# MEMORANDUM

TO: City Council
FROM: Assistant City Manager
DATE: February 4, 2016
SUBJECT: Comments on Agenda Items, Meeting of February 9, 2016

ITEM 3A. Council will be meeting in closed session on Real Property Negotiations related to properties located at 946, 952, 956, 962 Huntington Drive at 5pm.

ITEM 3B. Council will be meeting in closed session to discuss the position and performance of the City Attorney.

ITEM 4. Council will be holding a workshop on the 2015/16 Mid Year Budget at 6pm.

ITEM 9A. The new high school interns will be introduced at the City Council meeting.

Parks and Recreation Department - Athena Maiden
Facilities Maintenance - Javier Munoz
Public Safety - Yesenia Chavez
City Manager's Office - Jennifer Garcia
Duarte Teen Center - Lonsel Bennett
Duarte Teen Center - Christina Ortega
Teen Nutrition Council - Alfredo Alvarado, Felipe Valdez, Cynthia Sierra

ITEM 9B. The City Council will be recognizing the Duarte Junior Falcons Cheer Squad. Both the Mascot and Peewee divisions will be attending the meeting, including Mascot Coach Katie Hernandez Matiarena, Trainer Vanessa Gonzalez, Athletic Director Gabriela Orozco, Asst A.D. Vickie Martinez, Daniella Matiarena, Alyssa Tinoco, Hope Antonia Peoples, Elicia Macias, Danielle Lopez, Mya Harges, Malony Garza, Diana Duran, Peewee Coach Courtney Clark, Trainer Fatima Gonzalez, Athletic Director Wendy Lopez, Asst A.D. Claudia Duran, Crystal Ludwig, Alexis Hernandez, Faith Peoples, Gabriela Gonzalez, Hailey Battice-Bars, Marissa Duran, Mariah Walker, Mariah Garza, Leandra Shelton, Valerie Castaneda

ITEM 9C. Dr. Allan Mucerino will be giving a presentation on the DUSD Sustained Competitive Advantage Process that the District has recently begun.

ITEM 9D. (Consent Calendar) Five permit applications were received by the deadline of January 21, 2016. The five groups and locations are as follows:

Duarte Kiwanis Club – Ralph's Shopping Center
Duarte Community & Education Foundation – Fresh N Easy Center
Duarte High School Falcon Boosters – Adjacent to Carl's Jr
LULAC – WalMart Center
Duarte High School ASB – Mountain Vista Plaza

All applications were reviewed by staff and deemed complete based on the application standards.

ITEM 9E. (Consent Calendar) The Mid-Year Budget will be reviewed in detail during a workshop prior to the Council meeting. The Mid-Year reflects an improved situation, largely due to a repayment of $1.3 million on the City's outstanding loans to the former Redevelopment Agency. Since the adopted budget, total General Fund revenues are projected to increase by $1.58 million and

the General Fund expenses are projected to increase by $557,000. The net impact is a General Fund surplus of $335,500 instead of the deficit of $691,200 that was projected when the budget was adopted in June. Staff is recommending that the City Council receive and file the report, and approve the recommended budget amendments.

ITEM 15. Municipal Code Amendment 15-05 is being brought before the City Council to bring our current Landscape Chapter (DDC 19.40) into compliance with new State water efficient landscape regulations that became effective December 1, 2015, under Governor's Executive Order B-29-15. The major changes incorporated by this amendment are that the new requirements will apply to new projects that include landscape areas of 500 s.f. or more. The threshold was 2,500 s.f. prior to this amendment. The amendment also includes more efficient irrigation systems, like dedicated landscape water meters for residential landscape areas over 5,000 s.f. and non-residential areas over 1,000 s.f. All new irrigations systems will be required to have pressure regulators and master valves. Irrigation systems must be designed so as not to exceed a precipitation rate of 1 inch per hour. Flow sensors are required that detect and report high flow conditions due to broken pipes, etc. The minimum width of turf that can be irrigated with overhead irrigation (sprinklers) increased from eight (8) feet to ten (10) feet, in order to avoid overspray. There is a limited portion of the landscape that can be planted with high water use plants. There are incentives for graywater or captured rainwater usage. Friable soil such as compost is required in planted areas to maximize water retention and on-site stormwater capture. Local agencies developing a regional ordinance, such as Duarte, must report to the State Department of Water Resources on their adopted ordinance by March 1, 2016.

ITEM 15A. This item is the approval of a contract in the amount of $25,565 with Albert Grover & Associates to prepare an Intersection Capacity and Safety Analysis for Huntington Drive. Funding for this project was provided for in the 2015-16 General Fund Budget. The goal of the study is to develop a plan to address Huntington Drive peak hour congestion. The study will include: data collection via video surveillance and main intersections, data analysis, recommendations on actions and physical improvements. Examples of the types of improvements that may be warranted are: traffic signal upgrades, southbound and northbound left turn arrows, extension of left hand turn pockets, etc.

ITEM 15B. The City Council requested that staff give a presentation on the current Architectural Review Board (ARB) – Planning Commission process. You will recall that the ARB process was amended as part of the 2010 Duarte Development Code and is referred to as Site Plan and Design Review processes; the Architectural Review Board (ARB) is part of that process. Staff has prepared a detailed report that provides an overview of the process and the effectiveness of the design review requirements, and also an update on recent Planning Commission activity.

Respectfully submitted,

Kristen Petersen
Assistant City Manager

# MINUTES

## JOINT CITY COUNCIL/CITY COUNCIL AS SUCCESSOR AGENCY TO DISSOLVED REDEVELOPMENT AGENCY/HOUSING AUTHORITY/COMMUNITY FACILITIES FINANCING AUTHORITY OF THE CITY OF DUARTE
## REGULAR MEETING – JANUARY 26, 2016

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| CALL TO ORDER | The City Council/City Council as Successor Agency to Dissolved Redevelopment Agency/Housing Authority/Community Facilities Financing Authority of the City of Duarte met in a regular meeting in the Council Chambers, 1600 Huntington Drive, Duarte, California. Mayor Kang called the meeting to order at 7:05 p.m. |
| RECORDATION OF ATTENDANCE | The following were in attendance:<br>PRESENT: Fasana, Paras-Caracci (arrived at 7:40 p.m.), Reilly, Kang<br>ABSENT: Finlay<br>ADMINISTRATIVE STAFF PRESENT: City Manager George, City Attorney Melching |
| ADOPTION OF AGENDA | Fasana moved, Reilly seconded to adopt the Agenda, as amended to adjourn also in memory of Daniel Cardosa, Dave Lavin, and Richard Barger, and carried with Paras-Caracci not present and Finlay absent. |
| PLEDGE TO THE FLAG | Sheryl Lefmann led the Pledge of Allegiance to the Flag. |
| FITNESS/MENTAL WARM-UP | Fasana provided the warm-up. |
| MOMENT OF REFLECTION | A moment of reflection was observed. |
| SPECIAL ITEMS<br>Presentation – Lance Soll and Lunghard – Audited Statements | Kristen Petersen introduced Brian Gruber, CPA, Lance Soll and Lunghard, who presented an overview of the City of Duarte's 2014/15 Audited Financial Statements, including auditing procedures, new reporting requirements of GASB (Governmental Accounting Standards Board), and overall findings related to the City's 2014/15 Audited Financial Statements. |
| Public Safety Update | Brian Villalobos presented the monthly public safety update, and discussed El Niño preparations. |
| Redevelopment Dissolution | Jeff Melching provided an informational update about redevelopment dissolution. |
| ANNOUNCEMENTS | Sheryl Lefmann, Duarte Chamber, announced upcoming Chamber events in February and May.<br><br>Ryan Ricchio, Duarte Library, announced upcoming events, story times, and programs in January and February.<br><br>Karen Herrera presented community announcements about City events and activities in January, February, and March. |

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| ORAL COMMUNICATIONS | The following spoke on items not on the Agenda.<br>Sage Newman – Valley Light Industries.<br>Steve Hernandez – Glenn Frey, Lois Gaston, Pat De Rose.<br>Fire Chief Jim Enriquez – Fire Station 44, sandbags. |
| CONSENT CALENDAR | Fasana moved, Paras-Caracci seconded to approve the Consent Calendar as follows, and carried unanimously.<br>Approve Items A, B, C, E, G, K.<br>Receive and File Items H, I, J.<br>Remove Items D, F. |
| RESOLUTION NO. 16-04<br>CalRecycle | Item E – Council Bill 16-R-04 A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF DUARTE AUTHORIZING SUBMITTAL OF APPLICATION FOR PAYMENT PROGRAMS AND RELATED AUTHORIZATIONS TO THE DEPARTMENT OF RESOURCES RECYCLING AND RECOVERY (CALRECYCLE) |
| ORDINANCE NO. 861<br>DMC Chapter 6.19 – Cannabis<br>(Second Reading) | Council Bill 16-O-01 AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF DUARTE, CALIFORNIA, ADDING CHAPTER 6.19 TO THE DUARTE MUNICIPAL CODE TO PROHIBIT ALL CANNABIS RELATED USES, COMMERCIAL CANNABIS ACTIVITIES, AND THE DELIVERY AND THE CULTIVATION OF CANNABIS IN THE CITY (Second Reading) |
| ITEMS REMOVED<br>Item D – Edison License Agmt<br>Duarte Post Office Parking Lot | Fasana declared a conflict of interest, and left the building.<br>Karen Herrera presented a staff report about the item, and answered questions from Councilmembers about the agreement.<br>Paras-Caracci inquired about current services offered by Duarte Post Office.<br>Reilly inquired about the future of the Duarte Post Office.<br>Kang requested a report from the Post Office about its 5-year strategic plan, and inquired if there is a need for 21 parking spaces.<br>George stated the item can be brought back at a future meeting, with additional information to address Council's concerns. |
| ITEM D – CONTINUED | Paras-Caracci moved, Reilly seconded to continue Item D (Approval of and authorization for City Manager to execute a five-year License Agreement with Southern California Edison for the 21-space parking lot at the Duarte Post Office), and carried with Fasana not present for the item, and Finlay absent.<br>Fasana returned to the building, and resumed his chair. |
| Item F – Duarte Health Fair<br>Request for Co-Sponsorship | Reilly inquired if the Health Fair was only for seniors, or for the entire community. George stated it is for the entire community, and is open to everyone. |

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| ITEM F – APPROVED | Reilly moved, Paras-Caracci seconded to approve the request from the Duarte Health Fair Committee for City of Duarte co-sponsorship of the Duarte Health Fair on Saturday, March 12, 2016, and carried unanimously. |
| PUBLIC HEARING<br>Community Development Block Grant Funding – FY 2016-17<br>Change in proposed use | City Attorney Melching stated this is a Public Hearing to solicit input regarding a change in the proposed use of a portion of the City of Duarte's Community Development Block Grant funding for Fiscal Year 2016-17 (July 1, 2016 – June 30, 2017) allowing the City to use approximately $90,000 for a street improvement project along Bradbourne Avenue from Huntington Drive to Royal Oaks, which is a change from the previously approved location of Santo Domingo Avenue from Huntington Drive to Central Avenue.<br><br>Melching stated the notice was legally posted, and no correspondence was received.<br><br>Rafael Casillas, Public Works Manager, presented a staff report, stated a Public Hearing was conducted on December 8, 2015, CDBG funding was approved at that meeting, it has since been determined that an alternative plan for the Duarte Street Improvement Project will meet the guidelines, and provided information about the proposed revised location.<br><br>There was discussion.<br><br>Mayor Kang asked if anyone in the audience wished to speak on the item. There were none.<br><br>Reilly moved, Paras-Caracci seconded to close the Public Hearing, and carried with Finlay absent.<br><br>Fasana moved, Reilly seconded to reallocate $90,000 in FY 2016-17 (July 1, 2016 – June 30, 2017) CDBG program funding allowing the City to use approximately $90,000 for a street improvement project along Bradbourne Avenue from Huntington Drive to Royal Oaks, a change from the previously approved location of Santo Domingo Avenue from Huntington Drive to Central Avenue, and carried with Finlay absent. |
| BUSINESS ITEM (Continued)<br>Analysis of (ARB) and Planning Commission process | Fasana moved, Paras-Caracci seconded to continue this item to a future meeting when there will be a full Council present, and carried with Finlay absent. |
| ORAL COMMUNICATIONS | The following spoke on items not on the Agenda.<br>Lino Paras – Law enforcement, bank parking lot, reorganization. |
| ITEMS FROM CITY COUNCIL/ CITY MANAGER | GEORGE: Announced the Annual Breakfast Meeting with Supervisor Antonovich will begin at 8:00 a.m. tomorrow, rather than at 7:30 a.m. |

FASANA: Attended the Monrovia Station dedication, inquired about lighting on the bike trail at Vineyard (Hensley responded it will be up in the next few weeks), asked if we have an active evacuation plan for those living above Royal Oaks (Villalobos responded yes, and information will be provided to Council), stated he would like an update from the Mosquito Abatement District about the Zika virus, and stated Pat De Rose was a great community volunteer, and she will be missed.

REILLY: Stated she is looking forward to the March 5th opening of the Gold Line.

PARAS-CARACCI: Inquired about the tent at Ralphs and if it is beneficial to have events at the parking lot (Hensley stated it is a permitted Adidas event, and Smart and Final will be using the parking lot for a staging area to set up the store), stated she has received complaints that the trash cans at the Bank of America ATM by CVS are full and asked if we could contact the property owner to address that, stated she was able to speak for one minute at the Public Hearing regarding the Charter-Time Warner cable merger, she asked for consideration of Duarte's concerns about customer service and issues such as high-speed broadband access, and provided the City Manager a request she received for a proclamation for Safety Belt Safe USA.

KANG: Inquired about the status and re-opening of Maki Yaki and Janet's (George stated Janet's indicated it would be at least six months before re-opening), stated there are dead shrubs around the monument signs, asked if they can be taken out, and stated Burrtec truck #1360 needs to be cleaned and painted.

ADJOURNMENT

The meeting was adjourned at 8:31 p.m., in memory of Pat De Rose, Daniel Cardoza, Dave Lavin, Glenn Frey, and Richard Barger, to the Annual City Council and Supervisor Michael Antonovich Breakfast Meeting on January 27, 2016, 8:00 a.m. (Duarte Community Center Lounge), and to a Strategic Planning Workshop on Friday, January 29, 2016, 8:30 a.m. (City of Hope Visitors Center).

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Mayor Samuel Kang

ATTEST:

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City Clerk

# MINUTES

## JOINT CITY COUNCIL/SUCCESSOR AGENCY TO DISSOLVED REDEVELOPMENT AGENCY/HOUSING AUTHORITY/COMMUNITY FACILITIES FINANCING AUTHORITY OF THE CITY OF DUARTE
## ADJOURNED REGULAR MEETING – JANUARY 29, 2016

The City Council/Successor Agency/Housing Authority/Community Facilities Financing Authority of the City of Duarte met in an adjourned regular meeting at City of Hope Visitors Center, 1500 E. Duarte Road, Duarte, California, for the purpose of a strategic planning workshop.

CALL TO ORDER — The meeting was called to order at 8:30 a.m.

ATTENDANCE — The following were in attendance:

CITY COUNCIL
PRESENT: Fasana, Finlay, Paras-Caracci, Reilly, Kang
ABSENT: None

CITY STAFF: George, Hensley, Herrera, Monsalve, Petersen, Villalobos

CONSULTANT: Steve Behunin, MAP Vital Factors Solutions

ADOPTION OF AGENDA — The Agenda was adopted as presented.

ORAL COMMUNICATIONS — There were none.

WORKSHOP
Strategic Planning — During the course of the Strategic Planning Workshop, the Duarte City Council, City Manager, Deputy City Manager, and City Department Heads discussed visions, values, and future City projects, programs, and priorities.

ADJOURNMENT — The Strategic Planning Workshop was adjourned at 2:40 p.m.

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Mayor Samuel Kang

ATTEST:

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City Clerk

# Agenda Memo
# City Manager's Office

**To:** Mayor and Members of the Duarte City Council

**From:** Karen Herrera, Deputy City Manager

**Date:** 2/3/16

**Re:** **Fireworks Permit/License Application Award 2016**

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**Recommendation:** That the City Council, by motion, grant fireworks permit/licenses for 2016 to the following five community groups 1) Duarte Kiwanis Club 2) Duarte Community & Education Foundation 3) Duarte High School Falcon Boosters 4) LULAC and 5) Duarte High School ASB.

**Background:** On October 28, 2008, the Duarte City Council unanimously adopted Ordinance No. 810 which made the below changes for organizations who had previously filed for permits in the past.

- Council may issue up to five fireworks permits;
- The deadline for filing an application for fireworks was 5:00 pm on the third Thursday of January. For the 2016 Fourth of July fireworks application process, the deadline was 5:00 pm on Thursday, January 21, 2016.

Past applicants were sent a 2016 fireworks application and a copy of the ordinance on December 1, 2015. (See Attachment A)

**Discussion:** This year, five permit applications were received and submittal fees were paid by the deadline of January 21, 2016. The five groups that submitted were as follows:

1. The Duarte Kiwanis Club – Ralph's Shopping Center, 1155 – 1247 Huntington Drive
2. Duarte Community & Education Foundation – Fresh N Easy Center – 2213-2245 Huntington Drive
3. Duarte High School Falcon Boosters – Adjacent to Carl's Jr. - 1302 Huntington Drive
4. LULAC – Wal-Mart Center – 1600 S. Mountain Avenue
5. Duarte High School ASB - Mountain Vista Plaza – 1000 – 1096 Huntington Drive

All five applications were reviewed by staff and deemed complete based on the application standards and submittal requirements.

**Fiscal Impact:** None.

**Attachments:**

Application Process Letter – Attachment A

2016 Applications – Attachment B

City of Duarte

Sixteen Hundred Huntington Drive, Duarte, California 91010-2592
Tel 626-357-7931 FAX 626-358-0018 www.accessduarte.com



December 2, 2015

**2016 FIREWORKS APPLICATION PROCESS**

Dear Previous Fireworks Applicant:

The deadline for the 2016 fireworks application process is fast approaching. Per Duarte Municipal Code Section 15.05.030, the Duarte City Council may issue a maximum of five fireworks permits. The deadline for filing an application for fireworks is 5:00 p.m. on the third Thursday of January of each year. For the 2016 Fourth of July application process, the deadline is **5:00 p.m. on Thursday, January 21, 2016.**

Since your organization has applied for a fireworks permit in the past, we are enclosing a fireworks application for your convenience. Should you wish to apply for a 2016 fireworks permit, please return the completed application, $50 fee, and required documentation (as indicated on the application) to the City Clerk's office no later than the date/time stated above.

Also enclosed is a copy of Ordinance No. 854, which became effective January 2015. It revises Chapter 15.05 of the Duarte Municipal Code, and places additional restrictions and penalties on the sale and use of fireworks within the City of Duarte, restricts the discharge of fireworks exclusively to July 4th from noon to 11:00 p.m. (subject to a $250 fine for a first offense, then $500 for all subsequent violations), and imposes an administrative fine of $1,000 on individuals possessing, selling, or discharging illegal fireworks.

Please feel free to call Deputy City Manager Karen Herrera at (626) 357-7931, ext. 221 if you have any additional questions.

Sincerely,

Darrell J. George
City Manager

Enclosures

RECEIVED
JAN 19 2016
CITY OF DUARTE

# 2016 CITY OF DUARTE
# APPLICATION FOR LICENSE PERMIT TO SELL SAFE AND SANE FIREWORKS

Name of Organization Duarte Kiwanis Club Telephone 626 222-8689
Address PO Box 46 Duarte 91009 Email cathynagrL17@gmail.com

President Cheryl Reynolds Telephone 626 222-8689
Address PO Box 46 Duarte, CA 91009 Email cathynagrL17@gmail.com

Secretary Tina Carey Telephone 626 695-7443
Address PO Box 46 Duarte CA 91009 Email TCarey@miyachiamerica.com

Treasurer Filippo Fanara Telephone 626 303.1818
Address PO Box 46 Duarte, CA 91009 Email fil.ppo@ciboire.com

We, a Duarte fraternal organization as defined by Duarte Municipal Code Section 15.05.020, do hereby submit this application to the City Council of the City of Duarte for a license permit to sell safe and sane fireworks. We understand that this application for a license permit to sell safe and sane fireworks, pursuant to Chapter 15.05 of the Duarte Municipal Code, shall be filed with the City Clerk on or before **5:00 p.m.** on **January 21, 2016**, with the following information *attached to this application*:

1. Non-refundable application fee of $50.00.
2. ✓ Contract or letter of intent from proposed fireworks distributor.
3. ✓ Lease/license/use agreement and/or authorization letter from property owner authorizing and describing in detail the fireworks sales booth location.
4. ✓ Description of stand construction and a site map that confirms compliance with Section 15.05.060(e) of the Duarte Municipal Code.
5. ✓ Copy of applicant's organizational formation documents, such as its articles of incorporation and bylaws, or other evidence of the group's formation and status to show compliance with Municipal Code Section 15.05.020.
6. ✓ Liability insurance in the amount of One Million Dollars ($1,000,000) from the selected fireworks provider for the designated sales period, insuring against death and personal injury to persons and against property damage, naming as additional insureds the City of Duarte and its officers, officials, employees, agents, representatives, and volunteers acting in an official capacity.
7. ✓ Staff schedule plan detailing booth operation dates, operating hours, and 24-hour-a-day on-site staffing plan.
8. ✓ Operational plan detailing storage of fireworks, booth security, fire prevention and other safety measures, theft prevention measures, and clean-up and booth removal.
9. ✓ Profit utilization plan detailing the youth activities for which the applicant proposes to use the net profits from the sale of the safe and sane fireworks in compliance with Duarte Municipal Code Section 15.05.040. Note: If the applicant received a license permit in the prior year, such plan must also include a statement that all net receipts from the prior year have been expended in accordance with the requirements of Section 15.05.040 of the Duarte Municipal Code.
10. ✓ Certified statement (roster) of the number and residency of the members of the organization. Duarte Municipal Code Section 15.05.020 states: *"Duarte membership," as used in this section, means membership consisting of at least 75% of juvenile or adult persons who are either: (a) Duarte residents; or (b) Employed in Duarte; or (c) Owners or operators of a business or other establishment located in Duarte.*

By submitting this application, we further agree to the following:

a) To comply with Chapter 15.05 of the Duarte Municipal Code including, but not limited to, the requirement that the net profit from the sales shall be utilized only for youth activities/programs in accordance with Duarte Municipal Code Section 15.05.040, which states: *At least 75% of the youth participating in and benefiting from such activities shall be residents of the City of Duarte.*

b) Upon license permit approval, to comply with Resolution No. 11-04 adopted 2/8/11, requiring a $375 deposit per license, refundable if applicant helps with clean-up at a designated City park after the July 4th festivities by 8:00 a.m., July 5.

c) Per City Council policy established 2/25/97, to comply with the requirement to have at least two representatives attend a meeting with the Public Safety Department prior to the approval of this application (date to be announced.)

d) Per City Council policy established 3/24/98, to submit a financial accounting of fireworks revenue, expenses and profits by September 30th of the current year detailing a description of proposed youth programs, associated budget, number of overall participants, and breakdown of the total numbers of participants by the categories set forth in subparagraphs (a), (b), and (c) of the Duarte Municipal Code Section 15.05.040, and a reconciled account statement showing revenue and expense and net profit, supported by receipts, including for fireworks purchased and booth-related expenses, etc.

e) To indemnify, defend, and hold harmless the City of Duarte and its officers, officials, employees, agents, representatives, and volunteers acting in an official capacity, from and against any claims, costs, liabilities, expenses, judgments, fines, penalties, and the like, including but not limited to expert witness fees and attorney's fees arising out of the acts or omissions of applicant or any of its officers, officials, directors, managers, agents, representatives, or volunteers pertaining to this application or activities taken in furtherance thereof if a permit is issued including, but not limited to, as may be related to submission of this application, the granting of a permit if such permit is granted, applicant's sales booth and its location, construction and operation including, but not limited to, booth materials, booth staffing, and the display, sale, and storage of fireworks, the discharge of fireworks, applicant's agreement with the owner of booth site, applicant's contract with a fireworks distributor or provider, the use of funds raised from the sale of fireworks, or compliance or failure to comply with applicable law.

f) To waive, release, and discharge any claims or causes of action against the City of Duarte and its officers, officials, employees, agents, representatives, and volunteers acting in an official capacity, by the issuance or non-issuance of a license permit to applicant or to any other applicant.

g) That applicant is familiar with the provisions and has received a copy of Part 2 of Division 11 of the California Health & Safety Code, Sections 12500 et seq., with applicable provisions of the Fire Code of the County of Los Angeles as adopted by reference (including with amendments, if any) in Chapter 15.04 of the Duarte Municipal Code, and with Chapter 15.05 of the Duarte Municipal Code including that the applicant acknowledges the provisions of Section 15.05.100 which states: *"Any person violating or failing to comply with any provisions of this chapter or any of the rules or regulations hereinabove set forth and adopted hereby, or who fails or refuses to perform any duty prescribed herein to be performed by him, is guilty of a misdemeanor."*

h) That applicant acknowledges that (a) submission of an application does not guarantee that a license permit will be issued to applicant and (b) submission of an incomplete application by applicant will result in rejection of the application.

I hereby certify that the above information is true and correct, and that all required information and documents (#1-#10) are attached.

Cheryl L. Reynolds
Authorized Signature

Name: Cheryl Reynolds
(Please print)

Title: Duarte Kiwanis President

Receipt No. 00051649
Amount $ 50 —
Date 1/19/2016

Revised – Effective February 2011

RECEIVED
JAN - 6 2016
CITY OF DUARTE

# 2016 CITY OF DUARTE
# APPLICATION FOR LICENSE PERMIT TO SELL SAFE AND SANE FIREWORKS

Name of Organization Duarte Education Foundation Telephone _____
Address _____ Email _____

President Margaret Finlay Telephone 626-359-0416
Address 1600 Huntington Dr, Duarte, CA Email margaretsfinlay@gmail.com

Secretary Don La Plante Telephone 562-965-2930
Address 11908 Susan Avenue, Downey, CA Email donlaplante@gmail.com

Treasurer Shauna Pierce Telephone 626-357-4704
Address 890 San Marcus Lane, Duarte Email shaunapierce@hotmail.com

We, a Duarte fraternal organization as defined by Duarte Municipal Code Section 15.05.020, do hereby submit this application to the City Council of the City of Duarte for a license permit to sell safe and sane fireworks. We understand that this application for a license permit to sell safe and sane fireworks, pursuant to Chapter 15.05 of the Duarte Municipal Code, shall be filed with the City Clerk on or before **5:00 p.m. on January 21, 2016**, with the following information *attached to this application*:

1. Non-refundable application fee of $50.00.
2. Contract or letter of intent from proposed fireworks distributor.
3. Lease/license/use agreement and/or authorization letter from property owner authorizing and describing in detail the fireworks sales booth location.
4. Description of stand construction and a site map that confirms compliance with Section 15.05.060(e) of the Duarte Municipal Code.
5. Copy of applicant's organizational formation documents, such as its articles of incorporation and bylaws, or other evidence of the group's formation and status to show compliance with Municipal Code Section 15.05.020.
6. Liability insurance in the amount of One Million Dollars ($1,000,000) from the selected fireworks provider for the designated sales period, insuring against death and personal injury to persons and against property damage, naming as additional insureds the City of Duarte and its officers, officials, employees, agents, representatives, and volunteers acting in an official capacity.
7. Staff schedule plan detailing booth operation dates, operating hours, and 24-hour-a-day on-site staffing plan.
8. Operational plan detailing storage of fireworks, booth security, fire prevention and other safety measures, theft prevention measures, and clean-up and booth removal.
9. Profit utilization plan detailing the youth activities for which the applicant proposes to use the net profits from the sale of the safe and sane fireworks in compliance with Duarte Municipal Code Section 15.05.040. Note: If the applicant received a license permit in the prior year, such plan must also include a statement that all net receipts from the prior year have been expended in accordance with the requirements of Section 15.05.040 of the Duarte Municipal Code.
10. Certified statement (roster) of the number and residency of the members of the organization. Duarte Municipal Code Section 15.05.020 states: *"Duarte membership," as used in this section, means membership consisting of at least 75% of juvenile or adult persons who are either: (a) Duarte residents; or (b) Employed in Duarte; or (c) Owners or operators of a business or other establishment located in Duarte.*

By submitting this application, we further agree to the following:

a) To comply with Chapter 15.05 of the Duarte Municipal Code including, but not limited to, the requirement that the net profit from the sales shall be utilized only for youth activities/programs in accordance with Duarte Municipal Code Section 15.05.040, which states: *At least 75% of the youth participating in and benefiting from such activities shall be residents of the City of Duarte.*

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c) Per City Council policy established 2/25/97, to comply with the requirement to have at least two representatives attend a meeting with the Public Safety Department prior to the approval of this application (date to be announced.)

d) Per City Council policy established 3/24/98, to submit a financial accounting of fireworks revenue, expenses and profits by September 30th of the current year detailing a description of proposed youth programs, associated budget, number of overall participants, and breakdown of the total numbers of participants by the categories set forth in subparagraphs (a), (b), and (c) of the Duarte Municipal Code Section 15.05.040, and a reconciled account statement showing revenue and expense and net profit, supported by receipts, including for fireworks purchased and booth-related expenses, etc.

e) To indemnify, defend, and hold harmless the City of Duarte and its officers, officials, employees, agents, representatives, and volunteers acting in an official capacity, from and against any claims, costs, liabilities, expenses, judgments, fines, penalties, and the like, including but not limited to expert witness fees and attorney's fees arising out of the acts or omissions of applicant or any of its officers, officials, directors, managers, agents, representatives, or volunteers pertaining to this application or activities taken in furtherance thereof if a permit is issued including, but not limited to, as may be related to submission of this application, the granting of a permit if such permit is granted, applicant's sales booth and its location, construction and operation including, but not limited to, booth materials, booth staffing, and the display, sale, and storage of fireworks, the discharge of fireworks, applicant's agreement with the owner of booth site, applicant's contract with a fireworks distributor or provider, the use of funds raised from the sale of fireworks, or compliance or failure to comply with applicable law.

f) To waive, release, and discharge any claims or causes of action against the City of Duarte and its officers, officials, employees, agents, representatives, and volunteers acting in an official capacity, by the issuance or non-issuance of a license permit to applicant or to any other applicant.

g) That applicant is familiar with the provisions and has received a copy of Part 2 of Division 11 of the California Health & Safety Code, Sections 12500 et seq., with applicable provisions of the Fire Code of the County of Los Angeles as adopted by reference (including with amendments, if any) in Chapter 15.04 of the Duarte Municipal Code, and with Chapter 15.05 of the Duarte Municipal Code including that the applicant acknowledges the provisions of Section 15.05.100 which states: *"Any person violating or failing to comply with any provisions of this chapter or any of the rules or regulations hereinabove set forth and adopted hereby, or who fails or refuses to perform any duty prescribed herein to be performed by him, is guilty of a misdemeanor."*

h) That applicant acknowledges that (a) submission of an application does not guarantee that a license permit will be issued to applicant and (b) submission of an incomplete application by applicant will result in rejection of the application.

I hereby certify that the above information is true and correct, and that all required information and documents (#1-#10) are attached.

Authorized Signature

Name: Margaret Finlay
(Please print)

Title: President

Receipt No. 51366
Amount $ 50.00
Date 1/6/16

Revised – Effective February 2011

RECEIVED
JAN 21 2016
CITY OF DUARTE

# 2016 CITY OF DUARTE
# APPLICATION FOR LICENSE PERMIT TO SELL SAFE AND SANE FIREWORKS

Name of Organization Duarte Falcon Booster Club Telephone 626 253-6600
Address 3204 Conata St. Duarte Email EReilly3@aol.com

President Henry Baltazar Telephone 626 357-0708
Address 3204 Conata St Duarte 91010 Email firebird69@aol.com

Secretary Dolores Ortiz Telephone 626 357-0708
Address 3204 Conata St Duarte 91010 Email EReilly3@aol.com

Treasurer Lindy Ysassi Telephone 626 357-0708
Address 3204 Conata St Duarte 91010 Email Ysassi2@yahoo.com

We, a Duarte fraternal organization as defined by Duarte Municipal Code Section 15.05.020, do hereby submit this application to the City Council of the City of Duarte for a license permit to sell safe and sane fireworks. We understand that this application for a license permit to sell safe and sane fireworks, pursuant to Chapter 15.05 of the Duarte Municipal Code, shall be filed with the City Clerk on or before **5:00 p.m.** on **January 21, 2016**, with the following information *attached to this application:*

1. Non-refundable application fee of $50.00.
2. Contract or letter of intent from proposed fireworks distributor.
3. Lease/license/use agreement and/or authorization letter from property owner authorizing and describing in detail the fireworks sales booth location.
4. Description of stand construction and a site map that confirms compliance with Section 15.05.060(e) of the Duarte Municipal Code.
5. Copy of applicant's organizational formation documents, such as its articles of incorporation and bylaws, or other evidence of the group's formation and status to show compliance with Municipal Code Section 15.05.020.
6. Liability insurance in the amount of One Million Dollars ($1,000,000) from the selected fireworks provider for the designated sales period, insuring against death and personal injury to persons and against property damage, naming as additional insureds the City of Duarte and its officers, officials, employees, agents, representatives, and volunteers acting in an official capacity.
7. Staff schedule plan detailing booth operation dates, operating hours, and 24-hour-a-day on-site staffing plan.
8. Operational plan detailing storage of fireworks, booth security, fire prevention and other safety measures, theft prevention measures, and clean-up and booth removal.
9. Profit utilization plan detailing the youth activities for which the applicant proposes to use the net profits from the sale of the safe and sane fireworks in compliance with Duarte Municipal Code Section 15.05.040. Note: If the applicant received a license permit in the prior year, such plan must also include a statement that all net receipts from the prior year have been expended in accordance with the requirements of Section 15.05.040 of the Duarte Municipal Code.
10. Certified statement (roster) of the number and residency of the members of the organization. Duarte Municipal Code Section 15.05.020 states: *"Duarte membership," as used in this section, means membership consisting of at least 75% of juvenile or adult persons who are either: (a) Duarte residents; or (b) Employed in Duarte; or (c) Owners or operators of a business or other establishment located in Duarte.*

By submitting this application, we further agree to the following:

a) To comply with Chapter 15.05 of the Duarte Municipal Code including, but not limited to, the requirement that the net profit from the sales shall be utilized only for youth activities/programs in accordance with Duarte Municipal Code Section 15.05.040, which states: *At least 75% of the youth participating in and benefiting from such activities shall be residents of the City of Duarte.*

b) Upon license permit approval, to comply with Resolution No. 11-04 adopted 2/8/11, requiring a $375 deposit per license, refundable if applicant helps with clean-up at a designated City park after the July 4th festivities by 8:00 a.m., July 5.

c) Per City Council policy established 2/25/97, to comply with the requirement to have at least two representatives attend a meeting with the Public Safety Department prior to the approval of this application (date to be announced.)

d) Per City Council policy established 3/24/98, to submit a financial accounting of fireworks revenue, expenses and profits by September 30th of the current year detailing a description of proposed youth programs, associated budget, number of overall participants, and breakdown of the total numbers of participants by the categories set forth in subparagraphs (a), (b), and (c) of the Duarte Municipal Code Section 15.05.040, and a reconciled account statement showing revenue and expense and net profit, supported by receipts, including for fireworks purchased and booth-related expenses, etc.

e) To indemnify, defend, and hold harmless the City of Duarte and its officers, officials, employees, agents, representatives, and volunteers acting in an official capacity, from and against any claims, costs, liabilities, expenses, judgments, fines, penalties, and the like, including but not limited to expert witness fees and attorney's fees arising out of the acts or omissions of applicant or any of its officers, officials, directors, managers, agents, representatives, or volunteers pertaining to this application or activities taken in furtherance thereof if a permit is issued including, but not limited to, as may be related to submission of this application, the granting of a permit if such permit is granted, applicant's sales booth and its location, construction and operation including, but not limited to, booth materials, booth staffing, and the display, sale, and storage of fireworks, the discharge of fireworks, applicant's agreement with the owner of booth site, applicant's contract with a fireworks distributor or provider, the use of funds raised from the sale of fireworks, or compliance or failure to comply with applicable law.

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I hereby certify that the above information is true and correct, and that all required information and documents (#1-#10) are attached.

