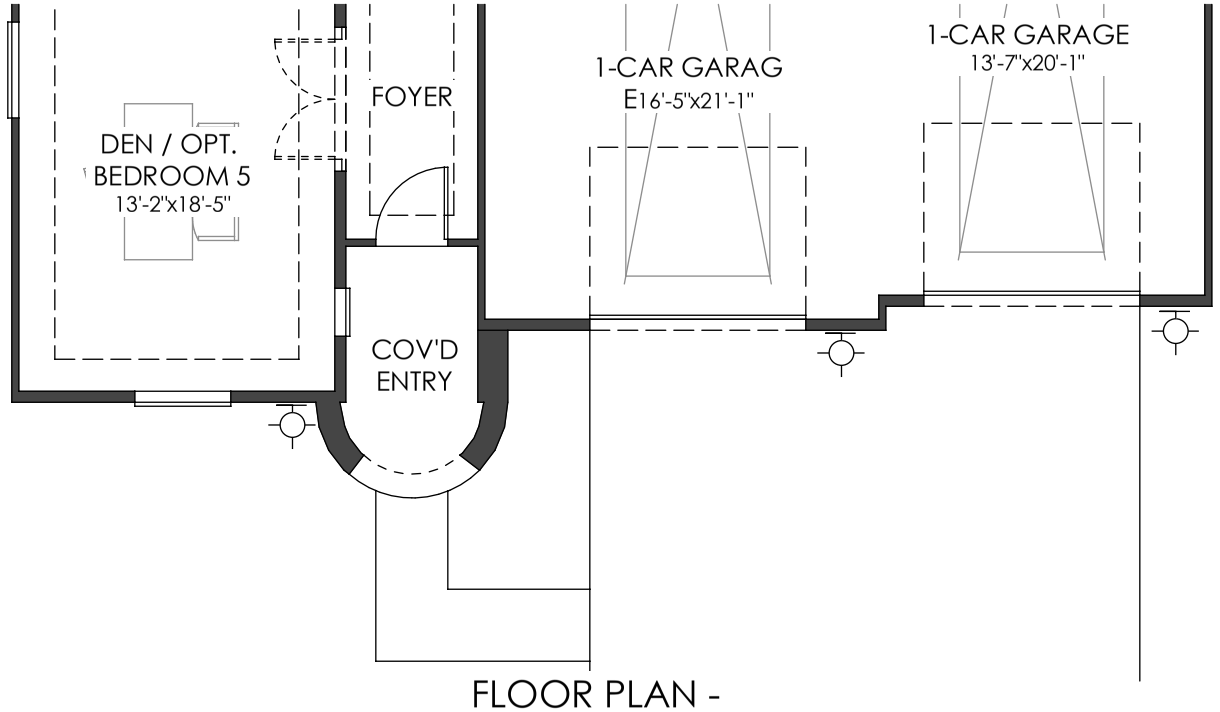
C36

KHovnanian® Homes

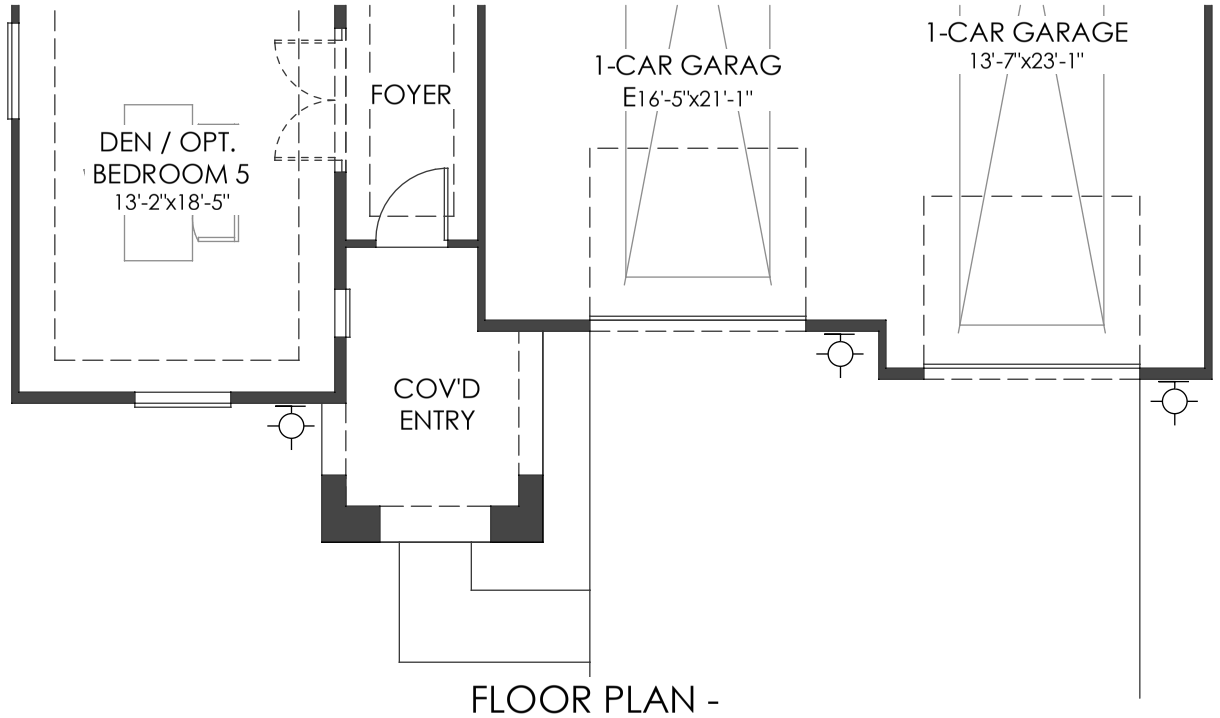
FLOOR PLAN -
ALL ELEVATIONS

RIVERVIEW at MONTERRA
NCD - ANTIOCH, CALIFORNIA
11.30.2018

November 30, 2018



FLOOR PLAN -
'ITALIANATE'



FLOOR PLAN -
'COTTAGE'

SERIES WIDTH
45' | 50'

LIV. SF:	**2,796**
PLAN WIDTH:	**50'**
PLAN #:	5036
SCALE:	1/8" = 1'-0"
NAME:	PLAN 4

VITAL STATS

BEDROOM	4
BATH	2.5
CAR	2
CEILING	9' | 9'

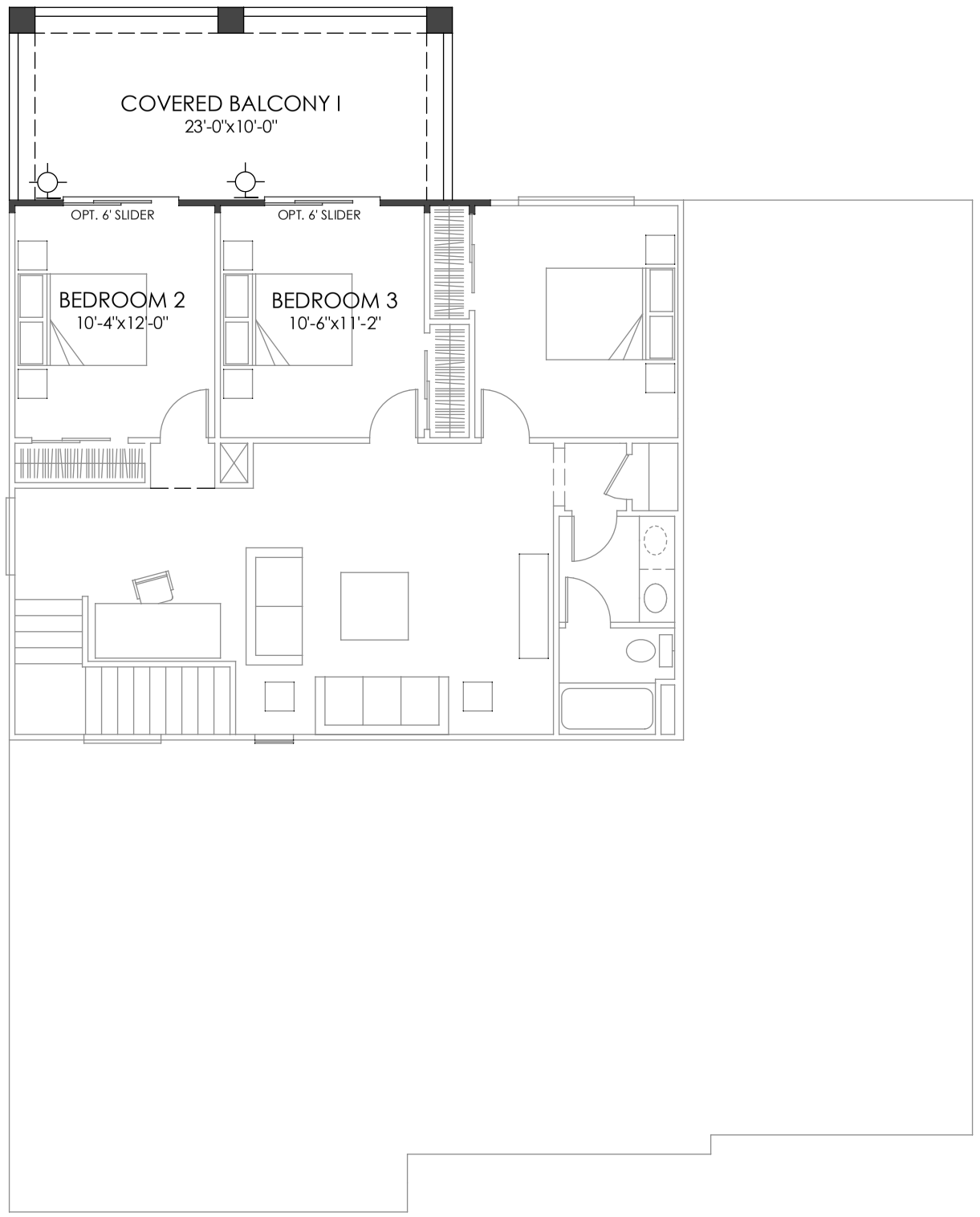
INDICATES EXTERIOR W.P.
COACH LIGHT, PER SPECS.

