

1 (2) For land subject to Agricultural Preserves and/or Williamson Act contracts within  
2 Planning Area 3-5, the uses permitted in Planning Area 3-5 of Specific Plan No.  
3 375 shall be the same as those uses permitted in Article XIII, Section 13.1 of  
4 Ordinance No. 348.

5 No use, other than an agricultural use and any use incidental thereto permitted in  
6 Article XIII, Section 13.1 of Ordinance No. 348 shall be permitted within Planning  
7 Area 3-5 of Specific Plan No. 375 until such time as Map No. 162 of Coachella  
8 Valley Agricultural Preserves No. 27 has been diminished or disestablished in  
9 Planning Area 3-5 and any corresponding Williamson Act contract is no longer in  
10 effect for Planning Area 3-5. Prior to issuance of a grading permit for uses other  
11 than the aforementioned agricultural uses within Planning Area 3-5 of Specific Plan  
12 No. 375, all agricultural uses including uses incidental thereto within Planning Area  
13 3-5 shall cease and no longer be a permitted use.

14 ~~Thereafter, the uses permitted on land formerly subject to Agricultural Preserves~~  
15 ~~and/or Williamson Act contracts within Planning Area 3-5 of Specific Plan No. 375~~  
16 ~~shall be the same as those uses permitted in Planning Areas 1-12 and 2-2 of~~  
17 ~~Specific Plan No. 375.~~

18 (3) The development standards for interim agriculture uses within Planning Areas 1-  
19 12, 2-2 and 3-5 of Specific Plan No. 375 shall be the same as those standards  
20 identified in Article XIII, Section 13.2 of Ordinance No. 348.

21 (4) The development standards for Planning Areas 1-12, 2-2 and 3-5 of Specific Plan  
22 No. 375 shall be the same as those standards identified in Article IX, Section 9.4 of  
23 Ordinance No. 348 except that the development standards set forth in Article IX,  
24 Section 9.4.b shall be deleted and replaced by the following:

25 A. There are no yard requirements for commercial buildings except that a  
26 fifteen foot (15') minimum rear and/or side yard setback shall be required  
27 where a commercial building within a Commercial Planning Area adjoins  
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1 a Residential Planning Area or a residential development within a Mixed  
2 Use Planning Area. For commercial buildings over forty feet (40') in  
3 height, an additional one foot (1') of side and/or rear yard setback shall be  
4 added for each one foot (1') of height over forty feet (40').

5 (5) Except as provided above, all other zoning requirements shall be the same as those  
6 requirements identified in Article IX of Ordinance No. 348.

7 g. Planning Area 2-19 (Regional Commercial Retail).

8 (1) The uses permitted in Planning Area 2-19 of Specific Plan No. 375 shall be the  
9 same as those uses permitted in Article IX, Section 9.1 of Ordinance No. 348,  
10 except that the uses permitted pursuant to Section 9.1.a.(30), (33), (43), (54), (61),  
11 (80), (82) and (93); Section 9.1.b.(10), (11), (15) and (16); and Section 9.1.d.(1),  
12 (3), (4), (6), (7), (9), (10) and (18) shall not be permitted. Governmental uses,  
13 offices, and facilities including but not limited to federal and state agencies, and  
14 ~~local civic centers, police and fire stations, libraries, public health and welfare~~  
15 offices, and employment departments shall be permitted within Planning Area 2-  
16 19.

17 Field crops, flower and vegetable gardening, tree crops, and greenhouses used only  
18 for purposes of propagation and culture, including the sale thereof from the  
19 premises and one unlighted sign that does not exceed two square feet in size  
20 pertaining to the sale of products shall be permitted within Planning Area 2-19 of  
21 Specific Plan No. 375 shall be permitted as an interim use. Prior to issuance of a  
22 grading permit for uses other than the aforementioned agricultural uses within  
23 Planning Area 2-19 of Specific Plan No. 375, all agricultural uses including uses  
24 incidental thereto within this planning area shall cease and shall no longer be a  
25 permitted use.

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27 In addition, the uses permitted under Article IX Section 9.1.a. shall include:  
28 administrative and professional offices, including but not limited to business, law,

1 medical, dental, chiropractic, architectural, engineering, community planning, and  
2 real estate offices, in which no activity is carried on catering to retail sales and no  
3 stock of goods is maintained for sale; art galleries; automobile sales and rental  
4 agencies; automobile and truck service stations, not including the concurrent sale  
5 of beer and wine for off-premises consumption; cell towers concealed within  
6 architectural projections or similar structures; clinics, including but not limited to  
7 medical, dental and chiropractic; community recreation facilities; conference  
8 center; cultural centers; dance school; entertainment venues and night clubs;  
9 farmers markets; grocery, dry goods, health food, and variety stores; health and  
10 exercise centers, provided all facilities are located within an enclosed building;  
11 hospitals (medical/surgical, convalescent, nursing, hospice care, etc.); lakes,  
12 including noncommercial fishing therefrom; laundries, with dry cleaning shops;  
13 libraries; micro-breweries and micro-wineries; museums; non-profit community  
14 centers; ~~office equipment sales and service; parcel delivery services (stores);~~  
15 pedestrian paseos; post offices; prescription pharmacy when related and incidental  
16 to a professional office building; professional offices; real estate offices;  
17 residences, live-work dwellings; sale, rental, repair, or demonstration of  
18 motorcycles, scooters, and motorbikes; spas, including day spas and medical spas;  
19 studios for professional work in or teaching of any form of fine arts, including but  
20 not limited to photography, music, drama, and dance, where no stock of goods is  
21 maintained for sale; sport courts and recreational fields and uses; utilities, both  
22 public and private; warehouse stores/big-box retail; and accessory buildings to a  
23 specific use, provided that the accessory building is established as an incident to a  
24 principal use and does not change the character of that use.

25  
26 In addition, the permitted uses identified under Section 9.1.b shall also include:  
27 boat and other marine rentals and services; building supply stores and equipment  
28 rental, including outside storage; neighborhood electric vehicle (NEV) sales and

1 service; nurseries, horticultural; power generation and distribution, including solar,  
2 wind, geothermal, and other alternative forms to traditional hydrocarbon-based  
3 energy facilities; parks and playgrounds, golf courses with standard length  
4 fairways, and country clubs; and travel trailers, motor homes and recreational  
5 vehicles sales and service.

6 In addition, the permitted uses identified under Section 9.1.d shall also include:  
7 automobile and truck service stations, including the concurrent sale of beer and  
8 wine for off-premises consumption; concrete batch plants and asphalt plants;  
9 gasoline service stations, not including the concurrent sale of beer and wine for  
10 off-premises consumption; liquid petroleum service stations, not including the  
11 concurrent sale of beer and wine, provided the total capacity of all tanks shall not  
12 exceed ten thousand (10,000) gallons; mortuaries; performing arts theaters and  
13 centers including live music, stage productions, etc.; schools, private; archery  
14 ranges, golf driving ranges, gymnasiums, miniature golf, parks and playgrounds;  
15 sports arenas; skating rinks; stadiums; commercial swimming pools; and wedding  
16 chapels.

17 The following uses are permitted provided a public use permit has been granted  
18 pursuant to the provisions of Section 18.29 of Ordinance No. 348: churches,  
19 temples and other places of religious worship.

20 (2) The development standards for interim agriculture uses within Planning Area 2-19  
21 of Specific Plan No. 375 shall be the same standards as identified in Article XIII,  
22 Section 13.2 of Ordinance No. 348.

23 (3) The development standards for Planning Area 2-19 of Specific Plan No. 375 shall  
24 be the same as those standards identified in Article IX, Section 9.4 of Ordinance  
25 No. 348 except that the development standards set forth in Article IX, Section  
26 9.4.b shall be deleted and replaced by the following:  
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1 A. There are no yard requirements for commercial buildings except that a  
2 fifteen foot (15') minimum rear and/or side yard setback shall be required  
3 where a commercial building within a Commercial Planning Area adjoins  
4 a Residential Planning Area or a residential development within a Mixed  
5 Use Planning Area. For commercial buildings over forty feet (40') in  
6 height, an additional one foot (1') of side and/or rear yard setback shall be  
7 added for each one foot (1') of height over forty feet (40').

8 (4) Except as provided above, all other zoning requirements shall be the same as those  
9 requirements identified in Article IX of Ordinance No. 348.

10 h. Planning Areas 3-9, 5-3 and 5-4 (Commercial Tourist / Resort).

11 (1) The uses permitted in Planning Areas 3-9, 5-3 and 5-4 of Specific Plan No. 375  
12 shall be the same as those uses permitted in Article IX, Section 9.1 of Ordinance  
13 No. 348 except that the uses permitted pursuant to Section 9.1.a(1), (3), (4), (5),  
14 (8), (9), (15), (25), (26), (27), (28), (29), (30), (33), (36), (37), (39), (42), (43), (47),  
15 (48), (49), , (52), (54), (55), (60), (61), (62), (64), (65), (66), (68), (69), (72), (77),  
16 (80), (82), (84), (91), (92), (93) and (94); Section 9.1.b.(4), (6), (8), (9), (10), (11),  
17 (12), (13), (15), (16), (18), (19) and (20); and Section 9.1.d.(1), (4), (6), (7), (9),  
18 (10), (11), (12), (13) and (14) shall not be permitted. Governmental uses, offices,  
19 and facilities including but not limited to federal and state agencies, and local civic  
20 centers, police and fire stations, libraries, public health and welfare offices, and  
21 employment departments shall be permitted within Planning Areas 3-9, 5-3 and 5-  
22 4. Field crops, flower and vegetable gardening, tree crops, and greenhouses used  
23 only for purposes of propagation and culture, including the sale thereof from the  
24 premises and one unlighted sign that does not exceed two square feet in size  
25 pertaining to the sale of products within Planning Areas 3-9, 5-3 and 5-4 of  
26 Specific Plan No. 375 shall be permitted as an interim use. Prior to issuance of a  
27 grading permit for uses other than the aforementioned agricultural uses within  
28

1 Planning Areas 3-9, 5-3 and 5-4 of Specific Plan No. 375, all agricultural uses  
2 including uses incidental thereto within this planning area shall cease and shall no  
3 longer be a permitted use.

4 In addition, the uses permitted under Article IX Section 9.1.a. shall include:  
5 administrative and professional offices, including but not limited to business, law,  
6 medical, dental, chiropractic, architectural, engineering, community planning, and  
7 real estate offices, in which no activity is carried on catering to retail sales and no  
8 stock of goods is maintained for sale; amusement parks; art galleries; bed and  
9 breakfast inns; campgrounds; cell towers concealed within architectural projections  
10 or similar structures; community recreation facilities; conference center; cultural  
11 centers; dance schools; entertainment venues and night clubs; golf courses and  
12 appurtenant facilities, including clubhouses (a clubhouse is permitted to have  
13 customary retail shop and restaurant facilities); grocery, dry goods, health food, and  
14 ~~variety stores; health and exercise centers, provided all facilities are located within~~  
15 an enclosed building; lakes, including noncommercial fishing therefrom; laundries,  
16 with dry cleaning shops; libraries; meeting, fraternal lodge, and community halls;  
17 micro-breweries and micro-wineries; museums; pedestrian paseos; picnic grounds;  
18 prescription pharmacy when related and incidental to a professional office building;  
19 rock climbing walls; sale, rental, repair, or demonstration of motorcycles, scooters,  
20 and motorbikes; spas, including day spas and medical spas; studios for professional  
21 work in or teaching of any form of fine arts, including but not limited to  
22 photography, music, drama, and dance, where no stock of goods is maintained for  
23 sale; swimming pools; sport courts and recreational fields and uses; utilities, both  
24 public and private; warehouse stores/big-box retail; wedding chapels; and  
25 accessory buildings to a specific use, provided that the accessory building is  
26 established as an incident to a principal use and does not change the character of  
27 that use.  
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1 In addition, the permitted uses identified under Section 9.1.b shall also include:  
2 boat and other marine rentals and services; electrical substations; neighborhood  
3 electric vehicle (NEV) sales and service; power generation and distribution  
4 facilities, including solar, wind, geothermal, and other alternative forms to  
5 traditional hydrocarbon-based energy facilities; public parks and playgrounds, golf  
6 courses with standard length fairways, and country clubs; and recreational vehicle  
7 parks.