Elizabeth Reilly
Authorized Signature

Name: Elizabeth Reilly
(Please print)

Title: Financial Director

Receipt No. 00051718
Amount $ 50.00
Date 1/21/16

Revised – Effective February 2011

RECEIVED

JAN 21 2016

CITY OF DUARTE

# 2016 CITY OF DUARTE
# APPLICATION FOR LICENSE PERMIT TO SELL SAFE AND SANE FIREWORKS

Name of Organization LVLAC Telephone 626-271-5890
Address P.O. BOX 244 Duarte, CA 91009 Email THM6R64@AOL.COM

President TOM R6465 Telephone 626-271-5890
Address 2523 Bloomdale St. Duarte, CA 91010 Email TTM6R64@AOL.COM

Secretary Kathy Vallejos Telephone (626) 806-6564
Address 1244 Milano Pl, Philips Ranch Ca 91766 Email KathrynVallejos@gmail.com

Treasurer Mike Vallejos Telephone (626) 786-2482
Address 1244 Milano Pl, Philips Ranch Ca 91766 Email michaelbvallejos@gmail.com

We, a Duarte fraternal organization as defined by Duarte Municipal Code Section 15.05.020, do hereby submit this application to the City Council of the City of Duarte for a license permit to sell safe and sane fireworks. We understand that this application for a license permit to sell safe and sane fireworks, pursuant to Chapter 15.05 of the Duarte Municipal Code, shall be filed with the City Clerk on or before **5:00 p.m. on January 21, 2016**, with the following information *attached to this application*:

1. Non-refundable application fee of $50.00.
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I hereby certify that the above information is true and correct, and that all required information and documents (#1-#10) are attached.

Tom Reyes
Authorized Signature

Name: TOM REYES
(Please print)

Title: CHAIRPERSON

Receipt No. 00151734
Amount $ 50.00
Date 1/21/16

Revised – Effective February 2011

RECEIVED
JAN 20 2016
CITY OF DUARTE

# 2016 CITY OF DUARTE
# APPLICATION FOR LICENSE PERMIT TO SELL SAFE AND SANE FIREWORKS

Name of Organization Duarte High School - ASB Telephone 626 599-5700
Address 1565 Central Ave. Email www.duarte-usd.org/dhs.

President Mark Sims Telephone 626 599-5700
Address 1565 E. Central ave. Email MSims@duarteusd.com

Secretary Robyn Garcia. Telephone 626 599-5720
Address 1565 E. Central ave. Email rgarcia@duarteusd.com

Treasurer Stella Starr Telephone 626 599-5723
Address 1565 Central ave. Email SStarr@duarteusd.org

We, a Duarte fraternal organization as defined by Duarte Municipal Code Section 15.05.020, do hereby submit this application to the City Council of the City of Duarte for a license permit to sell safe and sane fireworks. We understand that this application for a license permit to sell safe and sane fireworks, pursuant to Chapter 15.05 of the Duarte Municipal Code, shall be filed with the City Clerk on or before **5:00 p.m. on January 21, 2016**, with the following information *attached to this application:*

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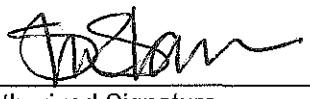

Authorized Signature

Name: Stella Starr
(Please print)

Title: Student Body Activities Asst.

Receipt No. 005/675
Amount $ $ 50.00
Date 11/20/14

Revised – Effective February 2011

# MEMORANDUM

**TO:** Darrell J. George, City Manager

**FROM:** Kristen Petersen, Assistant City Manager

**DATE:** February 3, 2016

**SUBJECT:** **MID-YEAR BUDGET REPORT – FISCAL YEAR 2015/16**

---

## Background

In keeping with the schedule set forth in the City's budget calendar, staff has completed the mid year budget projections for the 2015-16 fiscal year. The results of this process are presented in Attachment 1 to this report. The information in the attachment is organized by fund, and compares amounts budgeted to projected year-end revenues, expenditures and fund balances. This report also discusses any budget amendments, which are summarized in Attachment 2 and the Capital Projects that have been added to the 2015-16 are reflected on Attachment 3.

## General Fund

For 2015-16, the City adopted a General Fund budget that included a deficit of $691,200. At mid year, staff is estimating that the General Fund will reflect a surplus of $335,500. A surplus of $335,500 will increase the General Fund reserves to $7.8 million, which represents 47% of the General Fund expenditures. There were several notable changes in revenue and expenditures that offset one another to result in this net change. Many of the factors contributing to the projected increase in revenues and the changes provided for in expenses are described in further detail in the narrative below.

### Revenues:

At year-end, total General Fund revenues are projected to be $16.9 million. This amount represents an increase of $1,580,000 as compared to the adopted budget. This increase was the result of several notable changes in revenue both positive and negative. Some of the more substantial ones are discussed below.

Increase in Grant Program Revenue – The City was awarded a tree replacement grant by Supervisor Antonovich in 2014 and we were recently notified that all of the remaining amounts ($65,000) must be spent before June 30, 2016. As a result, we have increased revenues by this amount. Southern California Edison granted the City of Duarte $150,000 for park improvements and right of way projects. The

budgeted revenues have been increased by this amount and a description of the corresponding projects are described in more detail below.

Repayment of City Loans from former RDA/Successor Agency – The City received more than $1.3 million through the ROPS process as the very first repayment of City Loans owed by the former Redevelopment Agency. Unfortunately legislation was passed late late last year that may cause problems with the future repayment of these loans. We will not know how the Department of Finance will interpret the legislation in our City's particular case until future repayments are either granted or denied. As of December 2015, there is $8.2 million in outstanding loans. We have just recently requested repayment of approximately $1.26 million towards this amount on the 2015/16 ROPS. We should be notified by the end of March 2016, as to whether or not this request has been approved or denied.

Reduction in Gas Tax General Fund Reimbursement – Pursuant to the legal restrictions of Gas Tax revenue, the City is limited to utilizing 20% of the total Gas Tax funds spent for administrative overhead. Given that the projected spending on Gas Tax projects is substantially less than previously anticipated, we have decreased the projected General Fund Reimbursement for administrative expenses by $100,000. When future projects from gas tax funding are ramped up, the reimbursements can be increased respectively.

Delayed ATP grant reimbursement – A portion of the ATP grant was projected to be spent and reimbursed in 2014/15. This project was delayed and as a result, an increase of $155,000 to Transfers In has been included in the 2015/16 budget.

**Expenditures:**
At year-end, total General Fund expenditures are projected to be $16.6 million. This amount represents an increase of $557,000, as compared to the adopted budget. A discussion of General Fund expenditure highlights is provided below.

Election Costs – Given that only incumbent applications for the City Council election were filed in 2015, the City of Duarte did not hold an election. This represents a cost savings of $45,000.

Legal Expenses – The cost of legal activities, particularly in the case of NPDES litigation, continues to escalate. Based on year to date expenses and costs projected over the next 6 months, we have increased the budget by $30,000.

Community Development staffing – The Community Development department has had several changes since the adoption of the 2015/16 budget related to staffing. First of all, the position of Senior Planner was vacated in August of 2015 and after an extensive recruitment was not successful in finding a qualified candidate, we have instead begun recruiting for the position of Associate Planner. In the meantime, the

vacancy has resulted in a temporary savings of approximately $120,000 to the General Fund. We have also filled the new position of Community Development Technician and promoted our Senior Planner to City Planner. All of these changes are reflected in the mid year adjustments.

Consulting and Construction contracts – Several contracts have been approved since the budget was adopted in June 2015. For example, the City Council awarded Granicus an annual contract of $10,800 for iLegislate services; Aquatics Design Group was contracted for $20,000 to assist with the RFP and construction management on the Fitness Center Pool project; Active Net was approved for a $16,000 contract for the development of online class registration; Kosmont Associates was contracted for $28,000 to conduct an economic marketing study for the former Fresh & Easy site; RSG was awarded a contract for $30,000 to prepare a financial feasibility study for the proposed sale and development of the Third Street property; Soranelli was hired for $9,000 to prepare architectural design drawings for the former Mike's Food building and entire shopping center; a $17,000 annual air conditioning maintenance contract with ACCO was authorized and a bid was awarded to Condor Inc in the amount of $420,000 for the rehabilitation of the Fitness Center Pool, which after offsetting costs with Park Development Grant funds will result in a General Fund expenditure of approximately $183,000.

Grant Expenses – In 2014 we completed approximately 25% of the work related to the tree replacement grant, which primarily consisted of stump removal and tree planting in the Huntington Drive medians, and a small tree-planting project at the Teen Center involving the use of at risk youth (SGV Conservation Corps). In the current fiscal year we will complete planting the remaining trees and removing additional stumps in various locations, primarily within parks and along the bike trail and a few within parkways.

Approximately $115,000 in Southern California Edison grant funds will be spent on City of Duarte park improvements. $15,000 will be spent on resurfacing the tennis and basketball courts at Encanto and Duarte Parks and $100,000 will be spent on new playground equipment, outdoor exercise equipment and landscaping at Aloysia Moore Park.

## Other City Funds

In addition to the General Fund, the City maintains 18 other capital, debt service, and special revenue funds. For the most part, it is projected at mid-year that these Other City Funds will reflect conditions at year-end that are not significantly different than those planned for when the budget was adopted. There are, however, two noteworthy exceptions. These exceptions are highlighted below.

Park Development Grant – Staff made a presentation to City Council in November anticipating that the total cost of the Fitness Center Pool rehabilitation could be more than $500,000. In the end, the bid came in closer to $420,000. This means that after paying Aquatics Design $20,000 for assisting with the RFP and construction management, there will be $237,000 in Park Development Grant funds available to offset the costs of the Fitness Center Pool project. This will utilize all of the City's remaining Park Development Grant funds, which were set to expire in 2019.

Community Improvement Fund – Several amendments are being made in the Community Improvement Fund in order to provide for the ATP grant funds and the delay that kept funds from being spent and/or reimbursed in 2014/15. Given that this is a reimbursement grant, we will be transferring an advance of General Funds into the Community Improvement Fund, expending these amounts, then submitting for the grant reimbursement. Once the grant reimbursement is received by the Community Improvement Fund, it will be transferred back to reimburse the General Fund advance. The total project is anticipated to cost $1.6 million and will be funded with $1.3 million from the ATP grant and $300,000 from the City's Prop A funds as a match.

## Recommendation

It is recommended that the City Council receive and file the mid-year budget report, and approve the corresponding budget amendments as delineated in Attachment 2.

# ATTACHMENT 1

**MID YEAR BUDGET 2015 - 2016**

| | FY 2015-16 Budget | Proposed Amendments | FY 2015-16 Amended Budget | FY 2015-16 Est Actual |
|---|---|---|---|---|
| **GENERAL FUND** | | | | |
| Revenues: | | | | |
| Property tax | 1,160,000 | | 1,160,000 | 1,200,000 |
| Sales tax | 5,471,000 | | 5,471,000 | 5,471,000 |
| Franchise tax | 871,000 | | 871,000 | 915,000 |
| Business license tax | 320,000 | | 320,000 | 300,000 |
| Other taxes | 173,000 | | 173,000 | 183,000 |
| Building permits | 400,000 | | 400,000 | 440,000 |
| Other licenses & permits | 271,000 | | 271,000 | 247,000 |
| Interest | 15,000 | | 15,000 | 23,800 |
| Other uses of money & property | 248,900 | | 248,900 | 260,400 |
| Motor vehicle in lieu fees | 1,886,000 | | 1,886,000 | 1,886,000 |
| Other intergovernmental | 843,500 | 210,000 | 1,053,500 | 1,047,600 |
| Recreation fees | 416,700 | | 416,700 | 398,300 |
| Other service charges | 267,600 | | 267,600 | 286,300 |
| Fines & forfeitures | 165,000 | 0 | 165,000 | 180,000 |
| Miscellaneous revenues | 782,200 | 1,309,000 | 2,091,200 | 1,992,600 |
| Reimbursements from other funds | 907,800 | (100,000) | 807,800 | 792,700 |
| Transfers in from other funds | 1,150,000 | 155,000 | 1,305,000 | 1,305,000 |
| **Total Revenues** | 15,348,700 | 1,574,000 | 16,922,700 | 16,928,700 |
| Expenditures: | | | | |
| City council | 111,800 | 0 | 111,800 | 111,400 |
| City manager | 933,000 | (24,000) | 909,000 | 908,100 |
| Legal services | 170,000 | 30,000 | 200,000 | 200,000 |
| Com. Promotions & memberships | 196,700 | 26,000 | 222,700 | 223,100 |
| Public safety | 4,532,300 | 13,000 | 4,545,300 | 4,546,200 |
| Community development | 2,725,500 | (45,000) | 2,680,500 | 2,667,400 |
| Field services | 753,600 | 65,000 | 818,600 | 818,600 |
| Sports Park | 114,000 | 5,000 | 119,000 | 119,000 |
| Parks and recreation | 1,895,900 | (35,000) | 1,860,900 | 1,862,800 |
| Facilities maintenance | 769,000 | 352,000 | 1,121,000 | 1,130,000 |
| Administrative services | 2,362,000 | 15,000 | 2,377,000 | 2,375,500 |
| Transfers out to other funds | 1,476,100 | 155,000 | 1,631,100 | 1,631,100 |
| **Total Expenditures** | 16,039,900 | 557,000 | 16,596,900 | 16,593,200 |
| Revenues Over (Under) Expenditures | (691,200) | 1,017,000 | 325,800 | 335,500 |
| **Beginning Fund Balance** | **7,423,800** | | **7,493,771** | **7,493,771** |
| Revenues Over (Under) Expenditures | (691,200) | | 325,800 | 335,500 |
| **Ending Fund Balance** | **6,732,600** | | **7,819,571** | **7,829,271** |

# OTHER FUNDS

## STATE GASOLINE TAX

| | | | | |
|---|---|---|---|---|
| Revenues: | | | | |
| Interest | 1,500 | 0 | 1,500 | 2,000 |
| Gasoline tax | 495,300 | 0 | 495,300 | 491,900 |
| Total Revenues | 496,800 | 0 | 496,800 | 493,900 |
| | | | | |
| Expenditures: | | | | |
| Miscellaneous projects | 242,500 | 0 | 242,500 | 262,000 |
| Reimbursement to General Fund | 180,600 | 0 | 180,600 | 65,500 |
| Total Expenditures | 423,100 | 0 | 423,100 | 327,500 |
| | | | | |
| Revenues Over (Under) Expenditures | 73,700 | | 73,700 | 166,400 |
| | | | | |
| Beginning Fund Balance | 480,688 | | 938,650 | 938,650 |
| | | | | |
| Ending Fund Balance | 554,388 | | 1,012,350 | 1,105,050 |

## LIGHTING AND LANDSCAPE

| | | | | |
|---|---|---|---|---|
| Revenues: | | | | |
| Transfers in - general fund | 326,100 | 0 | 326,100 | 326,100 |
| Assessments & other | 1,196,000 | 0 | 1,196,000 | 1,196,000 |
| Total Revenues | 1,522,100 | 0 | 1,522,100 | 1,522,100 |
| | | | | |
| Expenditures: | | | | |
| City-wide lighting | 325,900 | 0 | 325,900 | 325,900 |
| City-wide landscape | 900,300 | 0 | 900,300 | 900,300 |
| Landscape zones | 295,900 | 0 | 295,900 | 295,900 |
| Total Expenditures | 1,522,100 | 0 | 1,522,100 | 1,522,100 |
| | | | | |
| Revenues Over (Under) Expenditures | 0 | | 0 | 0 |
| | | | | |
| Beginning Fund Balance | 65,645 | | 103,741 | 103,741 |
| | | | | |
| Ending Fund Balance | 65,645 | | 103,741 | 103,741 |

## COMMUNITY DEVELOPMENT BLOCK GRANT

| | | | | |
|---|---|---|---|---|
| Revenues: | | | | |
| Entitlement | 140,000 | 0 | 140,000 | 244,400 |
| Total Revenues | 140,000 | 0 | 140,000 | 244,400 |
| | | | | |
| Expenditures: | | | | |
| Home rebate | 0 | 0 | 0 | 0 |
| Storm Drain Study/Improvements | 0 | 0 | 0 | 0 |
| ADA Improvements | 85,000 | 0 | 85,000 | 85,000 |
| Other | 55,000 | 0 | 55,000 | 55,000 |
| Total Expenditures | 140,000 | 0 | 140,000 | 140,000 |
| | | | | |
| Revenues Over (Under) Expenditures | 0 | | 0 | 104,400 |

| | | | | |
|---|---|---|---|---|
| Beginning Fund Balance | 0 | | (104,361) | (104,361) |
| Ending Fund Balance | 0 | | (104,361) | 39 |

**PAEG FEES**

| | | | | |
|---|---|---|---|---|
| Revenues: | | | | |
| Interest Earnings | 0 | 0 | 0 | 0 |
| Fees | 24,000 | 0 | 24,000 | 24,000 |
| Total Revenues | 24,000 | 0 | 24,000 | 24,000 |
| Expenditures: | | | | |
| Other Expenses | 24,000 | 0 | 24,000 | 0 |
| Total Expenditures | 24,000 | 0 | 24,000 | 0 |
| Revenues Over (Under) Expenditures | 0 | | 0 | 24,000 |
| Beginning Fund Balance | 0 | | (67,142) | (67,142) |
| Ending Fund Balance | 0 | | (67,142) | (43,142) |

**SUPPLEMENTAL LAW ENFORCEMENT**

| | | | | |
|---|---|---|---|---|
| Revenues: | | | | |
| Interest | 100 | 0 | 100 | 100 |
| Entitlement | 100,000 | 0 | 100,000 | 100,000 |
| Total Revenues | 100,100 | 0 | 100,100 | 100,100 |
| Expenditures: | | | | |
| Special events patrol | 10,000 | 0 | 10,000 | 10,000 |
| Contract law enforcement | 90,000 | 0 | 90,000 | 90,000 |
| Total Expenditures | 100,000 | 0 | 100,000 | 100,000 |
| Revenues Over (Under) Expenditures | 100 | | 100 | 100 |
| Beginning Fund Balance | 12,539 | | 2,096 | 2,096 |
| Ending Fund Balance | 12,639 | | 2,196 | 2,196 |

**BICYCLE & PEDESTRIAN SAFETY**

| | | | | |
|---|---|---|---|---|
| Revenues: | | | | |
| Interest | 0 | 0 | 0 | 0 |
| Entitlement | 14,200 | 0 | 14,200 | 14,200 |
| Total Revenues | 14,200 | 0 | 14,200 | 14,200 |
| Expenditures: | | | | |
| Sidewalk improvements | 14,200 | 0 | 14,200 | 14,200 |
| Total Expenditures | 14,200 | 0 | 14,200 | 14,200 |

| | | | | |
|---|---|---|---|---|
| Revenues Over (Under) Expenditures | 0 | | 0 | 0 |
| Beginning Fund Balance | 0 | | 0 | 0 |
| Ending Fund Balance | 0 | | 0 | 0 |

**AIR QUALITY MANAGEMENT**

| | | | | |
|---|---|---|---|---|
| Revenues: | | | | |
| Interest | 100 | 0 | 100 | 100 |
| Entitlement | 26,000 | 0 | 26,000 | 26,000 |
| Total Revenues | 26,100 | 0 | 26,100 | 26,100 |
| Expenditures: | | | | |
| Vehicles | 33,000 | 0 | 33,000 | 32,500 |
| Street Improvements | 0 | 0 | 0 | 0 |
| Other | 2,500 | 0 | 2,500 | 3,500 |
| Total Expenditures | 35,500 | 0 | 35,500 | 36,000 |
| Revenues Over (Under) Expenditures | (9,400) | | (9,400) | (9,900) |
| Beginning Fund Balance | 58,917 | | 64,889 | 64,889 |
| Ending Fund Balance | 49,517 | | 55,489 | 54,989 |

**PARK DEVELOPMENT GRANT**

| | | | | |
|---|---|---|---|---|
| Revenues: | | | | |
| Grant Programs | 0 | 257,000 | 257,000 | 257,000 |
| Interest | 0 | 0 | 0 | 0 |
| Safe neighborhood parks act | 16,000 | (16,000) | 0 | 0 |
| Total Revenues | 16,000 | 241,000 | 257,000 | 257,000 |
| Expenditures: | | | | |
| Professional Services | 0 | 20,000 | 20,000 | 20,000 |
| Other capital improvements | 16,000 | 221,000 | 237,000 | 237,000 |
| Total Expenditures | 16,000 | 241,000 | 257,000 | 257,000 |
| Revenues Over (Under) Expenditures | 0 | | 0 | 0 |
| Beginning Fund Balance | 0 | | 19 | 19 |
| Ending Fund Balance | 0 | | 19 | 19 |

**QUIMBY ACT**

| | | | | |
|---|---|---|---|---|
| Revenues: | | | | |
| Interest | 0 | 0 | 0 | 0 |
| Assessments | 0 | 0 | 0 | 0 |
| Total Revenues | 0 | 0 | 0 | 0 |
| Expenditures: | | | | |

| | | | | |
|---|---|---|---|---|
| Park improvements | 0 | 0 | 0 | 0 |
| Transfers out - cash flow | 0 | 0 | 0 | 0 |
| Total Expenditures | 0 | 0 | 0 | 0 |
| Revenues Over (Under) Expenditures | 0 | | 0 | 0 |
| Beginning Fund Balance | 53,565 | | 53,565 | 53,565 |
| Ending Fund Balance | 53,565 | | 53,565 | 53,565 |

**TRANSPORTATION - PROPOSITION A**

| | | | | |
|---|---|---|---|---|
| Revenues: | | | | |
| Interest | 7,000 | 0 | 7,000 | 7,000 |
| Entitlement | 377,400 | 0 | 377,400 | 377,400 |
| NTD Entitlement | 39,300 | 0 | 39,300 | 39,300 |
| Reimbursements | 313,100 | 0 | 313,100 | 313,100 |
| Total Revenues | 736,800 | 0 | 736,800 | 736,800 |
| Expenditures: | | | | |
| Reimbursement - General Fund | 104,000 | 0 | 104,000 | 104,000 |
| Other - ATP match & Transit Plan | 471,000 | 75,000 | 546,000 | 556,200 |
| Transit services | 686,400 | 0 | 686,400 | 675,900 |
| Total Expenditures | 1,261,400 | 75,000 | 1,336,400 | 1,336,100 |
| Revenues Over (Under) Expenditures | (524,600) | | (599,600) | (599,300) |
| Beginning Fund Balance | 3,021,605 | | 3,049,826 | 3,049,826 |
| Ending Fund Balance | 2,497,005 | | 2,450,226 | 2,450,526 |

**TRANSPORTATION - PROPOSITION C**

| | | | | |
|---|---|---|---|---|
| Revenues: | | | | |
| Interest | 1,000 | 0 | 1,000 | 900 |
| Entitlement | 313,100 | 0 | 313,100 | 313,100 |
| Total Revenues | 314,100 | 0 | 314,100 | 314,000 |
| Expenditures: | | | | |
| Reimbursements | 313,100 | 0 | 313,100 | 313,100 |
| Other | 0 | 0 | 0 | 0 |
| Total Expenditures | 313,100 | 0 | 313,100 | 313,100 |
| Revenues Over (Under) Expenditures | 1,000 | | 1,000 | 900 |
| Beginning Fund Balance | 249,714 | | 253,622 | 253,622 |
| Ending Fund Balance | 250,714 | | 254,622 | 254,522 |

**MEASURE R LOCAL RETURN**

| | | | | |
|---|---|---|---|---|
| Revenues: | | | | |
| Interest | 1,500 | 0 | 1,500 | 1,500 |

| | | | | |
|---|---|---|---|---|
| Other | 222,000 | 0 | 222,000 | 222,000 |
| Total Revenues | 223,500 | 0 | 223,500 | 223,500 |
| | | | | |
| Expenditures: | | | | |
| Other | 198,800 | 0 | 198,800 | 155,000 |
| Total Expenditures | 198,800 | 0 | 198,800 | 155,000 |
| | | | | |
| Revenues Over (Under) Expenditures | 24,700 | | 24,700 | 68,500 |
| | | | | |
| Beginning Fund Balance | 471,527 | | 655,913 | 655,913 |
| | | | | |
| Ending Fund Balance | 496,227 | | 680,613 | 724,413 |

**TOWN CENTER DEBT SERVICE**

| | | | | |
|---|---|---|---|---|
| Revenues: | | | | |
| Interest | 1,400 | 0 | 1,400 | 1,400 |
| Transfers in | 225,000 | 0 | 225,000 | 225,000 |
| Total Revenues | 226,400 | 0 | 226,400 | 226,400 |
| | | | | |
| Expenditures: | | | | |
| Interest expense | 20,400 | 0 | 20,400 | 20,400 |
| Principal payment | 130,600 | 0 | 130,600 | 130,600 |
| Other | 3,500 | 0 | 3,500 | 3,500 |
| Total Expenditures | 154,500 | 0 | 154,500 | 154,500 |
| | | | | |
| Revenues Over (Under) Expenditures | 71,900 | | 71,900 | 71,900 |
| | | | | |
| Beginning Fund Balance | 628,068 | | 630,348 | 630,348 |
| | | | | |
| Ending Fund Balance | 699,968 | | 702,248 | 702,248 |

**COMMUNITY IMPROVEMENT**

| | | | | |
|---|---|---|---|---|
| Revenues: | | | | |
| Interest | 0 | 0 | 0 | 100 |
| Grant funding | 1,150,000 | 0 | 1,150,000 | 1,305,000 |
| Transfers in - General Fund | 1,150,000 | 0 | 1,150,000 | 1,305,000 |
| Total Revenues | 2,300,000 | 0 | 2,300,000 | 2,610,100 |
| | | | | |
| Expenditures: | | | | |
| Professional Services (ATP grant) | 1,150,000 | 0 | 1,150,000 | 148,000 |
| Other Capital Improvements (ATP grant | 0 | 155,000 | 155,000 | 1,157,000 |
| Other Capital Improvements | 0 | 15,000 | 15,000 | 15,700 |
| Transfers Out - General Fund | 1,150,000 | 155,000 | 1,305,000 | 1,305,000 |
| Total Expenditures | 2,300,000 | 325,000 | 2,625,000 | 2,625,700 |
| | | | | |
| Revenues Over (Under) Expenditures | 0 | | (325,000) | (15,600) |
| | | | | |
| Beginning Fund Balance | 0 | | 63,780 | 63,780 |
| | | | | |
| Ending Fund Balance | 0 | | (261,220) | 48,180 |

**INCLUSIONARY HOUSING**

| | | | | |
|---|---|---|---|---|
| Revenues: | | | | |
| Interest | 1,400 | 0 | 1,400 | 1,400 |
| Assesments | 0 | 0 | 0 | 0 |
| Total Revenues | 1,400 | 0 | 1,400 | 1,400 |
| | | | | |
| Expenditures: | | | | |
| Other expenses | 0 | 0 | 0 | 0 |
| Total Expenditures | 0 | 0 | 0 | 0 |
| | | | | |
| Revenues Over (Under) Expenditures | 1,400 | | 1,400 | 1,400 |
| | | | | |
| Beginning Fund Balance | 500,886 | | 500,915 | 500,915 |
| | | | | |
| Ending Fund Balance | 502,286 | | 502,315 | 502,315 |

**HOUSING AUTHORITY**

| | | | | |
|---|---|---|---|---|
| Revenues: | | | | |
| Interest | 0 | 0 | 0 | 0 |
| Other Revenue | 0 | 0 | 0 | 600 |
| Total Revenues | 0 | 0 | 0 | 600 |
| | | | | |
| Expenditures: | | | | |
| Meeting Stipends | 3,600 | 0 | 3,600 | 3,700 |
| Administrative Services | 0 | 0 | 0 | 0 |
| Legal Counsel | 0 | 0 | 0 | 0 |
| Payment fo LA County | 0 | 0 | 0 | 0 |
| Total Expenditures | 3,600 | 0 | 3,600 | 3,700 |
| | | | | |
| Revenues Over (Under) Expenditures | (3,600) | | (3,600) | (3,100) |
| | | | | |
| Beginning Fund Balance | (1,771,491) | | (1,770,811) | (1,770,811) |
| | | | | |
| Ending Fund Balance | (1,775,091) | | (1,774,411) | (1,773,911) |

# Attachment 2

**PROPOSED MID-YEAR BUDGET AMENDMENTS**
**FISCAL YEAR 2015 - 2016**

| GENERAL FUND | Account Number | Change in Revenues | Change in Expenditures |
|---|---|---|---|
| Grant Program Revenues | | | |
| Increase due to a one-time tree planting & SCE grants | 100-4611 | 210,000 | |
| SA Repayment of RDA loans | | | |
| Increase due to first repayment of RDA loans back to City | 100-5011 | 1,309,000 | |
| Reimbursements - Gas Tax | | | |
| Decrease admin reimbursement per reduced project expenses | 100-5102 | -100,000 | |
| Transfer In Other | | | |
| Increase due to carryover of ATP funds from 14/15 (delayed pr | 100-6911 | 155,000 | |
| City Manager | | | |
| Decrease due to no Election Service costs | 1010-7651 | | -24,000 |
| Legal Services | | | |
| Increase due to additional NPDES & COH legal costs | 1015-7686 | | 30,000 |
| Community Promotions | | | |
| Increase for Special Olympics expenses | 1020-7716 | | 7,000 |
| Increase for Active Net Online Class Registration software | 1020-7722 | | 16,000 |
| Increase for City share of COH garden | 1020-7980 | | 3,000 |
| Public Safety | | | |
| Increase for new parking ticket company | 1205-7761 | | 3,000 |
| Increase for additional CalGrip spending | 1205-7980 | | 10,000 |
| Community Development | | | |
| Decrease in salary due to vacancy | 1405-7002 | | -90,000 |
| Decrease in Part Time due to elimination of Intern position | 1405-7003 | | -15,000 |
| Decrease in health insurance costs due to vacant position | 1405-7071 | | -30,000 |
| Increase for Kosmont, RSG and Soranelli Consulting Contracts | 1405-7965 | | 60,000 |
| Increase for Pops Rd demo, Vineyard light, banner brackets & Li | 1405-7980 | | 30,000 |
| Field Services | | | |
| Increase to spend all tree grant funds by June 2016 | 1410-7896 | | 60,000 |
| Increase for Pops Rd pkg lot landscape | 1410-7980 | | 5,000 |
| Sports Park | | | |
| Increase for repairs to Otis Gordon field lights | 1415-7875 | | 5,000 |
| Park and Recreation | | | |
| Decrease to move Trail worker salaries to Facilities Division | 1605-7003 | | -15,000 |
| Decrease to move Trail supply costs to Facilities Division | 1605-7713 | | -10,000 |
| Decrease due to reduce Promise Fellow staffing | 1605-7728 | | -10,000 |
| Facilities | | | |
| Increase to move Trail worker salaries to Facilities Division | 1610-7003 | | 15,000 |

| | | | |
|---|---|---|---|
| Increase AC maintenance, TC alarms, SCtr chairs, Comm Ctr stor | 1610-7652 | | 33,000 |
| Increase for treadmill, Gen Fund pool cost, SCE funded parks pr | 1610-8100 | | 304,000 |
| General Services | | | |
| Increase Admin Support of Succ Agency | 1825-7782 | | 15,000 |
| Transfers Out | | | |
| Increase transfers to Comm Imp Fund for ATP project | 1905-9056 | | 155,000 |
| **Total General Fund Midyear Budget Change** | | **1,574,000** | **557,000** |
| **GENERAL FUND NET CHANGE** | **1,017,000** | | |
| **PARK DEVELOPMENT FUND** | | | |
| Increase grant revenues for pool project | 400-4611 | 241,000 | |
| Increase for Prof Svc for pool project | 4005-7965 | | 20,000 |
| Increase for Capital Imp for pool project | 4005-8100 | | 221,000 |
| | | **241,000** | **241,000** |
| **PARK DEVELOPMENT FUND NET CHANGE** | **0** | | |
| **PROPOSITION A FUND** | | | |
| Increase for final enhancement pmt to Gold Line Authority | 4408-8100 | | 65,000 |
| Increase for ATP match delayed from 14/15 | 4425-7965 | | 10,000 |
| | | **0** | **75,000** |
| **PROP A FUND NET CHANGE** | **-75,000** | | |
| **COMMUNITY IMPROVEMENT FUND** | | | |
| Increase in order to receive delayed 14/15 ATP grant | 620-4611 | 155,000 | |
| Increase in order to receive General Funds advance for ATP gra | 620-6901 | 155,000 | |
| Decrease in order to move budget to new account number | 6205-8100 | | -1,150,000 |
| Increase to pay delayed 14/15 ATP grant pro svc | 6225-7965 | | 148,000 |
| Increase to move budget to new account number | 6225-8100 | | 1,157,000 |
| Increase to transfer out to Gen Fund for ATP advance reimburse | 6205-9040 | | 155,000 |
| | | **310,000** | **310,000** |
| **COMMUNITY IMPROVEMENT FUND NET CHANGE** | **0** | | |

# Attachment 3

## One Time Capital Projects

### Included in 2015/16 General Fund Budget

### Capital Repairs/Replacement/Projects

| | | | |
|---|---|---|---|
| Directional Signs (multi yr plan) | 10,000 | | |
| Community Ctr new Chairs | 8,500 | | |
| Royal Oaks Park Playground Rubberized Surfac | 23,000 | | |
| Hunt Dr Peak Hr Circulation study | 50,000 | | |
| iPads for City Council electronic agenda packet: | 3,500 | | |
| iPads for CMgr & Dept Heads electonic agenda ] | 3,500 | | |
| Preventative Grafitti Paint | 10,000 | | |
| lap top/projector for 5 Depts (checkout) | 6,000 | | |
| FS truck (8) | 47,000 | | |
| City Hall Pkg Lot LED lighting (pilot program) | 30,000 | | |
| PR truck (20) | 36,000 | | |
| PR pass van (100) replace 15 w/8 passenger | 33,000 | | |
| CM Car (33) replace with CNG | 0 | 33,000 | funded with AQMD funds |
| Catch Basin Improvements (npdes impr.) | 40,000 | | |

### Added to 2015/16 General Fund Budget

| | | | |
|---|---|---|---|
| Fitness Center Treadmill | 8,000 | | |
| Alysia Moore Park | 0 | 100,000 | funded with SCE grant funds |
| Pool Tile & Plastering & Deck Repair | 183,000 | 257,000 | funded with Park Development grant funds |
| Encanto & Duarte Park basketball & tennis cou | 0 | 15,000 | funded with SCE grant funds |

## MEMORANDUM

**TO:** City Council

**FROM:** Public Safety Commission

**DATE:** January 21, 2016

**SUBJECT:** Commission Organization

At the regular meeting of the Public Safety Commission held on Tuesday, January 19, 2016, the Commission organized as follows:

Chairperson – Carol Haynes
Vice Chairperson – Chris Frye

BCV

From: **Jack Ochoa** ochoa.jack@gmail.com
Subject: Re: Traffic Safety Commission - Resignation
Date: February 3, 2016 at 8:25 AM
To: Rafael Casillas, PE rcasillas@accessduarte.com
Cc: Nohemi Hernandez hernandezn@accessduarte.com, Craig Hensley chensley@accessduarte.com, Marla Akana akanam@accessduarte.com, Samuel Kang M. S. Mba sam@samuelkang.com

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Good morning Rafael,

Yes, it is with a heavy heart that I am resigning from the Duarte Traffic Safety Commission.

Please accept this email as my official resignation.

Please thank all the Staff and City Council Members for allowing me this opportunity to serve the City of Duarte.

I will remain an active member of the community and will continue to look out for the greater good of the residents of Los Angeles County.

Thank you again

Jack Ochoa
626-221-5476

**CITY COUNCIL**
**NOTICE OF PUBLIC HEARING**

NOTICE IS HEREBY GIVEN that pursuant to State Law, the City Council of the City of Duarte will hold a Public Hearing at 7:00 p.m., on Tuesday, February 9, 2016 in Council Chambers, 1600 Huntington Drive, Duarte, California, to consider the following:

**Municipal Code Amendment 15-05:** A City-initiated request to amend Article 3 ("Regulations Applicable to All Zones"), Chapter 19.40 ("Landscaping") of the Duarte Development Code in its entirety to revise regulations and add definitions, primarily related to water efficient landscaping, in compliance with new State requirements promulgated by Governor's Executive Order B-29-15.
On January 19, 2016, the Planning Commission approved Planning Commission Resolution 16-01 by a 4-1 vote, recommending the City Council adopt proposed Municipal Code Amendment 15-05.

This proposed municipal code amendment is exempt from review under the California Environmental Quality Act (CEQA) (California Public Resources Code Section 21000 et al), pursuant to State CEQA Guidelines Regulation 15307, which exempts actions taken by regulatory agencies, as authorized by State law, 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 Municipal Code Amendment is required by Governor's Executive Order B-19-25 and will result in the enhancement and protection of water resources in the City, and will not result in negative impact to the environment; therefore, it is exempt from the provisions of CEQA and no further environmental review is necessary.

Any interested party may appear in person, or by agent, and be heard. If this matter is challenged in Court, there will be a limit to only those issues that were raised at the Public Hearing described in this Notice, or in written correspondence delivered to the City Council at, or prior to, the Public Hearing. Written correspondence may be sent to Duarte City Hall, City Clerk's Office, at 1600 Huntington Drive, Duarte, CA 91010.

For further information regarding this application, please contact Jason Golding, City Planner in the Community Development Department, 1600 Huntington Drive, Duarte, CA., 91010, Monday through Thursday at (626) 357-7931, ext. 231, between the hours of 7:30 a.m. and 6:00 p.m.