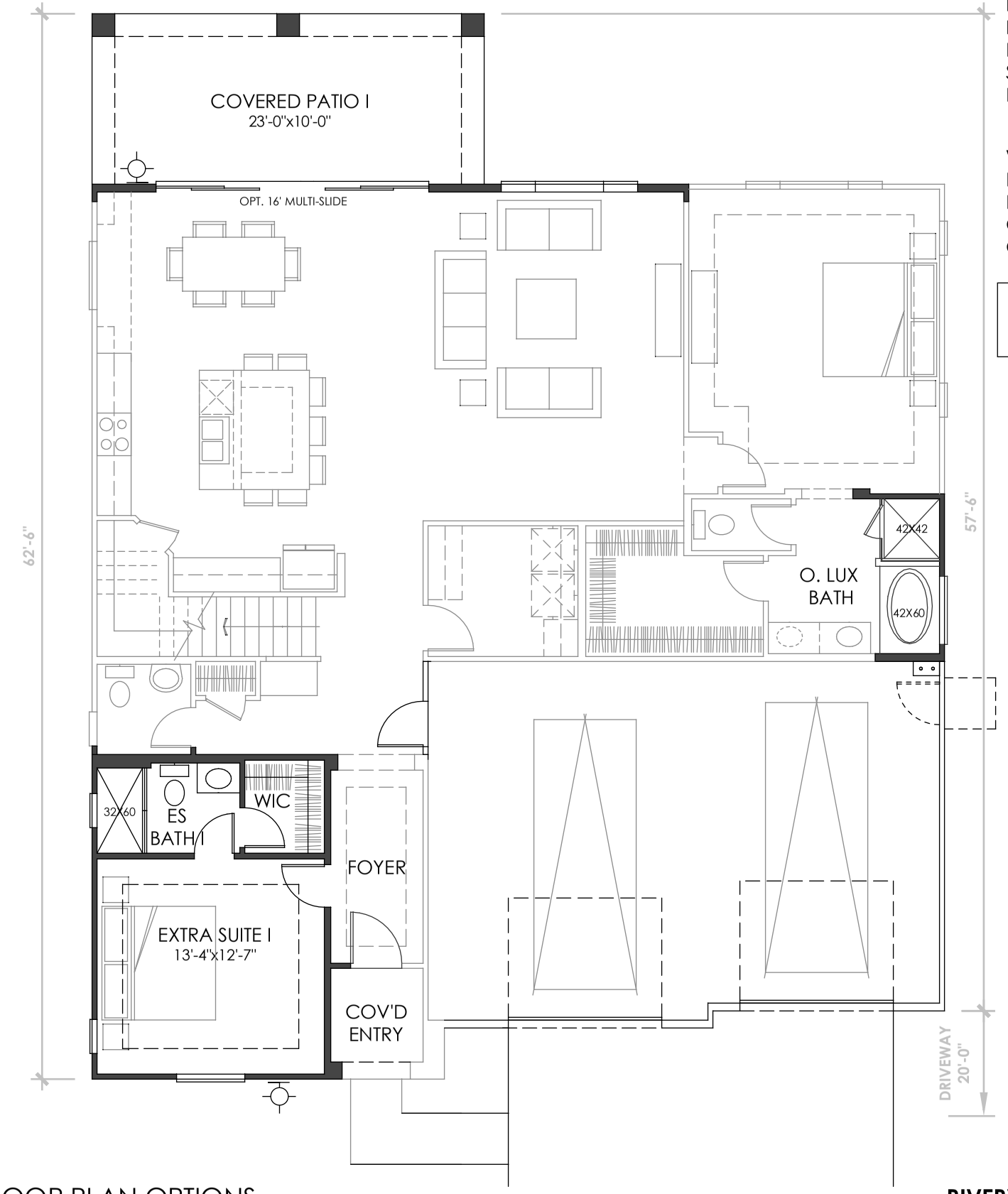
C37

KHovnanian® Homes

RIVERVIEW at MONTERRA
NCD - ANTIOCH, CALIFORNIA
11.30.2018

November 30, 2018





SERIES WIDTH
45' | 50'

LIV. SF:	**2,796**
PLAN WIDTH:	**50'**
PLAN #:	5036
SCALE:	1/8" = 1'-0"
NAME:	PLAN 4

VITAL STATS

BEDROOM	4
BATH	2.5
CAR	2
CEILING	9' | 9'

INDICATES EXTERIOR W.P. COACH LIGHT, PER SPECS.

