

*Appendix B. Resolution Adopting General Plan
Amendment for IBC Residential
Mixed-Use Vision Plan*



Appendices

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CITY COUNCIL RESOLUTION NO. 10-80

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRVINE APPROVING OF GENERAL PLAN AMENDMENT 00497846–PGA, GENERAL PLAN AMENDMENT CYCLE 2010-3 TO ADOPT THE IRVINE BUSINESS COMPLEX RESIDENTIAL MIXED USE VISION PLAN AS A NEW ELEMENT OF THE GENERAL PLAN; TO INCREASE THE RESIDENTIAL UNIT CAP TO 15,000 UNITS, WITH A CORRESPONDING REDUCTION OF NON-RESIDENTIAL INTENSITY; TO REPLACE THE CURRENT 52 UNIT/ACRE DENSITY CAP WITH A 30 UNIT/ACRE DENSITY MINIMUM, AND UPDATE OTHER ELEMENTS OF THE GENERAL PLAN TO REFLECT REFERENCES TO NEW IBC ELEMENT; FILED BY THE CITY OF IRVINE

WHEREAS, the City of Irvine has an adopted General Plan and Zoning Ordinance;
and

WHEREAS, the City of Irvine Community Development Department has proposed General Plan Amendment 00497846–PGA requesting approval of the following amendments:

- Adopt the Irvine Business Complex Residential Mixed Use Vision Plan as a new element of the General Plan (Exhibit A);
- Amend Land Use Element to reference new IBC Element (Exhibit B)
- Amend Land Use Element Table A-1 to increase the residential unit cap to 15,000 units, with a corresponding reduction of non-residential intensity (Exhibit C);
- Amend Land Use Element Table A-1 to replace the current 52 unit/acre density cap with a 30 unit/acre density minimum (Exhibit C);
- Amend Circulation Element Figure B-1 to reflect the downgrade of Jamboree Road from a 10-lane facility to an 8-lane facility between Barranca Parkway and McGaw Avenue (Remove Note 8.); downgrade Red Hill to 6-lanes between Barranca Parkway and Main Street; downgrade Barranca Parkway to 7-lanes (4 westbound, three eastbound) between Red Hill and Jamboree Road; downgrade main Street to a 6-lane divided arterial between Red Hill and Harvard Avenue; downgrade MacArthur Blvd. to a 7-lane divided highway between Redhill Avenue and Main Street and to a 6-lane divided highway between Fitch and Redhill Avenue (Exhibit D);
- Amend Figure B-4 to reference new IBC trails (Exhibit E)

- Amend Parks and Recreation Element Table K-1 to add additional description of IBC neighborhood parks (Exhibit F)

WHEREAS, General Plan Amendment 00497846-PGA is considered is considered a part of the overall Vision Plan project for the IBC (Vision Plan Project) pursuant to the California Environmental Quality Act (CEQA); and

WHEREAS, the amendment to the Land Use, Circulation, and Recreation Elements, and proposed new IBC Element of the Irvine General Plan will occur within General Plan Amendment Cycle 3 for the 2010 calendar year; and

WHEREAS, the City Council has considered information presented by the applicant, the Community Development Department, and other interested parties at public meetings and hearings held on July 11, 2006, July 25, 2006, February 27, 2007, October 23, 2007, February 26, 2008, April 27, 2010, and July 13, 2010.

NOW, THEREFORE, the City Council of the City of Irvine DOES HEREBY RESOLVE as follows:

SECTION 1. That pursuant to Section 15205 of the State CEQA Guidelines, the City Council reviewed and considered the Final Environmental Impact Report (SCH# 2007011024) (FEIR) in making its recommendation on the Zone Change and the Vision Plan Project.

SECTION 2. Most of the potentially significant environmental impacts of the Vision Plan Project identified in the FEIR have been determined to be less than significant or mitigated to a level that is considered less than significant or changes have been required or incorporated into the Vision Plan Project which avoid or substantially lessen the significant environmental effects.

SECTION 3. Certain impacts of the Vision Plan Project to Air Quality, Noise, Land Use and Traffic have been identified in the FEIR as significant and unavoidable. The specific impacts are summarized in Exhibit A to Resolution No 10-79. Based upon specific economic, social, technical or other considerations, the City Council finds these effects acceptable and adopts the required facts and findings and Statement of Overriding Considerations (attached as Exhibit B to Resolution No. 10-79).

SECTION 4. Although the FEIR identifies certain significant environmental effects that would result if the Vision Plan Project is approved, most environmental effects can feasibly be avoided or mitigated. The applicable mitigation measures, included within the FEIR as Table 1-2 and incorporated herein as Exhibit C to Resolution No. 10-79, have been incorporated into the Vision Plan Project or identified as requirements of the Vision Plan Project.

SECTION 5. In accordance with Section 8 of the City of Irvine CEQA Procedures, the Planning Commission recommends that the City Council find that the FEIR has been completed in compliance with CEQA and the State CEQA Guidelines, and the City's

CEQA Procedures. The Planning Commission also recommends that the City Council, having final approval authority over the project, certify as complete and adequate the Final EIR.

SECTION 6. Pursuant to Fish and Game Code Section 7.11.4 (C), all required Fish and Game filing fees will be paid subsequent to certification of the FEIR for the Vision Plan Project.

SECTION 7. The findings required by Section 2-11-8 of the City of Irvine Zoning Code for approval of a General Plan Amendment have been made as follows:

1. The proposed general plan amendment is consistent with other elements of the City's General Plan pursuant to Government Code Section 65300.5:

The amendment to the Land Use Element of the Irvine General Plan is consistent with other elements contained within the Irvine General Plan. The proposed amendment does not modify or alter the intent of any of the General Plan elements. The General Plan goals of maintaining balanced and harmonious land use patterns and ensuring that infrastructure and municipal services will be available to serve proposed development will continue to be met. The amendment also includes revisions to elements and associated figures of the General Plan as required reflect the proposed changes in intensity and to maintain internal consistency. Therefore, pursuant to Section 65300.5 of the State Government Code, this amendment is internally consistent with the other elements of the Irvine General Plan.

2. The proposed general plan amendment, if applicable, responds to changes in state and/or federal law pursuant to Section 65300.9 of the State Government Code.

This General Plan amendment has not been initiated in response to state and/or federal law.

3. The proposed general plan amendment has been referred to the County of Orange and any adjacent cities abutting or affected by the proposed action and any other federal agency whose operations or lands may be affected by the proposed decision pursuant to Government Code Section 65352.

The General Plan Amendment has been referred to the adjacent cities of Santa Ana, Tustin, Newport Beach, Costa Mesa, Laguna Beach, Laguna Woods, Laguna Hills, Lake Forest, and Orange and the County of Orange, as well as federal agencies that might be affected by the project such as the U.S. Fish and Wildlife Service.

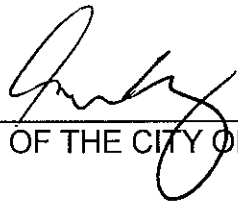
4. The proposed general plan amendment will not be detrimental to the public health, safety, and welfare of the community.

The General Plan Amendment is determined to be in the best interests of the health, safety and welfare of the community. The impacts of the General Plan Amendment have been analyzed in the RDEIR. As a result of the environmental analysis, measures such as existing plans, programs, policies (PPP), project design features (PDF), and mitigation measures (MM) have been developed to ensure that all environmental impacts, except four (Air Quality, Noise, Traffic and potentially Land Use), will be reduced to a level of insignificance, including any potential impacts to the public health, safety and welfare. A Statement of Overriding Considerations has been proposed to address those impacts that cannot feasibly be reduced to a level of insignificance.

SECTION 10. Based on the above findings, the City Council of the City of Irvine DOES HEREBY APPROVE General Plan Amendment 00497846–PGA, as follows:

- Adopt the Irvine Business Complex Residential Mixed Use Vision Plan as a new element of the General Plan (Exhibit A);
- Amend Land Use Element to reference new IBC Element (Exhibit B)
- Amend Land Use Element Table A-1 to increase the residential unit cap to 15,000 units, with a corresponding reduction of non-residential intensity (Exhibit C);
- Amend Land Use Element Table A-1 to replace the current 52 unit/acre density cap with a 30 unit/acre density minimum (Exhibit C);
- Amend Circulation Element Figure B-1 to reflect the downgrade of Jamboree Road from a 10-lane facility to an 8-lane facility between Barranca Parkway and McGaw Avenue (Remove Note 8.); downgrade Red Hill to 6-lanes between Barranca Parkway and Main Street; downgrade Barranca Parkway to 7-lanes (4 westbound, three eastbound) between Red Hill and Jamboree Road; downgrade main Street to a 6-lane divided arterial between Red Hill and Harvard Avenue; downgrade MacArthur Blvd. to a 7-lane divided highway between Fitch Avenue and Main Street (Exhibit D);
- Amend Figure B-4 to reference new IBC trails (Exhibit E)
- Amend Parks and Recreation Element Table K-1 to add additional description of IBC neighborhood parks (Exhibit F)

PASSED AND ADOPTED by the City Council of the City of Irvine at a regular meeting held on the 13th day of July, 2010.


MAYOR OF THE CITY OF IRVINE

ATTEST:


CITY CLERK OF THE CITY OF IRVINE

STATE OF CALIFORNIA)
COUNTY OF ORANGE)
CITY OF IRVINE)

I, SHARIE APODACA, City Clerk of the City of Irvine, HEREBY DO CERTIFY that the foregoing resolution was duly adopted at a regular meeting of the City Council of the City of Irvine, held on the 13th day of July, 2010.

AYES: 4 COUNCILMEMBERS: Agran, Choi, Krom and Kang
NOES: 0 COUNCILMEMBERS: None
ABSENT: 1 COUNCILMEMBERS: Shea


CITY CLERK OF THE CITY OF IRVINE

ELEMENT N
IRVINE BUSINESS COMPLEX (IBC)

GOAL: To create a cohesive planning framework for residential and mixed use development in the IBC that is compatible with existing non-residential development.

Description of the IBC Element

The IBC Element formally establishes the goals and objectives for future planning for residential and mixed use development in the IBC based on the IBC Vision Plan and Mixed Use Overlay Zoning Code Planning Process conducted by the City of Irvine between 2005-2010. The text of the Vision Plan document is presented in this element, reformatted into City of Irvine General Plan objective and policy statements.

Introduction

The Irvine Business Complex (IBC) is a unique part of the City of Irvine. Dating from the 1970s, the IBC was developed solely as a commercial and industrial center serving Southern California as a regional economic and employment base, including hotel, restaurant, commercial, retail, industrial, and office uses. (Figure N-1 Regional Location)

Transition in land use was contemplated in the original entitlement program for the IBC with the amount and variety of land use within an individual parcel being dictated by a trip generation strategy. A provision was created that permits Transfer of Development Rights between parcels based upon trip generation and environmental analysis. Market forces, however, have increased development pressures in the IBC and are encouraging a rapid transition from a suburban mixed-use commercial and industrial center into a more urban regional mixed-use center. This evolution, to a more urban environment, will include an array of commercial, industrial, retail and residential land uses constituting changes to the look, feel, and function of the business complex.

In early 2004, the number of applications for residential units within the IBC increased dramatically and City of Irvine anticipates that the total number of units in the IBC could increase to more than 10,000 within the next five to ten years. This increase in residential units represents a significant increase over the original residential cap of 3,896 dwelling units in the IBC established in 1992. The City of Irvine identified the opportunity for a mixed-use

community with a coordinated urban design framework within the IBC while ensuring the continued economic viability of existing and future businesses.

These development pressures have created the desire for a vision to bring the IBC-into the 21st Century. The purpose of this Vision Plan is to develop a comprehensive strategy and guiding urban design framework for future IBC development. This Vision Plan and the Irvine Business Complex Residential Mixed-Use (IBCRMU) Overlay Zone, call for creating sustainable urban neighborhoods within a framework of new streets and open spaces; a new approach than has traditionally been considered within other residential areas of Irvine.

This Vision Plan reflects a long-term view of the IBC as a mixed-use community, and reflects the best planning techniques available to assist in the evolution of the IBC from a traditional office and industrial area. This Vision Plan also builds on the principles established through the public meeting process and at the IBC Design Charrette held in July 2005.

Together, the Vision Plan and the IBCRMU Overlay Zone will become the basis for determining the coordination of public and private sector initiatives for the development and implementation of a sustainable, quality mixed-use community within the IBC.

Existing Conditions

Location

Lying on the southwestern edge of the City of Irvine and adjacent to the cities of Tustin, Santa Ana and Newport Beach, the IBC is a regional hub within Orange County. The IBC extends over 2,7600 acres, making it the largest business complex in Orange County-. The complex was originally designed as the bustling working machine for the City, creating a unique environment for economic growth and vitality.

The boundaries of the Irvine Business Complex, located on the southwestern portion of the City of Irvine, are well defined. John Wayne Airport forms the northwestern boundary and San Diego Creek forms the southeastern boundary, with two arterial roads - Barranca Parkway and Campus Drive – forming the northeast and southwest boundaries of the IBC area.

Regional Influences

There are several regional influences that are important in terms of the location of the IBC. These influences include:

John Wayne Airport

The IBC benefits from its close proximity to the John Wayne Airport, which provide an important transportation hub for the region. The airport has a service area of three million people with an annual volume of over nine million passengers. To keep up with population growth, the County has approved plans to expand facilities at the airport. The airport is located at the intersection of Michelson Drive and MacArthur Boulevard.

University of California Irvine (UCI)

The UCI campus is located on 1,500 acres to the east of the IBC. According to the UCI 2007 Long Range Development Plan, student enrollment by 2025 is anticipated to be over 35,000 students. The campus is anticipated to employ more than 11,000 people and provides a rich resource for the IBC area.

Regional Development

The developments proposed at the former MCAS Tustin (Tustin Legacy) and El Toro (Great Park and Great Park Neighborhoods), and the existing Spectrum Center, along with the South Coast Metro area within Costa Mesa and Santa Ana are emerging as significant draws within the region, both to residents and visitors. The IBC has played an important role in the image of the City since regional transportation connections flow through the IBC between the airport and these regional facilities.

San Diego Creek

The San Diego Creek, which runs along the southeastern boundary of the IBC, provides an important connection to a comprehensive system of parks and open space developed within the City of Irvine. The San Joaquin Wildlife Sanctuary, which abuts the IBC, offers ten miles of trails for walkers, joggers, bikers. The “Mountains to the Sea” trail, a 22-mile network of hiking, biking, and riding trails, connecting the historical Irvine Ranch and the northern foothills, to Upper Newport Bay and the Pacific Ocean, runs along the eastern side of the San Diego Creek.

Planning Issues

Transportation

Existing streets within the IBC are designed to accommodate high speed through traffic, especially on the major arterials. These wide streets make it difficult for pedestrians and bicycles to cross and would not be classified as “pedestrian-friendly” in character. However, any future planning must maintain the street capacities required to accommodate development previously approved within the IBC and address capacities as needed for any additional proposed intensity.

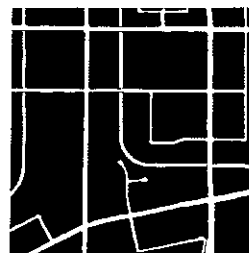
The IBC is served by a system of public transportation bus routes aligned on most major arterial streets. Currently, there are a number of local and regional bus routes serving the IBC. The routes are part of the wider Orange County Transportation Authority (OCTA) network of buses and trains within the region. The Tustin Metrolink train station is located 1.5 miles to the north of the IBC. There are existing OCTA bus routes that service the IBC from other parts of the region. The existing bus routes provide connectivity throughout the IBC along Alton Parkway, Michelson Drive, Red Hill Avenue, Jamboree Road, Dupont Drive, Main Street, and Von Karman Avenue.

On March 31, 2008 the i shuttle, which is operated by the City of Irvine and designed for the IBC community, began operating. The shuttle allows residents and employees to have an alternative way to commute to jobs and locations throughout the IBC.

The shuttle offers multiple routes to accommodate residents and employees traveling within the area and to and from the IBC. Future expansion of the shuttle service is anticipated as demand increases.

Existing Urban Form

The existing block system within the IBC has evolved based on industrial functionality and large user size resulting in a large grid, “super block” street pattern. For these practical reasons, little or no consideration was given to the pedestrian. In the book *Great Streets* by Allan B. Jacobs, the IBC was compared to various cities throughout the world in terms of scale and block size. The blocks within the IBC are three and four times the size of notable “walkable cities” such as Santa Monica and San Francisco. The comparative studies, below, show the disparity in the size of the blocks between the IBC and more urban, pedestrian-oriented environments, which typically are comprised of smaller blocks.