Marla Akana
City Clerk

PUBLISH: Duartean - Saturday, January 30, 2016
POSTED: Duarte City Hall, Duarte Public Safety Office, Duarte Library - Thursday, January 28, 2016

Para información en Español, favor de llamar a City Hall de Duarte, (626) 357-7931.
**Published: Duartean jan 30, 2016 AD#762749**

# CITY COUNCIL STAFF REPORT

Date: February 9, 2016

To: Mayor and City Council

Location: City-wide

Project: **Municipal Code Amendment 15-05**; A City-initiated request to amend Article 3 ("Regulations Applicable to All Zones"), Chapter 19.40 ("Landscaping") of the Duarte Development Code in its entirety to revise regulations and add definitions, primarily related to water efficient landscaping, in compliance with new State requirements promulgated by Governor's Executive Order B-29-15.

## SUMMARY

Prompted by several years of drought, Governor Brown signed Executive Order B-29-15 on April 1, 2015. The executive order directed the State Department of Water Resources (DWR) to update the State's Model Water Efficient Landscape Ordinance (MWELO) through expedited regulation. DWR allowed municipalities the opportunity to adopt either the State's MWELO or to adopt their own ordinance, which must be as effective as the State Ordinance.

Municipal Code Amendment (MCA) 15-05 is being brought before the City Council to bring our current Landscape Chapter (DDC 19.40) into compliance with new State water efficient landscape regulations that became effective December 1, 2015 under Governor's Executive Order B-29-15. More specifically, Staff is recommending that the City Council amend, in its entirety, Chapter 19.40 (Landscaping) of the Duarte Development Code (DDC). As proposed, a majority of Chapter 19.40 was modified, primarily related to language associated with the new State water efficiency requirements. Other subchapters of Chapter 19.40, unrelated to water efficiency, were generally maintained as currently written. Another major modification to Chapter 19.40 was the removal of detailed submittal requirements, technical details and water calculations associated with compliance of the 2010 water efficiency requirements. These details were updated to meet the new 2015 DWR requirements and assembled into a new Water Efficient Landscape Ordinance Guidelines (Guidelines), which is a practical supplement to the Landscape Chapter. MCA 15-05 also contains language that allows the Planning Commission to adopt the Guidelines by a Planning Commission Resolution. As such, Staff presented the Commission with the Guidelines and asked that they adopt them, subject to approval of MCA 15-05 by the City Council.

## BACKGROUND

One of the first efforts made by the State to address water conservation occurred in 1992, when the State enacted the Water Conservation in Landscaping Act (AB 325), requiring the adoption of a water efficient landscape ordinance by cities and counties throughout the state. The City Council adopted Ordinance 697 in 1993, which created the City's first landscape chapter that addressed water

conservation efforts. An update of the State's original Model Water Efficient Landscape Ordinance was adopted as AB 1881, the Water in Conservation Act of 2006. The Act required DWR to update the Model Water Efficient Landscape Ordinance to achieve greater landscape water use efficiency, and for cities to adopt the updated Model Water Efficient Landscape Ordinance, no later than January 1, 2010. The City Council adopted Ordinance 822 in 2010, which included a revision to the Landscape Chapter and was part of the Comprehensive Zoning (Development) Code update, bringing the City into compliance with the State's water efficiency mandate.

With the drought conditions at emergency levels, Governor Brown, earlier this year, signed an Executive Order (B-29-15) directing: 1) DWR to update the original Model Water Efficient Landscape Ordinance of 2009; and 2) local agencies to update their local Landscape Ordinances by December 1, 2015, or by February 1, 2016 if working collaboratively with other jurisdictions to create a regional ordinance, so they are "at least as effective as" DWR's updated Model Ordinance. Although Duarte will not have a Landscape Ordinance adopted by February 1, the State's Model Water Efficient Landscape Ordinance will be in effect in the interim.

In response to this mandate, a stakeholder group was formed under the San Gabriel Valley Council of Governments Planning Director's Technical Advisory Committee. A number of San Gabriel Valley cities participated in this group and decided to use a MWELO being developed by the Municipal Water District of Orange County. The Orange County stakeholder group included representatives from Orange County, cities, local water agencies, Building Industries Association (BIA), irrigation consultants, landscape architects, and other industry professionals. The goal of the stakeholder group was to develop a locally-crafted update to Orange County's Model Water Efficient Landscape Ordinance. The group was charged with meeting the "at least as effective as" requirement, minimizing the complexity, streamlining compliance, and providing consistency between local jurisdictions. Using this baseline document, the City of San Dimas and Duarte partnered on the further development of the Ordinance and Guidelines to address particular issues and concerns related to our environment here in the San Gabriel Valley. The model Ordinance and Guidelines are complete, meet the requirements of DWR and have been reviewed extensively by the Orange County stakeholder group, the City of San Dimas and our Community Development Staff.

On January 19, 2016, a public hearing for MCA 15-05 was conducted before the Duarte Planning Commission. The Commission approved both PC Resolution 16-01 and 16-02, by a 4-1-0-0 vote, recommending City Council approval of MCA 15-05. PC Resolution 16-01 (Exhibit A) recommends City Council approval of an amendment to DDC Chapter 19.40 in its entirety. PC Resolution 16-02 (Exhibit B) provides authority for the Planning Commission to adopt the Water Efficient Landscape Guidelines, subject to City Council approval of the Model Water Efficient Landscape Ordinance (MCA 15-05).

## ANALYSIS

The current Landscape Ordinance (DDC Chapter 19.40) was organized to address many aspects of landscape regulation, including: landscape design standards for residential, non-residential, and hillside

properties; landscape and irrigation maintenance provisions; general landscape standards; modification processes; in addition to the 2009 State Water Efficient Landscape requirements (Exhibit C).

This has lead to a very cumbersome development code chapter that requires action by both the Planning Commission and City Council for every modification, including those changes that are more practical in nature, very detailed or technical, or may be subject to more frequent change by the State.

Staff has taken this current State mandate as an opportunity to reorganize the Landscape chapter. The proposed MCA places regulations and critical standards within Chapter 19.40 of the Development Code (Exhibit D) and separates the technical, procedural and submittal-based requirements into a separate Water Efficient Landscape Ordinance Guidelines (Exhibit E).

Code language related to many aspects of landscape regulation, including: landscape design standards for residential, non-residential, and hillside properties; landscape and irrigation maintenance provisions; general landscape standards; and modification processes have been maintained within the new Chapter. Additional modifications proposed for the new Chapter 19.40 include, but are not limited to: percentages of landscaping, artificial turf, hardscaping and live plants within visible yards; restrictions to use on artificial turf in limited locations; and maintenance provisions for artificial turf.

The Guidelines have also been augmented to incorporate forms, checklists and easy-to use guides to assist applicants in complying with the new requirements. In order to more quickly react to changes in water efficiency requirements, DWR regulations, and technical adjustments, Staff is recommending that the City Council approve the proposed Ordinance to allow the Planning Commission to adopt and amend the Guidelines through the use of a PC Resolution.

The following represent the major changes to the 2015-16 MWELO:

Project Size Applicability

New development projects that include landscape areas of 500 sq. ft. or more are subject to the Ordinance. This applies to residential, commercial, industrial and institutional projects that require a permit, plan check or design review. The previous landscape size threshold for new development projects ranged from 2500 sq. ft. to 5000 sq. ft. The size threshold for existing landscapes that are being rehabilitated has not changed, remaining at 2500 sq. ft. Only rehabilitated landscapes that are associated with a building or landscape permit, plan check, or design review are subject to the Ordinance.

To reduce the complexity and costs for the smaller landscapes now subject to ordinance, the revised MWELO has a prescriptive compliance approach for landscapes between 500 and 2500 sq. ft. Landscapes within this size range can comply either through meeting the traditional MWELO approach or through the prescriptive approach provided in the Guidelines. The size threshold for existing landscapes that are being rehabilitated has not changed, remaining at 2500 square feet.

More Efficient Irrigation Systems

- Dedicated landscape water meters or submeters are required for residential landscape areas over 5,000 s.f. and non-residential areas over 1,000 s.f. (This requirement brings the landscape ordinance into alignment with CalGreen requirements).

- All new irrigation systems will be required to have pressure regulators and master valves.

- Irrigation systems must be designed so that a precipitation rate of 1.0 inch per hour is not exceeded in any portion of the landscape area.

- Flow sensors are required that detect and report high flow conditions due to broken pipes and/or popped sprinkler heads.

- Increased the minimum width of turf from eight (8) feet to ten (10) feet that can be irrigated with overhead irrigation (sprinklers). Areas of turf below this threshold must provide irrigation with a subsurface drip or other technology that produces no overspray or runoff. There are limited exceptions where turf strips can be irrigated with overhead irrigation, subject to provisions listed in the Guidelines.

Limiting the Portion of Landscapes that can be Planted with High Water Use Plants (Water Budgets)
The maximum amount of water that can be applied to a landscape is reduced 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. For residential projects, the coverage of high water use plants is reduced from 33% to 25% of the landscaped area. In nonresidential landscapes, planting with high water use is limited to special landscape areas. However, unchanged in the Ordinance is the extra water allowance made for non-residential areas when used for specific functional areas, such as recreation and edible gardens. Extra water allowance is also made for landscapes irrigated with recycled water, as was the case in the previous ordinance.

MWELO continues to use a water budget approach where areas of high water use plants can be installed if the water use is reduced in other areas provided the overall landscape stays within budget. This budget approach is carried out though irrigation efficiency calculations to estimate total water use by hydrozone. Worksheets for water allowances and estimated water use have combined into tables provided in the Guidelines.

The revised ordinance also precludes the use of high water use plants in street median strips. Also because of the requirement to irrigate areas less than ten feet wide with subsurface irrigation or other

means that produces no runoff or overspray, except in limited circumstances, the use of cool season turf in parkways is limited.

Incentives for Graywater Usage

Landscapes under 2500 sq. ft. that are irrigated entirely with graywater or captured rainwater are subject only to the irrigation system requirements provided in the Prescriptive Compliance Option. Any graywater system shall also comply with the California Plumbing Code and any applicable local ordinances.

On-Site Stormwater Capture

All applicable landscape areas are required to have friable soil to maximize water retention and infiltration. Friable soil is required in planted areas to maximize water retention and infiltration. Friable soil is a soil condition that is easily crumbled or loosely compacted down to a minimum depth per planting requirement, whereby the root structure of newly planted material will be allowed to spread unimpeded. Four yards of compost per 1000 sq. ft. of area must be incorporated. Other recommended measures for increasing onsite stormwater retention are listed in the Guidelines.

Reporting Requirements

All local agencies are required to report on the implementation and enforcement of their ordinances to DWR by December 31, 2015. Staff provided a report to DWR on December 29, 2015, detailing the progress being made to implement the new MWELO changes. Local agencies developing a regional ordinance, such as Duarte, will report on their adopted regional ordinance by March 1, 2016. Reporting for all agencies will be due by January 31st of each year thereafter.

Definition Changes

Several new words have been included and defined that will enhance understanding of the changes to the ordinance, including, but not limited to, Certificate of Completion, Effective Precipitation, Flow Rate, Flow Sensor, Friable, Graywater, Landscape Contractor, Landscape Water Meter, Recreational Area, Soil Moisture Sensing Device, and Submeter.

The proposed ordinance combines all landscape, irrigation and water efficiency definitions, from both the 2009 and 2015 MWELO, into subchapter 19.40.020. The words defined in this subchapter will be consistent with the definitions contained in the Guidelines.

## CONCLUSION

The Duarte Landscape Ordinance and associated Guidelines have been developed to reorganize the most important standards and regulations for inclusion in DDC Chapter 19.40, while providing more technical details, submittal requirements, water budgets, worksheets and guides within the Guidelines. By working collaboratively with the City of San Dimas using the Orange County Model, in addition to crafting specific guidelines and regulations unique to our community, we have developed a custom set of regulations that maintains some degree of local control. Like the current ordinance, this proposed

update retains the "self-certification" process allowing a design professional preparing an applicant's plans to "certifies" compliance with the necessary standards, similar to a professional engineer's certification of structural construction plans. The new Ordinance reduces the threshold to 500 square feet for new residential landscapes but retains the existing threshold for landscape rehabilitation projects of 2,500 square feet, only when a permit, plan check or design review process is required. Finally, adoption of the revised Water Efficient Landscape Ordinance ensures the City is compliant with the state mandate, meets the "at least as effective" test and provides additional resources for applicants and staff in implementing the new efficiency requirements.

## RECOMMENDATION

The adoption of MCA 15-05 will bring the City into compliance with Governor's Executive Order B-29-15 and meet DWR's "at least as effective" test working collaboratively with other jurisdictions to create a regional ordinance; and provide additional resources, through the Guidelines, for applicants and staff in implementing the new landscape efficiency requirements.

Staff recommends that City Council hold a public hearing, and review, consider and approve the proposed **Municipal Code Amendment 15-05** (Exhibit F, Ordinance 16-O-02); to: (1) amend Article 3 ("Regulations Applicable to All Zones"), Chapter 19.40 ("Landscaping") of the Duarte Development Code in its entirety to revise regulations and add definitions, primarily related to water efficient landscaping, in compliance with new State requirements promulgated by Governor's Executive Order B-29-15; and (2) allow the Planning Commission to adopt and amend the Guidelines, from time to time, through the use of a PC Resolution.

Respectfully Submitted,

Jason Golding
City Planner

## ATTACHMENTS

Exhibit A – PC Resolution 16-01
Exhibit B – PC Resolution 16-02
Exhibit C – Current Landscaping Chapter (DDC 19.40)
Exhibit D – Proposed Landscaping Chapter (DDC 19.40)
Exhibit E – Water Efficient Landscape Ordinance Guidelines
Exhibit F – Ordinance 16-O-02

**RESOLUTION NO. PC 16-01**

**A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF DUARTE, RECOMMENDING THE DUARTE CITY COUNCIL ADOPT MUNICIPAL CODE AMENDMENT (MCA) 15-05 WHICH WOULD AMEND CHAPTER 19.40 (LANDSCAPING) OF THE DUARTE DEVELOPMENT CODE IN ITS ENTIRETY TO REVISE REGULATIONS PRIMARILY RELATED TO WATER EFFICIENT LANDSCAPING, IN COMPLIANCE WITH NEW STATE REQUIREMENTS**

WHEREAS, in 1992, the State Legislature enacted the Water Conservation in Landscaping Act (AB 325) requiring cities adopt a water efficient landscape ordinance;

WHEREAS, the Duarte City Council adopted Ordinance 697 in 1993, which created the City's first landscape chapter that addressed water conservation efforts and incorporated the State's initial Model Water Efficient Landscape Ordinance developed by the Department of Water Resources (DWR); and

WHEREAS, the Water in Conservation Act of 2006 (AB 1881) required DWR to update the Model Water Efficient Landscape Ordinance to achieve greater landscape water use efficiency, and for cities to adopt the updated Model Water Efficient Landscape Ordinance, no later than January 1, 2010; and

WHEREAS, the Duarte City Council adopted Ordinance 822 on November 23, 2010, a comprehensive revision to the City's Zoning Code, now known as the Duarte Development Code, which revised the City's Landscape Chapter and incorporated DWR's updated Model Water Efficient Landscape Ordinance.

WHEREAS, Governor Brown issued a Drought Executive Order (B-29-2015) on April 1, 2015, directing DWR to update the State's Model Water Efficient Landscape Ordinance, to increase water efficiency standards for new and existing landscape through more efficient irrigation systems, graywater usage, onsite stormwater capture and by limiting the portion of landscaping that can be covered in turf; and

WHEREAS, on September 9, 2015, the California Water Commission adopted revisions to the California Code of Regulations Title 23, Division 2, Chapter 2.7, Model Water Efficient Landscape Ordinance; and

WHEREAS, provisions of the Model Water Efficient Landscape Ordinance require municipalities to adopt a local ordinance being at least as effective as the State's Model Ordinance by January 1, 2016 or February 1, 2016 when adopting a regional ordinance, or otherwise the State's Model Water Efficient Landscape Ordinance becomes effective until a municipality adopts a local ordinance being as least as effective as the State's; and

WHEREAS, the Municipal Water District of Orange County, Orange County, Orange County cities and local water agencies, Building Industries Association (BIA), irrigation consultants, landscape architects, and other industry professionals formed as a group of stakeholders to update the Orange County Model Ordinance to be at least as efficient as the DWR updated Model Water Efficient Landscape Ordinance; and

WHEREAS, the San Gabriel Valley Council of Governments organized a San Gabriel Valley Cities working group to craft a regional Model Water Efficient Landscape Ordinance, which utilized Orange County's Ordinance as a model for implementation, which was thereafter augmented by local San Gabriel Valley cities to address geographical, topographical, and local conditions unique to each community; and

WHEREAS, consistent with these findings, the purpose of the Orange County Model Water Efficient Landscape Ordinance, the San Gabriel Valley Council of Governments Model Water Efficient Landscape Ordinance and City of Duarte Model Water Efficient Landscape Ordinance is to establish an alternative model acceptable under Governor Brown's Executive Order (B-29-2015) as being at least as effective as the State's DWR Model Water Efficient Landscape Ordinance; and

WHEREAS, other landscape regulations, not pertaining directly to the Model Water Efficient Landscape Ordinance, are amended from time to time based upon past experience with landscape projects, changes in the industry and corrections from previous standards and regulations; and

WHEREAS, the Planning Commission of the City of Duarte conducted a duly-noticed public hearing on January 19, 2016, pursuant to Development Code Section 19.142.040 to consider MCA 15-05, a city initiated request to amend Chapter 19.40 (Landscaping) of the Duarte Development Code in its entirety to revise regulations, primarily related to water efficient landscaping, in compliance with new State requirements promulgated by Governor's Executive Order B-29-15; and

WHEREAS, notice of a public hearing on the MCA 15-05 was given pursuant to Duarte Development Code Chapter 19.146 and in accordance with applicable State law; and

WHEREAS, the Planning Commission received and considered the analysis and recommendation provided in the staff report for the MCA 15-05, and all of the information, evidence, and testimony received at the public hearing held on January 19, 2016 at 7:00 p.m. in the City Council Chambers; and

WHEREAS, after careful study and the holding of a duly noticed public hearing, the Planning Commission recommends the City Council adopt and approve Municipal Code Amendment 15-05.

**NOW, THEREFORE, THE PLANNING COMMISSION OF THE CITY OF DUARTE RESOLVES AS FOLLOWS:**

**SECTION 1. RECITALS**

All of the facts set forth in the Recitals of this Resolution are true and correct and incorporated herein by this reference.

**SECTION 2. CEQA DETERMINATION**

Pursuant to provisions of the California Environmental Quality Act (CEQA), the amendment to Duarte Development Code Chapter 19.40 to revise regulations, primarily related to water efficient landscaping, in compliance with new State requirements promulgated by Governor's Executive Order B-29-15 are categorically exempt under Section 15307 which exempts actions taken by regulatory agencies, as authorized by State law, to assure the maintenance, restoration, enhancement, or protection of a natural resource where the regulatory process involves procedures for protection of the environment.

The Planning Commission finds that the adoption of this Municipal Code Amendment is required by Governor's Executive Order B-19-25 and will result in the enhancement and protection of water resources in the City, and will not result in negative impact to the environment; therefore, it is exempt from the provisions of CEQA and no further environmental review is necessary.

**SECTION 3. FINDINGS FOR DEVELOPMENT CODE AMENDMENTS**

The Planning Commission of the City of Duarte makes the following findings:

(1) The proposed amendments to the Development Code are consistent with the General Plan and any applicable specific plan.

(A) Conservation Element Goal 2 and all related policies under said goal, to protect and maintain the local water supply to ensure that the City's growing demand for water can be met.

(B) Conservation Element Goal 3, Objective 3.1, to keep current on environmental legislation to protect Duarte's environment.

(C) Safety Element Goal 1, Policy 5.1.2, to support programs to reduce fire hazards of vegetation in areas of extreme to high fire risk.

(2) The proposed amendments to the Development Code will not be detrimental to the public interest, health, safety, convenience, or welfare of

the City for each of the following reasons:

(A) The amended Chapter 19.40 will provide measures that conserve water for the City and State. DWR estimates that a typical California landscape will use 12,000 gallons less a year, or 20% less than allowed by the 2009 Ordinance.

(B) Regulations have been added to address migrant dust, such as requirements to cover bare dirt.

(C) Provisions will continue to require substantial landscaping, recommended primarily as drought-tolerant landscaping, which will provide added air quality benefits and improve the aesthetic quality of our community.

(D) Definitions modified through MCA 15-05 will provide updated and comprehensive language that explains and familiarizes applicants with the terms used related to landscaping and water efficiency.

(3) The proposed amendments to the Development Code are internally consistent with other applicable provisions of this Development Code.

(A) The proposed amendments to Chapter 19.40 will provide continued internal consistency in the Development Code with other Chapters, including but not limited to Chapter 19.46 (Hillside Development Standards), and Chapter 19.52 (Sustainable Development Practices).

(B) The proposed definitions added to Chapter 19.40.020 related to landscaping will ensure continued clarity and consistency in the Development code.

**SECTION 4. RECOMMENDATION**

The Planning Commission approves this Resolution and recommends the City Council of the City of Duarte adopt MCA 15-05, which would amend Chapter 19.40 (Landscaping) of the Duarte Development Code in its entirety to revise regulations, primarily related to water efficient landscaping, in compliance with new State requirements promulgated by Governor's Executive Order B-29-15. The proposed language of Chapter 19.40 is depicted on the exhibit attached hereto and made a part of this resolution by reference marked "Exhibit A" *(as shown on Exhibit D for purposes of the 2/9/2016 CC meeting)* for identification.

Sheryl Lefmann, Chairperson
City of Duarte Planning Commission

ATTEST:

Craig Hensley, Community Development Director

CITY OF DUARTE
COUNTY OF LOS ANGELES } ss.
STATE OF CALIFORNIA

I, Craig Hensley, Secretary of the Planning Commission of the City of Duarte, do hereby certify that the foregoing Resolution was adopted at a regular meeting of the Planning Commission of the City of Duarte held on January 19, 2016, by the following vote:

AYES:
NOES:
ABSTAIN:
ABSENT:

Craig Hensley

**RESOLUTION NO. PC 16-02**

**A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF DUARTE, ADOPTING THE WATER EFFICIENT LANDSCAPE ORDINANCE GUIDELINES, SUBJECT TO CITY COUNCIL APPROVAL OF MUNICIPAL CODE AMENDMENT 15-05**

WHEREAS, Governor Brown issued a Drought Executive Order (B-29-2015) on April 1, 2015, directing DWR to update the State's Model Water Efficient Landscape Ordinance, to increase water efficiency standards for new and existing landscape through more efficient irrigation systems, graywater usage, onsite stormwater capture and by limiting the portion of landscaping that can be covered in turf; and

WHEREAS, the City of Duarte Model Water Efficient Landscape Ordinance is designed to establish an alternative model acceptable under Governor Brown's Executive Order (B-29-2015) as being at least as effective as the State's DWR Model Water Efficient Landscape Ordinance; and

WHEREAS, Municipal Code Amendment (MCA) 15-05 proposes to separate technical, procedural and submittal-based requirements into a separate Water Efficient Landscape Ordinance Guidelines, rather than being placed directly within the Landscape Chapter (Duarte Development Code Ch. 19.40). The Guidelines have also been organized to incorporate forms, checklists and easy-to use guides to assist applicants in complying with the new requirements; and

WHEREAS, the Planning Commission of the City of Duarte conducted a duly-noticed public hearing on January 19, 2016, pursuant to Development Code Section 19.142.040 to consider MCA 15-05, a city initiated request to amend Chapter 19.40 (Landscaping) of the Duarte Development Code in its entirety to revise regulations, primarily related to water efficient landscaping, in compliance with new State requirements promulgated by Governor's Executive Order B-29-15; and

WHEREAS, notice of a public hearing on the MCA 15-05 was given pursuant to Duarte Development Code Chapter 19.146 and in accordance with applicable State law; and

WHEREAS, the Planning Commission received and considered the analysis and recommendation provided in the staff report for the MCA 15-05, and all of the information, evidence, and testimony received at the public hearing held on January 19, 2016 at 7:00 p.m. in the City Council Chambers; and

WHEREAS, after careful study and the holding of a duly noticed public hearing, the Planning Commission recommended the City Council adopt and approve Municipal Code Amendment 15-05; and

WHEREAS, Chapter 19.40.030 of the proposed revisions to the landscape ordinance (MCA 15-05) provides authority for the Planning Commission to adopt Water Efficient Landscape Guidelines, subject to City Council approval of the Model Water Efficient Landscape Ordinance; and

WHEREAS, Upon City Council approval of the Model Water Efficient Landscape Ordinance associated with MCA 15-05, and 30 days for the Ordinance to become effective, the Planning Commission shall have the authority to adopt Water Efficient Landscape Guidelines.

**NOW, THEREFORE, THE PLANNING COMMISSION OF THE CITY OF DUARTE RESOLVES AS FOLLOWS:**

**SECTION 1. RECITALS**

All of the facts set forth in the Recitals of this Resolution are true and correct and incorporated herein by this reference.

**SECTION 2. CEQA DETERMINATION**

Pursuant to provisions of the California Environmental Quality Act (CEQA), the amendment to Duarte Development Code Chapter 19.40 to revise regulations, primarily related to water efficient landscaping, in compliance with new State requirements promulgated by Governor's Executive Order B-29-15, and the associated Water Efficient Landscape Guidelines are categorically exempt under Section 15307 which exempts actions taken by regulatory agencies, as authorized by State law, to assure the maintenance, restoration, enhancement, or protection of a natural resource where the regulatory process involves procedures for protection of the environment.

The Planning Commission finds that the adoption of Water Efficient Landscape Guidelines is required by Governor's Executive Order B-19-25 and will result in the enhancement and protection of water resources in the City, and will not result in negative impact to the environment; therefore, it is exempt from the provisions of CEQA and no further environmental review is necessary.

**SECTION 3. RECOMMENDATION**

The Planning Commission approves this Resolution, which adopts Water Efficient Landscape Ordinance Guidelines, subject to City Council approval of Municipal Code Amendment 15-05.

The proposed Water Efficient Landscape Ordinance Guidelines are depicted on the exhibit attached hereto and made a part of this resolution by reference marked "Exhibit A" for identification.

APPROVED, AND ADOPTED by the Planning Commission of the City of Duarte at a regular meeting held on the 19th day of January 2016.

_____
Sheryl Lefmann, Chairperson
City of Duarte Planning Commission

ATTEST:

_____
Craig Hensley, Community Development Director

CITY OF DUARTE
COUNTY OF LOS ANGELES } ss.
STATE OF CALIFORNIA

I, Craig Hensley, Secretary of the Planning Commission of the City of Duarte, do hereby certify that the foregoing Resolution was adopted at a regular meeting of the Planning Commission of the City of Duarte held on January 19, 2016, by the following vote:

AYES:
NOES:
ABSTAIN:
ABSENT:

_____
Craig Hensley

Chapter 19.40 - LANDSCAPING

Sections:



**19.40.010 - Purpose and applicability.**

A. *Purpose.* The City promotes the value and benefits of landscapes while recognizing the need to invest water and other resources as efficiently as possible. In compliance with applicable State standards and guidelines, and to promote the City's goals and standards regarding sustainable development set forth in Chapter 19.52 (Sustainable Development Practices), this Chapter establishes minimum landscape standards for all uses for the purpose of enhancing the appearance of developments, reducing heat and glare, controlling soil erosion, conserving water, establishing a buffer and/or screen between residential and nonresidential land uses, and ensuring the ongoing maintenance of landscape areas. Water conservation measures shall be addressed through landscape and irrigation design.

B. *Applicability.* The provisions of this Chapter shall apply to all of the following landscape projects:

1. New construction and rehabilitated landscapes for public agency projects and nonresidential private development projects with a landscape area equal to or greater than 2,500 square feet, and requiring a building, plumbing, or landscape permit, plan check, or site plan and design review.

2. New construction and rehabilitated landscapes which are developer-installed in single-family and multi-family residential projects with a landscape area equal to or greater than 2,500 square feet,

and requiring a building, plumbing, or landscape permit, plan check, or site plan and design review.

3. New construction landscapes which are homeowner-provided and/or homeowner-hired in single-family and multi-family residential projects with a total project landscape area equal to or greater than 5,000 square feet, and requiring a building, plumbing, or landscape permit, plan check, or site plan and design review.

C. *Exempt activities.* The provisions of this Chapter do not apply to:

1. Registered local, State, or federal historical sites.

2. Ecological restoration projects that do not require a permanent irrigation system.

3. Mined-land reclamation projects that do not require a permanent irrigation system.

4. Plant collections as part of botanical gardens and arboretums open to the public.

D. *Relationship to private covenants.* The architectural guidelines of a common interest development, which includes 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.

**19.40.020 - General landscape standards.**

These standards shall apply to all parcels within the City.

A. A Landscape Design Manual and a Design Guidelines Manual, adopted by resolution of the City Council, shall together establish criteria for the design and review of landscape and irrigation plans, and such criteria shall be adhered to in the design of landscape and irrigation plans.

B. Trees may be planted in any required yard area. All required trees shall be of a minimum size of 15 gallons, unless a larger size is specified in project conditions of approval. In limited cases, smaller tree sizes may be approved if the Director determines that long-term tree growth potential is improved by smaller specimens.

C. Landscaping shall be maintained in the area between the front property line and the dwelling, building, or structure. In all zones except the R-1 zones (inclusive), a permanent irrigation system shall also be maintained in the same front-yard area.

D. Landscape planting shall emphasize drought-tolerant and native species, complement the architectural design of structures on the site, and be suitable for the soil and climatic conditions of the site. Consistent with the purposes of California Government Code Section 65591 (Water Conservation in Landscaping Act), all new and rehabilitated landscape projects shall comply with the following water-conserving landscape requirements.

1. To the greatest extent possible, landscape material shall consist of drought-tolerant plants. Low-water-use plants shall be used in at least 50 percent of the total planted area. Plant material selected shall be suitable for the given soil and climate conditions. Plant selection shall take into consideration water conservation through appropriate use and groupings of plants that are well adapted to particular sites and to particular watering needs, climatic, geological, and

topographical conditions.

2. The maximum area permitted for turf shall be 50 percent of the total landscaped area on the site. Higher percentages may be permitted when sod is an essential part of the development such as playing fields for schools or parks and residential model units. Turf usage shall only be permitted for highly visual and functional use areas. Turf shall not be permitted in areas difficult to irrigate, such as sidewalk strips, slopes over 15 percent, or narrow pathways.

3. Where decorative water features such as pools, ponds, and waterfalls are used in landscaped areas, such features shall incorporate recycling of water and where available, use of reclaimed water. Decorative water features shall be designed to minimize water loss.

E. Transformers shall be screened with dense landscaping or walls similar to those required for trash enclosures, and shall not be located within open space recreation areas. They shall be located away from public view wherever possible and shall not impede pedestrian or vehicular circulation. Where feasible, transformers should be placed underground.

**19.40.030 - Landscape of unused and undeveloped portions of a site.**

All areas of a site not intended for a specific use or purpose in conjunction with a current application, including vacant or undeveloped pad sites in shopping centers held for future development, shall be fully landscaped and irrigated with an automatic irrigation system. Landscaping shall include a combination of trees, shrubs, ground cover, turf, and/or approved decorative landscape materials, as approved by the Director.

**19.40.040 - Residential landscape standards.**

The following standards shall apply to all parcels in all residential zones.

A. A minimum of 20 percent of the entire parcel shall be fully landscaped with plant materials.

B. A minimum of 50 percent of the front yard area between the street and dwelling unit shall be f ully landscaped.

C. A minimum of 50 percent of the street side yard areas between the street and dwelling unit shall be fully landscaped.

D. Parking lots for multi-family developments providing 10 or more parking spaces shall be landscaped per the requirements of Section 19.38.200 (Parking Lot Landscaping).

**19.40.050 - Nonresidential landscape standards.**

All new and rehabilitated landscaping plans undertaken in conjunction with any private development project on commercial, industrial, mixed-use, and other nonresidential properties, or those projects requiring a grading, building, use permit, or site plan and design review shall comply with the following standards.

A. All unpaved areas, including those portions of required yard areas not utilized for vehicular and pedestrian access, shall be landscaped with plant material, including some combination of trees, shrubs, groundcover, and turf. Mulch, bark, and similar landscaping materials may be incorporated into the landscape design.

B. A minimum of 15 percent of the parcel area shall be landscaped, exclusive of the parking lot area and any landscaping required within the parking lot.

C. All landscaped areas shall be provided with an automatic irrigation system, unless the Director finds that such an irrigation system, due to the size, location, or configuration of the landscaped area, cannot reasonably be installed and maintained.

D. To achieve an immediate effect of a landscape installation and to allow sustained growth of planting materials, plant material sizes and plant spacing shall comply with the following standards, unless the Director finds that alternative sizes and planting will achieve the same or similar desired effects:

1. The minimum plant size for trees shall be 15 gallons, unless otherwise specified by the provisions of this Chapter. Trees planted within 10 feet of a street, sidewalk, paved trail, or walkway shall be a deep-rooted species or shall be separated from paved surfaces by a root barrier to prevent physical damage to public improvements. A minimum distance of 15 feet is required between the center of trees to street light standards, water meters, back-flow prevention systems, sewer cleanouts, and fire hydrants.

2. The minimum plant size for shrubs shall be five gallons.

3. Groundcover, including turf, shall be planted in a manner to provide 100 percent coverage within one year of initial planting.

E. Lots with freeway frontage shall provide and maintain freeway frontage landscaping.

F. Parking lot landscaping shall be provided per the requirements of Section 19.38.180 (Parking Lot Landscaping).

**19.40.060 - Hillside landscaping standards.**

Landscaping standards for properties in hillside areas, as defined in Chapter 19.46 (Hillside Development Standards), in addition to the standards in this Chapter, shall comply with the standards set forth in 19.46.120 (Landscaping and Irrigation Standards).

**19.40.070 - Landscape plan approval required.**

A. *Required landscape plan.* Except as otherwise specified in this Section, any application for any development that requires a grading permit, building permit, use permit, or site plan and design review shall include landscape and irrigation plans which provide for the utilization of low-water-usage irrigation systems and a landscape design consistent with the requirements of this Chapter. The plans shall be prepared by a licensed landscape architect.

B. *Review required.* The plan shall contain the information described in Section 19.40.080 (Elements of a Landscape Documentation Package) and shall be subject to review and approval by the Director for compliance with the landscape design criteria contained in this Chapter. The review process represents the basis for approval or denial of a landscape design proposal. No grading, building, use permit, or site plan and design approval can be issued until a project has received approval from the Director.

C. *Full construction drawings required.* Following the granting of all required planning and subdivision

approvals, full construction drawings shall be submitted to the Building Division for plan check approval. Drawings submitted for plan check shall include the entire Landscape Documentation Package described in Section 19.40.080, including the approved Preliminary Landscape Design Plan. The Landscape Design Plan shall be in substantial conformity with the approved Preliminary Landscape Design Plan prior to issuance of building permits.

**19.40.080 - Elements of a landscape documentation package.**

A Landscape Documentation Package shall be provided to include the elements listed in this Section or as provided in the Landscape and Irrigation Design Manual.

A. *Project information.*

1. Date.
2. Project applicant.
3. Project address (if available, parcel and/or lot number(s)).
4. Total landscape area (square feet).
5. Project type (e.g., new, rehabilitated, public, private, cemetery, homeowner-installed).
6. Water supply type (e.g., potable, recycled, well) and identify the local water purveyor.
7. Checklist of all documents in Landscape Documentation Package.
8. Project contacts to include contact information for the project applicant and property owner.
9. 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."

B. *Water efficient landscape worksheet.*

1. Hydrozone information table.
2. Water budget calculations, including Maximum Applied Water Allowance (MAWA) and Estimated Total Water Use (ETWU).

C. *Other requirements.* Also included shall be a soil management plan, landscape design plan, irrigation design plan, and grading design plan.

**19.40.090 - Preliminary landscape and irrigation design plan.**

A. *Landscape details required.* A Preliminary Landscape Design Plan shall be required and shall specify the items detailed below. Special design attributes may require detail drawings and/or the submittal of manufacturer's literature.

1. Locate and identify all landscape planting material, including trees, shrubs, groundcover, and turf. Planting symbols shall be clearly drawn. Tree staking, plant installation, soil preparation details, and

any other applicable planting and installation details shall be provided

2. Reference planting symbols, specifying botanical name, common name, container size, spacing, and quantities.

3. Locate all existing mature trees, noting biological name, common name, and approximate trunk size, measured at four feet above existing grade. Note trees to be removed, relocated on-site, or maintained in place.

4. Express variation in water need. Designate hydrozones as low, moderate or high water usage. Temporarily irrigated areas of the landscape shall be included in the low water use hydrozone for the water budget calculation. Delineate and label each hydrozone by number, letter, or other method.