8 In addition, the permitted uses identified under Section 9.1.d shall also include:  
9 automobile sales and rental, automobile and truck service stations, including the  
10 concurrent sale of beer and wine for off-premises consumption; gasoline service  
11 stations, not including the concurrent sale of beer and wine for off-premises  
12 consumption; hunting clubs, skeet, trap, rifle and pistol ranges; liquid petroleum  
13 service stations, not including the concurrent sale of beer and wine, provided the  
14 ~~total capacity of all tanks shall not exceed 10,000 gallons; performing arts theaters~~  
15 and centers; private schools; archery ranges; golf driving ranges; gymnasiums;  
16 miniature golf; parks and playgrounds; sports arenas; skating rinks; stadiums; and  
17 commercial swimming pools.

18 The following uses are permitted provided a public use permit has been granted  
19 pursuant to the provisions of Section 18.29 of Ordinance No. 348: churches,  
20 temples and other places of religious worship.

- 21
- 22 (2) The development standards for interim agriculture uses within Planning Areas 3-9,  
23 5-3 and 5-4 of Specific Plan No. 375 shall be the same standards as identified in  
24 Article XIII, Section 13.2 of Ordinance No. 348.
- 25 (3) The development standards for Planning Areas 3-9, 5-3 and 5-4 of Specific Plan  
26 No. 375 shall be the same as those standards identified in Article IX, Section 9.4 of  
27 Ordinance No. 348 except that the development standards set forth in Article IX,  
28 Section 9.4.b and .c shall be deleted and replaced by the following:

1 A. There are no yard requirements for commercial buildings except that a  
2 fifteen foot (15') minimum rear and/or side yard setback shall be required  
3 where a commercial building within a Commercial Planning Area adjoins  
4 a Residential Planning Area or a residential development within a Mixed  
5 Use Planning Area. For commercial buildings over forty feet (40') in  
6 height, an additional one foot (1') of side and/or rear yard setback shall be  
7 added for each one foot (1') of height over forty feet (40').

8 B. No building or structure shall exceed one hundred and fifty feet (150') in  
9 height unless a greater height is approved pursuant to Section 18.34 of  
10 Ordinance No. 348. In no event, however, shall a building or structure  
11 exceed two hundred feet (200') in height, unless a variance is approved  
12 pursuant to Section 18.27 of this Ordinance.

13 (4) Except as provided above, all other zoning requirements shall be the same as those  
14 requirements identified in Article IX of Ordinance No. 348.

15 i. Planning Areas 1-21, 1-23, 2-4, 2-5 and 3-11 (Open Space - Recreation).

16 (1) The uses permitted in Planning Area 1-21, 1-23, 2-4, 2-5 and 3-11 of Specific Plan  
17 No. 375 shall be the same as those uses permitted in Article VIIIe, Section 8.100 of  
18 Ordinance No. 348, except that the uses permitted pursuant to Article VIIIe,  
19 Section 8.100.a. (6) and (8) and c.(1) shall not be permitted. Governmental uses,  
20 offices, and facilities including but not limited to federal and state agencies and  
21 local civic centers, police and fire stations, libraries, public health and welfare  
22 offices and employment departments shall be permitted within Planning Areas 1-  
23 21, 1-23, 2-4, 2-5 and 3-11. Field crops, flower and vegetable gardening, tree  
24 crops, and greenhouses used only for purposes of propagation and culture,  
25 including the sale thereof from the premises and one unlighted sign that does not  
26 exceed two square feet in size pertaining to the sale of products within Planning  
27 Areas 1-21, 1-23, 2-4, 2-5 and 3-11 of Specific Plan No. 375 shall be permitted as  
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1 an interim use. Prior to issuance of a grading permit for uses other than the  
2 aforementioned agricultural uses within Planning Areas 1-21, 1-23, 2-4, 2-5 and 3-  
3 11 of Specific Plan No. 375, all agricultural uses including uses incidental thereto  
4 within this planning area shall cease and shall no longer be a permitted use.

5 In addition, the uses permitted under Article VIIIe, Section 8.100.a. shall include:  
6 boat and other marine sales; boat and other marine rentals and services;  
7 campgrounds; cultural centers; fishing and casting pools; museums; non-profit  
8 community centers; pedestrian paseos; picnic grounds; public parks and  
9 playgrounds; refreshment stands; restaurants and other eating establishments; rock  
10 climbing walls; spas, including day spas and medical spas; sports and recreational  
11 facilities, not including motor-driven vehicles and riding academies, but including  
12 archery ranges, athletic fields, golf driving ranges, gymnasiums, miniature golf,  
13 sports arenas, skating rinks, stadiums, and commercial swimming pools; sport  
14 ~~courts and recreational fields and uses; tourist information centers; and accessory~~  
15 buildings to a specific use, provided that the accessory building is established as  
16 an incident to a principal use and does not change the character of that use.

17 In addition, the uses permitted under Article VIIIe, Section 8.100.b. shall include:  
18 auditoriums and conference rooms; hunting clubs, skeet, trap, rifle and pistol  
19 ranges; meeting, fraternal lodge, and community halls; performing arts theaters  
20 and centers; and recreational vehicle parks.

- 21  
22 (2) For land subject to Agricultural Preserves and/or Williamson Act contracts, the  
23 uses permitted in Planning Areas 1-21 and 3-11 of Specific Plan No. 375 shall be  
24 the same as those uses permitted in Article XIII, Section 13.1 of Ordinance No.  
25 348. No use, other than an agricultural use and any use incidental thereto  
26 permitted in Article XIII, Section 13.1 of Ordinance No. 348 shall be permitted  
27 within Planning Areas 1-21 and 3-11 of Specific Plan No. 375 until such time as  
28 Map No. 162 of Coachella Valley Agricultural Preserves No. 27 has been

1 diminished or disestablished in the planning area and any corresponding  
2 Williamson Act contract is no longer in effect for Planning Areas 1-21 and 3-11.  
3 Prior to issuance of a grading permit for uses other than the aforementioned  
4 agricultural uses within Planning Areas 1-21 and 3-11, all agricultural uses  
5 including uses incidental thereto within the affected planning area shall cease and  
6 shall no longer be a permitted use. Thereafter, the uses permitted on land formerly  
7 subject to Agricultural Preserves and/or Williamson Act contracts within Planning  
8 Areas 1-21 and 3-11 of Specific Plan No. 375 shall be the same as those uses  
9 permitted in Planning Areas 1-23, 2-4 and 2-5 of Specific Plan No. 375.

10 (3) The development standards for interim agriculture uses within Planning Areas 1-  
11 21, 1-23, 2-4, 2-5 and 3-11 of Specific Plan No. 375 shall be the same standards as  
12 identified in Article XIII, Section 13.2 of Ordinance No. 348.

13 (4) The development standards for Planning Areas 1-21, 1-23, 2-4, 2-5 and 3-11 of  
14 ~~Specific Plan No. 375 shall be the same standards as those identified in Article~~  
15 ~~VIIIe, Section 8.101 of Ordinance No. 348 except that the standards set forth in~~  
16 ~~Article VIIIe, Section 8.101.b shall be deleted and replaced with the following:~~

17 A. Whenever a building is to be constructed on a lot, it shall have a front  
18 yard, side yard, and rear yard, each of which shall be not less than twenty  
19 feet (20'). If more than one building is constructed on one lot, there shall  
20 be not less than twenty feet (20') of separation between the buildings. No  
21 structural encroachments shall be permitted in the front, side or rear yard  
22 except as provided for in Section 18.19 of this Ordinance.

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24 (5) Except as provided above, all other zoning requirements shall be the same as those  
25 requirements identified in Article VIII of Ordinance No. 348.

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1 j. Planning Areas 1-24, 1-25, 1-26, 1-27, 1-28, 1-29, 1-32, 2-22, 2-23, 2-24, 2-25, 2-26, 2-28,  
2 2-29, 2-30, 2-31, 2-32, 3-13, 3-15, 3-17, 3-18, 3-19, 4-10, 4-11 and 5-24 (Open Space –  
3 Water).

4 (1) The uses permitted in Planning Areas 1-24, 1-25, 1-26, 1-27, 1-28, 1-29, 1-32, 2-  
5 22, 2-23, 2-24, 2-25, 2-26, 2-28, 2-29, 2-30, 2-31, 2-32, 3-13, 3-15, 3-17, 3-18, 3-  
6 19, 4-10, 4-11 and 5-24 of Specific Plan No. 375 shall be the same as those uses  
7 permitted in Article VIIIe, Section 8.100 of Ordinance No. 348, except that the  
8 uses permitted pursuant to Article VIIIe, Section 8.100.a(1), (2) (6) and (8); b.(1)  
9 and c.(1) shall not be permitted. Field crops, flower and vegetable gardening, tree  
10 crops, and greenhouses used only for purposes of propagation and culture,  
11 including the sale thereof from the premises and one unlighted sign that does not  
12 exceed two square feet in size pertaining to the sale of products within Planning  
13 Areas 1-24, 1-25, 1-26, 1-27, 1-28, 1-29, 1-32, 2-22, 2-23, 2-24, 2-25, 2-26, 2-28,  
14 2-29, 2-30, 2-31, 2-32, 3-13, 3-15, 3-17, 3-18, 3-19, 4-10, 4-11 and 5-24 of  
15 Specific Plan No. 375 shall be permitted as an interim use. Prior to issuance of a  
16 grading permit for uses other than the aforementioned agricultural uses within  
17 Planning Areas 1-24, 1-25, 1-26, 1-27, 1-32, 2-22, 2-23, 2-24, 2-25, 2-26, 2-28, 2-  
18 29, 2-30, 2-31, 2-32, 3-17 and 5-24 of Specific Plan No. 375, all agricultural uses  
19 including uses incidental thereto within this planning area shall cease and shall no  
20 longer be a permitted use.

21 In addition, the uses permitted under Article VIII, Section 8.100.a. shall include:  
22 boat marinas; boat and other marine sales, rentals and services; and fishing and  
23 casting pools.

24 (2) For land subject to Agricultural Preserves and/or Williamson Act contracts within  
25 Planning Areas 1-28, 1-29, 3-13, 3-15, 3-18, 3-19, 4-10 and 4-11, the uses shall be  
26 the same as those uses permitted pursuant to Section 13.1 of Ordinance No. 348  
27 except that the uses permitted pursuant to Section 13.1.a.(1), (11), (12), (14) and  
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1 (15); b.(1), (2), (3), (4), (5), (8), (9), (10) and (11); and c.(1), (2), (3), (4), (5), (6),  
2 (7), (9), (10) and (11) shall not be permitted.

3 No use, other than an agricultural use and any use incidental thereto permitted in  
4 Article XIII, Section 13.1 of Ordinance No. 348 shall be permitted within Planning  
5 Areas 1-28, 1-29, 3-13, 3-15, 3-18, 3-19, 4-10 and 4-11 of Specific Plan No. 375.  
6 Thereafter, the uses permitted on land formerly subject to Agricultural Preserves  
7 and/or Williamson Act contracts within Planning areas 1-28, 1-29, 3-13, 3-15, 3-  
8 18, 3-19, 4-10 and 4-11 of Specific Plan No. 375 shall be the same as those uses  
9 within Planning Areas 1-24, 1-25, 1-26, 1-27, 1-32, 2-22, 2-23, 2-24, 2-25, 2-26, 2-  
10 28, 2-29, 2-30, 2-31, 2-32, 3-17 and 5-24.