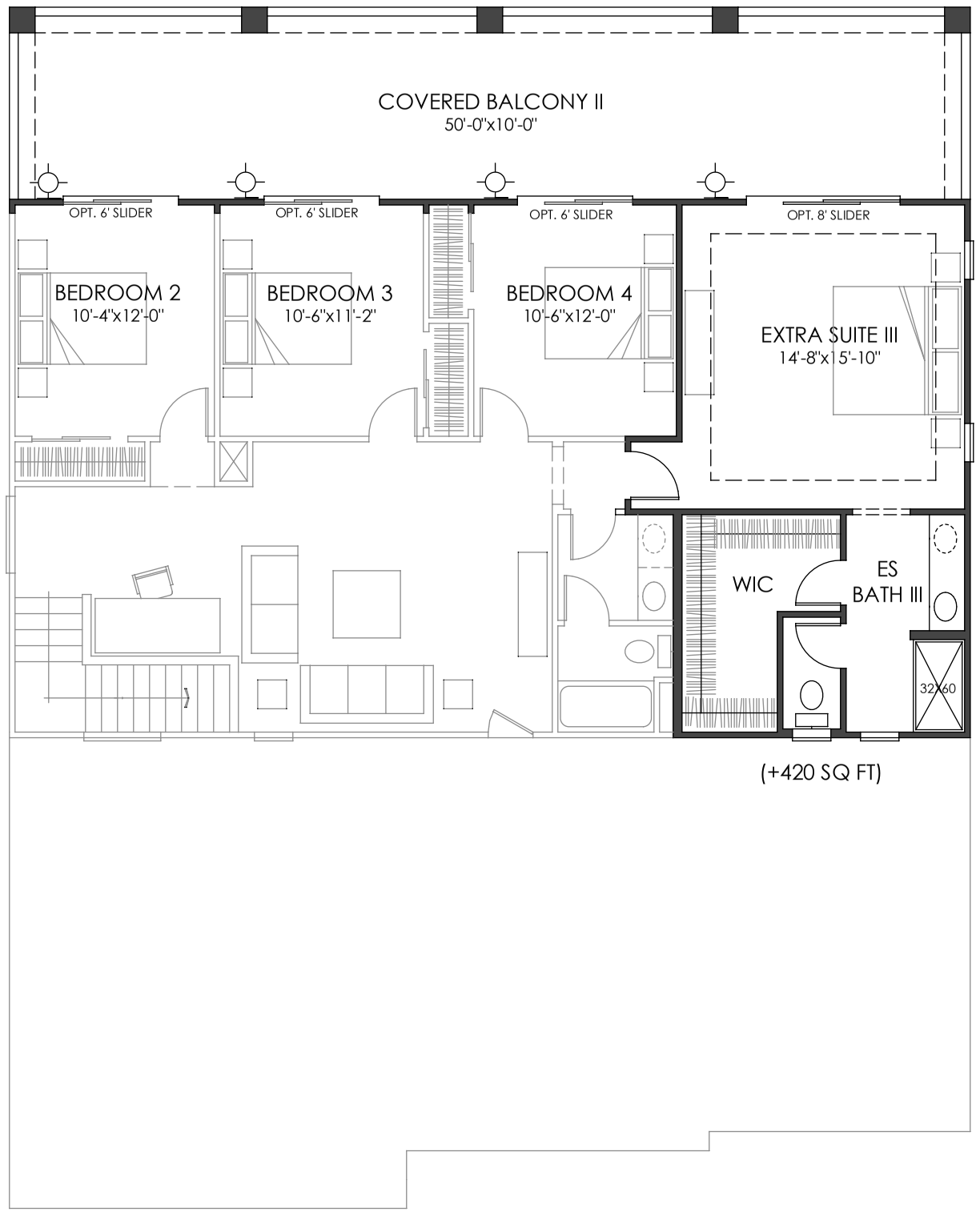
C38

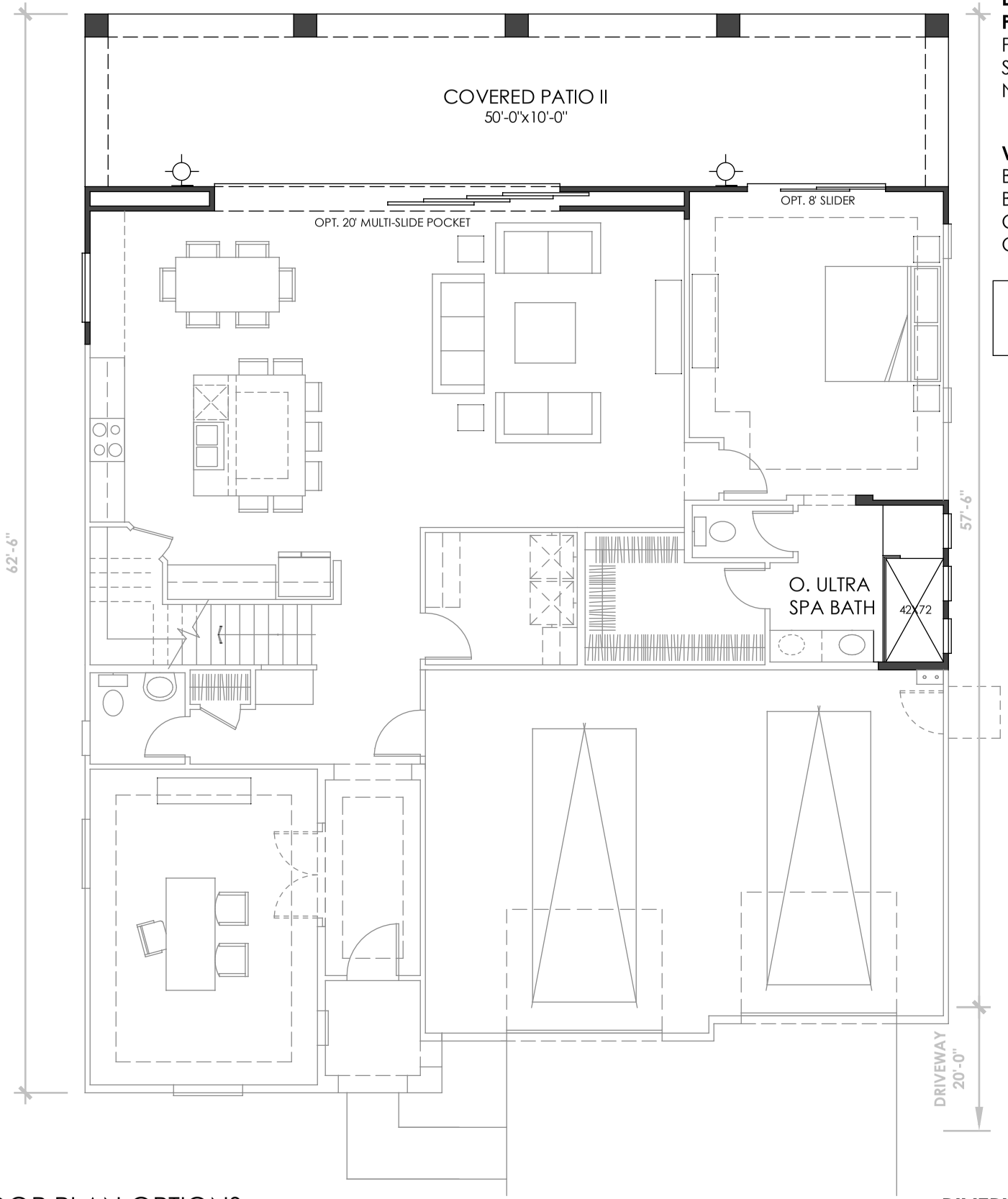
KHovnanian® Homes

FLOOR PLAN OPTIONS -
ALL ELEVATIONS

RIVERVIEW at MONTERRA
NCD - ANTIOCH, CALIFORNIA
11.30.2018

November 30, 2018





SERIES WIDTH
45' | 50'

LIV. SF:	**2,796**
PLAN WIDTH:	**50'**
PLAN #:	5036
SCALE:	1/8" = 1'-0"
NAME:	PLAN 4

VITAL STATS

BEDROOM	4
BATH	2.5
CAR	2
CEILING	9' | 9'

INDICATES EXTERIOR W.P. COACH LIGHT, PER SPECS.

C39

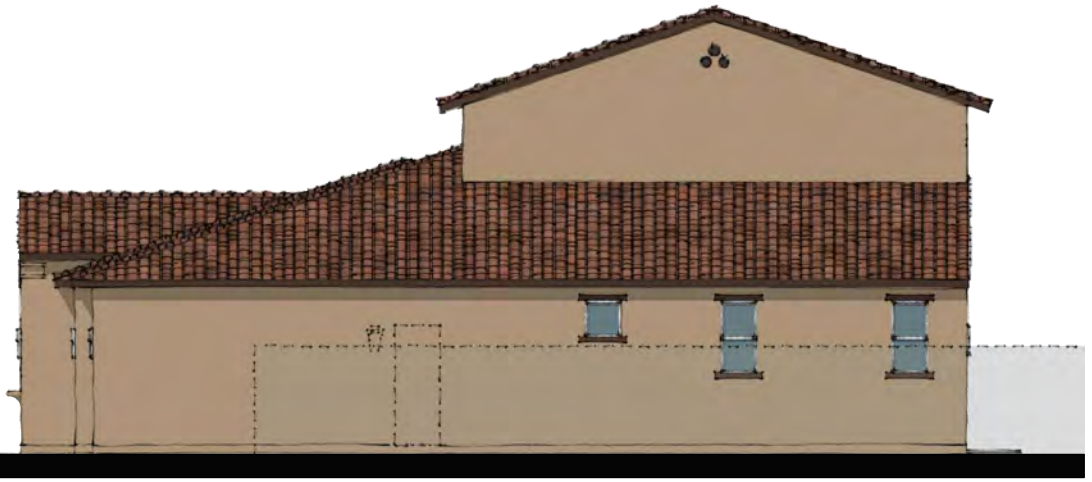
KHovnanian® Homes

FLOOR PLAN OPTIONS -
ALL ELEVATIONS

RIVERVIEW at MONTERRA
NCD - ANTIOCH, CALIFORNIA
11.30.2018

November 30, 2018

'SPANISH'
FRONT VIEW: N.T.S.



RIGHT ELEVATION
SCALE: 3/32" = 1'-0"

REAR ELEVATION
SCALE: 3/32" = 1'-0"

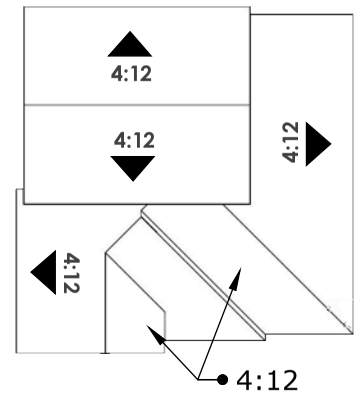
LEFT ELEVATION
SCALE: 3/32" = 1'-0"

T.O. RIDGE
24'-0"

FRONT ELEVATION
SCALE: 3/32" = 1'-0"

SERIES WIDTH
50'

LIV. SF:	**2,796 SF**
PLAN WIDTH:	**50'**
PLAN #:	5036
SPANISH	



ROOF PLAN
SCALE: N.T.S.

STYLE LEGEND:

1 PROMINENT GABLES
2 CONCRETE 'S' TILES
3 0" RAKES AND 12" EAVES
4 DECORATIVE GABLE DETAILS
5 DECORATIVE SHUTTERS

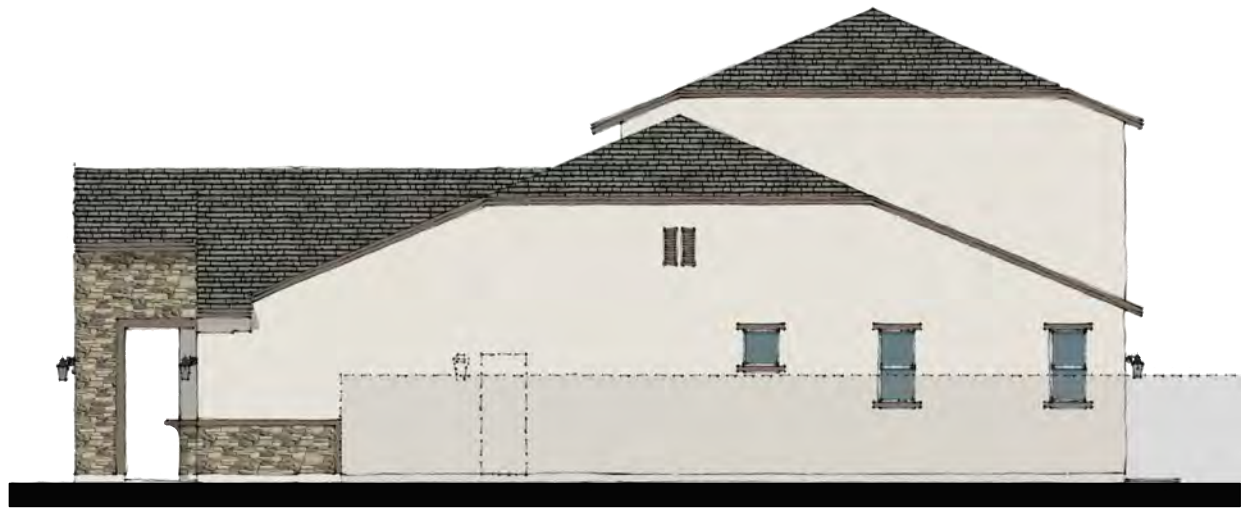
C40

KHovnanian® Homes

RIVERVIEW at MONTERRA
NCD - ANTIOCH, CALIFORNIA
11.30.2018

November 30, 2018

'COTTAGE'
FRONT VIEW: N.T.S.



RIGHT ELEVATION
SCALE: 3/32" = 1'-0"

REAR ELEVATION
SCALE: 3/32" = 1'-0"

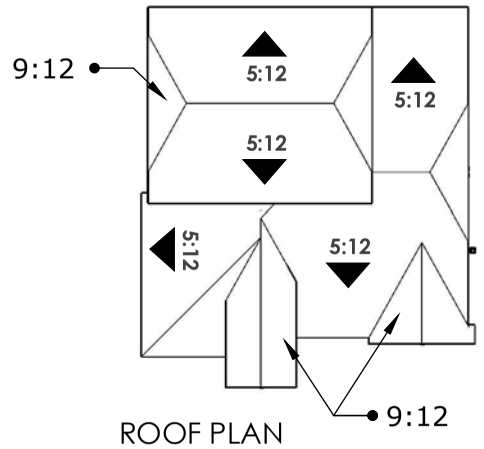
LEFT ELEVATION
SCALE: 3/32" = 1'-0"

T.O. RIDGE
26'-2"

FRONT ELEVATION
SCALE: 3/32" = 1'-0"

SERIES WIDTH
50'

LIV. SF:	**2,796 SF**
PLAN WIDTH:	**50'**
PLAN #:	5036
COTTAGE	



ROOF PLAN
SCALE: N.T.S.

STYLE LEGEND:

1 PROMINENT GABLES
2 CONCRETE FLAT TILES
3 0"/12" RAKES AND 12" EAVES
4 DECORATIVE GABLE DETAILS
5 DECORATIVE SHUTTERS
6 ARCHED SOFFITS
7 DECORATIVE STONE VENEER

C41

KHovnanian® Homes

RIVERVIEW at MONTERRA
NCD - ANTIOCH, CALIFORNIA
11.30.2018

November 30, 2018

'ITALIANATE'
FRONT VIEW: N.T.S.

RIGHT ELEVATION
SCALE: 3/32" = 1'-0"

REAR ELEVATION
SCALE: 3/32" = 1'-0"

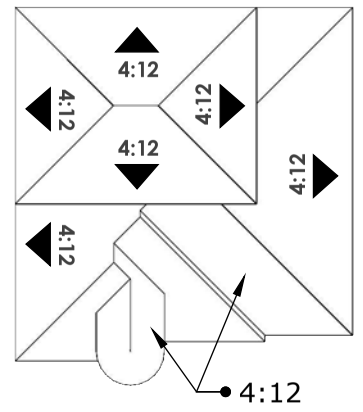
LEFT ELEVATION
SCALE: 3/32" = 1'-0"

T.O. RIDGE
24'-2"

FRONT ELEVATION
SCALE: 3/32" = 1'-0"

SERIES WIDTH
50'

LIV. SF:	**2,796 SF**
PLAN WIDTH:	**50'**
PLAN #:	5036
ITALIANATE	



ROOF PLAN
SCALE: N.T.S.

