

PLANNING COMMISSION AGENDA

Regular Meeting

7:00 P.M. on Tuesday, October 25, 2016

Hoyer Hall, Clayton Community Library, 6125 Clayton Road, Clayton, California

- 1. CALL TO ORDER, ROLL CALL, PLEDGE TO THE FLAG
- 2. ADMINISTRATIVE
 - 2.a. Review of agenda items.
 - 2.b. Declaration of Conflict of Interest.
 - 2.c. Commissioner Carl Wolfe to report at the City Council meeting of November 1, 2016 (alternate Commissioner Bassam Altwal).
- 3. PUBLIC COMMENT
- 4. MINUTES
 - 4.a. None.
- 5. PUBLIC HEARINGS
 - 5.a. ENV-01-15, GPA-01-15, ZOA-03-15, DP-01-15, MAP-01-15, SPR-07-16, TRP-37-15; Initial Study/Mitigated Negative Declaration, General Plan Amendment, Rezone, Development Plan, Tentative Parcel Map, Site Plan Review Permit, and Tree Removal Permit; Armand Butticci; 5555 Clayton Road (APN: 118-101-022). Review and consideration of a request from Armand Butticci for the approval of a General Plan amendment to change the land use designation of 0.41 acres of the project site from Institutional Density (ID) to Single Family Medium Density (MD); Rezone the project site Agricultural (A) District to Planned Development (PD) District; Development Plan to establish development standards; Tentative Parcel Map to subdivide the existing 2.77-acre parcel into three lots measuring 2.36, 0.22, and 0.19 acres in size; Site Plan Review Permit for review of architecture and design; and a Tree Removal Permit to remove seven of the ten existing on-site trees. An Initial Study/Mitigated Negative Declaration with a Mitigation Monitoring and Reporting Program are also being considered for adoption.

Staff Recommendation: Staff recommends that the Planning Commission receive and consider the staff report and all information provided and submitted to date, receive and consider any public testimony and, if determined to be appropriate:

- 1) Approve Planning Commission Resolution No. 09-16 recommending the City Council adopt the St. John's Church/Southbrook Drive Mixed Use Planned Development Project Initial Study/Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program (ENV-01-15); and
- Approve Planning Commission Resolution No. 10-16 recommending City Council approval of a General Plan Amendment for 0.41 acre of the project site from Institutional Density (ID) to Single Family Medium Density (MD) for the St. John's Church/Southbrook Drive Mixed Use Planned Development Project (GPA-01-15); and
- Approve Planning Commission Resolution No. 11-16 recommending City Council approval of an Ordinance for a rezone of the project site from Agriculture (A) District to Planned Development District (PD) for the St. John's Church/Southbrook Drive Mixed Use Planned Development Project (ZOA-03-15); and
- Approve Planning Commission Resolution No. 12-16 recommending City Council approval of the St. John's Church/Southbrook Drive Mixed Use Planned Development Project Development Plan (DP-01-15), Tentative Subdivision Map (MAP-01-15), Site Plan Review Permit (SPR-07-16), and Tree Removal Permit (TRP-37-15) for a three-lot subdivision for two single-family homes.
- **5.b. GPA-01-16; General Plan Amendment; City of Clayton.** A study session to consider a General Plan amendment to allow net acreage density calculations on properties with physical site constraints.
 - **Staff Recommendation:** It is recommended that the Planning Commission consider and discuss as well as provide feedback to staff regarding whether a formal General Plan amendment process, along with associated changes to the Clayton Municipal Code, if required, should be initiated.
- **5.c. ZOA-07-16; Zoning Ordinance Amendment; City of Clayton.** A public hearing to consider a City-initiated Ordinance amending Title 17 "Zoning", Chapter 17.80 of the Clayton Municipal Code in order to revise the landscape water conservation standards to comply with changes in State law.
 - **Staff Recommendation:** It is recommended that the Planning Commission consider all information provided and submitted, take and consider all public testimony and, if determined to be appropriate, adopt Resolution No. 13-16, recommending City Council approval of an Ordinance modifying the landscape water conservation standards.

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6. OLD BUSINESS

None.

7. NEW BUSINESS

None.

8. COMMUNICATIONS

8.a. Staff.

8.b. Commission.

9. ADJOURNMENT

9.a. The next regularly-scheduled meeting of the Planning Commission will be held on Tuesday, November 8, 2016.

Most Planning Commission decisions are appealable to the City Council within ten (10) calendar days of the decision. Please contact Community Development Department staff for further information immediately following the decision. If the decision is appealed, the City Council will hold a public hearing and make a final decision. If you challenge a final decision of the City in court, you may be limited to raising only those issues you or someone else raised at the public hearing(s), either in oral testimony at the hearing(s) or in written correspondence delivered to the Community Development Department at or prior to the public hearing(s). Further, any court challenge must be made within 90 days of the final decision on the noticed matter. If you have a physical impairment that requires special accommodations to participate, please contact the Community Development Department at least 72 hours in advance of the meeting at 925-673-7340. An affirmative vote of the Planning Commission is required for approval. A tie vote (e.g., 2-2) is considered a denial. Therefore, applicants may wish to request a continuance to a later Commission meeting if only four Planning Commissioners are present.

Any writing or documents provided to the majority of the Planning Commission after distribution of the agenda packet regarding any item on this agenda will be made available for public inspection in the Community Development Department located at 6000 Heritage Trail during normal business hours.

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PLANNING COMMISSION STAFF REPORT

Meeting Date:

October 25, 2016

Item Number:

5.a.

From:

Milan J. Sikela, Jr.

Assistant Planner

Subject:

Public Hearing to review and consider the three-lot St. John's Church/Southbrook Drive Mixed Use Planned Development Project Initial Study/Mitigated Negative Declaration (ENV-01-15), General Plan Amendment (GPA-01-15), Rezone (ZOA-03-15), Development Plan (DP-01-15), Tentative Parcel Map (MAP-01-15), Site Plan Review Permit (SPR-07-16), and Tree Removal

Permit (TRP-37-15)

Applicant:

Armand Butticci

REQUEST

The applicant, Armand Butticci, requests approval of a General Plan Amendment, Rezone, Development Plan, Tentative Parcel Map, Site Plan Review Permit, and Tree Removal Permit. The project is located on 2.77 acres of land in Clayton at 5555 Clayton Road (APN: 118-101-022) with Clayton Road bordering the project on the south and Southbrook Drive bordering the project on the north (see **Attachment E** for Vicinity Map). The proposal entails review of the following entitlements:

Environmental Review (ENV-01-15)

Review and consideration of the St. John's Church/Southbrook Drive Mixed Use Planned Development Project Initial Study/Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program, prepared in accordance with the California Environmental Quality Act (CEQA). This report analyzes the potential impacts caused by the project and identifies various measures to mitigate these impacts.

General Plan Amendment (GPA-01-15)

A General Plan Amendment to change the land use designation of 0.41 acres on the northern portion of the property from Institutional Density (ID) to Single Family Medium Density (MD) to accommodate two proposed single-family residential lots.

Rezone (ZOA-03-15)

A change in the zoning designation of the entire subject property from Agricultural (A) District to Planned Development (PD) District to allow for a mixed use Planned Development project consisting of the existing church and two proposed single-family residential lots.

Development Plan (DP-01-15)

The Development Plan establishes the development standards for the subject site. In this particular case, the Development Plan also allows for a mixed use Planned Development project consisting of an existing church and two proposed single-family lots.

Tentative Parcel Map (MAP-01-15)

A Tentative Parcel Map to subdivide the existing 2.77-acre church property into three parcels consisting of two proposed single-family residential lots measuring 8,168 and 9,624 square feet in area and a newly-created remainder lot measuring 102,933 square feet (2.36 acres) in area for the existing church.

• <u>Site Plan Review Permit (SPR-07-16)</u>

A Site Plan Review Permit to review the architecture and design of the two proposed single-family residences measuring approximately 2,715 square feet in area and 26 feet in height as well as the project-related landscaping, fencing, lighting, and retaining walls.

Tree Removal Permit (TRP-37-15)

A Tree Removal Permit to allow the removal of seven of the ten trees existing on the project site to be replaced with newly-planted trees, shrubs, and groundcover.

PROJECT INFORMATION

Applicant:

Armand Butticci

2804 Velvet Way

Walnut Creek, CA 94596

Acreage/Location:

2.77 acres

5555 Clayton Road APN: 118-101-022

Property Owner:

Protestant Episcopal Bishop

c/o Diocese of California

1055 Taylor Street

San Francisco, CA 94108

General Plan Designation

Existing:

Institutional Density (7.6 - 20 units per acre)

Proposed:

Single Family Medium Density (3.1 - 5.0 units per acre) [northern

0.41 acres of the subject property]

Institutional Density (7.6 - 20 units per acre) [southern 2.36 acres

of the subject property where existing church is located]

Zoning Classification

Existing:

Agricultural (A)

Proposed:

Planned Development (PD)

Surrounding General

Plan Designations:

North: Single Family Low Density (1.1 - 3.0 units per acre)

South: Single Family Residential (City of Concord)
Public and Semi-Public (City of Concord)

East: Single Family Low Density (1.1 - 3.0 units per acre)West: Single Family Low Density (1.1 - 3.0 units per acre)

Surrounding Zoning Classifications:

North: Single Family Residential R-12 District South: Planned District (PD) (City of Concord)

Community Office (CO) (City of Concord)

East: Single Family Residential R-12 District

Single Family Residential R-12 District

West: Single Family Residential R-12 District

Environmental Review:

St. John's Church/Southbrook Drive Mixed Use Planned Development Project Initial Study/Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program (ENV-01-15) prepared in accordance with the California Environmental Quality Act, which is discussed in further detail below.

Public Notice:

On September 16, 2016, a Notice of Intent to Adopt an Initial Study/Mitigated Negative Declaration for the St. John's Church/Southbrook Drive Mixed Use Planned Development Project was published in the Contra Costa Times, posted on the notice boards, and mailed to property owners within 300 feet of the project site. The 20-day public review period for the St. John's Church/Southbrook Drive Mixed Use Planned Development Project Initial Study/Mitigated Negative Declaration was from September 19, 2016 to October 10, 2016.

On October 14, 2016, a Public Hearing Notice was published in the Contra Costa Times, posted on the notice boards, mailed to property owners located within 300 feet of the project site, and mailed to interested parties.

BACKGROUND/DISCUSSION

The 2.77-acre project site is located between Clayton Road (located on the project site's southern frontage) and Southbrook Drive (located on the project's site's northern frontage) is surrounded by existing single-family residential neighborhoods to the east and west. The subject property is addressed as 5555 Clayton Road (APN: 118-101-022) and is the site of the existing St. John's Episcopal Church comprising the church itself, ancillary church buildings, and a parking lot with 82 parking spaces. The applicant proposes to subdivide the existing property into three lots. The largest parcel would consist of the existing structures and the parking lot related to the church; all existing structures and the parking lot associated with the church would remain unchanged by the project. The other two proposed parcels would be located in the northernmost undeveloped portion of the subject property adjacent to Southbrook Drive and would be utilized for the construction of two single-family residences, one two-story residence on each lot that would front onto and be accessed from Southbrook Drive.

The project entails review and consideration of an Initial Study/Mitigation Negative Declaration and Mitigation Monitoring and Reporting Program (ENV-01-15), General Plan Amendment (GPA-01-15), Rezone (ZOA-03-15), Development Plan (DP-01-15), Tentative Parcel Map (MAP-01-15), Site Plan Review Permit (SPR-07-16), and Tree Removal Permit (TRP-37-15). Due to the requested and proposed legislative actions, the General Plan Amendment, Rezone, and Development Plan, the City Council will be the final hearing body for this project; therefore, the Planning Commission actions will consist of recommendations to the City Council. The Planning Commission will first review and make separate recommendations to the City Council on the first three entitlements: the Initial Study/Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program (ENV-01-15); the General Plan Amendment (GPA-01-15); and the Rezone (ZOA-03-15), and then would make a recommendation to the City Council for the remaining entitlements: the Development Plan (DP-01-15); the Tentative Parcel Map (MAP-01-15); the Site Plan Review Permit (SPR-07-16); and the Tree Removal Permit (TRP-37-15) together under one recommendation. Separate Resolutions have been drafted for the first three entitlements (ENV-01-15, GPA-01-15, and ZOA-03-15) and then the remaining four entitlements (DP-01-15, MAP-01-15, SPR-07-16, and TRP-37-15) are bundled together in one Resolution. In total, the Planning Commission will review and render recommendations to the City Council on four individual Resolutions.

ENVIRONMENTAL REVIEW

In compliance with the California Environmental Quality Act (CEQA), the City has prepared an Initial Study/Mitigated Negative Declaration (IS/MND) and Mitigation Monitoring and Reporting Program (MMRP) for the proposed project. The IS/MND was circulated for a 20-day public review period from September 19, 2016 to October 10, 2016. Due to the length of the IS/MND, the document was distributed to the Planning Commission electronically on October 14, 2016. The IS/MND and MMRP are available for review at the Community Development Department on the third floor of City Hall and can also be found on the City's website at:

http://www.ci.clayton.ca.us/documents/ENV-01-

15.FINAL.Public.Review.Draft%20Southbrook%20ISMND%20091316.pdf

The IS/MND evaluated the potential project-related environmental impacts: aesthetics, agriculture resources, air quality, greenhouse gas emissions, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology, land use, mineral resources, noise, population and housing, public services, recreation, transportation/circulation, and utilities and service systems, and mandatory findings of Of the eighteen potential impacts evaluated, the IS/MND identified five environmental factors that are "potentially significant": biological resources, cultural resources, geology and soils, hydrology and water quality, and noise. Mitigation measures have been provided for the five potentially significant impacts, thereby reducing the project impacts on the environment to a "less-than-significant" level. The evaluations, impacts, and mitigation measures are described in detail in the IS/MND.

GENERAL PLAN AMENDMENT

The project site currently has a General Plan land use designation of Institutional Density (ID) (Attachment F) which is intended for the development of various forms of senior housing projects under the sponsorship of public or quasi-public agencies with densities ranging from 7.6 to 20 units per acre. Since the two proposed single-family residences would not be compliant with the ID designation, the applicant is requesting to change the land use designation of the northernmost 0.41 acres to Single Family Medium Density (MD) (Attachment G). The MD designation allows for planned unit development and single-family subdivisions including zero lot line projects and single-family residences at densities ranging from 3.1 to 5 units per acre as well as ancillary uses and structures typically associated with single-family residential development, including second dwelling units. Given that the 0.41-acre area is being split into two lots, the average lot size of the 0.41-acre area being proposed for a General Plan land use designation change is 8,929.8 square feet in area, amounting to 4.878 units per acre, which complies with the density range of 3.1 to 5 units per acre. As a result, the General Plan Amendment for the project would comply with uses and densities allowed within the MD designation.

In looking at the surrounding General Plan land use designations, directly adjacent to the project site are Single Family Low Density (1.1 to 3 units per acre), Public and Semi-Public (City of Concord), and Single Family Residential (City of Concord) land use designations. Within the immediate vicinity are also Single Family High Density (5.1 to 7.5 units per acre) and Rural Estate (0 to 1.0 units per acre). Given the mixture of surrounding residential land use designations, the proposed MD designation for the two residential lots would adequately integrate with the spectrum of nearby residential designations which range from Rural Estate to Single Family High Density. Also, the existing ID designation on the remaining 2.36-acre church property would blend with the existing Public and Semi-Public land use designation across Clayton Road from the project site which consists of church and "community office" uses as well.

Housing Element

State law requires that the State Department of Housing and Community Development (HCD) forecast statewide housing needs and allocate the anticipated need to regions throughout the state. For the Bay Area, HCD provides the regional need to the Association of Bay Area Governments (ABAG), which then distributes the Regional Housing Needs Assessment (RHNA) to the cities and counties within the ABAG region. ABAG allocates housing production goals for cities and counties based on their projected share of the region's household growth, the state of the local housing market and vacancies, and the jurisdiction's housing replacement needs.

For the 2014-2022 projection period, ABAG has allocated the City of Clayton a total of 141 housing units, which must be accommodated for and demonstrated within the City's Housing Element. The City's 2015-2023 Housing Element identifies a citywide capacity of 275 housing units, which provides for a housing surplus of 134 units above the City's assigned RHNA of 141 units. The Housing Element identifies the entire project site as an Underdeveloped Site and assigned it a realistic "unit capacity" (80% of the maximum density) of 42 units. While the northern 0.41acre portion of the subject property includes a General Plan Amendment to a less dense residential designation, there is still adequate capacity citywide to accommodate the City's RHNA. The remaining 2.36-acre portion of the subject property could be utilized for future housing development as identified by the General Plan land use designation. The realistic "unit capacity", as assumed in the City's Housing Element, for the remaining 2.36-acre property is 37 units and the inclusion of the two proposed homes would bring the total units for the project site to 39 units, assuming approval of the General Plan Amendment. This is a decrease of a total of three units, from the assumed realistic capacity of 42 units, which still leaves an overall City capacity of 272 units, which is a surplus of 131 units above the required Regional Housing Needs Allocation. Therefore, the proposed project, including the General Plan Amendment, would not conflict with the City's General Plan including the 2015-2023 Housing Element due to there still being adequate capacity to accommodate the RHNA.

REZONE

The current zoning for the subject property is Agricultural (A) District (Attachment H). The surrounding zoning classifications directly adjacent to the project site are Single Family Residential R-12 District, Planned District (City of Concord), and Community Office (City of Concord). Within the immediate vicinity are also Single Family Residential R-40-H and Planned Development (PD) zoning districts. Existing uses on the project site include the church, ancillary church structures, and the church parking lot, which does not comply with the zoning for the property. As the current zoning classification would suggest, permitted uses would encompass such agriculture-related activities as farming, forestry, and the keeping of aviaries and apiaries. Also, the minimum lot size for properties in the Agricultural District is 5 acres, whereas the project site is 2.77 acres in area, showing a further lack of conformance between the subject property and its existing zoning. Furthermore, the project site is not well-suited for agricultural activities, as it is surrounded in its entirety by residential development and church/office uses. Agricultural uses may be considered incompatible with residential, church, and office uses as agricultural activities could create noise, odors, and dust, which would be disruptive to nearby residences, churches, and offices.

Furthermore, the Institutional Density General Plan land use designation for the subject property is intended for senior housing under sponsorship of public or quasi-public agencies and does not allow for agricultural uses. Since agricultural uses would conflict with the senior housing uses intended for the site by the General Plan, the proposed rezone to Planned Development would establish greater conformity between the existing General Plan land use designation for the site and the current and proposed uses (Attachment I). In addition to providing conformity, the rezone would also would not conflict with any applicable land use plans, policies, or regulations.

Approval of the rezone would provide land use integration between the proposed residential portion of the project site and surrounding residential properties, allow development flexibility for potential future projects that may be proposed on the church portion of the subject property, and improve compatibility between zoning classifications and General Plan land use designations, resulting in more harmonious development pattern that is consistent with the City's current vision.

DEVELOPMENT PLAN

Open Space

The proposed project is requesting a rezone of the entire project site to Planned Development; therefore, the provisions of CMC Chapter 17.28 would also be applicable, including the open space requirements of CMC Section 17.28.100. This section requires provisions for active and passive open space comprising of at least 20 percent of the project site. As a result, the proposed project would be required to acquire and dedicate off-site land for open space or make an in-lieu contribution for the dedication of open space.

The total area of the two single family home sites is 17,859 square feet and 20 percent of that square footage the developer is required to provide as open space, with 10 percent active open space and 10 percent passive open space. Since on-site open space is not being provided, the developer has three options and shall memorialize the selected option or a combination of options by entering into an agreement with the City: 1) acquire the equivalent amount of land for public open space and/or the construction of open space at an off-site location, 2) payment of an in-lieu financial contribution to the City for acquisition and/or maintenance of public open space, or 3) if the financial contributions are based upon maintenance costs, such contributions shall be based upon reasonable maintenance costs for a 10-year period and shall be proportional to the land area that would be required if open space area was provided on-site. The acquisition of open space or the in-lieu fee shall be paid at the time of filing the final map. Staff has provided a condition that the project shall comply with the open space requirements of the CMC.

Development Standards

The Planned Development District allows for flexibility in regulations, limitations, and restrictions different than those specified elsewhere in the City such as setbacks and height limitations, location of pedestrian and vehicular access, construction fences and walls, amongst others. The development standards for the two lots for the two single-family homes are

proposed in the table below. Staff analyzed the development standards in the adjacent Single Family Residential Districts and found the proposed development standards were identical to those within the Single Family Residential R-12 District, which is the zoning district immediately adjacent to the proposed project; therefore the proposed development standards conform to surrounding existing development standards, development patterns, and house orientations.

Front Setback	Interior Side Setback	Exterior Side Setback	Rear Setback	Accessory Buildings and Structures	Principal Building Height	Accessory Building Height		
20'	10' minimum 25' aggregate	Not Applicable	15'	Subject to CMC Section 17.36.055	Subject to CMC Section 17.16.070	Subject to CMC Section 17.36.055		

TENTATIVE PARCEL MAP

The applicant proposes to subdivide the subject 2.77-acre property into three parcels with approximate proposed lot areas measuring as follows:

PARCEL	AREA (IN SQUARE FEET)	AREA (IN ACRES)					
А	8,168	0.19					
В	9,624	0.22					
REMAINDER PARCEL WHERE EXISTING CHURCH IS LOCATED	102,933	2.36					

The Tentative Parcel Map proposes to create two new single-family residential lots (Lot A and Lot B) on the undeveloped northern portion of the property along Southbrook Drive. The remaining third parcel will contain the existing church buildings and parking lot. The two proposed single-family residential lots are proposed to have a single-family residence placed on each lot that will be accessed by a shared driveway running along and being bisected by the shared side property line of the two proposed lots. The shared driveway is proposed to be 16 feet in width. Section 17.37.090.D.4 of the CMC states, in part, that the City Engineer may require driveway widths in excess of the minimum 16-foot requirement "where unusual traffic, grade, or site conditions prevail." Because of the proposed grade of the driveway, the City Engineer has required a minimum 20-foot driveway width curb to curb, in accordance with CMC Section 17.37.090.D.4, for which a condition has been provided.

Two existing easements are located on the east side property line of Lot B: a 5-foot wide private drainage easement and a 5-foot wide private stormdrain easement.

Regarding the required parking for the project, staff has provided a condition that four offstreet parking spaces shall be provided on each lot; two covered spaces in the garage of each residence and two uncovered spaces which can be provided tandem or side by side in front of the garages of each residence or at end of the driveway.

Section 16.12 of the CMC requires all new subdivisions to dedicate land, pay a fee in-lieu thereof, or both for park or recreational purposes. For projects involving 50 parcels or less, the proposed subdivision is required to pay a fee equal to the land value of the portion of the local park required to serve the needs of the residents of the proposed subdivision. A condition has been provided requiring payment of parkland dedication fees at the time of filing the final map.

GRADING

There are two topographical components of the subject property—the more level portion of the property, although with a slight downslope, where the church structures and parking lot are located; and then the steeper undeveloped portion of the lot at its northernmost reaches adjacent to Southbrook Drive. The more level portion of the property starts at a maximum elevation of approximately 349 feet above sea level and gradually descends from the southeastern corner of the church parcel along Clayton Road trending in a northwesterly downslope where, in the northern area, the downslope steepens to a minimum elevation of approximately 325 feet above sea level at the northwestern corner of proposed Lot A along Southbrook Drive. The majority of the elevation decline is in the northern portion of the property where the two single-family residential lots will be located. The maximum elevation of the residential portion of the property is approximately 337 feet above sea level with a minimum elevation of approximately 325 feet above sea level. The church portion of the property drops 11 feet in a 620-foot distance, then the terrain in the proposed residential area of the lot steepens considerably, dropping another 12 feet in an approximate 108-foot distance.

In order to address the downslope in the northern portion of the property, the applicant proposes to level off the residential portion of the property in order to provide graded pads for construction of the two proposed residences. As a result, a condition has been provided that the applicant shall obtain a grading permit from the City Engineer. With the pad elevation of the residences located at approximately 332 feet above sea level, the applicant is proposing to install two staircases—one on each residential lot—leading from the sidewalk along Southbrook Drive up to the front porch of each home. Also, a cut in the slope is proposed for the shared driveway which will rise from Southbrook Drive to access the garages for each residence. Retaining walls approximately 2 feet 6 inches in height will run along either side of the driveway where the walls will terminate into the ground as the driveway reaches its apex in front of the garages. At the rear of the graded level residential pad areas backing up to the church parcel will be a retaining wall with a proposed maximum height of approximately 5 feet 6 inches, wrapping around to the side property lines of each residential lot where the wall will shorten to several inches in height. The church parcel would not be altered in any way by grading or the installation of retaining walls or fencing.

UTILITIES

Water, sewer, and stormwater infrastructure for the church parcel would remain unchanged with the implementation of the proposed project. The proposed project would only alter the undeveloped northern portion of the project site as part of the construction of two new single-family residences.

Water

Contra Costa Water District (CCWD) will provide water to the residential portion of the project site. Currently, an existing CCWD water main is located along Southbrook Drive which the applicant proposes to utilize in order to serve the two residential parcels via two water laterals extending from the existing water main, one water lateral to each lot.

Sewer

Sewer service is currently provided in proximity to the residential project site by the City of Concord from an existing sewer line located along Southbrook Drive. The project would include the connection of the proposed residential units to sewer service by way of a new 8-inch sewer line extending from the existing sewer main. Two sewer laterals are proposed to service the two residential parcels, one sewer lateral to each lot. Conditions have been provided that the applicant shall provide a sewer cleanout on each sewer lateral at the front property line and shall submit sewer plans for review and approval by the City of Concord and the Clayton City Engineer.

Stormwater

In order to comply with State's C.3 Standards, the portion of the project site proposed for development has been separated into drainage management areas corresponding with the two residential units proposed as part of the project. Stormwater runoff from the drainage management areas would be directed to separate bioretention areas, with one bioretention area on each residential lot. Per C.3 Guidebook instructions, the proposed bioretention areas would be sized with adequate capacity to receive and treat all runoff from the impervious areas of the project. Runoff entering the bioretention areas would move through permeable soil layers, which would slow the stormwater while also removing pollutants that may be contained in the runoff. Stormwater that exceeds the bioretention facilities' infiltration capacity, such as in the case of heavy storm events, would be directed to existing stormwater infrastructure located on the eastern portion of the project site and on Southbrook Drive.

Staff has concerns that the applicant proposes the use of sump pumps as a component of the on-site storm drain system, which would not be reliable. Furthermore, the use of sump pumps would require backup generators. Given the constraints of this design, a condition has been provided that an alternative design to the use of sump pumps shall be provided by the applicant, to be reviewed and approved by the City Engineer.

Funding for the operation and maintenance of the stormwater detention basins as well as all drainage facilities located on or adjacent to (including those facilities located in the public right-of-way) each residential lot will be the ongoing responsibility of the property owner of each residential lot. In order to ensure that the stormwater detention basins are not modified in any

way and are adequately maintained, staff has provided a condition that the property owner for each lot shall be responsible for (including but not limited to) inspection, reporting, and maintenance of stormwater conveyance and treatment facilities, for which a covenant and agreement (including stormwater operations and maintenance plan) will be recorded against each property. Conditions have been provided addressing project-related stormwater, stormdrain, and drainage issues, including, but not limited to, the applicant submitting to the City Engineer for review and approval a stormwater operations and maintenance plan along with a final stormwater control plan.