Irvine Street Blocks



Santa Monica
Street Blocks



San Francisco
Street Blocks

Many streets within the IBC do not have sidewalks and on-street parking is not permitted in a majority of the complex. The large scale of the blocks and width of the streets have restricted pedestrian connectivity. As a result, accessibility and pedestrian movement is very difficult.

The existing urban form in many areas of the IBC lacks a distinctive “sense of place” or strong identity. The IBC tends to blend with neighboring industrial areas in adjacent jurisdictions with no clear demarcation. The perception of the area comes from its wide streets which provide the dominating visual experience with buildings typically set far back from the street. These characteristics are appropriate for a business park, but lack human scale, diversity and visual richness if a high value, mixed-use or residential district is the goal.

Existing Uses

The IBC offers a wide range of industrial and service industries ranging from specialty pharmaceutical, healthcare and medical products, clothing manufacturers and other commercial and financial institutions. As a result of the close proximity to the airport, other service industries have developed, including hotels and restaurants. Several companies, like such as Allergan and Edwards Life Sciences,

have located their company headquarters within the IBC, some of which date back prior to the City of Irvine’s incorporation in 1971. It is important that existing businesses be allowed to not only continue their business as usual but are empowered to expand consistent with current development rights.

Trends

Increased Housing Demand

A number of factors have created an impetus for the IBC to transition to an urban, mixed-use center. These factors include:

- A desire for housing in closer proximity to local jobs.
- An emphasis on a newer lifestyle geared more towards urban living rather than traditional suburban living.
-

Resident and Employee Characteristics

Alfred Gobar Associates performed a survey of the current residents of the IBC in 2005 and an additional survey of residents and employees within the IBC in 2007. All IBC residents currently reside in higher density apartment and condo-style dwellings. The characteristics of these existing households are seen to predict fundamental demographic traits (household size, number of cars, number of children, etc.) of future residents expected to reside in new, higher density housing planned in the IBC area.

Characteristics of special note found through the survey are as follows:

20% have been in the IBC no more than two years

Resident Surveys

- Approximately 25-40 percent of IBC residents also work in the IBC.
- There is an average of 1.65 persons per household
- 48% of households are single-person; 20% include 3 or more persons
- Roughly 10% of households have children present; less than 4% have children present full-time; balance only on weekdays, weekends, or scheduled visits
- Nearly 30% of households in current residence less than 1 year; 67% of households in current residence less than 3 years
- Approximately 57% of households bought their home; 43% rent their home
- Approximately 47% of current households relocated from another home in Irvine-Central O.C

- 25% of surveyed businesses have relocated to the IBC, with 78% of these businesses coming from other sites in Irvine or Central Orange County
- 1 out of 3 IBC businesses indicate plans to expand their operations. Of these businesses 40% plan to expand within the next 12 months while another 30% plan to expand within the next 24 months
- Of the IBC businesses planning to expand, about 60% are seeking a site in the IBC. Less than 5% of businesses expanding plan to add more than 25,000 square feet, while 85% plan to add less than 10,000 square feet

Business Survey

- 57% of IBC businesses are engaged in office activities, 12% in retail activities, 16% in industrial activities, and 18% in various miscellaneous activities, including lodging, education, etc.
- 43% of surveyed businesses have been in the IBC over 10 years while

Parks and Open Space

A number of private, internal recreation facilities have been developed as part of the residential developments within the IBC. These facilities are predominantly gated or indoor facilities serving the individual developments.

The Bill Barber Marine Corps Memorial Park, located adjacent to the IBC, serves the area for Community Park outdoor recreation facilities as well as the San Joaquin Freshwater Marsh and San Diego Creek Trail.

Community Participation

Throughout the IBC planning process, the involvement of various individuals, organizations, key stakeholders, local businesses and developers have been sought to build and develop a broad based consensus for the effective Vision Plan. The Irvine City Council adopted a series of recommendations directing the preparation of this document as well as the IBC Residential Mixed-Use Overlay Zone. As part of this effort, the City Council adopted five vision elements for use in guiding the preparation of development standards, which serve as the five objectives outlined in this element, as follows:

- Protect the existing job base within the IBC.
- Develop mixed-use cores.
- Provide transportation, pedestrian, and visual connectivity.
- Create useable open space.
- Develop safe, well-designed neighborhoods.

The City hosted a IBC Design Charrette to develop new standards and guidelines for residential development within the IBC. Key urban design principles created at the Design Charrette have formed the basis of this element and the IBC Vision Framework Plan (Figure N-2)

Identification of Issues	
1.	How can the existing job base in the IBC be protected from impacts of residential and mixed use development.
2.	How can the planning process accommodate a wide range of uses in the IBC?
3.	How can the transportation network and pedestrian linkages in the IBC be improved to facilitate mobility through the evolving neighborhoods in the IBC.
4.	How can open space areas be provided for residents and employees in the IBC?
5.	How can new residential and mixed use neighborhoods be designed to be compatible with the surrounding IBC environment?

The Vision – Overarching Concepts

The purpose of the Vision Plan, as incorporated into this IBC Element is to address the opportunities and constraints previously discussed and develop an urban design framework to guide future development in the IBC. This element suggests a dynamic mix of uses, with urban housing integrated into a conceptual framework of streets, landscape improvements, pedestrian walkways, and urban open spaces.

In order to achieve a balanced urban environment, the IBC needs walkable neighborhoods where people can work, live, and play; feeling part of an evolving and vibrant cosmopolitan city. This requires a mix of uses and places that are activated both day and night, drawing together diverse community segments both business and residential.

Provide a Guide for Future Development

This IBC Element will serve as a guide for public improvements within the complex, including criteria for park locations, a conceptual new street network, and improvements to the streetscape design.

Provide Housing Opportunities

New residential development will provide for a range of housing opportunities including rowhouses, live-work units, courtyard housing, commercial blocks, podiums, liners and towers (all as defined in the IBC Design Criteria adopted in conjunction with this element), while still retaining the mature industrial development and its associated job base.

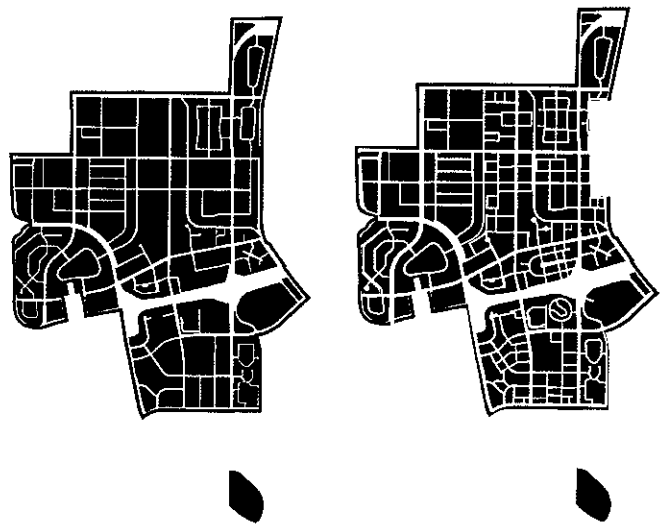
Private developments will be subject to the regulations of the new IBC Residential Mixed Use (RMU) Overlay Zone. In addition, a funding mechanism will be established concurrently with the adoption of this element to provide for implementation of the community-oriented pedestrian and infrastructure improvements to increase walkability within the IBC as outlined in this document.

Create New Streets and Smaller Blocks

A key consideration for the future of the IBC is the introduction of new streets, reducing the size of blocks to a pedestrian scale. A component of walkable neighborhoods is smaller blocks. While the existing arterial road system needs to continue to function as planned to move vehicles through the IBC, the new streets and pedestrian paseos will connect to the arterials at key locations.

New connections will be encouraged and designed that keep ultimate curb locations as planned under existing policies and requirements but move the sidewalk away from the curb into the required setback area where appropriate. Landscape parkways or wide sidewalks with tree wells will be encouraged in key locations.

The new standards in the IBCRMU Overlay Zone and associated-design criteria will lead to buildings that are more human-scaled, on smaller blocks, which provide a greater variety of pedestrian-friendly experiences.



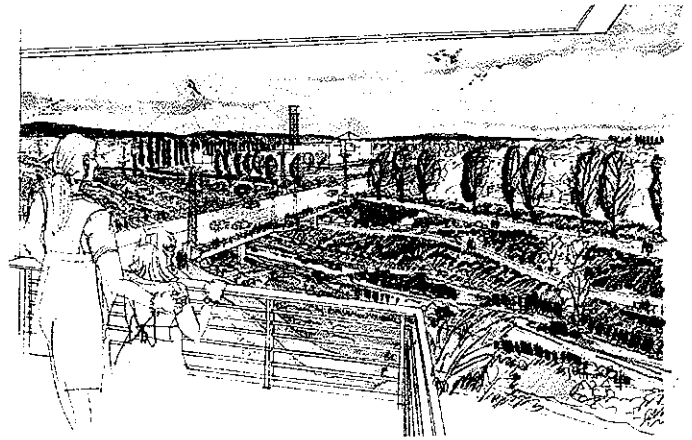
Existing Street Network

Conceptual Street Network

Develop a Pedestrian Linkage System

A system of pedestrian linkages, parks, and urban open spaces will be a critical component of future projects connecting residential to employment opportunities within the IBC as well as link to the San Diego Creek and San Joaquin Marsh.

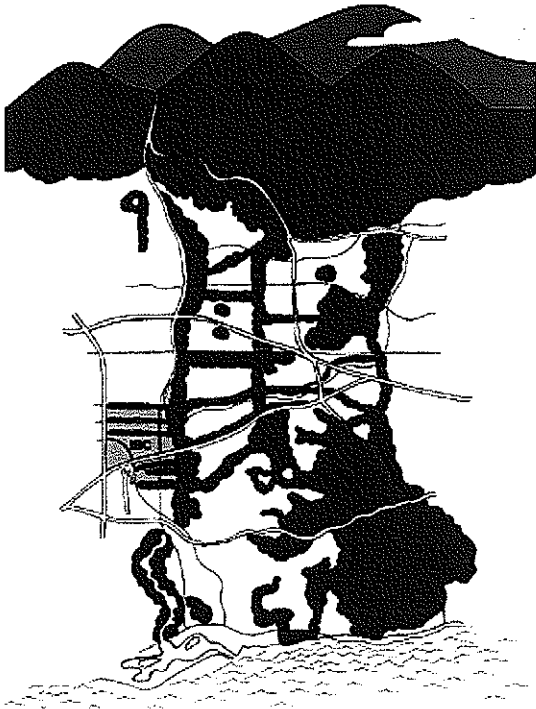
A pedestrian “Creekwalk” system is envisioned adjacent to the San Diego Creek that will ultimately provide a trail connection to the Great Park from the IBC and the Civic Center.



Creekwalk – IBC Illustrative Concept

Vision Framework Plan

The Vision Framework Plan (Figure N-2) provides the land use and urban design structure by which new residential development may occur. The Framework is a summary exhibit of the key elements and attributes to ensure the development of high quality, sustainable neighborhoods and a mixture of uses which will achieve and maintain the highest economic value within the long-term like the Land Use Element of the General Plan. The Regulating Plan in the IBC RMU Overlay Zone implements the objectives and polices of this Vision Element.

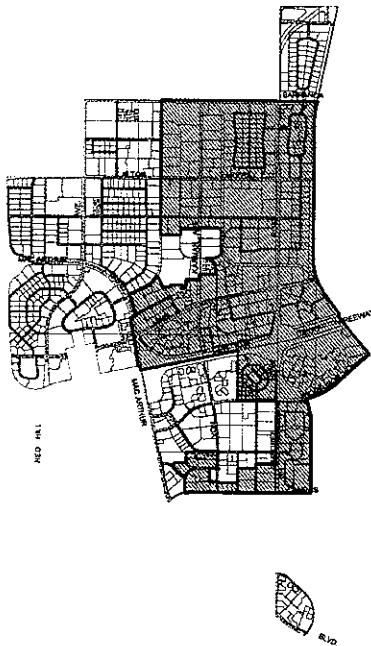


Open Space Connection – Mountains to Bay

New Districts

The IBC Element distinguishes the character of the different areas of the IBC by creating two districts, each with its own unique identity, based on the existing urban character within these districts and the opportunities for additional mixed-use development within. (see Figure N-3, IBC RMU Regulating Plan). The purpose of creating different districts is to influence the pattern of development and land uses within each district. This will be achieved through a range of land uses, development types, scale of buildings, the streetscape design, and setbacks. As a whole, the districts will create distinct areas which will become the focus for the activity or facility within each district and together they will create a unique 'sense of place' within the City of Irvine.

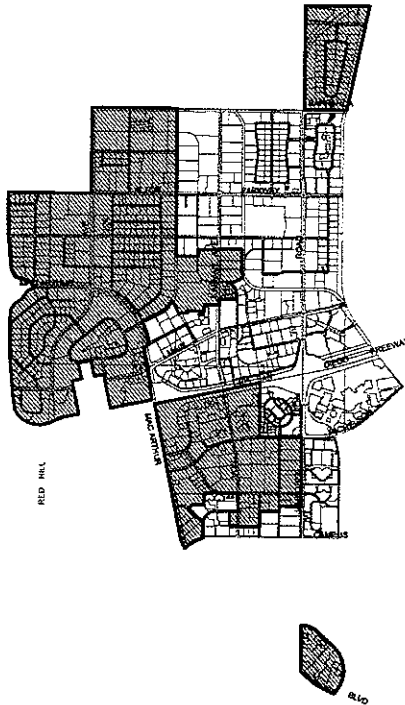
Urban Neighborhood (UN)



The Urban Neighborhood District includes the majority of the IBC and allows a range of land uses and buildings of up to twenty stories (however, in certain areas more precisely defined in Figure 1, following Section 5-8-3 of the Zoning Code as approved for first reading on July 13, 2010, the height limitation for residential buildings in the Urban Neighborhood District is limited to 75 feet). Generally, these neighborhoods are envisioned to be primarily residential with retail, offices and restaurants allowed on the first floor.

- Auto-oriented uses are not appropriate in this district.
- Street frontages throughout the district are pedestrian-oriented.
- Off-street parking is provided in shared garages, or located away from street frontages behind buildings.
- On-site parking may be appropriate on the new connector streets.
- Streetscapes are urban in character with enhanced pedestrian experience.

Business Complex (BC)



The Business Complex District is applied to portions of the IBC characterized by existing longstanding office and industrial uses that are expected to remain. This District accommodates new industrial uses and an expansion of existing uses.

- Residential uses are not permitted in this area.
- The land use types and standards allowed in the district are determined by the base zoning designation.
- Streetscapes are suburban in character with wide setbacks and landscaped areas, as originally planned for this area.
- Off -street parking is provided in parking lots, adjacent to the streets.
- On-street parking is restricted within this district.

Vision Elements

The following five Vision Elements, discussed as Objectives N-1 through N-5, organize the Vision Plan and includes key principles identified during public meetings. Following the introduction of each Vision Element are the key components that implement the Vision Plan.

Response to Issues

The following objectives, and policies have been formulated to respond to land use issues.



OBJECTIVE N-1 JOB BASE

Protect Existing Job Base



In order to maintain long-term property value and economic health, the IBC will not only attract new office, retail, and residential uses but will protect those businesses that wish to remain and possibly expand. As market strength shifts between uses over time, the value of all uses will be enhanced by a fully integrated and mixed-use district approach. New residential neighborhoods must coexist with mature industrial uses for the balanced community concept to succeed.

The following policies support Objective N-1:

Policy (a): Preserve a core area to protect the existing job base and provide for future job growth.

Policy (b): Provide housing opportunities for the local and regional employment base that support and complement commercial and industrial uses in the IBC.

Policy (c): Maintain existing zoning rights for all property owners.

Policy (d): Create criteria that protect both industrial and residential operations.

Overlay Zone Implementation

The Overlay Zone allows all property owners to maintain their current zoning for non-residential development subject to existing development standards. The Overlay Zone only applies to properties for which new residential is proposed. The Business Complex District designation also protects a number of existing businesses. The Overlay Zone outlines land use criteria by which residential and mixed use projects will be evaluated.

OBJECTIVE N-2 MIXED USE AREAS

Develop Mixed Use Areas

The development of mixed-use districts within the IBC will help stimulate and reinforce the integration of uses and provide housing adjacent to local services and jobs within a walkable environment.

The following policies support Objective N-2:

Policy (a): Allow for locations for mixed-use cores of higher density commercial and residential development.

Policy (b): Create pedestrian activity centers within and around the cores with services, food, child care, and transit within walking distance of residences and employment.