STYLE LEGEND:

1 PROMINENT HIPS
2 CONCRETE 'S' TILES
3 16" EAVES
4 DECORATIVE SHUTTERS
5 DECORATIVE STONE VENEER

C42

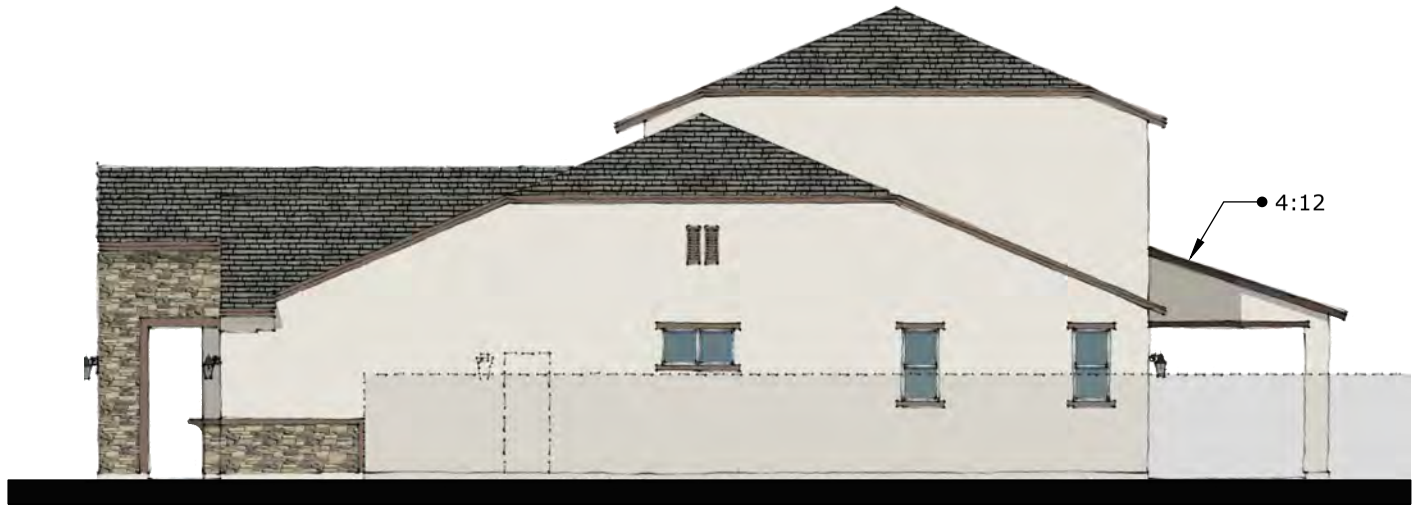
KHovnanian® Homes

RIVERVIEW at MONTERRA
NCD - ANTIOCH, CALIFORNIA
11.30.2018

November 30, 2018

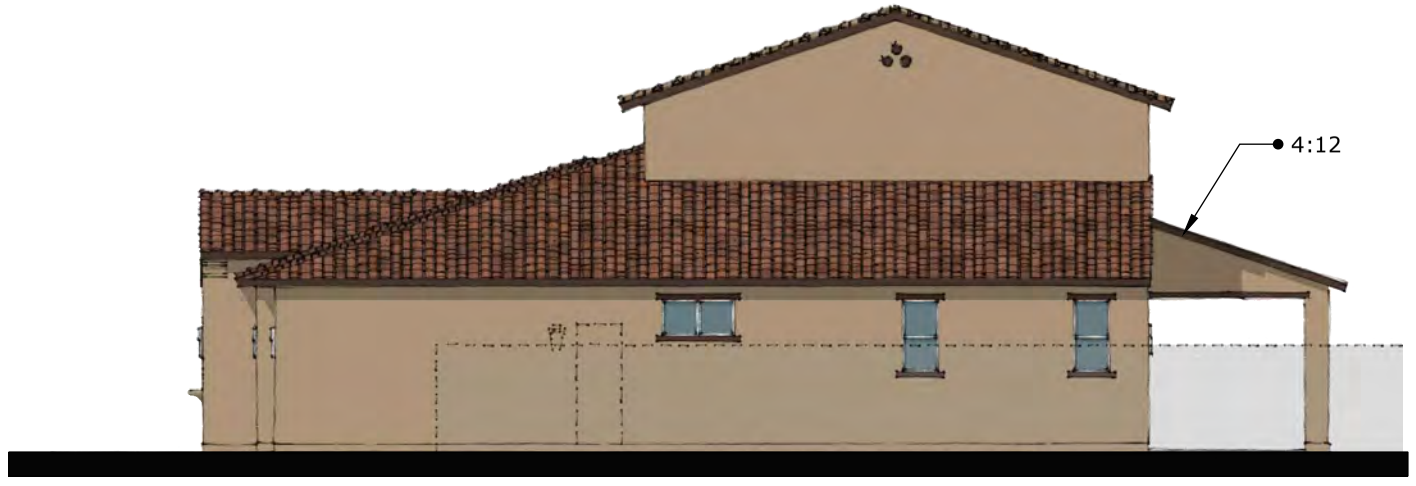
RIGHT ELEVATION
SCALE: 3/32" = 1'-0"

REAR ELEVATION - 'ITALIANATE'
SCALE: 3/32" = 1'-0"



RIGHT ELEVATION
SCALE: 3/32" = 1'-0"

REAR ELEVATION - 'COTTAGE'
SCALE: 3/32" = 1'-0"



RIGHT ELEVATION
SCALE: 3/32" = 1'-0"

REAR ELEVATION - 'SPANISH'
SCALE: 3/32" = 1'-0"

SERIES WIDTH
50'

LIV. SF:	**2,796 SF**
PLAN WIDTH:	**50'**
PLAN #:	5036
OPT. COVERED PATIO 1	

C43

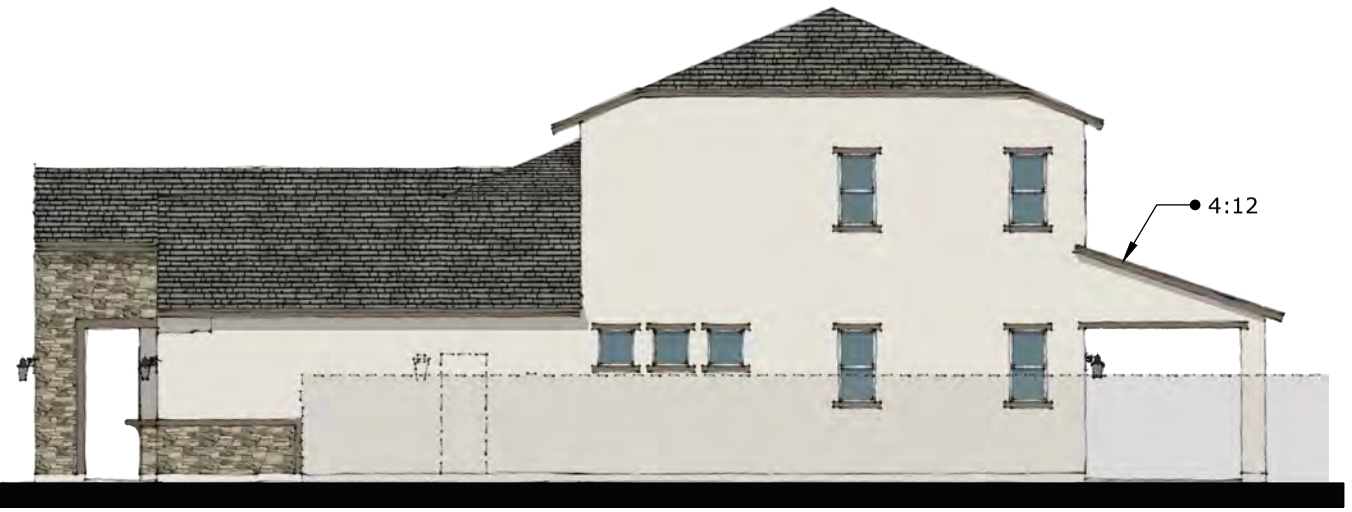
KHovnanian® Homes

RIVERVIEW at MONTERRA
NCD - ANTIOCH, CALIFORNIA
11.30.2018

November 30, 2018

RIGHT ELEVATION
SCALE: 3/32" = 1'-0"

REAR ELEVATION - 'ITALIANATE'
SCALE: 3/32" = 1'-0"



RIGHT ELEVATION
SCALE: 3/32" = 1'-0"

REAR ELEVATION - 'COTTAGE'
SCALE: 3/32" = 1'-0"

RIGHT ELEVATION
SCALE: 3/32" = 1'-0"

REAR ELEVATION - 'SPANISH'
SCALE: 3/32" = 1'-0"

SERIES WIDTH
50'