5. Locate and identify all paving and hardscape material.

6. Locate and identify the height of all walls, fences, and gates.

7. Locate and identify all outdoor amenity features, including but not limited to pools, spas, various water features, trellises, gazebos, play equipment, picnic tables, and benches.

8. Locate property lines, streets, street names, driveways, walkways, and other paved areas.

9. Locate existing and proposed buildings and structures, including pad elevations, if applicable.

10. Identify natural features including but not limited to rock outcroppings, existing trees, shrubs that will remain.

11. Provide a calculation of the total landscaped area and percentage of turf area.

12. Designate recreational areas.

13. Identify areas permanently and solely dedicated to edible plants.

14. Identify areas irrigated with recycled water.

15. Identify type of mulch and application depth.

16. Identify soil amendments, type, and quantity.

17. Identify location and installation details of any applicable stormwater Best Management Practices that encourage on-site retention and infiltration of stormwater. Stormwater best management practices are encouraged in the landscape design plan and examples include, but are not limited to:

    a. Infiltration beds, swales, and basins that allow water to collect and soak into the ground.

    b. Constructed wetlands and retention ponds that retain water, handle excess flow, and filter pollutants.

    c. Pervious or porous surfaces (e.g., permeable pavers or blocks, pervious or porous concrete, etc.) that minimize runoff.

18. Identify any applicable rain harvesting or catchment technologies (e.g., rain gardens, cisterns, etc.).

19. 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."

20. 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.)

B. *Irrigation plan content.* The irrigation plan shall be drawn on project base sheets. It shall be separate from but use the same format and scale as the landscape plan. The irrigation plan shall accurately and clearly identify the following:

1. Location and size of separate water meters for the landscape.

2. Location, type and size of all components of the irrigation system, including but not limited to automatic controllers, main and lateral lines, valves, sprinkler heads, moisture-sensing devices, rain switches, quick couplers 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 hours), and design operating pressure (psi) for each station.

5. Estimated annual water use expressed in inches per square foot of landscaped area per year.

6. Identification of self-adjusting controllers and moisture sensors to be used that conform to performance standards and labeling requirements established by the State Department of Water Resources.

**19.40.100 - Landscape design requirements.**

A. *General.* 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.

B. *Plant material.*

1. 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. To encourage the efficient use of water, the following are highly recommended:

a. Protection and preservation of native species and natural vegetation.

b. Selection of water-conserving plant and turf species.

c. Selection of plants based on disease and pest resistance.

d. Selection of native and native-compatible plants.

e. Use of plants suggested in the City's Landscape and Irrigation Design Manual.

2. Each hydrozone shall have plant materials with similar water use, with the exception of hydrozones with plants of mixed water use.

3. Plants shall be selected and planted appropriately based upon their adaptability to the climatic, geologic, and topographical conditions of the project site. To encourage the efficient use of water, the following are highly recommended:

   a. 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.

   b. 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).

   c. Consider the solar orientation for plant placement to maximize summer shade and winter solar gain.

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

5. 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.

6. The use of invasive and/or noxious plant species is strongly discouraged.

C. *Water features.*

1. Recirculating water systems shall be used for water features.

2. Where available, recycled water shall be used as a source for decorative water features.

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

D. *Mulch and amendments.*

1. A minimum three-inch 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.

2. Stabilizing mulching products shall be used on slopes.

3. The mulching portion of the seed/mulch slurry in hydro-seeded applications shall meet the mulching requirement.

4. Soil amendments shall be incorporated according to recommendations of the soil report and what is

appropriate for the plants selected.

**19.40.110 - Irrigation design requirements.**

A. *General.* 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.

B. *System.*

1. Dedicated landscape water meters are highly recommended on landscape areas smaller than 5,000 square feet to facilitate water management.

2. Automatic irrigation controllers utilizing either evapotranspiration or soil moisture sensor data shall be required for irrigation scheduling in all irrigation systems.

3. The irrigation system shall be designed to ensure that the dynamic pressure at each emission device is within the manufacturer's recommended pressure range for optimal performance.

    a. 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.

    b. 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.

4. 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.

5. 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.

6. Backflow prevention devices shall be required to protect the water supply from contamination by the irrigation system.

7. High flow sensors that detect and report high flow conditions created by system damage or malfunction are recommended.

8. 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.

9. Relevant information from the soil management plan, such as soil type and infiltration rate, shall be

utilized when designing irrigation systems.

10. The design of the irrigation system shall conform to the hydrozones of the landscape design plan.

11. The irrigation system must be designed and installed to meet, at a minimum, the irrigation efficiency criteria as described in Section 19.40.120 (Water-Efficient Landscape Worksheet) regarding the Maximum Applied Water Allowance.

12. It is highly recommended that the project applicant 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.

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

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

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

16. Swing joints or other riser-protection components are required on all risers subject to damage that are adjacent to high traffic areas.

17. Check valves or anti-drain valves are required for all irrigation systems.

18. Narrow or irregularly shaped areas, including turf, less than eight feet in width in any direction shall be irrigated with subsurface irrigation or low volume irrigation system.

19. 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:

    a. The landscape area is adjacent to permeable surfacing and no runoff occurs

    b. The adjacent non-permeable surfaces are designed and constructed to drain entirely to landscaping

    c. 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 19.40.120 (Water-Efficient Landscape Worksheet). Prevention of overspray and runoff must be confirmed during the irrigation audit.

20. Slopes greater than 25 percent shall not be irrigated with an irrigation system with a precipitation 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.

C. *Hydrozone.*

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

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

3. Where feasible, trees shall be placed on separate valves from shrubs, groundcovers, and turf.

4. Individual hydrozones that mix plants of moderate and low water use, or moderate and high water use, may be allowed if:

   a. Plant factor calculation is based on the proportions of the respective plant water uses and their plant factor.

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

5. Individual hydrozones that mix high- and low-water-use plants shall not be permitted.

6. 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. This table can also assist with the irrigation audit and programming the controller.

D. *Additional requirements.* The irrigation design plan, at a minimum, shall contain:

1. The point of connection to the public water supply, and location and size of separate water meters for landscape.

2. Location, type, size, and manufacturer 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 19.40.20 (Recycled Water).

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."

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 Title 16 of the California Code of Regulations, and Section 6721 of the Food and Agricultural Code).

**19.40.120 - Water-efficient landscape worksheet.**

A. *Worksheet required.* A project applicant shall complete the Water-Efficient Landscape Worksheet which contains two sections:

1. A hydrozone information table for the landscape project.

2. A water budget calculation for the landscape project. For the calculation of the Maximum Applied Water Allowance and Estimated Total Water Use, a project applicant shall use the ETo values from the Reference Evapotranspiration Table contained in the water-efficient landscape packet available from the Community Development Director. Because the City of Duarte is not covered the Reference Evapotranspiration Table, projects shall use data from other cities located nearby in the same reference evapotranspiration zone, such as the city of Monrovia, as found in the CIMIS Reference Evapotranspiration Zones Map, Department of Water Resources, 1999.

B. *Water budget calculations.* Water budget calculations shall adhere to the following requirements:

1. The plant factor used shall be from the Water Use Classification of Landscape Species (WUCOLS). The plant factor ranges from 0 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 described below.

4. ETAF for Special Landscape Areas shall not exceed 1.0.

C. *Maximum applied water allowance calculation.* The Maximum Applied Water Allowance shall be calculated using the equation:

MAWA = (ETo) (0.62) [(0.7 x LA) + (0.3 x SLA)]

MAWA = Maximum Applied Water Allowance (gallons per year)

ETo = Reference Evapotranspiration (inches per year)

0.62 = Conversion Factor (to gallons)

0.7 = ET Adjustment Factor (ETAF)

LA = Landscape Area including SLA (square feet)

0.3 = Additional Water Allowance for SLA

SLA = Special Landscape Area (square feet)

D. *Estimated total water use calculation.* The Estimated Total Water Use shall be calculated using the equation below. The sum of the Estimated Total Water Use calculated for all hydrozones shall not exceed the MAWA.

$$ETWU = (ETo)(0.62)\left(\frac{PF\ x\ HA}{IE} + SLA\right)$$

Where:

ETWU = Estimated Total Water Use per year (gallons)

ETo = Reference Evapotranspiration (inches)

PF = Plant Factor from WUCOLS

HA = Hydrozone Area [high, medium, and low water use areas] (square feet)

SLA = Special Landscape Area (square feet)

0.62 = Conversion Factor

IE = Irrigation Efficiency (minimum 0.71)

**19.40.130 - Soil management report.**

A. *General.*

1. To reduce runoff and encourage healthy plant growth, a soil analysis and management report shall be completed by the project applicant.

2. The soil samples shall be submitted to a laboratory for analysis and recommendations. Soil sampling shall be conducted in accordance with laboratory protocol, including protocols regarding adequate sampling depth for the intended plants.

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 shall submit documentation verifying implementation of soil analysis report recommendations with Certificate of Completion.

B. *Parameters.* The soil analysis may include soil texture, infiltration rate determined by laboratory test or soil texture infiltration rate table, pH, total soluble salts, sodium, percent organic matter, and recommendations for ensuring soil conditions to achieve the purposes of this Chapter.

C. *Grading considerations.* The project applicant shall comply with one of the following:

1. If significant mass grading is not planned, the soil analysis report shall be submitted as part of the Landscape Documentation Package.

2. If significant mass grading is planned, the soil analysis report shall be submitted as part of the Certificate of Completion.

**19.40.140 - Grading design plan.**

A. *General.* 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, prepared by a civil engineer, shall be submitted as part of the Landscape Documentation Package.

B. *Required contents.* The project applicant shall submit a landscape grading plan that indicates finished configurations and elevations of the landscape area, including:

1. Height of graded slopes.
2. Drainage patterns.
3. Pad elevations.
4. Finish grade.
5. Stormwater retention improvements, if applicable.

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.

C. *Recommended practices.* To prevent excessive erosion and runoff, it is highly recommended that project applicants:

1. Grade so that all irrigation and normal rainfall remains within property lines and does not drain on to non-permeable hardscapes.
2. Avoid disruption of natural drainage patterns and undisturbed soil.
3. Avoid soil compaction in landscape areas.

**19.40.150 - Certificate of completion.**

Upon receipt of the permit for the Landscape Documentation Package and completion of the landscaping and irrigation system, the developer shall submit a Certificate of Completion to the Director of Community Development for review. The following details apply to the Certificate of Completion:

A. The Certificate of Completion shall be on a standard form approved by the Director.

B. The Certificate of Completion shall include a statement that the landscaping and irrigation system have been installed in substantial compliance with the approved Landscape Documentation Package. It shall acknowledge the evaluation of the landscape and irrigation system by a California licensed landscape architect, landscape contractor, or other individual deemed qualified by the Director.

C. The Certificate of Completion shall include the irrigation scheduling parameters used to set the controller, per Section 19.40.160 (Irrigation Schedule).

D. The Certificate of Completion shall include a landscape and irrigation maintenance schedule, per Section 19.40.170 (Landscape and Irrigation Maintenance Schedule).

E. The Certificate of Completion shall include an irrigation audit report, per Section 19.40.180 (Irrigation Audit Report).

F. The Certificate of Completion shall include a soils analysis report if not previously submitted with the Landscape Documentation Package, per Section 19.40.080 (Elements of a Landscape Documentation Package).

G. The developer shall submit the Certificate of Completion to the Director prior to the issuance of occupancy permits or final approval of other applicable permits.

**19.40.160 - Irrigation scheduling.**

A. *General.* 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 or other agency, the stricter schedule shall apply. Operation of the irrigation system outside the normal watering window is only 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.

B. *Parameters for automatic controllers.* Parameters used to set the automatic controller shall be developed and submitted for each of the following:

1. The plant establishment period.

2. The established landscape.

3. Temporarily irrigated areas.

C. *Schedule considerations.* Each irrigation schedule shall consider for each station all of the following that apply:

1. Irrigation interval (days between irrigation).

2. Irrigation run times (hours or minutes per irrigation event to avoid runoff).

3. Number of cycle starts required for each irrigation event to avoid runoff.

4. Amount of applied water scheduled to be applied on a monthly basis.

5. Application rate setting.

6. Root depth setting.

7. Plant type setting.

8. Soil type.

9. Slope factor setting.

10. Shade factor setting.

11. Irrigation uniformity or efficiency setting.

**19.40.170 - 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; adjustment and repair of the irrigation system and its components; aerating and dethatching turf areas; 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.

D. A project applicant is encouraged to implement sustainable or environmentally friendly practices for overall landscape maintenance.

**19.40.180 - Irrigation audit report.**

A. All landscape irrigation audits shall be conducted by a certified landscape irrigation auditor.

B. For new construction and rehabilitated landscape projects installed after January 1, 2010, the following shall apply:

1. The project applicant shall submit an irrigation audit report with the Certificate of Completion 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

2. The City may require an irrigation water use analysis, irrigation audits, or irrigation surveys to ensure compliance with the Maximum Applied Water Allowance.

**19.40.190 - Irrigation efficiency.**

For the purpose of determining Maximum Applied Water Allowance, average irrigation efficiency is assumed to be 0.71. Irrigation systems shall be designed, maintained, and managed to meet or exceed an average landscape irrigation efficiency of 0.71.

**19.40.200 - Recycled water.**

A. The installation of recycled water irrigation systems shall allow for the current and future use of recycled water, unless a written exemption has been granted by the Director in the review of the landscape and irrigation plans.

B. Irrigation systems and decorative water features shall use recycled water unless a written exemption has been granted by the local water purveyor stating that recycled water meeting all public health codes and standards is not available and will not be available for the foreseeable future.

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

D. Landscapes using recycled water are considered Special Landscape Areas. The ET Adjustment Factor for Special Landscape Areas shall not exceed 1.0.

**19.40.210 - Stormwater management.**

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 retention and infiltration are encouraged.

B. Project applicants shall refer to the Regional Water Quality Control Board for information on any applicable stormwater ordinances and stormwater management plans.

C. Rain gardens, cisterns, and other landscapes features and practices that increase rainwater capture and create opportunities for infiltration and/or onsite storage are recommended.

**19.40.220 - Landscape irrigation and maintenance.**

A. *Landscape maintenance.* Landscaping and vegetation shall be maintained as follows:

1. All landscaped areas shall be kept and maintained in a manner that does not detract from the appearance of the immediate neighborhood, and that protects the health, safety, and welfare of the user, occupants, and general public.

2. Landscaped areas shall be kept and maintained in a neat and clean condition, free of weeds, debris and dead, diseased, or dying vegetation, and broken or defective decorative elements.

3. Vegetation in landscaped areas shall be mowed, groomed, trimmed, pruned, and watered to maintain a healthy, growing condition.

4. Irrigation systems shall be kept in good working condition and repair to prevent leaks or public health hazards.

5. Vegetative overgrowth shall not be permitted in a manner that is likely to harbor rodents, vermin, insects, or other nuisances; or impedes, obstructs, or denies pedestrian or other lawful travel on sidewalks, walkways, or other public rights-of-way.

6. All property owners shall water, prune, weed, and otherwise maintain landscaping in the parkway

portions of adjoining streets, including street trees.

B. *Irrigation systems.* Irrigation systems shall be maintained as follows:

1. Water waste resulting from inefficient landscape irrigation leading to excessive runoff, low-head drainage, overspray, and other similar conditions where water flows onto adjacent property, non-irrigated areas, walks, or structures, shall be minimized.

2. Irrigation systems and their components shall be maintained in a fully functional manner consistent with the originally approved design and the provisions of this Chapter.

3. Landscapes shall be maintained to ensure water efficiency. A regular maintenance schedule should include but not be limited to checking, adjusting and repairing irrigation equipment; resetting the automatic controller; aerating and dethatching turf areas; replenishing mulch; fertilizing; pruning; and weeding in all landscaped areas.

**19.40.230 - Provisions for existing landscapes.**

This section shall apply to all existing landscapes that were installed before January 1, 2010, are over one acre in size, and for which an application has been submitted to modify the development for which the landscaping is provided.

A. For all landscapes that have a water meter, the City 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).

B. For all landscapes that do not have a meter, the City 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.

C. All landscape irrigation audits shall be conducted by a certified landscape irrigation auditor.

**19.40.240 - Minor modifications to approved landscape and irrigation plans.**

The Director may approve minor changes to approved landscape, irrigation, and related plans, subject to the provisions of Chapter 19.122 (Site Plan and Design Review) and the following criteria:

A. Minor modifications to approved landscaping and irrigation, or grading plans which comply with the spirit and intent of this Chapter, including but not limited to, revising or substituting plant varieties, container sizes, plant locations, irrigation specifications, hardscape components, berm heights, berm locations, slope features, and the like.

B. Modifications of planting, installation, and/or soil preparation details.

Chapter 19.40 – LANDSCAPING

Sections:



**19.40.010 - Purpose, intent and applicability.**

A. *Purpose*. The City promotes the value and benefits of landscapes while recognizing the need to invest water and other resources as efficiently as possible. In compliance with applicable State standards and guidelines, and to promote the City's goals and standards regarding sustainable development set forth in Chapter 19.52 (Sustainable Development Practices), this Chapter establishes minimum landscape standards for all uses for the purpose of enhancing the appearance of developments, reducing heat and glare, controlling soil erosion, conserving water, establishing a buffer and/or screen between residential and nonresidential land uses, and ensuring the ongoing maintenance of landscape areas. Water conservation measures shall be addressed through landscape and irrigation design.

B. *Intent*. The intent of the water-efficient landscape chapter is:

1. That this Chapter be at least as effective in conserving water as the State Model Water Efficient Landscape Ordinance and consistent with Governor Brown's April 1, 2015 Drought Executive Order B-19-25;

2. Establish a structure for planning, designing, installing, and maintaining and managing water efficient landscapes in new construction and rehabilitated projects;

3. Establish provisions for water management practices and water waste prevention for existing landscapes;

4. To assure beneficial, efficient, and responsible use of water resources;

5. To retain the land's natural hydrological role and promote the infiltration of surface water into the groundwater;

6. To recognize that landscapes enhance the aesthetic appearance of developments and communities;

7. To encourage the appropriate design, installation, maintenance, and management of landscapes so that water demand can be decreased, runoff can be retained, and flooding can be reduced without a decline in the quality or quantity of landscapes; and

8. To reduce or eliminate water waste.

C. *Applicability*. Beginning March 24, 2016, all landscaping projects subject to this Chapter shall obtain a permit from the Community Development Department prior to installation of any landscaping. All planting, irrigation, and landscape related improvements required by this Chapter shall apply to the following landscape projects:

1. New landscape 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. New or rehabilitated landscape projects between 500 and 2,500 square feet may comply with the performance requirements of this ordinance or conform to the prescriptive measures contained in Appendix A of the Guidelines;

4. New or rehabilitated projects using treated or untreated graywater or rainwater capture on site, any lot or parcels within the project that has less than 2,500 square feet of landscape area and meets the lot or parcel's landscape water requirement (Estimated Total Water Use) entirely with the treated or untreated graywater or though stored rainwater capture on site is subject only to Appendix A of the Implementation Guidelines;

5. Special Landscaped Areas, such as areas dedicated to edible plants, irrigated with recycled water, or dedicated to active play and/or a Recreational Area, shall prepare a water efficient landscape worksheet and landscape documentation package according to specifications for Special Landscaped Areas;

6. Cemeteries. Recognizing the special landscape management needs of cemeteries, new and rehabilitated cemeteries are limited to Sections 2.2 and 2.9 of the Guidelines; and existing cemeteries are limited to Section 3 of the Guidelines.

D. *Other considerations*. The requirements of the Guidelines may be partially or wholly waived, at the discretion of the Director of Community Development or his/her designee, for landscape rehabilitation projects that are limited to replacement plantings with equal or lower water needs and where the irrigation system is found to be designed, operable and programmed consistent with minimizing water waste in accordance with local water purveyor regulations.

E. *Exempt activities*. The provisions of this Chapter do not apply to:

1. Registered local, State, or federal historical sites.

2. Ecological restoration projects that do not require a permanent irrigation system.

3. Mined-land reclamation projects that do not require a permanent irrigation system.

4. Existing plant collections as part of botanical gardens and arboretums open to the public.

F. *Project continuation*. Any landscape project(s) conducted on the same parcel of land within a 12-month period from the first landscape project submittal shall be aggregated for the purposes of determining a project's applicability to the requirements of this Chapter.

G. *Relationship to private covenants*. The architectural guidelines of a common interest development, which includes 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.

**19.40.020 – Definitions**

***Aggregate***. A concept that pertains to production home neighborhoods, common interest developments, or other situations where multiple parcels are undergoing landscape development as one project, but may eventually be individually owned or maintained.

***Applied water***. The portion of water supplied by the irrigation system to the landscape.

***Artificial turf***. A man-made material which simulates the appearance of live turf, organic turf, grass, sod, or lawn.

***Automatic irrigation controller***. See Automatic Controller under Chapter 19.160.030.

***Backflow prevention device***. A safety device used to prevent pollution or contamination of the water supply due to the reverse flow of water from the irrigation system.

***Certification of Completion or Landscape Installation Certificate of Completion***. The certification included as Exhibit E of the Implementation Guidelines that shall be provided to the City prior to Planning and Building Divisions final inspection pursuant to Section 2.7 of the Guidelines.

***Certification of Design or Certificate of Landscape Design***. The certification included as Exhibit B of the Implementation Guidelines that shall be included in the Landscape Documentation Package pursuant to Section 2.1 of the Guidelines.

***Certified landscape irrigation auditor***. A person(s) 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.

***Chapter***. Refers to Chapter 19.40 of the Duarte Development Code.

***Check valve*** or ***anti-drain valve***. A valve or valves 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.

***City***. Refers to the City of Duarte.

***Common interest developments***. Refers to community apartment projects, condominium projects, planned developments, and stock cooperatives per Civil Code Section 1351.

***Conversion factor***. The number that converts acre-inches per acre per year to gallons per square foot per year.

***Drip irrigation***. See definition under Chapter 19.160.050.

***Drought-tolerant landscaping***. Landscaping that utilizes little or no irrigation through the use of water-conserving materials and techniques, including but not limited to, native drought-tolerant plants, mulch and efficient irrigation.

***Drought-tolerant plants***. See definition under Chapter 19.160.050.

***Ecological restoration project***. A project where the site is intentionally altered to establish a defined, indigenous, historic ecosystem.

***Emitter***. A drip irrigation emission device that delivers water slowly from the system to the soil.

***Estimated Applied Water Use (EAWU)***. The annual total amount of water estimated to keep plants in a healthy state. It is based on factors such as reference evapotranspiration rate, the size of the landscaped area, plant water use factors, and the irrigation efficiency within each hydrozone.

***Evapotranspiration***. See definition under Chapter 19.160.060.

***Evapotranspiration adjustment factor (ETAF)***. 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.

***Evapotranspiration rate***. The quantity of water evaporated from adjacent soil and other surfaces and transpired by plants during a specified time.

***Flow rate***. 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.

***Front yard***. For purposes of this Chapter and the Guidelines, shall mean the required front yard setback and any area between the street and the outline of the main building line. For other unique lot configurations, the Director of Community Development shall determine front yard.

***Front yard landscaped area***. The Front Yard Area that is not occupied by driveways, hardscape or other pervious or non-pervious surfaces and that is required to be landscaped with live vegetation, artificial turf, drought tolerant landscaping or a combination of all three, as further described in this Chapter and the Implementation Guidelines.

***Graywater***. A system containing 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 unhealthy 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 as per the Health and Safety Code (Section 17922.12). 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.

***Hardscape***. See definition under Chapter 19.160.090.

***Hydrozone.*** See definition under Chapter 19.160.090.

***Implementation Guidelines or Guidelines***. Refers to the Water Efficient Landscape Ordinance Guidelines which shall be adopted by resolution of the Planning Commission. The purpose of the Guidelines is to provide procedural and design guidance for applicants proposing new landscape or landscape rehabilitation projects that are subject to Chapter 19.40 of the City of Duarte Development Code.

***Infiltration rate***. See definition under Chapter 19.160.100.

***Invasive and/or Noxious plants species***. Species of plants not historically found in California that spread outside cultivated areas and can damage environmental or economic resources. Invasive plant species may be regulated by county agricultural agencies as noxious species.

***Irrigation audit***. 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.

***Irrigation efficiency (IE).*** The measurement of the amount of water beneficially used divided by the amount of water applied to a landscaped area. Irrigation efficiency is derived from measurements and estimates of irrigation system characteristics and management practices. The minimum average irrigation efficiency for purposes of this Chapter and the Guidelines is 0.71. Greater irrigation efficiency can be expected from well designed and maintained systems. The following irrigation efficiency may be obtained for the listed irrigation heads with an IME of 90%:

| Irrigation Method | $DU_{LQ}$ | $DU_{LH}$* | EU | IE** |
|---|---|---|---|---|
| Spray nozzles | 65% | 79% | | 71% |
| High efficiency spray nozzles | 75% | 82% | | 73% |
| Multi stream/Multi trajectory rotary (MSMT) nozzles | 75% | 85% | | 76% |
| Stream rotor nozzle | 70% | 82% | | 73% |
| Microspray | 75% | 85% | | 76% |
| Bubblers | | | 85% | 77% |
| Drip emitter | | | 90% | 81% |
| Subsurface drip | | | 90% | 81% |

*$DU_{LH} = .386 + (.614)(DU_{LQ})$

** IE (spray) = $(DU_{LH})$(IME)

** IE (drip) = Emission uniformity (EU)(IME)

***Irrigation Management Efficiency (IME).*** The measurement used to calculate the irrigation efficiency of the irrigation system for a landscaped project. A 90% IME can be achieved by using evapotranspiration controllers, soil moisture sensors, and other methods that will adjust irrigation run times to meet plant water needs.

***Landscape coefficient*** **($K_L$ ).** The product of a plant factor multiplied by a density factor and a microclimate factor. The landscape coefficient is derived to estimate water loss from irrigated landscaped areas and special landscaped areas.

***Landscape documentation package.*** The package of documents that a project applicant is required to submit to the City pursuant to Section 2.1 of the Guidelines.

***Landscape professional***. A licensed landscape architect, licensed landscape contractor, or any other person authorized to design a landscape pursuant to Sections 5500.1, 5615, 5641, 5641.1, 5641.2, 5641.3, 5641.4, 5641.5, 5641.6, 6701, 7027.5 of the California Business and Professions Code, Section 832.27 of Title 16 of the California Code of Regulations, and Section 6721 of the California Food and Agriculture Code.

***Landscaped area***. Refers to all planting areas, turf areas, and water features in a landscape design plan subject to the Maximum Applied Water Allowance and Estimated Applied Water Use calculations. The landscaped 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).

***Landscaping***. See definition under Chapter 19.160.130.

***Lateral line***. A water delivery pipeline that supplies water to the emitters or sprinklers from the valve.

***Low volume irrigation***. 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.

***Low volume overhead irrigation***. Aboveground irrigation heads with an upper flow limit of 0.5 GPM.

***Main line***. A pressurized pipeline that delivers water from the water source to the valve or outlet.

***Manual isolation valve.*** A valve such as a gate valve, ball valve, or butterfly valve installed downstream of the point of connection of the water supply to shutdown water flow through mainline piping for routine maintenance and emergency repair.

***Master shut-off valve***. An electronic valve such as a solenoid valve installed as close as possible to the point of connection and is used in conjunction with a flow sensor and flow monitoring controller technology to automatically shutdown system wide water flow in the event of high flow conditions such as mainline pipe break.

***Maximum Applied Water Allowance (MAWA).*** Refers to the upper limit of annual applied water for the established *landscaped area,* as specified in Section 2.2 of the Guidelines. It is based upon the area's reference evapotranspiration, the ETAF, and the size of the landscaped area. The Estimated Applied Water Use shall not exceed the Maximum Applied Water Allowance.

***Microclimate***. The climate of a small, specific area that may contrast with the climate of the overall landscaped area due to factors such as wind, sun exposure, plant density, or proximity to reflective surfaces.

***Mined-land reclamation projects.*** Any surface mining operation with a reclamation plan approved in accordance with the Surface mining and Reclamation Act of 1975.

***Mulch***. Any organic material such as leaves, bark, straw or 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.

***Non-pervious or Impervious***. Any surface or material that does not allow for the passage of water through the material and into the underlying soil.

***Operating pressure***. The pressure at which the parts of an irrigation system of sprinklers are designed to operate at by the manufacturer.

***Overspray***. The irrigation water which is delivered beyond the target area.

***Parkway***. See definition under Chapter 19.160.170.

***Person.*** Any natural person, firm, joint venture, joint stock company, partnership, public or private association, club, company, corporation, business trust, organization, public or private agency, government agency or institution, school district, college, university, any other user of water provided

by the City or the local water purveyor, or the manager, lessee, agent, servant, officer, or employee of any of them or any other entity which is recognized by law as the subject of rights or duties.

***Pervious.*** Means any surface or material that allows the passage of water through the material and into the underlying soil.

***Plant factor or Plant water use factor***. A factor, when multiplied by ETo, that estimates the amount of water needed by plants. For purposes of this Water Efficient Landscape 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 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 the Guidelines are derived from the Department of Water Resources 2000 publication "Water Use Classification of Landscape Species."

***Precipitation rate***. The rate of application of water measured in inches per hour.

***Project applicant.*** The individual or entity submitting a Landscape Documentation Package required under Section 2.1 to request a permit, plan check, or design review from the City. A project applicant may be the property owner or his or her designee.

***Property owner.*** The record owner of real property as shown on the most recently issued equalized assessment roll.

***Rain sensor or Rain sensing shutoff device***. A component which automatically suspends irrigation when it rains.

***Recreational area.*** An area(s), excluding private single family residential areas, designated for active play; recreation or public assembly in parks, sports fields, picnic grounds, amphitheaters; golf course tees, fairways, roughs, surrounds and greens; private recreational or assembly space as part of a comprehensive project that otherwise meets the intent of this Chapter, and other active or recreational play areas as determined by the Community Development Director.

***Recycled water or Reclaimed water***. Treated or recycled waste water of a quality suitable for non-potable uses such as landscape irrigation and water features. This water is not intended for human consumption.

***Reference evapotranspiration (ETo).*** A standard measurement of environmental parameters which affect the water use of plants. ETo is given expressed in inches per day, month, or year as represented in Appendix C of the Guidelines, 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.

***Rehabilitated landscape.*** Any re-landscaping project that requires a permit, plan check, or design review, meets the requirement of Section 1.2 of the Guidelines, and the modified landscape area is equal to or greater than 2,500 square feet.

***Runoff***. See definition under Chapter 19.160.190.

***SMART irrigation controller or Soil moisture sensor***. A weather-based or soil moisture-based irrigation controller that monitors and uses information about the environmental conditions at a specific location and landscape to automatically adjust watering schedules.

***Soil texture***. The classification of soil based on its percentage of sand, silt, and clay.

***Special Landscaped Areas (SLA)***. Area(s) of the landscape dedicated solely to edible plants such as orchards and vegetable gardens, areas irrigated with recycled water, water features using recycled water, and areas designated as a Recreational Area.

***Sprinkler head***. A device which delivers water through a nozzle.

***Static water pressure***. See definition under Chapter 19.160.200.

***Station***. An irrigated area served by one valve or by a set of valves that operate simultaneously.

***Swing joint***. An irrigation component that provides a leak-free connection between the emission device and lateral pipeline to allow movement in any direction and to prevent equipment damage.

***Turf***. See definition under Chapter 19.160.210.

***Valve***. A device used to control the flow of water in an irrigation system.

***Visible street side yard***. For purposes of this Chapter and the Guidelines, means any street side yard that is visible from the public right of way, that shall be improved as further described in this Chapter and the Implementation Guidelines.

***Water-efficient irrigation system***. See definition under Chapter 19.160.240.

***Water-efficient landscape***. See definition under Chapter 19.160.240.

***Water efficient landscape ordinance***. Refers to Chapter 19.40 of the City of Duarte Development Code.

***Water efficient landscape worksheet***. The worksheet required to be completed pursuant to Section 2.2 of the Guidelines and which are included in Appendix C of the Guidelines.

***Water feature***. A design element or elements 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 landscaped area. Constructed wetlands used for on-site wastewater treatment, habitat protection, or storm water best management practices that are not irrigated and used solely for water treatment or storm water retention are not water features and, therefore, are not subject to the water budget calculation.

***Watering window***. The time of day irrigation is allowed on landscaped surfaces.

***WUCOLS***. Refers to the Water Use Classification of Landscape published by the University of California Cooperative Extension, the Department of Water Resources, and the Bureau of Reclamation, 2000. *www.owue.water.ca.gov/docs/wucols00*

**19.40.030 - Implementation guidelines**

Water Efficient Landscape Ordinance Guidelines shall be adopted by resolution of the Planning Commission.

**19.40.040 - General landscape standards.**

These standards shall apply to all parcels within the City.

A. Water Efficient Landscape Ordinance Guidelines (Implementation Guidelines), adopted by resolution of the City of Duarte Planning Commission, shall establish criteria for the design and review of landscape and irrigation plans, and such criteria shall be adhered to in the design of landscape and irrigation plans as required by this Chapter.

B. Trees may be planted in any required yard area. All required trees shall be of a minimum size of 15 gallons, unless a larger size is specified in project conditions of approval. In limited cases, smaller tree sizes may be approved if the Director determines that long-term tree growth potential is improved by smaller specimens.

C. Landscaping shall be maintained in the area between the front property line and the dwelling, building, or structure. In all zones except the R-1 zones (inclusive), a permanent irrigation system shall also be maintained in the same front-yard area.

D. Landscape planting shall emphasize drought-tolerant and native species, complement the architectural design of structures on the site, and be suitable for the soil and climatic conditions of the site, consistent with the requirement of this Chapter.

E. Transformers shall be screened with dense landscaping or walls similar to those required for trash enclosures, and shall not be located within open space recreation areas. They shall be located away from public view wherever possible and shall not impede pedestrian or vehicular circulation. Where feasible, transformers should be placed underground.

F. Use of artificial turf is regulated by both standards within this Chapter and in the Implementation Guidelines. The use of artificial turf requires Community Development Department approval before installation.

**19.40.050 - Landscape of unused and undeveloped portions of a site.**

All areas of a site not intended for a specific use or purpose in conjunction with a current application, including vacant or undeveloped pad sites in shopping centers held for future development, shall be fully landscaped and irrigated with an automatic irrigation system. Landscaping shall include a combination of trees, shrubs, ground cover, turf, and/or approved decorative landscape materials, as approved by the Director, and in compliance with this Chapter.

**19.40.060 - Residential landscape standards.**

The following standards shall apply to all parcels in all residential zones.

A. A minimum of 20 percent of the entire parcel shall be fully landscaped with plant materials.

B. At least 50% of the Front Yard Landscaped Area and 50% of the Visible Street Side Yard shall be landscaped with live vegetation, artificial turf, drought-tolerant landscaping or a combination of the three, as further described below:

   1. Live vegetation may include turf, trees, shrubs, groundcover, flowers, or other similar vegetation.

   2. Artificial turf is limited to no more than 40% coverage of the Front Yard Landscaped Area and shall include a minimum of 60% of live vegetation. Artificial turf is limited to no more than 40% coverage of the Visible Street Side Yard and shall include a minimum of 60% of live vegetation. (See Section 4.2 of the Guidelines)

   3. Drought tolerant landscaping shall include native water conserving plants. (See Section 4.3 of the Guidelines)

C. Artificial turf is not permitted within the parkway.

D. Bare dirt is not permitted within the front yard, visible street side yard or within the parkway. All bare dirt areas shall be finished with a minimum three inch thick layer of mulch, organic bark or earth-toned colored rubber bark.

E. Parking lots for multi-family developments providing 10 or more parking spaces shall be landscaped per the requirements of Section 19.38.200 (Parking Lot Landscaping).

**19.40.070 - Nonresidential landscape standards.**

All new and rehabilitated landscaping plans undertaken in conjunction with any private development project on commercial, industrial, mixed-use, and other nonresidential properties, or those projects requiring a grading, building, use permit, or site plan and design review, as required by this Chapter, shall comply with the following standards.

A. All unpaved areas, including those portions of required yard areas not utilized for vehicular and pedestrian access, shall be landscaped with plant material, including some combination of trees, shrubs, groundcover, and turf. Mulch, bark, and similar landscaping materials may be incorporated into the landscape design.

B. A minimum of 15 percent of the parcel area shall be landscaped, exclusive of the parking lot area and any landscaping required within the parking lot.

C. A minimum of 75% of the landscape area must be landscaped with live plants. The remaining area may utilize boulder, rocks, decomposed granite, water features or other hardscapes, subject to approval from the Community Development Department.

D. All landscaped areas shall be provided with an automatic irrigation system, unless the Director finds that such an irrigation system, due to the size, location, or configuration of the landscaped area, cannot reasonably be installed and maintained.