11 (3) The development standards for interim agriculture uses within Planning Areas 1-  
12 24, 1-25, 1-26, 1-27, 1-28, 1-29, 1-32 2-22, 2-23, 2-24, 2-25, 2-26, 2-28, 2-29, 2-  
13 30, 2-31, 2-32 3-13, 3-15, 3-17, 3-18, 3-19, 4-10, 4-11 and 5-24 of Specific Plan  
14 No. 375 shall be the same as those standards identified in Article XIII, Section 13.2  
15 of Ordinance No. 348.

16 (4) The development standards for Planning Areas 1-24, 1-25, 1-26, 1-27, 1-28, 1-29,  
17 1-32, 2-22, 2-23, 2-24, 2-25, 2-26, 2-28, 2-29, 2-30, 2-31, 2-32, 3-13, 3-15, 3-17,  
18 3-18, 3-19, 4-10, 4-11 and 5-24 of Specific Plan No. 375 shall be the same  
19 standards as identified in Article VIIIe, Section 8.101 of Ordinance No. 348 except  
20 that the standards set forth in Article VIIIe, Section 8.101.b. shall be deleted and  
21 replaced with the following:

22 (5) Yards. Whenever a building is to be constructed on a lot, it shall have a  
23 front yard, side yard, and rear yard, each of which shall be not less than  
24 twenty feet (20'). If more than one building is constructed on one lot, there  
25 shall be not less than twenty feet (20') of separation between the buildings.  
26 No structural encroachments shall be permitted in the front, side, or rear  
27 yard except as provided for in Section 18.19 of this Ordinance.  
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1 (6) Except as provided above, all other zoning requirements shall be the same as those  
2 requirements identified in Article VIIIe of Ordinance No. 348.

3 Section 3. Mixed Use Overlays

4 (1) INTENT.

5 This Ordinance hereby creates three Mixed Use Overlay Zones (MUOZ) for  
6 Specific Plan No. 375. Although the allowable uses as listed in Section 2.e.1 of  
7 this Ordinance are applicable with all three MUOZ, additional allowable uses and  
8 different development standards and required findings are unique to each MUOZ.  
9 The applicant of a project may decide to apply the uses and development standards  
10 of Section 2.e. and use an MUOZ. If there is any conflict between the uses and  
11 development standards of Section 2.e. and the MUOZ, the uses and development  
12 standards of the MUOZ shall be applicable. The MUOZ are intended to encourage  
13 a mixture of compatible land uses, such as residential with compatible non-  
14 ~~residential uses including additional retail uses, employment-intensive uses~~  
15 (including light industrial), and entertainment uses (including hotels and night  
16 clubs), with a particular focus on fostering pedestrian activity, vertical mixed use  
17 projects, public spaces, and other community amenities. Each of the three distinct  
18 MUOZs is described below as follows:

19 A. MUOZ-1 provides uses and standards for areas appropriate for the  
20 development of a broad range of retail commercial uses potentially  
21 integrated with office and/or residential uses. Projects may include vertical  
22 or horizontal mixed uses. All projects shall provide and maintain strong  
23 pedestrian linkages with neighboring Planning Areas, parks and schools.  
24 Single use structures in this MUOZ are acceptable. It is envisioned that this  
25 MUOZ will permit retail, restaurant, and commercial goods and services in  
26 conjunction with residential development early in the implementation of the  
27 Specific Plan.  
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1 B. MUOZ-2 provides uses and standards for areas appropriate for the  
2 development of high employment-generating land uses – strong retail,  
3 office, and/or light industrial uses – integrated with nearby residential  
4 development. Projects may include vertical or horizontal mixed uses with  
5 the intent of creating a defined, high-energy pedestrian-focused zone where  
6 residential uses will be coupled with covenant retail and/or office uses  
7 and/or with nearby light industrial uses. Limited single use structures are  
8 acceptable, however, it is envisioned that many, if not all, MUOZ-2 projects  
9 will be some form of mixed use development.

10 C. MUOZ-3 provides uses and standards for areas appropriate for the  
11 development of entertainment-oriented uses, including night clubs and  
12 overnight accommodations with limited retail, office, and/or residential use  
13 integration. Development may include horizontal or vertical mixed uses  
14 with strong pedestrian and vehicular integration with connections to  
15 neighboring traffic-ways and complementary Planning Areas. Residential  
16 uses in this Overlay are not a requirement but may be provided as an option.  
17 It is envisioned, though not required, that up to fifty percent (50%) of the  
18 MUOZ-3 may be mixed use.

19 (2) APPLICABILITY.

20 A. The MUOZ may only be used within Districts 1, 2, or 4 as set forth in  
21 Specific Plan No. 375. Each MUOZ used shall cover a minimum of one  
22 Planning Area.

23 B. The provisions of the MUOZ may also apply to all existing and future  
24 development within Districts 1, 2 and 4 unless otherwise specified in this  
25 Section.  
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1 (3) DEFINITIONS.

2 As used in this Section, the following terms shall have the following meanings:

- 3 A. Base Zone. The set of allowable uses and zoning standards that are  
4 applicable over Districts 1, 2 and 4 which are found in Section 2.e.1 of this  
5 Ordinance.
- 6 B. Mixed Use Structure. A building or structure that contains at least one  
7 floor devoted to allowed nonresidential uses and at least one devoted to  
8 allowed residential uses.
- 9 C. Block. Traditional grid pattern development with street length limitations,  
10 defined within each village, to foster a pedestrian friendly environment.
- 11 D. Mixed Use Dwelling. A dwelling located above the ground floor of a  
12 permitted commercial, retail, office, or institutional use permitted by a  
13 MUOZ.
- 14 E. ~~Horizontal Mixed Use. A mixing of uses in a development project or with~~  
15 ~~neighboring structures, although not necessarily in the same building.~~
- 16 F. Vertical Mixed Use. A mixing of uses within the same structure, usually  
17 with residential over commercial, retail, office, or institutional use though  
18 this is not required to meet the definition.
- 19 G. Pedestrian Friendly. Urban design elements including landscaping,  
20 amenities, sidewalk or plaza design, structure placement, or other elements  
21 all designed with an emphasis on creating a pleasant, walkable, and  
22 comfortable environment.
- 23 H. Covenants, Conditions and Restrictions (CC&Rs). A document used to  
24 describe restrictive limitations placed on real property and its uses, and  
25 which usually are made a condition of holding legal title to, or leasehold  
26 interest in, the real property in question.  
27  
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1 I. Overlay Zone. A set of zoning requirements that are superimposed upon  
2 the underlying base zone. Overlay zones are generally used when a  
3 particular mixed use area is intended to emphasize a particular non-  
4 residential use (e.g., retail commercial, employment, or entertainment), or  
5 requires special protection, or has a special neighborhood concern. If there  
6 is any conflict between the uses and development standards of Section 2.e.  
7 and the Overlay Zone, the uses and development standards of the Overlay  
8 Zone shall be applicable.

9 J. Human Scale. The design of neighborhoods, buildings, and recreational  
10 spaces that are welcoming and inviting to pedestrian uses, and also  
11 encourage the reduced use of automobiles. Density of the neighborhoods  
12 and the heights of the buildings are not restricted in this definition.

13 K. Conventional Shopping Center. A development of retail and/or other  
14 ~~commercial establishments that are planned, developed, owned and~~  
15 managed as a single property, typically with parking provided on-site. The  
16 center's size and orientation will be generally determined by the market  
17 characteristics of the trade area served by the center.

18 L. Project. A development proposal by one or more applicants involving a  
19 single structure or series of structures, under one development application.

20  
21 (4) REQUIRED FINDINGS.

22 In order for the applicable hearing body to approve a mixed use overlay zone for a  
23 project in Districts 1, 2 or 4, the following findings shall be made:

24 A. The project is consistent with the applicable District 1, 2 or 4 Refinement  
25 Plan(s).

26 B. The project integrates with neighboring uses in terms of vehicular  
27 connections, pedestrian connections on- and off-street, architectural styles,  
28 and landscaping.

- C. The project is designed to a human scale.
- D. Efforts have been adequately made so that parking areas have been located where they can be conveniently and safely accessed and not interfere with pedestrian activity.
- E. Parking does not dominate the street frontage and is screened appropriately.
- F. The project is complimentary to a mix of uses and blends with surrounding developments.
- G. Uses and structures are sited and designed to complement one another.

(5) MIXED USE OVERLAY ZONE 1 (RETAIL FOCUSED).

- A. The uses permitted in Mixed Use Overlay Zone 1 (MUOZ 1) for Planning Areas 1-4, 2-12, 2-13, 2-14, 2-15, 2-16, 4-2, 4-4, 4-5, 4-6, 4-7 and 4-8 of Specific Plan No. 375 shall be the same as those uses permitted pursuant to Section 2.e of this Ordinance. In addition, the following uses shall be permitted provided a plot plan is approved pursuant to Section 18.30 of Ordinance No. 348: dance halls; dance schools; sale, rental, repair or demonstration of motorcycles, scooters, and motorbikes; utilities, both public and private; and wholesale businesses with samples on the premises but not including storage; boat and other marine sales; equipment rental services, including rototillers, power mowers, sanders, power saws, cement and plaster mixers not exceeding ten cubic feet in capacity and other similar equipment; feed and grain sales, including outside storage; fishing and casting pools; and labor temples.  
In addition, the following uses shall be permitted provided a conditional use permit has been approved pursuant to Section 18.28 of Ordinance No. 348: ambulance services; body and fender shops and spray painting; building materials sales yards; drive-in theaters; heliports; lumber yards,

1 including only incidental mill work; mortuaries; swap meets; and  
2 underground bulk fuel storage.

3 B. The development standards for one family dwellings within the MUOZ 1  
4 for Planning Areas 1-4, 2-12, 2-13, 2-14, 2-15, 2-16, 4-2, 4-4, 4-5, 4-6, 4-7  
5 and 4-8 of Specific Plan No. 375 shall be the same as those standards for  
6 one family dwellings identified in the Mixed Use Base Zone.

7 C. The development standards for multiple family dwellings within the  
8 MUOZ 1 for Planning Areas 1-4, 2-12, 2-13, 2-14, 2-15, 2-16, 4-2, 4-4, 4-  
9 5, 4-6, 4-7 and 4-8 of Specific Plan No. 375 shall be the same as those  
10 standards for multiple family dwelling identified in the Mixed Use Base  
11 Zone.

12 D. The development standards for walkable commercial uses within the  
13 MUOZ 1 for Planning Areas 1-4, 2-12, 2-13, 2-14, 2-15, 2-16, 4-2, 4-4, 4-  
14 5, 4-6, 4-7 and 4-8 of Specific Plan No. 375 shall be the same as those  
15 standards for walkable commercial uses identified in the Mixed Use Base  
16 Zone.

17 E. The development standards for vertical mixed use projects within the  
18 MUOZ 1 for Planning Areas 1-4, 2-12, 2-13, 2-14, 2-15, 2-16, 4-2, 4-4, 4-  
19 5, 4-6, 4-7 and 4-8 of Specific Plan No. 375 shall be the same as those  
20 standards identified in Article IX, Section 9.4 and Article XVIII, Section  
21 18.5, except that the development standards set forth in Article IX, Section  
22 9.4 b. and c; and those development standards set forth in Article XVIII,  
23 Section 18.5 b., c., e., i., and k. shall be deleted and replaced by the  
24 following:

25 (a) The maximum vertical mixed use building height shall be  
26 seventy-five feet (75').  
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1 (b) There shall be no minimum yard requirements for vertical  
2 mixed use structures, except where adjacent to a Residential  
3 Planning Area or a residential building or development within a  
4 Mixed Use Planning Area, in which case a minimum fifteen  
5 foot (15') rear and/or side yard shall be required. For such  
6 vertical mixed use structures over forty feet (40') in height, an  
7 additional foot of rear and/or side yard shall be added for each  
8 foot above forty feet (40').