SITE PLAN REVIEW PERMIT

Architecture and Design

As part of the project, two single-family residences are proposed for construction on the two proposed single-family lots on the Southbrook Drive frontage of the project site, one residence on each lot. Both residences are proposed as two-story homes with four bedrooms, three bathrooms, and a two-car garage. Floor plans and architectural elevations are provided as **Attachment K**, roof plans are provided as **Attachment L**, and exterior colors and materials are provided as **Attachment M**.

While the two-story residences have been designed with slight variations in their exterior colors and materials, the residences share some architectural similarities as well. Each residence is proposed at 26 feet 9 inches in height, which complies with the 35-foot maximum building height allowed in single-family residential districts, as stipulated in CMC Section 17.16.070. Both residences are proposed to be designed with belly bands, "brown gray range" concrete roofing tile, and a 6:12 roof pitch. Plan A will utilize tan vertical board-and-batt siding, horizontal siding on the second-story gabled roof ends, and "El Dorado – La Plata Bluffstone" stone veneer highlights. Plan B will utilize grayish-brown "Hardie" horizontal siding, shingle siding on the second-story gabled roof ends, and "El Dorado – Bluffstone Mineret" stone veneer highlights.

Each residence features sufficient articulation with various projections, recesses, and undulations on all four facades. Visual interest is provided with the varying window sizes and locations which use a multitude of mullions and muntins to break up the various panes of window glass. The earth tones of the proposed exterior colors and materials provide dynamic yet subtle color schemes that foster a unique curb appeal augmenting the neighborhood streetscape while, at the same time, blending architectural integration and continuity with surrounding existing structures. Staff notes that the applicant was sensitive to minimizing impacts to the privacy of surrounding residences by placing only one second-story window on each side elevation of the proposed residences that faces toward the adjacent existing residential properties. Also, the appearance of the residences from off-site areas is enhanced by the garages being located toward the rear of the residences and oriented toward the other proposed residence rather than toward the street or adjacent existing homes. Furthermore, given that the garage is recessed in a stepped-in fashion behind the plane of the side elevations of the staircase and main floor bedroom sections of each residence, the garage is further screened from adjacent private properties, public streets, and public sidewalks.

Setback Analysis

As discussed earlier, the Planned Development zoning proposed for the site allows the project to establish project-specific setbacks, at the discretion of the Planning Commission and City Council. Staff has provided a setback analysis below comparing the proposed setbacks for the two new lots and setbacks for comparable existing interior lots in the surrounding R-12 District. As is evident, the proposed setbacks for both lots (which are interior lots) are consistent with surrounding existing interior lot setbacks and actually provide a greater amount of setback area than interior lots in the R-12 District.

Existing Setbacks Surrounding R-12 District		Proposed Setbac Plan A	ks	Proposed Setbacks Plan B			
Front Setback	20′	Front Setback (North)	20′	Front Setback (North)	20'		
Side Setback 10' minimum		Side Setback		Side Setback			
		West	15'	West	17'		
		East	17'	East	15'		
25' aggregate		Aggregate 32		Aggregate	32'		
Rear Setback 15'		Rear Setback (South)	17′	Rear Setback (South)	20'		

Residential Floor Area Analysis

Building Footprint

The project meets the applicable building footprint requirements as show below.

Proposed Proposed Lot Area Building Footprint Lot A		Maximum Building Footprint Allowed	Compliance With Building Footprint Requirements
8,168 sq ft	1,912 sq ft	2,400 sq ft	Yes

Proposed Lot Area Lot B	Proposed Building Footprint	Maximum Building Footprint Allowed	Compliance With Building Footprint Requirements
9,624 sq ft	1,912 sq ft	2,880 sq ft	Yes

Floor Area

The project meets the applicable building footprint requirements as show below.

Proposed Lot Area Lot A	Lot Area Floor Area		Compliance With Floor Area Requirements
8,168 sq ft	3,168 sq ft	4,133 sq ft	Yes

Proposed Lot Area Lot B	Proposed Floor Area	Maximum Floor Area Allowed	Compliance With Floor Area Requirements
9,624 sq ft	3,168 sq ft	4,640 sq ft	Yes

Landscaping

The applicant has submitted a Landscape Plan for the project (see **Attachment N**). The applicant is providing a mixture of Japanese maple, eastern redbud, and crape myrtle trees as well as various shrubs, ornamental grasses, and groundcovers. Staff has provided a condition that, prior to a grading permit being issued for the project, a revised Landscape, Irrigation, Fencing, and Retaining Wall Plan shall be submitted along with construction plans for building permit issuance to the Community Development Director for review and approval. Furthermore, landscaping (ornamental grasses and groundcovers) is proposed in front of both residential lots in the public right-of-way along Southbrook Drive. A condition has been provided addressing installation and maintenance of landscaping in the public right-of-way.

Overall, as conditioned, staff is satisfied with the proposed landscape plan as the applicant shows a good use of accent trees and a variety of shrubs and groundcover to provide a mix of heights, vegetative textures, and colors. Furthermore, the applicant has made good use of drought-tolerant landscaping and avoided utilizing turf as part of their landscape proposal. Staff has provided a condition that the landscaping for the project comply with the City's landscape water conservation standards, as listed in Chapter 17.80 of the CMC.

Fencing

Fencing is being proposed from the front porch of the residence on Lot A and the front corner of the residence on Lot B to both respective side property lines as well as in the rear yards of each residential lot. Staff conducted a site inspection of the property and observed that the existing side yard fences of each adjacent residential lot are older good-neighbor fences. As a result, staff has provided a condition that either the applicant work with the neighboring property owners to replace the existing side yard fencing or shall install a new fence along the side property lines of each residential lot abutting the existing adjacent residential properties.

Retaining Walls

The proposed project includes construction of multiple retaining walls. The retaining walls are proposed with brownish-tan coloring using a high-strength pin-connection Basalite Geowall system (see **Attachment O**). As a point of clarification, **Attachment O** depicts a three-tiered retaining wall; however, the retaining walls proposed for the project will only be a single tier. The attachment was provided to show the color and style of the proposed retaining wall rather than the number of tiers. As mentioned previously, staff has provided a condition that complete retaining wall plans shall be submitted to the City for review and approval by the Community Development Director to ensure design compliance with the City's approval.

The largest retaining wall would be approximately 6 feet or less in height and would separate the church parking lot from the proposed backyards of each residential lot. The grade would be retained along the property line separating the parcel containing the church from the parcels containing proposed residential units. Additional retaining walls will also be placed on either side of the proposed shared driveway, as well as on either side of the entry stairways leading from each residence to the sidewalk along Southbrook Drive. Currently, a dilapidated wooden retaining wall exists adjacent to the sidewalk along Southbrook Drive that will be removed and replaced with a fill slope as part of the proposed project. Soil displacement between the removal of existing retaining walls and the construction of new retaining walls is expected to be essentially balanced and, as a result, the proposed project is not expected to require soil import or export.

Overall, as conditioned, staff is satisfied with the design of the proposed retaining walls with the natural earth tone colors as it will blend well with surrounding topography and landscaping.

TREE REMOVAL PERMIT

Currently existing on the project site are ten trees. As part of the project, the applicant is requesting approval of a Tree Removal Permit to remove seven of the ten trees, for which an Arborist Report has been submitted (see **Attachment P**). Contained within the Arborist Report is a narrative that, in summary, addresses the poor branch structure and stress of the existing trees caused by the lack of maintenance and irrigation.

The applicant has submitted a Landscape Plan showing that six replacement trees will be provided. In analyzing the replacement trees vis-à-vis the removed trees, staff calculated the trunk diameter of the subject trees, which is the method of measurement used by the City to assess the size of a tree related to tree removal and/or tree replanting in accordance with the City's Tree Protection Ordinance. Section 15.70.015.E of the CMC defines the trunk diameter as the diameter of a tree trunk as measured 4 feet 6 inches above natural grade. Of the six replacement trees, three of them are proposed at 24-inch box size and three of them are proposed at 15-gallon size. Depending on the species of tree, a 24-inch box tree generally measures 1 to 2 inches in trunk diameter. For purposes of this analysis, staff averaged the trunk diameter of a 24-inch box tree as 1.5 inches (halfway between the 1- to 2-inch trunk diameter of 24-inch box trees). As for 15-gallon trees, a 15-gallon tree generally measures 0.5 to 1 inch in trunk diameter. Staff averaged the trunk diameter of a 15-gallon tree as 0.75 inches (halfway between the 0.5- to 1-inch trunk diameter). Based on these trunk diameter averages,

three replacement 24-inch box trees would amount to a total of 4.5 inches of replacement trunk diameter and three replacement 15-gallon trees would amount to a total of 2.25 inches of replacement trunk diameter. As a result, the applicant is proposing to provide a combined total of 6.75 inches of replacement tree.

Section 15.70.040.A of the CMC provides the following options for tree replacement:

- For every inch of removed tree trunk diameter, a half inch (or 50%) of replacement tree may be provided if the replacement tree is not on the City's Protected Tree list; or
- For every inch of removed tree trunk diameter, a third of an inch (or 33%) of replacement tree may be provided if the replacement tree is on the City's Protected Tree list.

When evaluating the amount of removed tree diameter against replacement tree diameter, staff notes that four of the seven trees slated for removal have trunk diameters that are below the 6-inch minimum trunk diameter threshold that would trigger the requirement for a Tree Removal Permit. In other words, only three of the seven trees proposed for removal have trunk diameters exceeding the 6-inch trunk diameter threshold requirement. observation, staff notes that the three trees triggering the Tree Removal Permit requirement amount to a cumulative total of 20 inches of trunk diameter (6, 6, and 8 inches). Since the applicant is proposing to use replacement trees that are not on the City's Protected Tree list, 50% of the 20-inch removed tree trunk diameter would have to be mitigated by 10 inches of replacement tree(s). Given the applicant's proposed 6.75 inches of replacement tree trunk diameter, there is a shortfall of 3.25 inches of replacement tree trunk diameter. As a result, staff has provided a condition that, prior to issuance of a grading permit for the project, a Tree Replacement Plan be submitted showing either two additional 24-inch box replacement trees or four additional 15-gallon trees to compensate for the 3.25-inch replacement tree trunk diameter shortfall or shall pay the appropriate tree replacement in-lieu fee if the applicant demonstrates there is not adequate space on-site to accommodate the required replacement trees with review and approval by the Community Development Director. Furthermore, a condition is provided that all project-related trees shall be planted a minimum of 10 feet away from water, sewer, and stormdrain lines. In addition, in order to minimize damage to public improvements (i.e. sidewalks), staff has provided a condition that trees planted less than 10 feet away from public improvements have root guards installed.

ENGINEERING COMMENTS

As part of the project, the applicant will be providing off-site curb, gutter, and sidewalk modifications and improvements in the public right-of-way along Southbrook Drive as part of the installation of the shared driveway as well as for the removal of an existing unused driveway on the street frontage of Lot A. In order to ensure that improvements done in the public right-of-way are compliant with City regulations, including addressing safety issues relating to line-of-sight issues for vehicles entering and exiting the shared driveway, conditions have been provided regarding public right-of-way improvements and line-of-sight issues related to the retaining walls adjacent to the shared driveway as well as the shared driveway itself.

AGENCY COMMENTS

Contra Costa County Fire Protection District

The Contra Costa County Fire Protection district reviewed the proposal and made a determination that the project complies with Fire District standards as related to fire safety access. Staff has provided advisory notes addressing project compliance with Fire District requirements.

East Contra Costa County Habitat Conservancy

The requirements of the East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan (HCP/NCCP), as promulgated by the East Contra Costa County Habitat Conservancy, would not be applicable to this project. According to CMC Section 16.55.030, any development that permanently disturbs less than one acre of land would not be subject to the HCP/NCCP. Since the project to permanently disturb only 0.41 acres of land, the project would not be subject to HCP/NCCP requirements.

RECOMMENDATION

Staff recommends that the Planning Commission receive and consider the staff report and all information provided and submitted to date, receive and consider any public testimony and, if determined to be appropriate:

- 1) Approve Planning Commission Resolution No. 09-16 (Attachment A) recommending the City Council adopt the St. John's Church/Southbrook Drive Mixed Use Planned Development Project Initial Study/Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program (ENV-01-15); and
- 2) Approve Planning Commission Resolution No. 10-16 (Attachment B) recommending City Council approval of a General Plan Amendment for 0.41 acre of the project site from Institutional Density (ID) to Single Family Medium Density (MD)for the St. John's Church/Southbrook Drive Mixed Use Planned Development Project (GPA-01-15); and
- Approve Planning Commission Resolution No. 11-16 (Attachment C) recommending City Council approval of Ordinance No. XX-2016 for a rezone of the project site from Agriculture (A) to Planned Development District (PD) for the St. John's Church/Southbrook Drive Mixed Use Planned Development Project (ZOA-03-15); and
- 4) Approve Planning Commission Resolution No. 12-16 (Attachment D) recommending City Council approval of the St. John's Church/Southbrook Drive Mixed Use Planned Development Project Development Plan (DP-01-15), Tentative Subdivision Map (MAP-01-15), Site Plan Review Permit (SPR-07-16), and Tree Removal Permit (TRP-37-15) for a three-lot subdivision for two single-family homes.

ATTACHMENTS

- A Planning Commission Resolution No. 09-16
- B Planning Commission Resolution No. 10-16
- C Planning Commission Resolution No. 11-16
- D Planning Commission Resolution No. 12-16
- E Vicinity Map
- F Existing General Plan Designation
- G Proposed General Plan Designation
- H Existing Zoning Classification
- I Proposed Zoning Classification
- J Development Plan and Tentative Parcel Map Plan (including Preliminary Grading Plan, Preliminary Stormwater Control Plan, Boundary and Topography Plan, Site Plan, and Site Sections)
- K Floor Plans and Architectural Elevations
- L Roof Plans
- M Exterior Colors and Materials Diagram
- N Landscape Plan
- O Retaining Wall Example
- P Arborist Report

ATTACHMENT A

CITY OF CLAYTON PLANNING COMMISSION RESOLUTION NO. 09-16

A RESOLUTION OF THE CLAYTON PLANNING COMMISSION RECOMMENDING CLAYTON CITY COUNCIL ADOPTION OF THE FINAL INITIAL STUDY/MITIGATED NEGATIVE DECLARATION AND MITIGATION MONITORING AND REPORTING PROGRAM FOR THE ST. JOHN'S CHURCH/SOUTHBROOK DRIVE MIXED USE PLANNED DEVELOPMENT PROJECT (ENV-01-15)

WHEREAS, the City received an application from Armand Butticci requesting review and consideration of an Initial Study/Mitigated Negative Declaration (ENV-01-15), General Plan Amendment (GPA-01-15), Rezone (ZOA-03-15), Development Plan (DP-01-15), Tentative Parcel Map (MAP-01-15), Site Plan Review Permit (SPR-07-16), and Tree Removal Permit (TRP-37-15) for the subdivision of the existing 2.77-acre St. John's Episcopal Church property into three parcels for the existing church and two single-family residences ("Project"). The Project site is located at 5555 Clayton Road (APN: 118-101-022); and

WHEREAS, the City prepared the St. John's Church/Southbrook Drive Mixed Use Planned Development Project Initial Study/Mitigated Negative Declaration ("IS/MND") and Mitigation Monitoring and Reporting Program (MMRP) to evaluate the potential environmental impacts of the Project, in accordance with Section 15063 of Title 14 of the California Code of Regulations, the California Environmental Quality Act ("CEQA") Guidelines; and

WHEREAS, a draft IS/MND was duly noticed and circulated for a 20-day review period, with the public review comment period commencing on September 19, 2016 and ending on October 10, 2016; and

WHEREAS, no comments were received by the City on the IS/MND during the 20-day public review period;

WHEREAS, the Clayton Planning Commission has reviewed the IS/MND for the Project; and

WHEREAS, proper notice of this public hearing was given in all respects as required by law; and

WHEREAS, on October 25, 2016, the Clayton Planning Commission held a duly-noticed public hearing on the IS/MND and MMRP, received and considered testimony and evidence, both oral and documentary, and recommended the Clayton City Council adopt the IS/MND and MMRP; and

Planning Commission Resolution No. 09-16

WHEREAS, the custodian of the Final IS/MND is the Clayton Community Development Department and the Final IS/MND is available for public review at City Hall in the Community Development Department and the MMRP is attached as Exhibit A to this Resolution.

NOW, THEREFORE, BE IT RESOLVED, as follows:

- 1. The foregoing recitals are true and correct.
- 2. The Clayton Planning Commission hereby finds, on the basis of the whole record before it (including the IS/MND, MMRP, and all comments received) that:
 - a. The City of Clayton exercised overall control and direction over the CEQA review for the Project, including the preparation of the Final IS/MND and MMRP, and independently reviewed the Final IS/MND and MMRP; and
 - There is no substantial evidence that the Project will have a significant effect on the environment once mitigation measures have been followed; and
 - c. The Final IS/MND and MMRP reflect the City's independent judgment and analysis.
- 3. The Clayton Planning Commission hereby recommends Clayton City Council approve and adopt the St. John's Church/Southbrook Drive Mixed Use Planned Development Project Initial Study/Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program.

PASSED AND ADOPTED by the Planning Commission of the City of Clayton at a regular meeting on the 25th day of October, 2016.

APPROVED:	ATTEST:
Dan Richardson	Mindy Gentry
Chair	Community Development Director

A

St. John's Church/Southbrook Drive Mixed Use Planned Development Project Mitigation Monitoring and Reporting Program

October 2016

Program (MMRP) ensures that mitigation measures imposed by the City are completed at the appropriate time in the development The California Environmental Quality Act (CEQA) and CEQA Guidelines require Lead Agencies to adopt a program for monitoring the mitigation measures required to avoid the significant environmental impacts of a project. The Mitigation Monitoring and Reporting process.

The mitigation measures identified in the Initial Study/Mitigated Negative Declaration for the St. John's Church/Southbrook Drive Mixed Use Planned Development Project are listed in the MMRP along with the party responsible for monitoring implementation of the mitigation measure, the milestones for implementation and monitoring, and a sign-off that the mitigation measure has been implemented

Compliance Verification	(Date / Initials)		
Implementation	lf tree removal must occur during the avian breeding season (February 1st to August 31st), then nesting bird survey shall be conducted 14 days prior to the commencement of construction	Prior to the issuance of a grading permit	Prior to the commencement of any construction activity and during
Monitoring	City of Clayton Community Development Department Qualified Biologist	City of Clayton Community Development Department	City of Clayton Community Development Department
	Mitigation Measure 1. Removal of trees shall occur between September 1st and January 31st, outside the bird nesting season, to the extent feasible. If tree removal must occur during the avian breeding season (February 1st o August 31st), a qualified biologist shall conduct a survey for nesting birds of all trees and shrubs within 75 feet of the entire project site 14 days prior to the commencement of construction, and submit the findings of the survey to the community Development Department. If nesting passerines are identified during the survey within 75 feet of the project site, a 75-foot buffer around the nest tree shall be fenced with orange construction fencing. If the nest tree is located off the project site, then the buffer shall be demarcated as per above. The size of the buffer may be altered if a qualified biologist conducts behavioral observations and determines the nesting passerines are well acclimated to disturbance. If acclimation has occurred, the biologist shall prescribe a modified buffer that allows sufficient room to prevent undue disturbance/harassment to the nesting passerines. Construction or earth-moving activity shall not occur within the established buffer until a qualified biologist has determined that the young have fledged (that is, left the nest) and have attained sufficient flight skills to avoid project construction zones, which typically occurs by July 15th. However, the date may be earlier or later, and would have to be determined by a qualified biologist is not hired to watch the nesting passerines, then within the buffer shall be maintained in place through the month of August and worth within the buffer may commence September 1st.	Mitigation Measure 2. Prior to issuance of a grading permit, in accordance with the City's Tree Protection Ordinance, the applicant shall submit to the Community Development Department a Tree Replacement Plan identifying the protected tree that would be removed during project construction. Based upon the current tentative parcel map, the arborist report indicates that one protected tree is proposed for removal, and is rated by the Arborist Report as being of moderate health (Tree #6). Protected trees rated as being in fair or good health shall be replaced at the ratios specified in City of Clayton Municipal Code Section 15.70.040. The Tree Replacement Plan shall be submitted for review and approval by the Community Development Director prior to issuance of a grading permit.	Mitigation Measure 3. The following construction policies and guidelines for tree preservation and protection for the existing trees put forth by the City of Clayton shall be followed during project implementation:

		Monitoring	Implementation	Compliance Verification
	Mittigation Measure	Agency	Schedule	(Date / Initials)
•	The applicant shall submit for the review and approval of the Community Development Director a tree protection plan to identify the location of the tree trunk and dripline of all protected oaks subject to City of Clayton		construction	
•	Municipal Code Section 13.70.020. A protective fence shall be installed around all oaks subject to the tree			
	protection plan. The protective fence shall be installed prior to			
	confimencement of any construction activity and shall remain in place for the duration of construction.			
•	Grading, excavation, deposition of fill, erosion, compaction, and other			
	construction-related activities shall not be permitted within the dripline or at locations which may demand the root exctom of troop subject to the			
	tree protection plan, unless such activities are specifically allowed by the			
	tree protection plan. Tree wells may be used if specifically allowed by the			
	tree protection plan.			
•	Oil, gas, chemicals, vehicles, construction equipment, machinery, and			
	other construction materials shall not be allowed within the dripline of			
Mitig	Mittestion Moseure A Drier to the incurrence of a sending actual the			
gradir	garding plan shall include a requirement (via notation) indication that if outlined	City of Clayton	Prior to the	
resou	grazing par crain include a requirement (via notation) material una il cultural resources, or human remains are encountered during site grading or other site	Community Development	Issuance or a	
work,	work, all such work shall be halted immediately within 100 feet of the area of	Department	grading permit,	
discor	discovery and the contractor shall immediately notify the City of the discovery. In		requirements shall	
such	such case, the City, at the expense of the project applicant, shall retain the		be noted on	
Servic	services of a qualified archaeologist for the purpose of recording, protecting, or		grading plan	
calda	culating the discovery as appropriate. The archaeologist shall be required to submit to the City for review and approval a page of the findings and matter of			
curatik	curation or protection of the resources. Further grading or site work within the			
vicinit	vicinity of the discovery, as identified by the qualified archaeologist, shall not be			
allowe	allowed until the preceding steps have been taken.			
Mitiga	Mitigation Measure 5. Pursuant to State Health and Safety Code	City of Clayton	During construction	
\$7050	§7050.5(c) State Public Resources Code §5097.98, if human bone or bone of	Community		
unknc	unknown origin is found during construction, all work shall stop in the vicinity of	Development		
the fir	the find and the Contra Costa County Coroner shall be contacted immediately. If	Department		
the re	the remains are determined to be Native American, the coroner shall notify the			
Native	all notify the person believed to be	Contra Costa		
me n	the most likely descendant. The most likely descendant shall work with the	County Coroner (If		

Compliance Verification (Date / Initials)					
Implementation Schedule		ā	Prior to the issuance of a grading permit		During construction
Monitoring Agency	human bone or bone of unknown origin is found during construction)	Native American Heritage Commission (if remains determined to be Native American)	City Engineer		City Engineer
Mitigation Measure	contractor to develop a program for re-internment of the human remains and any associated artifacts. Additional work is not to take place in the immediate vicinity of the find, which shall be identified by the qualified archaeologist at the applicant's expense, until the preceding actions have been implemented.		 Mingation imeasure 6. Prior to the issuance of a grading permit, the project applicant shall prepare to the satisfaction of the City Engineer, an erosion control plan that utilizes standard construction practices to limit the erosion effects during construction of the proposed project. Actions should include, but are not limited to: Hydro-seeding; Placement of erosion control measures within drainage ways and ahead of drop inlets; The temporary lining (during construction activities) of drop inlets with "filter fabric"; The placement of straw wattles along slope contours; Use of a designated equipment and vehicle "wash-out" location; 	 Use of siltation fences; Use of on-site rock/gravel road at construction access points; and Use of sediment basins and dust palliatives. 	Mitigation Measure 7. During construction, the project contractor, at the expense of the project applicant, shall completely remove and re-compact the existing non-engineered fill on-site under the supervision of a registered geotechnical engineer, according to the recommendations presented in the Geotechnical Investigation. The contractor shall remove the upper undocumented fill soil from the area extending at least five feet beyond the edge of the planned building envelopes and also below the planned rear retaining wall. Once removed, subsequent engineered fill may be used as approved by a licensed geotechnical engineer. A written summary of the operations shall be

Compliance Nerification (Date / Initials)	(amagan)	ψ _ω ω		Q											_		
Implementation Schedule		Prior to approval of improvement plans		During grading and													
Monitoring Agency		City Engineer		City of Clayton	Development	Department		City Engineer									
Mitigation Measure	submitted to the City Engineer.	Mitigation Measure 8. The applicant shall submit a Final Stormwater Control Plan (including an Operations and Maintenance Manual) fully addressing the requirements of the City's recently amended Municipal Regional Stormwater NPDES Permit (Permit No. CAS61200) as amended Movember 10, 2015, 2015	including an alternative to the use of sump pumps, such as dry wells, to the satisfaction of the City Engineer.	Mitigation Measure 9. During grading and construction, the project contractor shall ensure that the following measures are implemented consistent	with the recommendations in the Environmental Noise and Vibration Analysis:		 Grading and construction activities shall be limited to the daytime hours 	between 7:00 AM to 5:00 PM Monday through Friday, as specified in	Section 15.01.101 of the Clayton Municipal Code. Any such work beyond	said hours and days is strictly prohibited unless previously specifically	conditions of approval;	 The distances between on-site construction and demolition staging areas 	and the nearest surrounding residences shall be maximized to the extent	possible; and	 All construction and demolition equipment that utilizes internal 	combustion engines shall be fitted with manufacturer's mufflers or	equivalent.