E. To achieve an immediate effect of a landscape installation and to allow sustained growth of planting materials, plant material sizes and plant spacing shall comply with the following standards, unless the Director finds that alternative sizes and planting will achieve the same or similar desired effects:

1. The minimum plant size for trees shall be 15 gallons, unless otherwise specified by the provisions of this Chapter. Trees planted within 10 feet of a street, sidewalk, paved trail, or walkway shall be a deep-rooted species or shall be separated from paved surfaces by a root barrier to prevent physical damage to public improvements. A minimum distance of 15 feet is required between the center of trees to street light standards, water meters, back-flow prevention systems, sewer cleanouts, and fire hydrants.

2. The minimum plant size for shrubs shall be five gallons.

3. Groundcover, including turf, shall be planted in a manner to provide 100 percent coverage within one year of initial planting.

F. Lots with freeway frontage shall provide and maintain freeway frontage landscaping.

G. Parking lot landscaping shall be provided per the requirements of Section 19.38.180 (Parking Lot Landscaping).

H. Artificial turf is not permitted within in the parkway.

I. Artificial turf is discouraged on non-residential properties. Use of artificial turf is only allowed in special circumstances as approved by the Community Development Director.

J. Bare dirt is not permitted within the front yard, visible street side yard or within the parkway. All bare dirt areas shall be finished with a minimum three inch thick layer of mulch, organic bark or earth-toned colored rubber bark.

**19.40.080 - Hillside landscaping standards.**

Landscaping standards for properties in hillside areas, as defined in Chapter 19.46 (Hillside Development Standards), in addition to the standards in this Chapter, shall comply with the standards set forth in 19.46.120 (Landscaping and Irrigation Standards).

**19.40.090 - Landscape plan approval required.**

A. Required landscape plan. Except as otherwise specified in this Section, any application for any development that requires a grading permit, building permit, use permit, or site plan and design review shall include landscape and irrigation plans which provide for the utilization of low-water-usage irrigation systems and a landscape design consistent with the requirements of this Chapter. The plans shall be prepared by a licensed landscape architect, licensed landscape contractor or any other person authorized to design a landscape plan.

B. Review required. The plan shall contain the information described in the Implementation Guidelines and shall be subject to review and approval by the Director for compliance with the landscape design criteria contained in this Chapter. The review process represents the basis for approval or denial of a landscape design proposal. No grading, building, use permit, or site plan and design approval can be issued until a project has received approval from the Director.

C. Full construction drawings required. Following the granting of all required planning and subdivision approvals, full construction drawings shall be submitted to the Building Division for plan check approval. Drawings submitted for plan check shall include the entire Landscape Documentation Package described in the Implementation Guidelines, including the approved Preliminary Landscape Design Plan. The Landscape Design Plan shall be in substantial conformity with the approved Preliminary Landscape Design Plan prior to issuance of building permits.

**19.40.100 - Landscape and irrigation maintenance.**

A. Landscape maintenance. Landscaping and vegetation shall be maintained as follows:

1. All landscaped areas shall be kept and maintained in a manner that does not detract from the appearance of the immediate neighborhood, and that protects the health, safety, and welfare of the user, occupants, and general public.

2. Landscaped areas shall be kept and maintained in a neat and clean condition, free of weeds, debris and dead, diseased, or dying vegetation, and broken or defective decorative elements.

3. Vegetation in landscaped areas shall be mowed, groomed, trimmed, pruned, and watered to maintain a healthy, growing condition.

4. Vegetative overgrowth shall not be permitted in a manner that is likely to harbor rodents, vermin, insects, or other nuisances; or impedes, obstructs, or denies pedestrian or other lawful travel on sidewalks, walkways, or other public rights-of-way.

5. All property owners shall water, prune, weed, and otherwise maintain landscaping in the parkway portions of adjoining streets, including street trees.

B. Irrigation systems. Irrigation systems shall be maintained as follows:

1. Irrigation systems shall be kept in good working condition and repair to prevent leaks or public health hazards.

2. Water waste resulting from inefficient landscape irrigation leading to excessive runoff, low-head drainage, overspray, and other similar conditions where water flows onto adjacent property, non-irrigated areas, walks, or structures, shall be minimized.

3. Irrigation systems and their components shall be maintained in a fully functional manner consistent with the originally approved design and the provisions of this Chapter.

4. Landscapes shall be maintained to ensure water efficiency. A regular maintenance schedule should include but not be limited to checking, adjusting and repairing irrigation equipment; resetting the automatic controller; aerating and dethatching turf areas; replenishing mulch; fertilizing; pruning; and weeding in all landscaped areas.

C. Artificial turf. Artificial turf shall be maintained as follows:

1. All artificial turf areas shall be kept and maintained in a manner that does not detract from the appearance of the immediate neighborhood, and that protects the health, safety, and welfare of the user, occupants, and general public.

2. Artificial turf areas shall be kept free of animal waste, rubbish, leaves, sand, rocks, algae, mold, fungi, natural grass and/or weeds.

3. Artificial turf seams, joints and edges shall be inconspicuous and not allowed to cause tripping or other hazards.

4. Artificial turf that is discolored, deteriorated, matted, torn, stained, shows excess wear or is otherwise unsightly or neglected shall be repaired or replaced to the satisfaction of the City.

5. Artificial turf infill material shall be maintained at adequate levels to allow proper use of the turf. Infill materials shall not be allowed to accumulate within the artificial turf area or otherwise be visible from the public right-of-way. Sweeping, raking or otherwise redistributing infill material on a regular basis is required.

**19.40.110 - Cooperation with water purveyor(s).**

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.

**19.40.120 - Minor modifications to approved landscape and irrigation plans.**

The Director may approve minor changes to approved landscape, irrigation, and related plans, subject to the provisions of Chapter 19.122 (Site Plan and Design Review) and the following criteria:

A. Minor modifications to approved landscaping and irrigation, or grading plans which comply with the spirit and intent of this Chapter, including but not limited to, revising or substituting

plant varieties, container sizes, plant locations, irrigation specifications, hardscape components, berm heights, berm locations, slope features, and the like.

B. Modifications of planting, installation, and/or soil preparation details.

# GUIDELINES

## FOR IMPLEMENTATION OF THE CITY OF DUARTE MODEL WATER EFFICIENT LANDSCAPE ORDINANCE (MWELO)

## EFFECTIVE MARCH 24, 2016

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## 1. Purpose and Applicability

### 1.1 Purpose

**A.** The primary purpose of these Guidelines is to provide procedural and design guidance for applicants proposing new landscape or landscape rehabilitation projects that are subject to Chapter 19.40 of the City of Duarte Development Code. This document is also intended for use and reference by City staff in reviewing and approving designs and verifying compliance with Chapter 19.40.

**B.** Other regulations affecting landscape design and maintenance practices are potentially applicable and should be consulted for additional requirements. These regulations include but may not be limited to:

**1.** State of California Assembly Bill 1881;

**2.** State of California Executive Order B-29-15;

**3.** National Pollutant Discharge Elimination Permit(s) for the Municipal Separate Storm Sewer System;

**4.** Los Angeles County Fire Code Regulations for fuel modification in landscapes;

**5.** Water Conservation, Water Supply Shortage, and Drought Response Regulations of the Local Water Purveyor(s);

**6.** Local and State Regulations governing use of Recycled Water;

**7.** City of Duarte Municipal Code;

**8.** City of Duarte Development Code;

**9.** Building Code;

**10.** Specific Plans, Master Plans, General Plan, or similar land use and planning documents; and

**11.** Conditions of approval for a specific project.

### 1.2 Applicability

**A.** Beginning March 24, 2016, and consistent with Executive Order No. B-29-15, this ordinance shall apply to all of the following landscape projects:

1. New landscape 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. New or rehabilitated landscape projects between 500 and 2,500 square feet may comply with the performance requirements of this ordinance or conform to the prescriptive measures contained in Appendix A of the Guidelines;

4. New or rehabilitated projects using treated or untreated greywater or rainwater capture on site, any lot or parcels within the project that has less than 2,500 square feet of landscape area and meets the lot or parcel's landscape water requirement (Estimated Total Water Use) entirely with the treated or untreated greywater or though stored rainwater capture on site is subject only to Appendix A;

5. Special Landscaped Areas, such as areas dedicated to edible plants, irrigated with recycled water, or dedicated to active play and/or a Recreational Area, shall prepare a water efficient landscape worksheet and landscape documentation package according to specifications for Special Landscaped Areas;

6. Cemeteries. Recognizing the special landscape management needs of cemeteries, new and rehabilitated cemeteries are limited to Sections 2.2 and 2.9 of these Guidelines; and existing cemeteries are limited to Section 3 of these Guidelines.

B. The requirements of the Guidelines may be partially or wholly waived, at the discretion of the Director of Community Development or his/her designee, for landscape rehabilitation projects that are limited to replacement plantings with equal or lower water needs and where the irrigation system is found to be designed, operable and programmed consistent with minimizing water waste in accordance with local water purveyor regulations.

C. Unless otherwise determined by the City, the Water Efficient Landscape Ordinance and these Guidelines do not apply to:

1. Registered local, state, or federal historical sites;

2. Ecological restoration projects that do not require a permanent irrigation system;

3. Mined-land reclamation projects that do not require a permanent irrigation system; or

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

## 2. Submittal Requirements for New Landscape Installations or Landscape Rehabilitation Projects

**A.** Discretionary approval is typically required for landscape projects that are subject to site plan reviews or other procedural processes apply such that standard or special conditions of approval may be required by the City. Discretionary projects with conditions of approval may be approved administratively by city staff, or acted on formally by the Planning Commission, City Council, or other jurisdictional authority. A typical standard condition of approval reads:

*"Landscaping for the project shall be designed to comply with the City's Water Efficient Landscape Ordinance and with the Guidelines for Implementation of the Water Efficient Landscape Ordinance."*

Landscape or water features that typically require a ministerial permit (i.e., a building, plumbing, electrical, or other similar permit), thereby triggering compliance with the Water Efficient Landscape Ordinance requirements independently of the need for discretionary approval include, but are not limited to, swimming pools, fountains or ponds, retaining walls, and overhead trellises.

### 2.1 Landscape Documentation Package

**A.** A Landscape Documentation Package is required to be submitted by the applicant for review and approval prior to the issuance of ministerial permits and prior to the start of construction. Unless otherwise directed by the City, the Landscape Documentation Package shall include the following elements either on plan sheets or supplemental pages as directed by the City:

1. Project Information, including, but not limited to, the following:

   a. Date;

   b. Project name;

   c. Project address, parcel, and/or lot number(s);

d. Total landscaped area (square feet) and rehabilitated landscaped area (if applicable);

e. Project type (e.g., new, rehabilitated, public, private, cemetery, homeowner-installed);

f. Water supply type (e.g., potable, recycled, or well) and identification of the local retail water purveyor if the project applicant is not served by a private well;

g. Checklist or index of all documents in the Landscape Documentation Package;

h. Project contacts, including contact information for the project applicant and property owner;

i. Certification of Design in accordance with Appendix B of these Guidelines that includes a landscape professional's professional stamp, as applicable, signature, contact information (including email and telephone number), license number, and date, certifying the statement that "The design of this project complies with the requirements of the City's Water Efficient Landscape Ordinance" and shall bear the signature of the landscape professional as required by law; and

j. Any other information the Director of Community Development or his or her designee deems relevant for determining whether the landscape project complies with the Water Efficient Landscape Ordinance and these Guidelines.

2. Maximum Applied Water Allowance (MAWA) and Estimated Applied Water Use (EAWU) expressed as annual totals including, but not limited to, the following:

   a. Water Efficient Landscape Worksheet for the landscape project;

   b. Water budget calculations for the landscape project; and

   c. Hydrozone information table for the landscape project.

3. A soil management report or specifications, or specification provision requiring soil testing and amendment recommendations and implementation to be accomplished during construction of the landscape project.

4. A landscape design plan for the landscape project.

5. An irrigation design plan for the landscape project.

6. A grading design plan, unless grading information is included in the landscape design plan for the landscape project or unless the landscape project is limited to replacement planting and/or irrigation to rehabilitate an existing landscaped area.

[Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.]

**2.2 Water Efficient Landscape Calculations and Alternatives**

**A.** The applicant shall provide the calculated Maximum Applied Water Allowance (MAWA) and Estimated Applied Water Use (EAWU) for the landscaped area as part of the Landscape Documentation Package submittal to the City. The MAWA and EAWU shall be calculated based on completing the Water Efficient Landscape Worksheets (in accordance with the sample worksheets in Appendix C) which contain 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 EAWU is calculated based on the plants used and irrigation method selected for the landscape design.

**B.** The EAWU allowable for the landscaped area may not exceed the MAWA. The MAWA shall be calculated using an evapotranspiration adjustment factor (ETAF) of 0.55 for residential areas and 0.45 for nonresidential areas, except for the portion of the MAWA applicable to any special landscaped areas within the landscape project, which shall be calculated using an ETAF of 1.0. Where the design of the landscaped area can otherwise be shown to be equivalently water-efficient, the applicant may submit alternative or abbreviated information supporting the demonstration that the annual EAWU is less than the MAWA, at the discretion of and for the review and approval of the City.

**C.** Water budget calculations shall adhere to the following requirements:

1. The MAWA shall be calculated using the Water Efficient Landscape Worksheets and equation presented in Appendix C on page C-1.

2. The EAWU shall be calculated using the Water Efficient Landscape Worksheets and equation presented in Appendix C on page C-1.

3. For the calculation of the *MAWA* and *EAWU*, a *project applicant* shall use the *ETo* values from the closest location listed in the Reference Evapotranspiration Table in Appendix D. For geographic areas not covered in Appendix D, data from other cities located nearby in the same reference evapotranspiration zone may be used.

4. For calculation of the EAWU, the plant water use factor shall be determined as appropriate to the project location from the Water Use Efficiency of Landscape Species (WUCOLS) Species Evaluation List 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 use plants, 0.1 to 0.3 for low water use plants, 0.4 to 0.6 for moderate water use plants, and 0.7 to 1.0 for high water use plants.

5. For calculating the EAWU, the plant water use factor shall be determined for each valve hydrozone based on the highest-water-use plant species within the zone. The plant factor for each hydrozone may be required to be further refined as a "landscape coefficient," according to protocols defined in detail in the WUCOLS document, to reflect planting density and microclimate effects on water need at the option of the applicant or the City.

6. For calculation of the EAWU, the area of a water feature is defined as a high water use hydrozone with a plant factor of 1.0.

7. For calculation of the EAWU, a temporarily irrigated hydrozone area, such as an area of highly drought-tolerant native plants that are not intended to be irrigated after they are fully established, is defined as a very low water use hydrozone with a plant factor of 0.1.

8. For calculation of the MAWA, the ETAF for special landscaped areas is set at 1.0. For calculation of the EAWU, the ETAF for special landscaped areas is calculated as the special landscaped area (SLA) plant factor divided by the SLA irrigation efficiency factor.

9. Irrigation efficiency (IE) of the irrigation heads used within each hydrozone shall be assumed to be as follows, unless otherwise indicated by the equipment manufacturer's specifications or demonstrated by the project applicant:

| Irrigation Method | $DU_{LQ}$ | $DU_{LH}$* | EU | IE** |
|---|---|---|---|---|
| Spray nozzles | 65% | 79% | | 71% |
| High efficiency spray nozzles | 70% | 82% | | 73% |
| Multi stream/Multi trajectory rotary (MSMT) nozzles | 75% | 85% | | 76% |
| Stream rotor nozzle | 70% | 82% | | 73% |
| Microspray | 75% | 85% | | 76% |
| Bubblers | | | 85% | 77% |
| Drip emitter | | | 90% | 81% |
| Subsurface drip | | | 90% | 81% |

*$DU_{LH} = .386 + (.614)(DU_{LQ})$

** IE (spray) = $(DU_{LH})$(IME)

** IE (drip) = Emission uniformity (EU)(IME)

**D.** The Maximum Applied Water Allowance shall adhere to the following requirements:

**1.** The Maximum Applied Water Allowance shall be calculated using the equation presented in Appendix C. The reference evapotranspiration (ETo) values used in this calculation are from the Reference Evapotranspiration Table in Appendix D and are for planning purposes only. For actual irrigation scheduling, automatic irrigation controllers are required and shall use current ETo data, such as from the California Irrigation Management Information System (CIMIS), other equivalent data, or soil moisture sensor data.

## 2.3 Soil & Stormwater Management Report

**A.** All planted landscape areas are required to have friable soil to maximize retention and infiltration. On engineered slopes, only amended planning holes need to meet this requirement.

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

**1.** Submit soil samples to a certified agronomic soils 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 may 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.

**2.** In projects with multiple landscape installations (i.e. production home developments that are installing landscaping) a soil sampling rate of 1 in 7 lots or approximately 15% will satisfy this requirement; evenly disbursed throughout the development. Large landscape projects shall sample at a rate equivalent to 1 in 7 lots or approximately 15% landscaped area. The 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 City as part of the Certification of Completion.

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

**d.** The project applicant, or his/her designee, shall submit documentation verifying implementation of soil analysis report recommendations to the local agency with the Certification of Completion.

[Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.]

**C.** It is recommended that landscape areas be considered for capture and infiltration capacity, amongst other storm water retention methods and systems, that is sufficient to prevent runoff from impervious surfaces (i.e. roof and paved areas) from additional capacity as required by any applicable local, regional, state, or federal regulation and/or one of the following: the one inch, 24-hour rain event or the 85th percentile, 24-hour rain event.

**D.** It is recommended that storm water projects incorporate any of the following elements to improve on-site stormwater and dry weather runoff capture and use:

**1.** Grade impervious surfaces, such as driveways, during construction to drain into vegetated areas.

**2.** Minimize the area of impervious surfaces such as paved areas, roof, and concrete driveways.

**3.** Incorporate pervious or porous surfaces (e.g. gravel, permeable pavers or blocks, pervious or porous concrete) that minimize runoff.

**4.** Direct runoff from paved surfaces and roof areas into planting beds or landscape areas to maximize site water capture and reuse.

**5.** Incorporate rain gardens, cisterns, and other rain harvesting or catchment systems.

**6.** Incorporate infiltration beds, swales, basins, cisterns, subterranean storm water capture/detention systems, and drywells to capture stormwater and dry weather runoff and increase percolation into the soil.

**7.** Consider constructed wetlands and ponds that retain water, equalize excess flow, and filter pollutants.

[Note: Authority cited: Section 65595, Government Code. Reference: Section 65596, Government Code.]

**2.4 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. 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 landscaped area provided the EAWU in the landscaped area does not exceed the MAWA.

Methods to achieve water efficiency shall include one or more of the following:

1. Protection and preservation of non-invasive water-conserving plant, tree and turf species;

2. Selection of water-conserving plant, tree, and turf species;

3. Selection of plants based on local climate suitability, disease and pest resistance;

4. Selection of trees based on applicable City and local tree ordinances or tree shading guidelines, and size at maturity as appropriate for the planting area;

5. Selection of plants from local and regional landscape program plant lists; and

6. Selection of plants from Los Angeles County Fire Fuel Modification 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 2.5(a)(2)(d) of these Guidelines.

**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, and 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 discouraged 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 and fuel modification zones shall comply with requirements of Los Angeles County, where applicable. When conflicts between water conservation and fire safety design elements exist, the fire safety requirements have priority.

**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, may not prohibit or include conditions that have the effect of prohibiting the use of water efficient plant species as a group.

**1.** Water Features

**a.** Recirculating water systems shall be used for water features.

**b.** Where available and consistent with public health guidelines, recycled water shall be used as a source for decorative water features.

**c.** The 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.

**2.** Soil Preparation, Mulch and Amendments

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

**b.** Soil amendments shall be incorporated according to the recommendations of the soil report and what is appropriate for plants selected.

**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 six 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 shall be included in the landscape design plan as such.

e. Stabilizing mulching products shall be used on slopes that meet current engineering standards such as those detailed in the USDA/USAID Low-Volume Roads Engineering Best Management Practices Field Guide.

f. The mulching portion of the seed/mulch slurry in hydro-seeded applications shall meet the mulching requirement.

g. Organic mulch materials 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.

I. The landscape design plan, at a minimum, shall:

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 landscaped area 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 and installation details, and 24-hour retention or infiltration capacity of any applicable storm water best management practices that encourage on-site retention and infiltration of storm water. Project applicants shall refer to the local agency or regional Water Quality Control Board for information on any applicable stormwater technical requirements. Storm water best management practices are encouraged in the landscape design plan and examples are provided in Section 2.3.C-D.

11. Identify any applicable rain harvesting or catchment technologies (e.g., rain gardens, cisterns, etc.);

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 City of Duarte Water Efficient Landscape Ordinance (Duarte Development Code Chapter 19.40) and applied them for the efficient use of water in the landscape design plan;" and

14. Bear the signature of a California-licensed landscape professional.

[Note: Authority Cited: Section 65595, Reference: Section 65596, Government Code and Section 1351, Civil Code.]

**2.5 Irrigation Design Plan**

**A.** This section applies to landscape 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 manufacturer's 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 of private sub meter, shall be installed for all nonresidential irrigated landscapes of 1,000 square feet but not more than 5,000 square feet (the level at which Water Code 535 applies) and residential irrigated landscapes of 5,000 square feet or greater. A landscape meter may be either:

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

2. A private owned meter or sub meter.

**b.** Automatic irrigation controllers utilizing either evapotranspiration or soil moisture sensor data with non-volatile memory shall be required for irrigation scheduling in all irrigation systems, recommending U.S. EPA WaterSense labeled devices as applicable.

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

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

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

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

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

**f.** A master shutoff valve shall be as close as possible to the point of connection and is required on all projects: with the exception for 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.

**g.** 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 square feet or larger. The flow sensor shall be in combination with a master shut-off valve.

**h.** Manual isolation valves (such as a gate valve, ball valve, or butterfly valve) shall be required downstream of 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.

**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.** All irrigation emission devices shall 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 shall document a distribution uniformity low quarter of 0.65 or higher using the protocol defined in ASBE/ICC 802-2014.

**m.** Average irrigation efficiency for the project shall be determined in accordance with the EAWU calculation sheet in Appendix C. Unless otherwise indicated by the irrigation equipment manufacturer's specifications or demonstrated by the project applicant, the irrigation efficiency of the irrigation heads used within each hydrozone shall be as listed in Section 2.2.C.9.

**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; with the exception of areas with fuel modification requirements and/or those that require plan establishment to comply with local grading ordinances.

**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 components are required on all sprinklers subject to damage that are adjacent to hardscapes or in high traffic areas of turf grass.

**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. Overhead irrigation may be only be considered if such irrigation complies with Section 2.A.1.u of the Implementation Guidelines.

**u.** Overhead irrigation is not 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 landscaped 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 for the landscape project specifies an alternative design or technology, as part of the Landscape Documentation Package, and clearly demonstrates strict adherence to the irrigation system design criteria in Section 2.5.A.1.l hereof. Prevention of overspray and runoff shall be confirmed during an irrigation audit.

4. Slopes greater than 25% may not be irrigated with an irrigation system with an application rate exceeding 0.75 inches per hour. This restriction may be modified if the landscape designer of the landscape project 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 shall 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. The plant factor calculation is based on the proportions of the respective plant water uses and their respective plant factors; or

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

**e.** Individual hydrozones that mix high and low water use plants are not 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.

**g.** The irrigation design plan, at a minimum, shall contain:

**1.** The location and size of separate water meters for landscape;

**2.** The 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.** Irrigation schedule parameters necessary to program smart timers specified in the landscape design. Irrigation between the hours of 9:00 a.m. to 5:00 p.m. is prohibited, except for hand-watering;

**6.** The following statement: "I have complied with the criteria of the City of Duarte Water Efficient Landscape Ordinance (Duarte Development Code Chapter 19.40) and applied them accordingly for the efficient use of water in the irrigation design plan;" and

**7.** The signature of a California-licensed landscape professional.

[Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.]

**2.6 Grading Design Plan**

**A.** For the efficient use of water, grading of a landscape project site shall be designed to minimize soil erosion, runoff, and water waste. Finished grading configuration of the landscaped area, including pads, slopes, drainage, post-construction erosion control, and storm water control Best Management Practices, as applicable, shall be shown on the Landscape Plan unless this information is fully included in separate Grading Plans for the project, or unless the project is limited to replacement planting and/or irrigation to rehabilitate an existing landscaped area. The Landscape Grading Design Plan shall be prepared

in compliance with the City of Duarte Public Works Division requirements and standards or comply with Section 2.6.B-C.

**B.** The applicant shall submit a landscape grading plan that indicates finished configurations and elevations of the landscaped area including:

1. Height of graded slopes;
2. Drainage patterns;
3. Pad elevations;
4. Finish grade; and
5. Storm water retention improvements, if applicable.

**C.** To prevent excessive erosion and runoff, it is highly recommended that the project applicant:

1. Grade so that all irrigation and normal rainfall remains within property lines and does not drain on to non-permeable hardscapes;
2. Avoid disruption of natural drainage patterns and undisturbed soil; and
3. Avoid soil compaction in landscaped areas.

**D.** The Grading Design Plan shall contain the following statement: "I have complied with the criteria of the City of Duarte Water Efficient Landscape Ordinance (Duarte Development Code Chapter 19.40) 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 required by law.

[Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.]

## 2.7 Certification of Completion

**A.** Landscape project installation may not proceed until the Landscape Documentation Package has been approved by the City and any ministerial permits required are issued.

**B.** The project applicant shall notify the City at the beginning of the installation work and at intervals, as necessary, for the duration of the landscape project work to schedule all required inspections.

**C.** Certification of Completion of the landscape project shall be submitted to the City prior to Planning and Building Department final inspection approvals. The requirements for the Final Inspection and Permit Closure include submittal of:

**1.** A Landscape Installation Certificate of Completion in the form included as Appendix E of these Guidelines, which shall include: (i) certification by a landscape professional that the landscape project has been installed per the approved Landscape Documentation Package; and (ii) the following statement: "The landscaping has been installed in substantial conformance to the design plans, and complies with the provisions of the Water Efficient Landscape Ordinance for the efficient use of water in the landscape."

**a.** Where there have been significant changes (as deemed by the City) made in the field during construction, "as-built' or record drawings shall be included with the certificate.

**b.** A laminated or otherwise waterproofed diagram of the irrigation plan showing hydrozones shall be kept with the irrigation controller for subsequent management purposes.

**2.** A laminated or otherwise waterproofed document of the irrigation scheduling parameters used to set the controller(s) shall be kept with the irrigation controller for subsequent management purposes;

**3.** An irrigation audit report from a certified irrigation auditor, as certified by one of the U.S. EPA WaterSense labeled auditing programs; documentation of enrollment in regional or local water purveyor(s)' water conservation programs; and/or documentation that the MAWA and EAWU information for the landscape project has been submitted to the local water purveyor, may be required at the option of the City. Example Inspection Affidavit is included in Appendix H.

**a.** Landscape audits shall not be conducted by the person who designed or installed the landscape.

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

[Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.]

### 2.8 Post-Installation 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 in accordance with Chapter 19.40 of the Duarte Development Code and the local water purveyor(s)' Water Conservation Ordinance, if applicable. Operation of the irrigation system outside the normal watering window is allowed for auditing and system maintenance.

**3.** Use of an automated irrigation system between the hours of 9:00 a.m. to 5:00 p.m. is prohibited.

[Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.]

### 2.9 Post-Installation Landscape and Irrigation Maintenance

**A.** Landscapes shall be maintained to ensure water use efficiency in accordance with existing local agency code.

## 3. Provisions for Existing Landscapes

**A.** Irrigation of all landscaped areas shall be conducted in a manner conforming to the rules and requirements and shall be subject to penalties and incentives for water conservation and water waste prevention, as determined and implemented by the local water purveyor and as may be mutually agreed upon by the City.

**B.** The City and/or the regional or local water purveyor may administer programs such as irrigation water use analyses, irrigation surveys and/or irrigation audits, tiered water rate structures, water budgeting by parcel, or other approaches to achieve landscape water use efficiency community-wide to a level equivalent to or less than would be achieved by applying a MAWA calculated with an ETAF of 0.8 to all landscape areas in the City over one acre in size.

**C.** The architectural guidelines of a common interest development, including apartments, condominiums, planned developments, and stock cooperatives, may not prohibit or include conditions that have the effect of prohibiting the use of low-water use plants as a group.

## 4. Additional Residential Landscape Requirements

### 4.1 Front Yard and Street-Side Yard Landscape Requirements

**A.** In addition to requirements in this Section, landscape projects shall also be subject to requirements of Section 1.2 of these Guidelines.

**B.** At least 50% of the Front Yard Landscaped Area and 50% of the Visible Street Side Yard shall be landscaped with live vegetation, artificial turf, drought-tolerant landscaping or a combination of the three, as further described below:

**1.** Live vegetation may include turf, trees, shrubs, groundcover, flowers, or other similar vegetation.

**2.** Artificial turf is limited to no more than 40% coverage of the Front Yard Landscaped Area and shall include a minimum of 60% of live vegetation. Artificial turf is limited to no more than 40% coverage of the Visible Street Side Yard and shall include a minimum of 60% of live vegetation. (See Section 4.2 of these Guidelines)

**3.** Drought tolerant landscaping shall include native water conserving plants. (See Section 4.3 of these Guidelines)

**C.** Bare dirt is not permitted within the front yard, visible street side yard or within the parkway. All bare landscaped areas shall be finished with a minimum three inch thick layer of mulch, organic bark or earth-toned colored rubber bark.

**D.** A maximum 50% of the front yard may be covered in materials including, but are not limited to, concrete, pavers and step stones (driveways and walkways shall be included in the 50% coverage). Driveways shall be constructed of concrete or paver stones. The 50% coverage shall comply with the requirements set forth in these Guidelines and shall require City approval. The 50% maximum is not automatic and will vary on site conditions.

**E.** Exceptions to these provisions may be permitted on a case by case basis, to be reviewed by Planning Staff, to address R/V access, circular driveways, irregular shaped lots and any other situations not addressed in these Guidelines.

**4.2 Artificial Turf Landscape Standards** - Artificial or synthetic turf is an appropriate substitute, in some cases, for natural turf for the purposes of water conservation.

**A.** In addition to requirements in this Section, landscape projects shall also be subject to requirements of Section 1.2 of these Guidelines.

**B.** The use and maintenance of artificial turf shall be governed by the following standards as set forth in Chapter 19.40.100.C.

1. Artificial turf may be installed in the front yard landscaped area and in visible street-side yards, not to exceed 40% coverage per yard area. Front Yard Landscaped Area means 50% of the front yard area that is required to be landscaped.

2. Artificial turf is not permitted within the parkway.

3. Artificial turf shall be installed in combination with a minimum 60% of natural plant materials (i.e. trees, shrubs or groundcover) to enhance the overall landscaping design.

4. Artificial turf shall be natural in appearance and color.

5. Artificial turf should have two colors of blades.

6. Artificial turf should have a UV protection.

7. Pile height shall be at least 1 ¾ inches and shall be installed in a manner where top of piles are not flush with adjacent surfaces and are a minimum of ½" above adjacent surfaces.

8. Artificial turf shall be professionally installed by a licensed company.

9. Artificial turf shall be installed in a manner where there are no visible seams, patterns or change in color. Seams shall be installed per manufacturer's standards which may include glue, sod-staples of other methods of attachment to prevent future separation.

10. A weed barrier shall be installed to protect against weeds.

11. Artificial turf shall be prepared in a manner that allows water to permeate and pass through the turf so as not to cause runoff onto adjacent properties, flooding, or pooling of water.

12. Artificial turf shall be installed and maintained to effectively simulate the appearance of a well-maintained lawn.

13. Artificial turf should not be installed directly on top of existing grass, dirt or paved surfaces.

14. Artificial turf uniformity must be maintained for all areas that are visibly linked.

15. Artificial turf area shall be kept free of weeds, debris, tears, stains, holes, mildew and impressions.

16. The use of indoor or outdoor plastic or nylon carpeting for installation or as a replacement for artificial turf or natural turf shall be prohibited.

17. The use of artificial turf requires Community Development Department approval before installation.

18. Inspection by City Staff is required upon installation to ensure compliance with City Standards.

C. Recommended installation standards

1. A sub-base of infill of three inches of compacted aggregate material should be installed under the artificial surface.

2. Lose infill material is not recommended.

3. Artificial turf should be concealed by a hard edge material.

4. Pile weight should be at least 40 ounces per square yard.

5. Artificial turf should have a minimum of an eight year product warranty.

6. Artificial turf should have a minimum one year installation/workmanship warranty.

7. Artificial turf edges should be finished.

8. Remove organic material from the surface with a leaf blower or rake.

9. If you have animals that will use the turf, remove the animal feces on a frequent basis, and wash the area. Urine should flow through the turf like rainwater.

10. Artificial turf should be cleaned and the pile fluffed periodically to maintain its appearance.

11. Artificial turf should not be installed within 48 inches of trees or 36 inches of any native shrubs.

12. Artificial turf should not contain lead or any substance with the potential to leach elements and/or compounds that could come in contact with ground water or any other ecologically sensitive area.

13. Artificial turf should not have a felt backing.

D. Materials to be submitted to the Planning Department for Approval.

1. A sample of the turf to be installed and the manufacturer's product information sheet.

2. A scaled site plan which shall include the following:

   a. Dimensions of the entire yard.

   b. Dimensions and percentage of the area being covered with artificial turf (40% maximum).

   c. Location and identification of natural vegetation (60% minimum).

   d. Location and identification of hardscape material, including driveways and walkways (50% maximum).

3. Irrigation plan, which shall include but not be limited to:

   a. Type of irrigation system.

   b. Location of all irrigation emission devices such as sprinkler heads or low volume irrigation devices.

4. Contact information and license number for the company installing the artificial turf.

**4.3 Drought Tolerant Landscape Standards** - Drought tolerant landscapes may be an appropriate substitute, in some cases, for natural turf for the purposes of water conservation. When installed correctly, drought tolerant landscapes can provide aesthetic curb appeal and provide an appealing community environment, while utilizing little to no water consumption.

A. In addition to requirements in this Section, landscape projects shall also be subject to requirements of Section 1.2 of these Guidelines.

B. The use and maintenance of drought tolerant landscapes shall be governed by the following standards:

1. Plants and landscape materials, except trees, should not be spaced less than five feet on center.

2. Decorative rocks may be utilized, but shall consist of earth-toned colored rocks and shall not exceed 20% of the Landscaped Area.

3. Decomposed granite may be utilized only in combination with plant material.

4. Bare areas shall be covered with mulch, bark or wood chips to a depth of three inches. Ground cover shall also be installed to minimize the amount of mulch, bark or wood chips during the interim time in which the plants are established.

5. Bare dirt is not permitted.

C. Drought Tolerant Care Standards

1. Removing weeds is imperative as they compete for water and can harbor pests and diseases.

2. Remove broken and crossing branches and pest riddled or infested plant material.

3. Pest and disease monitoring is critical.

4. Diseased plants shall be removed immediately.

5. Trim plant material to reduce overcrowding.

6. Routine and thoughtful maintenance will keep the landscape looking at its best.

7. Perform routine maintenance of the irrigation system.

D. Materials to be submitted to the Planning Department for Approval

1. A scaled site plan which shall include the following:

a. Dimensions of the entire yard;

b. Location, spacing, size and identification of plant material proposed ; and

c. Dimensions and percentages of area covered with decorative rocks (20% maximum) if proposed.

2. Irrigation plan, which shall include but not be limited to:

a. Type of irrigation system.

b. Location of all irrigation emission devices such as sprinkler heads or low volume irrigation devices.

E. Suggested plant material

1. See Appendix I – City of Duarte California Drought Tolerant Landscape Guide.

### 4.4 Parkway Landscape Standards

**A.** Parkways must be landscaped with live vegetation such as drought-tolerant landscaping, turf, trees, shrubs, groundcover, flowers, or other similar vegetation.

**B.** The use of mulch, rocks, stones, decomposed granite or other hardscapes within the Parkway shall be reviewed on a case-by-case basis. maximum 50% of the parkway may be covered in organic bark, rubber bark, and/or hardscape materials including, but not limited to, concrete, pavers, step stones, and compressed granite. Water runoff must remain the same or decrease in volume.

**C.** Artificial turf is not permitted within the parkway.

**D.** Parkway trees shall not be removed by anyone not authorized by the City. Any questions pertaining to street trees shall be referred to the Community Development Department.

**E.** General Requirements

1. An encroachment permit from Public Works is required for any structures, hardscape, rocks, stones, decomposed granite, or pavement installed within the public right-of-way.

2. Materials used in the parkway must not be a tripping hazard. Step stones, pavers, bricks, and other walkway materials shall be installed in a manner where the materials are flush with the adjacent sidewalk, upon approval from the Public Works Division.

3. No bare dirt or asphalt shall be permitted within the parkway.

4. Small rocks and pebbles are not permitted within the parkway.

5. Plant materials must not obscure the line of sight for traffic or obstruct the sidewalk.

6. Noxious plants that are a threat to the public health, safety, or welfare shall not be permitted. These may include, but are not limited to, plants that are diseased, pointed, thorny, poisonous, food bearing, or attract pets and/or vermin.

7. Elevated planters are not permitted within the parkway.

8. Electrical lighting within the parkway is discouraged, but may be considered on a case-by case basis contingent upon Public Works Division approval.