9 (c) The maximum ration of floor area to lot area (i.e., FAR) shall  
10 not be greater than three to one (3:1), not including basement  
11 floor area.

12 (d) The minimum private yard open space per residential unit  
13 within a vertical mixed use structure shall be fifty (50) square  
14 feet, with a minimum dimension in any direction of six feet (6').

15 Roof top open space may be used as private yard space when  
16 directly accessible to the unit(s) it serves.

17 (e) No multiple family dwelling shall be constructed within a  
18 vertical mixed use structure unless it has a minimum floor  
19 living area of not less than seven hundred fifty (750) square  
20 feet. Porches, garages, patios, and similar features, whether  
21 attached or detached to a dwelling, shall not be included when  
22 calculating the floor living area.

23 (f) At least one vertical mixed use structure on each block shall be  
24 required to use a design-related architectural projection.

25 (g) A minimum of sixty percent (60%) of vertical mixed use street-  
26 facing building façades between two feet and eight feet in  
27  
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1 height shall be comprised of windows that allow views of  
2 indoor space or product display areas.

3 (h) Vertical mixed use buildings must have a primary entrance door  
4 facing a public sidewalk. Entrances at building corners may be  
5 used to satisfy this requirement.

6 (i) Vertical mixed use building entrances may include doors to  
7 individual shops or businesses, lobby entrances, entrances to  
8 pedestrian-oriented plazas, or courtyard entrances to a cluster of  
9 shops or businesses.

10 (j) Residential structures may place residential uses on the ground  
11 floor of a structure provided said structure is contiguous to a  
12 non-residential ground floor use.

13 F. The following findings shall be made for all projects within MUOZ 1, in  
14 ~~addition to those referenced in Section 3.(4) of this Ordinance:~~

15 (a) MUOZ 1 projects shall establish and maintain strong pedestrian  
16 connections to neighboring compatible development including  
17 parks and schools, to ensure a fully green and sustainable  
18 pedestrian environment.

19 (b) MUOZ 1 projects provide usable public and private open  
20 spaces, including but not limited to plazas in commercial areas  
21 that enhance commercial activity.

22 (c) Residential land uses, exclusive of vertical mixed use projects,  
23 shall not comprise more than fifty percent (50%) of the total  
24 MUOZ 1.

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1 (6) MIXED USE OVERLAY ZONE 2 (EMPLOYMENT FOCUSED).

2 A. The uses permitted in Mixed Use Overlay Zone 2 (MUOZ 2) of Planning  
3 Areas 1-4, 2-12, 2-13, 2-14, 2-15, 2-16, 4-2, 4-4, 4-5, 4-6, 4-7 and 4-8 of  
4 Specific Plan No. 375 shall be the same as those uses permitted pursuant to  
5 Section 2.e of this Ordinance. In addition, the following uses shall be  
6 permitted provided a plot plan is approved pursuant to Section 18.30 of  
7 Ordinance No. 348: dance halls; dance school; manufacturing of grain and  
8 bakery products, sugar and confectionary products, nonalcoholic  
9 beverages, ice, and furniture and fixtures including cabinets, partitions,  
10 and similar items ; printing and publishing of newspapers, periodicals,  
11 books, forms, cards, and similar items; binding of books and other  
12 publications; manufacturing of clothing and accessory products, handbags,  
13 luggage, footwear and other personal leather goods; manufacturing of  
14 ~~pharmaceuticals including research, blown, pressed and cut glass and other~~  
15 glassware products; manufacturing of jewelry including repair, electronic  
16 devices, equipment and components including assembly testing and repair;  
17 vehicle storage and impoundment within an enclosed building; trailer,  
18 recreational vehicle, and boat storage within an enclosed building;  
19 manufacture and repair of engineering, scientific and medical  
20 instrumentation; public utility substations and storage buildings;  
21 warehousing and distribution, including mini-warehouses; communication  
22 and microwave installations; cold storage facilities; telephone exchanges  
23 and switching equipment; post offices; water and gas company service  
24 facilities; parcel delivery services; recycling collection facilities; banks and  
25 financial institutions; blueprint and duplicating services; laboratories, film,  
26 medical, research, or testing centers; office equipment sales and service;  
27 offices, professional sales and service, including business, law, medical,  
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1 dental, chiropractic, architectural and engineering; parking lots and  
2 parking structures; restaurants and other eating establishments; barber and  
3 beauty shops; day care centers; health and exercise centers; mobilehomes,  
4 provide they are kept mobile and licensed pursuant to state law, when used  
5 for construction offices and caretaker's quarters on construction sites for  
6 the during of a valid building permit; one family dwellings on the same  
7 parcel as the industrial or commercial use provided such dwellings are  
8 occupied exclusively by the proprietor or caretaker of the use and their  
9 immediate families; signs, on-site advertising; automobile service stations,  
10 not including the concurrent sale of beer and wine for off-premises  
11 consumption; motels; churches, temples, or other structures used primarily  
12 for religious worship; labor temples; sale, rental, repair, or demonstration  
13 of motorcycles, scooters, and motorbikes; utilities, both public and private;  
14 ~~warehousing and distribution, and wholesale businesses with samples on~~  
15 the premises but not including storage; boat and other marine sales;  
16 equipment rental services, including rototillers, power mowers, sanders,  
17 power saws, cement and plaster mixers not exceeding ten cubic feet in  
18 capacity and other similar equipment; feed and grain sales, including  
19 outside storage; fishing and casting pools; mobile home sales and storage,  
20 trailer sales and rental house trailers; recreational vehicle parks; travel  
21 trailers, motor homes and recreational vehicles sales and service; truck and  
22 trailer sales, rentals and service.

23  
24 In addition, the following uses shall be permitted provided a conditional  
25 use permit has been pursuant to Section 18.28 of Ordinance No. 348: body  
26 and fender shops and spray painting; building materials sales yards;  
27 heliports; hunting clubs, skeet, trap, rifle and pistol ranges; lumber yards,  
28 including only incidental mill work; mortuaries; swap meets; tire recapping;

1 trailer and boat storage; and underground bulk fuel storage. The  
2 development standards for one family dwellings within the MUOZ 2 for  
3 Planning Areas 1-4, 2-12, 2-13, 2-14, 2-15, 2-16, 4-2, 4-4, 4-5, 4-6, 4-7 and  
4 4-8 of Specific Plan No. 375 shall be the same as those standards for one  
5 family dwellings identified in the Mixed Use Base Zone.

6 B. The development standards for multiple family dwellings, within the  
7 MUOZ 2 for Planning Areas 1-4, 2-12, 2-13, 2-14, 2-15, 2-16, 4-2, , 4-4,  
8 4-5, 4-6, 4-7 and 4-8 of Specific Plan No. 375 shall be the same as those  
9 standards for multiple family dwellings identified in the Mixed Use Base  
10 Zone.

11 C. The development standards for walkable commercial uses within the  
12 MUOZ 2 of Planning Areas 1-4, 2-12, 2-13, 2-14, 2-15, 2-16, 4-1, 4-2, 4-  
13 4, 4-5, 4-6, 4-7, and 4-8 of Specific Plan No. 375 shall be the same as  
14 ~~those standards for walkable commercial uses identified in the Mixed Use~~  
15 Base Zone.

16 D. The development standards for commercial, industrial, and horizontal and  
17 vertical mixed use projects within the MUOZ 2 for Planning Areas 1-4, 2-  
18 12, 2-13, 2-14, 2-15, 2-16, 4-2, 4-4, 4-5, 4-6, 4-7 and 4-8 of Specific Plan  
19 No. 375 shall be the same as those standards identified in Article IX,  
20 Section 9.4 and Article XVIII, Section 18.5, except that the development  
21 standards set forth in Article IX, Section 9.4. b. and c. and the  
22 development standards set forth in Article XVIII, Section 18.5. b., c., e., i.  
23 and k. shall be deleted and replaced by the following:

24 (a) The maximum commercial, industrial and horizontal and  
25 vertical mixed use building heights shall be seventy-five feet  
26 (75').  
27  
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1 (b) There shall be no minimum yard requirements for commercial,  
2 industrial and horizontal and vertical mixed use structures,  
3 except where adjacent to a Residential Planning Area or a  
4 residential building or development within a Mixed Use  
5 Planning Area, in which case a minimum fifteen (15) foot rear  
6 and / or side yard shall be required. For such commercial,  
7 industrial and horizontal and vertical mixed use structures over  
8 forty feet (40') in height, an additional foot of rear / side yard  
9 shall be added for each foot above forty feet (40').

10 (c) The maximum ratio of floor area to lot area (i.e., FAR) shall not  
11 be greater than three to one (3:1), not including basement floor  
12 area.

13 (d) The minimum private usable yard space per residential unit  
14 ~~within a vertical mixed use structure shall be fifty (50) square~~  
15 feet, with a minimum dimension in any direction of six feet (6').  
16 Roof top space may be used as private yard space when directly  
17 accessible to the unit(s) it serves.

18 (e) No multiple family dwelling shall be constructed within a  
19 vertical mixed use structure unless it has a minimum floor  
20 living area of not less than seven hundred fifty (750) square  
21 feet. Porches, garages, patios, and similar features, whether  
22 attached or detached to a dwelling, shall not be included when  
23 calculating the floor living area.

24 (f) At least one non-residential structure on each block shall be  
25 required to use a design-related architectural projection.

26 (g) A minimum of sixty percent (60%) of non-residential street-  
27 facing building façades between two feet (2') and eight feet (8')  
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1 in height must be comprised of clear windows that allow views  
2 of indoor space or product display areas.

3 (h) Commercial, office, light industrial, and horizontal and vertical  
4 mixed use buildings must have a primary entrance door facing a  
5 public sidewalk. Entrances at building corners may be used to  
6 satisfy this requirement.

7 (i) Vertical mixed use building entrances may include doors to  
8 individual shops or businesses, lobby entrances, entrances to  
9 pedestrian-oriented plazas, or courtyard entrances to a cluster of  
10 shops or businesses.

11 (j) Vertical mixed use buildings may place residential uses on the  
12 ground floor of a structure provided said building is contiguous  
13 to a non-residential ground floor use.

14 E. ~~These findings must be made for all projects within MUOZ 2, in addition~~  
15 to those referenced in Section 3.(4) of this Ordinance:

16 (a) MUOZ 2 projects shall establish and maintain strong pedestrian  
17 connections to neighboring compatible development including  
18 parks and schools, to ensure a fully green and sustainable  
19 pedestrian environment.

20 (b) Residential land uses, exclusive of vertical mixed use projects,  
21 shall not comprise more than fifty percent (50%) of the total  
22 MUOZ 2.

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1 (7) MIXED USE OVERLAY ZONE 3 (ENTERTAINMENT FOCUSED).

2 A. The uses permitted in Mixed Use Overlay Zone 3 (MUOZ 3) of Planning  
3 Areas 1-4, 2-12, 2-13, 2-14, 2-15, 2-16, 4-2, 4-4, 4-5, 4-6, 4-7 and 4-8 of  
4 Specific Plan No. 375 shall be the same as those uses permitted in Section  
5 2.e of this Ordinance. In addition, the following uses shall be permitted  
6 provided a plot plan is approved pursuant to Section 18.30 of Ordinance  
7 No. 348: automobile sales and rental agencies; campgrounds; cell towers  
8 concealed by architectural features or similar structures; dance halls; dance  
9 schools; entertainment venues and night clubs; labor temples; picnic  
10 grounds; racing and competition events other than between humans; rock  
11 climbing walls; sale, rental, repair, or demonstration of motorcycles,  
12 scooters, and motorbikes; utilities, both public and private; boat and other  
13 marine sales; fishing and casting pools; mobile home sales and storage;  
14 ~~trailer sales and rentals; recreational vehicle parks; recreational vehicles~~  
15 sales, rentals and service; truck rentals.