ATTACHMENT B

CITY OF CLAYTON PLANNING COMMISSION RESOLUTION NO. 10-16

A RESOLUTION OF THE CLAYTON PLANNING COMMISSION
RECOMMENDING CITY COUNCIL APPROVAL OF A GENERAL PLAN AMENDMENT
TO MODIFY THE EXISTING LAND USE DESIGNATION FROM INSTITUTIONAL DENSITY (ID) TO
SINGLE FAMILY MEDIUM DENSITY (MD) FOR
THE NORTHERN 0.41 ACRES OF THE

ST. JOHN'S CHURCH/SOUTHBROOK DRIVE MIXED USE PLANNED DEVELOPMENT PROJECT (GPA-01-15)

WHEREAS, the City received an application from Armand Butticci requesting review and consideration of an Initial Study/Mitigated Negative Declaration (ENV-01-15), General Plan Amendment (GPA-01-15), Rezone (ZOA-03-15), Development Plan (DP-01-15), Tentative Parcel Map (MAP-01-15), Site Plan Review Permit (SPR-07-16), and Tree Removal Permit (TRP-37-15) for the subdivision of the existing 2.77-acre St. John's Episcopal Church property into three parcels for the existing church and two single-family residences ("Project"). The Project site is located at 5555 Clayton Road (APN: 118-101-022); and

WHEREAS, the General Plan Amendment request is to modify the existing General Plan land use designation for the two single-family residential lots proposed as part of the St. John's Church/Southbrook Drive Mixed Use Planned Development Project and is not considered to be a "substantial amendment"; and

WHEREAS, the applicant is proposing to modify the existing General Plan land use designation for an undeveloped 0.41-acre portion of the entire 2.77-acre site located on the northern area of the property adjacent to Southbrook Drive from Institutional Density (ID) to Single Family Medium Density (MD) in order to create two single-family residential lots (0.19 acres and 0.22 acres in area) for the construction of a single-family residence on each lot; and

WHEREAS, the remaining 2.36-acre portion of the property containing the St. John's Episcopal Church will maintain its existing General Plan land use designation of Institutional Density (ID); and

WHEREAS, the St. John's Church/Southbrook Drive Mixed Use Planned Development Project Initial Study/Mitigated Negative Declaration (IS/MND) was prepared pursuant to Section 15063 of Title 14 of the California Code of Regulations (the CEQA Guidelines), which included an analysis of the proposed amendment to the General Plan; and

WHEREAS, the IS/MND concluded that the Project's potentially significant impacts could be mitigated to a less than significant level; and

B-1

WHEREAS, the Planning Commission has recommended adoption of the Initial Study/Mitigated Negative Declaration and Mitigation and Monitoring Program to the City Council; and

WHEREAS, Section 65358 of the California Government Code provides for the amendment of all or part of an adopted General Plan; and

WHEREAS, the proposed modification of the General Plan land use designation for the 0.41-acre portion in the northern area of the property adjacent to Southbrook Drive from Institutional Density (ID) to Single Family Medium Density (MD) would be in the public interest, has been assessed for potential impacts, and has been determined to not be detrimental to the public health, safety, or welfare; and

WHEREAS, the surrounding neighborhood, including properties adjacent to the Project consist of the single-family residential uses; and

WHEREAS, the proposed modification of the General Plan land use designation for the 0.41-acre portion in the northern area of the property adjacent to Southbrook Drive from Institutional Density (ID) to Single Family Medium Density (MD) is internally consistent with the balance of the General Plan; and

WHEREAS, proper notice of this public hearing was given in all respects as required by law; and

WHEREAS, on October 25, 2016, the Clayton Planning Commission held a duly-noticed public hearing on the matter, received and considered testimony and evidence, both oral and documentary, and recommended approval to the Clayton City Council for the proposed modification of the General Plan land use designation for the 0.41-acre portion in the northern area of the property adjacent to Southbrook Drive from Institutional Density (ID) to Single Family Medium Density (MD); and

NOW, THEREFORE, BE IT RESOLVED, that the Clayton Planning Commission, based on substantial evidence in the administrative record of proceedings and pursuant to its independent review and consideration, does hereby recommend City Council approval of the amendment to the General Plan map to modify the land use designation for the 0.41-acre northern portion of the Project site from Institutional Density (ID) to Single Family Medium Density (MD) as shown in Exhibit A.

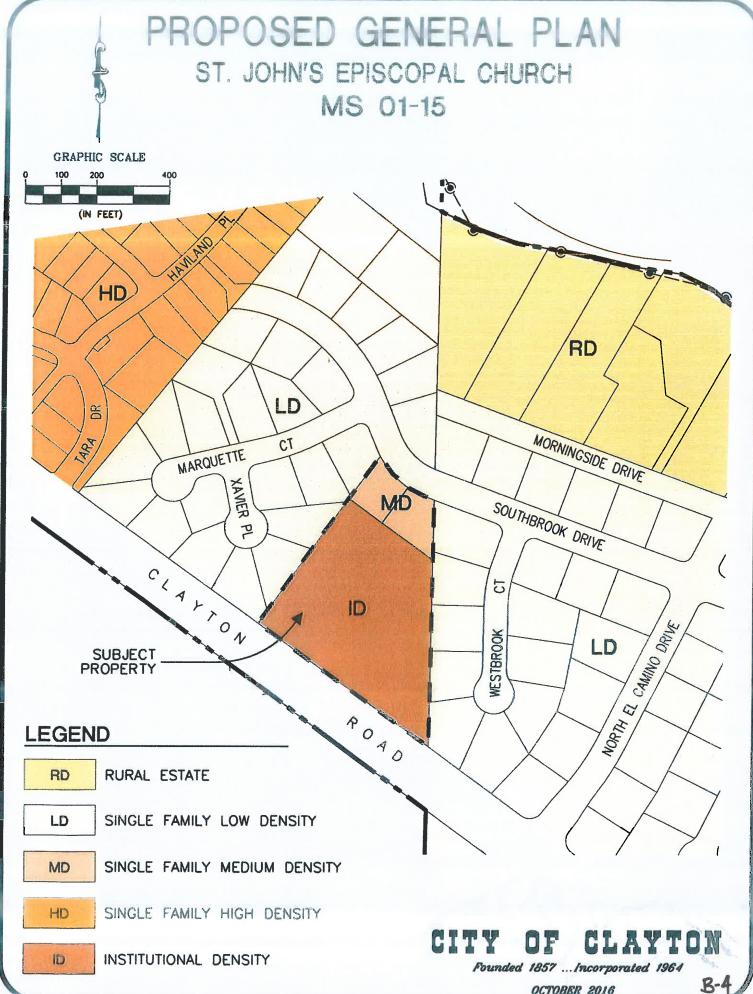
PASSED AND ADOPTED by the Planning Commission of the City of Clayton at a regular meeting on the 25th day of October, 2016.

APPROVED:	ATTEST:
Dan Richardson Chair	Mindy Gentry Community Development Director

Exhibit A: Excerpt of Clayton General Plan Map with Proposed General Plan Amendment

Planning Commission Resolution No. 10-16

Page 3 of 3



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ATTACHMENT (

CITY OF CLAYTON PLANNING COMMISSION RESOLUTION NO. 11-16

A RESOLUTION OF THE CLAYTON PLANNING COMMISSION RECOMMENDING CITY COUNCIL APPROVAL OF A REZONE OF 2.77 ACRES FROM AGRICULTURAL DISTRICT (A) TO PLANNED DEVELOPMENT DISTRICT (PD) FOR THE ST. JOHN'S CHURCH/SOUTHBROOK DRIVE MIXED USE PLANNED DEVELOPMENT PROJECT (ZOA-03-15)

WHEREAS, the City received an application from Armand Butticci requesting review and consideration of an Initial Study/Mitigated Negative Declaration (ENV-01-15), General Plan Amendment (GPA-01-15), Rezone (ZOA-03-15), Development Plan (DP-01-15), Tentative Parcel Map (MAP-01-15), Site Plan Review Permit (SPR-07-16), and Tree Removal Permit (TRP-37-15) for the subdivision of the existing 2.77-acre St. John's Episcopal Church property into three parcels for the existing church and two single-family residences ("Project"). The Project site is located at 5555 Clayton Road (APN: 118-101-022); and

WHEREAS, the City received an application from Armand Butticci ("applicant") requesting review and consideration of a rezone to modify the existing zoning classification for the 2.77-acre Project site); and

WHEREAS, Section 17.56.060 of the Clayton Municipal Code requires the Planning Commission to make a recommendation to the Clayton City Council on zoning changes; and

WHEREAS, Chapter 17.56 of the Clayton Municipal Code authorizes the City Council to amend the Official Zoning Map of the City of Clayton; and

WHEREAS, the property has a current zoning classification of Agricultural District (A); and

WHEREAS, the applicant is proposing to modify the zoning classification of the property to Planned Development District (PD); and

WHEREAS, the St. John's Church/Southbrook Drive Mixed Use Planned Development Project Initial Study/Mitigated Negative Declaration (IS/MND) was prepared pursuant to Section 15063 of Title 14 of the California Code of Regulations (the CEQA Guidelines), which included an analysis of the proposed rezone; and

WHEREAS, the IS/MND concluded that the Project's potentially significant impacts could be mitigated to a less than significant level; and

WHEREAS, the Planning Commission has recommended adoption of the Initial Study/Mitigated Negative Declaration and Mitigation and Monitoring Program to the City Council; and

WHEREAS, proper notice of this public hearing was given in all respects as required by law; and

WHEREAS, on October 25, 2016, the Clayton Planning Commission held a duly-noticed public hearing on the matter, received and considered testimony and evidence, both oral and documentary, and recommended approval to the Clayton City Council for the proposed modification of the zoning classification for the property from Agricultural District (A) to Planned Development District (PD); and

NOW, THEREFORE, BE IT RESOLVED, that the Clayton Planning Commission, based on substantial evidence in the administrative record of proceedings and pursuant to its independent review and consideration, and makes the following findings required for the proposed zone change:

- 1) The proposed amendment and Project are in conformance with the Clayton General Plan.
- 2) The public necessity requires the proposed zoning change. The subject property is zoned Agriculture (A) and the proposed project is required to rezone the subject property to a Planned Development District. The proposed Project is in conformance with the surrounding residential uses.

BE IT FUTHER RESOLVED, the Planning Commission does hereby recommend City Council approval of the proposed modification of the zoning classification of the property from Agricultural District (A) to Planned Development District (PD)

PASSED AND ADOPTED by the Planning Commission of the City of Clayton at a regular meeting on the 25th day of October, 2016.

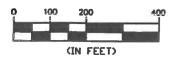
APPROVED:	ATTEST:
Day Birkandan	
Dan Richardson	Mindy Gentry
Chair	Community Development Director

Exhibit A: Excerpt of Clayton Zoning Map with Proposed Zoning Designation Modification

PROPOSED ZONING MAP

ST. JOHN'S EPISCOPAL CHURCH MS 01-15

GRAPHIC SCALE





40-H

MORNINGSIDE DRIVE

R-12

MORTH

W

SOUTHBROOK DRIVE

CI

WESTBROOK



P

CT



CLATTON SUBJECT PROPERTY

LEGEND

R-12

12,000 S.F. MINIMUM LOT SIZE

R-40-H

40,000 S.F. MINIMUM LOT SIZE

(HORSES ALLOWED)

PD

PLANNED DEVELOPMENT

Founded 1857 ... Incorporated 1964

OCTOBER 2018



ZONING MS 01-15

WARREN OCT 20, 2016 10:20 A

HC,

ATTACHMENT D

CITY OF CLAYTON PLANNING COMMISSION RESOLUTION NO. 12-16

A RESOLUTION OF THE CLAYTON PLANNING COMMISSION
RECOMMENDING CITY COUNCIL APPROVAL OF THE
DEVELOPMENT PLAN (DP-01-15), TENTATIVE PARCEL MAP (MAP-01-15),
SITE PLAN REVIEW PERMIT (SPR-07-16), AND TREE REMOVAL PERMIT (TRP-37-15) FOR THE
ST. JOHN'S CHURCH/SOUTHBROOK DRIVE MIXED USE PLANNED DEVELOPMENT PROJECT

WHEREAS, the City received an application from Armand Butticci ("applicant") requesting review and consideration of a Development Plan to develop two single-family residential lots; a Tentative Parcel Map to subdivide a 2.77-acre property into three parcels; a Site Plan Review Permit for review of architecture and landscaping; and a Tree Removal Permit to remove seven of the ten existing on-site trees as part of the St. John's Church/Southbrook Drive Mixed Use Planned Development Project ("project") located at 5555 Clayton Road (APN: 118-101-022) ("property"); and

WHEREAS, Section 17.24.140.A.2 of the Clayton Municipal Code requires the Clayton Planning Commission to make a recommendation to the Clayton City Council on development plans; and

WHEREAS, Section 17.24.140.A.3 of the Clayton Municipal Code authorizes the City Council to approve development plans; and

WHEREAS, Chapter 16.10 of the Clayton Municipal Code authorizes the Planning Commission to approve tentative parcel maps; and

WHEREAS, Chapter 17.44 of the Clayton Municipal Code authorizes the Planning Commission to approve site plan review permits; and

WHEREAS, Chapter 15.70 of the Clayton Municipal Code authorizes the Planning Commission to approve tree removal permits; and

WHEREAS, the St. John's Church/Southbrook Drive Mixed Use Planned Development Project Initial Study/Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program were prepared pursuant to the California Environmental Quality Act and concluded that there is no substantial evidence to suggest that, as applicably mitigated, the proposed project-related Development Plan, Tentative Parcel Map, Site Plan Review Permit, and Tree Removal Permit would have a significant effect on the environment; and

WHEREAS, proper notice of this public hearing was given in all respects as required by law; and

WHEREAS, on October 25, 2016, the Clayton Planning Commission held a duly-noticed public hearing on the matter, received and considered testimony and evidence, both oral and documentary, and recommended approval to the Clayton City Council for the proposed a Development Plan to develop two single-family residential lots; a Tentative Parcel Map to subdivide a 2.77-acre property into three parcels; a Site Plan Review Permit for review of architecture and design; and a Tree Removal Permit to remove seven of the ten existing on-site trees as part of the project; and

NOW, THEREFORE, BE IT RESOLVED, the Planning Commission does determine the foregoing recitals are true and correct and makes the following findings for approval of the Development Plan as follows:

- 1. The Planning Commission hereby finds, on the basis of the whole record before it, including all comments received, that the St. John's Church/Southbrook Drive Mixed Use Planned Development Project Development Plan (DP-01-15):
 - a. Results in a significantly better quality development that would in a non-flexible zone based the evaluation of the project-related natural open space, open space, vehicular access, landscape design, site design, and design features, because the current zoning of Agricultural (A) District would not allow new single-family residences and associated improvements to be constructed on lots that are 8,168 and 9,624 square feet in area which are uses and lot sizes that would be integrated and complementary with surround existing uses and lot sizes; and
 - b. Complies with the Open Spaces Requirements of Section 17.28.100 since the applicant is conditioned to enter into an agreement with the City to satisfy the applicable Open Space requirements; and
 - c. The General Plan land use designation for the 0.41-acre area has been amended to Single Family Medium Residential of which the two singlefamily homes are consistent with the General Plan land use designation, policies, and objectives for the site by complying with the intended land uses and density for the site; and
 - d. Is compatible with and in harmony and character with the City as a whole and with adjoining areas and uses by incorporating two single-family residences which blend with the surrounding existing single-family neighborhoods and uses adjacent to the property; and
 - e. Will incorporate mitigation measures identified by the project's Initial Study/Mitigated Negative Declaration and thereby reduce potentially significant impacts to less-than-significant levels. As a result, the project, as conditioned and mitigated, will not result in any significant effects on the environment, and there is no evidence that the project will have the

potential for any adverse effect on fish and wildlife resources, or their habitat as defined in Section 711.2 of the Fish and Game Code; and

f. Is sponsored by an applicant that intends to commence construction within 18 months after approval by the City Council of the project's Development Plan.

BE IT FURTHER RESOLVED, the Planning Commission does determine the foregoing recitals are true and correct and makes the following findings for approval of the tentative map as follows:

- 1. The Planning Commission hereby finds, on the basis of the whole record before it, including all comments received, that the St. John's Church/Southbrook Drive Mixed Use Planned Development Tentative Parcel Map (MAP-01-15):
 - a. The subdivision map, design, and improvements are consistent with the Clayton General Plan Single Family Low Density land use designation, policies, and objectives for the site by complying with the intended land uses and density (1.1-3.0 units per acre) for the site, in accordance with Section 66473.5 of the State Government Code (Subdivision Map Act) and the City's regulation as related to tentative subdivision maps; and
 - b. The subdivision complies with State Government Code Section 66412.3 (Subdivision Map Act) by providing more residential units for the housing needs of the region while simultaneously not burdening public services needs of existing and future residents nor impacting fiscal and environmental resources; and
 - c. The subdivision has, to the maximum extent feasible, considered and provided availability for future passive or natural heating and cooling opportunities since the project site is level with no impact to the existing terrain caused by the subdivision and well as large lots being proposed which will provide adequate distance from neighboring existing properties, thereby minimizing or eliminating impacts to natural heating and cooling opportunities. Further the site is being developed in such a manner that 36 trees will be remain onsite to optimizing shading opportunities; and
 - d. Will incorporate mitigation measures identified by the project's Initial Study/Mitigate Negative Declaration and thereby reduce potentially significant impacts to less-than-significant levels. As a result, the project, as conditioned and mitigated, will not result in any significant effects on the environment, and there is no evidence that the proposed project will have the potential for any adverse effect on fish and wildlife resources, or their habitat, as defined in Section 711.2 of the Fish and Game Code.

NOW, THEREFORE, BE IT RESOLVED, that the Clayton Planning Commission, based on substantial evidence in the administrative record of proceedings and pursuant to its independent review and consideration, does hereby recommend City Council approval of a Development Plan to develop two single-family residential lots; a Tentative Parcel Map to subdivide a 2.77-acre property into three parcels; a Site Plan Review Permit for review of architecture and design; and a Tree Removal Permit to remove seven of the ten existing on-site trees as part of the St. John's Church/Southbrook Drive Mixed Use Planned Development Project located at 5555 Clayton Road based on the findings and subject to the conditions listed below (APN: 118-101-022):

PLANNING CONDITIONS

- 1. Each property owner is responsible for the repair and maintenance of the required fences along their respective property lines. The fences shall be maintained in a style consistent with the design approved by the City.
- 2. All project-related fencing shall comply with the City's fencing standards including, but not limited to, the City's fencing height regulations.
- 3. Property owners shall comply with the Tree Protection Conditions.
- 4. Routine inspection of the stormwater conveyance and treatment facilities, and the corresponding landscaping and irrigation improvements, shall be conducted by the property owner of each residential lot. The property owner of each residential lot shall be responsible for any needed maintenance work or repairs in their entirety.
- 5. The property owner of each residential lot shall perform and prepare annual inspections and reports for the stormwater conveyance and treatment facilities, which shall be submitted to the City along with payment of the City's required fees. In addition, the property owner of each residential lot shall be responsible to comply with the reports in relation to needed maintenance work or repairs.
- 6. The property owner of each residential lot shall be responsible to maintain the landscaping and irrigation in the public right-of-way and the stormwater conveyance and treatment facilities.
- 7. The deeds for all lots shall contain language which prohibits any future land division(s) to create additional home sites.
- 8. The project is subject to development impact fees. The applicant shall be responsible for all fees and environmental review costs, including those charged by the California Department of Fish and Wildlife.

- 9. At the time of filing of the final subdivision map, the subdivider shall pay the parkland dedication fees as determined by the City (pursuant to Chapter 16.12 of the Clayton Municipal Code).
- 10. The developer shall enter into an agreement with the City to satisfy the open space requirement as outlined in Section 17.28.100 of the Clayton Municipal Code. This agreement shall be completed prior to the filing of the final subdivision map.
- 11. No permits or approvals, whether discretionary or mandatory, shall be considered if the applicant is not current on fees, reimbursement payments, and other fees that are due.
- 12. Prior to the commencement of grading or construction activities, the applicant shall submit a recycling plan for construction materials to the City for review and approval. The plan shall include that all materials that would not be acceptable for disposal in the sanitary landfill be recycled/reused. Documentation of the material type, amount, where taken, and receipts for verification and certification statements shall be included in the plan. The applicant shall submit deposits to the City to ensure good faith efforts of construction and demolition recycling. A deposit of \$2,000 per residence shall be submitted prior to issuance of the building permit for each residence, or demolition permit. Appropriate documentation regarding recycling shall be provided to the City. All staff costs related to the review, monitoring, and enforcement of this condition shall be charged to the deposit account.
- 13. All conditions of approval, which are applicable to the construction of the subdivision improvements, shall appear on the improvement drawings.
- 14. Pursuant to Government Code Section 66474.9, the applicant (including the subdivider or any agent thereof) shall defend, indemnify, and hold harmless the City of Clayton and its agents, officers, and employees from any claim, action, or proceeding against the City or its agents, officers, or employees to attack, set aside, void, or annul the City's approval concerning this subdivision map application, which action is brought within the time period provided for in Section 66499.37. The City will promptly notify the subdivider of any such claim, action, or proceeding and cooperate fully in the defense.
- 15. The applicant agrees applicant agrees to indemnify, protect, defend, and hold harmless the City and its elected and appointed officials, officers, employees, and agents from and against any and all liabilities, claims, actions, causes, proceedings, suits, damages, judgments, liens, levies, costs, and expenses of whatever nature, including attorney's fees and

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disbursements arising out of or in any way relating to the issuance of this entitlement, any actions taken by the City relating to this entitlement, or the environmental review conducted under the California Environmental Quality Act for this entitlement and related actions. 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.

- 16. All mitigation measures set forth in the St. John's Church/Southbrook Drive Mixed Use Planned Development Project Initial Study/Mitigated Negative Declaration are hereby incorporated into these Conditions of Approval, as if fully contained herein, except those mitigation measures found infeasible pursuant to Section 15091 of the California Environmental Quality Act Guidelines. The applicant shall implement all mitigation measures set forth in the St. John's Church/Southbrook Drive Mixed Use Planned Development Project Initial Environmental Study/Mitigated Negative Declaration.
- 17. The applicant shall work with the neighboring property owners to replace the existing side yard fencing or install a new fence along, and just inside of, side property lines of each residential lot abutting existing adjacent residential properties.

TREE PROTECTION CONDITIONS

- 18. The recommendations listed in the Arborist Report, prepared for the project by Bob Peralta, ISA Certified Arborist, representing Valley Crest Tree Care Services (dated May 28, 2015), shall be implemented to protect trees to be retained on the project site. Specific tree preservation and preservation actions shall be listed on all grading and constructions plans and specifications for the project.
- 19. Prior to issuance of a grading permit, in accordance with the City's Tree Protection Ordinance, the applicant shall submit to the Community Development Department a Tree Replacement Plan identifying the protected tree that would be removed during project construction. Protected trees rated as being in fair or food health shall be replaced at the ratios specified in Section 15.70.040 of the Clayton Municipal Code. The Tree Replacement Plan shall be submitted for review and approval by the Community Development Director. [Mitigation Measure (MM) 2]
- 20. The following construction policies and guidelines for tree preservation and protection put forth by the City of Clayton shall be followed during project implementation [MM 3]:
 - a. The applicant shall submit for the review and approval of the Community Development Director a tree protection plan to

- identify the location of the tree trunk and dripline of all protected oaks subject to Section 15.70.020 of the Clayton Municipal Code.
- b. A protective fence shall be installed around all oaks subject to the tree protection plan. The protective fence shall be installed prior to commencement of any construction activity and shall remain in place for the duration of construction.
- c. Grading, excavation, deposition of fill, erosion, compaction, and other construction-related activities shall not be permitted within the dripline or at locations which may damage the root system of trees subject to the tree protection plan, unless such activities are specifically allowed by the tree protection plan. Tree wells may be used if specifically allowed by the tree protection plan.
- d. Oil, gas, chemicals, vehicles, construction equipment, machinery, and other construction materials shall not be allowed within the dripline of trees subject to the tree protection plan.
- 21. Trees which are identified for preservation, and are subsequently removed during construction, shall be replaced by new trees or shall be required to pay an lieu fee equal to 200% of the value (as established by the International Society of Arboriculture) of the original tree(s) to be preserved.
- 22. The Community Development Department shall review and approve grading and improvement plans to ensure adequate measures are taken to protect trees.

LANDSCAPING CONDITIONS

- 23. All plant material to be located in the public right-of-way shall be maintained by the property owner of each residential lot and is subject to inspection by the Maintenance Department and must be guaranteed for one year from the date of final inspection.
- 24. The applicant shall maintain all landscaped areas in the public right-of-way for a period of ninety (90) days after final acceptance of the subdivision improvements by the City Council. Following acceptance by the City the property owner of each residential lot shall maintain all landscaped areas in the public right-of-way.
- 25. Installation of all irrigation and landscaping shall be performed by a licensed contractor.
- 26. All trees shall be planted at least ten (10) feet away from any public water, sewer, or storm drain lines, unless a closer location is approved by the City. All trees shall be installed with support staking. All nursery

- stakes must be removed from trees. All trees planted within eight (8) feet of a sidewalk or driveway shall be installed with root guards.
- 27. Prior to a grading permit being issued for the project, a revised Landscape, Irrigation, Fencing, and Retaining Wall Plan shall be submitted, along with construction plans for building permit issuance, to the Community Development Department for review and approval.
- 28. All project-related landscaping shall comply with the landscape water conservation standards listed in Chapter 17.80 of the Clayton Municipal Code.

GRADING CONDITIONS

- Removal of trees shall occur between September 1st and January 31st, 29. outside the bird nesting season, to the extent feasible. If tree removal must occur during the avian breeding season (February 1st to August 31st), a qualified biologist shall conduct a survey for nesting birds of all trees and shrubs within 75 feet of the entire project site 14 days prior to the commencement of construction, and submit the findings of the survey to the Community Development Director. If nesting passerines are identified during the survey within 75 feet of the project site, a 75-foot buffer around the nest tree shall be fenced with orange construction fencing. If the nest tree is located off the project site, then the buffer shall be demarcated as per above. The size of the buffer may be altered if a qualified biologist conducts behavioral observations and determines the nesting passerines are well acclimated to disturbance. If acclimation has occurred, the biologist shall prescribe a modified buffer that allows sufficient room to prevent undue disturbance/harassment to the nesting passerines. Construction or earth-moving activity shall not occur within the established buffer until a qualified biologist has determined that the young have fledged (that is, left the nest) and have attained sufficient flight skills to avoid project construction zones, which typically occurs by July 15th. However, the date may be earlier or later, and would have to be determined by a qualified biologist. If a qualified biologist is not hired to watch the nesting passerines, then the buffers shall be maintained in place through the month of August and work within the buffer may commence September 1st. [MM 1]
- 30. Prior to the issuance of a grading permit, the grading plan shall include a requirement (via notation) indicating that if cultural resources, or human remains, are encountered during site grading or other site work, all such work shall be halted immediately within 100 feet of the area of discovery and the contractor shall immediately notify the City of the discovery. In such case, the City, at the expense of the project applicant, shall retain the services of a qualified archaeologist for the purpose of recording,

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protecting, or curating the discovery as appropriate. The archaeologist shall be required to submit to the City for review and approval a report of the findings and method of curation or protection of the resources. Further grading or site work within the vicinity of the discovery, as identified by the qualified archaeologist, shall not be allowed until the preceding steps have been taken, to the issuance of a grading permit, the grading plan shall include a requirement (via notation) indicating that if cultural resources, or human remains, are encountered during site grading or other site work, all such work shall be halted immediately within 100 feet of the area of discovery and the contractor shall immediately notify the City of the discovery. In such case, the City, at the expense of the project applicant, shall retain the services of a qualified archaeologist for the purpose of recording, protecting, or curating the discovery as appropriate. The archaeologist shall be required to submit to the City for review and approval a report of the findings and method of curation or protection of the resources. Further grading or site work within the vicinity of the discovery, as identified by the qualified archaeologist, shall not be allowed until the preceding steps have been taken. [MM 4]

- 31. Pursuant to State Health and Safety Code §7050.5(c) State Public Resources Code §5097.98, if human bone or bone of unknown origin is found during construction, all work shall stop in the vicinity of the find and the Contra Costa County Coroner shall be contacted immediately. If the remains are determined to be Native American, the coroner shall notify the Native American Heritage Commission who shall notify the person believed to be the most likely descendant. The most likely descendant shall work with the contractor to develop a program for reinternment of the human remains and any associated artifacts. Additional work is not to take place in the immediate vicinity of the find, which shall be identified by the qualified archaeologist at the applicant's expense, until the preceding actions have been implemented. [MM 5]
- 32. Prior to the issuance of a grading permit, the applicant shall prepare to the satisfaction of the City Engineer, an erosion control plan that utilizes standard construction practices to limit the erosion effects during construction of the proposed project. Actions include, but are not limited to, the following:
 - a. Hydro-seeding;
 - b. Placement of erosion control measures within drainage ways and ahead of drop inlets;
 - c. The temporary lining (during construction activities) of drop inlets with "filter fabric";
 - d. The placement of straw wattles along slope contours;
 - e. Use of designated equipment and vehicle "wash-out" location;

- f. Use of siltation fences;
- g. Use of on-site rock/gravel road at construction access points; and
- h. Use of sediment basins and dust palliatives.
- 33. During grading and construction, the project contractor shall ensure that the following measures are implemented, consistent with the recommendations in the Environmental Noise and Vibration Analysis:
 - a. Grading and construction activities shall be limited to the daytime hours between 7:00 a.m. to 5:00 p.m. Monday through Friday, as specified in Section 15.01.101 of the Clayton Municipal Code. Any such work beyond said hours and days is strictly prohibited unless previously specifically authorized in writing by the City Engineer or designee or by project conditions of approval;
 - b. The distances between on-site construction and demolition staging areas and the nearest surrounding residences shall be maximized to the greatest extent possible; and
 - c. All construction and demolition equipment that utilizes internal combustion engines shall be fitted with manufacturer's mufflers or equivalent. [MM 9]
- 34. A licensed surveyor or engineer shall survey the locations, elevations, and limits of the trunk and dripline of all trees to be retained and protected as shown on the tentative map tree retention plan. The locations and limits are to be shown on the grading plans and the construction plans. A licensed arborist shall review the proposed construction operations that may impact the preserved trees and shall provide mitigations that shall be incorporated into the grading and construction plans. The arborist shall review and approve (by signature on the plans) the grading and improvement plans prior to submittal to the City for plan check.
- 35. Signature blocks shall be provided for the Community Development Director and City Engineer on the grading and construction plans.
- 36. All required setbacks shall contain at least five feet of flat, unoccupied area. "Flat" means a cross-slope between 2% and 10%. "Unoccupied" means no encroachments by fireplaces, building pop-outs (with or without a foundation), air conditioner pads and the like.
- 37. Two feet of flat area shall be provided between a property or right-of-way line and the top of slope.
- 38. The recommendations of the geotechnical report shall be incorporated into the grading and construction plans.