9. Mulch, decomposed granite and plant materials must be maintained at all times and kept off the street, curb and sidewalk.

**5. 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.

B. Model Homes. All model homes that are landscaped shall use signs and written information to demonstrate the principles of water efficient landscapes as described.

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 site water efficient landscape; and demonstrate low water use approaches to landscaping such as using appropriate plants, alternative water sources, or rainwater catchment systems.

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

[Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.]

## Appendix A

## PRESCRIPTIVE COMPLIANCE OPTION

**A.** This appendix contains prescriptive requirements which may be used as a compliance option to the Ordinance.

**B.** Compliance with the following items is mandatory and shall be documented in a landscape plan in order to use the prescriptive compliance option:

**1.** Submit a Landscape Documentation Package which includes the following elements:

**a.** Date

**b.** Project applicant

**c.** Project address (if available, parcel and/or lot number (s))

**d.** Total landscape area (square feet), including a breakdown of turf and plant material

**e.** Project type (e.g., new, rehabilitated, public, private, cemetery, homeowner-installed)

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

**g.** Contact information for the project applicant and property owner

**h.** Applicant signature and date with statement, "I agree to comply with the requirements of the prescriptive compliance option to the MWELO"

**2.** Incorporate compost at a rate of at least four cubic yards per 1,000 square feet to a depth of six inches into landscaped area (unless contradicted 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 plan factor 0.3) for 75% of the plant area excluding edibles and areas using recycled water; For nonresidential areas, install climate adapted plants that require occasional, little or no summer water (average WUCOLS plan 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 landscaped area in residential areas, and there shall be no turf in nonresidential 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 shall be irrigated by sub-surface irrigation or by other technology that creates no overspray or runoff, unless overhead irrigation complies with Section 2.A.1.u.

5. Irrigation systems shall comply with the following:

   a. Automatic irrigation controllers are required and shall use evapotranspiration or soil moisture sensor data

   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 shall meet the requirements set in the ANSI standard, ASABE/ICC802-2014, "Landscape irrigation Sprinkler and Emitter Standard." All Sprinkler heads installed in the landscape shall document a distribution uniformity low quarter of 0.65 or higher using the protocol defined in ASABE/ICC 802-2014.

C. At the time of final inspection, the permit applicant shall provide the owner of the property with a Certificate of Completion, Certificate of Installation, Irrigation Schedule and a Schedule of Landscape and Irrigation Maintenance.

## Appendix B

## CERTIFICATION OF LANDSCAPE DESIGN

I hereby certify that:

(1) I am a professional appropriately licensed in the State of California to provide professional landscape design services.

(2) The landscape design and water use calculations for the property located at _____

_____

(provide street address or parcel number(s)) were prepared by me or under my supervision.

(3) The landscape design and water use calculations for the identified property comply with the requirements of the City of Duarte Water Efficient Landscape Ordinance (Development Code Chapter 19.40) and the City of Duarte Guidelines for Implementation of the City of Duarte Water Efficient Landscape Ordinance.

(4) The information I have provided in this Certificate of Landscape Design is true and correct and is hereby submitted in compliance with the City of Duarte Guidelines for Implementation of the City of Duarte Water Efficient Landscape Ordinance.

_____ _____

Print Name Date

_____ _____

Signature License Number

_____

Address

_____ _____

Telephone E-mail Address

Landscape Design Professional's Stamp
(If applicable)

## Appendix C

## WATER EFFICIENT LANDSCAPE WORKSHEET

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

**Reference Evapotranspiration (ETo)[a]: _____**

**Landscape Area Sector Type** [ ] Residential [ ] Non-Residential

| | Hydrozone #/Planting Description | Location | Plant Factor[b] (PF) | Irrigation Method[c] | Irrigation Efficiency[c] (IE) | ETAF (PF/IE) | Landscape Area (sq-ft) | ETAF x Area | Estimated Total Water Use[d] (ETWU) |
|---|---|---|---|---|---|---|---|---|---|
| ***Regular Landscape Area*** | | | | | | | | | |
| 1 | | | | | | | | | |
| 2 | | | | | | | | | |
| 3 | | | | | | | | | |
| 4 | | | | | | | | | |
| 5 | | | | | | | | | |
| 6 | | | | | | | | | |
| 7 | | | | | | | | | |
| 8 | | | | | | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |

| ***Average*** | ***Total*** | ***Total*** |
|---|---|---|
| | | |

**Average ETAF for Regular Landscape Areas[e] (circle one):** **In Compliance** **Not In Compliance**

***Special Landscape Area***

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| SLA-1 | | | | | | | |
| SLA-2 | | | | | | | |
| SLA-3 | | | | | | | |
| SLA-4 | | | | | | | |
| SLA-5 | | | | | | | |

***Totals*** | | |

**Total Landscape Area** | |

**Site wide ETAF** | |

**ETWU Total** | |

**Maximum Allowed Water Allowance (MAWA)[f]** | |

## WORKSHEET INFORMATION & EQUATIONS

[a] Local monthly evapotranspiration rates are listed in Appendix D.

[b] The following table can be used for common plant factors:

| Plant Factor | PF |
|---|---|
| Very low water use plant | 0.1 |
| Low water use plant | 0.2 |
| Medium water use plant | 0.5 |
| High water use plant | 0.8 |
| Lawn | 0.8 |
| Pool, spa, or other water feature | 1.0 |

[c] *Irrigation efficiency* is derived from measurements and estimates of irrigation system characteristics and management practices. The minimum average *irrigation efficiency* for purposes of these *Guidelines* is 0.71. The following *irrigation efficiency* may be obtained for the listed irrigation heads with an *Irrigation Management Efficiency* of 90%:

| Irrigation Method | IE |
|---|---|
| Spray nozzles | 71% |
| High efficiency spray nozzles | 73% |
| Multi stream/Multi trajectory rotary (MSMT) nozzles | 76% |
| Stream rotor nozzle | 73% |
| Microspray | 76% |
| Bubblers | 77% |
| Drip emitter | 81% |
| Subsurface drip | 81% |

[d] Estimated Total Water Use (ETWU) is the annual gallons required

$$ETWU = (ETo) \times (0.62) \times (ETAF \times Area)$$

where, ETo = annual evapotranspiration rate in inches per year
0.62 = factor used to convert inches per year to gallons per square foot
ETAF = plant factor ÷ irrigation efficiency

[e] Average ETAF for Regular Landscape Areas must be 0.55 or below for residential areas, and 0.45 or below for nonresidential areas.

[f] Maximum Allowed Water Allowance (MAWA) is the annual gallons allowed

$$MAWA = (ETo) \times (0.62) \times [(ETAF \times LA) + ((1\text{-}ETAF) \times SLA)]$$

where, ETo = annual evapotranspiration rate in inches per year
0.62 = factor used to convert inches per year to gallons per square foot
ETAF = plant factor ÷ irrigation efficiency
LA = total (site wide) landscape area in square feet
SLA = total special landscape area

## Appendix D

## REFERENCE EVAPOTRANSPIRATION (ETO) TABLE

| LOS ANGELES | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Annual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 |

* 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 Department 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
4. Natural Resources (1987), Publication Leaflet 21426

## Appendix E

## LANDSCAPE INSTALLATION CERTIFICATE OF COMPLETION

I hereby certify that:

(1) I am a professional appropriately licensed in the State of California to provide professional landscape design services for_____(project name, mailing address, and telephone).

(2) The landscape project for the property located at _____ _____ (provide street address or parcel number(s)) was installed by me or under my supervision.

(3) The landscaping for the identified property has been installed in substantial conformance with the approved Landscape Documentation Package and complies with the requirements of the City of Duarte Water Efficient Landscape Ordinance (Development Code Chapter 19.40 and the City of Duarte Guidelines for Implementation of the City of Duarte Water Efficient Landscape Ordinance for the efficient use of water in the landscape.

(4) The following elements are attached hereto:

a. Irrigation scheduling parameters used to set the controller;

b. Landscape and irrigation maintenance schedule;

c. Irrigation audit report; and

d. Soil analysis report, if not submitted with Landscape Document Package, and documentation verifying implementation of the soil report recommendations.

(5) The site installation complies with the following:

a. The required irrigation system has been installed according to approved plans and specifications and if applicable, any prior approved irrigation system alternatives.

____ Yes ____ No

b. Sprinklers comply with ASABE/ICC 802-2014 Landscape Irrigation Sprinkler & Emitter Standard.

_____ Yes ____ No

(6) The information I have provided in this Landscape Installation Certificate of Completion is true and correct and is hereby submitted in compliance with the City of Duarte Guidelines for Implementation of the City of Duarte Water Efficient Landscape Ordinance.

| | |
|---|---|
| Print Name | Date |
| Signature | License Number |
| Address | |
| Telephone | E-mail Address |

Landscape Design Professional's Stamp
(If Appropriate)

## Appendix F

## DEFINITIONS

The terms used in these **Guidelines** have the meaning set forth below:

***Aggregate***. A concept that pertains to production home neighborhoods, common interest developments, or other situations where multiple parcels are undergoing landscape development as one project, but may eventually be individually owned or maintained.

***Applied water***. The portion of water supplied by the irrigation system to the landscape.

***Artificial turf***. A man-made material which simulates the appearance of live turf, organic turf, grass, sod, or lawn.

***Automatic irrigation controller***. See *Automatic Controller* under Chapter 19.160.030.

***Backflow prevention device***. A safety device used to prevent pollution or contamination of the water supply due to the reverse flow of water from the irrigation system.

***Certification of Completion or Landscape Installation Certificate of Completion***. The certification included as Exhibit E of the Implementation Guidelines that shall be provided to the City prior to Planning and Building Divisions final inspection pursuant to Section 2.7 of the Guidelines.

***Certification of Design or Certificate of Landscape Design***. The certification included as Exhibit B of the Implementation Guidelines that shall be included in the Landscape Documentation Package pursuant to Section 2.1 of the Guidelines.

***Certified landscape irrigation auditor***. A person(s) 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.

***Chapter***. Refers to Chapter 19.40 of the Duarte Development Code.

***Check valve*** or ***Anti-drain valve***. A valve or valves 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.

***City***. Refers to the City of Duarte.

***Common interest developments***. Refers to community apartment projects, condominium projects, planned developments, and stock cooperatives per Civil Code Section 1351.

***Conversion factor***. The number that converts acre-inches per acre per year to gallons per square foot per year.

***Drip irrigation***. See definition under Chapter 19.160.050.

***Drought-tolerant landscaping***. Landscaping that utilizes little or no irrigation through the use of water-conserving materials and techniques, including but not limited to, native drought-tolerant plants, mulch and efficient irrigation.

***Drought-tolerant plants***. See definition under Chapter 19.160.050.

***Ecological restoration project***. A project where the site is intentionally altered to establish a defined, indigenous, historic ecosystem.

***Emitter***. A drip irrigation emission device that delivers water slowly from the system to the soil.

***Estimated Applied Water Use (EAWU)***. The annual total amount of water estimated to keep plants in a healthy state. It is based on factors such as reference evapotranspiration rate, the size of the landscaped area, plant water use factors, and the irrigation efficiency within each hydrozone.

***Evapotranspiration***. See definition under Chapter 19.160.060.

***Evapotranspiration adjustment factor (ETAF)***. 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.

***Evapotranspiration rate***. The quantity of water evaporated from adjacent soil and other surfaces and transpired by plants during a specified time.

***Flow rate***. 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.

***Front yard***. For purposes of this Chapter and the Guidelines, shall mean the required front yard setback and any area between the street and the outline of the main building line. For other unique lot configurations, the Director of Community Development shall determine front yard.

***Front yard landscaped area***. The Front Yard Area that is not occupied by driveways, hardscape or other pervious or non-pervious surfaces and that is required to be landscaped with live

vegetation, artificial turf, drought tolerant landscaping or a combination of all three, as further described in this Chapter and the Implementation Guidelines.

***Graywater***. A system containing 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 unhealthy 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 as per the Health and Safety Code (Section 17922.12). 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.

***Hardscape***. See definition under Chapter 19.160.090.

***Hydrozone.*** See definition under Chapter 19.160.090.

***Implementation Guidelines or Guidelines***. Refers to the Water Efficient Landscape Ordinance Guidelines which shall be adopted by resolution of the Planning Commission. The purpose of the Guidelines is to provide procedural and design guidance for applicants proposing new landscape or landscape rehabilitation projects that are subject to Chapter 19.40 of the City of Duarte Development Code.

***Infiltration rate***. See definition under Chapter 19.160.100.

***Invasive and/or Noxious plants species***. Species of plants not historically found in California that spread outside cultivated areas and can damage environmental or economic resources. Invasive plant species may be regulated by county agricultural agencies as noxious species.

***Irrigation audit.*** 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.

***Irrigation efficiency (IE).*** The measurement of the amount of water beneficially used divided by the amount of water applied to a landscaped area. Irrigation efficiency is derived from measurements and estimates of irrigation system characteristics and management practices. The minimum average irrigation efficiency for purposes of this Chapter and the Guidelines is 0.71. Greater irrigation efficiency can be expected from well designed and maintained systems. The following irrigation efficiency may be obtained for the listed irrigation heads with an IME of 90%:

| Irrigation Method | $DU_{LQ}$ | $DU_{LH}$* | EU | IE** |
|---|---|---|---|---|
| Spray nozzles | 65% | 79% | | 71% |
| High efficiency spray nozzles | 75% | 82% | | 73% |
| Multi stream/Multi trajectory rotary (MSMT) nozzles | 75% | 85% | | 76% |
| Stream rotor nozzle | 70% | 82% | | 73% |
| Microspray | 75% | 85% | | 76% |
| Bubblers | | | 85% | 77% |
| Drip emitter | | | 90% | 81% |
| Subsurface drip | | | 90% | 81% |

*$DU_{LH}$ = .386 + (.614)($DU_{LQ}$)

** IE (spray) = ($DU_{LH}$)(IME)

** IE (drip) = Emission uniformity (EU)(IME)

***Irrigation Management Efficiency (IME).*** The measurement used to calculate the irrigation efficiency of the irrigation system for a landscaped project. A 90% IME can be achieved by using evapotranspiration controllers, soil moisture sensors, and other methods that will adjust irrigation run times to meet plant water needs.

***Landscape coefficient ($K_L$ ).*** The product of a plant factor multiplied by a density factor and a microclimate factor. The landscape coefficient is derived to estimate water loss from irrigated landscaped areas and special landscaped areas.

***Landscape documentation package.*** The package of documents that a project applicant is required to submit to the City pursuant to Section 2.1 of the Guidelines.

***Landscape professional.*** A licensed landscape architect, licensed landscape contractor, or any other person authorized to design a landscape pursuant to Sections 5500.1, 5615, 5641, 5641.1, 5641.2, 5641.3, 5641.4, 5641.5, 5641.6, 6701, 7027.5 of the California Business and Professions Code, Section 832.27 of Title 16 of the California Code of Regulations, and Section 6721 of the California Food and Agriculture Code.

***Landscaped area.*** Refers to all planting areas, turf areas, and water features in a landscape design plan subject to the Maximum Applied Water Allowance and Estimated Applied Water Use calculations. The landscaped 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).

***Landscaping.*** See definition under Chapter 19.160.130.

***Lateral line.*** A water delivery pipeline that supplies water to the emitters or sprinklers from the valve.

***Low volume irrigation***. 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.

***Low volume overhead irrigation***. Aboveground irrigation heads with an upper flow limit of 0.5 GPM.

***Main line***. A pressurized pipeline that delivers water from the water source to the valve or outlet.

***Manual isolation valve.*** A valve such as a gate valve, ball valve, or butterfly valve installed downstream of the point of connection of the water supply to shutdown water flow through mainline piping for routine maintenance and emergency repair.

***Master shut-off valve***. An electronic valve such as a solenoid valve installed as close as possible to the point of connection and is used in conjunction with a flow sensor and flow monitoring controller technology to automatically shutdown system wide water flow in the event of high flow conditions such as mainline pipe break.

***Maximum Applied Water Allowance (MAWA).*** Refers to the upper limit of annual applied water for the established landscaped area, as specified in Section 2.2 of the Guidelines. It is based upon the area's reference evapotranspiration, the ETAF, and the size of the landscaped area. The Estimated Applied Water Use shall not exceed the Maximum Applied Water Allowance.

***Microclimate***. The climate of a small, specific area that may contrast with the climate of the overall landscaped area due to factors such as wind, sun exposure, plant density, or proximity to reflective surfaces.

***Mined-land reclamation projects.*** Any surface mining operation with a reclamation plan approved in accordance with the Surface mining and Reclamation Act of 1975.

***Mulch***. Any organic material such as leaves, bark, straw or 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.

***Non-pervious or Impervious***. Any surface or material that does not allow for the passage of water through the material and into the underlying soil.

***Operating pressure***. The pressure at which the parts of an irrigation system of sprinklers are designed to operate at by the manufacturer.

***Overspray***. The irrigation water which is delivered beyond the target area.

***Parkway***. See definition under Chapter 19.160.170.

***Person.*** Any natural person, firm, joint venture, joint stock company, partnership, public or private association, club, company, corporation, business trust, organization, public or private agency, government agency or institution, school district, college, university, any other user of water provided by the City or the local water purveyor, or the manager, lessee, agent, servant, officer, or employee of any of them or any other entity which is recognized by law as the subject of rights or duties.

***Pervious.*** Means any surface or material that allows the passage of water through the material and into the underlying soil.

***Plant factor or Plant water use factor.*** A factor, when multiplied by ETo, that estimates the amount of water needed by plants. For purposes of this Water Efficient Landscape 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 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 the Guidelines are derived from the Department of Water Resources 2000 publication "Water Use Classification of Landscape Species."

***Precipitation rate***. The rate of application of water measured in inches per hour.

***Project applicant.*** The individual or entity submitting a Landscape Documentation Package required under Section 2.1 to request a permit, plan check, or design review from the City. A project applicant may be the property owner or his or her designee.

***Property owner.*** The record owner of real property as shown on the most recently issued equalized assessment roll.

***Rain sensor or Rain sensing shutoff device***. A component which automatically suspends irrigation when it rains.

***Recreational area.*** An area(s), excluding private single family residential areas, designated for active play; recreation or public assembly in parks, sports fields, picnic grounds, amphitheaters; golf course tees, fairways, roughs, surrounds and greens; private recreational or assembly space as part of a comprehensive project that otherwise meets the intent of this Chapter, and other active or recreational play areas as determined by the Community Development Director.

***Recycled water or Reclaimed water***. Treated or recycled waste water of a quality suitable for non-potable uses such as landscape irrigation and water features. This water is not intended for human consumption.

***Reference evapotranspiration (ETo).*** A standard measurement of environmental parameters which affect the water use of plants. ETo is given expressed in inches per day, month, or year as represented in Appendix C of the Guidelines, 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.

***Rehabilitated landscape.*** Any re-landscaping project that requires a permit, plan check, or design review, meets the requirement of Section 1.2 of the Guidelines, and the modified landscape area is equal to or greater than 2,500 square feet.

***Runoff***. See definition under Chapter 19.160.190.

***SMART irrigation controller or Soil moisture sensor***. A weather-based or soil moisture-based irrigation controller that monitors and uses information about the environmental conditions at a specific location and landscape to automatically adjust watering schedules.

***Soil texture***. The classification of soil based on its percentage of sand, silt, and clay.

***Special Landscaped Areas (SLA)***. Area(s) of the landscape dedicated solely to edible plants such as orchards and vegetable gardens, areas irrigated with recycled water, water features using recycled water, and areas designated as a Recreational Area.

***Sprinkler head***. A device which delivers water through a nozzle.

***Static water pressure***. See definition under Chapter 19.160.200.

***Station***. An irrigated area served by one valve or by a set of valves that operate simultaneously.

***Swing joint***. An irrigation component that provides a leak-free connection between the emission device and lateral pipeline to allow movement in any direction and to prevent equipment damage.

***Turf***. See definition under Chapter 19.160.210.

***Valve***. A device used to control the flow of water in an irrigation system.

***Visible street side yard.*** For purposes of this Chapter and the Guidelines, means any street side yard that is visible from the public right of way, that shall be improved as further described in this Chapter and the Implementation Guidelines.

***Water-efficient irrigation system***. See definition under Chapter 19.160.240.

***Water-efficient landscape***. See definition under Chapter 19.160.240.

***Water efficient landscape ordinance***. Refers to Chapter 19.40 of the City of Duarte Development Code.

***Water efficient landscape worksheet***. The worksheet required to be completed pursuant to Section 2.2 of the Guidelines and which are included in Appendix C of the Guidelines.

***Water feature***. A design element or elements 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 landscaped area. Constructed wetlands used for on-site wastewater treatment, habitat protection, or storm water best management practices that are not irrigated and used solely for water treatment or storm water retention are not water features and, therefore, are not subject to the water budget calculation.

***Watering window***. The time of day irrigation is allowed on landscaped surfaces.

***WUCOLS***. Refers to the Water Use Classification of Landscape published by the University of California Cooperative Extension, the Department of Water Resources, and the Bureau of Reclamation, 2000. *www.owue.water.ca.gov/docs/wucols00*

## Appendix G

This is a voluntary compliance tool template developed by the Irrigation Association.

### IRRIGATION PLAN CHECKLIST

Please complete the following checklist by checking all appropriate categories under APPLICANT column, indicating compliance with these content requirements. All submitted plans shall contain the following information:

LANDSCAPE PLAN NUMBER: _____

NAME OF PROJECT: _____

| Applicant | | | Planner |
|---|---|---|---|
| [ ] | 1. | Prevailing winds | [ ] |
| [ ] | 2. | Slope aspect and degree of slope | [ ] |
| [ ] | 3. | Soil type and infiltration rate | [ ] |
| [ ] | 4. | Vegetation type | [ ] |
| [ ] | 5. | Microclimates | [ ] |
| [ ] | 6. | Expansive or hazardous soil conditions | [ ] |
| [ ] | 7. | Water harvesting potential | [ ] |
| [ ] | 8. | Available water supply, including non-potable and recycled water | [ ] |
| All pertinent system information is indicated, including: | | | |
| [ ] | 9. | Irrigation zones substantially corresponding to hydrozones on the landscape plan and labeled by precipitation rates and method of application | [ ] |
| [ ] | 10. | Water meters | [ ] |
| [ ] | 11. | Tap-in location | [ ] |
| [ ] | 12. | Static water pressure at the point of connection | [ ] |
| [ ] | 13. | System controller | [ ] |
| [ ] | 14. | Rain sensor/shut-off device | [ ] |
| [ ] | 15. | Backflow preventers | [ ] |
| [ ] | 16. | Shut-off valves and zone control valves | [ ] |
| [ ] | 17. | Main line and lateral piping | [ ] |
| [ ] | 18. | Sprinkler heads | [ ] |
| [ ] | 19. | Bubblers and drip irrigation tubing runs | [ ] |
| [ ] | 20. | Type and size of main irrigation system components | [ ] |
| [ ] | 21. | Total required operating pressure for each control valve/zone | [ ] |
| [ ] | 22. | Graphic depiction of the locations of irrigation system components | [ ] |
| [ ] | 23. | Total required operating pressure for each control valve/zone | [ ] |
| [ ] | 24. | Any supplemental stormwater and/or runoff harvesting | [ ] |
| System design is in conformance with the following standards: | | | |
| [ ] | 25. | Certification of Professional Qualifications, attached | [ ] |
| [ ] | 26. | Pedestrian surfaces located on plan | [ ] |
| [ ] | 27. | Equipment installed flush with grade for safety | [ ] |
| [ ] | 28. | Compliance with local codes | [ ] |
| [ ] | 29. | Overspray onto impervious areas minimized | [ ] |

## Appendix H

This is a voluntary compliance tool template developed by the Irrigation Association.

**IRRIGATION INSPECTION AFFIDAVIT**
(To be submitted in conformance with Code Section 309.C)

Irrigation Plan File No: _____ Name of Project: _____

Irrigation Plan Designer: _____ Inspector: _____

Date(s) of Inspection: _____

**This project was inspected within the limits of customary access for compliance with the approved irrigation plan on file in City Planning. At least two (2) inspections were conducted. The findings are as follows:**

| (Check One) | Yes | No |
|---|---|---|
| A. Inspection during construction to check main line in open trench: | | |
| 1. Location of main line conforms to as-built plan | _____ | _____ |
| 2. Size of main line conforms to plan | _____ | _____ |
| 3. Depth of main line conforms to plan | _____ | _____ |
| 4. Main line condition is undamaged | _____ | _____ |
| 5. Main line pressure tested with water and meter to check for visible leaks | _____ | _____ |
| 6. Specific observations attached if needed | _____ | _____ |
| B. Inspection after completion of system installation prior to seeding or sodding: | | |
| 1. Settling along trenches is absent | _____ | _____ |
| 2. System components (i.e., controller, backflow preventer, rain sensor, etc.) installed as specified | _____ | _____ |
| 3. Rotary heads pressure tested | _____ | _____ |
| 4. System activated for observation of compliance | _____ | _____ |
| 5. Landscape components are not blocking application | _____ | _____ |
| 6. Each station complies with design / as-built plan | _____ | _____ |
| 7. Matched precipitation rates provided by zone | _____ | _____ |
| 8. As-built plan provided to owner | _____ | _____ |
| 9. Specific observations attached as needed | _____ | _____ |

I hereby certify that I am qualified to submit this irrigation inspection affidavit based on the qualification indicated below: (check one)

☐ Certified Irrigation Designer certified by The Irrigation Association, indicate year of certification _____

State: _____ Licensed No. _____

State Agency Phone No. (_____) _____



_____ _____

Name (PRINT) Signature

Date

## Appendix I

## CITY OF DUARTE SOUTHERN CALIFORNIA DROUGHT TOLERANT LANDSCAPE GUIDE *

### SHRUBS

1. Apache Plume

2. Bush Sunflower

3. Cleveland Sage

4. Fairy Duster

5. Island Bush Poppy

6. Mexican Bush Sage

### SHRUBS CONTINUED

7. Ribes

8. Manzanita

9. Vevin's Barberry

10. Mountain Mahogany

11. Rosemary

12. Safari Sunset

### GROUNDCOVER

1. Dymondia Silver Carpet

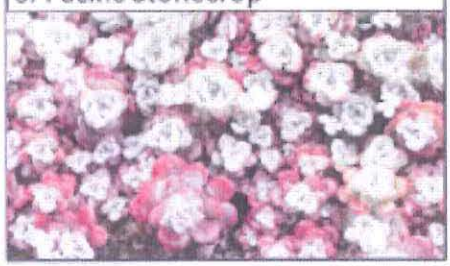
2. Lantana- (variety of colors)

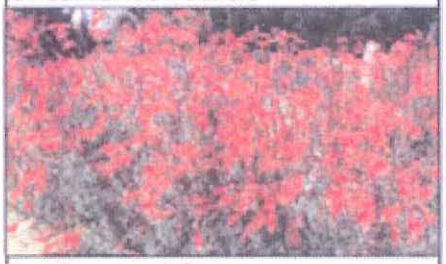
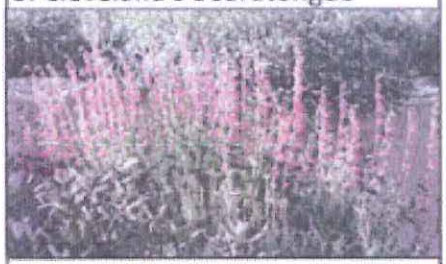
3. Common Yarrow

4. Woolly Thyme

5. Sulfur Buckwheat

6. Red Creeping Thyme

| SUCCULENTS |
| --- |
| 1. New Mexico Agave |
|  |
| 2. Sempervivum 'Clipper' |
|  |
| 3. Agave (attenuata) |
|  |
| 4. Paddle Plant |
|  |
| 5. Banana yucca |
|  |
| 6. Pacific Stonecrop |
|  |

| PERENNIALS |
| --- |
| 1. California Poppy |
|  |
| 2. California Evening-Primose |
|  |
| 3. California Fuchsia |
|  |
| 4. Blue-eyed Grass |
|  |
| 5. Cleveland's Beardtongue |
|  |
| 6. Desert Marigold |
|  |

| PERENNIALS CONTINUED |
| --- |
| 7. Island Coral Bells |
|  |
| 8. Penstemon "Margarita Bop" |
|  |
| 9. Hummingbird Sage |
|  |
| 10. Wooly Blue Curls |
|  |
| 11. Matilija Poppy |
|  |
| 12. Douglas Iris |
|  |

## GRASSES

1. Fountain Grass (Purple)

2. Deer Grass

3. Eulalia Grass (Miscanthus)

4. Blue Festuca

5. Pink Muhly

6. Switchgrass (Dallas Blues)

## TREES

1. Coastal Live Oak

2. California Redbud

3. Desert Willow

4. California Sycamore

5. Australian Willow

6. Hollyleaf Cherry

## TREES CONTINUED

7. Shoestring Acacia

8. Peppermint Tree

9. Blue Palo Verde

10. Incense Cedar

11. Crape Myrtle

12. Mesquite

* This is only a sample of drought tolerant landscape materials and does not constitute an exhaustive list of such plant materials. The City advises that before any of these plants on this list are used, the user researches the plant's growth habits, maintenance, use in high fire zones, longevity and reproduction methods, etc.

**ORDINANCE NO.**

**AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF DUARTE, CALIFORNIA ADOPTING MUNICIPAL CODE AMENDMENT (MCA) 15-05 WHICH WOULD AMEND CHAPTER 19.40 "LANDSCAPING" OF ARTICLE 3, "REGULATIONS APPLICABLE TO ALL ZONES", TO TITLE 19 OF THE DUARTE DEVELOPMENT CODE IN ITS ENTIRETY, TO REVISE REGULATIONS PRIMARILY RELATED TO WATER EFFICIENT LANDSCAPING, IN COMPLIANCE WITH NEW STATE REQUIREMENTS**

WHEREAS, Governor Brown issued a Drought Executive Order (B-29-2015) on April 1, 2015, directing DWR to update the State's Model Water Efficient Landscape Ordinance, to increase water efficiency standards for new and existing landscape through more efficient irrigation systems, graywater usage, onsite stormwater capture and by limiting the portion of landscaping that can be covered in turf; and

WHEREAS, consistent with these findings, the purpose of the City of Duarte Model Water Efficient Landscape Ordinance is to establish an alternative model acceptable under Governor Brown's Executive Order (B-29-2015) as being at least as effective as the State's DWR Model Water Efficient Landscape Ordinance; and

WHEREAS, other landscape regulations, not pertaining directly to the Model Water Efficient Landscape Ordinance, are amended from time to time based upon past experience with landscape projects, changes in the industry and corrections from previous standards and regulations; and

WHEREAS, the Planning Commission of the City of Duarte conducted a duly-noticed public hearing on January 19, 2016, pursuant to Development Code Section 19.142.040 to consider MCA 15-05, a city initiated request to amend Chapter 19.40 (Landscaping) of the Duarte Development Code in its entirety to revise regulations, primarily related to water efficient landscaping, in compliance with new State requirements promulgated by Governor's Executive Order B-29-15; and

**WHEREAS**, after careful study and the completion of the duly noticed public hearings, the Planning Commission adopted Resolution No. PC 16-01, recommending the City Council approve the proposed Municipal Code Amendment 15-05; and

**WHEREAS**, notice of a public hearing of the City Council on the proposed Municipal Code Amendment 15-05 were given in accordance with applicable law; and

**WHEREAS**, on February 9, 2016, the City Council of the City of Duarte held a duly noticed public hearing on the proposed Municipal Code Amendment 15-05, and related environmental review. At the public hearing the City Council received and independently considered the staff report and all of the information, evidence, and testimony presented in connection with the foregoing.

**NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF DUARTE, CALIFORNIA, ORDAINS AS FOLLOWS:**

**SECTION 1. CHAPTER 19.40 AMENDED IN ITS ENTIRETY**

Amend Chapter 19.40 "Landscaping" of Article 3, "Regulations Applicable to All Zones", to Title 19 of the Duarte Development Code in its entirety, to revise regulations primarily related to water efficient landscaping, in compliance with new State requirements promulgated by Governor's Executive Order B-29-15. The revised Chapter 19.40 is depicted on the exhibit attached hereto and made a part of this resolution by reference marked "Exhibit A" *(as shown on Exhibit D for purposes of the 2/9/2016 CC meeting)* for identification.

**SECTION 2. CEQA DETERMINATION.**

The City Council finds and determines that, pursuant to provisions of the California Environmental Quality Act (CEQA), the amendment to Duarte Development Code Chapter 19.40 to revise regulations, primarily related to water efficient landscaping, in compliance with new State requirements promulgated by Governor's Executive Order B-29-15 are categorically exempt under Section 15307 which exempts actions taken by regulatory agencies, as authorized by State law, to assure the maintenance, restoration, enhancement, or protection of a natural resource where the regulatory process involves procedures for protection of the environment.

The City Council further finds that the adoption of this Municipal Code Amendment is required by Governor's Executive Order B-19-25 and will result in the enhancement and protection of water resources in the City, and will not result in negative impact to the environment; therefore, it is exempt from the provisions of CEQA and no further environmental review is necessary.

**SECTION 3. SEVERABILITY.**

If any section, subsection, subdivision, paragraph, sentence, clause or phrase, or portion of this Ordinance is, for any reason, held to be unconstitutional or invalid or ineffective by any court of competent jurisdiction, such decision shall not affect the validity or effectiveness of the remaining portions of this Ordinance or any part thereof. The City Council herby declares that it would have adopted this Ordinance and each section, subsection, subdivision, paragraph, sentence, clause or phrase of this Ordinance irrespective of the fact that one or more sections, subsections, subdivisions, paragraphs, sentences, clauses or phrases be declared unconstitutional or invalid or ineffective. To this end the provisions of this Ordinance are declared to be severable.

**SECTION 4. POSTING OF ORDINANCE.**

The City Clerk shall certify as to the adoption of this Ordinance and shall cause this Ordinance to be posted in the manner provided for in the Duarte Municipal Code.

**SECTION 5. EFFECTIVE DATE.**

This Ordinance shall take effect thirty (30) days following its second reading.

PASSED, APPROVED, AND ADOPTED after second reading at a regular meeting of the City Council of the City of Duarte this ___ day of _____, 2016.

_____
MAYOR SAMUEL KANG

STATE OF CALIFORNIA )

COUNTY OF LOS ANGELES ) ss.
CITY OF DUARTE )

I, Marla Akana, City Clerk of the City of Duarte, County of Los Angeles, State of California, hereby attest to the above signature and certify that Ordinance No. ____ was adopted by the City Council of said City of Duarte at a regular meeting of said Council held on the _____ day of _____, 2016, by the following Roll Call vote:

AYES: Councilmembers:

NOES: Councilmembers:

ABSENT: Councilmembers:

_____
City Clerk Marla Akana
City of Duarte, California

# MEMORANDUM

**TO:** **Mayor and City Council**

**FROM:** **Craig Hensley, Community Development Director**

**DATE:** **February 9, 2016**

**SUBJECT:** **Award of Contract for Preparation of Huntington Drive Intersection Capacity and Safety Analysis to Albert Grover & Associates**

---

Staff recommends that the City Council authorize the City Manager to execute a standard professional services agreement with Albert Grover & Associates to prepare an Intersection Capacity and Safety Analysis for Huntington Drive for $25,565. Funding for this project was provided for in the 2015-16 General Fund Budget.

Traffic congestion during peak hours along Huntington Drive has been an increasing problem. As the problem has worsened on Huntington Drive conflicts have increased on north-south streets such as Highland Avenue and Las Lomas Drive. Based on past discussions with the City Council, Staff initiated this process to take a closer look at capacity and safety issues and to develop a plan of actions and capital improvements to improve peak hour conflicts.

Staff conducted a request for proposal process and received this one proposal. RKA, that provided City Engineering services for the City, has worked with Albert Grover & Associates in the past and has had positive results.

The study will include: data collection via video surveillance and main intersections, data analysis, recommendations on actions and physical improvements that will help to mitigate peak traffic congestion. Examples of the types of improvements that may be warranted are: traffic signal upgrades, southbound and northbound left turn arrows, extension of left hand turn pockets and etc.

The study is a proactive approach to addressing congestion issues on the city's busiest street.