Policy (c): Provide incentives for mixed-use and the inclusion of retail and other support services within core areas.

OBJECTIVE N-3 CONNECTIVITY

Provide Transportation, Pedestrian and Visual Connectivity

The Vision Plan suggests a more ‘pedestrian oriented, urban living experience’ within the emerging residential and mixed-use districts of the IBC. In the long-term, it is hoped that the need to drive within the IBC will be reduced. To achieve this, it is essential that each new development make a positive contribution towards an expanded and connected street system, comfortable and secure walking paths and an expanded transit opportunity. Attractive buildings, ‘eyes on the street’ residential design and integrated open space will also encourage an enhanced pedestrian and vehicular experience.

In an attempt to transition from large-scale blocks to sustainable urban residential neighborhoods, new residential developments will be encouraged to utilize smaller blocks and more interconnected streets and pedestrian ways to create a network of linkages.

The following policies support Objective N-3:

Policy (a): Enhance project relationships to transit systems, including the i-Shuttle, Metrolink, OCTA buses and UCI shuttles.

Policy (b): On larger projects, introduce additional local streets within and between parcels to improve vehicular, emergency and pedestrian access.

Policy (c): Provide pedestrian linkages that facilitate improved resident access to local services, recreation facilities, the City's trail network and transit access.

Policy (d): Create attractive, safe (eyes on the street) and well landscaped pedestrian environments.

Policy (e): Provide linkages and support facilities to promote use of city and regional bicycle trail systems.

Policy (f): Connect all new residential development with existing and future transit services .

Policy (g): Work with school districts to establish safe routes to schools for IBC residents.

Arterial Streets

Arterial streets within the IBC are proposed to maintain wider building setbacks of 30 feet from ultimate curb line with an extensive landscaped frontage. New roadway sections proposed for the City's standard plans for roadways include a parkway adjacent to the street and a sidewalk are proposed. In addition, on-street bike

lanes will connect along Red Hill Avenue, Von Karman Avenue and parts of Jamboree Road, into the wider City of Irvine Bikeways network.

Gateways and Landmarks

A hierarchy of gateways has been identified to create identity for the IBC and strengthen and unify the Urban Neighborhood Districts. The introduction of these elements, such as new bridges or enhancement to existing bridges at key intersections will enhance the 'sense of place' and identity for the area, and will let visitors know they have arrived at a major destination. The gateways will create a strong urban design context through the uses of architectural and streetscape design elements. These design elements could include also civic or monumental gateways, landmark buildings, new urban plazas, street lighting, new hardscape and landscape treatments, integrated with public art.

Regional Gateways

The IBC is highly visible when viewed from the 405 freeway. The 405 freeway bisects the IBC, and the off ramps at Jamboree Road and MacArthur Boulevard, could create an "entrance" to the IBC.

Local Gateways

These local gateways to the IBC need to be recognized and enhanced, to provide an identity to the area as a vibrant place to live and work. The pedestrian bridges over Jamboree Road could form important gateways for local residents in the adjacent neighborhoods and the City of Irvine, to the IBC.

Streetscape

The rapid transition of land use in the IBC provides an opportunity to create a distinctive streetscape system of tree-lined streets, new sidewalks, street lighting and furniture, bicycle trails, parks, plazas and open spaces.

The streetscape elements including gateways, public art, light fixtures, street furniture, and signs need to be coordinated with a landscape concept plan unique to the IBC. This landscape concept plan (Figure N-4) should be designed to reinforce pedestrian walkability and create a unified and coordinated planting structure to the IBC, with some variations within the different districts to create some visual interest and ecological variety within the landscape. One of the next steps to implement the Vision Plan is to refine the Landscape Concept Plan and update the Master Streetscape Plan.

To create this distinctive streetscape, the following elements should be provided:

- Wide tree-lined sidewalks with a canopy of shade trees, benches, and coordinated street furniture, including bus shelters and trash receptacles.
- Visual unification and integration of the facilities and uses within the IBC through the use of streetscape, lighting, special paving, and landscape treatments.
- Shared sidewalks for pedestrians and bicycles
- Pedestrian connections to the transit system.
- Landscape street planting program that can be coordinated with future developments.

- Pedestrian and bicycle connectivity to every public park and urban open space.
- Enhanced intersection treatments and pavement.

The implementation of the streetscape within the various rights-of-way will occur as new sites are developed within the IBC, unless otherwise determined by the City. Every development within the IBC should be thought of as an opportunity to enhance the walkability and livability of the area and contribute to the streetscape system.

Generally, for arterial and local streets, sidewalks are proposed to be located away from the street with a landscaped parkway providing a buffer between pedestrians and traffic.

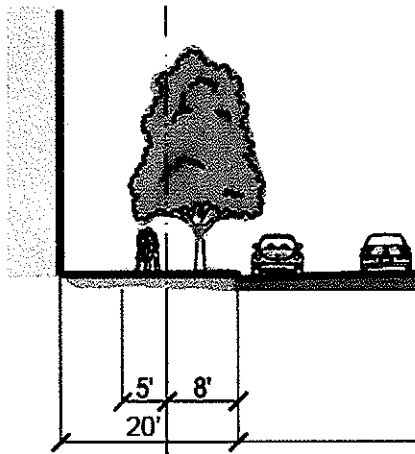
Road Capacity

The vehicular capacity of these streets is important to maintain while improving the pedestrian experience. Certain arterial streets are planned to be widened - including Main Street and Red Hill Avenue. In conjunction with the certified EIR for the Vision Plan project, certain roadways will be downgraded – including Jamboree Road between Barranca and McGaw (10-lanes to 8-lanes) and Barranca Parkway between Red Hill and Jamboree (8-lanes to 7-lanes). In conjunction with the certified EIR for the Vision Plan project and upon approval of an Amendment to the County of Orange’s Master Plan of Arterial Highways, certain roadways will be downgraded - including Von Karman Avenue (6-lanes to 4-lanes) and Alton Parkway between Red Hill and Jamboree (6-lanes to 4-lanes)..

Local Streets

The proposed new streets, as well as existing local streets, in the IBC are smaller scale; providing the opportunity for a more pedestrian oriented 'green' network of streets, connecting business and residential districts to the San Diego Creek and the citywide open space system. Canopy trees for shade are proposed in eight-foot parkways and a minimum of five-feet for sidewalks should be provided.

The existing east-west streets proposed to be enhanced for pedestrian use include: Alton Parkway, Barranca Parkway, Campus Drive, McGaw Avenue, Main Street and Michelson Drive.



Typical Local Street Cross Section

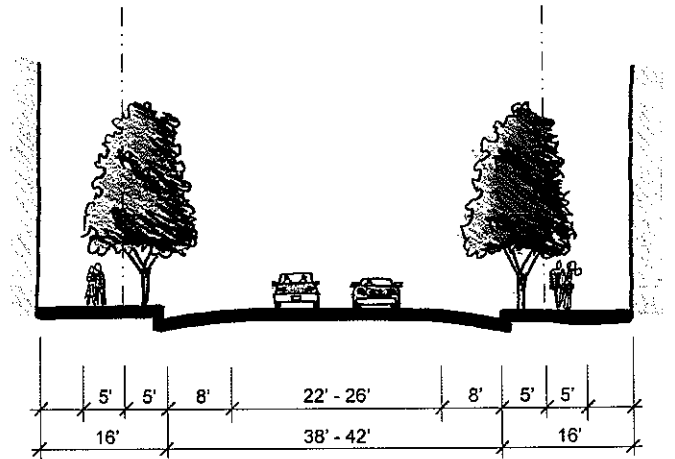
Expanding the Street Network

The Vision Plan as outlined in this element seeks to address the imbalance between pedestrian and automobile users, by deconstructing large super blocks into smaller parcels through the creation of new local vehicular and walking streets. The ultimate aim is to provide improved connectivity between blocks and the existing street network for the benefit of all the community. This system will encourage access to the interior of existing large parcels. This proposed street network will provide improved emergency fire and police access, trash pick-up, access to parking areas, and a more pedestrian friendly access system to local services, workplaces, and transit.

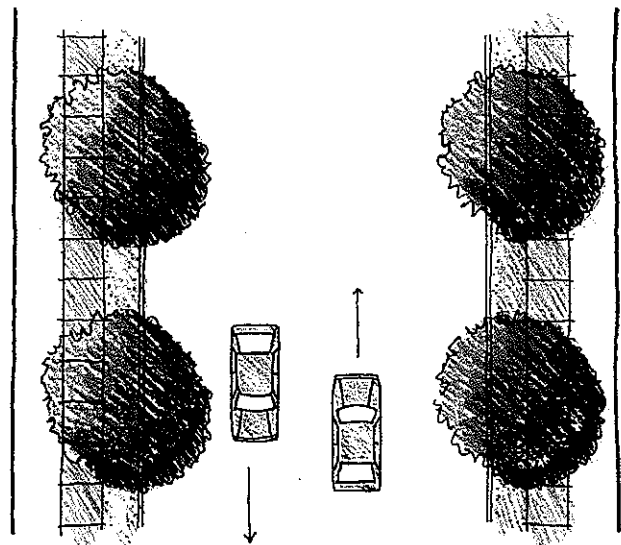
While maintaining the existing arterials and enhancing the pedestrian experience, the plan calls for the introduction of a “finer grain” street pattern allowing for a greater diversity in housing types by reducing the scale and size of developments and making it easier to mix housing types within a single large project site. The smaller blocks can create a more walkable pedestrian network by providing various routes to a variety of destinations.

Proposed sections for these new streets are shown in the section of this element on Typical Street Cross Sections. When a new street straddles or is adjacent to a property line, the first development will be required to provide selected improvements as identified in the street sections of this Vision document and in the Overlay Zone adjacent to their project and a minimum travel way to ensure fire access. The proposed conceptual street plan shows conceptual locations of new local streets.

To maintain connectivity, new local streets should not be gated.



New Conceptual Street Section



New Conceptual Street (IBC Private Way) Plan

Transit

The City Council adopted a Citywide Transit Vision in April 2009. The Citywide Transit Vision is in compliance with a development condition for Planning Area 40. The Transit Vision evaluates a citywide rubber-tired clean technology shuttle system intended to provide convenient, safe, environmentally friendly, direct connections from Irvine and Tustin Stations to other development areas in the Irvine Spectrum, the Orange County Great Park and Heritage Fields, Woodbury/North Irvine, and the IBC.

The Citywide Transit Vision builds on the success of the City's i-Shuttle, the University of California Irvine Student Shuttle Program, and the planned expansion of Metrolink service by the Orange County Transportation Authority (OCTA). Implementation of the City service is expected to occur in phases.

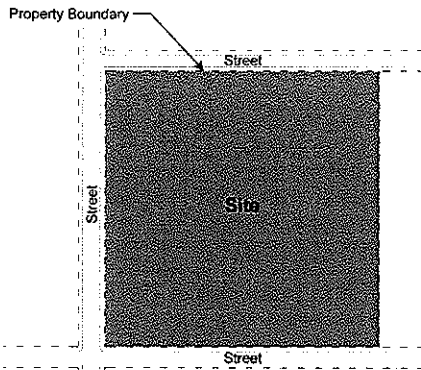
Complete the Sidewalk System

Many of the streets within the IBC do not have sidewalks. The existing sidewalk improvement program will continue to be implemented and embellished with enhanced standards for improved walkability and connectivity to create an interconnected system of pedestrian-friendly boulevards, avenues and streets.

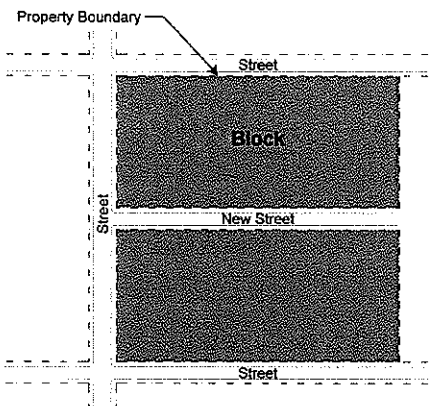
Proposed Completion/Infill of Existing Sidewalks

Overlay Zone Implementation

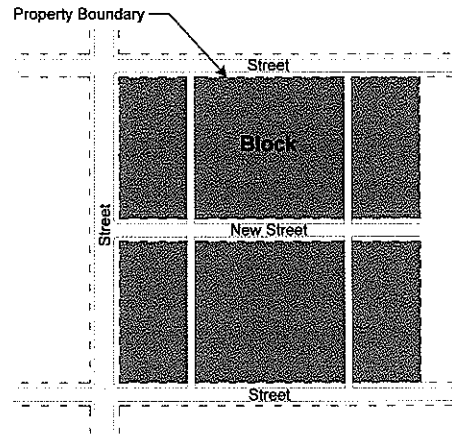
The Overlay Zone recommends new development exceeding a certain size to incorporate new vehicular or walking streets that improve access, create smaller block sizes and induce a mix of housing types. New streets shall connect with the existing street network except in cases where intersection spacing precludes such connections; in such cases walking streets shall be provided. Sidewalks and parkways are required adjacent to new residential development. These sidewalks will be located within the private setback area. Street setbacks have been established for all the streets within the Overlay.



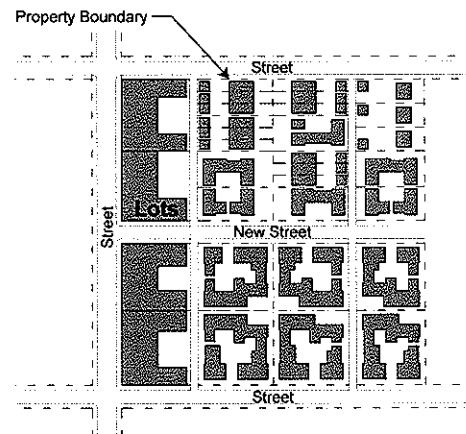
Existing Block Size



Introduce Streets



Introduce New Streets/Access



Mix of Housing Types

OBJECTIVE N-4 OPEN SPACE

Create Usable Open Space

Higher density neighborhoods need parks and urban space to offset building intensity and provide space for informal activities. The vision is to create a system of new public parks, urban plazas, open spaces, and private or public recreation areas that are interconnected by streets, bikeways, and trails. Well crafted and programmed public space encourages people gathering and neighborhood events.

The following policies support Objective N-4:

Policy (a): Contribute fees to new community park within or adjacent to the IBC that serves new residents and provides a variety of amenities.

Policy (b): Provide smaller, neighborhood scale parks and urban open space within and between projects that provide local park areas for residents.

Policy (c): Provide private on-site recreational facilities and open space for use by neighborhood residents in meeting recreation, health and wellness needs.

Policy (d): In addition to providing the park and recreational requirements, additional private open space in the form of patios, courtyards, and balconies for most dwellings will be required.

Policy (e): Provide a balance between landscape and built form by providing sufficient planting space around buildings and within internal spaces.

Regional Open Space

The San Diego Creek and the San Joaquin Freshwater Marsh, which lie adjacent to the IBC, are part of the wider open space system adjacent and easily accessible to the IBC. This open space system is a mosaic of habitats ranging from wetlands and coastal sage scrub, and includes an important ecologically diverse ecosystem.

This open space system then connects with the Santa Ana Mountains along several open space corridors, including Peters Canyon Wash and Jeffrey Open Space Trail (the 'Mountains to the Sea' trail), and the Upper Newport Bay Ecological Reserve to the Pacific Ocean. This extensive open space system offers a comprehensive network of 43 miles of off-street and 132 miles of on-street trails for biking.

As part of this Vision, the open space system provides a unique resource on the doorstep of the residents and businesses of the IBC. An opportunity exists to provide an interconnected system of streets, bikeways and trails, connecting the new streets, parks, and urban plazas within the IBC to the wider system of City open space.