- 39. All grading shall be performed under the direction and inspection of a registered soils or geotechnical engineer and shall be in conformance with the recommendations of the geotechnical report and the requirements of the City Engineer. Prior to the construction of any improvements, the engineer shall submit a testing and observation report to the City Engineer for review and approval.
- 40. Grading and stormwater permits shall be obtained from the City Engineer.
- 41. The applicant shall implement all of the Bay Area Air Quality Management District's Basic Construction Mitigation Measures, which include the following:
 - All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
 - b. All haul trucks transporting soil, sand, or other loose material offsite shall be covered.
 - c. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
 - d. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
 - e. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator.
 - f. Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.
 - g. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator.
 - h. Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

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STREET CONDITIONS

- 42. The existing driveway at Parcel A is to be removed and replaced with standard curb, gutter and sidewalk.
- 43. The proposed driveway shall be constructed in accordance with the City's Standard Plan for driveways with monolithic sidewalks.
- 44. Applicant shall remove and replace any damaged existing curb, gutter and sidewalk as directed by the City Engineer.
- 45. Driveway and retaining walls at Southbrook Drive shall be designed to provide adequate sight distance per the City's standard plan.
- 46. The shared driveway for the two residential lots shall be twenty (20) feet wide from curb to curb.
- 47. All mailbox locations shall be constructed and grouped in accordance with United States Postal Service standards and the grouping of mailboxes shall be architecturally treated to reduce massing and visual impact. All mailbox locations and design are subject to review and approval of the Community Development Department and the United States Postal Service.

DRAINAGE CONDITIONS

- 48. Total storm runoff peak flows from the site shall not exceed predevelopment levels. All stormwater runoff from impervious areas shall be treated and contaminants removed prior to discharge from the site. The design and of the detention and treatment facilities shall be subject to the approval of the City Engineer.
- 49. The applicant shall submit a Final Stormwater Control Plan (including an Operations and Maintenance Manual) fully addressing the requirements of the City's recently amended Municipal Regional Stormwater National Pollutant Discharge Elimination System (NPDES) Permit (Permit No. CAS612008, as amended November 10, 2015), including the new "Green Streets/Green Infrastructure" requirements, and including an alternative to the use of sump pumps, such as dry wells, to the satisfaction of the City Engineer. [MM 8]
- 50. Maintenance of all drainage facilities shall be the responsibility of the homeowner on whose lot the facilities are located or adjacent to (including those facilities within the public right-of-way).

- 51. The improvement plans shall reflect that all on-site storm drain inlets shall be labeled "No Dumping Drains to Creek" using thermoplastic stenciling or equivalent permanent method, subject to City approval.
- 52. All roofs shall have rain gutters with rain water leaders that drain into depressed biofiltration treatment beds located within landscaped areas before discharging into the storm drain system or the street.
- 53. The Mosquito and Vector Control District and its contractors shall have the right of access to conduct inspections and maintenance of all on-site drainage devices.
- 54. Developer shall, prior to commencement of construction, enter into a recorded covenant and agreement for each lot with the following requirements at a minimum:
 - a. Bioretention planter to be maintained as originally constructed and in accordance with the approved Operations and Maintenance Plan. Planters may not be modified without the approval of the City Engineer.
 - b. By September 15th of each year, lot owner is to perform (or have performed by a firm approved by the City) a pre-rainy season inspection and submit a report to the City along with payment of the required fees. Any deficiencies noted shall be remedied within 20 calendar days of completion of the inspection.
 - c. City shall have the right of access to inspect the bioretention planter at any time.
 - d. Should said City inspection reveal any problems or inadequacies with the bioretention planter or drainage system, Owner shall be notified and must remedy the problems or inadequacies within 30 days of said notice.

UTILITY CONDITIONS

- 55. Sanitary sewer plans to be submitted to the City of Concord and the City Engineer for review and approval.
- 56. A sewer cleanout shall be provided on each sewer lateral at the front property line of each residential lot.
- 57. The applicant shall connect all residences to the sanitary sewer system, obtain applicable permits and pay applicable fees as required by the City of Concord.
- 58. The applicant shall install two four-inch conduits and pull-boxes with pull lines for City use for future tele-communication purposes. Conduits shall

- be installed in the public utility easement with termination on residential property lines behind the curbs.
- 59. The width of new access and maintenance easements for underground facilities shall be twice the depth of the facility with a minimum width of ten (10) feet, as determined appropriate and applicable by the City Engineer.
- 60. Underground facilities crossing lots shall be located in flat portions of the lots, not within slope areas.
- 61. Any existing underground facilities, either on-site or adjacent to the site, no longer required shall be either removed or filled, as directed by the City Engineer.
- 62. The applicant shall furnish and install the conduit required by SBC California for the service connection wires or cables.

ENGINEERING CONDITIONS

- 63. The applicant shall obtain an encroachment permit for all work in the public right-of-way.
- 64. All required easements or rights-of-way for off-site improvements shall be obtained by the applicant at no cost to the City of Clayton. Advance permission shall be obtained from any property or easement holders for any work to be done within such property or easements.
- 65. Upon recording of the final map, the City shall be given a full size, reproducible, Mylar copy of the recorded map and an electronic file of the map in AutoCAD. Upon completion of the improvements and prior to City Council acceptance, the City shall be given a full size, reproducible Mylar copy of the grading, construction, irrigation and landscape plans (plus an electronic copy in PDF), annotated to reflect changes that occur during construction and signed by the Project Engineer and Landscape Architect.
- 66. All work shall be designed and constructed in accordance with the Municipal Code requirements and City Standard Plans and Specifications.
- 67. During construction, the project contractor, at the expense of the project applicant, shall completely remove and re-compact the existing non-engineered fill on-site under the supervision of a registered geotechnical engineer, according to the recommendations presented in the Geotechnical Investigation. The contractor shall remove the upper undocumented fill soil from the area extending at least five feet beyond the edge of the planned building envelopes and also below the planned

rear retaining wall. Once removed, subsequent engineered fill may be used as approved by a licensed geotechnical engineer. A written summary of the operations shall be submitted to the City Engineer. [MM 7]

PARKING CONDITION

68. Four off-street parking spaces shall be provided on each lot; two covered spaces in the garage of each residence and two uncovered spaces which can be provided tandem or side by side in the driveways of each lot.

EXPIRATION CONDITION

69. The St. John's Church/Southbrook Drive Mixed Use Planned Development Project Development Plan (DP-04-15), Site Plan Review Permit (SPR-07-16), and Tree Removal Permit (TRP-37-15) shall expire simultaneously with the expiration of the St. John's Church/Southbrook Drive Mixed Use Planned Development Project Tentative Subdivision Map (MAP-01-15), pursuant to the tentative map expiration provisions listed in the State of California Government Code Subdivision Map Act.

ADVISORY NOTES

- 1. The applicant shall obtain the necessary approvals from the Contra Costa County Fire Protection District.
- 2. The applicant shall provide an adequate and reliable water supply for fire protection as set forth in the Uniform Fire Code.
- 3. NO PARKING FIRE LANE signs or red curbs shall be provided throughout both sides of the twenty (20) foot wide access driveway/roadway and turnaround. The applicant shall submit a minimum of two (2) copies of site improvement plans indicating existing hydrant locations and proposed fire apparatus access for your review and approval prior to obtaining building permits.
- 4. The twenty (20) foot wide access driveway/roadway and turnaround improvements must be completed and inspected by the Contra Costa County Fire Protection District (CCCFPD) prior to construction on the two residential lots.
- 5. Development on any parcel in this subdivision shall be subject to review and approval by the CCCFPD to ensure compliance with minimum CCCFPD requirements.
- 6. Any future proposed residences are required to be protected with an approved automatic fire sprinkler system complying with the 2013 edition of NFPA 13D or Section R313.3 of the 2013 California Residential

Page 15 of 16

Planning Commission Resolution No. 12-16

Code. A minimum of two (2) sets of sprinkler plans shall be submitted to the CCCFPD for each proposed residence for review and approval prior to installation.

7. Additional requirements may be imposed by the Contra Costa County Fire Protection District. Before proceeding with the project, it is advisable to check with the Fire District located at 2010 Geary Road, Pleasant Hill, 925-930-5500.

PASSED AND ADOPTED by the Planning Commission of the City of Clayton at a regular meeting on the 25^{th} day of August, 2016.

APPROVED:	ATTEST:
	
Dan Richardson	Mindy Gentry
Chair	Community Development Director

SOUTHBROOK DRIVE PLANNED DEVELOPMENT

DEVELOPMENT STANDARDS

Front Setback	Interior Side Setback	Exterior Side Setback	Rear Setback	Accessory Buildings and Structures	Principal Building Height	Accessory Building Height
20′	10' minimum 25' aggregate	Not Applicable	15'	Subject to CMC Section 17.36.055	Subject to CMC Section 17.16.070	Subject to CMC Section 17.36.055

Attachment to Resolution No. _____

ATTACHMENT E

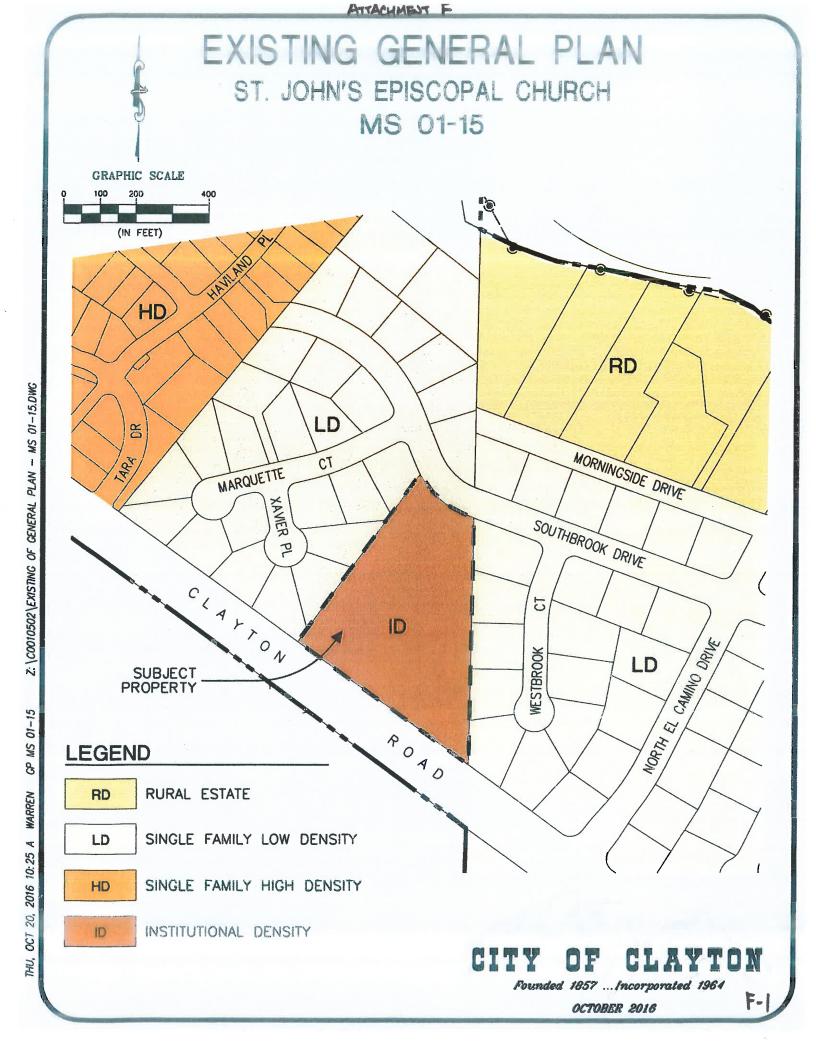


VICINITY MAP



St. John's Church/Southbrook Drive Mixed Use Planned Development ENV-01-15, GPA-01-15, ZOA-03-15, MAP-01-15, DP-01-15, SPR-07-16, TRP-37-15 5555 Clayton Road APN: 118-101-022

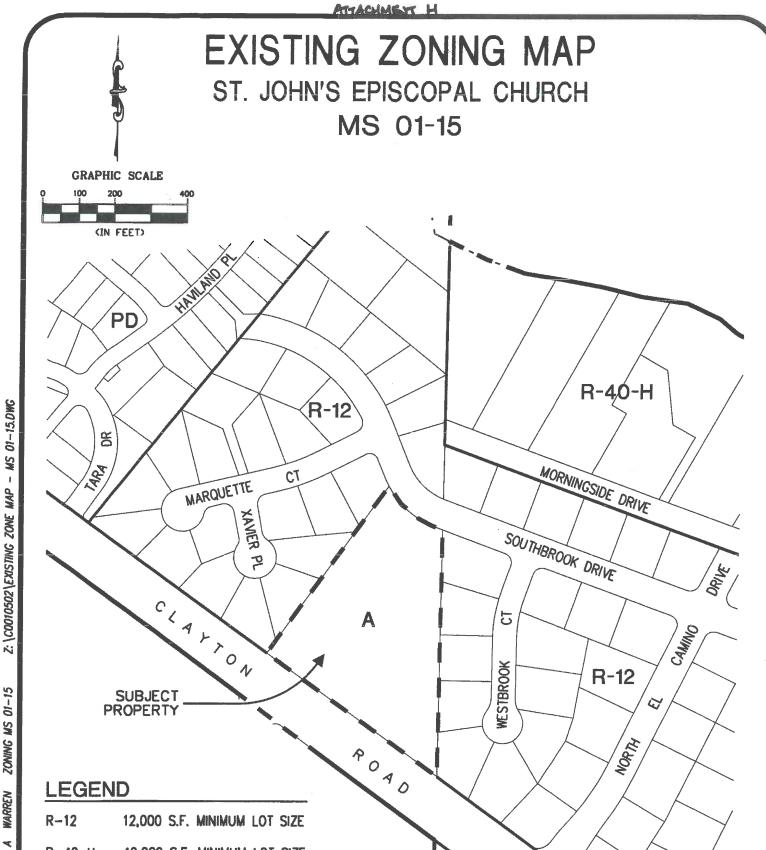




OCTOBER 2016

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R-40-H

40,000 S.F. MINIMUM LOT SIZE

(HORSES ALLOWED)

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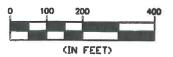
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PROPOSED ZONING MAP

ST. JOHN'S EPISCOPAL CHURCH MS 01-15

PD

GRAPHIC SCALE





XAVIER

P

R-40-H

R-12

NORTH

W

MORNINGSIDE DRIVE SOUTHBROOK DRIVE

C

WESTBROOK

CLATON SUBJECT PROPERTY

LEGEND

R-12

12,000 S.F. MINIMUM LOT SIZE

R-40-H

40,000 S.F. MINIMUM LOT SIZE

(HORSES ALLOWED)

PD

PLANNED DEVELOPMENT

Founded 1857 ... Incorporated 1964

OCTOBER 2018

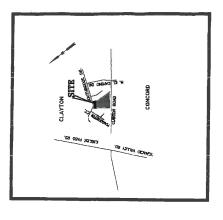


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H ATTACHMENT

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VICINITY MAP

SHEET INDEX:

PRELIMINARY GRADING AND DRAINAGE PLAN PRELIMINARY UTLITY PLAN

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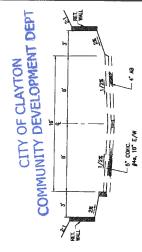
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JAN 1 3 2016

CONTRA COSTA COUNTY

SOLTHBROOK DRIVE, MS 01-15

VESTING TENTATIVE PARCEL MAP AND DEVELOPMENT PLAN



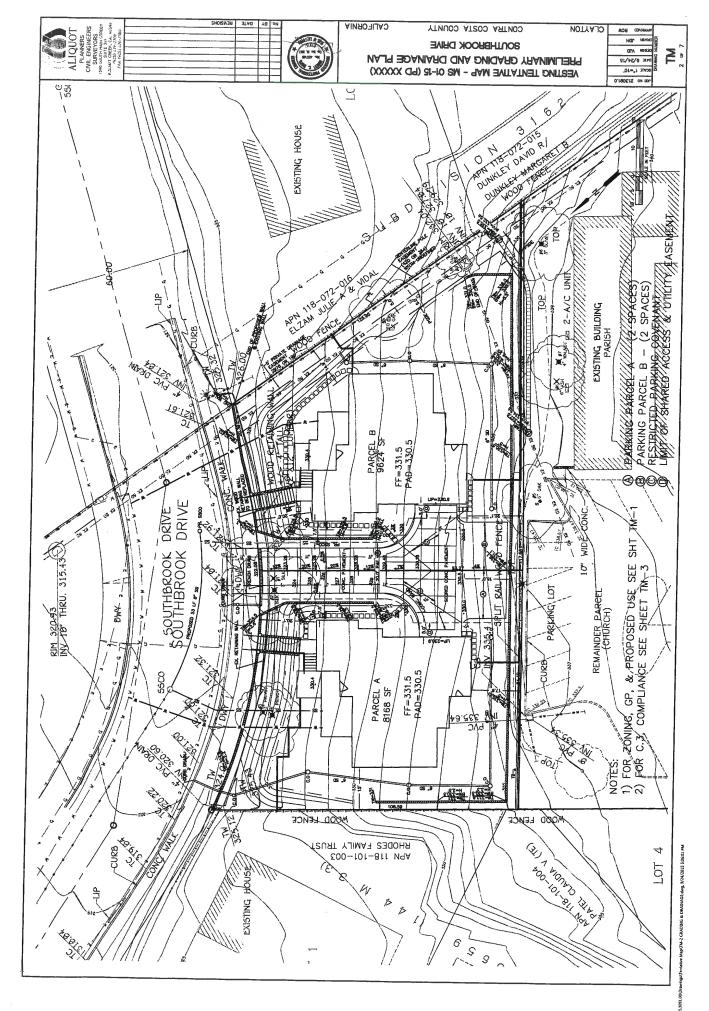
SITE PLAN

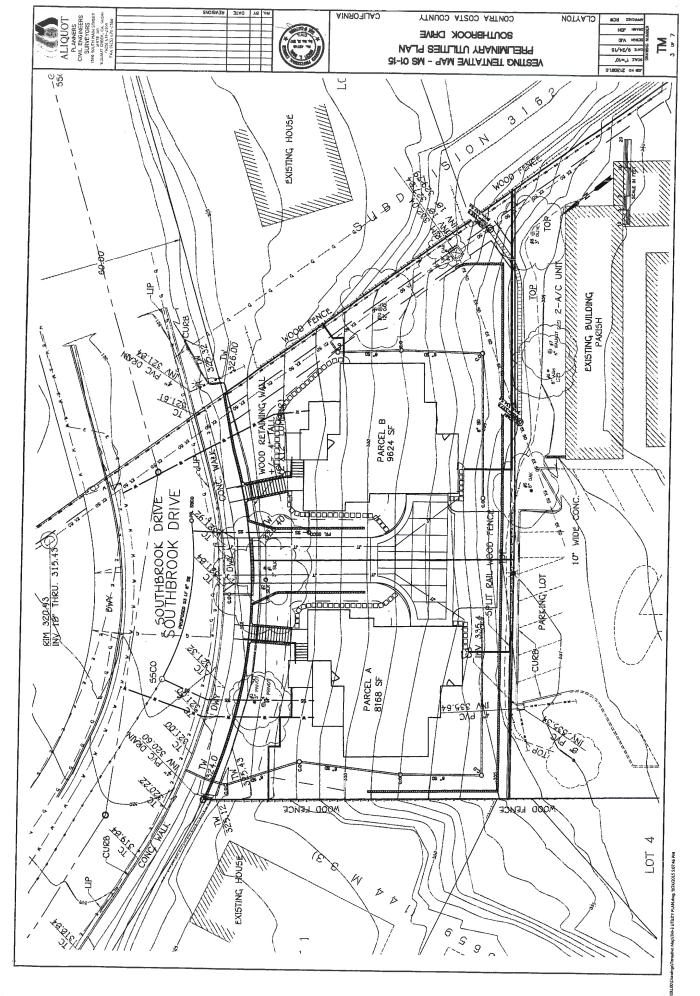
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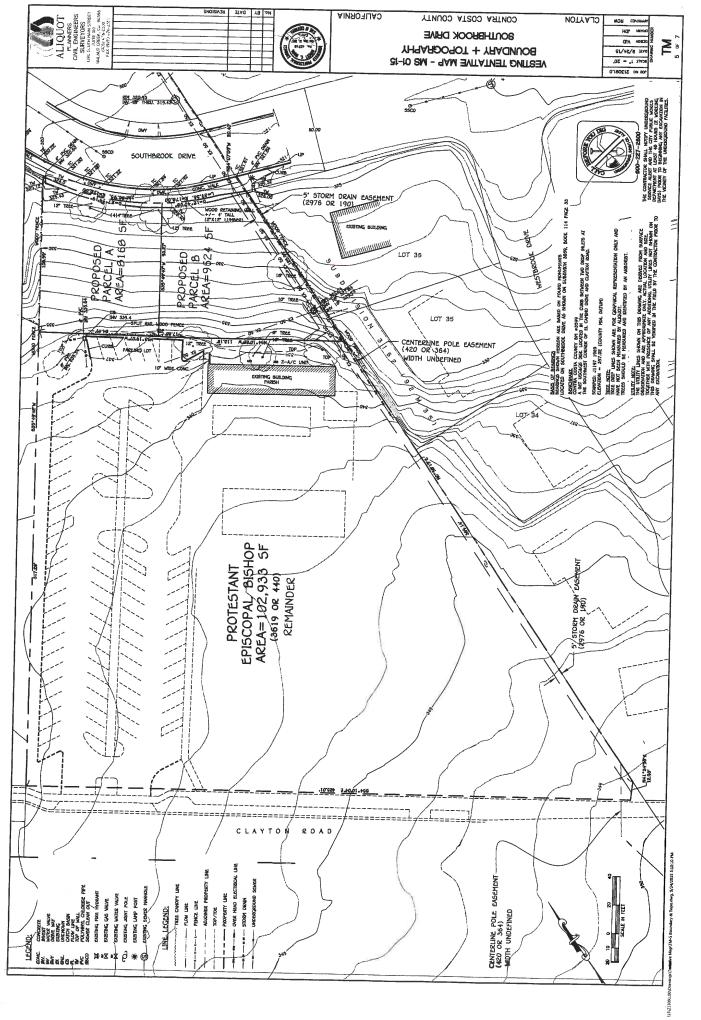
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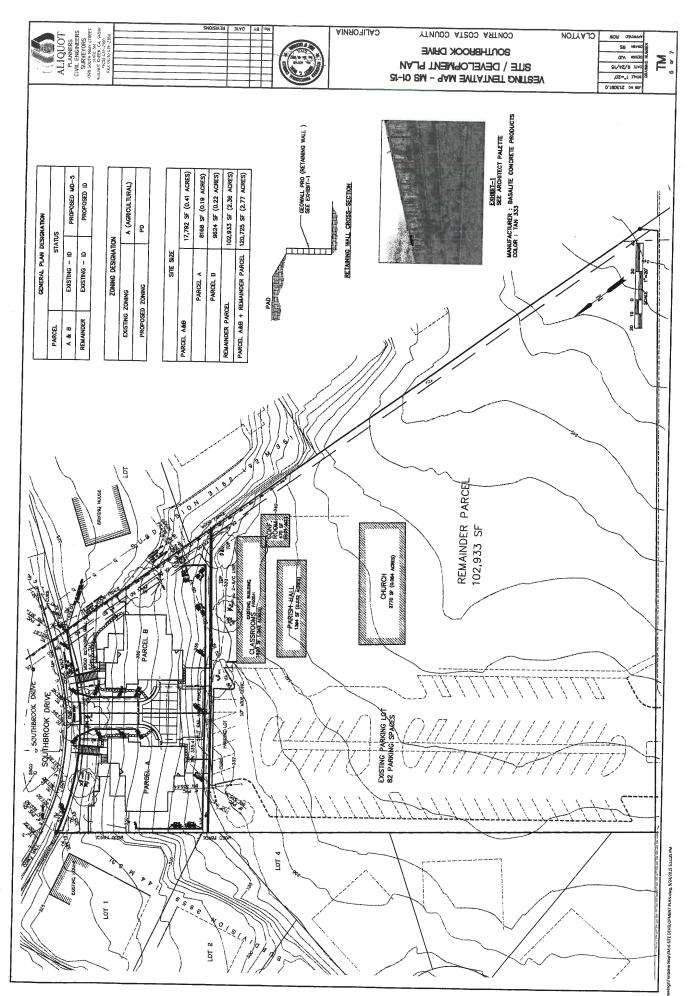
SOUTHBROOK DRIVE VESTING TENTATIVE MAP - MS 01-15 PRELIMINARY STORM WATER CONTROL PLAN

CLAYTON



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CONTRA COSTA COUNTY CALIFORNIA