Attachment: Albert Grover & Associates Proposal

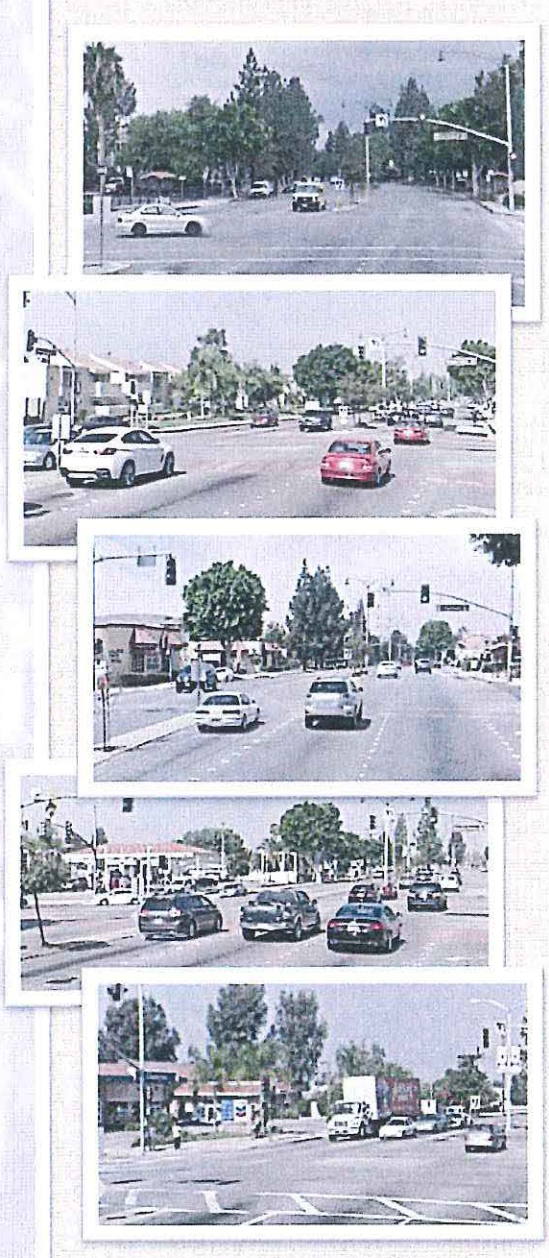
# TECHNICAL PROPOSAL

to provide

## CONSULTING SERVICES

for

## HUNTINGTON DRIVE INTERSECTION CAPACITY AND SAFETY ANALYSIS



Submitted to

City of Duarte

December 21, 2015

Submitted by

ALBERT GROVER & ASSOCIATES

ALBERT GROVER & ASSOCIATES

December 21, 2015

Mr. Dominic Milano
City Engineer
City of Duarte
1600 Huntington Drive
Duarte, California 91010

**RE: Huntington Drive Intersection Capacity and Safety Analysis**

Dear Mr. Milano:

In response to your solicitation for professional traffic engineering consultant services, Albert Grover & Associates (AGA) is pleased to present to you this proposal to conduct a comprehensive capacity and safety analysis of nine intersections along Huntington Drive. AGA has successfully completed countless such intersection capacity and safety reviews for numerous jurisdictions in Southern California and we look forward to being able to assist the City in improving traffic flow and safety along this important, regionally significant corridor.

The AGA team possesses the qualifications and experience necessary to successfully provide the technical studies and professional recommendations requested by the City. We fully understand the importance to the City of addressing congestion and safety issues and the difficulty in developing feasible cost effective solutions that work. We feel it is important that the City select a consultant that isn't merely going to crunch a few numbers and produce a report in a remote office, but has the track record of successfully implementing innovative recommendations and solutions adapted to the operational and geometric specifics of each location. AGA has been doing just that for the past twenty years for our clients throughout the region.

Reviewing traffic operations with the aim of improving arterial operations and enhancing safety is a passion of mine, having done so with much success in the City of Fullerton. Over the course of my fifteen-year tenure as the City Traffic Engineer for Fullerton, I have implemented numerous traffic flow improvement projects from synchronizing traffic signals to major construction projects to installing innovative solutions such as flashing yellow-arrow left-turns, all the while seeing traffic collision rates decline. I will not be a manager from afar on this project but, rather, I will be hands on reviewing traffic conditions in the field, developing the list of recommendations, and making presentations as desired by the City. I would very much like the opportunity to assist the City of Duarte in improving this important arterial corridor for the commuters, businesses, and residents that use it every day.

If you have any questions regarding this proposal, please don't hesitate to contact me at (714) 992-2990.

Respectfully submitted,

ALBERT GROVER & ASSOCIATES

Mark H. Miller, P.E., T.E., PTOE
*Executive Vice President*

Proposals\Duarte\Huntington Drive Capacity\Proposal\Huntington Drive Transmittal Letter.docx

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# SECTION 1
## PROJECT UNDERSTANDING AND APPROACH

The City of Duarte has requested proposals to provide professional traffic engineering consulting services for the preparation of recommendations of changes to several intersections along Huntington Drive to improve their capacity and safety. The six signalized intersections that are to be reviewed are at Las Lomas Road, Mount Olive Drive, Highland Avenue, Buena Vista Street, Mountain Avenue and Crestfield Drive. The three unsignalized intersections that are to be reviewed are at Encanto Parkway, Cotter Avenue, and Brycedale Avenue.

Albert Grover & Associates (AGA) is a multidiscipline engineering firm specializing in municipal and transportation engineering. The AGA team proposed for this project possesses all of the necessary qualifications and experience required to successfully provide the professional services requested by the City. We at AGA fully understand the importance of efficiently accommodating peak traffic flows while providing the highest degree of safety for all road users. Huntington Drive is a key regional arterial corridor providing primary east/west regional connections in the San Gabriel Valley. In addition, to carrying significant commuter traffic, Huntington Drive is also a key roadway connection for the residents of Duarte by providing access to major shopping and commercial areas, freeways, and public facilities. It is important that this key arterial not only function efficiently during peak periods for through traffic but also provide the residents of Duarte safe and convenient to access to their homes and the commercial core of the City.

**Mr. Mark Miller, P.E., T.E., POTE,** has been identified as the Project Manager and will be responsible for the day-to-day management of the project. Mr. Miller will coordinate with the City and present the findings of the study efforts at a minimum of two public meetings, one with the City Traffic and Safety Commission and the other with the City Council. He will also be responsible for adherence to the project schedule and, along with **Mr. David Roseman, T.E.**, for maintaining quality control of all project work products. AGA has a comprehensive Quality Assurance/Quality Control program to ensure accuracy and compliance to standards for all aspects of a project. In short, Mr. Miller will do everything necessary to ensure that the project is completed on time in a manner that fulfills all of the goals and objectives of the City.

Based on our understanding of the purpose and need of the study, the scope of work outlined in the RFP, and our knowledge of the project area, the following six-task work plan outlines our proposed approach to this important study effort.

### TASK 1: Kick-Off Meeting

AGA's project manager will conduct a project kick-off meeting with the City to discuss and finalize project objectives and parameters, update/revise the project schedule, and discuss other relevant information regarding the services to be provided. As this initial meeting sets the stage for the entire project, our project manager and key task leaders will be in attendance.

In preparation for this initial meeting AGA's Project Manager will forward a list of requested data to the City's Project Manager so that the information can either be gathered ahead of the meeting or a discussion can occur at the Kick-Off Meeting regarding the availability of the information. It is anticipated that as a minimum that the AGA's Project Manager will request any information the City might have readily available regarding traffic counts, traffic signal timing, traffic collisions (both summary information and CHP 555

reports as necessary), traffic control/operations complaints, and future developments in the area. In addition, during a recent field review of Huntington Drive, an AGA engineer observed temporary video surveillance equipment from Quality Counts at one of the study intersections. Perhaps the City might be able to provide AGA access to those video files either through a recent traffic study effort initiated by the City or another agency such as LA County or Caltrans.

It is anticipated that brief progress updates or meetings either in person or over the phone will also be held with the City's project manager on a regular basis during the course of the project. Additionally, Mr. Miller will fully leverage AGA's project administrative team experience in managing the project, including project budget control and invoicing, tracking of the project schedule, regular project updates and progress reports, agency comment dispositions, and document control and filing.

**TASK 2: Data Collection at Intersections**

It is anticipated that both morning and afternoon peak-period turning movement counts will need to be gathered at all nine intersections, six signalized and three unsignalized. Video surveillance is by far the best method by which to gather such data since the video data files can be stored and re-reviewed by engineers in the office to observe key periods of activity and driver behavior. Tabulated video data will be primarily used in the intersection capacity analysis where the raw video will be most helpful in analyzing and recommending safety solutions at the unsignalized locations. Review of raw video footage can also help engineers better understand driver behavior, especially at those locations where reports of poor motorist decisions and unsafe turns are being made on a regular basis. In addition, the video can also be used in a presentation to better explain driver behavior to the public and political leaders that may be asked to approve safety counter measures that may not be popular with some constituencies.

National Data Service (NDS) will be tasked with gathering the peak period video and creating the tabulated traffic counts from those video files. NDS will provide six hours of video footage at each intersection based on the time periods suggested by AGA and agreed to by the City's Project Manager. For the purposes of this proposal it is assumed that NDS will gather 3 hours of morning peak-period video/data and 3 hours of afternoon peak-period video/data at each of the nine intersections under study.

**TASK 3: Data Analysis**

AGA engineers will compile the various sources of data gathered from the City in Task 1 and through Task 2 noted above to determine appropriate morning and evening peak-period traffic flows. Then engineers will perform appropriate intersection capacity analysis at the signalized intersections using WEBSTER. WEBSTER is a user-friendly intersection capacity and level of service analysis tool created by AGA engineers based on the methodologies of the Highway Capacity Manual. This data analysis task is not merely a one-time computation but an iterative process by which AGA engineers will investigate identified intersection bottlenecks by phase movement and lane configuration to highlight possible efficiency improvements for further investigation in Task 4. Possible efficiency improvements could include revised lane configurations, addition of lanes, lengthening of turn pockets, revised traffic signal phasing sequences, improved traffic signal control strategies, new hardware/software and equipment. At the conclusion of the analysis process, AGA engineers will have documented the existing capacity and level of service of each of the six signalized intersections under study and will have an excellent understanding of not only the existing operational performance of those intersections but will also have assessed the most promising efficiency improvements as well.

Although not specifically requested in the Scope of Work outlined in the RFP, we at AGA would also like to review the reported collisions for each intersection to search for reoccurring patterns or clues as to how to prevent similar accidents from reoccurring. Generally a review of summarized collision data through the Statewide Integrated Traffic Records System (SWITRS) is insufficient for this purpose. A thorough review of each of the CHP 555 collision reports for the past few years will allow a more in depth understanding of the true safety performance of each intersection and can lead to successful safety enhancement recommendations.

The output of this task will be a document which clearly summarizes the traffic movements and volumes at all nine study intersections and provides a detailed assessment of the existing operational characteristics of each of the six signalized intersections. The document along with the video footage gathered in Task 2 will be provided to the City.

**TASK 4: Intersection Characteristics Analysis**

AGA traffic engineers will conduct comprehensive field reviews of each of the nine study intersections along Huntington Drive. The field reviews will include inventorying traffic controls, reviewing circulation patterns, and observing vehicle, bicycle, and pedestrian activity. During the field review, AGA engineers will investigate the possible efficiency improvements developed through the data analysis of Task 3. The AGA engineering team will be looking for intersection characteristics or driver behavior not readily apparent through data analysis or to the public to determine the optimum lane configuration, traffic signal phasing, and traffic signal timing strategies to address both the morning and afternoon peak-period traffic congestion and safety concerns expressed in the RFP.

The AGA field review team will review all traffic controls, roadway characteristics, traffic and pedestrian activity, and traffic safety issues at each of the nine intersections. Although it is important to look at specific traffic controls at intersections, it also important to look at the overall context of the roadway, adjacent land use, and human behavior to ensure consistency of approach as Huntington Drive is used by motorists, pedestrians, and bicyclists to reach their destinations. The field review team will also be on the lookout for free flow speeds to verify that traffic is not influenced by special characteristics such as proximity to schools, parks, retail and commercial areas, presence of bus stops, location of driveways, on-street parking activities/restrictions, adequacy of travel and turning lanes, traffic congestion, pedestrian routes/patterns, and the percentage and type of larger vehicles traversing the area.

In preparation of this proposal, AGA engineers conducted a preliminary "windshield review" of the corridor during the afternoon peak-period and made a number of observations that could lead to future recommendations and ultimately improvement projects. Of course additional data collection and investigation will need to be conducted to determine if these observations/suggestions are feasible and worth pursuing; however, we would like to share these ideas with the City as a part of our proposal:

Huntington Drive & Las Lomas Road: A relatively low cost improvement could be to implement a southbound right-turn overlap phase to be activated concurrently with the protected eastbound left-turn arrow. Additionally, if the concurrent left-turn arrows for Huntington Drive were split into a lead-lag configuration with the eastbound left-turn arrow lagging and there is no pedestrian activation in the west leg crosswalk then the southbound right-turn arrow could come on during the eastbound left-turn arrow and remain on through the southbound phase possibly even doubling the number of southbound right-turns that can traverse the intersection in a single cycle. This reconfiguration may require restriping the northbound

approach to the intersection and the prohibition of eastbound U-turns; however, a more thorough analysis of this phasing concept will determine its feasibility and applicability.

Huntington Drive & Crestfield Drive: It is unlikely that this "T-intersection" has a capacity problem; however, the RFP indicated that unsafe turning movements on to Huntington Drive could be occurring. In observing traffic and pedestrian movements at the intersection we observed aggressive drivers on Crestfield Drive turning left across pedestrians in the west leg crosswalk. This aggressive motorist behavior can be addressed relatively inexpensively and intersection efficiency improved by splitting the west-leg crossing movement across a lagging westbound left-turn arrow and northbound Crestfield Drive. This would allow pedestrians to begin their crossing of Huntington Drive unimpeded by conflicting traffic during the westbound left-turn arrow. By starting the pedestrian phase "early" it has a calming effect on motorists' behavior so that they don't tend to "race" to beat the pedestrian across the street. An added benefit to this arrangement is that generally less green time is dedicated to northbound Crestfield Drive since the pedestrian movement is significantly reduced thus providing more green time back to Huntington Drive. Another strategy to address northbound "late comers" making turns on to Huntington Drive at the end of the northbound phase is to deploy enhanced detector settings to "hold" the onset of the green for Huntington Drive when a "late coming" vehicle is detected running the yellow or all-red sequence thus allowing the intersection to safely clear the conflicting traffic before the east/west green is activated. Before any of these changes can be made, it is important to fully understand the reported unsafe behavior by reviewing collision reports and observing video footage so that the most appropriate safety counter-measure can be deployed.

Huntington Drive & Mount Olive Drive / Freeway Ramps: The traffic signal at this location is currently split-phased for north/south traffic which creates significant delays for Huntington Drive and it's left-turn arrows. A quick assessment conducted during the evening peak-period over three cycles revealed that 85% of the traffic in the northbound middle shared travel lane exiting the freeway ramp drove straight, effectively rendering the lane ineffective as a shared lane. Of course more study is needed throughout the day to determine if this trend is consistent; however, if the observed traffic pattern is consistent there is a possibility that the split-phase could be removed allowing concurrent north/south movements and providing significantly more green time back to Huntington Drive and it's left-turn movements. If the study effort reveals that the split-phase is still needed, there are a number of alternative strategies that could be investigated to improve westbound left-turn capacity including elimination of one of the north/south crosswalks or the conversion from a protected left-turn arrow to protected-permissive operation possibly with a flashing left-turn yellow-arrow. This intersection will clearly be the most challenging to find efficiency gains and the study process will ultimately lead to the most appropriate answer.

Huntington Drive & Highland Avenue: Highland Avenue at Huntington Drive is not provided left-turn pockets although it appears with the existing no parking zones near the intersection that sufficient roadway width may exist to reconfigure the striping to provide left-turn pockets. Doing so would not only improve safety but could also facilitate traffic movement on Highland Avenue, thus requiring less green time for the north/south direction to clear. Potentially any recovered green time could then be provided to the left-turn arrows on Huntington Drive, reducing congestion. It might also be possible to implement a lead-lag conditional left-turn arrow for the westbound direction that would be operated by vehicle detectors placed at the back of the left-turn pocket. Having the capability to monitor the "fullness" of the left-turn pocket could permit the traffic signal controller to activate the left-turn arrow a second time in the same cycle during periods of peak demand that exceeds the capacity of the storage provided by the left-turn pocket. Serving the left-turn twice can quickly flush out the back-up of left-turn traffic so that the traffic signal can return to normal operation (one left-turn arrow per cycle) rather than just letting the back-up in the left-turn pocket

continue to grow and spilling out into the through lane blocking through traffic flow. This operational strategy is one that has been used with great effectiveness in large urban cities such as the City of Los Angeles and the City of Long Beach.

The above noted observations and suggestions for the four identified intersections are an example of the type of comprehensive solutions that the AGA engineering team can bring forward to the City of Duarte as a part of this project. We are committed not just to perform the requested study and analysis outlined in the RFP but to find innovative and cost effective solutions that the City can implement to solve it's congestion and safety concerns.

**TASK 5: Summary of Recommendations**

Based on data analysis, field reviews, and our experience conducting similar studies throughout Southern California, the AGA engineering team will develop a series of specific recommendations for discussion with the City. It is likely that some of those recommendations will require discussion and/or coordination with transportation professionals from the City's agency partners at Los Angeles County Department of Public Works, Caltrans, and the City of Monrovia. Before a finalized list of recommendations is completed, the AGA team, with concurrence from the City, will lead those conversations with key managerial professionals with the effected agencies to gain their concurrence.

Once the preliminary list of recommendations have been finalized, the AGA team will prepare a preliminary draft report summarizing the data gathered, investigations conducted, and recommendations for the Huntington Drive corridor and specifically all nine study intersections. The draft report will provide a complete documentation of the project, including a discussion of project scope, objectives, methodology, findings, recommendations, and conclusions. While much of the information contained in the report will have already been presented to City staff during the course of the project, the report will combine the results of all of the individual components in one technical document. It is anticipated that the draft report will have to be reviewed by a number of City staff before being finalized. AGA will incorporate all comments, recommendations, and suggestions into the Final Project Report.

**TASK 6: Preparation of Final Report of Recommendation**

The AGA project manager will ensure that all comments received on the draft report are addressed and, as appropriate, incorporated into the Final Report. AGA's project manager is a Registered Civil Engineer and Traffic Engineer in the State of California and he will stamp and sign the Final Report and provide the City with ten color copies. Upon direction from the City's project manager, AGA's project manager will attend the Traffic Safety Commission and City Council meeting to present the report, outline the recommended improvements, and answer any questions.

## SECTION 2
### ORGANIZATION CHART AND QUALIFICATIONS OF KEY STAFF

AGA's staff has extensive experience in providing professional engineering evaluations of traffic controls with specific specialties in intersection capacity and safety analysis. Most key members of our staff have been working together as a team since 1990, completing numerous capacity and safety analyses for a wide range of jurisdictions within Southern California.

The AGA team will be headed up by the firm's Executive Vice President, **Mr. Mark Miller, P.E., T.E., PTOE**, who will serve as the Project Manager for all proposed tasks, and has been designated as the Responsible Representative for AGA authorized to negotiate terms and execute a contract on behalf of the company. As such, Mr. Miller will remain in charge throughout the project period and will be the primary point of contact with the City of Duarte. Mr. Miller is currently the City Traffic Engineer in three jurisdictions and he has had extensive experience evaluating capacity and safety issues and providing innovative and cost-effective solutions in cities where he has faced similar operations issues as outlined in the RFP.

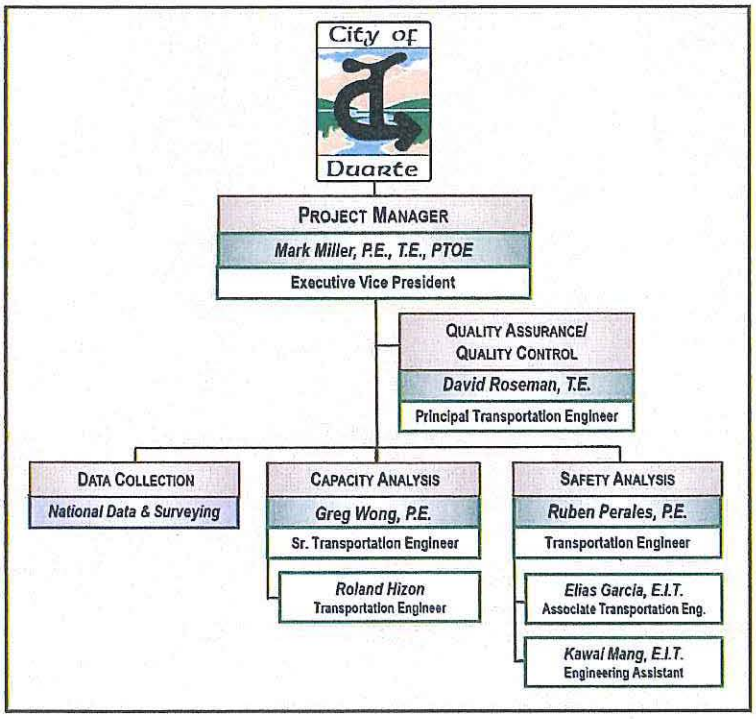
As the Project Manager, Mr. Miller will be actively involved in each of the tasks comprising the scope of work. Mr. Miller will, at the desire of the City, present the findings and recommendations of the study effort to the Traffic Safety Commission and the City Council. The entire AGA team will report to Mr. Miller on this project.

While Mr. Miller will personally be responsible for all work products, he will be supported by two other dedicated members of the AGA staff. **Mr. Ruben Perales, P.E.**, Transportation Engineer will lead the technical safety analysis and **Mr. Greg Wong, P.E.**, will conduct the capacity analysis. These two project leads with their associated engineering staffs will assist Mr. Miller in the preparation of research, studies, reports, and other related work as required.

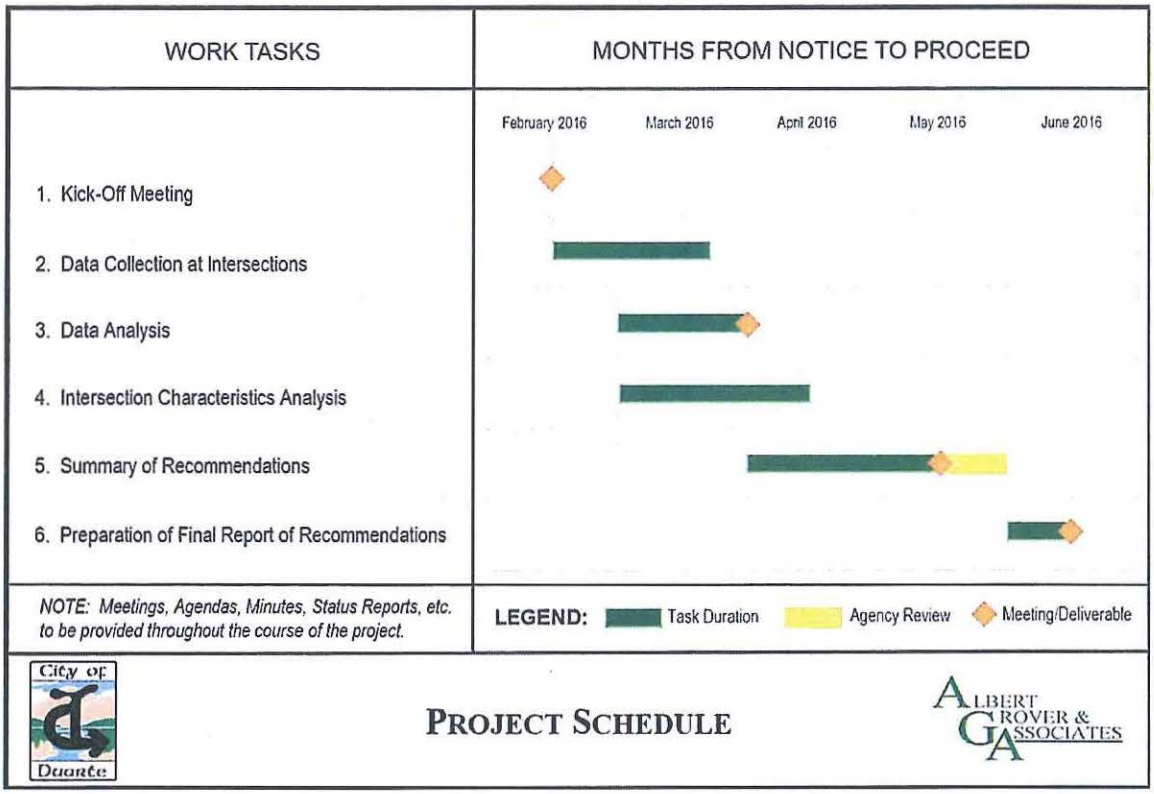
Additionally, **Mr. David Roseman, T.E.**, Principal Transportation Engineer, will provide as needed support to Mr. Miller and serve in an advisory and quality control role to staff assigned to the project. Having served as the City Traffic Engineer for the City of Long Beach for thirteen years, Mr. Roseman is well versed in assessing intersection capacity and safety issues and recommending improvements that work.

The Project Organization Chart outlines the AGA project team. Brief resumes of AGA staff are in Section 4.

**STAFF ORGANIZATION CHART**



# SECTION 3
## SCHEDULE AND DEADLINES




As illustrated in the project schedule noted above, the AGA team proposes to complete the review and analysis portion of the project and provide the City with a draft report for its review in approximately 90 days from the issuance of a notice to proceed. The preliminary engineering field reviews and data collection effort is likely to be completed within one month and shortly thereafter the City will be provided with a summary of the data collected. While the data is being collected AGA engineers will begin reviewing the traffic characteristics and safety aspects of the various intersections. It is anticipated that as a part of the intersection characteristics analysis that AGA engineers will also meet with representatives from Caltrans, Los Angeles County, and the City of Monrovia to seek input on traffic operations and discuss possible capacity enhancing measures. It is anticipated that the AGA team will complete and submit the draft report for City review and comment in early May of 2016. Based on City review of the technical information, evaluations, and recommendations, the AGA team will produce the final report for circulation to key City decision makers. The Project Manager will then be made available at the City's request to attend and/or present the findings of the study process to the Traffic Safety Commission and the City Council possibly in June of 2016.

## SECTION 4
### STAFFING PLAN AND AVAILABILITY OF KEY PERSONNEL

The following table highlights the education and experience of the members proposed as a part of the AGA team for the project. The table also identifies the projected availability of those staff members over the course of the anticipated contract duration.

### AGA's Staff Qualifications Summary

| Name | Registration | Years of Experience | Years with AGA | Education Training | Project Assignment | Availability |
|---|---|---|---|---|---|---|
| Mark Miller | P.E., Civil<br>P.E., Traffic<br>P.T.O.E. | 41 | 22 | BS-Civil, 1973 | Project Management | 25% |
| David Roseman | P.E., Traffic | 28 | 1 | BS-Civil, 1988 | Quality Assurance<br>Quality Control | 25% |
| Greg Wong | P.E., Civil | 19 | 14 | BS-Civil, 1996 | Task Lead<br>Capacity Analysis | 30% |
| Roland Hizon | E.I.T. | 26 | 11 | BS-Civil, 1982 | Capacity Analysis<br>Summary Report | 50% |
| Ruben Perales | P.E., Civil | 12 | 10 | BS-Civil, 2004 | Task Lead<br>Safety Analysis | 30% |
| Elias Garcia | E.I.T. | 2 | 2 | BS-Civil, 2015 | Safety Analysis<br>Summary Report | 40% |
| Kawai Mang | E.I.T. | 1 | 1 | BS-Civil, 2013 | Safety Analysis<br>Summary Report | 40% |

A brief discussion of the key qualifications of key project team members are as follows:

**Mr. Mark Miller, Executive Vice President** of AGA, is a registered Civil and Traffic Engineer, as well as a certified Professional Traffic Operations Engineer (PTOE) with more than 38 years' experience. Mr. Miller has completed numerous traffic and transportation related engineering projects and studies for a wide range of client throughout Southern California and he had made hundreds of presentations to political commissions and City Councils. Mr. Miller also has prior public agency experience having served as the City Traffic Engineer for the City of Pomona and as an Assistant Traffic Engineer for the City of Pasadena. Mr. Miller currently serves as the City Traffic Engineer for the cities of Fullerton, Placentia, and San Dimas.

**Mr. David Roseman, Principal Transportation Engineer,** is a registered Traffic Engineer with nearly 30 years of experience. Prior to joining AGA, Mr. Roseman was City Traffic Engineer for the City of Long Beach for 13 years overseeing all aspects of traffic engineering, transportation programs, and parking for the City. Prior to his appointment in Long Beach he worked for the City of Los Angeles Department of Transportation for 14 years primarily in traffic signal operations, special events management, and project management.

**Mr. Ruben Perales, Transportation Engineer**, is a registered Civil Engineer with over ten years' experience and is currently AGA's lead engineering designer. Mr. Perales has conducted various traffic engineering related projects, including traffic signal design and/or traffic signal modification projects; accident studies and analyses; traffic signal signing, striping, and detour plan preparation and/or plan checking; and interconnect design.

**Mr. Greg Wong, Senior Transportation Engineer**: Mr. Wong has eighteen years of planning and operational analysis experience. He regularly conducts traffic control device investigations, including traffic signal warrant studies and crosswalk evaluations for the majority of AGA's on-call traffic engineering clients. Mr. Wong is also well versed in capacity and level of service analysis, environmental impact report review and analysis, parking studies, and traffic impact study preparation and review. He has worked extensively on timing plan development utilizing a variety of traffic engineering software, including PASSER, WEBSTER and Synchro.

**National Data and Survey Surveying Services (NDS):** NDS was founded in 1989, and was established to deliver accurate and cost-effective solutions to client data collection needs. NDS has an experienced team of over one hundred professional full-time employees in seven states that have undergone extensive training to ensure the successful coordination and completion of projects. AGA has worked with NDS for traffic data collection for more than fifteen years. This long working relationship between NDS and AGA ensures that the data collection efforts for the project will be conducted accurately and in a timely fashion.

## SECTION 5
### SUMMARIZED FEE PROPOSAL

As outlined in the Request for Proposal the following is an itemization of proposed cost according to the tasks outlined in the Scope of Work:

| | | |
|---|---|---|
| Task #1: | Kick-Off Meeting | $ 1,550 |
| Task #2: | Data Collection at Intersections | $ 5,620 |
| Task #3: | Data Analysis | $ 3,780 |
| Task #4: | Intersection Characteristics Analysis | $ 6,495 |
| Task #5: | Summary of Recommendations | $ 4,520 |
| Task #6: | Preparation of Final Report of Recommendation | $ 3,600 |
| | Total Not To Exceed Cost: | $25,565 |

The above noted fee is a specific "not to exceed" fixed fee including all associated fees, including, but not limited to, printing costs, materials, travel, incidentals, sub consultant fees, and attendance at meetings identified in the scope of work.

All contractual and insurance requirements outlined in the RFP as well as the standard contract language as presented in "Attachment A" of the RFP are acceptable to AGA.

# SECTION 6
## DETAILED FEE SCHEDULE BY TASK

| Task Description | Mark Miller Project Manager $250 | Dave Roseman Principal Transportation Engineer $225 | Greg Wong Senior Transportation Engineer $200 | Roland Hizon Transportation Engineer $165 | Ruben Perales Transportation Engineer $165 | Elias Garcia Associate Engineer $110 | Kawai Mang Engineering Assistant $90 | National Data and Surveying | GRAND TOTAL Hours / Cost |
|---|---|---|---|---|---|---|---|---|---|
| 1. Kick-Off Meeting | 3 $750 | | 4 $800 | | | | | — | 7 / $1,550 |
| 2. Data Collection at Intersections | | | 2 $400 | | | | 8 $720 | $4,500 | 10 / $5,620 |
| 3. Data Analysis | 4 $1,000 | | 4 $800 | 12 $1,980 | | | | — | 20 / $3,780 |
| 4. Intersection Characteristics Analysis | 8 $2,000 | | | | 3 $495 | 20 $2,200 | 20 $1,800 | — | 51 / $6,495 |
| 5. Summary of Recommendations | 6 $1,500 | 4 $900 | 4 $800 | 4 $660 | 4 $660 | | | — | 22 / $4,520 |
| 6. Preparation of Final Report of Recommendations | 10 $2,500 | | | | | 10 $1,100 | | — | 20 / $3,600 |
| TOTALS (Hours/Cost) | 31/$7,750 | 4/$900 | 14/$2,800 | 16/$2,640 | 7/$1,155 | 30/$3,300 | 28/$2,520 | $4,500 | 130 / $25,565 |

# SECTION 7
## HOURLY RATE SCHEDULE

### SCHEDULE OF HOURLY RATES
### EFFECTIVE JULY 1, 2014

| | | |
|---|---|---|
| Mark Miller | Executive Vice President | $ 250 |
| Dave Roseman | Principal Transportation Engineer | $ 225 |
| Greg Wong | Senior Transportation Engineer | $ 200 |
| Ruben Perales, Roland Hizon | Transportation Engineer | $ 165 |
| Elias Garcia | Associate Transportation Engineer | $ 140 |
| Kawai Mang | Assistant Engineer | $ 90 |

# CITY COUNCIL STAFF REPORT

**Date:** January 26, 2016

**To:** Mayor and City Council

**From:** Craig Hensley, Community Development Director

**Subject:** Analysis of ARB and Planning Commission Process

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In November 2015, City Council requested that Staff bring back an informational report on the ARB – Planning Commission process. This report provides an overview of the process and the effectiveness of the design review requirements.

The requirements for site plan and design review are set forth in the Duarte Development Code. In 2010, the City completed a wholesale update to its zoning code and adopted what we see today as the Development Code. There were several goals of the Development Code: in addition to developing contemporary development regulations, the goal was to create a streamlined development review process that reduced the amount of time that projects were in the approval process and also reduced the number of items that were subject to discretionary review. What these revisions meant is that the Planning Commission and the ARB would review fewer items as part of the streamlined process. Strong and clear standards for review were adopted to make this process effective and fair. This process has been a positive impact to development and the resulting development quality is proof of effectiveness. The majority of the input from the development and business community has been positive. The City's process is very business friendly; the City has been recognized for its business friendly approach.

This memo outlines the Architectural Review Board and Planning Commission process and explains the effectiveness of each.

## Architectural Review Board

The City Council established the ARB in June 1980. Since its establishment, the three member board has been composed of the: City Manager, Community Development Director and City Engineer.

When the ARB process was originally formed, all buildings and structures were subject to review and approval by the ARB. In 2010, as part of the comprehensive update of the Zoning

Code and adoption of the new Development Code, the ARB process was refined to focus on a more streamlined review of projects. The 2010 revisions, also brought expanded design standards to promote higher quality development in the city. The 2010 Development Code changes also expanded the design review involvement of Staff for over the counter approvals and put in place a Director Review category where smaller projects are processed by Staff, approved by the Director and receive an action letter with findings and conditions of approval, usually within a week of a complete application filing.

Site Plan and Design Review cases are made are four different levels which are based on the size of project. Smaller projects, such as room additions, signs and patio covers are subject to over the counter review and approved by Planning Staff; approved projects receive a stamp of approval by the Planning Department along with building permits. Slightly larger projects, such as room additions over 600 square feet, landscape plans for commercial projects and small commercial improvements are subject to Director Review where action is taken and an approval letter is issued with conditions of approval. Projects such of a bit larger scale, such as new single family houses, two story additions from 250 to 600 square feet, commercial additions up to 2,500 square feet and sign programs, are heard by the ARB. All large scale projects are acted on by the Planning Commission with a recommendation from the ARB. Projects at this level include: all new commercial buildings, non-residential additions over 2,500 square feet, two story additions over 600 square feet and all new two story houses.