16 In addition, the following uses shall be permitted provided a conditional  
17 use permit has been approved pursuant to Section 18.28 of Ordinance No.  
18 348: amusement parks; body and fender shops and spray painting; drive-  
19 in theaters; heliports; hunting clubs, skeet, trap, rifle and pistol ranges;  
20 riding academies and stables; trailer and boat storage; and swap meets.

21 B. The development standards for one family dwellings within the MUOZ 3  
22 for Planning Areas 1-4, 2-12, 2-13, 2-14, 2-15, 2-16, 4-2, 4-4, 4-5, 4-6, 4-7  
23 and 4-8 of Specific Plan No. 375 shall be the same as those standards for  
24 one family dwellings identified in the Mixed Use Base Zone.  
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1 C. The development standards for multiple family dwellings within the  
2 MUOZ 3 for Planning Areas 1-4, 2-12, 2-13, 2-14, 2-15, 2-16, 4-2, 4-4, 4-  
3 5, 4-6, 4-7 and 4-8 of Specific Plan No. 375 shall be the same as those  
4 standards for multiple family dwellings identified in the Mixed Use Base  
5 Zone.

6 D. The development standards for walkable commercial uses within the  
7 MUOZ 3 for Planning Areas 1-4, 2-12, 2-13, 2-14, 2-15, 2-16, 4-2, 4-4, 4-  
8 5, 4-6, 4-7, and 4-8 of Specific Plan No. 375 shall be the same as those  
9 standards for walkable commercial uses identified in the Mixed Use Base  
10 Zone.

11 E. The development standards for commercial entertainment uses authorized  
12 by the MUOZ 3 or vertical mixed use projects within the MUOZ 3 for  
13 Planning Areas 1-4, 2-12, 2-13, 2-14, 2-15, 2-16, 4-2, 4-4, 4-5, 4-6, 4-7  
14 and 4-8 of Specific Plan No. 375 shall be the same as those standards  
15 identified in Article IX, Section 9.4 and Article XVIII, Section 18.5,  
16 except that the development standards set forth in Article IX, Section 9.4.  
17 b. and c. and those development standards set forth in Article XVIII,  
18 Section 18.5. b., c., e., i. and k. shall be deleted and replaced by the  
19 following:

20 (a) The height of commercial entertainment or vertical mixed use  
21 buildings shall not exceed a maximum height of one hundred  
22 fifty feet (150').

23 (b) There shall be no minimum yard requirements for commercial  
24 entertainment or vertical mixed use buildings, except where  
25 adjacent to a Residential Planning Area or a residential building  
26 within a Mixed Use Planning Area, in which case a minimum  
27 fifteen (15) foot rear and /or side yard shall be required. For  
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1 vertical mixed use buildings over forty feet (40') in height, an  
2 additional foot of rear /side yard shall be added for each foot  
3 above forty feet (40').

4 (c) The maximum ration of floor area to lot area (i.e., FAR) shall  
5 not be greater than four to one (4:1), not including basement  
6 floor area.

7 (d) The minimum private usable yard space per residential unit  
8 within a vertical mixed use building shall be fifty (50) square  
9 feet, with a minimum dimension in any direction of six feet (6').  
10 Roof top space may be used as private yard space when directly  
11 accessible to the unit(s) it serves.

12 (e) No multiple family dwelling shall be constructed within a  
13 vertical mixed use building unless it has a minimum floor living  
14 ~~area of not less than seven hundred fifty (750) square feet.~~

15 Porches, garages, patios, and similar features, whether attached  
16 or detached to a dwelling, shall not be included when  
17 calculating the floor living area.

18 (f) At least one non-residential structure on each block shall be  
19 required to use a design-related architectural projection.

20 (g) A minimum of sixty percent (60%) of non-residential street-  
21 facing building façades between two feet (2') and eight feet (8')  
22 in height must be comprised of windows that allow views of  
23 indoor space or product display areas.

24 (h) Commercial entertainment and vertical mixed use buildings  
25 must have a primary entrance door facing a public sidewalk.  
26 Entrances at building corners may be used to satisfy this  
27 requirement.  
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1 (i) Commercial entertainment and vertical mixed use building  
2 entrances may include doors to individual shops or businesses,  
3 lobby entrances, entrances to pedestrian-oriented plazas, or  
4 courtyard entrances to a cluster of shops or businesses.

5 (j) Vertical mixed use buildings may have residential uses on the  
6 ground floor of the building provided said building is  
7 contiguous to a non-residential ground floor use.

8 F. The following findings shall be made for all projects within MUOZ 3, in  
9 addition to those findings referenced in Section 3.(4) of this Ordinance:

10 (a) MUOZ 3 projects shall establish and maintain strong pedestrian  
11 connections to neighboring compatible development including  
12 parks and schools, to ensure a fully green and sustainable  
13 pedestrian environment.

14 ~~(b) Residential land uses, exclusive of vertical mixed use projects,~~  
15 ~~shall not comprise more than fifty percent (50% )of the total~~  
16 ~~MUOZ 3 Zone.~~

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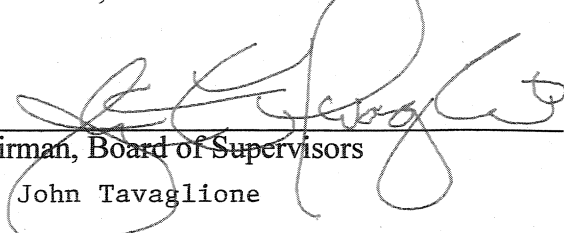
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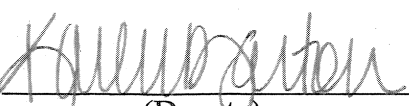
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1                    Section 4.    This ordinance shall take effect thirty (30) days after its adoption.

2  
3                    BOARD OF SUPERVISORS OF THE COUNTY  
                         OF RIVERSIDE, STATE OF CALIFORNIA

4  
5                    By:   
6                    Chairman, Board of Supervisors  
                         John Tavaglione

7                    ATTEST: Kecia Harper-Ihem  
8                    CLERK TO THE BOARD

9  
10                  By:   
11                  (Deputy)

12  
13                  (SEAL)  
14

15  
16                  APPROVED AS TO FORM:

17                  January 26, 2012

18                  By:   
19                  KARIN WATTS-BAZAN  
20                  Principal Deputy County Counsel

21  
22  
23                  G:\Property\KWATTSBA\Travertine SP Zoning Ordinance (SP No. 375).docx

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STATE OF CALIFORNIA        )  
  )  
COUNTY OF RIVERSIDE        )        SS

I HEREBY CERTIFY that at a regular meeting of the Board of Supervisors of said county held on February 7, 2012, the foregoing ordinance consisting of 4 Sections was adopted by the following vote:

AYES:            Buster, Tavaglione, Stone, Benoit and Ashley  
NAYS:            None  
ABSENT:          None

DATE:            February 7, 2012

KECIA HARPER-IHEM  
Clerk of the Board  
BY: *[Signature]*  
Deputy

SEAL

## **TRAVERTINE POINT SPECIFIC PLAN - APPENDIX B**

### **Appendix B: Quantitative Assessment of Operational Greenhouse Gas Emission Reductions Resulting from Travertine Point's Sustainability Initiatives**

**Prepared by Symbiotic Engineering  
(Revised August 20, 2010)**

**TRAVERTINE POINT SPECIFIC PLAN - APPENDIX B**

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## **Quantitative Assessment of Operational Greenhouse Gas Emission Reductions Resulting from Travertine Point's Sustainability Initiatives**

**Prepared by  
Michael Whitaker, Ph.D.  
Symbiotic Engineering, LLC**

**August 20, 2010**





## Executive Summary

Travertine Point (Travertine) has developed numerous sustainability initiatives as part of an effort to minimize the community's operational<sup>1</sup> greenhouse gas (GHG) emissions. A benchmark community GHG emission inventory, based on Travertine's design without the project's sustainability features, would be estimated to have operational GHG emissions of approximately 300,300 metric tonnes of carbon dioxide equivalents (mtCO<sub>2</sub>e) per year including building energy use, vehicular emissions, and water demand. Natural gas and electricity consumption in residential and commercial buildings, mobile source emissions from community transportation, and emissions related to the energy consumption for water supply comprise 99% of the community's operational GHG emissions.

The following analysis seeks to quantify the anticipated operational GHG emission reductions related to Travertine's proposed sustainability initiatives that go beyond the calculations for a benchmark community. The calculations and assumptions used to develop the values in Table 1 are detailed in the main sections of the report. Travertine's sustainability initiatives are projected to reduce operational GHG emissions by 38% compared with the benchmark community as summarized in Table 1. As the operational GHG emissions for Travertine primarily occur from the combustion of fossil fuels, carbon dioxide (CO<sub>2</sub>) is the predominant GHG, accounting for over 99% of the carbon dioxide equivalent (CO<sub>2</sub>e) emissions resulting from building energy and water demand and over 97% of the vehicular GHG emissions. Methane (CH<sub>4</sub>) and nitrous oxide (N<sub>2</sub>O) account for the remaining foreseeable GHG emissions. Methane and nitrous oxide are converted to CO<sub>2</sub>e using global warming potentials of 21 and 310 respectively<sup>2</sup>.

The study then normalizes the projected GHG emissions for Travertine per capita and per service population (residents plus created jobs) to compare Travertine's projected GHG emission intensity levels to the California 2020 business-as-usual (BAU) GHG emission intensity levels and to the GHG emission intensity levels required to meet California's AB 32 GHG emission reduction goals for 2020 (see Table 4). With the sustainability features in place, Travertine's GHG emission intensity levels are projected to be 47% less than California's 2020 BAU intensity levels<sup>3</sup> and 28% less than the GHG emission intensity levels required to meet California's AB 32 GHG emission reduction goals for 2020.

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<sup>1</sup> This analysis focuses on the operational life cycle stage of the project, not on construction or end of life.

<sup>2</sup> California Climate Action Registry, "General Reporting Protocol," Version 3.1, January, 2009.

<sup>3</sup> California Air Resources Board, "Climate Change Scoping Plan: A Framework for Change," December 2008. Available: [http://www.arb.ca.gov/cc/scopingplan/document/adopted\\_scoping\\_plan.pdf](http://www.arb.ca.gov/cc/scopingplan/document/adopted_scoping_plan.pdf)





**Table 1. Summary of GHG emission reductions for Travertine with sustainability initiatives compared with a benchmark community**

Category	Benchmark GHG Emissions (mtCO <sub>2</sub> e/yr)	Travertine Sustainability Initiative GHG Emission Reductions (mtCO <sub>2</sub> e/yr)	Percent Reduction from Category Benchmark
<b>Building Energy Use</b>	<b>93,100</b>	<b>63,000</b>	<b>68%</b>
<i>Community Design</i>		3,500	
<i>Exceeding Title 24 2008 (30% res., 15% com.)</i>		38,600	
<i>Renewable Energy<sup>A</sup></i>		20,200	
<i>Heat Island Mitigation</i>		700	
<b>Vehicular Emissions</b>	<b>196,400</b>	<b>45,900</b>	<b>23%</b>
<i>Project Design Features</i>		40,400	
<i>Roundabouts</i>		5,500	
<b>Water Demand</b>	<b>10,800</b>	<b>5,900</b>	<b>55%</b>
<i>Residential Savings</i>		700	
<i>Dual Piping</i>		5,200	
<b>Total Project Operational GHG Emissions</b>	<b>300,300</b>	<b>114,800</b>	<b>38%</b>

<sup>A</sup> Renewable energy reductions based on exceeding Title 24 2008 by 30% for residential and 15% for commercial.