LIV. SF:	**2,796 SF**
PLAN WIDTH:	**50'**
PLAN #:	5036
OPT. COVERED PATIO 2	

C44

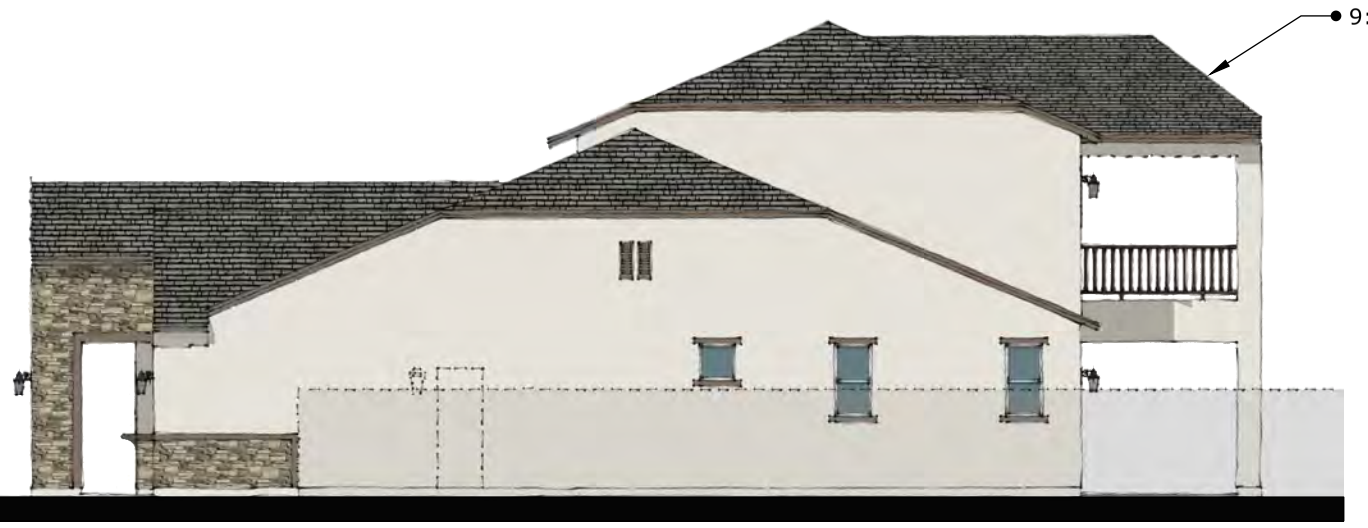
KHovnanian® Homes

RIVERVIEW at MONTERRA
NCD - ANTIOCH, CALIFORNIA
11.30.2018

November 30, 2018

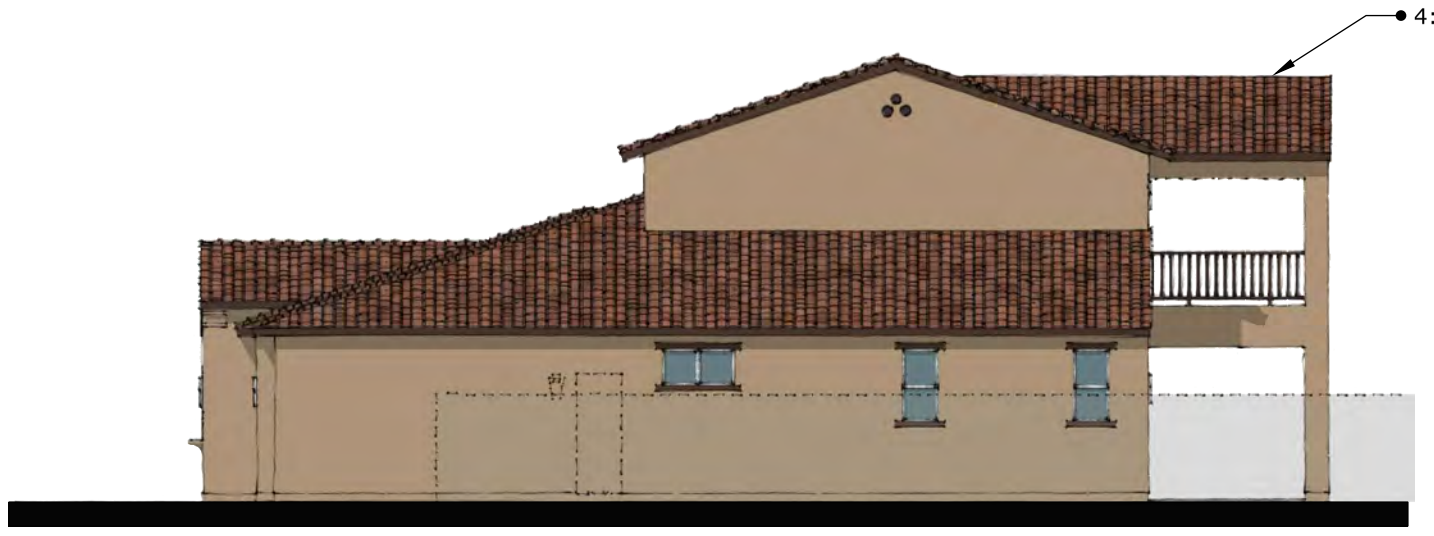
RIGHT ELEVATION
SCALE: 3/32" = 1'-0"

REAR ELEVATION - 'ITALIANATE'
SCALE: 3/32" = 1'-0"



RIGHT ELEVATION
SCALE: 3/32" = 1'-0"

REAR ELEVATION - 'COTTAGE'
SCALE: 3/32" = 1'-0"



RIGHT ELEVATION
SCALE: 3/32" = 1'-0"

REAR ELEVATION - 'SPANISH'
SCALE: 3/32" = 1'-0"

SERIES WIDTH
50'

LIV. SF:	**2,796 SF**
PLAN WIDTH:	**50'**
PLAN #:	5036
OPT. BALCONY 1	

C45

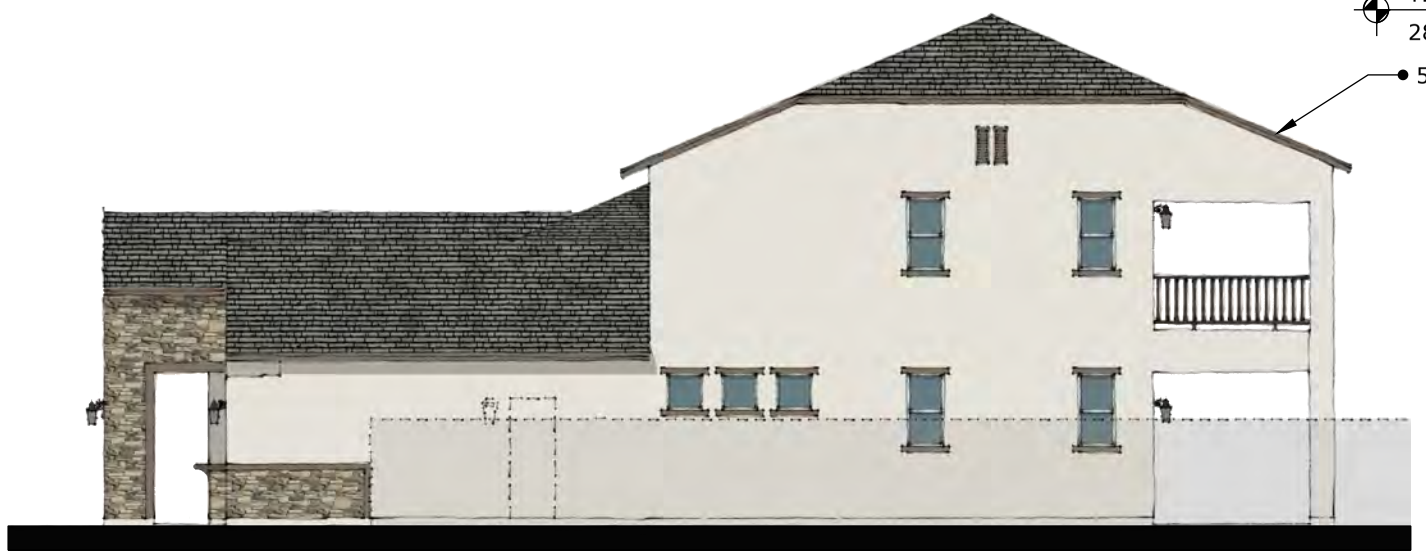
KHovnanian® Homes

RIVERVIEW at MONTERRA
NCD - ANTIOCH, CALIFORNIA
11.30.2018

November 30, 2018

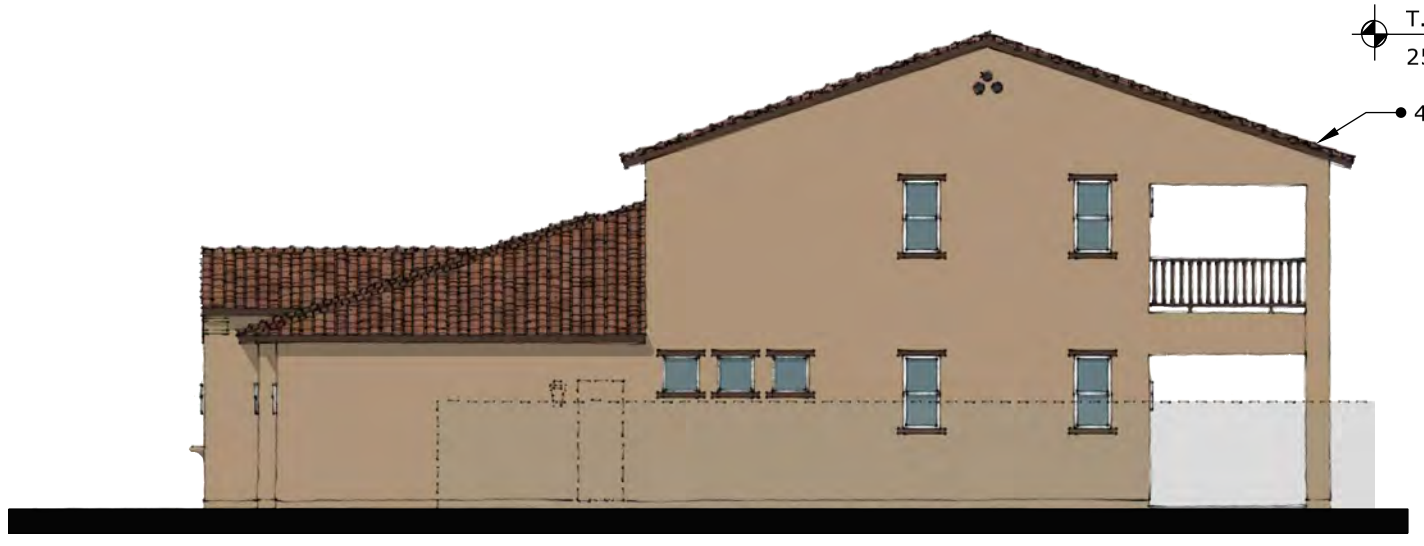
RIGHT ELEVATION
SCALE: 3/32" = 1'-0"

REAR ELEVATION - 'ITALIANATE'
SCALE: 3/32" = 1'-0"



RIGHT ELEVATION
SCALE: 3/32" = 1'-0"

REAR ELEVATION - 'COTTAGE'
SCALE: 3/32" = 1'-0"



RIGHT ELEVATION
SCALE: 3/32" = 1'-0"

REAR ELEVATION - 'SPANISH'
SCALE: 3/32" = 1'-0"

SERIES WIDTH
50'