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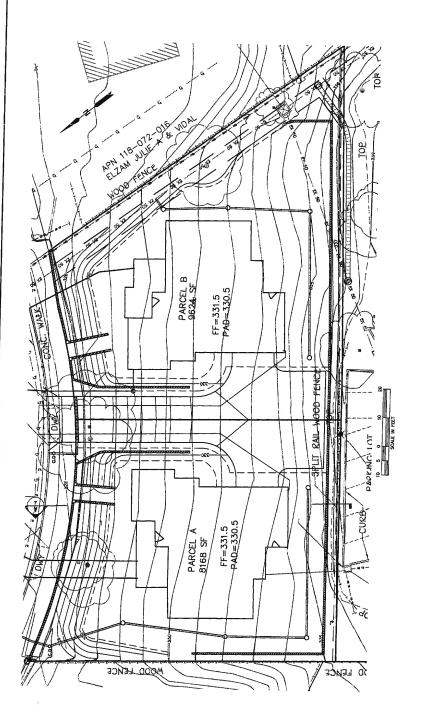
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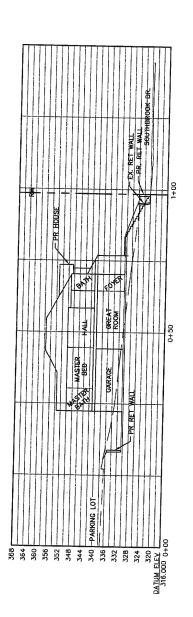
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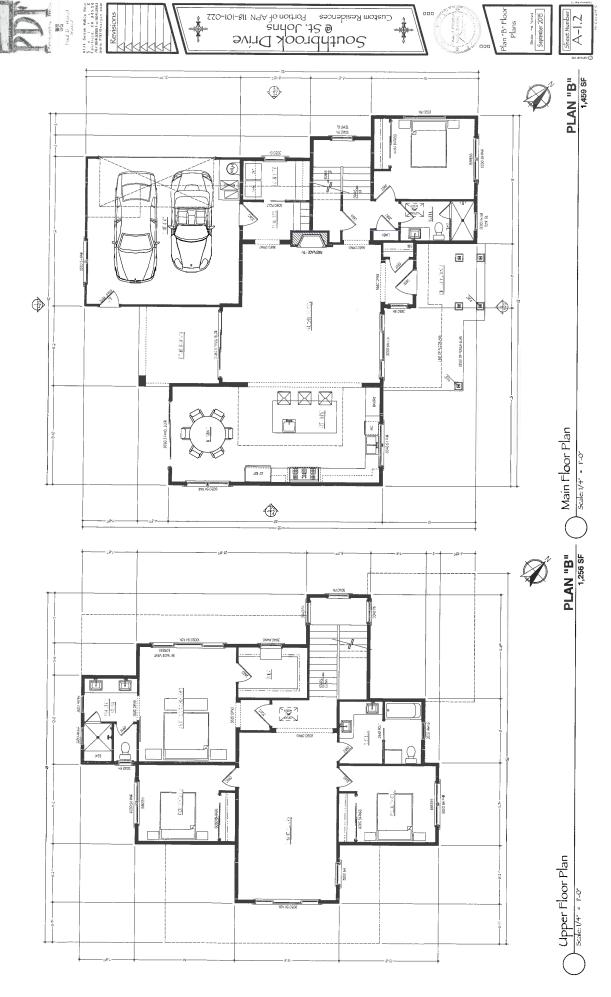


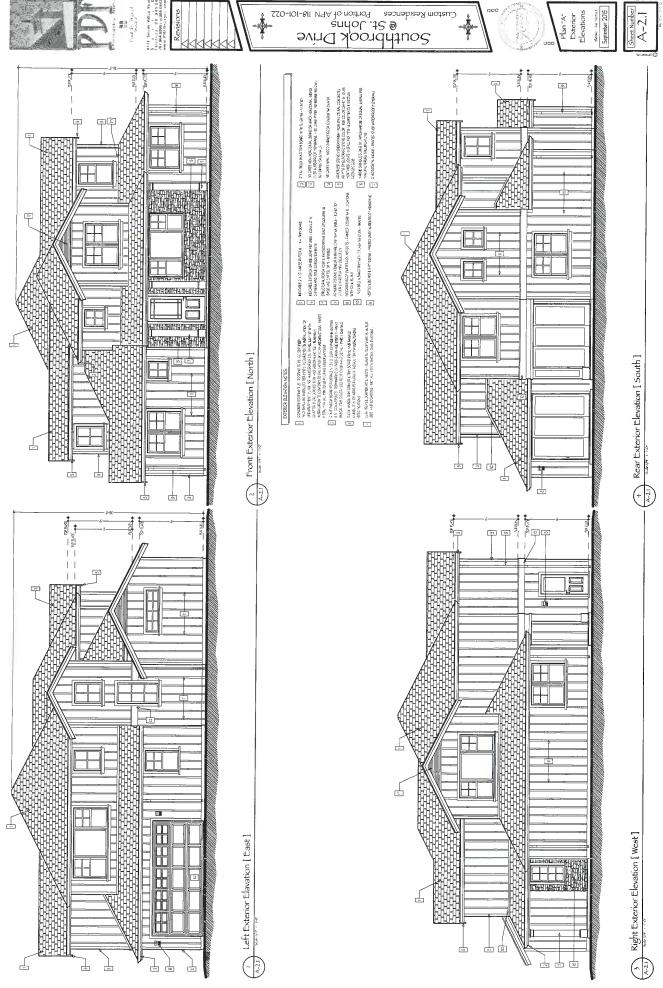


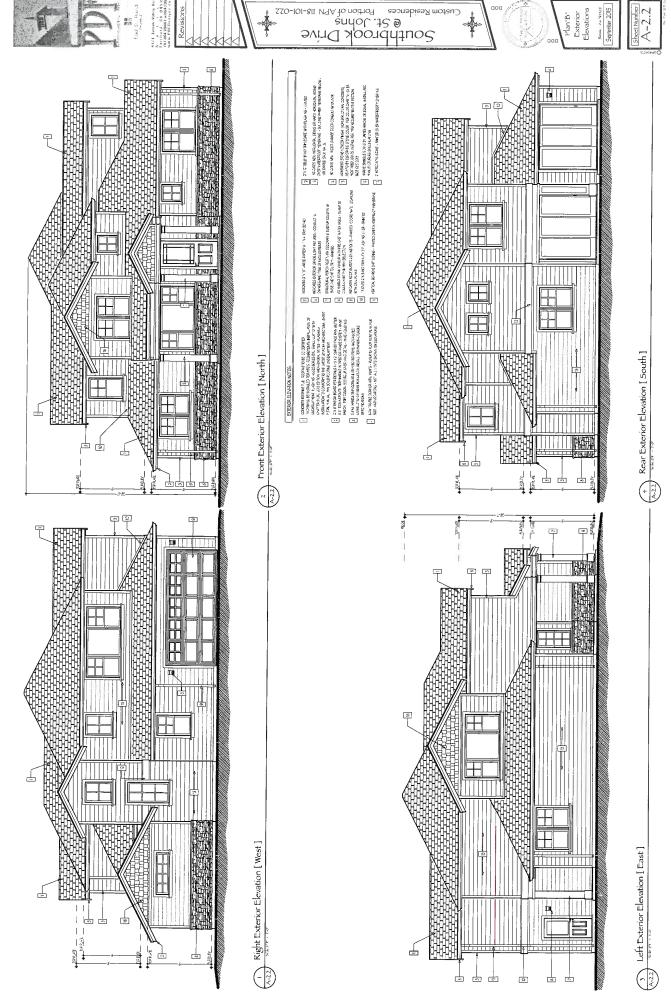
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ATTACHMENT JAN 1 3 2016

Southbrook Drive @ 54, Johns Custom Residences Portion of APN 118-101-022 A-1.1 PLAN "A" 1,459 SF **4** ZG-CFRYCHSUM BE 9 1 CITY OF CLAYTON COMMUNITY DEVELOPMENT DEPT Main Floor Plan HE DECOLUTION OF \bigoplus **(4)** PLAN "A" 1,256 SF STATE OF • **(** • MOPSH Upper Floor Plan **\$**



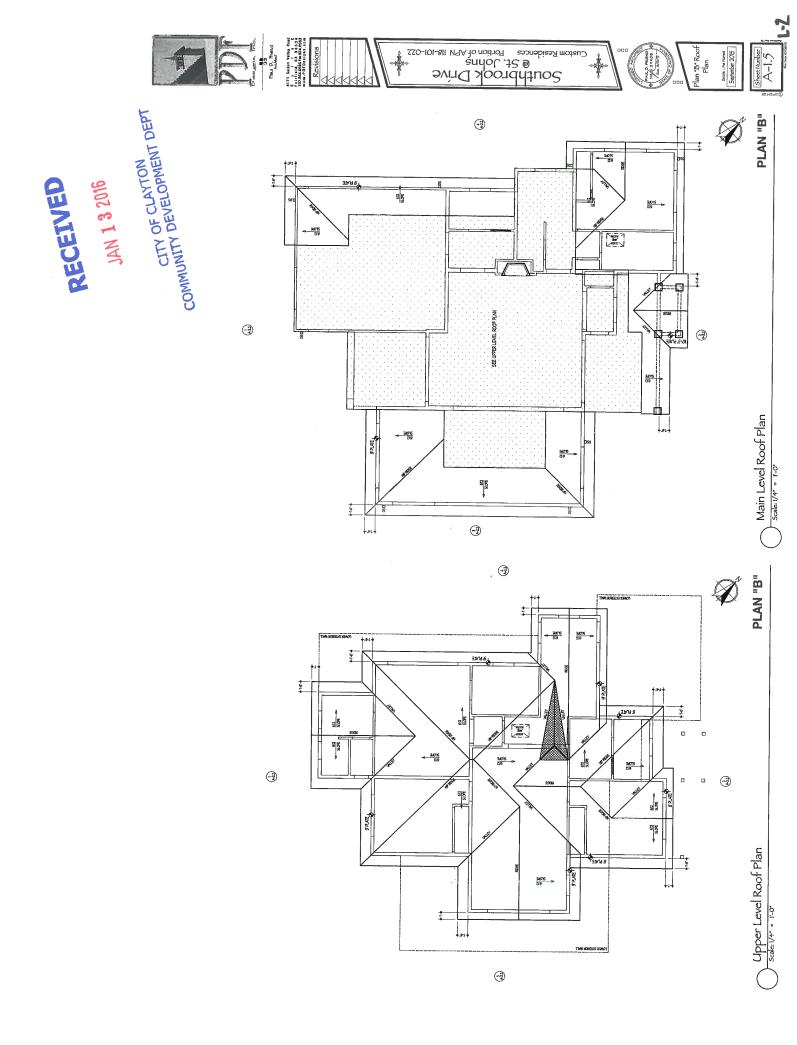




Southbrook Drive @ St. Johns "Residence Portion of APN 118-101-022 PAUL D. FREENST NO. 24408 Ton 63V5 Sheet Number
A-1.4 PLAN "A" CITY OF CLAYTON COMMUNITY DEVELOPMENT DEPT **4** 3076 JAN 1 3 2016 9 PLATE 340% 839 3MM6 **(** Main Level Roof Plan 307 1 Φ 1 **®** PLAN "A" S PATE 2008 **®** 35 3,075 **③** 34075 0.9 8 3075 500E 300 Upper Level Roof Plan 3 NAE **4**

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ATTACHMENT



ATTACHMENT M

SouthBrook Residence Plan "A"

5555 Clayton Road Clayton, California 94517

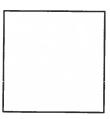
House Colors & Materials



Roofing:

Eagle Roofing "Brown Gray Range" RECEIVED Flat Concrete Roofing Tiles Color: Bel Air 287

JAN 1 3 2016



Trim Paint:

CITY OF CLAYTON

COMMUNITY DEVELOPMENT DEPT Trim Paint, Garage Door Kelly Moore "SWISS COFFEE" KM 23



Trim Paint:

Front Door, Fascia Boards & Gutters Kelly Moore "NOT MY FAULT" KM 5825-3



Siding:

Body Kelly Moore "FOSSIL" KM 4599-2



Stone Veneer:

El Dorado Stone La Plata Bluffstone

PDF Designs, Inc + Paul D. Friend, AIA 4171 Suisun Valley Road, Suite C, Fairfield, CA 94534 707 864-6986

SouthBrook Residence Plan "B"

5555 Clayton Road Clayton, California 94517

House Colors & Materials



Roofing:

Eagle Roofing "Brown Gray Range" RECEIVED Flat Concrete Roofing Tiles Color: Bel Air 287

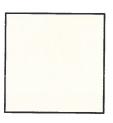


CITY OF CLAYTON



Trim Paint:

COMMUNITY DEVELOPMENT DEPT Window Trim Kelly Moore "NOT MY FAULT" KM 5825-3



Trim Paint:

Fascia Boards & Gutters, Columns, Garage Door Kelly Moore "BONE" KM 27



Siding:

Body Kelly Moore "ABBEY ROAD" KM 4586-2

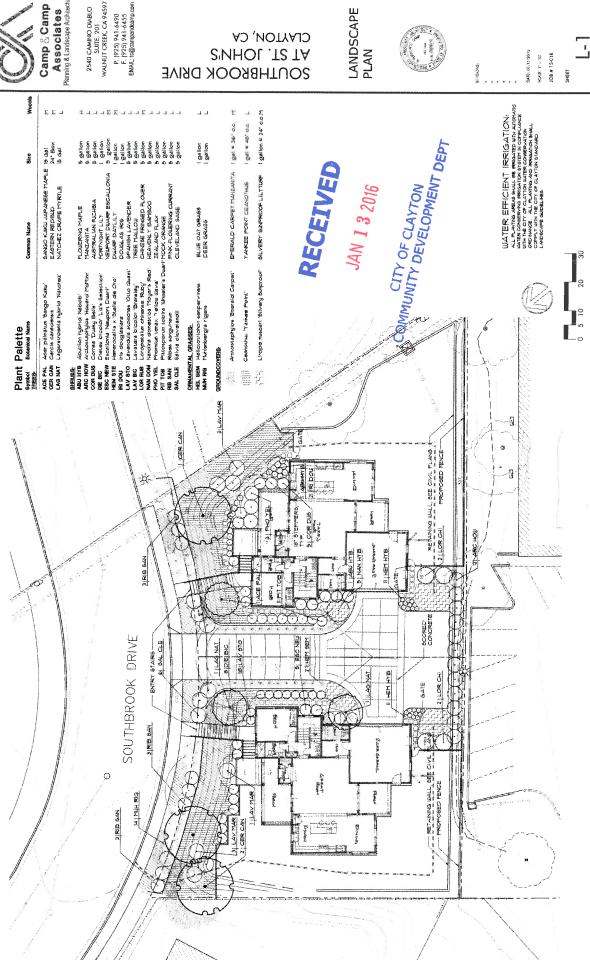


Stone Veneer:

El Dorado Stone Bluffstone Mineret

PDF Designs, Inc + Paul D. Friend, AIA 41/1 Suisun Valley Road, Suite C, Fairfield, CA 94534 707 864-6986

ATTACHMENT N



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2001HBROOK DRIVE



2540 CAMINO DIABLO SUITE, 201 WALNUT CREEK, CA 94597 P. (925) 941-6490 F. (925) 941-6455 EMAIL to@campandcamp.com

O BASALITE

Request Basalite Hardscape Catalog









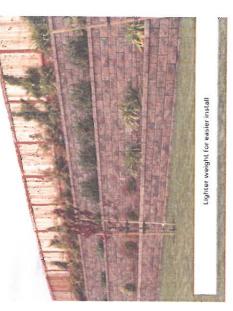
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BASALITE RETAINING WALL SYSTEM

features an open core design and high strength pin connection system. Each block face measures one square foot The Geowall Series by Basalite for easy calculation

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Where to Buy Retaining Wall nt/contact-us)

(http://www.basalite.com/where (Khq-ō)

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CITY OF CLAYTON
CITY DEVELOPMENT DEPT
COMMUNITY DEVELOPMENT

Product Unit Specifications

Click on any of the sizes below to see more details











Beveled Corner

Straight Bevel

Classic

Tri Plane

Ashlar Face

Corner Unit



RECEIVED

MAY 28 2015

April 5, 2015

Armand Buttici III 2804 Velvet Way Walnut Creek, CA 94596

CITY OF CLAYTON COMMUNITY DEVELOPMENT DEF

RE: 5555 Clayton Road Tree Report

Dear Armand,

Thank you for asking me to provide a Consulting Arborist Report for your proposed housing project located at 5555 Clayton Road in Clayton, California. The site is behind St. John's Episcopal Church on a vacant lot with 10 very small mostly volunteer trees. This report will identify the trees, their size, health and recommendations. I have numbered the trees 1-10 and will be plotted by Aliquot Associates, Inc., by number and size.

Tree Number	Species	Size canop	y Health	Recommendation
1	Silk tree	6" dbh. 5'	Moderate	Poor condition-recommend removal
2	Silk tree	8" dbh. 5'	Moderate	Poor condition-recommend removal
3	Privot	3" dbh. 3'	Poor	Volunteer-recommend removal
4	Privot	3" dbh. 3'	Poor	Volunteer-recommend removal
5	Valley oak	6" dbh. 4"	Good	Poor branch structure-in good helath
6	Ash tree	6" dbh. 7"	Moderate	Signs of blight/dead branches-removal
7	Walnut	4" dbh. 2'	Poor	Next to building/leaning – removal
8	Olive tree	3" dbh. 2'	Poor	Next to building/poor health-removal
9	Valley Oak	6"dbh. 4'	Good	Small oak with poor branch structure
10	Valley Oak	12" dbh. 8'	Good	Small oak with good branch structure

The trees that I evaluated are all very small and have never been properly maintained or irrigated. As a result most of the trees have poor branch structure and will need to be removed. The Valley oaks have adapted much better without water but still show signs of stress. I believe replacing these trees with nursery grown trees properly installed and irrigated will have longer term impact on the property.

If any trees do remain during construction I recommend placing orange protective fencing to protect the root zone. Due to the size of the trees most of the protection will be less than 7' from the root flare.

Please give me a call if you need additional information or have any questions, 925-525-3795.

Sincerely,

Bob Peralta Registered Consulting Arborist #505 American Society of Consulting Arborist ISA Certified Arborist WE-7150A

PLANNING COMMISSION STAFF REPORT

Meeting Date:

October 25, 2016

Item Number:

5.b.

From:

Mindy Gentry 4

Community Development Director

Subject:

Study Session to Consider a General Plan Amendment to Allow

Net Acreage Density Calculations on Properties with Physical

Site Constraints (GPA-01-16)

Applicant:

City of Clayton

DISCUSSION

SILIVER OAK ESTATES GENERAL PLAN CONFORMANCE ISSUE

The proposed Silver Oak Estates project consists of 59 units which are comprised of seven (7) single-family homes, 28 town homes, and 24 "Green Courts" located on approximately 5.37 acres; a neighborhood swimming pool and cabana on 0.59 acres; roadways on 2.10 acres; and open space on 7.84 acres. The project is to be located on the 13.96-acre Hurd Ranch property located between the northerly terminus of Lydia Lane and south of Oakhurst Drive in Clayton. The currently proposed project has been going through the City's entitlement process since approximately 2010, which has included the completion of a draft Initial Study/Mitigated Negative Declaration and the start of the process to undertake an Environmental Impact Report.

Due to staffing changes and following staff's cursory review of the project in 2016, it became apparent the attached product type being proposed by the applicant, the 28 town homes and 24 "Green Courts", were not in conformance with the City's General Plan. The General Plan designation for the property is Single Family Medium Density (MD) (3.1 to 5 units per acre) which is described in the General Plan as being "intended for and allows planned unit development (PUD) and single-family subdivisions. Development will range from a standard singlefamily subdivision to a zero lot line or single-family home." This General Plan designation would allow for 43 to 70 units on the subject property. While the proposed number of units, 59, fits within the overall allowed density, the General Plan land use designation of Single Family Medium Density (MD) is reserved for various single-family detached product types; therefore, the proposed attached product type would not fit within the Single Family Medium Density designation and would only fit within one of the three Multifamily General Plan land use designations, Multifamily Low, Multifamily Medium, or Multifamily High Density. In regards to product type, this determination has been consistently applied throughout the City and there is no evidence the City has ever deviated from its interpretation of the General Plan Single Family land use designation as being anything other than a designation for a single-family detached product type. In light of the proposed product type only fitting into the three multifamily land use designations, another issue arises because these designations require a higher density with more units to the acre, which, if applied to the subject site, would result in additional units being required in order to fit the General Plan density range of which the subject property really cannot manage given the physical constraints—the creek and sloping topography—located on the site. A General Plan amendment to Multifamily Low Density would result in a minimum unit count 106 units (7.6 units/acre) in order to allow the proposed product type, which would be an overall increase of 47 units on the property from the proposed 59

units.

Further, if the applicant were to try and fit the prescribed product type on the subject site it would result in a small lot single-family development of detached homes more than likely with a zero lot line or minimal setbacks. Given the physical constraints of the property, it is questionable whether the parcel is large enough to even fit a detached single-family product type.

PREVIOUSLY SUBMITTED PROJECT BACKGROUND FOR SILVER OAK ESTATES

Prior to 2010, the project previously filed with the City back in 2000 on the subject property consisted of a single-family detached residential development with 28 homes. The applicant is claiming at the time this application was subject to and required a General Plan amendment to change the land use density of the site from Multifamily Medium Residential to Single Family Medium Residential, which is evidenced by a letter from the Community Development Director at the time, Jeremy Graves. Mr. Graves indicated in his letter dated August 7, 2000 to the applicant, Callida Development LLC, "The current General Plan Diagram designation for the site is Multi-Family Medium Density (10.1-15 units per gross acre). Since the density proposed for the project is approximately 2.1 units per gross acre, an amendment of the General Plan Diagram designation for the site to [Single Family] Low Density (1.1-3 units per gross acre) is needed." Even though Mr. Graves identified the property having a designation of Multifamily Medium Density residential, staff is unable to find any indication in the official City records that the property ever had a Multifamily residential land use designation. The previously adopted Housing Elements, one adopted in June of 2000 and the other adopted in September of 2005 both show the property designated as Single Family Medium Density (3.1 to 5 units per acre). Further, City Council resolutions approving any General Plan amendments on this property are absent.

GENERAL PLAN AMENDMENT

Given the difficulty of being able to meet the General Plan density range with the allowed product type and the community contention surrounding the project, the applicant has requested that the City take the lead in processing a General Plan amendment. Further, the applicant has alluded to the processing of this amendment would assist in alleviating the previous determinations made by staff.

The General Plan Land Use Element currently states, "The acreages are based on the legal or gross acreage of the parcel. Maximum density cannot be guaranteed but density will fall within a range due to differences in sites" (Attachment A). The concept of the proposed General Plan amendment would be to allow projects with large physical site constraints to determine the density calculation based on net developable acreage rather than the gross or legal acreage of the parcel. The amendment would be drafted in a manner to allow the City Council or the Planning Commission the opportunity to make findings to support the request to use net acreage in instances where the site contains a certain percentage of slopes over 25%, or if the site contains a flood plain, rock outcroppings, a creek, or another type of physical constraint.

For example, the subject site for the Silver Oak Estates project contains large physical constraints such as sloping topography and Mount Diablo Creek (Attachment B). In particular, the Habitat Conservation Easement is 6.53 acres, which includes a minimum 50-foot required setback from the top of bank of Mount Diablo Creek. This constraint alone removes almost half, 47%, of the developable acreage of the site, making it nearly impossible for a development project to fit within the parameters of the General Plan as it pertains to development intensity and allowed product type. Further, the topography on the property additionally restricts the number of units due the slope and required grading.

These physical constraints on the project site provide limited land available for development in order to fit the required number of units and to provide the allowable product type identified in the General Plan. This issue is occurring because the General Plan bases the density range on legal or gross acreage of the parcel whether or not there are physical constraints on the property. Another way to categorize the issue would be trying to fit unwarranted intense density on a site that is really much smaller given the constraints that exist. By not providing the option of using the net acreage by subtracting the constrained property, this could result in a less desirable project given that the site may not necessarily have a proper land use designation due to the constraints and the resulting development intensity would not correspond given its location and surroundings.

The General Plan requirement for density on the legal or gross acreage of the parcel fits for those properties that are flat and/or minimally constrained; however this requirement does not appropriately apply to those properties that are limited in their developable land due large physical site constraints. The City of Clayton is approximately 98 percent built-out and the available properties left to develop are marginal or more difficult, particularly properties with site constraints such as slopes or creeks. This amendment could provide the City with the opportunity for more desirable developments rather than applying a singular approach in regards to the determination of density.

The particulars of the General Plan amendment and possibly appropriate corresponding changes to the Clayton Municipal Code would be addressed during this process. The proposed details such as the applicability, standards, and findings would come back at a later date to the Planning Commission and City Council for review and consideration. For example, a benchmark, such as a percentage of property that is constrained, identifying when the net acreage versus gross acreage could be applied to a property that contains a physical constraint could result from the process. The amendment is envisioned so that the required findings and/or standards of review for the use of net acreage versus gross acreage would need to be considered and identified during a site specific entitlement process as well.

OTHER CONSIDERATIONS

- HCD The City has a total Regional Housing Needs Assessment (RHNA) obligation of 141 units for the 2014-2022 planning period. The City's Housing Element has an estimated capacity of 275 housing units, which results in a housing surplus of 137 units. The subject property was included in the City's inventory of available sites for housing units, which help to demonstrate that the City could accommodate its given RHNA (Attachment C). The City's Housing Element identified the site with an assumed realistic capacity (80% of maximum density) of 56 units; however the physical constraints were not fully taken into consideration, which resulted in a much higher estimate of capacity given the allowed product types within the General Plan. If the site were to be developed not utilizing the gross developable acreage as called for in the General Plan, but rather a net acreage by removing, at a minimum, the 6.53 acre Conservation easement the property would yield approximately 23 to 37 units. This would decrease the City's adopted Housing Element's assumed realistic capacity to 29 units from the assumed 56, assuming no further acreage deductions would be necessary for the sloping topography. By applying the unit range of the General Plan designation based on the reduced acreage, the City of Clayton would still have adequate housing capacity based on the density range, 104 to 118 additional housing units above its RHNA obligation.
- Other Applications While this proposed amendment has been generated from one particular situation, it
 could be beneficial to other parcels in the City. For example, one parcel that could benefit from this
 amendment, if applied, would be the vacant High Street property behind the Post Office. This property
 has a significant slope, which could constrain the property from achieving the required density, at 20 units
 per acre. This amendment could also assist the property in resulting in a more suitable development for
 the area.

RECOMMENDATION

It is recommended the Planning Commission consider and discuss as well as provide feedback to staff regarding whether a formal General Plan amendment process, along with associated changes to the Clayton Municipal Code, if required, should be initiated. Considerations as to the scope of the General Plan amendment and changes to the Clayton Municipal Code, if that process is recommended, are also being requested by staff.

ATTACHMENTS

- A. Excerpt from the General Plan Land Use Element
- B. Sample Constraints Map
- C. Excerpt from the Housing Element Capacity to Accommodate the 2014-2022 RHNA

ATTACHMENT A

- 7b Support establishment of a Heritage Center that would permit uses that support historical heritage and community activity within the Town Center.
- 7c Support development of community playfields. (Amended by Resolution 21-87, dated 5/16/87)

Objective 8

To direct development of Keller Ranch within appropriate areas as constrained by topography, visual corridors, geologic factors, water courses and other planning considerations.

Policies

- 8a Utilize map designation footprint to indicate development form.
- 8b Permit density transfer among residential development areas within the overall unit limit.
- 8c Designate Country Club and athletic field facilities as Open Space/Facility.
- Permit minor design deviation among residential development, open space, open space/facility, and commercial designation footprints through the Planned Development approval process.

 (Amended by Resolution 21-87, dated 5/16/87)

LAND USE DESIGNATIONS

The General Plan Diagram indicates application, location, extent, type and density of development. Designations provide assurance of city policy and guidance to homeowners, landowners, and developers.

(Amended by Resolution 25-2004, dated 6/1/04)

RESIDENTIAL DESIGNATIONS

There are seven residential designations. The acreages are based on the legal or gross acreage of the parcel. Maximum density cannot be guaranteed but density will fall within a range due to differences in sites. Second dwelling units are exempt from the determination of residential densities.

When clustering is proposed for development, the City may provide relief from the lot coverage standards discussed below.