Parks and Public Spaces

Parks in the City of Irvine are provided at 5 acres per 1,000 population. Within the IBC, Community Park dedication shall only be provided through payment of in-lieu fees at the required 2 acres per 1,000 population. Neighborhood Parks in the City of Irvine are provided at 3 acres per 1,000 population. However, in order to provide needed public facilities within the IBC, minor modifications in the park dedication distribution is needed. The public/private distribution of Neighborhood Park land within the IBC is proposed to be allocated for the Overlay Zone as follows:

- Public: two acres per 1,000 population
- Private: one acre per 1,000 population

The following new parks should be provided in the IBC:

- A new Community Park south of the 405 freeway. Bill Barber marine Corps Memorial Park serves the park needs for the area north of the 405 freeway.
- At least six new Neighborhood Parks to provide a local park within one-half mile of every resident. Such parks would be part of the continued requirements for recreational facilities for residential development

projects, but could be given public park credit if designed as urban open space with public access. This would help create a network of urban open space as part of the proposed development within the IBC

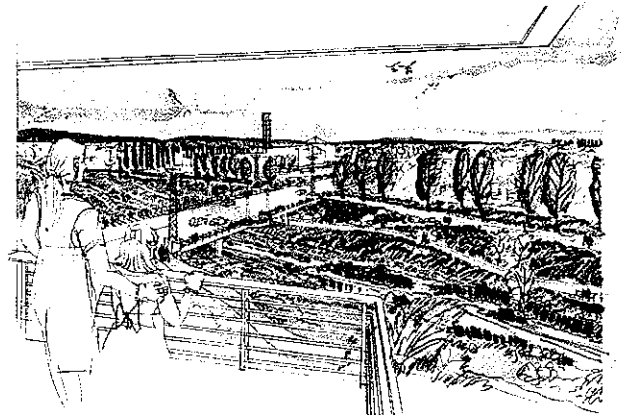
- Community/civic building within the IBC to serve the needs of the IBC community; facilities could include a library and a community building with meeting rooms, theater, or gallery space.

San Diego Creek ‘Creekwalk’

San Diego Creek ranks as one of Irvine’s most valuable natural assets. It defines the eastern boundary of the Irvine Business Complex (IBC) while also serving as an integral component of the regional open space network – connecting the Orange County Great Park, Irvine Open Space Preserve, and the Upper Newport Bay Ecologic Reserve.

Existing Conditions

The Creek affords several opportunities to provide the city and IBC with meaningful recreational and park amenities. It is uniquely situated to draw users to itself by becoming a destination to experience the natural environment and partake in programmed activities and events. Presently, the Creek’s west bank is inaccessible in parts. Transmission lines of Southern California Edison (SCE) run alongside the Creek. Abutting SCE’s corridor are chain link fences that define the rear edges of adjoining low-rise developments – typically occupied by parking lots and service areas. A multi-purpose trail is located on the east side of the Creek channel – this can potentially be connected with a new trail system on the west bank. The character of the Creek channel itself is a blend of man-made, rip-rap embankments and natural, riparian environment.



Creekwalk Perspective

Urban Design Opportunities

The SCE corridor along the San Diego Creek forms the eastern boundary of the IBC. It traverses from Main Street to Barranca Parkway. This corridor is ideally located for reconfiguration into an accessible linear open space to serve as the interface between the IBC and the creek environment. This open space, designated as “Irvine’s Creekwalk”, will provide valuable amenities, serve as a destination, and also create opportunities for new Creek edge development by significantly enhancing the value of land in its vicinity, which will benefit both landowners and the City.

It is vital, above all, to announce the presence of the Creek. Enhancing existing creek crossings by introducing sculptural features will signify the importance of the crossings as gateways and points of arrival and transition. The alignment of the Creek affords excellent opportunities to create special places and vista points. The two most significant are the existing promontories downstream of Barranca Parkway and upstream of Main Street. Located strategically at bends in the Creek, they provide excellent downstream and upstream views. There are also opportunities to build new pedestrian bridges across the Creek to connect and make the trail system continuous on both banks. The concrete buttresses that extend on the upstream side of existing bridges at Main Street. and Alton Parkway could support new pedestrian walkways.

The long term vision of the Creekwalk includes the introduction of a new street – which will flank the western edge of the open space. This new street will improve access and help to activate the Creek’s edge. Also in the long term, the City should encourage mid-rise residential development (with some street-level restaurants and cafes) along the Creek to positively change the character of the water’s edge. Key developments along the Creek should in the future be expanded and reoriented to acknowledge the waterway. This is particularly important with regard to Irvine City Hall and Jamboree Center since the Creek currently serves as backyard for these key uses.

Articulation of Creekwalk

San Diego Creek will not revert to its untouched natural state; nor is it

Creekwalk’s intention to make it do so. The proposed design takes the Creek’s urban setting as an opportunity to interpret and express the interface of natural and urban edges.

The linear open space will have twin and contrasting characters. Closer to the Creek’s edge several varieties of natural grasses of Southern California will be introduced to highlight the Creek’s water-oriented environment. Closer to the urban edge, manicured grasses and formal pathways are proposed. This zone incorporates urban elements, such as children’s play areas, pathways, benches, and public artwork. Transition from the natural to the urban occurs at trails which form the spine of the open space.

Special plazas are proposed within the Creekwalk area at or near the termination of east-west streets and pedestrian pathways. These incorporate elements that will draw users to the Creek’s edge – such as, vista points, special paving, lighting, and water features. The plazas punctuate the mile-long length of the open space, and where possible Bougainvillea shrubs may cascade down the rocky rip-rap to soften the edge of the Creek. The design proposes no other intervention within the Flood Control District’s right-of-way.

Any available parcel near the eastern end of McGaw Avenue (outside SCE’s right-of-way) could potentially become a new neighborhood park. This park, in conjunction with a proposed plaza within the Creekwalk will become the Creek’s most significant node and destination. McGaw Avenue will serve as the main east-west connection to the Creekwalk, providing both physical and

visual linkages from Jamboree Road. The neighborhood park helps to draw the Creek's natural environment into the urban fabric, thereby enhancing development potential value along McGaw to Jamboree.

A new pedestrian bridge is proposed across the Creek to connect the plaza at McGaw with San Marco Park on the east bank. Two new trail bridges are also proposed – at Alton and at Main – supported on the upstream buttresses of the existing road bridges.

Implementation

The Creekwalk and adjacent new street will most probably be developed in an incremental manner recognizing the distributed patterns of landownership and undetermined availability of funding. One potential scenario of phasing could envision the neighborhood park and adjoining plaza be the first pieces implemented, followed by smaller plazas and their corresponding pedestrian connections to Murphy Avenue. These in turn can be followed by the missing segments of Creekwalk and adjacent new street, building piece by piece the full vision of the proposed design. This phasing strategy has convenient 'pick and choose' options that allow the City to first implement pieces of the project that will have maximum benefit and likelihood of success – knowing that these short term actions will not preclude realization of the long term vision.



Existing San Diego Creek

Trails and Bikeways

The City of Irvine has an extensive trails and bikeways network throughout the City.

However, the connections from the IBC to this network are very limited. Continuous on-street bicycle lanes currently exist only along Main Street. Bicycle lanes are proposed along parts of Jamboree Road, Red Hill Avenue, Von Karman, Michelson Carlson Avenue, Barranca Parkway, and Alton Parkway.

Key principles are:

- Establish the San Diego Creek Creekwalk, along the easement on the west side of the creek, further connecting the ‘Mountain to the Sea’ Trail.
- Improve bicycle and pedestrian connections to San Marco Park, adjacent to the San Diego Creek, across the San Diego Creek with a new pedestrian bridge.
- Explore the opportunity to develop new shared use trails along the existing drainage channels and creeks within the IBC – Barranca channel and the Armstrong channel.
- As a larger team effort, establish the ‘Rails to Trails’ program to convert the abandoned railroads within the IBC, to walking and bicycle trails. The trails will eventually connect to the wider system of public realm improvements to create an interconnected pedestrian/bicycling experience within the street network of the IBC.

Bridges

The San Diego Creek forms an important physical feature between the IBC and the City of Irvine. Several existing bridges cross the creek providing vehicular and pedestrian access to the IBC.

The Vision creates an opportunity to celebrate these crossings, as gateways to the IBC and provide a ‘sense of arrival’ to the IBC. These gateways could be enhanced with the provision of new civic or monumental features including new street lighting, monuments, signage, street furniture, and landscaping.

The major bridges include Barranca and Alton Parkways, Main Street, and Michelson Drive. The Coronado Bridge also forms an important local connection across the creek, providing access to the IBC (Figure N-5).

To provide enhanced pedestrian connectivity to the IBC, new bridges are proposed to create enhanced pedestrian and bicycle connections with the IBC and to the wider system of trails.

Several new pedestrian bridges are envisioned within the IBC:

- Across the San Diego Creek, connecting to Bill Barber Marine Corps Memorial Park.
- Across the San Diego Creek, connecting McGaw to the new 'Creekwalk,' San Marco Park, and the existing 'Mountains to the Sea' trail along the San Diego Creek.
- A bridge crossing on Jamboree Road from Central Park to Park Place.
- Improve the bridge/underpass along San Juan Diego Creek at the 405 freeway.

Overlay Zone Implementation

The IBC Design Criteria adopted in conjunction with this element and the Residential Mixed Use Overlay Zone describes the type of open spaces that can qualify for the public and private Neighborhood Park requirement. Urban open spaces such as plazas and squares may qualify as a Public Neighborhood Park if they meet the design criteria.

OBJECTIVE N-5 NEIGHBORHOOD DESIGN

Develop Safe, Well Designed Neighborhoods

A major goal of the IBC Vision Plan is to create long lasting and enduring neighborhoods that maintain their value and socio-economic vitality. The Vision Plan and the Overlay Zone should provide a strong and appropriately scaled framework of urban blocks, streets, parks, and urban open spaces. Only by providing these essentials can a truly rich, sustainable urban community be achieved. The new Overlay Zone and associated Design Criteria will regulate the building form and encourage a diverse mix and variety of urban living choices.

The residential uses should be compatible with the existing businesses within the IBC. This element and associated Overlay Zone and Design Guidelines attempt to set the framework to create a high quality living environment for both businesses and residents.

The following policies support Objective N-5:

Policy (a): Build sustainable and energy efficient residential buildings.

Policy (b): Create a pedestrian friendly walking environment that is attractive, safe, and engaging.

Policy (c): Provide visually rich and engaging street scenes along designated local and collector roads, encouraging pedestrian use and adding aesthetic value to neighborhoods.

Policy (d): Visually differentiate and emphasize retail in the mixed-use residential developments.

Policy (e): Implement suitable landscape and building treatments along arterial roadways.

Policy (f): Be sensitive to existing industrial uses when designing new residential developments.

Policy (g): Encourage variation in building heights and housing types (liners, podium, and towers) to avoid massive “project” appearance within each IBC residential project.

Policy (h): Design buildings with articulated massing and roof forms to avoid an institutional character and feel.

Policy (i): Incorporate architectural detailing that leads to a sense of quality, diversity, and authenticity in design.

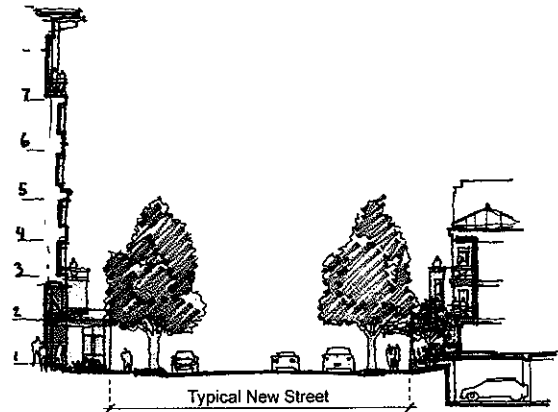
Policy (j): Design roof forms with variation and that are attractive when seen from both the ground and taller buildings.

Policy (k): Buffer and blend parking structures into the neighborhood so that they are not visually obtrusive or detract from the quality of the pedestrian environment.

Policy (l): Provide parking solutions that are incentives for creative site planning and neighborhood design.

Policy (m): Create a safer living and work environment through use of Crime Prevention Through Environmental Design (CPTED) principles.

Policy (n) Develop residential uses that are not in conflict with nearby John Wayne Airport Operations



Typical Setback Cross Section

Street Frontages - Setbacks

The IBC has developed in a manner that has resulted in a patchwork of building frontages and setbacks. Building setbacks currently range between 20 to 40 feet measured from the curb. These setbacks were designed with the vehicle in mind which has created an environment that is unfriendly to pedestrians within the IBC. In addition, some buildings along Jamboree Road turn their backs on the major streets and do not contribute to an attractive street frontage.

Buildings should be designed in a manner that creates an attractive, safe pedestrian scale along public streets.

A hierarchy of street setbacks has been established in the IBCRMU Overlay Zone which proposes different setbacks for different types of streets and in some cases location within the IBC. A typical street cross section is shown below demonstrating the relationship between buildings and street. Detailed cross sections can be found in the Typical Street Cross Sections section of this element.

Provide Variation in Housing and Building Types

A healthy variety of housing and building types not only enhances long term economic stability but provides a public benefit by serving a wider demographic spectrum. It is especially important for the IBC to have a balance of for-sale and rental housing, if the districts are to maintain values and quality over time. The following housing types are considered appropriate within the IBC:

- Rowhouse;
- Live/work;
- Court;
- Mixed-use commercial block;
- Liner;
- Podium; and
- Tower.

Multiple housing types are encouraged within individual development projects to create blocks and buildings of a size and scale that are not overwhelming. Height and coverage criteria within the IBCRMU Overlay Zone will guide developments toward appropriate variations in block size, building density and integrated open space.

Provide Variety in Building Heights

The scale of buildings varies dramatically within the IBC. The existing scale of the built form remains fairly uniform throughout the IBC, with 1 and 2 story industrial buildings throughout, and the introduction of numerous “wrapped” 4 story residential building types built with the residential units built to clad or wrap the exterior of the parking structure. There are two notable areas, the existing multiple use districts, mainly adjacent to the I-405,

where the height of buildings increases with towers up to 20 stories.

Towers and tall buildings contribute to the skyline and act as landmarks and visual references for the area. The Vision Plan enhances the existing concentration of tall buildings within the IBC, in particular within the Multiple Use Districts.

The Overlay Zone provides specific design criteria to require building heights to vary within a project as well as from district to district. An overall goal is to guide taller buildings to areas around mixed-use/commercial cores.

Landmarks

New buildings should address arterial street intersections with architecture and/or landscape enhancements, offering an opportunity to create visual cues and reference points for both visitors and locals within the IBC. Corner buildings should be both expressive and visually interesting and contribute to the character of the urban neighborhoods and the street scene as a whole, but consistent with the underlying Code.

Parking

The Vision seeks to create safe attractive parking places for businesses, residents and visitors and address opportunities for shared use parking throughout the IBC.

- Develop a shared parking structure strategy for use by workers during the day and residents to use at night.
- Develop strategies to re-use existing under-utilized parking structures within the IBC.

- Encourage employer transit subsidies to reduce employee parking demand.

Protection from Airport Operations

The IBC Residential Mixed-Use Overlay District (*Section 5-8-4.C.*) incorporates a number of development standards to mitigate residential impacts on airport operations. These standards include maximum *noise levels*, *maximum building heights*, required notification of residents (*including deed and tenant disclosures*) of the airport proximity and compliance with obstruction lighting and marking criteria.

Sustainability

While the IBC is Irvine’s largest job center with approximately 83,000 jobs, this business district is rapidly transitioning into an urban core for Orange County. This element will guide the evolution of the IBC into a mixed-use, pedestrian-friendly, residential, industrial, office, commercial and recreational center. The implementation of the IBC Vision Plan and associated Overlay Zone and Design Criteria, as contained in this element, promotes the City’s long-term sustainability goals of mobility, livability, and prosperity.

Mobility

The Irvine Business Complex (IBC) is now transitioning from a highly successful business district into a mixed-use urban core for central Orange County, and to help guide this process, the City has developed the Vision Plan, as incorporated into this IBC Element, which will allow a total of 15,000 residential units in the IBC. The City has also created an infrastructure improvement plan for the IBC which

includes pedestrian linkages, trails, bridges, sidewalks, a library, parks and recreation facilities. In March 2008, the City implemented a shuttle service, complementing regional bus service and providing direct express service to and from the nearby Tustin Metrolink Station, John Wayne Airport, and throughout the IBC, providing employees and residents with an alternative mode of transportation for making trips in and outside the IBC. The shuttle, known as the “i” operates fully accessible, compressed natural gas busses, and is funded by the City of Irvine and OCTA.

With approximately 90,000 jobs, the IBC is one of two major job centers in the city. The area also includes more than 4,500 housing units. The desirability of the IBC and the resulting high price of land create a challenge for the City in producing affordable housing.

However, the concentration of such a large mix of residences and employment, in addition to approximately 1.3 million sq. ft. of retail services within the 1,800-acre mixed use core of the IBC does provide opportunities for decreased commute times and distances by providing jobs closer to employment, and allowing for combining vehicle trips for both work and non-work related (i.e. shopping, recreation) purposes.

Livability

The opportunity to transition the IBC into a mixed use center resulted in the IBC Vision Plan. Through a series of community workshops, the City developed this plan to incorporate not only residential land uses into the area, but also the amenities and support services that Irvine's residential communities desire.