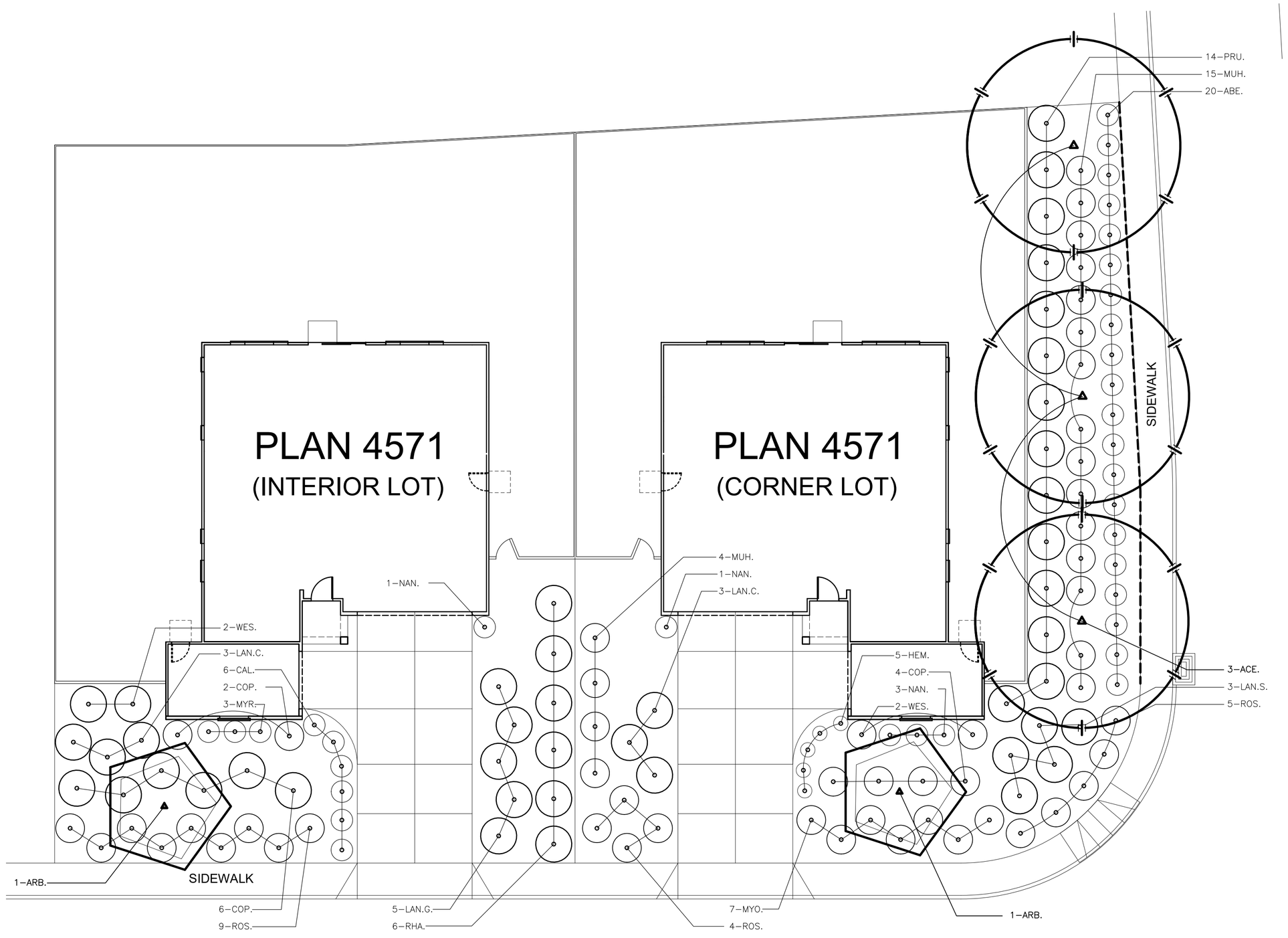
LIV. SF:	**2,796 SF**
PLAN WIDTH:	**50'**
PLAN #:	5036
OPT. BALCONY 2 W/ EXTRA SUITE	

C46

KHovnanian® Homes

RIVERVIEW at MONTERRA
NCD - ANTIOCH, CALIFORNIA
11.30.2018

ATTACHMENT "D"



MASTER PLANT MATERIAL LIST

WATER USE	SIZE	KEY	BOTANICAL NAME ... COMMON NAME	HxW
			SHADE TREE:	
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KEY | LANDSCAPE LEGEND

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- SHRUBS
- 5—ARB. — PLANT QUANTITY / PLANT KEY

I HAVE COMPLIED WITH THE CRITERIA OF THE ORDINANCE AND APPLIED THEM FOR EFFICIENT USE OF WATER IN THE LANDSCAPE DESIGN PLAN.

LANDSCAPE ARCHITECT — 11/19/18 DATE

10' 5' 0 10' 20'

SCALE: 1"= 10'—0"

D1

MTW group
LANDSCAPE ARCHITECTURE AND PLANNING
2707 K STREET, SUITE 201
Sacramento, CA 95816
916 369-3990

LANDSCAPE ARCHITECT — PETER D. LARIMER — 5284 — STATE OF CALIFORNIA
11/19/18
6/30/20 RENEWAL DATE

Peter D. Larimer C-5284

REVISIONS

NO.	DESCRIPTION	DATE	REV'D

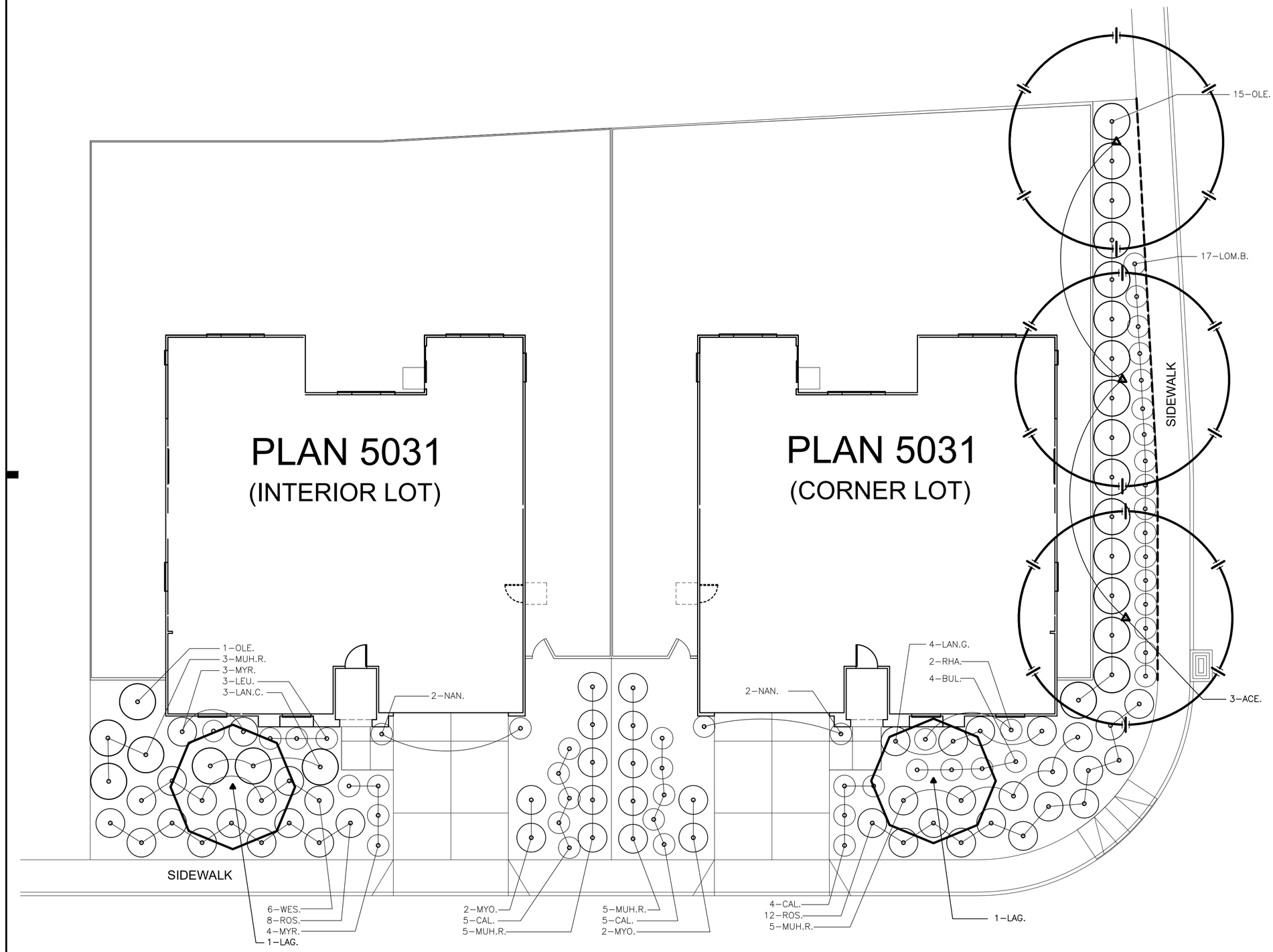
RIVERVIEW AT MOTERRA
TYPICAL INTERIOR
PRODUCTION HOMES
ANTIOCH, CALIFORNIA

DATE 11/13/18
JOB NO. 18-32.P
SHEET TITLE

PLAN 4571
LANDSCAPE
PLANTING
PLAN

SHEET NO.
L1.1
SHEET 1 OF 5

CITY APPROVAL



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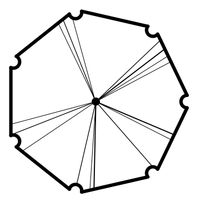

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D2

MTW group
LANDSCAPE ARCHITECTURE AND PLANNING
2707 K STREET, SUITE 201
Sacramento, CA 95816
916 369-3990