Unless otherwise noted, the following uses are allowed in each of the General Plan residential categories, provided they meet the requirements of the underlying zoning district, applicable specific plan policies and guidelines, and applicable general plan policies:

- Churches and places of worship;
- Public / quasi-public buildings and facilities;
- Day care centers, family day care homes, and residential care facilities;
- Bed and breakfast facilities;
- Lodges, fraternal organizations, and clubs;

- Crop and tree farming and horticulture, not including the raising or keeping of any animals other than ordinary household pets; and
- Publicly-owned parks and playgrounds.

(Amended by Resolution 43-95, dated 6/28/95, and Resolution 25-2004, dated 6/1/04)

Additional uses allowed under each category are described below.

Rural Estate (0 to 1.0 Units Per Acre)

This density range is intended for single-family estates, or horse set-ups on individual lots of an acre or more. Allowable uses include single-family homes, private stables and corrals with access to greenbelts and equestrian facilities, and accessory structures and uses normally auxiliary to them. Second dwelling units are also allowed.

(Amended by Resolution 21-87, dated 5/16/87, Resolution 43-95, dated 6/28/95, and Resolution 25-2004, dated 6/1/04)

Single Family Low Density (1.1 to 3 Units per Acre)

This density range is intended for development of single-family houses on lots that range between 12,500 and 40,000 square feet. This designation has been the predominant density in Clayton. Uses allowed under this designation include single-family homes, and the accessory structures and uses normally auxiliary to them. Second dwelling units are also allowed.(Amended by Resolution 21-87, dated 5/16/87, Resolution 43-95, dated 6/28/95, and Resolution 25-2004, dated 6/1/04)

Single Family Medium Density (3.1 to 5 Units Per Acre)

This density is intended for and allows planned unit development (PUD) and single-family subdivisions. Development will range from a standard single-family subdivision to a zero lot line or single-family home. Accessory structures and uses normally auxiliary to them are also allowed, as well as second dwelling units.

(Amended by Resolution 21-87, dated 5/16/87, Resolution 43-95, dated 6/28/95, and Resolution 25-2004, dated 6/1/04)

Single Family High Density (5.1 to 7.5 Units Per Acre)

This designation is an urban single-family density that will allow patio homes, zero lot line and cluster homes in a PUD development. Accessory structures and uses normally auxiliary to them are also allowed, as well as second dwelling units. Second dwelling units are also allowed. Development will require innovative design with a combination of development concentration and open space. Development intensity will permit individual parcel coverage of up to 75% provided common open space is provided. Development excluding recreational amenities shall not exceed total structural land coverage of 25%.

(Amended by Resolution 21-87, dated 5/16/87, Resolution 43-95, dated 6/28/95, and Resolution 25-2004, dated 6/1/04)

Multifamily Low Density (7.6 to 10 Units Per Acre)

This designation is intended for and allows cluster units such as duplexes, triplexes, townhouses, garden units, and other types of PUDs, as well as single family detached dwellings on smaller lots with a conditional use permit, that provide a development with amenities to balance the increased density. This density must be adequately buffered from single-family and estate development. Structural coverage, excluding recreational amenities, shall not exceed 40% of the site area. Second dwelling units are allowed.

(Amended by Resolution 21-87, dated 5/16/87, Resolution 64-98, dated 12/1/98, and Resolution 11-2012, dated 4/3/12)

Multifamily Medium Density (10.1 to 15 Units Per Acre)

This designation is intended for and allows multifamily units, including duplexes, triplexes, and townhouses, located where the site area, circulation system and other features can comfortably accommodate increased density. Development within this density shall be encouraged to use a PUD concept and standards with incorporation of significant design and amenity in the project. Structural coverage, excluding recreational amenities, shall not exceed 50% of the site area. Second dwelling units are allowed.

(Amended by Resolution 21-87, dated 5/16/87, Resolution 25-2004, dated 6/1/04, and Resolution 11-2012, dated 4/3/12)

Multifamily High Density (15.1 to 20 Units Per Acre)

This designation is intended for and allows two-story (or higher) apartments or condominiums located where higher densities may be appropriate, such as near major public transportation and commercial centers. Development within this density shall be encouraged to use a PUD concept and standards with incorporation of significant design and amenity in the project. Structural coverage, excluding recreational amenities, shall not exceed 65% of the site area.

(Resolution 11-2012, dated 4/3/12)

Institutional Density (7.6 to 20 Units Per Acre)

This designation is intended for development of various forms of senior housing under sponsorship of public or quasi-public agencies. The density of senior projects is not always equivalent to standard concepts of density; therefore, a density range of 7.6 to 20 units per acre may be permitted. Group dining, limited vehicles, medicine-dispensing services and other characteristics make this form of housing unique.

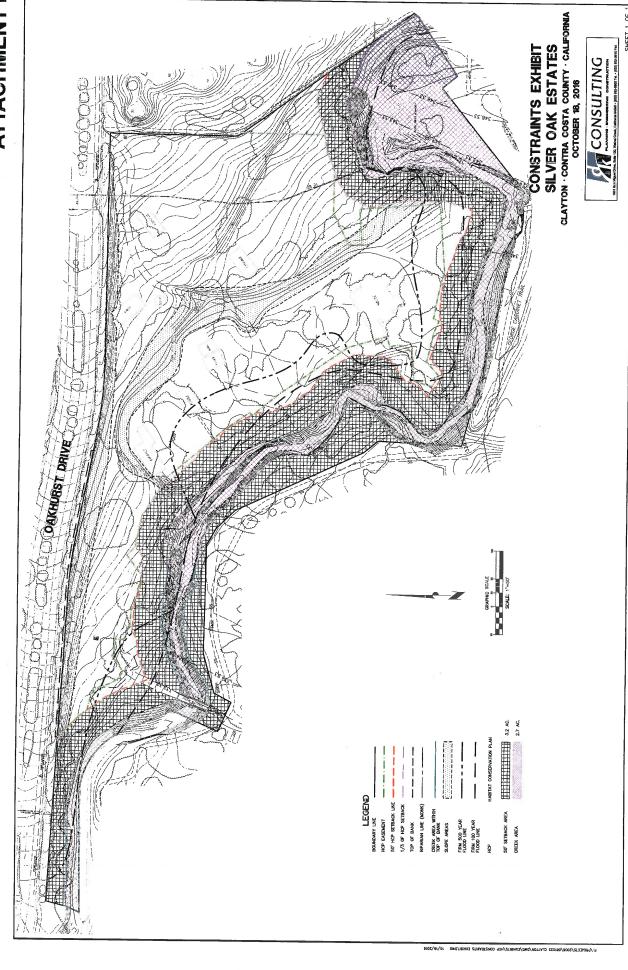
Senior projects must be submitted as planned developments and will have to be reviewed for site limitations including density, number of stories and structure height, on a case-by-case basis. It is assumed that densities can exceed 15 units per acre when possible impacts can be mitigated. Development intensity can reach 100% structural coverage of each individual parcel. Structural coverage shall not exceed 50% of the site area, however, specific sites and relationship to adjacent uses may pose additional limitations.

(Amended by Resolution 21-87, dated 5/16/87, Resolution 64-98, dated 12/1/98, Resolution 25-2004, dated 6/1/04, and Resolution 11-2012, dated 4/3/12)

Residential Density and Population Projections

The 2010 census indicated that Clayton had an average population of 2.72 persons per unit for occupied units. Clayton's high occupancy rate compared to other cities in Contra Costa County is due to the large homes on large parcels. As homes decrease in size, occupant size can also be expected to decrease.

The analysis of the relationship of units per acre to population is not direct. Population is based on relationship of residential unit size and living pattern of residents. Generally the size of the units will indicate the number of bedrooms. Variables include the reduced size of the family, larger homes on smaller lots, ethnic and cultural preferences for family size and use of space, economic fluctuations, percentage of unmarried shared rent households and changes in taste. The projected population levels are as follows:



ALIACHMENI C

CITY OF CLAYTON

HOUSING ELEMENT

As stated in Implementation Measure I.1.1, the City will continue to track and monitor the inventory of available sites throughout the planning period to ensure that adequate sites remain available to accommodate the City's RHNA.

Table 45. Capacity to Accommodate the 2014–2022 RHNA

Income Category	RHNA	Planned/ Approved (see Table 46) ¹	Vacant Land (see Table 47) ²	Underdeveloped Sites (see Table 48) ²	Remaining Need (Surplus)
Extremely Low	25				
Very Low	26	2	57	86	(69)
Low	25				
Moderate	31		79	43	(68)
Above Moderate	34	11			
Total	141	13	136	129	(137)

Source: ABAG 2014–2022 Regional Housing Needs Allocation 2013; Clayton Community Development Department 2014

¹ Units estimated in the lower-income categories will be deed-restricted for affordability in the Creekside Terrace and Oak Creek Canyon Projects. ² Units estimated in the lower-income categories are located in General Plan land use designations that allow up to at least 20 units per acre (Multi-family High Density and Town Center Commercial), in keeping with the "default density" for the City of Clayton as determined by HCD.

6.2 Adequate Sites Inventory

State law requires that the Housing Element include an "inventory of land suitable for residential development, including vacant sites and sites having the potential for redevelopment" (Government Code Section 65583[a][3]). State law further requires that the Housing Element analyze zoning and infrastructure on these sites to ensure that housing development during the planning period is actually feasible. Through this process, the City must demonstrate that it has sufficient land to accommodate its fair share of the RHNA as described above.

The City must also show that the land supply is capable of supporting housing demand for all economic segments of the community, including lower-income households. The state has generally held that the best way to demonstrate capacity for "affordable" housing is to provide sufficient and suitable land zoned for higher-density multi-family housing.

All sites identified in the inventory are shown on the map in Appendix B.

Approved Projects

As of March 2014, 13 housing units were approved for development in the City of Clayton. As shown in **Table 46**, these units are located in the Creekside Terrace and Oak Creek Canyon projects.

PLANNING COMMISSION STAFF REPORT

Meeting Date:

October 25, 2016

Item Number:

5.c.

From:

Mindy Gentry 44

Community Development Director

Subject:

Ordinance Amending the Landscape Water Conservation Standards

(ZOA-07-16)

Applicant:

City of Clayton

REQUEST

The City of Clayton is requesting a public hearing to consider a City-initiated Ordinance amending Title 17 "Zoning", Chapter 17.80 of City of Clayton Municipal Code in order to revise the landscape water conservation standards to comply with changes in State law (ZOA-07-16).

PROJECT INFORMATION

Location:

Citywide

Environmental:

This ordinance is exempt from review under the California Environmental Quality Act ("CEQA") (California Public Resources Code Section 21000 et seq.). Pursuant to State CEQA Guidelines section 15307 (14 Cal. Code Regs., § 15307), this Ordinance is covered by the CEQA Categorical Exemption for actions taken to assure the maintenance, restoration, enhancement, or protection of a natural resource where the regulatory process involves procedures for protection of the environment. The adoption of this Ordinance will result in the enhancement and protection of water resources, and will not result in cumulative adverse environment impacts or any other potentially significant impact described in State CEQA Guidelines section 15300.2. It is therefore exempt from the provisions of CEQA.

Public Notice:

On October 14, 2016, a public hearing notice was published in the Contra Costa Times and a public hearing notice was posted at designated locations in the City.

BACKGROUND

In 1990, the California State Legislature passed the Water Conservation in Landscaping Act, AB 325, requiring all local agencies to adopt a Water Efficient Landscape Ordinance (WELO).

In September of 2010, the City of Clayton adopted an updated water conservation ordinance in response to the State Water Conservation in Landscaping Act of 2006 (AB 1881). AB 1881 directed the Department of Water Resources to develop a new State Landscape Water Conservation Ordinance,

which became effective January 1, 2010. The State Ordinance required all new and rehabilitated landscapes be designed and installed to meet the latest best practices for water use efficiency. All cities and counties in California were required to adopt the State Ordinance as written or develop their own ordinance that is at least as effective in conserving water. Generally, the thresholds established in the State Ordinance applied to irrigated landscaped areas of 2,500 square feet or greater for developer-initiated projects and public projects, and 5,000 square feet or greater for owner-initiated single-family residential projects. The Planning Commission found the State Ordinance to be too cumbersome and directed staff to participate in drafting an alternative ordinance that was equally as effective as the State Ordinance, but less complicated. The City of Clayton, along with other jurisdictions in the area, worked to draft a Regional Ordinance in order to improve the administration and implementation of the required standards by simplifying the process for design and review. Minor changes were made to the Regional Ordinance which was adopted by the City in 2010.

DISCUSSION

On January 14, 2014, Governor Jerry Brown proclaimed a State of Emergency throughout the State of California due to severe drought conditions. Subsequently on April 1, 2015, the Governor issued Executive Order B-29-15 (EO-29-15) directing the State Water Resources Board to update the State Model Water Efficient Landscape Ordinance (Attachment B). The Executive Order called for revising the Model Ordinance to increase water efficiency standards for new retrofitted landscapes through more efficient irrigation systems, greywater usage, onsite stormwater capture, and by limiting the portion of landscapes that can be covered in turf. The Model Ordinance also requires jurisdictions to report on the implementation and enforcement of local ordinances (Attachment C).

All jurisdictions throughout the state are required to adopt the State model ordinance or alternatively jurisdictions can adopt their own ordinance as long as it is equally as effective in conserving water as the State's Model Ordinance. The City's existing ordinance does not comply with the with the State's Model Ordinance as it is not equally as effective in conserving water. Therefore, the City is now under the State's updated Ordinance which is in compliance with Executive Order 29-15; however similarly to the update in 2010, the State's Ordinance is cumbersome and the City's subject proposed ordinance will simplify the process.

SIGNIFICANT PROPOSED CHANGES TO CITY'S ORDINANCE

The major changes to the City's model ordinance, in conformance with the State Ordinance, are as follows:

Projects Subject to the Ordinance

The size of new landscape areas associated with commercial, multifamily, and single family projects subject to the Ordinance has been lowered from 2,500 square feet to 500 square feet. The threshold for new owner-directed single family projects has been lowered from 5,000 square feet to 500 square feet and rehabilitated owner-directed single family projects has been lowered from 5,000 square feet to 2,500 square feet.

Water Efficient Worksheet and Water Budget

• The maximum applied water allowance (MAWA) has been lowered from 70% of the reference evapotranspiration (ETo) to 55% for residential landscape projects, and to 45% of ETo for non-residential projects. This water allowance reduces the landscape area that can be planted with high water use plants such as cool season turf. The water budget approach allows for areas of high water use plants if the water use is reduced in other areas, provided the overall landscape area stays within budget.

Landscape Design

- Turf cannot exceed 25 percent of the landscape area for residential uses and no turf is allowed in non-residential uses.
- Turf cannot be planted in medians or in areas narrower than ten feet.
- Compost must be incorporated into the soil prior to planting at a rate of four yards per 1,000 square feet.
- Mulch depth has been increased to three inches from two.

Irrigation

- Dedicated landscape water meters or submeters are required for residential landscapes over 5,000 square feet and non-residential landscapes over 1,000 square feet.
- Irrigation systems are required to have pressure regulation to ensure correct and efficient operation.
- Flow sensors that detect and report high flow conditions due to broken pipes and/or popped sprinkler heads are required for landscape areas greater than 5,000 square feet.
- Master shut-off valves are now required in case of large irrigation system failures.
- Minimum width of area that can be overhead irrigated was increased to ten feet.

Graywater

Graywater systems are allowed.

Reporting

• The City is required to report annually to the Department of Water Resources on the implementation and enforcement of the Water Efficient Landscape Ordinance.

RECOMMENDATION

Staff recommends that the Planning Commission consider all information provided and submitted, and take and consider all public testimony and, if determined to be appropriate, adopt Resolution 13-16, recommending City Council approval of an Ordinance modifying the landscape water conservation standards (Attachment A).

ATTACHMENTS

- A. Planning Commission Resolution 13-16, with attachment:

 Exhibit A Draft Ordinance Modifying the Landscape Water Conservation Standards
- B. Executive Order B-29-15
- C. Department of Water Resources Model Water Efficient Landscape Ordinance

ATTACHMENT A

CITY OF CLAYTON PLANNING COMMISSION RESOLUTION NO. 13-16

RECOMMENDING CITY COUNCIL APPROVAL OF AN ORDINANCE AMENDING MUNICIPAL CODE TITLE 17, "ZONING", CHAPTER 17.80 LANDSCAPE WATER CONSERVATION STANDARDS (ZOA-07-16)

WHEREAS, California Government Code Section 65595 required that local agencies adopt a water efficient landscape ordinance on or before January 1, 2010 that is at least as effective in conserving water as the updated State Model Water Efficient Landscape Ordinance; and

WHEREAS, on April 1, 2015, the California Governor's Executive Order B-29-15 directed the Department of Water Resources to update the State Model Water Efficient Landscape Ordinance through expedited regulation; and

WHEREAS, Executive Order B-29-15 and the revised State Model Water Efficient Landscape Ordinance require that local agencies report on their implementation and enforcement of their local water efficient landscape ordinances to the State each year; and

WHEREAS, the City wishes to amend its existing Water Conserving Landscape Guidelines to meet State law; and

WHEREAS, this Ordinance is exempt from review under the California Environmental Quality Act ("CEQA") (California Public Resources Code Section 21000 et seq.). Pursuant to State CEQA Guidelines Section 15307 (14 Cal. Code Regs., § 15307), this Ordinance is covered by the CEQA Categorical Exemption for actions taken to assure the maintenance, restoration, enhancement, or protection of a natural resource where the regulatory process involves procedures for protection of the environment. The adoption of this Ordinance will result in the enhancement and protection of water resources, and will not result in cumulative adverse environment impacts or any other potentially significant impact described in State CEQA Guidelines Section 15300.2; and

WHEREAS, proper notice of this public hearing was given in all respects as required by law; and

WHEREAS, on October 25, 2016, the Clayton Planning Commission held a duly-noticed public hearing on the matter, and received and considered testimony, both oral and documentary and recommended approval to the City Council of the proposed Ordinance to amend the landscape water conservation standards in compliance with State law; and

WHEREAS, the Planning Commission has determined that the proposed amendments to the Clayton Municipal Code do not conflict with and are in general conformance with the City of Clayton General Plan.

NOW, THEREFORE, BE IT RESOLVED, that the Planning Commission of the City of Clayton, based on substantial evidence in the administrative record of proceedings and pursuant to its independent review and consideration, does hereby recommend City Council approval of the proposed Ordinance to amend the Clayton Municipal Code landscape water conservation standards, attached hereto as Exhibit A and incorporated herein by this reference.

PASSED AND ADOPTED by the Planning Commission of the City of Clayton at a regular meeting on the 25th day of October, 2016.

APPROVED:	ATTEST:
Dan Richardson	Mindy Gentry
Chair	Community Development Director

ATTACHMENTS

Exhibit A – Draft Ordinance Amending the Landscape Water Conservation Standards

EXHIBIT A

ORDINANCE NO. XXX

AN ORDINANCE AMENDING THE CLAYTON MUNICIPAL CODE CHAPTER 17.80 LANDSCAPE WATER CONSERVATION STANDARDS

THE CITY COUNCIL City of Clayton, California

THE CITY COUNCIL OF THE CITY OF CLAYTON DOES HEREBY FIND AS FOLLOWS:

WHEREAS, California Government Code Section 65595 required that local agencies adopt a water efficient landscape ordinance on or before January 1, 2010 that is at least as effective in conserving water as the updated State Model Water Efficient Landscape Ordinance; and

WHEREAS, on April 1, 2015, the California Governor's Executive Order B-29-15 directed the Department of Water Resources to update the State Model Water Efficient Landscape Ordinance through expedited regulation; and

WHEREAS, Executive Order B-29-15 and the revised State Model Water Efficient Landscape Ordinance require that local agencies report on their implementation and enforcement of their local water efficient landscape ordinances to the State each year; and

WHEREAS, the City wishes to amend its existing Water Conserving Landscape Guidelines to meet State law; and

WHEREAS, proper notice of this public hearing was given in all respects as required by law; and

WHEREAS, the Clayton City Council has reviewed all written evidence and oral testimony presented to date on this matter.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF CLAYTON DOES ORDAIN AS FOLLOWS:

Section 1. The above recitals are true and correct and are hereby incorporated into this Ordinance.

<u>Section 2.</u> Chapter 17.80 of the Clayton Municipal Code is hereby amended and restated in its entirety as provided in Exhibit "A" attached hereto and incorporated herein by reference.

Section 3. CEQA. The City Council hereby determines that this Ordinance is exempt from review under the California Environmental Quality Act ("CEQA") (California Public Resources Code Section 21000 et seq.). Pursuant to State CEQA Guidelines section 15307 (14 Cal. Code Regs., § 15307), this Ordinance is covered by the CEQA Categorical Exemption for actions taken to assure the maintenance, restoration, enhancement, or protection of a natural resource where the regulatory process involves procedures for protection of the

environment. The adoption of this Ordinance will result in the enhancement and protection of water resources, and will not result in cumulative adverse environment impacts or any other potentially significant impact described in State CEQA Guidelines section 15300.2. It is therefore exempt from the provisions of CEQA. The City Council hereby directs the City Manager or his designee to prepare and file a Notice of Exemption within five business days following adoption of this Ordinance.

Section 4. Severability. If any section, subsection, sentence, clause, or phrase of this Ordinance, or the application thereof to any person or circumstances, is held to be unconstitutional or to be otherwise invalid by any court competent jurisdiction, such invalidity shall not affect other provisions or clauses of this Ordinance or application thereof which can be implemented without the invalid provisions, clause, or application, and to this end such provisions and clauses of the Ordinance are declared to be severable.

<u>Section 5.</u> Conflicting Ordinances Repealed. Any ordinance or part thereof, or regulations in conflict with the provisions of this Ordinance, are hereby repealed. The provisions of this Ordinance shall control with regard to any provision of the Clayton Municipal Code that may be inconsistent with the provisions of this Ordinance.

Section 6. Effective Date and Publication. This Ordinance shall become effective thirty (30) days from and after its passage. Within fifteen (15) days after the passage of the Ordinance, the City Clerk shall cause it to be posted in three (3) public places heretofore designated by resolution by the City Council for the posting of ordinances and public notices. Further, the City Clerk is directed to cause the amendments adopted in Section 2 of this Ordinance to be entered into the City of Clayton Municipal Code.

The foregoing Ordinance was introduced at a regular public meeting of the City Council of the City of Clayton held on XXXX, 2016.

Passed, adopted, and ordered posted by the City Council of the City of Clayton at a regular public meeting thereof held on XXXX, 2016 by the following vote:

AYES:	
NOES:	
ABSENT:	
ABSTAIN:	
	THE CITY COUNCIL OF CLAYTON, CA
	Howard Geller, Mayor

ATTEST	
Janet Brown, City Clerk	
APPROVED AS TO FORM	APPROVED BY ADMINISTRATION
Malathy Subramanian, City Attorney	Gary A. Napper, City Manager
	dinance was duly introduced at a regular meeting of on XXXX, 2016 and was duly adopted, passed, and by Council held on XXXX, 2016.
	Langt Drawn City Clark
	Janet Brown, City Clerk

EXHIBIT A

Chapter 17.80

LANDSCAPE WATER CONSERVATION STANDARDS

Sections:	
17.80.010	Title and Purpose
17.80.020	Definitions
17.80.030	Applicability
17.80.040	Landscape Project Application (LPA) Requirements
17.80.050	Water Efficient Landscape Standards
17.80.060	Landscape Plan Requirements
17.80.070	Landscape Water Audit Requirements
17.80.080	Certifications
17.80.090	Landscape and Irrigation Maintenance Schedule
17.80.100	Stormwater Management
17.80.110	Provisions for Existing Landscapes
17.80.120	Public Education
17.80.130	Reporting

<u>17.80.010</u> <u>Title and Purpose.</u> This Chapter shall be known and may be cited as the Landscape Water Conservation Standards Ordinance of the City of Clayton for the purpose of implementing within Clayton the Water Conservation in Landscaping Act of 2006 and the implementation of Executive Order B-29-15.

<u>17.80.020</u> <u>Definitions.</u> Certain words and phrases are defined within this Chapter and the definitions herein apply to this Chapter only. Where it appears from the context of such words, phrases, or provisions that a different meaning is intended, the definition shall be determined by the Community Development Director.

A. "Applicant" means the individual or entity submitting a Landscape Project Application (LPA) required under Section 17.80.040 of this Chapter to request a permit, plan check, or design review from the City of Clayton, or requesting

- new or expanded water service from the local water district. A project applicant may be the property owner or his or her designee.
- B. "Applied water" means the portion of water supplied by the irrigation system to the landscape.
- 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 an irrigation system.
- D. "Certified irrigation system auditor" means a person certified by the U.S. Environmental Protection Agency's WaterSense Irrigation Partners Program.
- E. "Control valve manifold" a series of control valves plumbed together in one central spot for distribution to sprinkler heads.
- F. "Conversion factor (0.62)" means the number that converts acre-inches per acre per year to gallons per square foot per year.
- G. "Emission Device" means any device that is contained within an irrigation system that is used to apply water. Common emission devices in an irrigation system include, but are not limited to, spray and rotary sprinkler heads, bubblers, and drip irrigation emitters.
- H. "Estimated Total Water Use (ETWU)" means the estimated total water used for the landscape, as described in the City of Clayton Water Allowance Work Sheet.
- I. "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 which are two major influences upon the amount of water that needs to be applied to the landscape. ETAF for a Special Landscape Area shall be 1.0.
- J. "ETo" stands for Reference Evapotranspiration, and means the water loss from a large field of 4-7 inch-tall, cool-season grass that is not water stressed. Local ETo numbers can be found through the California Irrigation Management Information System (CIMIS).
- K. "Evapotranspiration" means the combination of water transpired from plants and evaporated from the soil and plant surfaces.
- L. "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.
- M. "Flow sensors" 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.
- N. "Graywater" means untreated wastewater that has not been contaminated by any toilet discharge, has not been affected by infectious, contaminated, or unhealthy body wastes, and does not present a threat from contamination by unhealthful processing, manufacturing, or operating wastes.
- O. "Geometry" means the size, shape, and angles of an area.
- P. "Hardscape" means any durable material (pervious and non-pervious).
- Q. "Hydrozone" means a portion of the landscaped area having plants with similar water needs. This ordinance uses the publication *Water Use Classification of Landscape Species* (WUCOLS) to determine a plant's water needs. A hydrozone may be irrigated or non-irrigated.
- R. "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 such a manner with the Irrigation Association's Landscape Irrigation Auditor Certification program or other U.S. Environmental Protection Agency "Watersense" labeled auditing program.
- S. "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 Chapter is 75% for overhead spray devices and 81% for drip or bubbler systems. Greater irrigation efficiency can be expected from well-designed and well-maintained systems.
- T. "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 recommendations to improve performance of the irrigation system.
- U. "Irrigation water use analysis" means an analysis of water use data based on meter readings and billing data.
- V. "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, or other pervious or non-pervious hardscapes, and other non-irrigated areas designated for non-development (e.g., open spaces and existing native vegetation).