The land uses in the IBC have noticeably changed over the decades from tilt-up manufacturing and light industrial, to high-rise office, hotel and high-density residential. Luxury apartments and high-rise condominiums have been built along Jamboree Road, mixed with retail centers, restaurants, offices and light manufacturing. The City has supported and facilitated this mix of uses, and through the implementation of the IBC Vision Plan the City will help add the additional amenities and connectivity that will make this urban center a truly livable community. The IBC's housing units include studios and apartments, lofts, townhouses, and luxury high-rise apartments and condominiums, creating an excellent mix of choices for the IBC workforce who can live close to work avoiding long commutes. The City's shuttle system further improves livability, decreasing traffic congestion by encouraging employees not living in the IBC to commute to work using mass transit.

Prosperity

The variety of housing that has been built in the IBC includes rental and ownership with monthly apartment rents

up to \$3,100 and luxury condos priced over \$3 million.

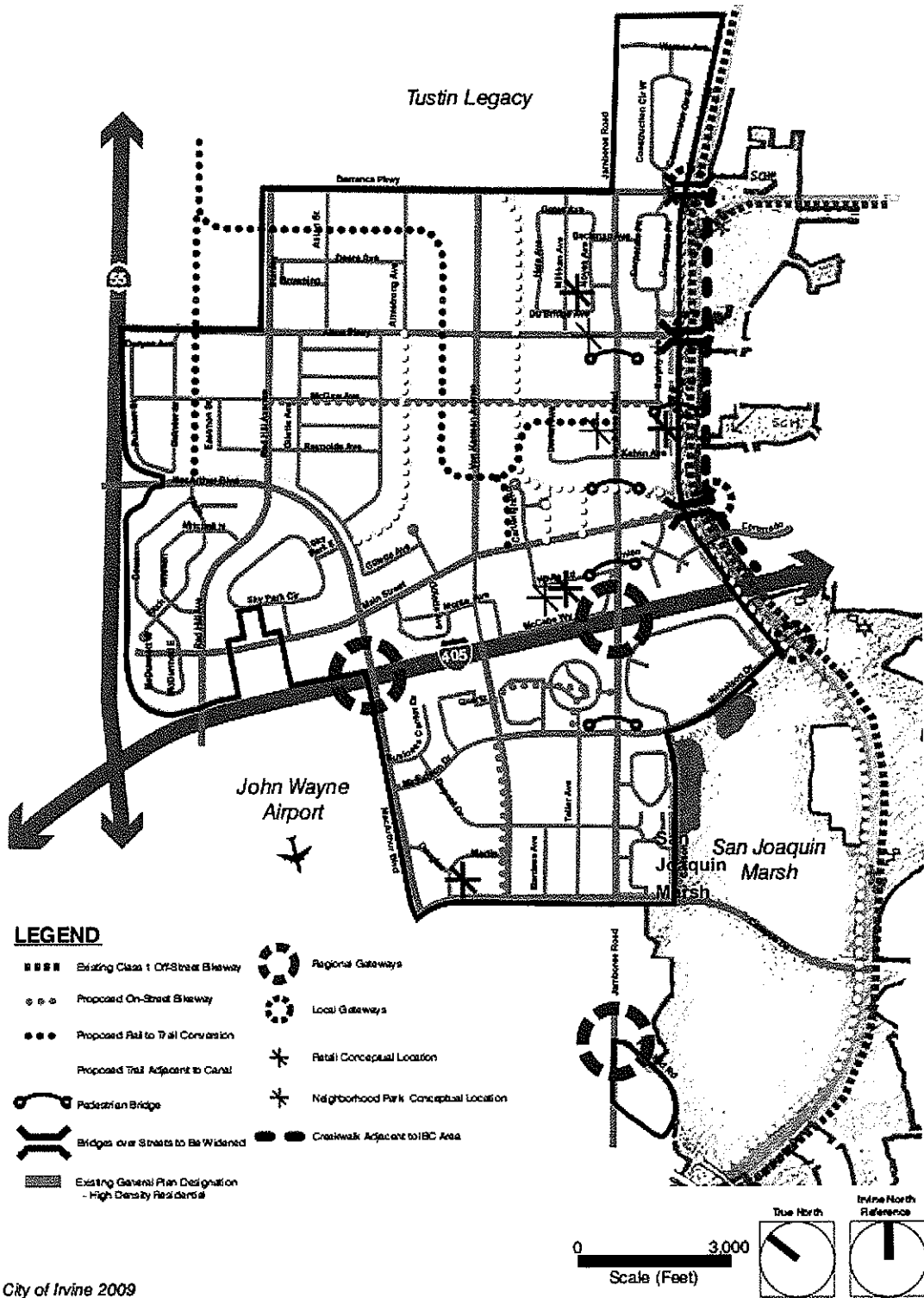
The City's Housing Strategy is designed to create a full spectrum of housing to meet the shelter needs of all income groups in all stages of life. The City's affordable housing programs ensure that the community is served, regardless of race, ethnicity or income. In addition, the City's long-term commitment to Universal Design features ensures that housing units will be accessible to all persons.

Irvine's Housing Strategy, and IBC planning policies are all part of the local policies that ensure the balanced growth of this community and support the principles of the SCAG 2% Compass Blueprint plan to encourage balanced growth in Southern California. By incorporating County funds for the shuttle system and State affordable housing funds together with local resources, Irvine is an outstanding example of how SCAG's and the State's growth policies can and should be implemented.



City of Irvine
General Plan

Figure N-1
Regional Location

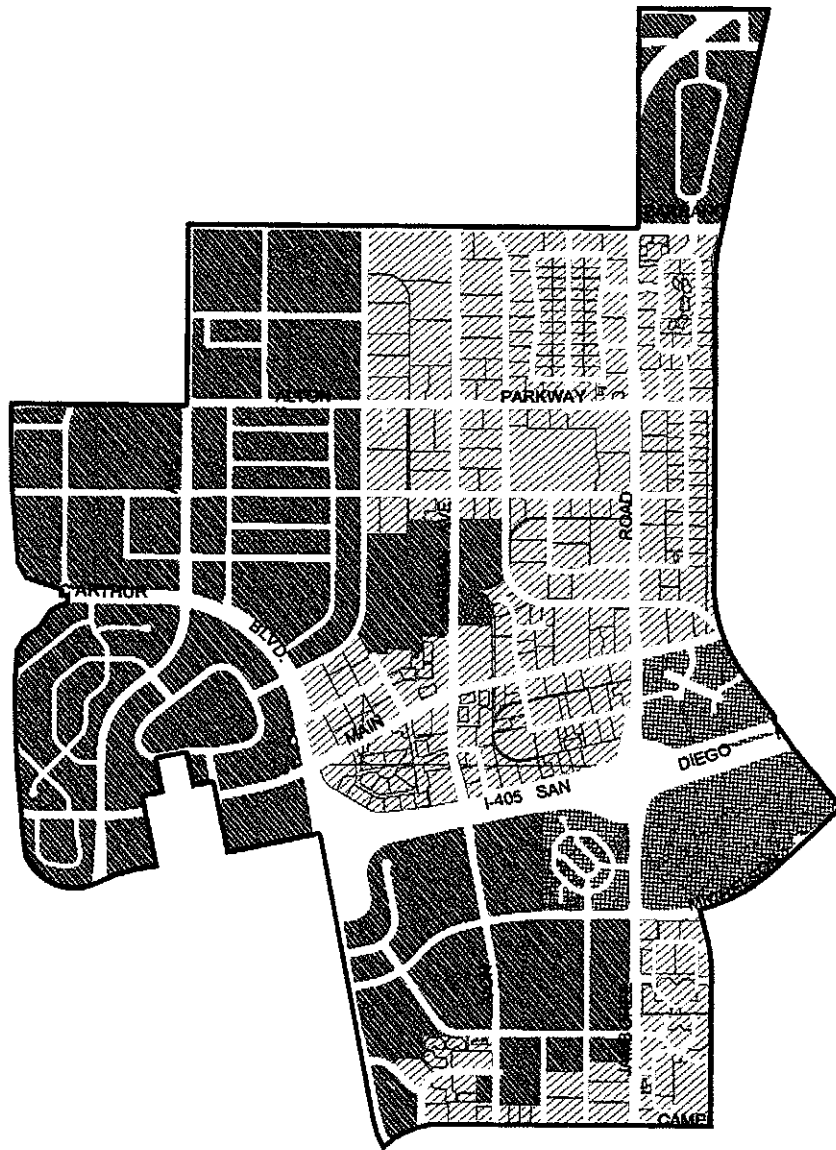


Source: City of Irvine 2009






City of Irvine
General Plan

Figure N-2
IBC Vision
Framework Plan



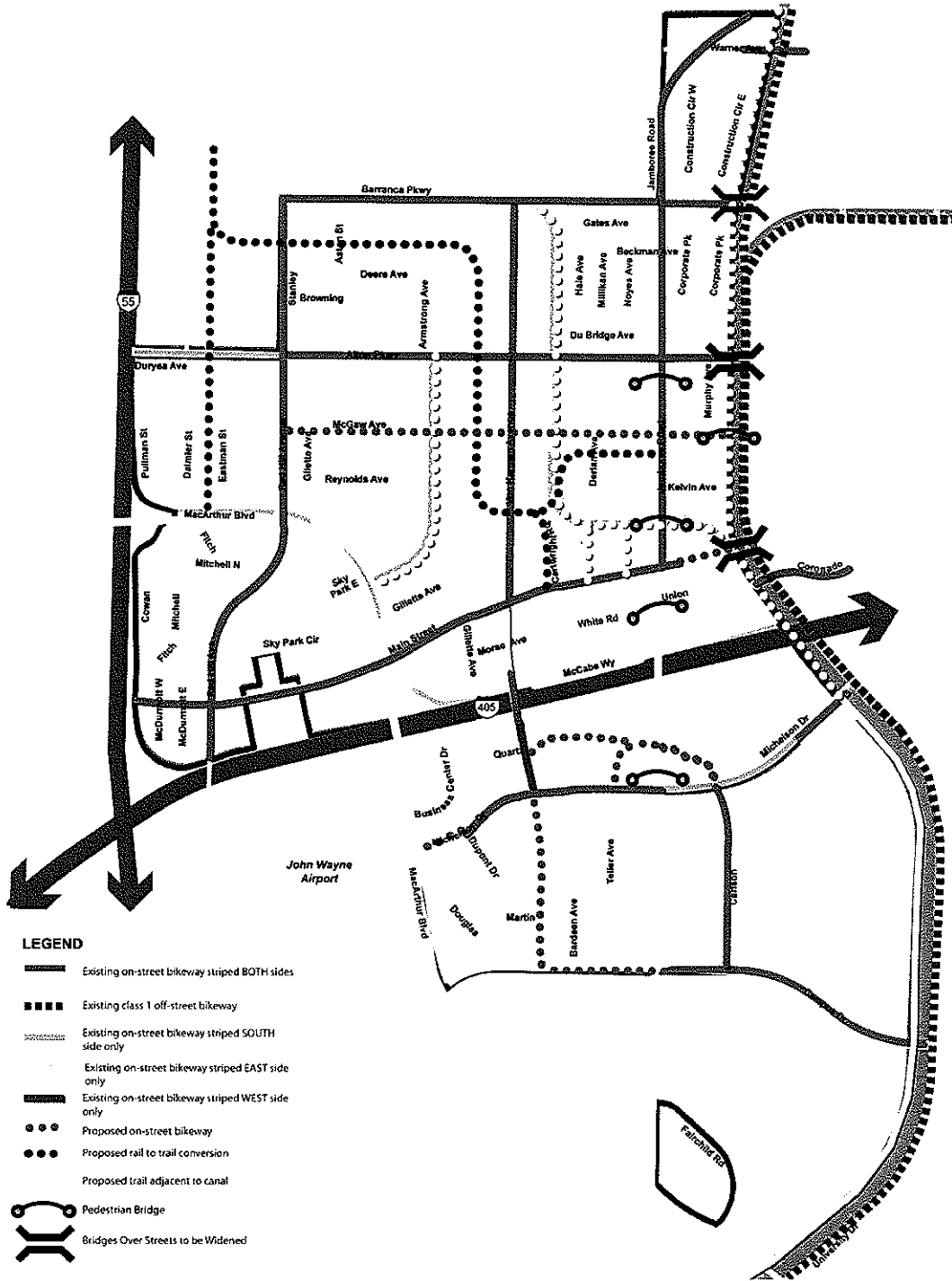
Overlay Districts

-  Business Complex
-  Urban Neighborhood - Height limit 75 feet above ground level
-  Urban Neighborhood - Height limit 20 stories or FAA height limits as determined by Part 77 of FAA regulations, whichever is less.



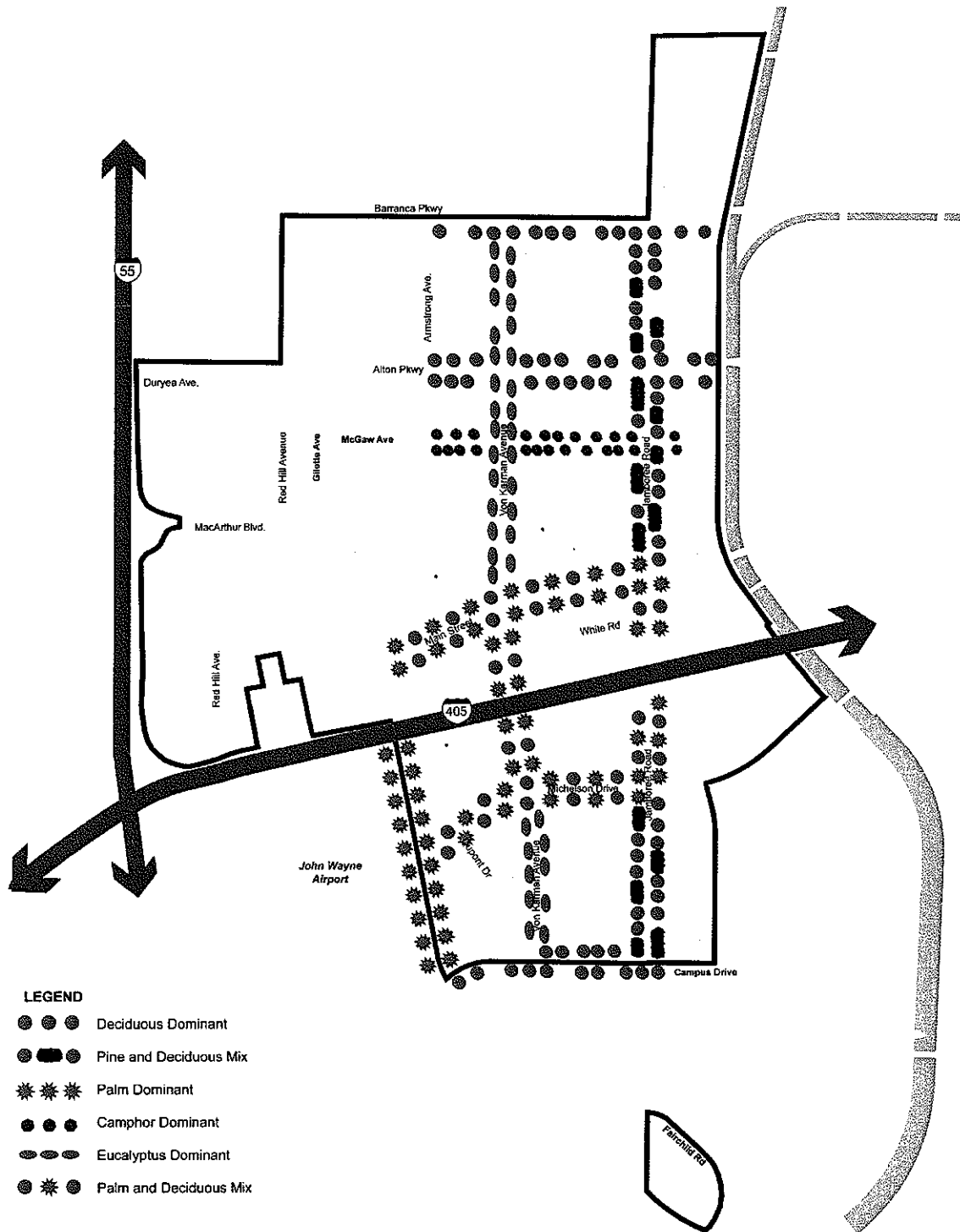
**City of Irvine
General Plan**

**Figure N-3
IBC Residential- Mixed Use
Overlay Zone- Regulating Plan**



City of Irvine
General Plan

Figure N-4
IBC Trail System



Conceptual Landscape Plan
Irvine Business Complex

500 0 500 1,000 Feet
Source: City of Irvine
January 6, 2006



City of Irvine
General Plan

Figure N-5
Conceptual Landscape
Plan for Major Roadways

and community owned facilities. Also includes uses that may be privately owned, but are nonprofit and generally open to the public. Typical uses would be post offices, libraries, museums, places of worship, child care centers, fire facilities, police stations, government buildings, non-profit housing, utilities and other related uses.