LICENSED LANDSCAPE ARCHITECT PETER D. LARIMER 5284 11/19/18 6/30/20 RENEWAL DATE STATE OF CALIFORNIA

Peter D. Larimer C-5284

REVISIONS

NO.	DESCRIPTION	DATE	REV'D

RIVERVIEW AT MOTERRA
TYPICAL INTERIOR
PRODUCTION HOMES

ANTIOCH, CALIFORNIA

DATE 11/13/18

JOB NO. 18-32.P

SHEET TITLE

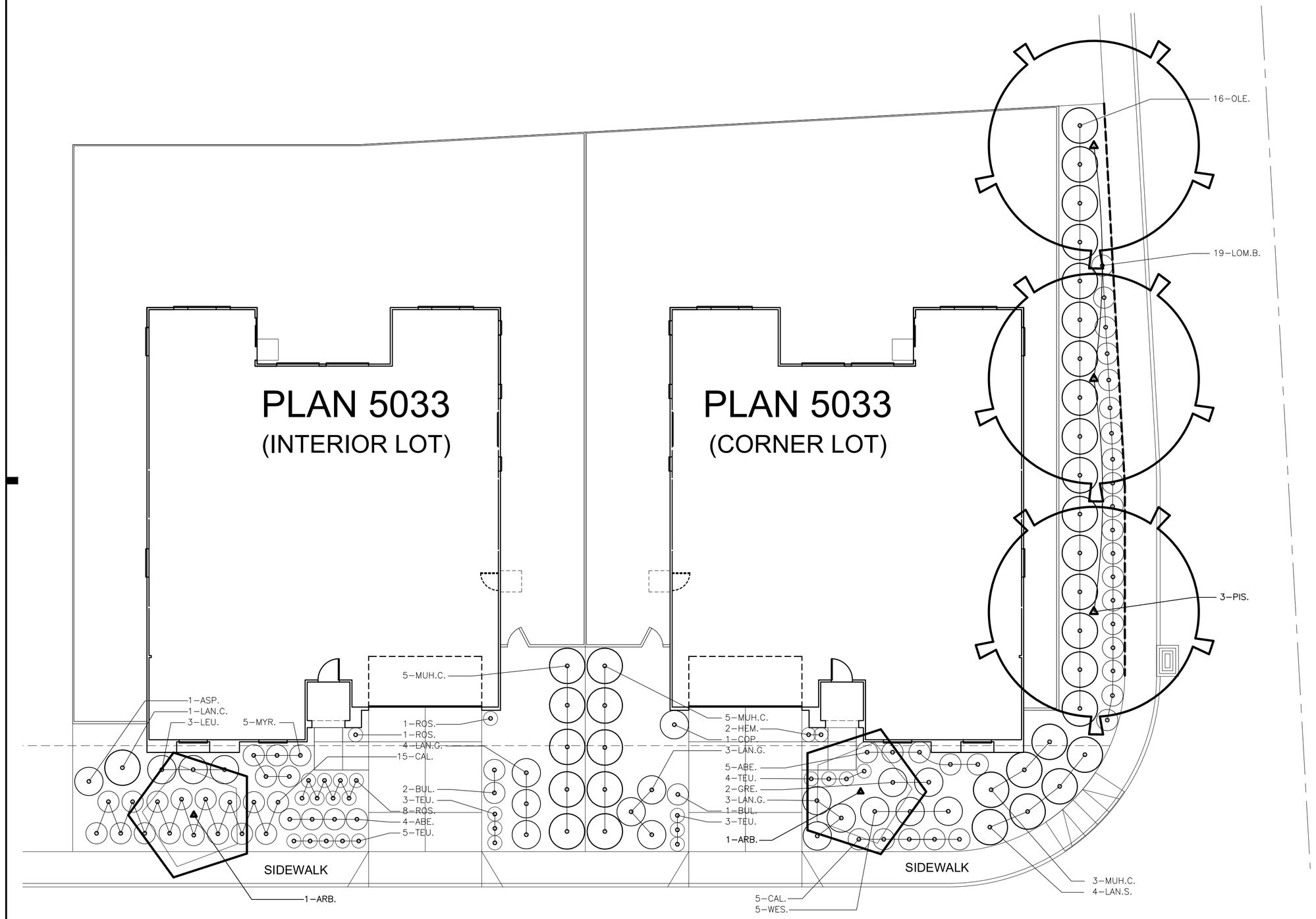
PLAN 5031
LANDSCAPE
PLANTING
PLAN

SHEET NO.

L2.1

SHEET 2 OF 5

CITY APPROVAL



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LOW	1 G.C.	TEU.	TEUCRIUM CHAMAEDRYS ... GERMANDER	1.5'X2.5'
LOW	5 G.C.	WES.	WESTRINGIA 'WYNYABBIE HIGHLIGHT' ... AUSTRALIAN ROSEMARY	4'X4'

LANDSCAPE PLANTING NOTES

1. ALL SHRUB AREAS SHALL BE COMPLETELY COVERED WITH A 3" LAYER OF DECORATIVE WALK–ON BARK. PROVIDE SAMPLE TO OWNER'S REPRESENTATIVE FOR APPROVAL PRIOR TO INSTALLATION.
2. FIELD ADJUST TREES AS NECESSARY TO MAINTAIN THE FOLLOWING MINIMUM CLEARANCES:
   8 FEET CLEARANCE FROM SEWER OR WATER LINES.
   5 FEET CLEARANCE FROM STORM DRAIN, JOINT TRENCH AND FIRE HYDRANTS
   15 FEET FROM STREET LIGHTS
   25 FEET FROM STOP SIGNS/STOP LIGHTS.
3. SEE SOIL TESTING NOTES FOR SOIL AMENDMENT AND FERTILIZER RATES.
4. TREES TO RECIEVE ROOTBARRIER IF PLANTED WITHIN 5' OF HARDSCAPE. SEE DETAIL ON SHEET LD.1 FOR MORE INFORMATION.
5. CERTIFICATION OF COMPLETION TO BE COMPLETED BY THE CONTRACTOR FOR EACH HOUSE INSTALLED AND EXCEEDS 500 SQ.FT. OF LANDSCAPE AREA. THE CERTIFICATION OF COMPLETION TO CONTAIN THE FOLLOWING INFORMATION:
   A. DATE, PROJECT NAME, PROJECT APPLICANT NAME, TELEPHONE AND MAILING ADDRESS, PROJECT ADDRESS AND LOCATION, AND PROPERTY OWNER NAME, TELEPHONE AND MAILING ADDRESS.
   B. CERTIFICATION BY LICENSED LANDSCAPE CONTRACTOR WHO INSTALLED THE LANDSCAPING AND IRRIGATION. WHERE SIGNIFICATE CHANGES ARE MADE IN THE FIELD DURING CONSTRUCTION "AS–BUILT" OR RECORD DRAWINGS SHALL BE INCLUDED. A COPY OF THE IRRIGATION PLAN OR RECORD DRAWING SHALL BE PLACED WITH THE IRRIGATION CONTROLLER.
   C. IRRIGATION SCHEDULING PARAMETERS USED TO SET THE CONTROLLER.
   D. LANDSCAPE AND IRRIGATION MAINTENANCE SCHEDULE
   E. IRRIGATION AUDIT REPORT.
   F. SOILS ANALYSIS REPORT.
6. THE OWNERS SHALL BE RESPONSIBLE FOR ANY LANDSCAPE MAINTENANCE NEEDED DURING OWNERSHIPS.
7. IRRIGATION AUDIT SHALL BE CONDUCTED BY A THIRD PARTY IRRIGATION AUDITOR. LANDSCAPE AUDITS SHALL NOT BE CONDUCTED BY THE PERSON WHO DESIGNED THE LANDSCAPE OR INSTALLED THE LANDSCAPE. THE APPLICANT SHALL SUBMIT AN IRRIGATION AUDIT REPORT WITH THE CERTIFICATE OF COMPLETION TO THE LOCAL AGENCY THAT MAY INCLUDE, BUT IS NOT LIMITED TO: INSPECTION, SYSTEM TUNE–UP, SYSTEM TEST WITH DISTRIBUTION UNIFORMITY, REPORTING OVERSPRAY OR RUN OFF THAT CAUSES OVERLAND FLOW, AND PREPARATION OF AN IRRIGATION SCHEDULE, INCLUDING CONFIGURING IRRIGATION CONTROLLERS WITH APPLICATION RATE, SOIL TYPES, PLANT FACTORS, SLOPE, EXPOSURE AND OTHER FACTORS NECESSARY FOR ACCURATE PROGRAMMING.
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2. EACH SAMPLE SHALL BE SUBMITTED TO A LABORATORY. THE LABORATORY MUST BE APPROVED BY THE OWNER. SUBMIT SAMPLE SIZES AS REQUIRED BY LABORATORY.
3. AS A MINIMUM, SOIL SAMPLES SHALL BE ANALYZED FOR: SOIL TEXTURE, INFILTRATION RATE, PERCENT OF ORGANIC MATTER, TOTAL SOLUBLE SALTS, PH, AMMONIA, PHOSPHATE, POTASSIUM, CALCIUM, MAGNESIUM, BORON, AND SODIUM LEVELS. LABORATORY TO PROVIDE APPRAISAL OF CHEMICAL PROPERTIES, INCLUDING PARTICLE SIZE AND RECOMMENDATIONS FOR TYPES AND QUANTITIES OF AMENDMENTS AND FERTILIZERS. CONTRACTOR TO ADVISE TESTING LAB THAT THE FOLLOWING AMENDMENTS ARE TO BE INCLUDED IN RECOMMENDATIONS: GRO–POWER PLUS (MINIMUM RATE OF 150 LBS/1000 SQ.FT.) AND 90% BARK BASE PRODUCT, 1/4 INCH SIZE, TREATED WITH NITROGEN, 1/2–0–0. (MINIMUM RATE OF 4 CY PER 1000 SQ.FT.)
4. SOIL TEST RESULTS FROM THE MODEL HOMES MAY BE USED FOR THE PRODUCTION HOMES.

KEY	LANDSCAPE LEGEND
	TREES - NOT ALL SYMBOLS SHOWN
	ROOT BARRIER, INSTALL WHERE SHOWN ON PLANS
	SHRUBS
5–ARB.	PLANT QUANTITY
	PLANT KEY

I HAVE COMPLIED WITH THE CRITERIA OF THE ORDINANCE AND APPLIED THEM FOR EFFICIENT USE OF WATER IN THE LANDSCAPE DESIGN PLAN.