- W. "Landscape contractor" means a person licensed by the State of California to construct, maintain, repair, install, or subcontract the development of landscape systems.
- X. "Landscape water audit" means an in-depth evaluation of the installed landscape to verify the landscape complies with the Water-Efficient Landscape Standards of the City of Clayton Landscape Water Conservation Standards Ordinance, and completes the Certificate of Compliance for a landscape water audit.
- Y. "Lateral line" means the water delivery pipeline that supplies water to the emitters or sprinklers from the valve.
- Z. "Maximum Applied Water Allowance (MAWA)" means the upper limit of annual applied water for the established landscaped area, as specified in the City of Clayton "Water Allowance Work Sheets".
- AA. "Medians" mean any planting area that separates traffic lanes on streets and parking areas in parking lots.
- BB. "Mulch" means any organic material, such as leaves, bark, straw, or compost; or inorganic mineral materials, such as rocks, gravel, and 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.
- CC. "Non-Permeable" means any surface or material that will not allow the passage of water through that surface or material and into the underlying soil at a rate that ensures run-off will not occur.
- DD. "Operating pressure" means the pressure at which the parts of an irrigation system are designed by the manufacturer to operate.
- EE. "Overhead irrigation" means systems that deliver water through the air (e.g., sprayheads and rotors).
- FF. "Overspray" means the irrigation water that is delivered beyond the target area.
- GG. "Permit" means an authorizing document issued by local agencies for new construction or rehabilitated landscapes.
- HH. "Plant factor" or "plant water use factor" is a factor that, when multiplied by ETo, estimates the amount of water needed by plants. The plant factors for this Chapter are from the WUCOLS publication.
- II. "Precipitation rate" for this Chapter means the rate of application of water measured in inches per hour.
- JJ. "Project" means the total area comprising the landscape area, as defined in this Chapter.

- KK. "Rain switch" or "rain sensing shutoff device" means a component that automatically suspends an irrigation event when it rains.
- LL. "Reference evapotranspiration" or "ETo" means a standard measurement of environmental parameters that affect the water use of plants.
- MM. "Rehabilitated landscape" means any re-landscaping project that requires a permit, plan check, or design review, or requires a new or expanded water service application.
- NN. "Retail water supplier" means any entity, including a public agency, city, county, district or private water company that provides retail water service.
- OO. "Runoff" means water that is not absorbed by the soil or landscape to which it is applied and that flows from the landscape area.
- PP. "Smart irrigation controllers" means controllers using weather information or soil moisture readings along with site information to automatically adjust the irrigation schedule on a daily basis.
- QQ. "Soil moisture sensor" or "soil moisture sensing device" means a device that measures the amount of water in the soil. The device may also suspend or initiate an irrigation event.
- RR. "Special Landscape Area (SLA)" means an area of the landscape dedicated solely to edible plants, such as vegetable gardens or orchards, areas irrigated with recycled water, water features using recycled water, cemeteries, and areas dedicated to active play, such as parks, sports fields, and golf courses where turf provides a playing surface.
- SS. "Sprinkler head" means a device that delivers water through a nozzle.
- TT. "Station" means an area served by one valve or by a set of valves that operate simultaneously.
- UU. "Turf" means a ground cover surface of mowed grass. Kentucky bluegrass, Perennial ryegrass, Red fescue, and Tall fescue are examples of cool-season grasses. Bermuda grass, Kikuyu grass, Seashore Paspalum, St. Augustine grass, Zoysia grass, and Buffalo grass are examples of warm-season grasses.
- VV. "Valve" means a device used to control the flow of water in the irrigation system.
- WW. "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).
- XX. "WUCOLS" means the Water Use Classification of Landscape Species, published by the University of California Cooperative Extension, the

Department of Water Resources, and the Bureau of Reclamation, 2000. (WUCOLS) report is available at http://www.water.ca.gov?wateruseefficiency/publications/. Search for WUCOLS, and then go to Part 2 WUCOLS III* 1999 Edition.

<u>17.80.030</u> <u>Applicability.</u> After January 1, 2017, the indicated provisions of this Chapter shall apply to landscape projects as follows:

- A. Developer Projects: New landscape development for commercial, multi-family, and single family projects with irrigated landscape areas cumulatively equal to or greater than 500 square feet and rehabilitated landscape development for commercial, multi-family, and single family projects with irrigated landscape areas cumulatively equal to or greater than 2,500 square feet, requiring a building permit, grading permit, plan check, or design review shall complete the Landscape Project Application (LPA) described in Section 17.80.040, and comply with all other Sections of this Chapter.
- B. Municipality and Public Agency Projects: New projects designed and installed by the City of Clayton with irrigated landscape areas cumulatively equal to or greater than 500 square feet and rehabilitated projects designed and installed by the City of Clayton with irrigated landscape areas cumulatively equal to or greater than and 2,500 square feet shall comply with Sections 17.80.050, 17.80.060, 17.80.070, 17.80.080, 17.80.090, and 17.80.100.
- C. Owner-Directed Single Family Projects: New owner-directed single family projects with irrigated landscape areas cumulatively equal to or greater than 500 square feet and rehabilitated owner-directed single family projects with irrigated landscape areas cumulatively equal to or greater than 2,500 and requiring a building permit, grading permit, plan check, or design review shall complete the Landscape Project Application (LPA) described in Section 17.80.040, and comply with all other Sections, except Section 17.80.090, of this Chapter.
- D. Existing Landscapes: Existing landscapes are only subject to the provisions in Section 17.80.110, "Provisions for Existing Landscapes" and Section 17.80.120, "Public Education".
- E. The provisions of this Chapter shall not apply to:
 - 1. Landscapes that are only temporarily irrigated for establishment purposes and landscapes that are not irrigated with a permanent irrigation system.
 - 2. Registered local, state or federal historical sites, or as may otherwise be determined by the City Council.
 - 3. Community gardens, botanical gardens and arboretums open to the public.

17.80.040 <u>Landscape Project Application (LPA) Requirements.</u> Applicant shall choose one of the two options below to comply with this Chapter:

A. Option A: Proposed landscape project does <u>not</u> include any:

- 1. Water features with more than 100 square feet of total surface area;" or
- 2. Turf or other high water use plants, unless they qualify as a "Special Landscape Area. High water use plants are those designated as 'high water use' in the Water Use Classification of Landscape Species (WUCOLS) report¹."

For this option, the applicant shall complete the following:

- 1. Project Application Sheet.
- 2. Certification Sheets.
- 3. Landscape Plans (See Section 17.80.060);
- 4. Maintenance Schedule (See Section 17.80.090).
- B. Option B: Proposed landscape project does include:
 - 1. Water features with more than 100 square feet of total surface area; or
 - 2. Turf or other high water use plants not qualifying as a "Special Landscape Area." The Estimated Total Water Use (ETWU) for the proposed landscape shall not exceed the Maximum Applied Water Allowance (MAWA) for the site. The MAWA formula will use an ET Adjustment Factor of .50 for residential projects and an ET Adjustment Factor of .45 for non-residential projects.

For this option, the applicant shall complete the following:

- 1. Project Application Sheet.
- 2. Certification Sheets.
- 3. Water Allowance Work Sheets.
- 4. Landscape Plans (See Section 17.80.060).
- 5. Maintenance Schedule (See Section 17.80.090).

An applicant requesting design review approval shall submit, at a minimum, a preliminary landscaping plan with the design review application; however, the applicant must submit all components of the Landscape Project Application (LPA) concurrently with the application for building permit or grading permit for the project.

¹ Water Use Classification of Landscape Species (WUCOLS) report which is available at http://www.water.ca.gov?wateruseefficiency/publications/ A Guide to Estimating, Part 2.

The Community Development Director or his/her designee shall review each LPA for compliance with the provisions of this Chapter and may withhold issuance of a building permit or grading permit for which its corresponding LPA does not comply with this Chapter.

<u>17.80.050</u> <u>Water Efficient Landscape Standards.</u> The proposed landscape design shall incorporate the most recent acceptable best management practices as determined by the City of Clayton for water-efficient landscape design and shall comply with the following standards:

A. Plant Design:

- 1. Plants selected shall be well suited to the area's climate and the site's soil conditions.
- 2. For residential areas, install climate adapted plants with an average WUCOLS plant factor of 0.3 for 75% of the plant area excluding edibles.
- 3. For non-residential areas, install climate adapted plants with an average WUCOLS plant factor of 0.3 for 100% of the plant area excluding edibles.
- 4. The proposed landscape shall be designed so that distinct hydrozones are irrigated separately by one or more irrigation valves. A hydrozone is an area with similar sun exposure, irrigation precipitation rate, soil conditions, slope, and plant material with similar water needs. Refer to the WUCOLS report for plant water needs.
- 5. Plants shall be spaced appropriately based on their expected mature spread.
- 6. If the geometry of the planting area does not conform to the spray pattern of the sprinkler, resulting in overspray onto the adjacent pavement, then overhead irrigation shall not be used.
- 7. Plants shall be spaced so that at mature size they do not block sprinklers.
- 8. Turf shall not be planted on slopes steeper than 15%.
- 9. Turf shall not exceed 25% of the landscape area for residential areas and there shall be no turf in non-residential areas.
- 10. Turf shall not be planted in any medians or in areas narrower than 10'0".
- 11. High water use plants with a WUCOLS plant factor of 0.7 to 1.0 are prohibited in street medians.

B. Irrigation System:

The irrigation system design shall comply with the following requirements:

- 1. Smart irrigation controller(s) utilizing all the features listed below shall be required on all irrigation systems:
 - a. Daily evapotranspiration data or daily soil moisture sensor utilizing a rain sensor.
 - b. Ability to maintain all data in the event of a power shortage.
- 2. Specify a dedicated landscape water meter for residential landscapes with an irrigated area greater than 5,000 square feet, and a dedicated water meter for non-residential landscapes with an irrigated area greater than 1,000 square feet, or per retail water supplier regulations.
- 3. Pressure regulators shall be install on the irrigation system to assure dynamic pressure is within the manufacturers recommended range.
- 4. Manual shut-off valve shall be installed as close as possible to water supply connection.
- 5. Manual shut off valves shall be installed before each control valve manifold for residential irrigation systems.
- 6. Manual shut-off valves shall be installed before each control valve manifold or individual control valve on non-residential irrigation systems.
- 7. 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.
- 8. Flow sensors that detect high flow conditions created by system damage or malfunction are required for all non-residential landscapes and residential landscapes of 5,000 sq. ft. or larger.
- 9. Recycled water shall be used for landscape irrigation if it is available at the project site.
- 10. 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.
- 11. All graywater systems shall conform to the California Plumbing Code (Title 24, Part 5, Chapter 16) and any applicable local ordinance standards.
- 12. Specify technology and practices to prevent runoff, low head drainage, overspray, or other water waste.
- 13. Overhead irrigation shall not be permitted within 12" of any non-permeable surface.

- 14. Specify sprinkler heads and other emission devices that have matched precipitation rates within each irrigation zone. No irrigation zone shall specify a precipitation rate greater than 1.2 inches per hour. On slopes steeper than 25%, the specified precipitation rate shall not exceed 0.75 inches per hour.
- 15. Specify irrigation controls so the dynamic water pressure at sprinkler head or other emission device is within manufacturer's recommended optimal operating range.
- 16. No overhead irrigation shall be specified in planting areas less than 10'0" wide in any dimension, unless demonstrated that water waste will not occur.
- 17. Specify a manual shut-off valve for each point of connection and specify that each shut-off valve be identified on the controller map.
- 18. Prepare a controller map and programming table and specify that this be stored in the controller cabinet. The controller map shall visually differentiate each controller zone. For each irrigation valve, the controller programming table shall list the plant water requirement (high, medium, low, or very low), the sun exposure, irrigation emission device type, precipitation rate, station flow rate, optimal pressure, soil type, infiltration rate, square foot area, and degree of slope.
- 19. Each irrigation valve shall control irrigation to only one distinct hydrozone. A hydrozone is an area with similar sun exposure, irrigation precipitation rate, soil conditions, slope, and plant material with similar water needs. Refer to the WUCOLS report for plant water needs.
- 20. Specify a separate irrigation valve and hydrozone for the top of a slope and the bottom of a slope.

C. Water Features:

- 1. All water features shall have re-circulating water systems.
- 2. Fountain(s) shall be designed so that no wind drift or overspray occurs.

D. Grading and Soil Preparation:

The landscape design shall:

- 1. Include a soils management report for large landscape projects and multiple landscape installations (for production home developments a soil sampling of 1 in 7 lots or approximately 15% will satisfy this requirement).
- 2. Comply with Storm Water Control Plan requirements (C.3), if applicable.

- 3. Be designed to improve or maintain the infiltration rate of landscape soils typical of their soil texture and minimize soil erosion.
- 4. Be designed to avoid drainage onto non-permeable hardscapes within the property lines and prevent runoff of all irrigation and natural rainfall outside property lines.
- 5. Soil amendments shall be incorporated according to recommendations of the soils report and what is appropriate for the plants selected.
- 6. For landscape installations that require rototilling, compost at a rate of a minimum of 4 cubic yards per 1,000 square feet of permeable area, to a depth of 6 inches into the soil.
- 7. Specify a minimum three inch layer of mulch shall be applied on all exposed soil surfaces of planting areas unless there is a horticultural reason not to use mulch in a portion of the planting area. Mulch, such as shredded bark, shall be specified in bio-retention areas and slopes, so that the material will stay in place during rain events.

<u>17.80.060</u> <u>Landscape Plan Requirements</u>. The Landscape plans shall demonstrate that all the water-efficient landscape standards have been met:

A. The planting plan shall:

- 1. Identify Special Landscape Areas. Special Landscape Areas include: landscape dedicated solely to edible plants, such as vegetable gardens or orchards, areas irrigated with recycled water, water features using recycled water, cemeteries, and areas dedicated to active play, such as parks, sports fields, and golf courses where turf provides a playing surface.
- 2. Identify plants by their common and botanical names.
- 3. Identify type and surface area of water features.

B. The irrigation plan shall:

- 1. Show the location and size of the landscape irrigation water meter.
- 2. Show the location, type and size of all components of the irrigation system, including, but not limited to, controllers, main and lateral lines, valves, sprinkler heads, moisture sensing devices, rain switches, quick couplers, pressure regulators, and backflow prevention devices.
- 3. Identify the static water pressure at the point of connection to the public water supply.
- 4. Identify the flow rate (gallons per minute), application rate (inches per hour), and design operating pressure (pressure per square inch) for each station.

- 5. Identify any applicable graywater discharge piping, system components, and areas of distribution.
- C. Landscape plans shall include details and specifications reflecting the most recent acceptable best management practices as determined by the City of Clayton for water-efficient landscape design.

<u>17.80.070</u> <u>Landscape Water Audit Requirements</u>. A landscape water audit shall be performed to ensure that the installed landscape meets the requirements of this Chapter.

- A. A landscape water audit shall be conducted within thirty (30) days of the start of the landscape maintenance period or, if no maintenance period, then, immediately, upon completion of the landscape installation. An EPA WaterSense certified Irrigation System Auditor shall conduct the landscape water audit and submit a Certificate of Compliance, Landscape Water Audit sheet.
- B. The Landscape Auditor shall inform the applicant of all non-compliance issues with the Ordinance. This shall include, but not be limited to, all items listed on the Certificate of Compliance, Landscape Water Audit sheet.
- C. All non-compliance issues shall be repaired and the site shall be re-audited for compliance with the criteria of this Chapter prior to final inspection/permit and final sign off.

17.80.080 <u>Certifications.</u> Water Efficiency Landscape Checklist/Certification sheets will be part of the Landscape Project Application (LPA) requirements.

- A. The person(s) creating the landscape design shall complete the Certificate of Compliance, Landscape Design sheet certifying the landscape has been designed to comply with the criteria of this Chapter.
- B. The Landscape Contractor/Installer shall complete the Certificate of Compliance, Landscape Installation sheet certifying the landscape has been installed, as specified in the Landscape Plans, and complies with the criteria of this Chapter.
- C. The Landscape Auditor shall complete the Landscape Certificate of Compliance, Water Audit sheet certifying the landscape and irrigation system have been installed, as specified in the Landscape Plans, and comply with the criteria of this Chapter.
- D. The Maintenance Contractor/Person shall complete the Certificate of Compliance, Landscape Maintenance sheet certifying the landscape maintenance contractor agrees to manage the property using less water than the Maximum Applied Water Allowance.
- E. While standards applications are not required for Municipality and Public Agency Projects involving "City" projects conducted by City staff or City hired consultants, certifications (i.e., Design, Installation, Maintenance, and Auditing) are needed and the City's Maintenance Supervisors may sign-off on them.

<u>17.80.090</u> <u>Landscape and Irrigation Maintenance Schedule.</u> The landscape designer or installer shall develop a landscape maintenance specification and schedule for the landscape project that is consistent with the most recent acceptable best management practices as determined by the City of Clayton for landscape maintenance. Schedules shall be submitted with the Certification of Completion.

- A. An annual landscape maintenance schedule shall include at least the following: routine inspection; adjustment and repair of the irrigation system and its components; aerating turf areas; replenishing mulch; seasonal pruning; weeding in all landscape areas; and removing obstructions to emission devices;
- B. Repair of all irrigation equipment shall be done with the originally installed components or their equivalents;
- C. Project shall be irrigated so that total annual water applied is less than or equal to the Maximum Applied Water Allowance (MAWA) (if applicable).

17.80.100 Stormwater Management. All applicable projects shall comply with the requirements of the National Pollutant Discharge Elimination System intended to implement storm water best management practices into the planting, irrigation, and grading plans to minimize runoff and to increase on-site retention and infiltration.

<u>17.80.110</u> <u>Provisions for Existing Landscapes.</u> This section applies to existing landscapes that were installed before January 1, 2017.

A. Irrigation Survey and Irrigation Water Use Analysis

To ensure the efficient use of landscape water, each owner of property in the City of Clayton is encouraged to utilize resources and services, such as irrigation surveys and irrigation water use analyses that are offered by the local retail or wholesale water utility.

B. Water Waste Prevention

Each owner of property in the City of Clayton shall prevent water waste resulting from inefficient landscape irrigation by prohibiting runoff from the target landscape areas due to excessive irrigation or inappropriate run times related to time of day, seasonal and/or variable weather conditions, low head drainage, overspray, or other similar conditions where water flows onto an adjacent property, walks, roadways, parking lots, or structures.

17.80.120 Public Education.

A. All new model homes that are landscaped shall use signs, brochures and other written information to demonstrate the principles of water-efficient landscapes that are described in this Chapter. 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.
- B. The architectural guidelines of a common interest development, which include homeowner associations, community apartment projects, condominiums, planned developments, and stock cooperatives, shall not prohibit activities or conditions that have the effect of allowing the use of low water use plants as a group.
- C. For new homes/commercial developments, applicant/owner is required to provide the irrigation controller map and programming table and annual maintenance schedules to new tenants or owners at transfer of ownership/maintenance responsibility.
- D. The City of Clayton shall provide on its website links to resources that offer information about the principals of designing, installing, and maintaining waterefficient landscapes. An example of a link is to the local water utility, the Contra Costa Water District, and the landscape water conservation information that Agency offers.

17.80.130 Reporting

A. The City of Clayton shall submit annual reports to the Department of Water Resources using the Water Efficient Landscape Ordinance Reporting Form, which can be accessed through the Department of Water Resources website, All reports are due by January 31st of each year.

ATTACHMENT B

Executive Department State of California

EXECUTIVE ORDER B-29-15

WHEREAS on January 17, 2014, I proclaimed a State of Emergency to exist throughout the State of California due to severe drought conditions; and

WHEREAS on April 25, 2014, I proclaimed a Continued State of Emergency to exist throughout the State of California due to the ongoing drought; and

WHEREAS California's water supplies continue to be severely depleted despite a limited amount of rain and snowfall this winter, with record low snowpack in the Sierra Nevada mountains, decreased water levels in most of California's reservoirs, reduced flows in the state's rivers and shrinking supplies in underground water basins; and

WHEREAS the severe drought conditions continue to present urgent challenges including: drinking water shortages in communities across the state, diminished water for agricultural production, degraded habitat for many fish and wildlife species, increased wildfire risk, and the threat of saltwater contamination to fresh water supplies in the Sacramento-San Joaquin Bay Delta; and

WHEREAS a distinct possibility exists that the current drought will stretch into a fifth straight year in 2016 and beyond; and

WHEREAS new expedited actions are needed to reduce the harmful impacts from water shortages and other impacts of the drought; and

WHEREAS the magnitude of the severe drought conditions continues to present threats beyond the control of the services, personnel, equipment, and facilities of any single local government and require the combined forces of a mutual aid region or regions to combat; and

WHEREAS under the provisions of section 8558(b) of the Government Code, I find that conditions of extreme peril to the safety of persons and property continue to exist in California due to water shortage and drought conditions with which local authority is unable to cope; and

WHEREAS under the provisions of section 8571 of the California Government Code, I find that strict compliance with various statutes and regulations specified in this order would prevent, hinder, or delay the mitigation of the effects of the drought.

NOW, THEREFORE, I, EDMUND G. BROWN JR., Governor of the State of California, in accordance with the authority vested in me by the Constitution and statutes of the State of California, in particular Government Code sections 8567 and 8571 of the California Government Code, do hereby issue this Executive Order, effective immediately.



IT IS HEREBY ORDERED THAT:

 The orders and provisions contained in my January 17, 2014 Proclamation, my April 25, 2014 Proclamation, and Executive Orders B-26-14 and B-28-14 remain in full force and effect except as modified herein.

SAVE WATER

- 2. The State Water Resources Control Board (Water Board) shall impose restrictions to achieve a statewide 25% reduction in potable urban water usage through February 28, 2016. These restrictions will require water suppliers to California's cities and towns to reduce usage as compared to the amount used in 2013. These restrictions should consider the relative per capita water usage of each water suppliers' service area, and require that those areas with high per capita use achieve proportionally greater reductions than those with low use. The California Public Utilities Commission is requested to take similar action with respect to investor-owned utilities providing water services.
- 3. The Department of Water Resources (the Department) shall lead a statewide initiative, in partnership with local agencies, to collectively replace 50 million square feet of lawns and ornamental turf with drought tolerant landscapes. The Department shall provide funding to allow for lawn replacement programs in underserved communities, which will complement local programs already underway across the state.
- The California Energy Commission, jointly with the Department and the Water Board, shall implement a time-limited statewide appliance rebate program to provide monetary incentives for the replacement of inefficient household devices.
- 5. The Water Board shall impose restrictions to require that commercial, industrial, and institutional properties, such as campuses, golf courses, and cemeteries, immediately implement water efficiency measures to reduce potable water usage in an amount consistent with the reduction targets mandated by Directive 2 of this Executive Order.
- The Water Board shall prohibit irrigation with potable water of ornamental turf on public street medians.
- The Water Board shall prohibit irrigation with potable water outside of newly constructed homes and buildings that is not delivered by drip or microspray systems.

8. The Water Board shall direct urban water suppliers to develop rate structures and other pricing mechanisms, including but not limited to surcharges, fees, and penalties, to maximize water conservation consistent with statewide water restrictions. The Water Board is directed to adopt emergency regulations, as it deems necessary, pursuant to Water Code section 1058.5 to implement this directive. The Water Board is further directed to work with state agencies and water suppliers to identify mechanisms that would encourage and facilitate the adoption of rate structures and other pricing mechanisms that promote water conservation. The California Public Utilities Commission is requested to take similar action with respect to investor-owned utilities providing water services.

INCREASE ENFORCEMENT AGAINST WATER WASTE

- The Water Board shall require urban water suppliers to provide monthly information on water usage, conservation, and enforcement on a permanent basis.
- 10. The Water Board shall require frequent reporting of water diversion and use by water right holders, conduct inspections to determine whether illegal diversions or wasteful and unreasonable use of water are occurring, and bring enforcement actions against illegal diverters and those engaging in the wasteful and unreasonable use of water. Pursuant to Government Code sections 8570 and 8627, the Water Board is granted authority to inspect property or diversion facilities to ascertain compliance with water rights laws and regulations where there is cause to believe such laws and regulations have been violated. When access is not granted by a property owner, the Water Board may obtain an inspection warrant pursuant to the procedures set forth in Title 13 (commencing with section 1822.50) of Part 3 of the Code of Civil Procedure for the purposes of conducting an inspection pursuant to this directive.
- 11. The Department shall update the State Model Water Efficient Landscape Ordinance through expedited regulation. This updated Ordinance shall increase water efficiency standards for new and existing landscapes through more efficient irrigation systems, greywater usage, onsite storm water capture, and by limiting the portion of landscapes that can be covered in turf. It will also require reporting on the implementation and enforcement of local ordinances, with required reports due by December 31, 2015. The Department shall provide information on local compliance to the Water Board, which shall consider adopting regulations or taking appropriate enforcement actions to promote compliance. The Department shall provide technical assistance and give priority in grant funding to public agencies for actions necessary to comply with local ordinances.
- 12. Agricultural water suppliers that supply water to more than 25,000 acres shall include in their required 2015 Agricultural Water Management Plans a detailed drought management plan that describes the actions and measures the supplier will take to manage water demand during drought. The Department shall require those plans to include quantification of water supplies and demands for 2013, 2014, and 2015 to the extent data is available. The Department will provide technical assistance to water suppliers in preparing the plans.

- 13. Agricultural water suppliers that supply water to 10,000 to 25,000 acres of irrigated lands shall develop Agricultural Water Management Plans and submit the plans to the Department by July 1, 2016. These plans shall include a detailed drought management plan and quantification of water supplies and demands in 2013, 2014, and 2015, to the extent that data is available. The Department shall give priority in grant funding to agricultural water suppliers that supply water to 10,000 to 25,000 acres of land for development and implementation of Agricultural Water Management Plans.
- 14. The Department shall report to Water Board on the status of the Agricultural Water Management Plan submittals within one month of receipt of those reports.
- 15. Local water agencies in high and medium priority groundwater basins shall immediately implement all requirements of the California Statewide Groundwater Elevation Monitoring Program pursuant to Water Code section 10933. The Department shall refer noncompliant local water agencies within high and medium priority groundwater basins to the Water Board by December 31, 2015, which shall consider adopting regulations or taking appropriate enforcement to promote compliance.
- 16. The California Energy Commission shall adopt emergency regulations establishing standards that improve the efficiency of water appliances, including toilets, urinals, and faucets available for sale and installation in new and existing buildings.

INVEST IN NEW TECHNOLOGIES

17. The California Energy Commission, jointly with the Department and the Water Board, shall implement a Water Energy Technology (WET) program to deploy innovative water management technologies for businesses, residents, industries, and agriculture. This program will achieve water and energy savings and greenhouse gas reductions by accelerating use of cutting-edge technologies such as renewable energy-powered desalination, integrated onsite reuse systems, water-use monitoring software, irrigation system timing and precision technology, and on-farm precision technology.

STREAMLINE GOVERNMENT RESPONSE

- 18. The Office of Emergency Services and the Department of Housing and Community Development shall work jointly with counties to provide temporary assistance for persons moving from housing units due to a lack of potable water who are served by a private well or water utility with less than 15 connections, and where all reasonable attempts to find a potable water source have been exhausted.
- 19. State permitting agencies shall prioritize review and approval of water infrastructure projects and programs that increase local water supplies, including water recycling facilities, reservoir improvement projects, surface water treatment plants, desalination plants, stormwater capture, and greywater systems. Agencies shall report to the Governor's Office on applications that have been pending for longer than 90 days.