Commercial

Definition: A variety of facilities for the sale and purchase of commodities and services.

Neighborhood Commercial. This land use category provides convenience shopping opportunities such as dry cleaners, grocery stores, barber shops, restaurants and similar types of uses for the surrounding planning area.

Community Commercial. This land use category includes uses intended to serve the needs of the community at large, including the industrial and business areas. Automobile service, retail, professional/administrative offices, commercial recreation facilities, service businesses, and similar types of uses are allowed under this designation. Research and development uses are conditionally permissible if compatible with surrounding land uses.

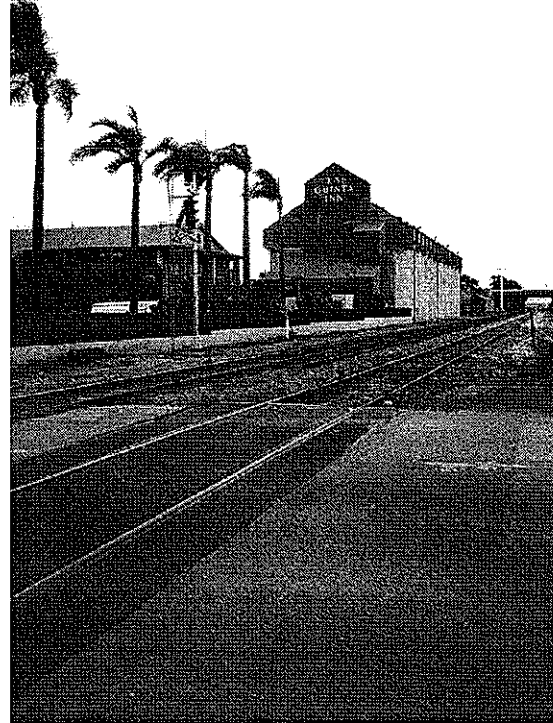
Regional Commercial. This land use category includes uses intended to serve a broad population base. Businesses in this designation provide a wider array of services such as major department stores, specialty shops, professional offices, hotels and motels, and institutional and government uses. This mix of uses, combined with convenient access to many modes of transportation, also can accommodate the inclusion of high-density residential development.

Commercial Recreation. This land use category includes recreational and leisure

time activities such as amusement parks and miniature golf courses.

Old Town Irvine

Industrial



Definition: The manufacture, production, and processing of goods.

Research/Industrial. This land use category includes uses intended for the manufacturing, research and development, storage, and distribution of materials or products; administrative, professional, and business offices associated with manufacturing uses; and employee-oriented retail services.

Urban/Industrial. (Irvine Business Complex) This land use category

provides for offices, industry, and support commercial, mixed with high-density housing, and a variety of activities. Typical uses are professional/medical offices, industrial manufacturing, research and development, support service retail, restaurants, multifamily housing and hotel/motels. The IBC Element of the General Plan outlines the framework for future development of the IBC as a mixed-use community.

Multi-use

Definition: The integration of a variety of land uses and intensities.

Multi-use. This land use category includes uses which are high intensity and urban in character. Typical uses include medium to high density residential, commercial, institutional, and offices.

Orange County Great Park

Definition: The development of regionally significant conservation and open space, parks and recreation, educational facilities, and other public-oriented land uses, integrated with privately developed multi-use, residential, commercial, and industrial properties, at the former MCAS El Toro site.

The Orange County Great Park land use category ensures the development of a Great Park and other cultural and institutional uses at the former MCAS El Toro site. The site will serve as a countywide asset consistent with the intent of the citizens of Orange County, who adopted Measure W, the “Orange County Central Park and Nature Preserve Initiative,” in March 2002. This land use

category includes habitat preservation, conservation and open space, parks and recreation, education, institutional, and other public-oriented land uses as well as opportunities for the private development of agriculture, research and development, commercial, transit-oriented, and residential development. The baseline development intensities for this land use category are shown in Table A-4 Base Plan Maximum Intensity Standards for the Orange County Great Park (Planning Areas 30 and 51). In order to develop at the maximum intensities listed in Table A-5 Overlay Plan Maximum Intensity Standards for the Orange County Great Park (Planning Areas 30 and 51), property-owners must enter into development agreements, which will require the dedication of land and the funding of infrastructure improvements in excess of the City's standard requirements and the commitment to long-term maintenance of public facilities.

Military

Definition: Land under the jurisdiction of the United States.

The Military land use category currently shown on the Land Use Element map shall be retained within the General Plan until such time as the City's planning efforts establish new and compatible land uses for MCAS Tustin.

Conservation and Open Space

Definition: Land or water that is essentially unimproved for the purposes of management and natural resources, production of preservation or enhancement of resources, outdoor recreation, or public health and safety.

TABLE A-1 MAXIMUM INTENSITY STANDARDS BY PLANNING AREA

City of Irvine General Plan		LAND USE ELEMENT																		
Planning Area Number	Estate D.U.	RESIDENTIAL			MULTI-USE ⁽¹⁾⁽¹⁵⁾		INSTITUTIONAL ⁽³⁾		INDUSTRIAL ⁽²⁾⁽²⁾⁽²⁾⁽³⁾			COMMERCIAL ⁽⁴⁾			Maximum Regulatory Dwelling Units ⁽⁶⁾⁽⁶⁾	Maximum Square Feet	ADDITIVE Sq Ft	Maximum Units with Additive Units	Planning Area Number	
		Low 0-5 D.U.	Medium 0-10 D.U.	High 0-25 D.U.	0-40 D.U.	Sqare Feet	0-40 D.U.	Public Facility Sq. Ft.	Educational Facility Sq. Ft.	Urban/Industrial ⁽²⁾ 30 D.U./acre min.	Sqare Feet	Research/Industrial Sq. Ft.	Community Commercial Sq. Ft.	Neighborhood Commercial Sq. Ft.						Regional Commercial Sq. Ft.
1 ⁽¹⁾	0	4,088	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10 ⁽¹⁾	
3 ⁽¹⁾	0	0	5,366	2,315	0	0	4,580	0	0	1,422,000	132,500	0	0	0	0	0	0	0	3 ⁽¹⁾	
4 ⁽¹⁾⁽²⁾⁽³⁾	0	0	2,450	630	0	0	0	0	0	0	156,000	0	0	0	0	0	0	0	4 ⁽¹⁾⁽²⁾	
5	0	750	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	
6	0	1,188	4,453	2,046	68	0	188,174	0	0	500,000	175,000	0	0	0	0	0	0	0	6 ⁽¹⁾	
8	0	0	4,222	4,610	0	0	0	0	0	0	829,400	0	0	0	0	0	0	0	8	
8 ⁽¹⁾	0	0	2,205	248	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	
9 ⁽¹⁾	0	0	2,818	2,590	0	0	99,623	0	0	2,822,921	813,608	0	0	0	0	0	0	0	9 ⁽¹⁾	
10 ⁽²⁾⁽³⁾	0	0	0	0	0	0	194,440	0	0	3,446,031	490,214	0	0	0	0	0	0	0	10 ⁽²⁾⁽³⁾	
11 ⁽²⁾⁽³⁾	0	0	310	2,608	0	0	1,585,263	0	0	3,558,010	955,000	0	0	0	0	0	0	0	11 ⁽²⁾⁽³⁾	
12 ⁽²⁾⁽³⁾	0	0	0	0	0	0	227,322	0	0	0	179,906	0	0	0	0	0	0	0	12 ⁽²⁾⁽³⁾	
13	0	758	1,064	3,410	53	0	321,079	0	0	0	618,801	0	0	0	0	0	0	0	13	
14 ⁽²⁾⁽³⁾	0	0	8,394	452	477	0	0	0	0	0	715,736	0	0	0	0	0	0	0	14 ⁽²⁾⁽³⁾	
15 ⁽²⁾⁽³⁾⁽⁴⁾	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15 ⁽²⁾⁽³⁾⁽⁴⁾	
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	
17 ⁽²⁾	0	0	2,553	0	0	0	0	0	0	1,066,006	150,000	0	0	0	0	0	0	0	17 ⁽²⁾	
18 ⁽²⁾	0	175	575	0	0	0	9,274	0	0	0	0	0	0	0	0	0	0	0	18 ⁽²⁾	
19 ⁽²⁾⁽³⁾	0	354	1,717	1,735	0	0	36,936	0	0	0	96,890	0	0	0	0	0	0	0	19 ⁽²⁾⁽³⁾	
20 ⁽²⁾⁽³⁾	0	0	77	722	0	0	30,000	0	0	0	173,542	0	0	0	0	0	0	0	20 ⁽²⁾⁽³⁾	
21 ⁽²⁾⁽³⁾	400	3,121	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21 ⁽²⁾⁽³⁾	
22 ⁽³⁾	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22 ⁽³⁾	
23	0	0	0	0	0	0	112,230	0	0	0	0	0	0	0	0	0	0	0	23	
24 ⁽²⁾⁽³⁾	0	0	0	2,757	0	0	25,850	0	0	0	68,953	0	0	0	0	0	0	0	24 ⁽²⁾⁽³⁾	
25	0	0	975	1,180	0	0	210,746	0	0	1,436,170	0	0	0	0	0	0	0	0	25	
27 ⁽²⁾	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27 ⁽²⁾	
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28	
29	0	0	0	0	0	0	53,500	0	0	1,600,000	102,000	0	0	0	0	0	0	0	29	
30 ⁽²⁾⁽³⁾⁽⁴⁾	0	0	0	0	0	0	350,370	0	0	6,888,385	147,359	0	0	0	0	0	0	0	30 ⁽²⁾⁽³⁾⁽⁴⁾	
31	0	0	0	0	0	0	0	0	0	4,355,127	1,398,947	0	0	0	0	0	0	0	31	
32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32	
33 ⁽²⁾⁽³⁾	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33 ⁽²⁾⁽³⁾	
34	0	0	0	0	0	0	62,101	0	0	4,765,300	963,930	0	0	0	0	0	0	0	34	
35	0	0	0	0	0	0	0	0	0	12,815,738	1,252,654	0	0	0	0	0	0	0	35	
36 ⁽²⁾⁽³⁾	0	0	1,213	2,601	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36 ⁽²⁾⁽³⁾	
37	0	0	1,595	2,323	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37	
39	0	0	0	0	0	0	0	0	0	1,662,352	205,000	0	0	0	0	0	0	0	39	
40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40	
50 ⁽²⁾⁽³⁾	0	0	0	0	0	0	9,810,293	0	0	0	0	0	0	0	0	0	0	0	50 ⁽²⁾⁽³⁾	
51 ⁽¹⁾⁽²⁾⁽³⁾⁽⁴⁾	0	1,100	0	0	0	0	1,254,500	0	0	1,050,000	225,000	0	0	0	0	0	0	0	51 ⁽¹⁾⁽²⁾⁽³⁾⁽⁴⁾	
Unallocated	0	0	0	0	0	0	0	0	0	0	68,000	0	0	0	0	0	0	0	Unallocated	
TOTAL	400	11,534	44,757	34,910	1,954	0	4,577,708	14,533,204	9,401	48,787,662	47,331,032	9,408,039	1,268,200	10,756,980	3,271	905,500	141,586,295	1,053	1,355,359	127,326

TABLE A-1 MAXIMUM INTENSITY STANDARDS BY PLANNING AREA- DETACHED LANDS

Planning Area Number	Estate D.U.	RESIDENTIAL			MULTI-USE ⁽¹⁾		INSTITUTIONAL ⁽³⁾		INDUSTRIAL ⁽⁴⁾			COMMERCIAL ⁽⁵⁾			Maximum Dwelling Units ⁽⁶⁾⁽⁶⁾	Maximum Square Feet	MILITARY 0-10 D.U.	Maximum Dwelling Units ⁽⁶⁾⁽⁶⁾	Maximum Square Feet	Planning Area Number
		Low 0-5 D.U.	Medium 0-10 D.U.	High 0-25 D.U.	0-40 D.U.	Sqare Feet	0-40 D.U.	Public Facility Sq. Ft.	Educational Facility Sq. Ft.	Urban/Industrial ⁽²⁾ 0-40 D.U.	Sqare Feet	Research/Industrial Sq. Ft.	Community Commercial Sq. Ft.	Neighborhood Commercial Sq. Ft.						
26 ⁽²⁾	0	0	420	1,580	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,800	26 ⁽²⁾
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,800	27
TOTAL	0	0	420	1,580	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,800	26⁽²⁾



**City of Irvine
General Plan**

Figure B-4

**TRAILS
NETWORK**

LEGEND

City Sphere
of Influence

Class I (Off-Street) Trails

Class II (On-Street) Trails
are on all street shown on
this exhibit except for Barranca
between Jamboree and Redhill,
along Mac Arthur between Jamboree
Road, northwest to city limits, and
along the west side of Jamboree Road
between Michelson Drive and the
San Diego (4-405) Freeway.

Riding and Hiking Trails

See Figure N-4 for planned trail network in
Irvine Business Complex.

NOTE: The Trail Network Diagram is illustrative
only and not indicative of precise alignments

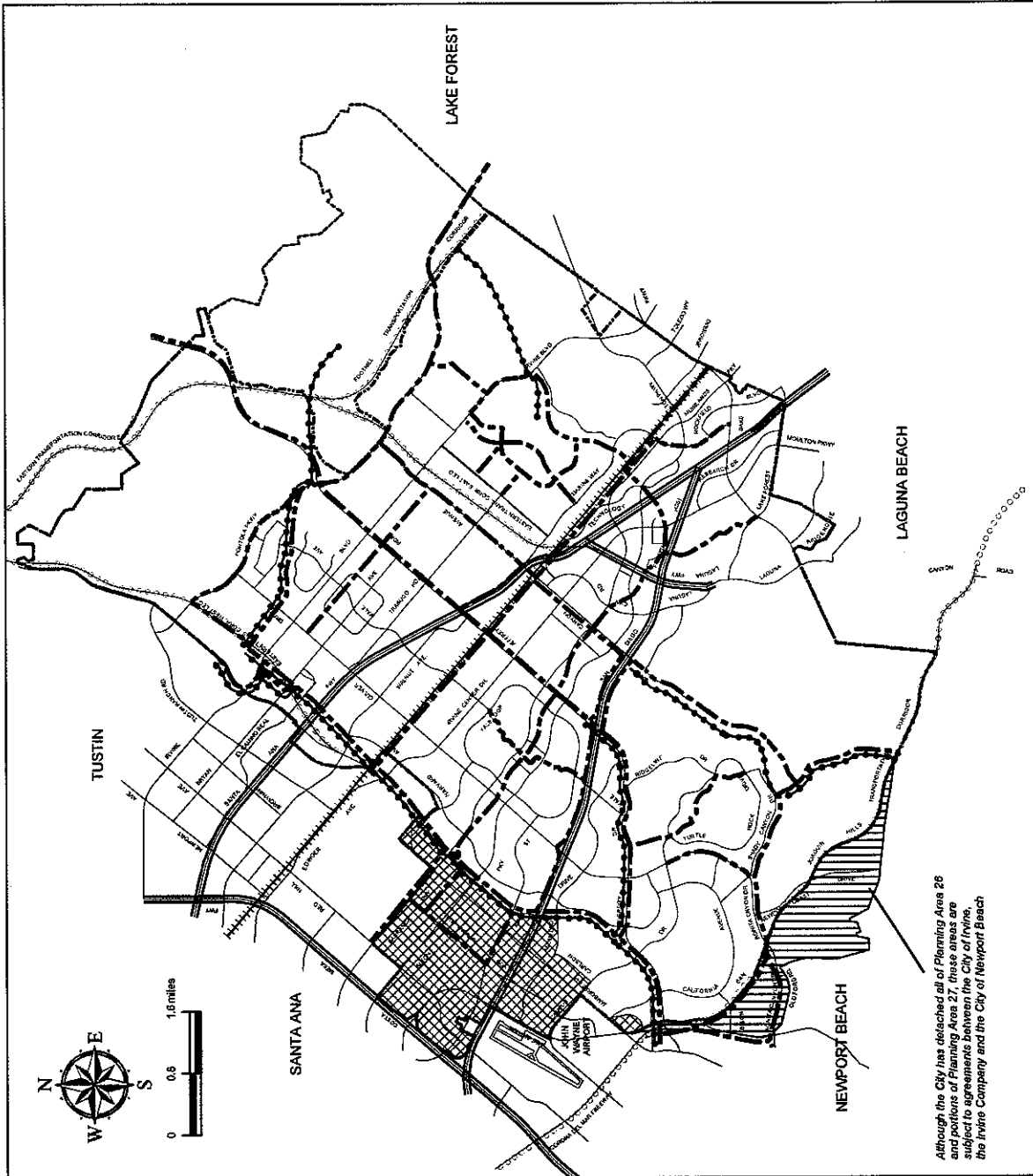


Table K-1

Parks and Recreation Facility Descriptions

PARK FACILITIES: There are five types of park facilities provided in Irvine. Each type is described below:

- **Regional Open Space:** Regional open space areas are lands primarily acquired through the dedications agreed to under the Implementation Actions Program of the Conservation and Open Space Element. Once dedicated to the city the land becomes permanent public open space area. These areas vary in size and location throughout the City and may have full or limited public access depending on the environmental sensitivity.
- **Regional Parks:** Regional parks are owned by the County of Orange and managed by the Harbors, Beaches and Parks Department. There is no mandated dedication standard or park size required. Regional parks can be active or passive parks.
- **Community Parks:** These parks are generally a minimum of 20 acres in size (excluding greenbelts, trails and school grounds) and able to serve a population of 10,000 persons. An exception to this standard exists in Lower Peters Canyon (Planning Area 4) where community parks may be a minimum of 10 acres in size (excluding greenbelts and school grounds). Community parks are owned and maintained by the City. Colonel Bill Barber Marine Corps Memorial Park, Heritage Community Park, Harvard Community Park and Turtle Rock Community Park are examples of community parks in Irvine. Community parks are developed with facilities that are Citywide in scope and are intended to serve more than one residential village.
- **Public Neighborhood Parks:** These parks are generally a minimum of 4 acres in size (excluding greenbelts, trails and school grounds) and able to serve a minimum population of 2,500 persons. Public parks are owned and maintained by the city. Orchard Park, San Carlo Park and Chaparral Park are examples of public neighborhood parks.
- **Private Neighborhood Parks:** These parks are a minimum of one third of an acre in size and able to serve the immediate development or specific planned community in which they are located. Private parks are owned and maintained by homeowner associations or maintenance district. They are generally minimum one third acre in size for developments with densities under 30 dwelling units per acre and minimum 6,000 square feet in size for developments with densities over 31 dwelling units per acre, except for developments in Planning Area 36 where the parks will comply with provisions contained in the "IBC Residential Mixed Use Vision and Overlay Zoning Code."