LANDSCAPE ARCHITECT

11/19/18
DATE

10' 5' 0 10' 20'

SCALE: 1"= 10'–0"

D3

MTW group
LANDSCAPE ARCHITECTURE AND PLANNING
2707 K STREET, SUITE 201
Sacramento, CA 95816
916 369-3990

LICENSED LANDSCAPE ARCHITECT — PETER D. LARIMER — 5284 — 11/19/18 — 6/30/20 RENEWAL DATE — STATE OF CALIFORNIA

Peter D. Larimer C-5284

REVISIONS

NO.	DESCRIPTION	DATE	REV'D

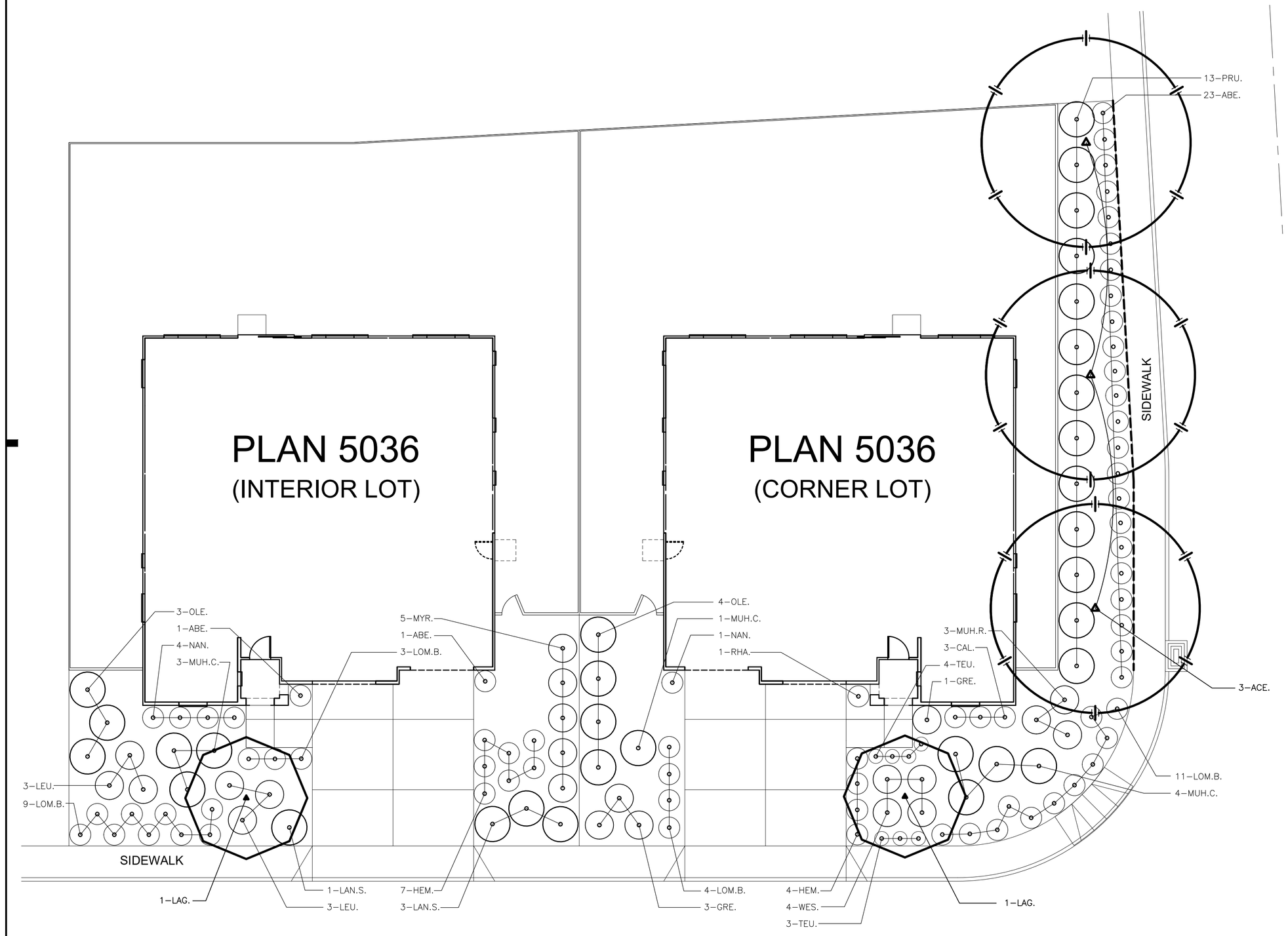
RIVERVIEW AT MOTERRA
TYPICAL INTERIOR
PRODUCTION HOMES
ANTIOCH, CALIFORNIA

DATE 11/13/18
JOB NO. 18-32.P
SHEET TITLE

PLAN 5033
LANDSCAPE
PLANTING
PLAN

SHEET NO.
L3.1
SHEET 3 OF 5

CITY APPROVAL



MASTER PLANT MATERIAL LIST

WATER USE	SIZE	KEY	BOTANICAL NAME ... COMMON NAME	HxW
			SHADE TREE:	
MEDIUM	24" BOX	ACE.	ACER BEURGERIANUM ... TRIDENT MAPLE	30'X30'
LOW	15 G.C.	ARB.	ARBUTUS 'MARINA' ... MARINA DWARF STRAWBERRY TREE (STD)	20'X20'
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LOW	24" BOX	PIS.	PISTACIA CHINENSIS ... CHINESE PISTACHE	35'X30'
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KEY | LANDSCAPE LEGEND

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- ROOT BARRIER, INSTALL WHERE SHOWN ON PLANS
- SHRUBS
- 5–ARB. — PLANT QUANTITY / PLANT KEY

I HAVE COMPLIED WITH THE CRITERIA OF THE ORDINANCE AND APPLIED THEM FOR EFFICIENT USE OF WATER IN THE LANDSCAPE DESIGN PLAN.

LANDSCAPE ARCHITECT — DATE 11/19

10' 5' 0 10' 20'

SCALE: 1"= 10'–0"

D4

MTW group
LANDSCAPE ARCHITECTURE AND PLANNING
2707 K STREET, SUITE 201
Sacramento, CA 95816
916 369-3990

LANDSCAPE ARCHITECT PETER D. LARIMER — 11/19/18 — 6/30/20 RENEWAL DATE — STATE OF CALIFORNIA

Peter D. Larimer C-5284

REVISIONS

NO.	DESCRIPTION	DATE	REV'D

RIVERVIEW AT MOTEGA TYPICAL INTERIOR PRODUCTION HOMES

ANTIOCH, CALIFORNIA

DATE 11/13/18

JOB NO. 18-32.P

SHEET TITLE

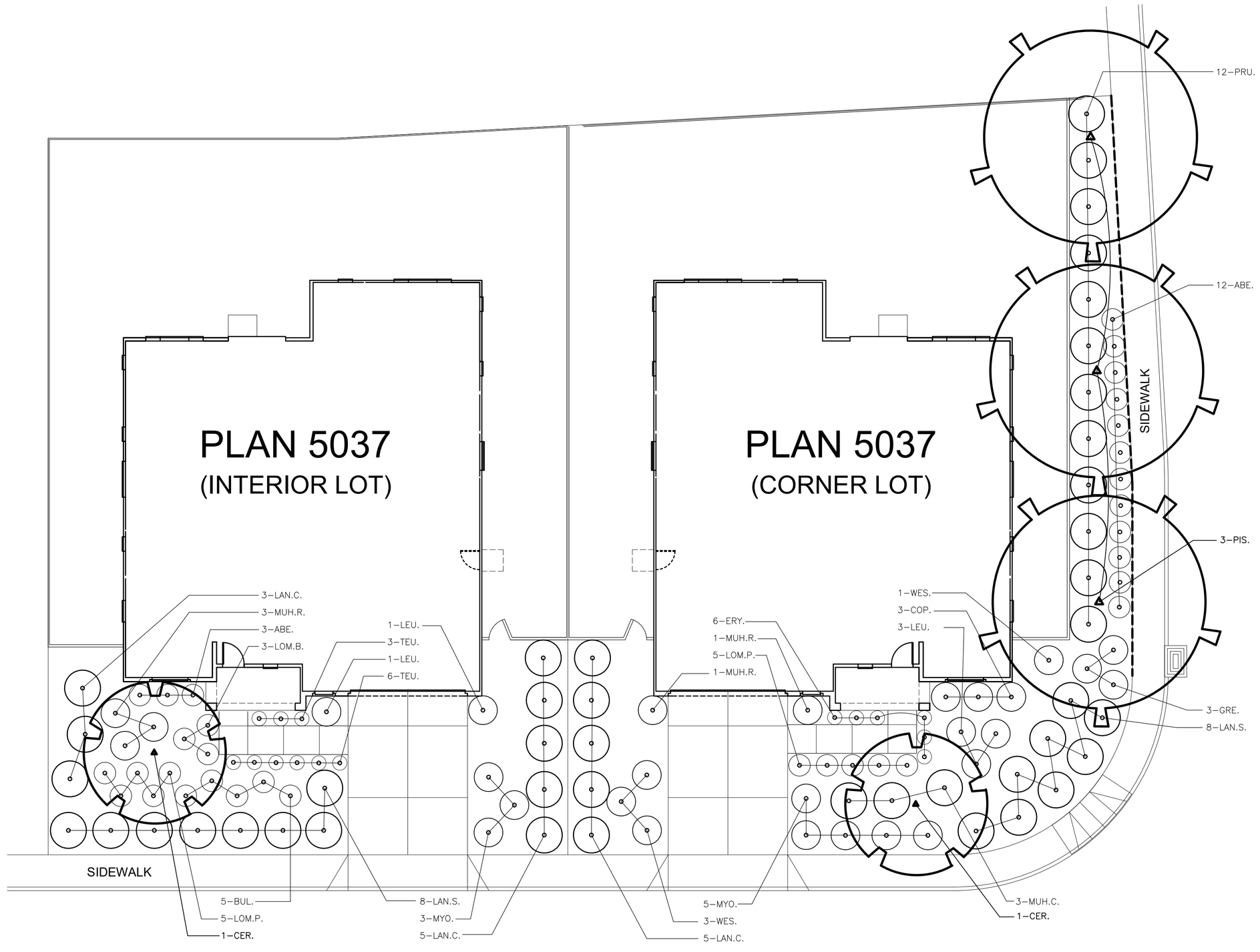
PLAN 5036 LANDSCAPE PLANTING PLAN

SHEET NO.

L4.1

SHEET 4 OF 5

CITY APPROVAL



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LICENSED LANDSCAPE ARCHITECT — PETER D. LARIMER — 5284 — 11/19/18 — 6/30/20 RENEWAL DATE — STATE OF CALIFORNIA

Peter D. Larimer C-5284

REVISIONS

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RIVERVIEW AT MOTERRA
TYPICAL INTERIOR
PRODUCTION HOMES
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SHEET TITLE

PLAN 5037
LANDSCAPE
PLANTING
PLAN

SHEET NO.

L5.1

SHEET 5 OF 5

CITY APPROVAL