### Residential and Commercial Building Energy Use

GHG emission reductions associated with residential and commercial building energy use can be achieved through community design, exceeding Title 24 building standards, meeting Travertine energy needs with renewable energy, and mitigating the community’s heat island effect. The potential reductions are summarized in Table 2 and are discussed in further detail in the following sections.<sup>4</sup>

<sup>4</sup> If Travertine elects to pay an extra fee for designated zero-carbon electricity sources from the Imperial Irrigation District, building energy use GHG emissions could be reduced by an additional 18,400 mtCO<sub>2</sub>e/yr, bringing total potential building energy use reductions to 87% and overall project GHG emission reductions to 44% compared with the benchmark community. Travertine per capita operational GHG emissions would be reduced to 4.4 mtCO<sub>2</sub>e/person-yr and per service population GHG emissions would be reduced to 3.3 mtCO<sub>2</sub>e/SP-yr. See the *Normalized GHG Emission Analysis Section* for more details on per capita and per service population calculations.



**Table 2. Summary of residential and commercial building energy use GHG emission reductions**

Sustainability Initiative	Description	GHG Reductions (mtCO <sub>2</sub> e/yr)
Community Design – Multi-family/Mixed-Use Housing	Average residential and commercial energy use can be reduced through higher density residential and mixed use community design	3,500
Exceed Title 24 2008	2008 Title 24 standards are exceeded by 30% for residential and by 15% for commercial	38,600
Renewable Energy Supply <sup>A</sup>	80% of commercial buildings meet 40% of their energy needs with renewable energy; 80% of residential buildings meet 60% of their energy needs with renewable energy	20,200
Heat Island Effect Mitigation	Cool pavements, cool roofs, and urban trees are used to reduce air conditioning/cooling loads by reducing the heat island effect	700

<sup>A</sup> Renewable energy GHG reductions are dependent on the building energy efficiency standards in place based on the way the sustainability initiatives are written. This calculation assumes building energy efficiency exceeds Title 24 2008 standards by 30% in the residential sector and by 15% in the commercial sector.

### *Community Design*

Electricity and natural gas consumption in residential and commercial buildings is projected to account for approximately 16% of Travertine’s anticipated GHG emissions<sup>5</sup> with all building energy use sustainability initiatives in place. The Travertine community, with its design incorporating medium to high density residential areas and specific commercial sector functions, can be compared with a community that would meet average California residential and commercial electricity (5,914 kWh/yr residential, 15.58 kWh/sf/yr commercial) and natural gas use as estimated in the California Energy Efficiency Strategic Plan<sup>6</sup> and in the California Climate Action Registry<sup>7</sup> reporting protocol. It is estimated that Travertine’s residential electricity use will be approximately 93.5 million kWh per year compared with 98.5 million kWh per year for a benchmark community and commercial electricity use will be reduced from 78.4 million kWh per year to 72.9 million kWh/yr. Using a GHG emission factor of 0.33 kg CO<sub>2</sub>e/kWh<sup>4</sup>, it is

<sup>5</sup> See Appendix A for details on community energy consumption calculations.

<sup>6</sup> California Public Utilities Commission, “California Long Term Energy Efficiency Strategic Plan: Achieving Maximum Energy Savings in California for 2009 and Beyond,” September, 2008, Available Online: <http://www.californienergyefficiency.com> Last Accessed: July 2, 2009.

<sup>7</sup> California Climate Action Registry, “General Reporting Protocol,” Version 3.1, January, 2009.



anticipated that Travertine will save approximately 3,500 mtCO<sub>2</sub>e/yr (4% reduction from benchmark) based on the design of the residential and commercial sectors compared with a benchmark community.

#### *Exceeding Title 24*

The benchmark community design calculations are based on average consumption factors that assume meeting the 2005 Title 24 building energy efficiency standards. Travertine's energy use based on community design can be further reduced by setting mandatory energy efficiency standards for the residential and commercial buildings that surpass Title 24 standards. A benchmark community of Travertine's size in the same climate zone would be expected to emit approximately 89,600 mtCO<sub>2</sub>e/yr from the consumption of natural gas and electricity. The community design discussed in the previous section reduces projected emissions to 73,100 mtCO<sub>2</sub>e/yr. Travertine is proposing to set standards of exceeding 2008 Title 24 standards by 30% in the residential sector and by 15% in the commercial sector. It is estimated that the 2008 Title 24 standards exceed the 2005 Title 24 benchmark by 15-20%<sup>8</sup>. Reductions in electricity and natural gas consumption from meeting the above stated goals of exceeding 2008 Title 24 standards by 30% in residential and 15% in commercial are expected to lead to GHG emission reductions of approximately 38,600 mtCO<sub>2</sub>e/yr (a reduction of over 40% from benchmark).

#### *Greenhouse Gas Equivalent to Exceeding 2008 Title 24*

To achieve the stated GHG reductions associated with exceeding 2008 Title 24 by 30% in the residential sector and by 15% in the commercial sector, Travertine must reduce GHG emissions by 24,100 mtCO<sub>2</sub>e/yr in the residential sector and 14,500 mtCO<sub>2</sub>e/yr in the commercial sector.

#### *Meeting Travertine Energy Needs with Renewable Energy*

Travertine's operational GHG emissions can be further reduced compared with the emissions of a benchmark community if a portion of the community's electricity and natural gas requirements are met with renewable energy. Travertine's sustainability strategies propose that 80% of the residential buildings will meet 60% of their energy needs with renewable energy. Additionally, 80% of the commercial buildings will meet 40% of their energy needs with renewable energy. The types of renewable energy to be used and the percentage that will offset electricity vs. natural gas requirements have not been specified. However, if it is assumed that renewable energy offsets are equally applied to natural gas and electricity and that the Travertine community exceeds 2008 Title 24 standards by 30% in the residential sector and 15% in the commercial sector, then 11,600 mtCO<sub>2</sub>e/yr could be offset in the residential buildings and 8,600 mtCO<sub>2</sub>e/yr could be offset in commercial buildings (accounting for over 20% of the projected GHG reduction from the benchmark community building energy use).

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<sup>8</sup> <http://www.greenbuildingadvisor.com/blogs/dept/green-building-news/california-s-title-24-marches-toward-greener-standards> Calculations conservatively assume that 2008 Title 24 exceeds 2005 Title 24 by 20%.



### *Heat Island Effect Mitigation*

According to the Environmental Protection Agency<sup>9</sup>, as rural areas are converted to more developed communities with buildings, roads, and other infrastructure in place, a heat island effect is realized that raises air temperatures significantly. Annual mean air temperatures may rise by as much as 1-3 degrees Celsius compared with surrounding areas, and nighttime temperatures may be as much as 12 degrees Celsius higher. The effects of heat islands are particularly important during the summer months when higher temperatures lead to increased energy consumption and elevated emissions of air pollutants and greenhouse gases among other impacts. Research by Lawrence Berkeley National Laboratory<sup>10</sup> suggests that about 20% of the national cooling demand can be avoided through systematic implementation of heat island mitigation measures.

Travertine proposes numerous measures that are in line with best practices in heat island effect mitigation. The plan includes utilizing cool roofs, cool pavements, and strategically placed shade trees to minimize the heat island effect of the community. Conservatively, if it is assumed that Travertine is successful in achieving a 50% reduction in heat island effect, the community may realize a 10% reduction in cooling demand compared with a benchmark community. According to the California Energy Efficiency Strategic Plan, approximately 10% of residential electricity use and 15% of commercial electricity use are due to air conditioning/cooling demand. Compared with a benchmark community of 16,655 dwelling units using an average of 5,914 kWh/household per year, Travertine's heat island mitigation initiatives may lead to annual savings of approximately 985,000 kWh and GHG emission reductions of over 320 mtCO<sub>2</sub>e/yr. Similarly, heat island mitigation could lead to commercial cooling electricity savings of approximately 1.2 million kWh/yr and GHG emission reductions of over 380 mtCO<sub>2</sub>e/yr for combined heat island reduction GHG emission reductions of approximately 700 mtCO<sub>2</sub>e/yr.

### **Vehicular emissions**

Vehicular emissions from mobile sources account for approximately 80% of Travertine's estimated operational emissions with the implemented sustainability initiatives. As a result, Travertine has instituted several measures in an attempt to minimize personal vehicle travel in the community. Transportation measures include using mixed-use/higher density development projects, incorporating public transit in project design, promoting pedestrian and bicycle travel, planning for the widespread use of neighborhood electric vehicles (NEVs), designing roundabouts to facilitate more efficient movement of traffic, and creating a good jobs/housing balance. Table 3 summarizes the potential impacts of Travertine's transportation sustainability initiatives.

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<sup>9</sup> <http://www.epa.gov/hiri/about/index.htm>

<sup>10</sup> Akbari, Hashem, "Energy Saving Potentials and Air Quality Benefits of Urban Heat Island Mitigation," Lawrence Berkeley National Laboratory – Heat Island Group Available Online: <http://www.osti.gov/bridge/servlets/purl/860475-UIHWIq/860475.pdf>, Last Accessed: July 7, 2009.



**Table 3. Summary of vehicular GHG emission reductions**

Sustainability Initiative	Description	GHG Emission Reductions (mtCO <sub>2</sub> e/yr)
Community Design – Mode Shifting	Intelligent community design to shift trips from private automobiles to transit, walking, bicycles, and NEVs and to reduce overall number and distance of trips	40,400
Roundabouts	Replace signalized and stop sign intersections with roundabouts (16) to improve traffic flow, minimize idling time, and reduce accelerations/decelerations	5,500

According to Table 1-4.1 of the Traffic Study Supplement<sup>11</sup>, the concept plan for a benchmark Travertine community without the project’s sustainability features would yield 2,354,193 vehicle miles traveled (VMT) per day. The project sustainability features are projected to reduce VMT per day to 1,870,066, a reduction of more than 20%. The Traffic Study Supplement contains additional information regarding the assumptions behind the VMT reduction. VMT can be used to estimate the GHG emission savings associated with the project’s sustainability features. For estimating the associated GHG emissions, this study assumes that the VMT will occur in gasoline-powered vehicles. According to California Climate Action Registry<sup>12</sup>, the current emission factor for gasoline consumption is 8.81 kg CO<sub>2</sub> per gallon. By 2020, California has committed to reducing the carbon content of transportation fuels by 10%<sup>13</sup> thereby reducing the estimated emission factor for 2020 to approximately 8 kg CO<sub>2</sub>e per gallon once methane and nitrous oxide emissions are included. For converting VMT to gallons consumed, an average fleet fuel economy for 2020 of 35 miles per gallon is used in line with the national fuel efficiency policy<sup>14</sup>. Using these assumptions, a benchmark community of Travertine’s size would emit 196,400 mtCO<sub>2</sub>e/yr from mobile emissions while the compact design and sustainability initiatives of the current Travertine plan would yield 156,000 mtCO<sub>2</sub>e per year, a savings of 40,400 mtCO<sub>2</sub>e per year.

<sup>11</sup> Urban Crossroads, “Travertine Point Mixed use Compact Development Scenario (16,655 DUs) Traffic Study Supplement, Counties of Riverside and Imperial, California, June 17, 2010.

<sup>12</sup> California Climate Action Registry, “General Reporting Protocol,” Version 3.1, January, 2009.