Table from Chapter 19.122

| TABLE 7-2<br>REVIEW AUTHORITY FOR<br>SITE PLAN<br>AND DESIGN REVIEW | Review Level (1) (2) | | | | |
|---|---|---|---|---|---|
| | Staff (3) | Director (4) | ARB | Commission | Council |
| **RESIDENTIAL CONSTRUCTION ACTIVITIES (5)** | | | | | |
| **Residential New Construction** | | | | | |
| 1-Story Single-family and Two-family | — | — | Decision | Appeal | Appeal |
| 2-Story Single-family and Two-family | — | — | Recommend | Decision | Appeal |
| Multi-family (attached or detached) | — | — | Recommend | Decision | Appeal |
| **Residential Additions, Modifications, and/or Accessory Structures** | | | | | |
| R-1D zone < 250 sq. ft. | | Decision | Appeal | Appeal | Appeal |
| R-1D zone > 250 sq. ft. | — | — | Decision | Appeal | Appeal |
| R-1 and R-2 zones (except R-1D)<br>1st-story construction < 600 sq. ft. | Decision | Appeal | Appeal | Appeal | Appeal |
| R-1 and R-2 zones (except R-1D)<br>1st-story construction > 600 sq. ft. | — | Decision | Appeal | Appeal | Appeal |
| R-1 and R-2 zones (except R-1D)<br>2nd-story construction < 250 sq. ft. | — | Decision | Appeal | Appeal | Appeal |
| R-1 and R-2 zones (except R-1D)<br>2nd-story construction between<br>250 sq. ft. and 600 sq. ft. | — | — | Decision | Appeal | Appeal |
| R-1 and R-2 zones (except R-1D)<br>2nd-story construction > 600 sq. ft. | — | — | Recommend | Decision | Appeal |
| R-3 and R-4 zones construction including expansion of square footage (main building or accessory structures) or change in number of units | — | — | Decision | Appeal | Appeal |

| Table 7-2 continued | Staff | Director | ARB | Commission | Council |
|---|---|---|---|---|---|
| **Other Residential Construction or Improvements (6)** | | | | | |
| Facade or exterior improvements in the R-1 and R-2 zones | Decision | Appeal | Appeal | Appeal | Appeal |
| Facade or exterior improvements (inclusive of color changes) in the R-3 and R-4 zones | — | Decision | Appeal | Appeal | Appeal |
| Fences and walls (all) | Decision | Appeal | Appeal | Appeal | Appeal |
| Front yard porches | Decision | Appeal | Appeal | Appeal | Appeal |
| Pools and spas | Decision | Appeal | Appeal | Appeal | Appeal |
| Roof pitch changes | Decision | Appeal | Appeal | Appeal | Appeal |
| **NONRESIDENTIAL CONSTRUCTION ACTIVITIES** | | | | | |
| **Nonresidential New Construction (including Accessory Structures)** | | | | | |
| All new structures, except accessory structures and signs | — | — | Recommend | Decision | Appeal |
| Accessory structures | — | Decision | Appeal | Appeal | Appeal |
| **Nonresidential Additions and Modifications** | | | | | |
| Additions < 2500 sq. ft. | — | Recommend | Decision | Appeal | Appeal |
| Additions > 2500 sq. ft. | — | — | Recommend | Decision | Appeal |
| **Other Nonresidential Construction** | | | | | |
| Facade or exterior improvements (inclusive of color changes) | — | Decision | Appeal | Appeal | Appeal |
| Fences and walls (all) | Decision | Appeal | Appeal | Appeal | Appeal |
| Landscaping | — | Decision | Appeal | Appeal | Appeal |
| Restriping of parking lots | Decision | Appeal | Appeal | Appeal | Appeal |
| Roof pitch changes | Decision | Appeal | Appeal | Appeal | Appeal |
| **SIGNS AND SIGN PROGRAMS** | | | | | |
| Comprehensive Sign Programs | — | — | Decision | Appeal | Appeal |
| Signs (excluding freeway and monument signs) permanent and temporary | Decision | Appeal | Appeal | Appeal | Appeal |
| Freeway signs | — | — | Decision | Appeal | Appeal |
| Monument signs | — | Decision | Appeal | Appeal | Appeal |
| **OTHER REVIEW** | | | | | |
| Joint and Off-Site Parking Plans | — | Decision | Appeal | Appeal | Appeal |
| Open Space Plans | — | Decision | Appeal | Appeal | Appeal |
| Outdoor Dining < 800 sq. ft. | — | Decision | Appeal | Appeal | Appeal |
| Outdoor Dining > 800 sq. ft. | — | Recommend | Recommend | Decision | Appeal |
| Planned Development Permits | — | — | Recommend | Decision | Appeal |
| Specific Plans | — | — | Recommend | Recommend | Decision |
| Subdivisions/Condominiums | — | — | Recommend | Recommend | Decision |

Notes:

1. "Decision" means that the review authority makes the final decision on the matter; "Appeal" means that the review authority may consider and decide upon appeals to the decision of an earlier decision-making body, in compliance with Chapter 19.144 (Appeals); "Recommend" means that the review authority should provide preliminary review and forward input to the decision-making review authority for consideration.
2. The review authority may defer action and refer the request to the next higher review authority for the final decision in compliance with Subsection 19.122.050 B. (Referral of Application), below.
3. Process allows Department Staff to include conditions of approval.
4. Process to include findings, conditions of approval, and appeal period.
5. Square footages provided in this table presume a calculation that is all inclusive of aggregate new construction area, including square footage of both habitable and non-habitable structures meeting the definition of new building construction.
6. Facade and/or exterior improvements requiring Site Plan And Design Review include window and door change outs when a Building Permit is required.

The intent of the Site Plan and Review process is the foundation by which all of the review standards and the process are based on. Chapter 19.122.010. B states:

The intent of this Chapter is to ensure that all approved site and structural development:

1. Promotes the orderly development of the City in compliance with the goals, objectives, and policies of the General Plan, any applicable specific plan, and the standards specified in this Development Code;
2. Respects the physical and environmental characteristics of the site;
3. Ensures safe and convenient access and circulation for pedestrians and vehicles;
4. Exemplifies high-quality design practices;
5. Encourages the maintenance of a distinct neighborhood and/or community identity; and
6. Minimizes or eliminates negative or undesirable visual impacts.

All Site Plan and Review items are subject to meeting the "Standards of Review" listed in 18.122.040.D that include standards in the following topic areas: compatibility, architectural design and detail, landscape, lighting, parking, signs, and other design details, fences/walls, landscaping, lighting, parking and signs.

Through the years, the architectural review process has been very valuable for the community. The process has ensured quality well designed projects that over time have created a better designed community. Great designed communities will rarely happen by accident, but by the way of clearly communicated design standards and a process that ensures that these standards will be met.

*Comparing Duarte's ARB Process to Other Cities*

There are essentially two main issues to consider in an effective design review process: 1) higher quality buildings and development as the result of a process that provides clear direction to achieve good design; and 2) a timely process that allows project action to happen quickly with fair and consistent results.

Duarte's process is well developed, but is not unique among other neighboring communities. The table below shows the design process in Duarte and surrounding communities. The Duarte process is similar to other cities that have design review boards. Cities without design review boards typically place design decision making at the staff level or have design decisions made by the Planning Commission or City Council. The process in Duarte is efficient and effective.

| | ARB Process | Make up of Board | Residential Addition 1 story | Residential Addition 2 story | New Residential | Commercial Addition | New Commercial |
|---|---|---|---|---|---|---|---|
| Duarte | ARB | City Manager, Community Development Director, City Engineer | Staff | ARB (up to 600 sf) | ARB | PC (over 2,500 sf) | PC |
| Monrovia | Design Review Commission | Director of Public Services, Police Chief, Fire Chief and Director of Community Development | Staff | DRC | DRC | DRC | PC |
| Arcadia | No ARB | | Staff | Staff | Staff | Staff | Staff |
| Azusa | Design Review Commission (started in September 2015) | Planning Director, Building Official, Light and Water Director, Code Enforcement Director, City Engineer, Police Chief | Staff | Staff | Staff | DRC | DRC |
| Glendora | No ARB | | Staff | PC | PC | PC | PC |

*Other possible ARB Arrangements*

Other alternatives to the current ARB process would be: abolishing the ARB and making the Planning Commission or Staff the decision maker on design items; or changing the makeup of the ARB to add extra members (such as local Architects, Landscape Architect, residents and business owners).

There are some negatives to each of the other possible design review arrangements that are worthy of consideration. The Planning Commission already is the final hearing body for many larger design review projects such as new Residential, residential additional that are 2-story and over 600 square feet, new Commercial and commercial additions over 2,500 square feet. Smaller items are the cases heard only by ARB. The one main negative in having all design items decided by Planning Commission is the substantial negative impact on the time it takes applicants to gain approval. The Planning Commission meets only once a month. The ARB meets twice a month, as needed. Staff preparation for Planning Commission is much more involved than it is for ARB, so taking all design items to the Planning Commission would extend the approval process for smaller projects.

Other design review makeups have challenges also. The main challenge to having an ARB that is made up of public members that are professionals in architecture is the difficulty of getting enough experienced residents to take part and donate their time. Since there are relatively few items that are heard by the ARB, the meetings are often intermittent which makes participation difficult. An effective ARB made up of members of the public would need at least some design professionals. A design committee made up of public members that are not design professionals would tend to add too much personal preference rather than trained input to the process. The result may very well be a less effective process with less of a focus on good design.

*ARB Activity and Effectiveness*

The best test for Duarte's current design review process is the excellent results that it has produced. In the past several years, the projects that have been approved through the City process have exhibited tremendous architectural quality. Examples include: Andres Duarte II, Magellan Self Storage, City of Hope Visitors Center, the Santa Teresita Specific Plan and more. Projects such as Starbucks and the façade enhancements to the Grocery Outlet building are examples that are in the process that will be excellent too.

The table below shows the ARB activity for 2015. The majority of cases are either staff level review or director review. Staff level review, in most cases, occurs over the counter or within a short timeframe and includes cases such as small, one story, room additions and patio covers. The plans receive an approval stamp after building plan check. Director review cases such as larger residential additions, monument signs and etc. are submitted to the planning department for review. The review usually takes a few days and then an approval letter with findings and conditions of approval is issued. All staff level and director reviews are appealable to the ARB.

| **2015 ARB cases** | |
|---|---|
| Total Number of ARB Cases: | 39 |
| Staff Level Review (counter) | 11 |
| Director Review (letter to applicant): | 19 |
| ARB Review of Design | 7 |
| ARB Recommend/Planning Commission | 2 |

Note: Four total ARB meetings in 2015

## Planning Commission Process

Since the 1960's in California, cities are required to have a "planning agency" that is responsible for planning for the physical development of the community. In Duarte, the Planning Commission is made up of five members appointed by the City Council. The Commission meets once a month, on the third Monday at 7:00 pm.

The Duarte Development Code set up a process where the Planning Commission is the final decision making body for Quasi-Judicial items such as variances and conditional use permits and is a recommending body on Legislative acts such as zone changes and general plan amendments. As was addressed in the last section of this report, the Planning Commission also is the decision body for some ARB cases for large projects and for planned development permits. Table 7-1 below addresses Planning Commission actions in more detail.

| TABLE 7-1 REVIEW AUTHORITY | | | | |
|---|---|---|---|---|
| Type of Action | Applicable Code Section | Role of Review Authority | | |
| | | Director | Commission | Council |
| **A. Administrative Permits and Actions** | | | | |
| Administrative Variances | 19.126 | Decision | Appeal | Appeal |
| Development Code Interpretations | 19.04 | Decision | Appeal | Appeal |
| Joint/Off-Site Parking Plans | 19.38.140/150 | Decision | Appeal | Appeal |
| Minor Use Permits | 19.114 | Decision | Appeal | Appeal |
| Open Space Plans | 19.11.060 | Decision | Appeal | Appeal |
| Reasonable Accommodations | 19.120 | Decision | Appeal | Appeal |
| Sign Permits/Comprehensive Sign Programs | 19.42 | See Table 7-2 (Site Plan and Design Review Authorities) | | |
| Site Plan and Design Reviews | 19.122 | See Table 7-2 (Site Plan and Design Review Authorities) | | |
| Temporary Use Permits/Special Event Permits | 19.124 | Decision | Appeal | Appeal |
| Zoning Clearances | 19.128 | Issuance | Appeal | Appeal |
| **B. Quasi-Judicial Permits and Actions** | | | | |
| Conditional Use Permits | 19.114 | | Decision | Appeal |
| Planned Development Permits | 19.118 | | Decision | Appeal |
| Variances | 19.126 | | Decision | Appeal |
| **C. Legislative Actions** | | | | |
| Development Agreements and Amendments | 19.148 | | Recommend | Decision |
| Development Code Text/Zoning Map Amendments | 19.142 | | Recommend | Decision |
| General Plan Text/Map Amendments | 19.142 | | Recommend | Decision |
| Specific Plans and Amendments | 19.150 | | Recommend | Decision |
| **D. Subdivision Maps and Other Approvals** | | | | |
| Tentative Maps, Final and Parcel Maps | See Table 5-1 (Subdivision Review Authorities) | | | |
| Lot Line Adjustments, Mergers, and Approvals | See Table 5-1 (Subdivision Review Authorities) | | | |

City Council members raised the question of whether or not the Planning Commission was meeting regularly. The table on the next page addresses the 2015 calendar for Commission meetings. Of 12 possible meetings, the Commission met seven times. The February and April meetings were cancelled because of a lack of hearing items. Meeting in July, August and September were cancelled for two reasons: lack of items and because as a result of resignations there were only three Commission members. In 2014, Staff met with the Commission and developed a schedule of possible training topics that could be presented to the Commission when a meeting had no items. At that time, the Community Development Director and the Commissioners felt that cancelling one month's meeting because of a lack of items was fine but the Commission should miss no more than one consecutive meeting. This practice was followed with the exception of Summer 2015 when the Commission was down to three

members. The Majority of the Commission felt that training for three commissioners was not necessary since new commissioners would soon be appointed and they could benefit from training topics. Therefore, the decision was made to only have meetings when a public hearing was needed.

Overall, there were several items heard by the Commission in the 2015 calendar year. There were 12 public hearing items at the seven meetings that were held. At the November meeting, the Commission, including the two newest commission members discussed training topics that would be helpful to the Commission. At the December meeting, the Deputy City Attorney provided a training session on: the Brown Act, Roberts Rules of Order and FPPC rules. Upcoming training topics include: Development Process and Zoning Code; Design Review Successes; Environmental Review; and New Laws – Legislative Review.

| 2015 | Meeting Held | Public Hearings Items | Other Items | Comments |
|---|---|---|---|---|
| January | Yes | 2 | | Massage |
| February | No | -- | | No Items |
| March | Yes | 2 | | Massage Rehearing |
| April | No | -- | | |
| May | Yes | 2 | | Don Reyes Outdoor Area/ Rt. 66 |
| June | Yes | 4 | | Starbucks, Buena Vista/ Huntington Center Specific Plan |
| July | No | -- | | Three Commissioners No Items |
| August | No | -- | | Three Commissioners No Items |
| September | No | -- | | Three Commissioners No Items |
| October | Yes | 2 | 1 | City of Hope EIR Scoping, Tattoo, Massage Green |
| November | Yes | | 1 | Discuss Training Topics |
| December | Yes | | 1 | New Commissioner Training |
| | 7 | 12 | 3 | |

Notes: Commissioner Hernandez resigned July 2015; Commissioner Kelinski resigned May 2015
Commissioner Lawrence resigned October 2015.
Commissioners Watson-Gardner and Vasquez appointed September 2015; Commissioner Farra appointed December 2015.

If there is a desire to expand the responsibilities of the Planning Commission there are ways to accommodate this. Additional, items could be subject to Planning Commission review. While this idea could give the Planning Commission additional items, Staff would recommend careful consideration to ensure that the streamlining accomplished in the 2010 Development Code adoption not be undone.

Another option would be to combine the Planning Commission's tasks with other Commissions such as the Economic Development Commission and/or the Traffic Safety Commission. Since the loss of redevelopment it has been difficult to generate topics for the EDC to discuss, so of the two commissions to compress it would be a more logical choice. If the Council desires additional staff research on commission consolidation, Staff is happy to conduct additional analysis.

Attachment: Chapter 19.122 Site Plan and Design Review

## Chapter 19.122

## SITE PLAN AND DESIGN REVIEW

**Sections:**



### 19.122.010 Purpose and intent.

A. *Purpose.* The purpose of this Chapter is to provide a process for the appropriate review of development projects by the applicable City review authority specified in Table 7-2 (Review Authority for Site Plan and Design Review), below.

B. *Intent.* The intent of this Chapter is to ensure that all approved site and structural development:

1. Promotes the orderly development of the City in compliance with the goals, objectives, and policies of the General Plan, any applicable specific plan, and the standards specified in this Development Code;
2. Respects the physical and environmental characteristics of the site;
3. Ensures safe and convenient access and circulation for pedestrians and vehicles;
4. Exemplifies high-quality design practices;
5. Encourages the maintenance of a distinct neighborhood and/or community identity; and
6. Minimizes or eliminates negative or undesirable visual impacts.

### 19.122.020 Applicability.

A. *Site plan and design review required.* No one shall construct any structure or site improvement, or alter, move, rebuild, relocate, or significantly enlarge or modify any existing structure or site improvement specified in Table 7-2 (Review Authority for Site Plan and Design Review), below, unless a Site Plan and Design Review application is first reviewed and approved or conditionally approved by the applicable review authority in compliance with this Chapter.

B. *Compliance with chapter required.* No Building or Grading Permit shall be issued until the requirements of this Chapter, as applicable, have been met.

### 19.122.030 Review authority.

A. *Applicable review authority.* The applicable review authority for Site Plan and Design Review shall be as specified in Table 7-2 (Review Authority for Site Plan and Design Review), below, based on the type and/or size of structure or site improvement. Plans subject to review shall meet the standards of review identified in Section 19.122.040 D. Conditions of approval may be imposed through the review process to ensure that the project will be in compliance with those standards. The review authority's decision shall be subject to the findings specified in Subsection 19.122.050 E. Any review items requiring Director, ARB, or Commission review shall be subject to the application process specified in Section 19.122.040 (Application Filing, Processing, and Review). Any application or item subject to Site Plan and Design Review may be referred to a higher review authority in compliance with Subsection 19.122.050 B. (Referral of Application), below, or the review may be automatically elevated in compliance with Subsection C. (Discretionary Review by Other Review Authority), below.

1. *Staff review.* Items listed as Department Staff review in Table 7-2 shall be subject to the review and approval of the Department (Community Development Department) Staff. At the discretion of the Director,

proposals that are listed as Department Staff review items that may have the potential to be incompatible with or have an adverse effect on existing and surrounding property may be elevated to the level of Director or ARB review as provided for in Subparagraphs 2. and 3., below.

2. *Director review.* Items listed as Director review in Table 7-2 shall be subject to the review and approval of the Director. At the discretion of the Director, proposals that are listed as Director review items that may have the potential to be incompatible with or have an adverse effect on existing and surrounding property may be elevated to the level of ARB review as provided for in Subparagraph 3., below.

3. *ARB review.* Items listed as ARB review in Table 7-2 shall be subject to the review and approval of the Architectural Review Board, as defined in Article 9 (Definitions). The Commission, when acting as ARB, shall also act as the review authority for appeals of Director decisions.

4. *Commission review.* When accompanied by other quasi-judicial action items, or where elevated by the Director or ARB, Commission review shall be subject to the review and approval of the Commission after consideration at a scheduled Commission meeting. The Commission shall also act as the review authority for appeals of ARB decisions.

5. *Council review.* When accompanied by other related legislative action items, the Council may provide the final review decision. The Council shall also act as the review authority for appeals of Commission decisions.

B. *Determination of review authority by director.* The review authority for items not listed in Table 7-2 shall be determined by the Director.

| TABLE 7-2 REVIEW AUTHORITY FOR SITE PLAN AND DESIGN REVIEW | Review Level (1) (2) | | | | |
|---|---|---|---|---|---|
| | Staff (3) | Director (4) | ARB | Commission | Council |
| **RESIDENTIAL CONSTRUCTION ACTIVITIES (5)** | | | | | |
| **Residential New Construction** | | | | | |
| 1-Story Single-family and Two-family | — | — | Decision | Appeal | Appeal |
| 2-Story Single-family and Two-family | — | — | Recommend | Decision | Appeal |
| Multi-family (attached or detached) | — | — | Recommend | Decision | Appeal |
| **Residential Additions, Modifications, and/or Accessory Structures** | | | | | |
| R-1D zone < 250 sq. ft. | | Decision | Appeal | Appeal | Appeal |
| R-1D zone > 250 sq. ft. | — | — | Decision | Appeal | Appeal |
| R-1 and R-2 zones (except R-1D) 1st-story construction < 600 sq. ft. | Decision | Appeal | Appeal | Appeal | Appeal |
| R-1 and R-2 zones (except R-1D) 1st-story construction > 600 sq. ft. | — | Decision | Appeal | Appeal | Appeal |
| R-1 and R-2 zones (except R-1D) 2nd-story construction < 250 sq. ft. | — | Decision | Appeal | Appeal | Appeal |
| R-1 and R-2 zones (except R-1D) 2nd-story construction between 250 sq. ft. and 600 sq. ft. | — | — | Decision | Appeal | Appeal |
| R-1 and R-2 zones (except R-1D) 2nd-story construction > 600 sq. ft. | — | — | Recommend | Decision | Appeal |
| R-3 and R-4 zones construction including expansion of square footage (main building or accessory structures) or change in number of units | — | — | Decision | Appeal | Appeal |

| TABLE 7-2 REVIEW AUTHORITY FOR SITE PLAN AND DESIGN REVIEW | Review Level (1) (2) | | | | |
|---|---|---|---|---|---|
| | Staff (3) | Director (4) | ARB | Commission | Council |
| **Other Residential Construction or Improvements (6)** | | | | | |
| Facade or exterior improvements in the R-1 and R-2 zones | Decision | Appeal | Appeal | Appeal | Appeal |
| Facade or exterior improvements (inclusive of color changes) in the R-3 and R-4 zones | — | Decision | Appeal | Appeal | Appeal |
| Fences and walls (all) | Decision | Appeal | Appeal | Appeal | Appeal |
| Front yard porches | Decision | Appeal | Appeal | Appeal | Appeal |
| Pools and spas | Decision | Appeal | Appeal | Appeal | Appeal |
| Roof pitch changes | Decision | Appeal | Appeal | Appeal | Appeal |
| **NONRESIDENTIAL CONSTRUCTION ACTIVITIES** | | | | | |
| **Nonresidential New Construction (including Accessory Structures)** | | | | | |
| All new structures, except accessory structures and signs | — | — | Recommend | Decision | Appeal |
| Accessory structures | — | Decision | Appeal | Appeal | Appeal |
| **Nonresidential Additions and Modifications** | | | | | |
| Additions < 2500 sq. ft. | — | Recommend | Decision | Appeal | Appeal |
| Additions > 2500 sq. ft. | — | — | Recommend | Decision | Appeal |
| **Other Nonresidential Construction** | | | | | |
| Facade or exterior improvements (inclusive of color changes) | — | Decision | Appeal | Appeal | Appeal |
| Fences and walls (all) | Decision | Appeal | Appeal | Appeal | Appeal |
| Landscaping | — | Decision | Appeal | Appeal | Appeal |
| Restriping of parking lots | Decision | Appeal | Appeal | Appeal | Appeal |
| Roof pitch changes | Decision | Appeal | Appeal | Appeal | Appeal |
| **SIGNS AND SIGN PROGRAMS** | | | | | |
| Comprehensive Sign Programs | — | — | Decision | Appeal | Appeal |
| Signs (excluding freeway and monument signs) permanent and temporary | Decision | Appeal | Appeal | Appeal | Appeal |
| Freeway signs | — | — | Decision | Appeal | Appeal |
| Monument signs | — | Decision | Appeal | Appeal | Appeal |
| **OTHER REVIEW** | | | | | |
| Joint and Off-Site Parking Plans | — | Decision | Appeal | Appeal | Appeal |
| Open Space Plans | — | Decision | Appeal | Appeal | Appeal |
| Outdoor Dining < 800 sq. ft. | — | Decision | Appeal | Appeal | Appeal |
| Outdoor Dining > 800 sq. ft. | — | Recommend | Recommend | Decision | Appeal |
| Planned Development Permits | — | — | Recommend | Decision | Appeal |
| Specific Plans | — | — | Recommend | Recommend | Decision |
| Subdivisions/Condominiums | — | — | Recommend | Recommend | Decision |

Notes:

1. "Decision" means that the review authority makes the final decision on the matter; "Appeal" means that the review authority may consider and decide upon appeals to the decision of an earlier decision-making body, in compliance with Chapter 19.144 (Appeals); "Recommend" means that the review authority should provide preliminary review and forward input to the decision-making review authority for consideration.

2. The review authority may defer action and refer the request to the next higher review authority for the final decision in compliance with Subsection 19.122.050 B. (Referral of Application), below.

3. Process allows Department Staff to include conditions of approval.
4. Process to include findings, conditions of approval, and appeal period.
5. Square footages provided in this table presume a calculation that is all inclusive of aggregate new construction area, including square footage of both habitable and non-habitable structures meeting the definition of new building construction.
6. Facade and/or exterior improvements requiring Site Plan And Design Review include window and door change outs when a Building Permit is required.

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**19.122.040 Application filing, processing, and review.**

A. *Application filing.*

1. *Staff level reviews.* Staff level review does not require a formal application; however, sufficient detail shall be provided to Department Staff in order to make a determination to approve, conditionally approve, or deny the Site Plan and Design Review.
2. *All other reviews.* All other reviews shall require an application for a Site Plan and Design Review which shall be filed and processed in compliance with Chapter 19.112 (Application Processing Procedures). The application shall include the information and materials specified in the Department handout for Site Plan and Design Review applications, together with the required fee in compliance with the Planning Fee Schedule. It is the responsibility of the applicant to provide evidence in support of the findings required by Section 19.122.050 (Findings and Decision), below. Initial review of the application, including time requirements and requests for information, shall be as provided in Section 19.112.070 (Initial Review of Application).

B. *Review with other land use applications.* If the project for which the request for Site Plan and Design Review is being made also requires some other discretionary approval (e.g., Conditional Use Permit, etc.), the applicant shall file the information required by Subsection A. (Application Filing), above, together for concurrent review with the application for discretionary approval.

C. *Application review.*

1. Each application for a Site Plan and Design Review shall be reviewed to ensure that the application is consistent with the purpose of this Chapter; applicable development standards and regulations of this Development Code; and any adopted design guidelines and policies that may apply. Upon receipt of a complete application, the applicable review authority shall review the design, location, site plan configuration, and the effect of the proposed development on surrounding development by comparing the project plans to established development standards, regulations, and applicable design guidelines/policies.
2. Regardless of whether an application is otherwise complete, the Director at his/her sole discretion may require installation of story poles, a massing model or a computer model for new residential and nonresidential structures, and second-story additions to existing residential structures that exceed 1,000 square feet, when it is deemed necessary for application review.
3. Written notice shall be sent to the applicant before consideration of the Site Plan and Design Review application by the applicable review authority in compliance with Chapter 19.146 (Public Notices and Hearings). Additional notice provisions are specified in Subsection F. (Public Hearing and Notice Provisions), below.

4. After the Site Plan and Design Review application has been deemed complete, the review authority shall either approve or deny the Site Plan and Design Review application and, if approved, may impose conditions deemed reasonable and necessary to protect the public health, safety and general welfare and ensure compliance with this Chapter and various regulations of the City in compliance with Section 19.122.050 (Findings and Decision), below.

D. *Standards of review.* When reviewing development plans that are subject to Site Plan and Design Review, the following criteria, in addition to other principles of good design, shall be considered as part of the review:

1. *Compatibility.* Compatibility shall be ensured and determined by use of the following criteria:
   a. The arrangement, design, location, and size of all structures should be visually harmonious with the project site and with the surrounding sites and structures.
   b. New development, alteration, and/or enlargement of existing development should enhance and improve the appearance of the project's vicinity and be compatible with the character and quality of surrounding development.
   c. The proposed development should protect the development site as well as surrounding properties from noise, odor, vibration, and other impacts that may have an adverse impact.
   d. The height and bulk of proposed structures on the site should be in scale with the height and bulk of structures on surrounding sites, and should not visually dominate their sites or call undue attention.
   e. The location and configuration of structures should minimize interference with the privacy and views of occupants of surrounding structures.

2. *Architectural design and detail.* Architectural design and detail shall be provided in all proposed development and shall be determined by use of the following criteria and in compliance with the applicable provisions of Chapter 19.44 (Architectural and Design Standards):
   a. Every effort should be given to design new structures in keeping with a recognized and established architectural style utilizing massing, materials, details, and similar elements of that style.
   b. Elements of good urban design and architecture should be implemented in all projects including, but not limited to building articulation, building colors, fenestration, massing, materials, and other architectural elements.
   c. Where no consistent architectural style or pattern is present, building design and massing should be used to complement existing development.
   d. Architectural treatment of all structures should be visually coordinated.
   e. Long, plain building walls should be avoided by incorporating building articulation (e.g., arcades, decks, material variation, porches, public art, roofline variation, varied setbacks, and windows) and other similar methods.
   f. Garish, inharmonious, or out-of-character colors should not be used on any structure, face, or roof visible from the street or from an adjoining site.
   g. Roof-mounted equipment shall be fully screened. Acceptable methods of screening may include parapet walls or some other creative manner as an architectural solution. Individual equipment screens may only be used for structures after all other methods of screening have been explored.

h. Rooflines on a structure should create design interest and be compatible throughout the structure and with existing structures and surrounding development.

i. The design of the structures, driveways, landscaping, lighting, loading facilities, parking areas, signs, solar facilities, and other sight features should show proper consideration for the functional aspects of the site (e.g., automobile, pedestrian and bicycle circulation) and the visual effect of the development on surrounding development.

j. Amenities (e.g., arbors, architectural lighting, fountains, hardscape, public art, and trellis) and other design features should be provided on larger development projects.

k. Green building practices, in addition to those required by Chapter 19.52 (Sustainable Development Standards) should be used when feasible.

l. Electrical rooms with switchgear and similar items should be located within an electrical room and integrated into the building footprint.

m. Interior roof access shall be used. Exterior roof ladders are prohibited.

3. *Landscape, lighting, parking, signs, and other design details.* Landscaping, lighting, parking, signs, and other design details shall be provided in all proposed development and shall be determined by use of the following criteria:

a. *Equipment and utilities.*

(1) Utility boxes and other similar equipment should be located where they are well screened from public view.

(2) Mechanical equipment on the site shall be appropriately screened from view.

(3) When possible, all utilities should be installed underground.

b. *Fences/walls.*

(1) Fencing, walls, solid waste enclosures, and accessory structures should be harmonious with the principal structure and other structures on the site.

(2) Retaining walls that are visible from public views should be limited in height, when possible. Decorative block should be used for all retaining walls. When taller retaining walls are necessary, they should be designed to reduce visual impact.

c. *Landscaping.*

(1) Landscaping should be designed in a way as to accent the property. Special effort should be given to colorful, creative, and varied planting designs that use native and native-compatible species that provide visual interest and water efficiency.

(2) Attention shall be given to selecting parking lot trees that provide shade.

(3) When mature trees are present on a site, every effort should be made to assess the value of the trees and, if reasonable, the trees should be incorporated into the proposed landscape plans.

(4) Pedestrian paths should be incorporated into site design to provide access and visual interest and to provide the most effective pedestrian access to structures.

(5) Decorative hardscape should be integrated into project areas to provide visual interest.

(6) In the parking and driveway areas, decorative hardscape should be used at driveway access points and nodes in the parking area.

(7) In pedestrian areas, decorative hardscape should be used near entries, within patio areas, and at other focal points in the project.

(8) All landscaping shall conform to the provisions of Chapter 19.40 (Landscaping).

d. *Lighting.*

(1) Lighting shall be located so as to avoid glare and to reflect the light away from adjoining property and rights-of-way while recognizing the importance of security.

(2) Wall-mounted lighting fixtures should be decorative and be compatible with the architectural style of the structure(s). Wall packs and fixtures that spread uncontrolled light shall be prohibited.

(3) Pole-mounted lighting should be of an appropriate scale to compliment the structure that it serves. Wherever possible, decorative poles and fixtures should be used.

e. *Parking.*

(1) Parking and loading facilities should function efficiently with minimum obstruction of traffic on surrounding streets while facilitating on-site circulation.

(2) Wherever possible, driveway access to parking areas should have as shallow of slope as possible to provide proper drainage and facilitate ease of access.

f. *Signs.*

(1) Signs should be creatively designed so as to improve the aesthetic aspects of the development as well as identify a business or location.

(2) With a focus on graphic design, signs shall be clearly readable and shall utilize materials, textures, colors, and illumination that compliment the structure and site design.

(3) During project design and review, consideration should also be given to the location and size of signs to ensure visual compatibility and vehicular and pedestrian safety.

(4) For ground-mounted signs, landscape shall be incorporated with plans for the signs.

E. *On-site inspection.* An application for a Site Plan and Design Review may require that the Director perform an on-site inspection of the subject parcel before confirming that the request complies with all of the applicable criteria and provisions specified in this Chapter.

F. *Public hearing and notice provisions.*

1. A public hearing shall not be required for any Site Plan and Design Review application, except when the Site Plan and Design Review application is accompanied by a companion quasi-judicial or legislative matter that would otherwise require a public hearing, and except for those items specified in Subparagraph 2., below.

2. Required notice for specified Site Plan and Design Review applications shall be as follows:

a. For all single-family new construction structures or single-family second-story additions, notice shall be pro-

vided to all abutting residential property owners before the initial decision.

b. For all non-single-family new construction structures or additions exceeding 500 square feet and when adjacent to a residential zone, notice shall be provided to all abutting residential property owners before the initial decision.

3. When a public hearing is required, notice of the hearing shall be given and the hearing shall be conducted in compliance with Chapter 19.146 (Public Notices and Hearings).

G. *Appeal provisions.* The review authority's decision may be appealed in compliance with Chapter 19.144 (Appeals).

**19.122.050 Findings and decision.**

A. *Meets requirements of this chapter.* The review authority shall determine whether or not the application meets the requirements of this Chapter.

B. *Referral of application.*

1. The Director may defer action and refer the application to the next higher review authority for the final decision.

2. If the Site Plan and Design Review application submitted is of significant consequence or magnitude or involves potential public controversy, the ARB may defer action and refer the application to the Commission for review and final decision.

3. The referral shall be placed on the agenda of the next available regular Commission meeting following the referral.

C. *Discretionary review by other review authority.*

1. If the application is filed concurrently with another discretionary land use application, the decision to approve or deny the Site Plan and Design Review shall be made by the authority responsible for reviewing the other discretionary land use application (e.g., Conditional Use Permit, etc.) in compliance with the applicable review procedure for the other discretionary review and Table 7-1 (Review Authority).

2. For example, a project for which applications for a Conditional Use Permit and Site Plan and Design Review for a new structure shall have both applications decided by the Commission, instead of the ARB being the final decision-making authority for the Site Plan and Design Review as otherwise required by Table 7-2 (Review Authority for Site Plan and Design Review). In the example cited, the ARB would still consider the Site Plan and Design Review for the new structure and forward a recommendation to the Commission for consideration of both the Conditional Use Permit and Site Plan and Design Review.

3. The decision to approve or deny the Site Plan and Design Review shall be made in compliance with Subsection E (Required Findings), below.

D. *Review authority's action.*

1. An application for a Site Plan and Design Review may be approved, conditionally approved, or denied by the review authority.

2. The Director, ARB, or Commission shall consider an application in a timely manner after it is deemed complete. A decision of the Director, ARB, or Commission shall be made in writing. An approval by Department Staff may be in the form of a signature, stamp, or similar form of documentation.

3. The written decision including any findings and/or conditions of approval shall be mailed to the applicant and kept on file in the Department.

E. *Required findings.* The review authority may approve a Site Plan and Design Review application, only after first making all of the following findings. The proposed development is:

1. Consistent with the General Plan and is in compliance with all applicable provisions of this Development Code and all other City ordinances and regulations;
2. To be constructed on a parcel that is adequate in shape, size, topography, and other circumstances to accommodate the proposed development;
3. In compliance with the applicable criteria specified in Subsection 19.122.040 D. (Application Filing, Processing, and Review), above, and the site is suitable for the proposed development; and
4. Designed and arranged to provide adequate consideration to ensure the public health, safety, and general welfare, and to prevent adverse effects on neighboring property.

**19.122.060 Conditions of approval.**

In approving a Site Plan and Design Review application, the review authority, including a Staff-level review, may impose conditions deemed reasonable and necessary to ensure that the approval would be in compliance with the findings required by Section 19.122.050 (Findings and Decision), above.

**19.122.070 Issuance of other required permits and approvals.**

A. *Permits for grading, structures, and uses.* Upon approval or conditional approval of a Site Plan and Design Review, or a revised Site Plan and Design Review, permits may be issued for grading, structures, and uses.

B. *Compliance with site plan and design review.* Grading shall not be commenced and no structure shall be altered, enlarged, erected, moved, or rebuilt subject to the provisions of this Chapter, except in compliance with the approved Site Plan and Design Review and the conditions imposed on the review.

C. *Determination by director.* Compliance shall be determined by the Director, or in the case of disagreement with the applicant, by the applicable review authority.

D. *Determination by building official.* Before a Building Permit may be issued for any structure in a development requiring Site Plan and Design Review, the Building Official shall make a determination that the proposed structure(s) is in compliance with the approved Site Plan and Design Review.

E. *Expiration.* Construction of improvements permitted by a Site Plan and Design Review approval shall be "exercised" or commenced within 12 months of the actual date of approval in compliance with Section 19.130.060 (Expiration); provided, that this time limit may be increased or decreased, at the time of granting the approval, in order to allow the time limit to be concurrent with any other entitlement to construct identified in this Development Code.

F. *Extension.* Upon receiving a written request before the expiration of any approval time period, the Director may grant an extension for a period not exceeding 12 additional months in compliance with Section 19.130.070 (Time Extensions); provided, that it is found that there has been no subsequent change in the findings, conditions of approval, and applicable regulations governing the approval.

**19.122.080 Minor changes by director.**

Minor changes in a Site Plan and Design Review that do not involve an increase in structure area or height, an increase in the number of dwelling units, or an intensity of use may be approved by the Director in compliance with Section 19.130.080 (Changes to an Approved Project).

**19.122.090 Post-decision procedures.**

The procedures and requirements in Chapter 19.130 (Permit Implementation, Time Limits, and

Extensions), and those related to appeals and revocation in Article 8 (Development Code Administration) shall apply following the decision on a Site Plan and Design Review application.