*Appendix C. Ordinances Adopting
Amendments to the Zoning and
Municipal Codes*



Appendices

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CITY COUNCIL ORDINANCE NO. 10-07

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF IRVINE APPROVING ZONE CHANGE 00497861-PZC TO ADD CHAPTER 5-8 IRVINE BUSINESS COMPLEX RESIDENTIAL MIXED USE OVERLAY ZONING CODE; UPDATE REFERENCES TO EXISTING INTENSITY LIMITS AND TRAFFIC MITIGATION IN CHAPTER 9-36; TO INCREASE THE RESIDENTIAL UNIT CAP TO 15,000 UNITS, WITH A CORRESPONDING REDUCTION OF NON-RESIDENTIAL INTENSITY; TO REPLACE THE CURRENT 52 UNIT/ACRE DENSITY CAP WITH A 30 UNIT/ACRE DENSITY MINIMUM AND AMEND OTHER SECTIONS OF THE ZONING CODE TO REFLECT NEW REFERENCES TO VISION PLAN AND OVERLAY ZONING CODE; FILED BY THE CITY OF IRVINE

WHEREAS, The City of Irvine has proposed Zone Change 00497861-PZC requesting the following:

- Add Chapter 5-8 establishing the IBC Residential/Mixed-Use Overlay Zone (Exhibit A);
- Amend Chapter 9-36 to update IBC provisions related to the Vision Plan project and change zoning of properties at 2810 Kelvin; 2301 Martin Street; and 2851 Alton Parkway from 5.3 IBC Residential to 5.1 IBC Multi-Use (Exhibit B);
- Amend Chapter 1-2 Definitions to add definitions related to the Vision Plan project (Exhibit C);
- Amend Chapter 3-27 Setbacks- to update IBC provisions related to the Vision Plan project (Exhibit D);
- Amend Chapter 3-37 IBC Zoning Standards to update IBC provisions related to the Vision Plan project (Exhibit E);
- Amend Chapter 2-17-3 Master Plan Application Requirements to update IBC provisions related to the Vision Plan project (Exhibit F);
- Amend Section 3-3-1 Land Use Matrix to update IBC provisions related to the Vision Plan project (Exhibit G);
- Amend Section 2-28-5 Sexually Oriented Business Findings to update definition of IBC "trips" consistent with the Vision Plan project (Exhibit H);

- Amend Section. 4-3-4 Automobile Parking Matrix to adjust parking requirements for private neighborhood recreational amenities (Appendix I).

WHEREAS, the City of Irvine has an adopted Zoning Code; and

WHEREAS, Zone Change 00497861-PZC is considered a part of the overall Vision Plan project for the IBC (Vision Plan Project) pursuant to the California Environmental Quality Act (CEQA); and

WHEREAS, the City Council has considered information presented by the applicant, the Community Development Department, and other interested parties at public meetings and hearings held on July 11, 2006, July 25, 2006, February 27, 2007, October 23, 2007, February 26, 2008, April 27, 2010, and July 13, 2010.

NOW, THEREFORE, the City Council of the City of Irvine DOES HEREBY ORDAIN as follows:

SECTION 1. That pursuant to Section 15205 of the State CEQA Guidelines, the City Council reviewed and considered the Final Environmental Impact Report (SCH# 2007011024) (FEIR) in making its recommendation on the Zone Change and the Vision Plan Project.

SECTION 2. Most of the potentially significant environmental impacts of the Vision Plan Project identified in the FEIR have been determined to be less than significant or mitigated to a level that is considered less than significant or changes have been required or incorporated into the Vision Plan Project which avoid or substantially lessen the significant environmental effects.

SECTION 3. Certain impacts of the Vision Plan Project to Air Quality, Noise, Land Use and Traffic have been identified in the FEIR as significant and unavoidable. The specific impacts are summarized in Exhibit A to Resolution No 10-79. Based upon specific economic, social, technical or other considerations, the City Council finds these effects acceptable and adopts the required facts and findings and Statement of Overriding Considerations (attached as Exhibit B to Resolution No. 10-79).

SECTION 4. Although the FEIR identifies certain significant environmental effects that would result if the Vision Plan Project is approved, most environmental effects can feasibly be avoided or mitigated. The applicable mitigation measures, included within the FEIR as Table 1-2 and incorporated herein as Exhibit C to Resolution No. 10-79, have been incorporated into the Vision Plan Project or identified as requirements of the Vision Plan Project.

SECTION 5. In accordance with Section 8 of the City of Irvine CEQA Procedures, the Planning Commission recommends that the City Council find that the FEIR has been completed in compliance with CEQA and the State CEQA Guidelines, and the City's CEQA Procedures. The Planning Commission also recommends that the City Council, having final approval authority over the project, certify as complete and adequate the

Final EIR.

SECTION 6. Pursuant to Fish and Game Code Section 7.11.4 (C), all required Fish and Game filing fees will be paid subsequent to certification of the FEIR for the Vision Plan Project.

SECTION 7. The findings required by Section 2-38-7 of the City of Irvine Zoning Code for approval of a zone change have been made as follows:

- A. The proposed zone change is consistent with the City of Irvine General Plan.

The zone change is consistent with the goals and objectives of the General Plan, including the new IBC Element of the General Plan. The code provisions implement the General Plan goals and objectives for protection of existing uses and ensure land use compatibility.

- B. The proposed zone change is consistent with any applicable concept plan.

The implementing zoning for this area is consistent with the General Plan and there is no existing concept plan applicable to the IBC. The Zone Change and RDEIR have adequately addressed the Concept Plan criteria. As a result, the Director of Community Development approved a concept plan waiver in accordance with Section 2-8-3 of the Zoning Code. The proposed zone change will allow development of the site consistent with the established General Plan categories. In addition, any issues normally addressed through the concept plan process are addressed within the RDEIR and Zoning Code Sections 5-8 and 9-36.

- C. The proposed zone change meets all the requirements set forth within Division 8 for the dedication of permanent open space through a specified phased implementation program for affected planning areas and zoning districts.

The project is not subject to this provision of the code.

- D. The proposed zone change is in the best interest of the public health, safety and welfare of the community.

The zone change is consistent with all applicable provisions of the Zoning Code and is determined to be in the best interests of the health, safety and welfare of the community. The impacts of the zone change application have been analyzed in the RDEIR. As a result of the environmental analysis, measures such as existing plans, programs, policies (PPP), project design features (PDF), and mitigation measures (MM) have been developed to ensure that all environmental impacts, except four (Air Quality, Noise, Traffic and potentially Land Use), will be reduced to a level of insignificance, including any potential impacts to the public health, safety and welfare. A Statement of Overriding Considerations has been proposed to address those impacts that cannot feasibly be reduced to a level of insignificance.

- E. Based upon information available at the time of approval, adequate sewer and water lines, utilities, sewage treatment capacity, drainage facilities, police protection, fire protection/emergency medical care, vehicular circulation and school facilities will be available to serve the area affected by the proposed zone change when development occurs.

The project is located in a developed area already served by exiting facilities and services. In addition, the mitigation measures and project design features in the RDEIR and the requirements of subsequent discretionary approvals (such as the tentative parcel map, master plans and conditional use permits) will ensure that adequate utilities, services, and facilities are provided in conjunction with the development of the project. Where adequate improvements do not exist, the applicant will be required to provide such improvements to the infrastructure when development occurs.

- F. If the proposed zone change affects land located within the coastal zone, the proposed zone change will comply with the provisions of the land use plan of the certified local coastal program.

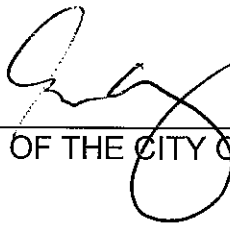
A portion of the IBC is located within the coastal zone, but project does not affect this area.

SECTION 9. Based on the above findings, The City of Irvine DOES HEREBY APPROVE Zone Change 00497861-PZC amending the City's Zoning Code as follows:

- Add Chapter 5-8 establishing the IBC Residential/Mixed use Overlay Zone (Exhibit A);
- Amend Chapter 9-36 to update IBC provisions related to the Vision Plan project and change zoning of properties at 2810 Kelvin; 2301 Martin Street; and 2851 Alton Parkway from 5.3 IBC Residential to 5.1 IBC Multi-Use (Exhibit B);
- Amend Chapter 1-2 Definitions to add definitions related to the Vision Plan project (Exhibit C);
- Amend Chapter 3-27 Setbacks- to update IBC provisions related to the Vision Plan project (Exhibit D);
- Amend Chapter 3-37 IBC Zoning Standards to update IBC provisions related to the Vision Plan project (Exhibit E);
- Amend Chapter 2-17-3 Master Plan Application Requirements to update IBC provisions related to the Vision Plan project (Exhibit F);
- Amend Section 3-3-1 Land Use Matrix to update IBC provisions related to the Vision Plan project (Exhibit G);

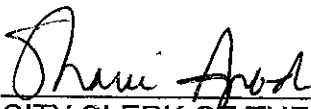
- Amend Section 2-28-5 Sexually Oriented Business Findings to update definition of IBC "trips" consistent with the Vision Plan project (Exhibit H);
- Amend Section. 4-3-4 Automobile Parking Matrix to adjust parking requirements for private neighborhood recreational amenities (Appendix I).

PASSED AND ADOPTED by the City Council of the City of Irvine at an adjourned regular meeting held on the 27th day of July 2010, by the following roll call vote:



 MAYOR OF THE CITY OF IRVINE

ATTEST:



 CITY CLERK OF THE CITY OF IRVINE

STATE OF CALIFORNIA)
 COUNTY OF ORANGE) SS
 CITY OF IRVINE)

I, SHARIE APODACA, City Clerk of the City of Irvine, HEREBY DO CERTIFY that the foregoing Ordinance was introduced for first reading on July 13th, 2010, and duly adopted at an adjourned regular meeting of the City Council of the City of Irvine held on the 27th day of July, 2010, by the following vote:

AYES: 5 COUNCILMEMBERS: Agran, Choi, Krom, Shea and Kang
 NOES: 0 COUNCILMEMBERS: None
 ABSENT: 0 COUNCILMEMBERS: None



 CITY CLERK OF THE CITY OF IRVINE

CHAPTER 5-8. IRVINE BUSINESS COMPLEX RESIDENTIAL MIXED-USE OVERLAY DISTRICT

- Sec. 5-8-1. Purpose.
- Sec. 5-8-2. Applicability.
- Sec. 5-8-3. Regulating Plan and Districts.
- Sec. 5-8-4. Special Development Requirements.
- Sec. 5-8-5 Urban Neighborhood (UN) Standards.
- Sec. 5-8-6. Business Complex (BC).
- Sec 5-8-7. IBC Infrastructure Improvement Fee Program

5-8-1. Purpose.

The Irvine Business Complex Residential and Mixed-Use (IBCRMU) Overlay District establishes districts that are intended to provide for the orderly transition of certain portions of the IBC from exclusively industrial and/or office areas into pedestrian-oriented districts that accommodate a mixture of retail, office, and residential uses, while protecting existing businesses.

This Overlay District implements the following goals and objectives as defined in the IBC Element of the General Plan and corresponding IBC Design Criteria:

IBC Vision Plan Goals:

- A. Protect the existing job base;
- B. Develop mixed-use cores;
- C. Provide transportation, pedestrian, and visual connectivity;
- D. Create usable outdoor areas; and
- E. Develop, safe well-designed neighborhoods.

These goals are further implemented through the following objectives:

- A. Create a walkable urban environment that encourages on-street pedestrian activity and reduces dependence on the automobile for everyday needs.
- B. Develop an urban framework to ensure the appearance, location, and scale of buildings compliment the character of the area in which they are located.
- C. Ensure compatibility between existing and proposed businesses within the IBC.
- D. Provide a mix of building types allowing variety and choice in urban living.
- E. Provide a variety of outdoor areas for both passive and active recreation as an amenity for residents and employees.
- F. Establish sustainable new urban development within the IBCRMU Overlay District.

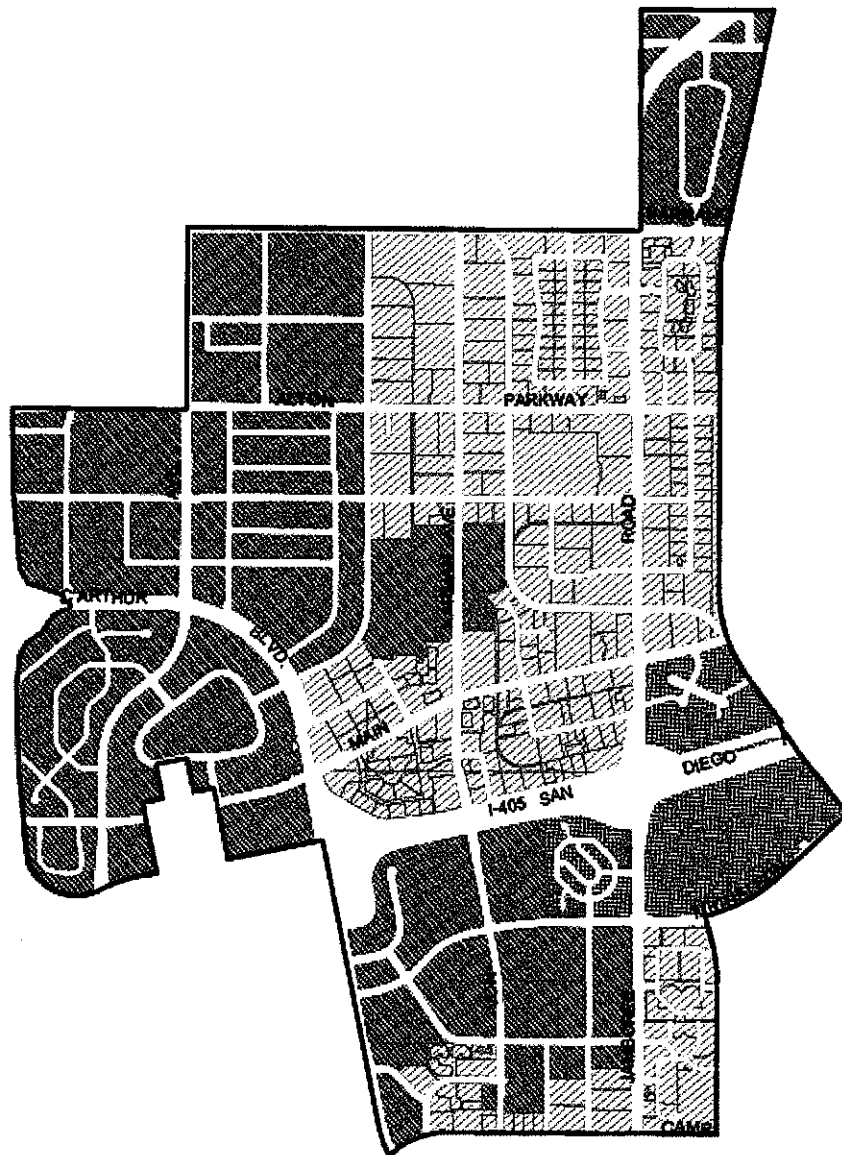
5-8-2. Applicability.