<sup>13</sup> Low Carbon Fuel Standard: <http://www.gov.ca.gov/index.php?/press-release/5174/>

<sup>14</sup> National Fuel Efficiency Policy: [http://www.whitehouse.gov/the\\_press\\_office/president-obama-announces-national-fuel-efficiency-policy/](http://www.whitehouse.gov/the_press_office/president-obama-announces-national-fuel-efficiency-policy/)





### *Roundabouts*

Travertine anticipates utilizing roundabouts for sixteen of its intersections in an effort to improve traffic flow and to minimize idling. Urban Crossroads' analysis of study area roundabouts suggests that drivers will save an average of 43,000 gallons of fuel per year per roundabout based on reductions in stop time, idling, and required accelerations/decelerations. Multiple studies back up the assertion that roundabouts result in significant GHG emission and fuel savings compared with traditional signalized or stop sign-based intersections with actual emission reductions dependent on the anticipated traffic flow patterns through the intersections<sup>15,16</sup>. Based on an average 2020 emission factor for the consumption of gasoline in automobiles of 8 kg CO<sub>2</sub>e/gallon and assuming conservatively that the 43,000 gallons of saved fuel is gasoline, the Travertine Point development will save approximately 5,500 mtCO<sub>2</sub>e/yr compared with a benchmark community based on the presence of roundabouts as opposed to traditional intersections.

### **Water Initiatives**

In addition to instituting sustainability initiatives to reduce building energy use and vehicular emissions, Travertine is also targeting significant reductions in water consumption. Reductions in water consumption can be translated to reductions in GHG emissions based on the energy required to treat and transport utilized water<sup>17</sup>. Examples of water saving measures proposed by Travertine include the use of water-efficient irrigation systems, water-efficient building design, and dual plumbing to facilitate gray-water use for landscape irrigation. Table 4 summarizes the potential GHG savings from water reduction initiatives

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<sup>15</sup> Redington, Tony, "Modern Roundabouts, Global Warming, and Emissions Reductions: Status of Research, and Opportunities for North America," Vermont Department of Public Service. Available Online: <http://www.nh.gov/oep/resourcelibrary/referencelibrary/r/roundabouts/documents/vermontctrpaper.pdf> Last Accessed July 6, 2009.

<sup>16</sup> Hesch, Maxine, "Quantitatively Determining the Emissions Reductions Benefits of the Replacement of a Signalized Intersection by a Roundabout," Available Online: [https://www.nysdot.gov/main/roundabouts/files/Emissions\\_Reduction.pdf](https://www.nysdot.gov/main/roundabouts/files/Emissions_Reduction.pdf) Last Accessed July 6, 2009.

<sup>17</sup> California Energy Commission, Public Interest Energy Research Program, "Refining Estimates of Water-related Energy Use in California," Prepared for the California Energy Commission's Public Interest Energy Research Program, December 2006. Available Online: <http://www.energy.ca.gov/2006publications/CEC-500-2006-118/CEC-500-2006-118.PDF> Last Accessed: July 7, 2009.



**Table 3. Summary of Water Supply GHG Emission Reductions**

Sustainability Initiative	Description	GHG Reductions (mtCO <sub>2</sub> e/yr)
Residential indoor water consumption standards	Require residential buildings to meet more stringent water consumption standards to achieve a 15%-20% reduction in residential potable water consumption. Benchmark community residential indoor water use = 69.3 gallons/per capita/day; Travertine standards = 57 gallons/per capita/day	700
Dual Pipe System	Separate potable and non-potable water supplies, allow for use of recycled water and agricultural quality water for outdoor uses throughout the community	5,200

Travertine anticipates saving water-related GHG emissions compared with a benchmark community in two primary ways. The first is that the community plans to implement a suite of water saving measures to achieve at least a 15%-20% reduction in residential indoor water consumption as discussed in the water section of the Environmental Impact Report. By reducing residential indoor water consumption by 15%-20%, Travertine can save over 195 million gallons (MG) of potable water per year yielding GHG emission reductions of over 700 mtCO<sub>2</sub>e/yr. In addition to the GHG emission savings from reduced residential indoor water consumption, Travertine anticipates realizing far greater GHG emission reductions as a result of implementing the community-wide dual piping system. The dual piping will allow Travertine to meet all of its residential and non-residential outdoor water needs using non-potable water sourced from the Colorado River, similar to how the agricultural watering needs of the current area are met. According to the California Energy Commission report<sup>18</sup>, electricity consumption for water supply, conveyance, and treatment in Southern California averages 11,110 kWh/MG for both indoor and outdoor water use. However, by maintaining a dual piping system to keep potable and non-potable water separate and by sourcing the water from the Colorado River or recycling water from local wastewater treatment plants, the electricity required for water supply,

<sup>18</sup> California Energy Commission, Public Interest Energy Research Program, “Refining Estimates of Water-related Energy Use in California,” Prepared for the California Energy Commission’s Public Interest Energy Research Program, December 2006. Available Online: <http://www.energy.ca.gov/2006publications/CEC-500-2006-118/CEC-500-2006-118.PDF> Last Accessed: July 7, 2009.



conveyance, and treatment is significantly reduced to only 1,150 kWh/MG<sup>17</sup>, similar to the energy requirements for agricultural uses. With 1,570 MG of water projected to be consumed each year for outdoor, non-potable uses, Travertine projects to save about 5,200 mtCO<sub>2</sub>e/yr compared with a benchmark community due to the presence of the dual pipe system.

### **Normalized Greenhouse Gas Emission Analysis**

As California seeks to meet its 2020 GHG emission reduction goals under AB 32 (i.e. capping 2020 GHG emissions at 1990 levels), it is important to evaluate whether new developments help meet California's future population and employment demands in a way that is in line with the AB 32 goals. One suggested methodology for evaluating new developments is to examine the GHG emission intensity of the project in terms of both GHG emissions per capita and GHG emissions per service population (SP) with the SP defined as population plus jobs. This methodology was originally proposed by the California Air Pollution Control Officers Association<sup>19</sup>, and the methodology, while not approved for formally determining project significance under CEQA, can be used to help evaluate whether a proposed project can help meet California's increasing population and employment demands in 2020 and beyond while still enabling the state to meet its GHG emission reduction goals.

The GHG emission intensity can be compared with the business-as-usual (BAU) GHG emission intensity for California's economy in 2020 as projected by the Climate Change Scoping Plan<sup>20</sup> using 2002-2004 data. Additionally, the California Air Resources Board<sup>21</sup> (CARB) has conducted an analysis of the impact of the AB 32 scoping plan on California's economy in 2020. As part of this analysis, CARB has estimated projected GHG emissions by sector in 2020 assuming all aspects of the scoping plan are enacted. For both the BAU and AB 32 scoping plan projections, the statewide sectors that directly relate to potential operational impacts from Travertine include residential, commercial, transportation, and electricity generation GHG emissions.

Statewide in 2020, the projected GHG emissions for these sectors are approximately 411 million mtCO<sub>2</sub>e/yr for BAU and approximately 306 million mtCO<sub>2</sub>e/yr if the AB 32 scoping plan initiatives are enacted. The GHG emission projections are not allocated to specific counties. The projected population for California in 2020 is 44.1 million with an expected labor demand of

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<sup>19</sup> California Air Pollution Control Officer's Association, "CEQA & Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act," January 2008. Available Online: <http://www.capcoa.org/wp-content/uploads/downloads/2010/05/CAPCOA-White-Paper.pdf> Last Accessed: June 25, 2010.

<sup>20</sup> California Air Resources Board, "Climate Change Scoping Plan: A Framework for Change," December 2008. Available: [http://www.arb.ca.gov/cc/scopingplan/document/adopted\\_scoping\\_plan.pdf](http://www.arb.ca.gov/cc/scopingplan/document/adopted_scoping_plan.pdf)

<sup>21</sup> California Environmental Protection Agency Air Resources Board, "Updated Economic Analysis of California's Climate Change Scoping Plan: Staff Report to the Air Resources Board, March 24, 2010. Available Online: [http://www.arb.ca.gov/cc/scopingplan/economics-sp/updated-analysis/updated\\_sp\\_analysis.pdf](http://www.arb.ca.gov/cc/scopingplan/economics-sp/updated-analysis/updated_sp_analysis.pdf) Last Accessed: June 25, 2010.





14.9 million jobs<sup>20</sup>. Normalizing the 2020 BAU and AB 32 scoping plan projections by the population yields an expected California GHG per capita emission intensity of 9.3 mtCO<sub>2</sub>e/person for BAU and 6.9 mtCO<sub>2</sub>e/person with the AB 32 scoping plan initiatives in place. When expected jobs are added to the population to evaluate the SP, the projected GHG emission intensities per SP from the analyzed GHG emission sectors are 7.0 mtCO<sub>2</sub>e/SP for BAU and 5.2 mtCO<sub>2</sub>e/SP for California to meet its 2020 AB 32 GHG emission reduction goals.

The same GHG emission categories (i.e. residential, commercial, electricity, and transportation) can be evaluated for Travertine and normalized per capita and per SP in order to compare the GHG emission intensity of Travertine to California’s GHG emission reduction goals. Travertine projects a population of 37,710 with 12,856 jobs for an SP of 50,566. A benchmark community of Travertine’s size without sustainability features would project to emit 300,300 mtCO<sub>2</sub>e/yr compared with 185,500 mtCO<sub>2</sub>e/yr for Travertine with the sustainability features in place. Table 4 compares the normalized GHG emission intensities for the benchmark community and for Travertine with sustainability initiatives to California’s 2020 benchmarks for BAU and for the AB 32 scoping plan goals.

**Table 4. Greenhouse gas emission intensities for Travertine benchmark and Travertine w/ sustainability initiatives vs. California business-as-usual (BAU) and AB 32 scoping goals**

	Greenhouse Gas Emissions Per Capita			Greenhouse Gas Emissions Per Service Population		
	Operational GHG Emissions per Capita (mtCO <sub>2</sub> e/person)	% Change from California 2020 BAU	% Change from California 2020 Scoping Plan Goals	Operational GHG Emissions per Service Population (mtCO <sub>2</sub> e/SP)	% Change from California 2020 BAU	% Change from California 2020 Scoping Plan Goals
California 2020 Business-as-usual	9.3	N/A	34%	7.0	N/A	34%
California 2020 Scoping Plan Goals	6.9	-26%	N/A	5.2	-26%	N/A
Travertine Benchmark	8.0	-15%	15%	5.9	-15%	15%
Travertine w/ sustainability features	4.9	-47%	-29%	3.7	-47%	-29%

\*Values rounded to two significant figures.

As shown in Table 4, the operational GHG emissions for a development the size of Travertine without the sustainability features (Travertine Benchmark) would be 15% less than California 2020 BAU levels, but would exceed California’s 2020 AB 32 GHG emission intensity goals by approximately 15% per capita and per SP, thereby not aiding the state in meeting its future population and employment needs while still achieving the GHG emission reduction goals. However, by including sustainability features targeting building energy use, vehicular emissions, and water demand, Travertine’s operational GHG emission intensities with sustainability features are projected not only to be 47% below California’s 2020 BAU levels but also to be



approximately 29% below California's 2020 per capita and per SP GHG emission intensity benchmarks under the AB 32 scoping plan goals.

#### *Comparison with Existing Communities*

Travertine's per capita GHG emission intensity of 4.9 mtCO<sub>2</sub>e/person is projected to be well below other existing communities in the region. For comparison, Palm Desert has calculated a per capita GHG emission intensity of 12.2 mtCO<sub>2</sub>e/person<sup>22</sup> and San Diego County reports a similar per capita GHG emission intensity of 12 mtCO<sub>2</sub>e/person<sup>23</sup>. California must add both housing for new population and additional jobs to meet projected demand in 2020 and beyond. Travertine's projected operational GHG emission intensity per capita and per SP indicates that the community can aid California in meeting its growing population and labor demands while still achieving the statewide GHG emission reduction goals.