- 20. The Department shall take actions required to plan and, if necessary, implement Emergency Drought Salinity Barriers in coordination and consultation with the Water Board and the Department of Fish and Wildlife at locations within the Sacramento San Joaquin delta estuary. These barriers will be designed to conserve water for use later in the year to meet state and federal Endangered Species Act requirements, preserve to the extent possible water quality in the Delta, and retain water supply for essential human health and safety uses in 2015 and in the future.
- 21. The Water Board and the Department of Fish and Wildlife shall immediately consider any necessary regulatory approvals for the purpose of installation of the Emergency Drought Salinity Barriers.
- 22. The Department shall immediately consider voluntary crop idling water transfer and water exchange proposals of one year or less in duration that are initiated by local public agencies and approved in 2015 by the Department subject to the criteria set forth in Water Code section 1810.
- 23. The Water Board will prioritize new and amended safe drinking water permits that enhance water supply and reliability for community water systems facing water shortages or that expand service connections to include existing residences facing water shortages. As the Department of Public Health's drinking water program was transferred to the Water Board, any reference to the Department of Public Health in any prior Proclamation or Executive Order listed in Paragraph 1 is deemed to refer to the Water Board.
- 24. The California Department of Forestry and Fire Protection shall launch a public information campaign to educate the public on actions they can take to help to prevent wildfires including the proper treatment of dead and dying trees. Pursuant to Government Code section 8645, \$1.2 million from the State Responsibility Area Fire Prevention Fund (Fund 3063) shall be allocated to the California Department of Forestry and Fire Protection to carry out this directive.
- 25. The Energy Commission shall expedite the processing of all applications or petitions for amendments to power plant certifications issued by the Energy Commission for the purpose of securing alternate water supply necessary for continued power plant operation. Title 20, section 1769 of the California Code of Regulations is hereby waived for any such petition, and the Energy Commission is authorized to create and implement an alternative process to consider such petitions. This process may delegate amendment approval authority, as appropriate, to the Energy Commission Executive Director. The Energy Commission shall give timely notice to all relevant local, regional, and state agencies of any petition subject to this directive, and shall post on its website any such petition.

- 26. For purposes of carrying out directives 2–9, 11, 16–17, 20–23, and 25, Division 13 (commencing with section 21000) of the Public Resources Code and regulations adopted pursuant to that Division are hereby suspended. This suspension applies to any actions taken by state agencies, and for actions taken by local agencies where the state agency with primary responsibility for implementing the directive concurs that local action is required, as well as for any necessary permits or approvals required to complete these actions. This suspension, and those specified in paragraph 9 of the January 17, 2014 Proclamation, paragraph 19 of the April 25, 2014 proclamation, and paragraph 4 of Executive Order B-26-14, shall remain in effect until May 31, 2016. Drought relief actions taken pursuant to these paragraphs that are started prior to May 31, 2016, but not completed, shall not be subject to Division 13 (commencing with section 21000) of the Public Resources Code for the time required to complete them.
- 27. For purposes of carrying out directives 20 and 21, section 13247 and Chapter 3 of Part 3 (commencing with section 85225) of the Water Code are suspended.
- 28. For actions called for in this proclamation in directive 20, the Department shall exercise any authority vested in the Central Valley Flood Protection Board, as codified in Water Code section 8521, et seq., that is necessary to enable these urgent actions to be taken more quickly than otherwise possible. The Director of the Department of Water Resources is specifically authorized, on behalf of the State of California, to request that the Secretary of the Army, on the recommendation of the Chief of Engineers of the Army Corps of Engineers, grant any permission required pursuant to section 14 of the Rivers and Harbors Act of 1899 and codified in section 48 of title 33 of the United States Code.
- 29. The Department is directed to enter into agreements with landowners for the purposes of planning and installation of the Emergency Drought Barriers in 2015 to the extent necessary to accommodate access to barrier locations, land-side and water-side construction, and materials staging in proximity to barrier locations. Where the Department is unable to reach an agreement with landowners, the Department may exercise the full authority of Government Code section 8572.
- 30. For purposes of this Executive Order, chapter 3.5 (commencing with section 11340) of part 1 of division 3 of the Government Code and chapter 5 (commencing with section 25400) of division 15 of the Public Resources Code are suspended for the development and adoption of regulations or guidelines needed to carry out the provisions in this Order. Any entity issuing regulations or guidelines pursuant to this directive shall conduct a public meeting on the regulations and guidelines prior to adopting them.

31. In order to ensure that equipment and services necessary for drought response can be procured quickly, the provisions of the Government Code and the Public Contract Code applicable to state contracts, including, but not limited to, advertising and competitive bidding requirements, are hereby suspended for directives 17, 20, and 24. Approval by the Department of Finance is required prior to the execution of any contract entered into pursuant to these directives.

This Executive Order is not intended to, and does not, create any rights or benefits, substantive or procedural, enforceable at law or in equity, against the State of California, its agencies, departments, entities, officers, employees, or any other person.

I FURTHER DIRECT that as soon as hereafter possible, this Order be filed in the Office of the Secretary of State and that widespread publicity and notice be given to this Order.

IN WITNESS WHEREOF I have hereunto set my hand and caused the Great Seal of the State of California to be affixed this 1st day of April 2015.

EDMUND G. BROWN JR. Governor of California

ATTEST:

ALEX PADILLA Secretary of State **Department of Water Resources**

entering into the loan contract. For investor-owned utilities, meetings or hearings held by the Public Utilities Commission may serve as Project Feasibility Meetings.

- (b) Before a Project Feasibility Meeting, the supplier shall:
- (1) Make available information describing the project in a form and location that will enable the water users to review it and to make appropriate comments. The information must be made available for a period of at least fifteen days before the Project Feasibility Meeting.
- (2) Establish a date for the meeting agreeable to the Department and Department of Health Services.
- (3) Notify the Department, the Department of Health Services and appropriate county health agencies in writing at least twenty calendar days before the meeting, and notify all water users and the local news media in writing at least fifteen calendar days before the meeting. The notice shall state: the date, time, location, and purpose of the meeting and the location of information describing the project for review by the water users. Sample notice forms will be provided by the Department.
- (4) Obtain a meeting place of sufficient size and at a convenient location to accommodate the anticipated attendance.
- (c) The agenda of the meeting shall include the following matters: (1) A discussion of applicable public health and water works standards, existing and potential health hazards associated with the water system, how the proposed project will bring the system to minimum health standards, and alternative solutions to the problem. (2) The supplier shall describe the proposed project in detail, using maps, charts, and other illustrative devices, if appropriate. The discussion shall include the costs, sources of funds, the amount of the loan—grant commitment, and changes in water costs resulting from the project.
- (3) A representative of the State may describe the Act, the State's role in its administration and the Department's recommendation regarding the supplier's loan application. Persons present at the meeting shall be permitted to ask questions regarding all subjects discussed at the meeting.
- (d) If no representative of the Department is present at the meeting, the supplier shall submit an official written report to the Department describing the meeting and its outcome including the results of any vote taken. Note: Authority cited: Section 13834, Water Code. Reference: Section 13834, Water Code.

§ 489.1. Plans and Specifications.

Before commencing construction, each Supplier shall provide detailed plans and specifications to the Department of Health Services for review and approval by a registered Civil Engineer employed by the Department of Health Services. Unless otherwise authorized in writing by the Department of Health Services, the supplier shall not commence construction without written notification from the Department of Health Services that the plans and specifications have been approved.

NOTE: Authority cited: Section 13834, Water Code. Reference: Section 13837, Water Code.

§ 489.2. Certification of Completion.

Department of Health Services shall inspect the completed project and if satisfied that the project has been completed in accordance with approved plans and specifications, shall provide the supplier and the Department with written certification to that effect.

NOTE: Authority cited: Section 13834, Water Code. Reference: Section 13834, Water Code.

Chapter 2.6. Weather Resources Management [Repealed]

NOTE: Authority cited: Sections 161, 401, 403 and 6078, Water Code. Reference: Sections 401, 402 and 403, Water Code and Sections 21000 et seq., Public Resources Code.

HISTORY

- 1. New Subchapter 2.6 (Articles 1–5, Sections 490–495.03, not consecutive) filed 9–28–79; effective thirtieth day thereafter (Register 79, No. 39).
- Repealer of Subchapter 2.6 (Articles 1-5, Sections 490-495.03, not consecutive, not previously repealed by OAL Order of Repeal) filed 6-5-86; effective

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-

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).
- 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;
- 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

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

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- (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 Wa-

- ter 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.
- (*II*) "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.
- (00) "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.
- (III) "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.

(000) "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 warmseason 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).
- Amendment of section and Note filed 9-10-2009; operative 9-10-2009 pursuant to Government Code section 11343.4 (Register 2009, No. 37).
- 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,

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).
- 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).
- 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

 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).
- 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).
- 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;
- 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
- 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:

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- (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

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

- lating 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.

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- (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).
- 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

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- (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

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

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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).
- 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

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

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

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).

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§ 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).
- 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).
- 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).
- 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) $[(0.55 \times LA) + (0.45 \times SLA)]$ for residential areas.
- MAWA= (ETo-EPPT) (0.62) [$(0.45 \times LA) + (0.55 \times SLA)$] 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).
- 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.

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Appendix A. Reference Evapotranspiration (ETo) Table

Appendix A - Refer					I)								Annua
County and City	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ЕТо
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				***				7.0	3.3	3.2		0.7	10.0
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	-		,	,,,,	0.7	7.23	0.5	7.5	3.3	3.1	7.0	1.0	30.0
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	1.4	0.7	41.8
Moraga	1.2	1.5	3.4	4.2	5.5	6.1	6.7		4.7				
Pittsburg	1.0	1.5	2.8	4.1	5.6	6.4	7.4	5.9 6.4	5.0	3.2	1.6	1.0	44.9 45.4
Walnut Creek	0.8	1.5	2.9	4.4	5.6	6.7	7.4	6.4			1.3	0.7	
DEL NORTE	0.8	1.5	2.9	4.4	3.0	0.7	7.4	0.4	4.7	3.3	1.5	1.0	46.2
	0.5	00	20	2.0	2.7	2.5	4.0	2.5	2.0	20	0.0	0.5	00.0
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		1.77	2.5	- 2 0			= 0	- ()					
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 - Refere	nce Ev	apoti	anspi	ration	(ET) Tab	le*						
County and City	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annua ETo
FRESNO				1	1.223	Jun	Jun	Aug	Зер	Oct	1407	Dec	EIU
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										1		1	50.0
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								†					1
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
Ноора	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							0.1	3.1	3.6	2.4	0.9	0.7	33.0
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	3.1	2.3	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	2.0	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	2.1	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		<u> </u>
Seeley	2.7	3.5	5.9	7.7	9.7	10.1	9.3	8.3	6.9	5.5	3.4	2.3	68.2
Westmoreland	2.4	3.3	5.3	6.9	8.7	9.6	9.6	8.7	6.9	5.0	3.4	2.2	75.4
Yuma	2.5	3.4	5.3	6.9	8.7	9.6	9.6	8.7	6.9	5.0	3.0		71.4
INYO	2.5	3.7		0.5	0.7	9.0	7.0	0.7	0.9	3.0	3.0	2.2	71.6
Bishop	1.7	2.7	4.8	6.7	8.2	10.9	7.4	9.6	7.4	10	2.5	1.6	(0.2
Death Valley Jct	2.2	3.3	5.4	7.7	9.8	11.1	11.4	10.1	8.3	4.8 5.4	2.5	1.6	68.3
Independence	1.7	2.7	3.4	6.6	8.5	9.5	9.8	8.5			2.9	1.7	79.1
Lower Haiwee Res.	1.8	2.7	4.4	7.1	8.5	9.5	9.8	8.5	7.1	3.9	2.0	1.5	65.2
Oasis	2.7	2.8	5.9	8.0	10.4	11.7	11.6	10.0		4.2	2.6	1.5	67.6
KERN	2.7	2.0	3.9	0.0	10.4	11./	11.0	10.0	8.4	6.2	3.4	2.1	83.1
Arvin	1.2	1.8	3.5	4.7	6.6	7.4	8.1	7.2		2.4			
Bakersfield	1.0	1.8	3.5	4.7	6.6	7.7	1	7.3	5.3	3.4	1.7	1.0	51.9
Bakersfield/Bonanza	1.0	2.2	3.7	5.7	7.4		8.5	7.3	5.3	3.5	1.6	0.9	52.4
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		8.2	8.7	7.8	5.7	4.0	2.1	1.2	57.9
Blackwells Corner	1.4	2.1	3.8	5.4	7.7	8.5	8.6	7.8	6.0	3.8	2.0	1.5	59.2
Buttonwillow	1.0	1.8	3.2		7.0	7.8	8.5	7.7	5.8	3.9	1.9	1.2	56.6
China Lake	2.1	3.2	5.3	4.7	6.6	7.7	8.5	7.3	5.4	3.4	1.5	0.9	52.0
Delano	0.9	1.8	3.4	7.7	9.2	10.0	11.0	9.8	7.3	4.9	2.7	1.7	74.8
Famoso	1.3	1.9	3.4	4.7	6.6	7.7	8.5	7.3	5.4	3.4	1.4	0.7	52.0
Grapevine	1.3	1.8		4.8	6.7	7.6	8.0	7.3	5.5	3.5	1.7	1.3	53.1
Inyokern	2.0	3.1	3.1	4.4	5.6	6.8	7.6	6.8	5.9	3.4	1.9	1.0	49.5
Isabella Dam	1.2		4.9	7.3	8.5	9.7	11.0	9.4	7.1	5.1	2.6	1.7	72.4
Lamont		1.4	2.8	4.4	5.8	7.3	7.9	7.0	5.0	3.2	1.7	0.9	48.4
Lost Hills	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
McFarland/Kern	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
Shafter	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
Taft	1.0			5.0	6.6	7.7	8.3	7.3	5.4	3.4	1.5	0.9	52.1
Tehachapi	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
KINGS	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
	1	25	10		-								
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 - Refer	ence Ev	apotr	anspi	ration	(ETo) Tab	ole*						
County and City	Jan	Feb	Mar	Apr	May	Jun		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							1	1			1		1
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							1	1			1.0	0.5	13.1
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			-		+		J.7	3.4	3.9	3.4	2.4	2.2	44.2
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		
Raymond	1.2	1.5	3.0	4.6	6.1	7.6	8.4	7.3	5.2	3.4		0.7	51.5
MARIN	1	<u> </u>		1.0	0.1	7.0	0.4	7.5	3.2	3.4	1.4	0.7	50.5
Black Point	1.1	1.7	3.0	4.2	5.2	6.2	6.6	5.8	12	20	12	-	42.0
Novato	1.3		2.4	3.5	4.4	6.0	5.9	5.4	4.3	2.8	1.3	0.9	43.0
Point San Pedro	1.1	1.7	3.0	4.2	5.2	6.2	6.6	5.8	4.4	2.8	1.4	0.7	39.8
San Rafael	1.2	1.3	2.4	3.3	4.0	4.8			4.3	2.8	1.3	0.9	43.0
MARIPOSA	+	1.5		5.5	7.0	7.0	4.8	4.9	4.3	2.7	1.3	0.7	35.8
Coulterville	1.1	1.5	2.8	4.4	5.9	72	0 1	7.0	-	2.1			10.5
Mariposa	1.1		2.8	4.4	5.9	7.3	8.1	7.0	5.3	3.4	1.4	0.7	48.8
Yosemite Village	0.7		2.3	3.7	5.1	7.4	8.2	7.1	5.0	3.4	1.4	0.7	49.0
MENDOCINO	10.7	1.0	ا د.۵	3.1	ا.ر	0.3	7.1	6.1	4.4	2.9	1.1	0.6	41.4
Fort Bragg	0.9	1.3	2.2	3.0	3.7	2.5	27	27	20		12	0-	20.0
Hopland			2.6		5.0	3.5	3.7	3.7	3.0	2.3	1.2	0.7	29.0
	1.1	1.3	2.0	3.4	3.0	5.9	6.5	5.7	4.5	2.8	1.3	0.7	40.9

Appendix A - Refer				T	Ι			T		1	I	T	Annua
County and City	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annua 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	1.4	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		1.9		
Pajaro	1.8	2.2	3.7	4.8	5.3	5.7				2.8		1.5	36.0
Salinas	1.6	1.9	2.7	3.8	4.8	4.7	5.6	5.3	4.3	3.4	2.4	1.8	46.1
Salinas North	1.0	1.5	2.7				5.0	4.5	4.0	2.9	1.9	1.3	39.1
San Ardo				4.1	4.6	5.2	4.5	4.3	3.2	2.8	1.5	1.2	36.9
San Juan	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
Soledad	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
	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	ce Ev	apotr	anspi	ration	(ETo) Tab	le*						
					<u> </u>								Annual
County and City PLUMAS	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ЕТо
Portola	0.7	0.9	1.0	2.5	4.0	5.0	7.0	5.0	4.2	0.7	0.0	0.5	20.4
Quincy	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
RIVERSIDE	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
Beaumont	2.0	2.2	2.4	4.4	6.1		7.6		(0)		2 (
	1	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 Coachella	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
	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 Indio	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
	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

County and City	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annua ETo
SAN DIEGO	Jun	100	17161	Арі	IVALLY	Juli	Jui	Aug	Зер	Oct	1107	Dec	EIU
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	1.0			1	J.,	7.0	0.5	/./	0.5	7.0	2.5	1.2	30.0
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	1.5	1.5	25.7	7.0	3.7	4.0	7.7	7.0	7.1	2.0	1.5	0.7	33.1
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	4.7	6.3	6.9	7.3	6.4	4.5	3.0	1.4	0.7	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	0.8	51.2
													
Stockton Tracy	0.8	1.5	2.9	4.7	6.2	7.4	8.1 7.9	6.8	5.3	3.2	1.4	0.6	49.1
SAN LUIS OBISPO	1.0	1.3	2.7	4.3	0.1	1.3	1.9	0./	3.3	3.2	1.5	0.7	48.5
	20	2.2	2.0	2.0	4.0	4.00	4.6	4.0	A 6	20.0		4 80	45.0
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 - Refere	nce Ev	apoti	ansni	ration	(ETo) Tah	le*						
										T		T	Annual
County and City SANTA CLARA	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ЕТо
San Jose	1.5	1.8	3.1	4.1	5.5	5.0	-	 		l			
SANTA CRUZ	1.3	1.8	3.1	4.1	5.5	5.8	6.5	5.9	5.2	3.3	1.8	1.0	45.3
De Laveaga	1.4	1.0	122	4.7	1.0	-	-	1.					
Green Valley Rd	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
Santa Cruz		1.8	3.2	4.5	4.6	5.4	5.2	5.0	3.7	3.1	1.6	1.3	40.6
Watsonville	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
Webb	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
SHASTA	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
		1.0	-	ļ <u></u>					ļ				
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 - Refe					T			T	T				Annual
County and City	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ЕТо
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				<u> </u>									
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
ТЕНАМА													
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												0.0	
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							ļ ,,,	0.7	J.1	3.25	1.7	0.,	77.0
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		2.0	3.2	3.0	7.0	7.7	5.5	7.7	7.1	3.4	2.5	2.0	43.3
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	7.0	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	4.0	2.0	1.0	55.8
Winters	1.7	1.7	2.9	4.4	5.8	7.1	7.9	6.7	5.8	3.3	1.6	1.2	49.4
Woodland	1.0	1.8	3.2	4.7	6.1	7.1	8.2	7.2	5.4	3.7	1.6	1.0	51.6
Zamora	1.1	1.9	3.5	5.2	6.4	7.4	7.8	7.0					
YUBA	1.1	1.7	ر د د	٦.۷	0.4	1.4	7.0	7.0	5.5	4.0	1.9	1.2	52.8
Browns Valley	1.0	1.7	2 1	12	6.1	7.5	0 5	76	57	41	20	1.1	50.0
Brownsville			3.1	4.7	6.1	7.5	8.5	7.6	5.7	4.1	2.0	1.1	52.9
DIOMUSAITIE	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;
- 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).

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	Evapotrans	piration ((ETo)

Hydrozone # /Planting Description ²	Plant Factor (PF)	Irrigation Method ^b	Irrigation Efficiency (IE) ^c	ETAF (PF/IE)	Landscape Area (sq, ft,)	ETAF x Area	Estimated Tota Water Use (ETWU) [®]
Regular Landsca	pe Areas			1		<u> </u>	
				Totals	(A)	(B)	
Special Landsca	pe Areas		l	1			
				1			
				1			
				1			·
				Totals	(C)	(D)	
					1	ETWU Total	
			Maxi	mum Allowed	Water Allowar	ice (MAWA) ^e	

*Hydrozone #/Planting Description

E.g

- 1.) front lawn
- 2.) low water use plantings
- 3.) medium water use planting

^bIrrigation Method overhead spray or drip

^cIrrigation Efficiency 0.75 for spray head 0.81 for drip dETWU (Annual Gallons Required) =
Eto x 0.62 x ETAF x Area
where 0.62 is a conversion
factor that converts acreinches per acre per year to
gallons per square foot per

year.

*MAWA (Annual Gallons Allowed) = (Eto) (0.62) [(ETAF x LA) + ((1-ETAF) x SLA)]

where 0.62 is a conversion factor that converts acreinches 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 nonresidential 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

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

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.

Date				
Project Name				
Name of Project Applicant		Telephone No.		
		Fax No.	Management and a second	
Title		Email Address		
Company		Street Address		
City		State	Zip Code	
Broject Ad	droce and Locations	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
Project Address and Location: Street Address		Parcel, tract or lot number, if available.		
City		Latitude/Longitude (optional)		
State	Zip Code			
Title Company		Fax No. Email Address Street Address		
			LT. O. d.	
City	· · · · · · · · · · · · · · · · · · ·	State	Zip Code	
and the Certif	hat I/we have received cop ficate of Completion and ti	pies of all the documents wi hat it is our responsibility to igation Maintenance Sched	thin the Landscape Documentation Pac see that the project is maintained in ule."	
Property Owner Signature			Date	
 Date the Date the Date that 	Landscape Documentation	n Package was submitted to n Package was approved b ent Landscape Worksheet (

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		

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

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

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

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 MWE-LO".
- (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).

Chapter 2.7.1. Flood Protection Corridor Program of the Costa–Machado Water Act of 2000

§ 497.1. Scope.

- (a) These regulations implement Sections 79035 through 79044, and 79044.9 in Article 2.5 of Chapter 5 of Division 26 of the Water Code, which Division is the Costa—Machado Water Act of 2000. They establish a process for funding acquisition of property rights and related activities for flood protection corridor projects undertaken by the Department of Water Resources directly or through grants to local public agencies or nonprofit organizations.
- (b) The Flood Protection Corridor Program is statewide in scope. Within the geographic scope of the CALFED Bay-Delta Program, funds in the subaccount for this program shall be used for projects that, to the greatest extent possible, are consistent with the CALFED long-term plan identified in the Programmatic Record of Decision of August 28, 2000. NOTE: Authority cited: Sections 8300, 12580 and 79044.9, Water Code; 2000 Cal. Stat. Ch. 52, Item No. 3860-101-6005; 2001 Cal. Stat. Ch. 106, Item No. 3860-101-6001, Provision 3; and 2002 Cal. Stat. Ch. 379, Item No. 3860-101-6005. Reference: Sections 79037, 79043, 79044 and 79044.9, Water Code

HISTORY

1. New chapter 2.7.1 (sections 497.1–497.12) and section filed 8–19–2003; operative 8–19–2003 pursuant to Government Code section 11343.4 (Register 2003, No. 34).

§ 497.2. Definitions.

The words used in this chapter have meanings set forth as follows:

- (a) "A List" means the preferred priority list of projects described in Section 497.6.
- (b) "Applicant" means an entity that is acting as the principal party making an application for funding under the provisions of the Costa-Machado Water Act of 2000.
- (c) "B List" means the reserve priority list of projects described in Section 497.6.
- (d) "CEQA" means the California Environmental Quality Act, Public Resources Code Sections 21000 et seq.
- (e) "Department" means the California Department of Water Resources.
- (f) "Director" means the Director of the Department of Water Resources.
- (g) "FEMA" means the Federal Emergency Management Agency.
- (h) "Fully funded" with respect to a grant project means funded to the full amount of the requested funds or to the funding limit, whichever is less.
- (i) "Grant application form" means the Department's form entitled "Flood Protection Corridor Program Project Evaluation Criteria and Competitive Grant Application Form" dated April 9, 2003 and incorporated herein by this reference.
- (j) "Local public agency" means any political subdivision of the State of California, including but not limited to any county, city, city and county, district, joint powers agency, or council of governments.

- (k) "Milestone" means a time when a significant portion of a project is completed, as defined in the contract as a time for disbursement of grant funds.
- (I) "Nonprofit organization" means an organization that does not operate for profit and has no official governmental status, including but not limited to clubs, societies, neighborhood organizations, advisory councils, conservation organizations and privately run local community conservation corps.
- (m) "Program" means the Flood Protection Corridor Program established by Water Code Division 26, Chapter 5, Article 2.5.
- (n) "Property interest" means any right in real property, including easement, fee title, and any other kind of right acquired by legally binding means.
- (o) "Project" means all planning, engineering, acquisition of real property interests, construction and related activities undertaken to implement a discrete action undertaken under the program pursuant to Water Code Section 79037.
- (p) "Sponsor" means an applicant who has received grant funding through the application process described in these regulations.
- (q) "Subaccount" means the Flood Protection Corridor Subaccount created by Water Code Section 79035(a).

NOTE: Authority cited: Sections 8300, 12580 and 79044.9, Water Code. Reference: Sections 79035, 70937, 79038(a) and 79043, Water Code; and Sections 21000 et seq., Public Resources Code.

HISTORY

1. New section filed 8–19–2003; operative 8–19–2003 pursuant to Government Code section 11343.4 (Register 2003, No. 34).

§ 497.3. Program Management Process.

The Department selects, approves, funds, and monitors projects funded by grants under the program. The process of managing the program includes these steps:

- (a) The Department shall appoint and maintain a Project Evaluation Team composed of Department staff and other consulting governmental agencies. The Department may request consultation with any appropriate government agency, including but not limited to the Department of Conservation, the Department of Fish and Game, the Department of Food and Agriculture, the Office of Emergency Services, and the CALFED Bay—Delta Program.
- (b) Local public agencies or nonprofit organizations qualified under Section 497.4 may apply for program grants for projects at such times as

- the Department may designate. Applications for proposed projects shall be submitted in response to a solicitation issued by the Department. As long as uncommitted funds remain available to fund new projects, the Department shall solicit proposals at least once per calendar year. The time period for submitting applications shall be 90 days from the date notice is given by the Department that project proposals are being solicited. Notices shall be provided to cities, counties, flood control districts, reclamation districts, and other local government entities that manage flood plains and flood control projects. The Department will also provide notice to nonprofit organizations with interest in flood management issues, and shall send notice to all individuals and organizations that have requested notice of the opportunity to submit applications. Notices may be given by mail, electronic mail, website posting, or any other method that provides easy access and prompt availability. Projects shall meet the requirements of Section 497.5. Applications shall meet the requirements of Section 497.7.
- (c) The Project Evaluation Team shall review each application and evaluate the subject project within 60 days of the close of the specified submittal period, or within 60 days of receipt of requested additional information, whichever is later.
- (d) The Project Evaluation Team shall notify the Department to request the applicant to provide additional information within 30 days of the Department's request if:
- (1) The project appears potentially eligible but is missing information needed to evaluate the merits of the project, or
- (2) Additional information is needed to evaluate the merits of the project in comparison to others received.
- (e) If the requested additional information cannot be provided in 30 days, the applicant may refile its application with the additional information at the Department's next solicitation of proposals.
- (f) When a proposal that meets minimum qualifications is complete and all requested additional information has been supplied, the Project Evaluation Team shall complete the evaluation of the project including recommending its place on a priority list as described in Section 497.6.
- (g) After each solicitation of proposals, Department staff, using the evaluations and recommended priorities of the Project Evaluation Team, shall recommend projects, priority, and amounts per project to be funded and submit the recommendations to the Director for approval of the priority lists. Department staff may recommend:

[The next page is 38.15.]