#### *Relationship to Senate Bill 375 Greenhouse Gas Reduction Goals*

Senate Bill 375 (SB 375) required CARB to establish GHG emission reduction goals for each of the 18 Metropolitan Planning Organizations (MPO) in California including regional targets for 2020 and 2035. The MPO for the Travertine site is the Southern California Association of Governments (SCAG) and CARB accepted SCAG's recommended 2020 reduction target of an 8% per capita reduction in GHG emissions compared with 2005 baseline year emissions. According to the CARB staff report<sup>24</sup>, SCAG's reduction scenarios were built assuming implementation of land use patterns that reflect locally-supported land use policies and that incorporate transportation infrastructure improvements along with new transportation demand, pricing, and system management strategies.

The SB 375 reduction goals for SCAG are region-wide and are not tied to specific development projects. However, Travertine incorporates many of the strategies recommended in the staff report for meeting the SB 375 goals including:

- Increasing mixed use development;
- Improving the connectivity of streets and the pedestrian network;
- Improving neighborhood and site design through traffic calming and beautification;
- Providing local workforce housing;
- Improving bicycle infrastructure; and
- Other trip reduction strategies such as the NEV network.

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<sup>22</sup> The Desert Sun "Actions Lag Ambitions on Local Greenhouse Gas Plan," Available Online: <http://www.mydesert.com/apps/pbcs.dll/article?AID=20106170311> Last Accessed: July 1, 2010.

<sup>23</sup> Anders et al., "San Diego County Greenhouse Gas Inventory: An Analysis of Regional Emissions and Strategies to Achieve AB 32 Targets," September 2008. Available Online: <http://legacy.signonsandiego.com/news/science/images/080918carbonfootprint.pdf> Last Accessed July 1, 2010.

<sup>24</sup> California Air Resources Board, "Regional Greenhouse Gas Emission Reduction Targets for Automobiles and Light Trucks Pursuant to Senate Bill 375 – Staff Report," August 9, 2010, Available Online [http://arb.ca.gov/cc/sb375/staffreport\\_sb375080910.pdf](http://arb.ca.gov/cc/sb375/staffreport_sb375080910.pdf) Last Accessed: August 20, 2010.



The CARB staff report does not contain quantitative criteria for determining if a project is in line with an MPOs SB 375 reduction requirements. However, this study uses rough calculations to evaluate Travertine's potential impact. For these calculations, only internal and external project trips that are expected to be taken by Travertine project residents are included in order to calculate per capita VMT. Trips generated by non-Travertine residents are excluded as they would be accounted for elsewhere in SCAG's per capita GHG emissions from passenger vehicle travel calculations. As noted in Table 1.4-1 of the traffic impact analysis, the project estimates 1,870,066 VMT/weekday including local and external travel. Of the external vehicle trips, it is estimated by Urban Crossroads that 922,073 VMT/weekday are the result of trips generated by persons not living in Travertine. Therefore, the estimated passenger vehicle travel for Travertine residents is 947,993 VMT/weekday. The VMT can be converted to estimated per capita GHG emissions by using the same assumptions outlined in the *Vehicular Emissions* section of this report (e.g. average fleet fuel economy equals 35 mpg based on tighter 2020 fuel economy standards and average GHG emission factor of 8 kgCO<sub>2</sub>e/gallon based on implementation of the low carbon fuel standard).

Using these assumptions and a Travertine population of 37,710, the estimated per capita GHG emissions from passenger vehicle travel equate to about **6 kg CO<sub>2</sub>e/person/weekday**. According to data provided by SCAG in developing the SB 375 standards<sup>25</sup>, SCAG's per capita GHG emissions from passenger vehicles in 2005 (the baseline year) were equal to 9.6 kg CO<sub>2</sub>e/person/weekday. Meeting the 8% per capita GHG emission reduction goal would require reducing SCAG's average per capita passenger vehicle GHG emissions to 8.8 kg CO<sub>2</sub>e/person/weekday, a value greater than the projected passenger vehicle emissions from Travertine residents of 6 kg CO<sub>2</sub>e/person/weekday. As stated previously, SB 375 is not designed for evaluating the impacts of a specific proposed development project or for determining how a specific project fits into a regional transportation plan developed by an MPO, but these rough calculations indicate that GHG emissions from personal vehicle travel by Travertine residents is unlikely to adversely impact SCAG's ability to meet its 2020 per capita SB 375 GHG emission reduction goals.

### **Current Greenhouse Gas Emissions at the Site**

In 2009, the nine mayors of the Coachella Valley pledged to create a GHG emission inventory for the region. However, this analysis has yet to be completed with Palm Desert being the only city in the Coachella Valley to complete its inventory<sup>26</sup>. As a result, a comprehensive GHG emission inventory for the existing site has not been completed. However, a rough estimate of the GHG emissions from the existing activities in the area (including agriculture and solid waste disposal) can be calculated based on California averages. According to the existing agriculture

<sup>25</sup>Southern California Association of Governments, "Preliminary Report on Target Setting from MTC, SACOG, SANDAG, and SCAG," May 18, 2010, Available Online: <http://www.arb.ca.gov/cc/sb375/mpo/prelimreport.mtc.sacog.sandag.scag.pdf> Last Accessed: August 20, 2010.

<sup>26</sup>The Desert Sun "Actions Lag Ambitions on Local Greenhouse Gas Plan," Available Online: <http://www.mydesert.com/apps/pbcs.dll/article?AID=20106170311> Last Accessed: July 1, 2010.



section of Travertine's Environmental Impact Report, there are 3,129 acres of farmland within the site boundaries including grapes, citrus, dates, and row crops. California's GHG emission inventory for 2002 estimates that agricultural GHG emissions (excluding livestock) were 13.8 million mtCO<sub>2</sub>e for crop growing, land preparation and maintenance, fertilizer use, crop harvesting and residue burning, and general agricultural fuel use (e.g. diesel, natural gas, and gasoline)<sup>27</sup>. In 2002, California had approximately 8.5 million acres of harvested cropland<sup>28</sup> leading to a statewide average agricultural GHG emission intensity of about 1.6 mtCO<sub>2</sub>e/acre for non-livestock farmland. Multiplying that value by the 3,129 acres of farmland at the existing site yields estimated agricultural GHG emissions of about 5,000 mtCO<sub>2</sub>e/yr.

Additional GHG emissions at the site not related to the agricultural activities are expected to be minimal based on existing conditions. These include the operation of the Oasis Landfill and three existing residential buildings on site. Estimated GHG emissions from the landfill are approximately 420 mtCO<sub>2</sub>e/yr based on an average daily intake of about 12 tonnes, 321 operating days per year, and an EPA GHG emission factor for municipal waste of 0.11 mtCO<sub>2</sub>e/tonne waste<sup>29</sup>. The existing three residential homes are expected to contribute less than 10 mtCO<sub>2</sub>e/yr based on average electricity and natural gas use for the region. As a result, the existing GHG emissions on the site from agricultural operations, existing buildings, and the landfill are estimated at approximately 5,400-5,500 mtCO<sub>2</sub>e/yr.

## Conclusion

If Travertine successfully implements its proposed sustainability initiatives, including exceeding 2008 Title 24 building energy efficiency standards by at least 30% in the residential and 15% in the commercial sector, the community can realize operational GHG emission reductions of approximately 38% compared with a benchmark community that does not implement the same sustainability initiatives.

- GHG emissions from residential and commercial energy use can be reduced by 68% compared with a benchmark community through community design, energy efficiency standards, renewable energy supply, and heat island effect mitigation.
- GHG emissions from mobile sources can be reduced by 23% through community design, mode shifting, and roundabouts.
- GHG emissions from water supply can be reduced by 55% through the use of enhanced residential indoor water use standards and the implementation of the dual pipe system.

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<sup>27</sup> California Air Resources Board, "Greenhouse Gas Inventory – 2020 Forecast," Available Online: <http://www.arb.ca.gov/cc/inventory/data/forecast.htm> Last Accessed: July 1, 2010.

<sup>28</sup> United States Department of Agriculture, "The Census of Agriculture," Available Online: [http://www.agcensus.usda.gov/Publications/2002/Volume\\_1\\_Chapter\\_2\\_US\\_State\\_Level/st99\\_2\\_023\\_023.pdf](http://www.agcensus.usda.gov/Publications/2002/Volume_1_Chapter_2_US_State_Level/st99_2_023_023.pdf) Last Accessed: July 1, 2010.

<sup>29</sup> See Solid Waste chapter of the EIR for more details.



- Travertine's operational GHG emission intensity per capita and per service population can be approximately 47% below the BAU GHG emission intensity benchmark for California in 2020
- Moreover, Travertine's operational GHG emission intensity per capita and per service population can be approximately 29% below the benchmark GHG emission intensity levels required for California to meet its AB 32 scoping plan GHG emission reduction goals.



## Appendix A

### Assumptions for Benchmark Community and Travertine Building Energy Calculations based on 2005 Title 24 Building Energy Efficiency Requirements

#### For the benchmark community,

16,655 DU \* 5,914 kWh/DU-yr<sup>30</sup> = 98,497,670 kWh/yr – residential  
5,029,500 sf \* 15.58 kWh/sf-yr<sup>31</sup> = 78,359,610 kWh/yr – commercial  
Total benchmark residential and commercial = 176,857,280 kWh/yr

#### For Travertine,

##### Residential<sup>32</sup>

10,446 single family homes \* 6,760 kWh/yr = 70,614,960 kWh/yr  
2,206 town homes \* 4,218 kWh/yr = 9,304,908 kWh/yr  
4,003 multi-family \* 3,397 kWh/yr = 13,598,191 kWh/yr  
Total residential = 93,518,059 kWh/yr

##### Commercial<sup>33</sup>

1,505,000 sf business park light commercial at 15.4 kWh/sf-yr = 23,177,000 kWh/yr  
720,000 sf commercial retail (regional) at 14.06 kWh/sf-yr = 10,123,200 kWh/yr  
540,000 sf commercial retail (local) at 14.06 kWh/sf-yr = 7,592,400 kWh/yr  
665,500 sf commercial tourist at 12.13 kWh/sf-yr = 8,072,515 kWh/yr  
1,599,000 sf mixed use at 15.0 kWh/sf-yr = 23,910,380 kWh/yr  
Total commercial = 72,875,495 kWh/yr

Total Travertine residential and commercial = 166,393,554 kWh  
CO<sub>2</sub>e factor = 0.33 kg CO<sub>2</sub>e/kWh

GHG savings for Travertine based on community design = 3,500 mtCO<sub>2</sub>e

Note: Natural gas consumption is conservatively assumed to be unchanged between the benchmark estimate and Travertine community as designed at 618,200 MMBtu/yr for residential and commercial leading to GHG emissions of 34,800 mtCO<sub>2</sub>e/yr.

<sup>30</sup> California Public Utilities Commission, "California Long Term Energy Efficiency Strategic Plan: Achieving Maximum Energy Savings in California for 2009 and Beyond," September, 2008, Available Online: <http://www.californienergyefficiency.com> Last Accessed: July 2, 2009.

<sup>31</sup> Travertine Point Environmental Impact Report Appendix 6-3d Table GHG-6.

<sup>32</sup> California Energy Commission, California Statewide Residential Appliance Saturation Study Volume 2, Study Results Final Report, KEMA-XENERGY, Itron, RoperASW, June 2004 300-00-004  
[http://www.energy.ca.gov/reports/400-04-009/2004-08-17\\_400-04-009VOL2B.PDF](http://www.energy.ca.gov/reports/400-04-009/2004-08-17_400-04-009VOL2B.PDF)

<sup>33</sup> California Energy Commission, California Commercial End-Use Survey, Itron, Inc. March 2006 CEC-400-2006-005