All proposed residential or residential mixed-use development/redevelopment, subdivisions, and new residential land uses within the IBCRMU Overlay shall comply with all applicable requirements of this Chapter, including the provisions outlined below:

- A. Regulating Plan.** The Regulating Plan (Section 5-8-3) defines and identifies the three IBCRMU Overlay Districts as follows: Urban Neighborhood (UN), Multiple Use (MU), and Business Complex (BC).
- B. Additional Applicable Requirements.** All development pursuant to this Overlay Zone is subject to the development intensity maximums established in Section 9-36 of the Zoning Code.
- C. Administrative Relief.** Requests for administrative relief shall be considered by the Planning Commission in conjunction with the associated discretionary review application and shall be subject to the requirements of Chapter 2-22 of the Zoning Code. In order for the Planning Commission to approve administrative relief from the overlay zone requirements, except where noted in this section, the approval body shall find that:
 - 1. The proposed project meets the intent of the IBCRMU Overlay Zone and Vision Plan.
 - 2. The request will not negatively impact the appearance of the project site or the surrounding properties.
 - 3. The proposed project will not adversely impact operations of adjacent non-residential uses.

5-8-3. Regulating Plan and Districts.

- A. Purpose.** This Section establishes the districts applied to property within the IBCRMU Overlay by the Regulating Plan. The Regulating Plan divides the area within the IBCRMU Overlay into separate districts. The districts allocate land uses and suggest architectural types as well as provide guidelines for building placement and height.
- B. Zones Established.** The following districts are established for the purposes of the IBCRMU Overlay District, and are applied to property within the Overlay Zone boundary as shown on the Regulating Plan, as provided in Section 5-8-5 and 5-8-6. Existing Current underlying zoning designations in Chapter 9-36 remain unchanged except as noted on the zoning map in Chapter 9-36-2.



Overlay Districts




-  Business Complex
-  Urban Neighborhood - Height limit 75 feet above ground level
-  Urban Neighborhood - Height limit 20 stories or FAA height limits as determined by Part 77 of FAA regulations, whichever is less.



Figure 1- IBC Residential Mixed Use Overlay Zone Regulating Plan

5-8-4. Special Development Requirements.

A. **Compatibility Standards.** The following standards are intended to ensure the compatibility of uses within a residential or mixed-use project.

1. Development Adjacent to San Diego Creek or San Joaquin Marsh

- a. For buildings four or more stories in height located within 100 feet of the San Joaquin Marsh or San Diego Creek, the project applicant shall demonstrate that architectural plans do not specify the use of highly reflective glass windows, and utilize angles that are not highly reflective in order to reduce light and glare impacts on the marsh and creek environment, and to reduce the incidence of bird collisions, to the satisfaction of the Community Development Director.
- b. Landscape plans for areas located within 100 feet of the San Joaquin Marsh or San Diego Creek shall not include exotic plant species that may be invasive to native habitats. Exotic plant species not to be used include those species listed on Lists A and B of the California Invasive Plant Council's (Cal-IPC) list of "Exotic Pest Plants of Greatest Ecological Concern in California as of October 1999." Or subsequent documentation.

2. Compatibility with Surrounding Uses. The IBC mixed use environment is an urbanized area, therefore land use compatibility issues are expected to occur. Therefore, applicants for new residential and/or residential mixed use development shall submit data as determined by the Director of Community Development for the City to evaluate compatibility with surrounding uses with respect to issues including, but limited to the following:

- a. Noise
- b. Odors
- c. Truck traffic and deliveries
- d. Hazardous Materials handling/storage
- e. Air emissions
- f. Soil/Groundwater contamination
- g. John Wayne Airport compatibility

3. Residential Disclosures: All discretionary applications for residential or residential mixed use shall include a condition of approval for disclosure to residents clearly outlining the issues associated with living in a mixed-use environment. The language for this disclosure shall be as specified by the Community Development Director. Copies of each signed disclosure shall be made available for review upon written request by the City. Such disclosure shall also include additional wording regarding proximity to John Wayne Airport, pursuant to Section 11010 of the Business and Professions Code, as follows:

Notice of Airport in Vicinity

This property is presently located in the vicinity of an airport, within what is known as an airport influence area. For that reason, the property may be subject to some of the

annoyances or inconveniences associated with proximity to airport operations (for example: noise, vibration, or odors). Individual sensitivities to those annoyances can vary from person to person. You may wish to consider what airport annoyances, if any, are associated with the property before you complete your purchase and determine whether they are acceptable to you.

4. Air Quality Standards

For residential and residential mixed use projects, the following air quality standards are required, or as otherwise mandated by state regulations:

a. Applicants for new residential/mixed-use developments in the Irvine Business Complex shall require that the construction contractor to utilize off-road construction equipment that conforms to Tier 3 of the United States Environmental Protection Agency, or higher emissions standards. The construction contractor shall be made aware of this requirement prior to the start of construction activities. Use of Tier 3 or higher off-road construction equipment shall be stated on all grading plans. The construction contractor shall maintain a list of all operating equipment in use on the project site. The construction equipment list shall state the makes, models, and numbers of construction equipment on-site.

b. Applicants for new residential/mixed-use developments in the Irvine Business Complex shall require that the construction contractor to properly service and maintain construction equipment in accordance with the manufacturer's recommendations. Non-essential idling of construction equipment shall be restricted to five minutes or less in compliance with California Air Resources Board's Rule 2449.

c. Applicants for new developments in the Irvine Business Complex shall require that the construction contractor prepare a dust control plan and implement the following measures during ground-disturbing activities in addition to the existing requirements for fugitive dust control under South Coast Air Quality Management District Rule 403 to further reduce PM10 and PM2.5 emissions. To assure compliance, the City shall verify compliance that these measures have been implemented during normal construction site inspections:

- During all grading activities, the construction contractor shall reestablish ground cover on the construction site through seeding and watering.
- During all construction activities, the construction contractor shall sweep streets with Rule 1186 compliant PM₁₀-efficient vacuum units on a daily basis if silt is carried over to adjacent public thoroughfares or occurs as a result of hauling.
- During all construction activities, the construction contractor shall maintain a minimum 24-inch freeboard on trucks hauling dirt, sand, soil, or other loose materials and tarp materials with a fabric cover or other suitable means.
- During all construction activities, the construction contractor shall water exposed ground surfaces and disturbed areas a minimum of every three hours on the construction site and a minimum of three times per day.
- During all construction activities, the construction contractor shall limit on-site vehicle speeds on unpaved roads to no more than 15 miles per hour.
- The construction contractor shall apply chemical soil stabilizers to reduce wind erosion.

- d. Prior to the issuance of building permits, plans shall indicate that coatings and solvents with a volatile organic compound (VOC) content lower than required under Rule 1113 (i.e., Super Compliant Paints) shall be used. All architectural coatings shall be applied either by (1) using a high-volume, low-pressure (HVLP) spray method operated at an air pressure between 0.1 and 10 pounds per square inch gauge (psig) to achieve a 65 percent application efficiency; or (2) manual application using a paintbrush, hand-roller, trowel, spatula, dauber, rag, or sponge, to achieve a 100 percent applicant efficiency. The construction contractor shall also use precoated/natural colored building materials, where feasible.
- e. Applicants for new residential developments in the Irvine Business Complex within 500 feet of Interstate 405 shall be required to install high efficiency Minimum Efficiency Reporting Value (MERV) filters of MERV 14 or better in the intake of residential ventilation systems. Heating, air conditioning and ventilation (HVAC) systems shall be installed with a fan unit power designed to force air through the MERV 14 filter. To ensure long-term maintenance and replacement of the MERV 14 filters in the individual units, the following shall occur:
- i) The developer, sale, and/or rental representative shall provide notification to all affected tenants/residents of the potential health risk from I-405 for all affected units, per item 7 of this section.
 - ii) For rental units within 500 feet of the I-405, the owner/property manager shall maintain and replace MERV 14 filters in accordance with the manufacturer's recommendations. The property owner shall inform renters of increased risk of exposure to diesel particulates from I-405 or SR-55 when windows are open.
 - iii) For residential owned units within 500 feet of I-405, the Homeowner's Association (HOA) shall incorporate requirements for long-term maintenance in the Covenant Conditions and Restrictions and inform homeowners of their responsibility to maintain the MERV 14 filter in accordance with the manufacturer's recommendations. The HOA shall inform homeowner's of increased risk of exposure to diesel particulates from I-405 when windows are open.
- f. For all residential or residential mixed-use projects located within the distances to industrial uses as outlined below the Project Applicant shall submit a health risk assessment (HRA) prepared in accordance with policies and procedures of the state Office of Environmental Health Hazard Assessment (OEHHA) and the South Coast Air Quality Management District (SCAQMD) to the Community Development Director prior to approval of any future discretionary residential or residential mixed use project. If the HRA shows that the incremental cancer risk exceeds one in one-hundred thousand ($1.0E-05$), or the appropriate noncancer hazard index exceeds 1.0, the applicant will be required to identify and demonstrate that Best Available Control Technologies for Toxics (T-BACTs) are capable of reducing potential cancer and noncancer risks to an acceptable level, including appropriate enforcement mechanisms. T-BACTs may include, but are not limited to, scrubbers at the industrial facility, or installation of Minimum Efficiency Reporting Value (MERV) filters rated at 14 or better at all residential units.

- 1,000 feet from the truck bays of an existing distribution center that accommodates more than 100 trucks per day, more than 40 trucks with operating transport refrigeration units, or where transport refrigeration unit operations exceed 300 hours per week.
 - 1,000 feet from an existing chrome plating facility, or existing facility using Hexavalent Chromium.
 - 300 feet from a dry cleaning facility using perchloroethylene using one machine and 500 feet from a dry cleaning facility using perchloroethylene using two machines.
 - 50 feet from gas pumps within a gas-dispensing facility and 300 feet from gas pumps within a gasoline dispensing facility with a throughput of 3.6 million gallons per year or greater.
- g. For all discretionary residential or residential mixed-use projects located within 1,000 feet of an industrial facility which emits toxic air contaminants (TACs), the Project Applicant shall submit a health risk assessment (HRA) prepared in accordance with policies and procedures of the state Office of Environmental Health Hazard Assessment (OEHHA) and the South Coast Air Quality Management District (SCAQMD) to the Community Development Director prior to approval of any discretionary residential or residential mixed-use projects. If the HRA shows that the incremental cancer risk exceeds one in one-hundred thousand (1.0E-05), or the appropriate noncancer hazard index exceeds 1.0, the applicant will be required to identify and demonstrate that Best Available Control Technologies for Toxics (T-BACTs) are capable of reducing potential cancer and noncancer risks to an acceptable level, including appropriate enforcement mechanisms. T-BACTs may include, but are not limited to, scrubbers at the industrial facility, or installation of Minimum Efficiency Reporting Value (MERV) filters rated at 14 or better at all residential units. "
- h. For all residential projects located within 1,000 feet of an industrial facility that emits substantial odors, which includes but is not limited to:
- wastewater treatment plants
 - composting, greenwaste, or recycling facilities
 - fiberglass manufacturing facilities
 - painting/coating operations
 - coffee roasters
 - food processing facilities,

The Project Applicant shall submit an odor assessment to the Community Development Director prior to approval of any future discretionary action that verifies that the South Coast Air Quality Management District (SCAQMD) has not received three or more verified odor complaints. If the Odor Assessment identifies that the facility has received three such complaints, the applicant will be required to identify and demonstrate that Best Available Control Technologies for Toxics (T-BACTs) are capable of reducing potential odors to an acceptable level, including appropriate enforcement mechanisms. T-BACTs may include, but are not limited to, scrubbers at the industrial facility, or installation of Minimum Efficiency Reporting Value (MERV) filters rated at 14 or better at all residential units.

5. Noise Standards

- a. Prior to issuance of grading permits, the project applicant shall incorporate the following measures as a note on the grading plan cover sheet to ensure that the greatest distance between noise sources and sensitive receptors during construction activities has been achieved.
 - Construction equipment, fixed or mobile, shall be equipped with properly operating and maintained noise mufflers consistent with manufacturer's standards.
 - Construction staging areas shall be located away from off-site sensitive uses during the later phases of project development.
 - The project contractor shall place all stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the project site, whenever feasible.
- b. Individual projects that involve vibration-intensive construction activities, such as pile drivers, jack hammers, and vibratory rollers, occurring near sensitive-receptors shall be evaluated for potential vibration impacts. If construction-related vibration is determined to exceed the Federal Transit Administration vibration-annoyance criteria of 78 VdB during the daytime, mitigation measures, such as use of less vibration intensive equipment or construction techniques shall be implemented.
- c. The project applicant shall submit evidence to the satisfaction of the Director of Community Development that occupancy disclosure notices for units with patios and/or balconies that do not meet the 65 dBA CNEL are provided to all future tenants pursuant to the City's Noise Ordinance.

6. Hazardous Materials Standards

Individual development sites may have existing facilities, such as transformers or clarifiers, to be demolished as part of a proposed development. To mitigate hazardous materials-related impacts during the removal of such facilities, the Director of Community Development, in conjunction with the Orange County Fire Authority, shall include specific project conditions of approval as part of the discretionary review process for the proposed development.

7. Green-Point Rated Development

Applicants for new residential developments in the Irvine Business Complex shall submit evidence to the satisfaction of the Director of Community Development that proposed buildings are designed and constructed to be GreenPoint Rated. GreenPoint Rated developments must achieve a minimum of 50 total points and meet the category-specific point thresholds as specified in the current GreenPoint Rated Builder Handbook. Developments that exceed this minimum are rewarded by a higher grade on their projects. The GreenPoint Rated program is updated every three years to coincide with changes to the California Building Energy Efficiency Standards.

B. Public Safety Standards.

1. Plans submitted for discretionary review of residential development shall include the following safety features:
 - a. Recreation areas shall be located adjacent to residential uses whenever possible. These areas shall be visible to residents from within their dwellings to allow for “eyes on the street” proper visual surveillance. Placement of windows, landscaping, lighting, and recreation uses shall be coordinated to enhance resident surveillance opportunity, but not to detract from the recreational use.
 - b. General utilization of the concepts of Crime Prevention Through Environmental Design (CPTED) in the planning and development stages.
2. The inclusion of the following items shall be verified by the Public Safety Department prior to issuance of the first building permit for a residential unit.
 - a. Development of a security plan for residential and/or mixed-used projects that includes:
 - (1) Management contact for public safety issues available 24-hours a day;
 - (2) Cameras for monitoring and recording vehicles and persons entering the site;
 - (3) Comprehensive tenant screening process for apartments tenants;
 - (4) Quick removal of graffiti; and
 - (5) Enforcement of restricted parking spaces.
 - b. Preparation of a standardized, high density, “wayfinding” sign program to aid emergency responders in finding individual residential units quickly and easily.
 - c. A Click2Enter radio frequency access system shall be installed at any vehicle and pedestrian access point controlled by privacy gates.
 - d. Security. Residential units shall be designed to ensure the security of residents through the provision of secured entrances and exits that are separate from the non-residential uses. Non-residential and residential uses shall not have common entrance hallways or common balconies. These separations shall be shown on the development plan and the separations shall be permanently maintained.
 - e. Lighting. Outdoor lighting associated with commercial uses shall be shaded and directed to minimize impact to surrounding residential uses, but shall provide sufficient illumination for access and meet the Uniform Security Code requirements for lighting. Such lighting shall not blink, flash or oscillate.
 - f. Windows. Residential windows of buildings directly adjacent to industrial uses shall generally be directed away from loading areas and docks, unless view-restricting architectural elements are utilized.

C. Airport Restrictions. Development within the Airport Land Use Commission ("ALUC") jurisdiction shall meet the following requirements in order to support John Wayne Airport operations.

1. Building Height limitations, recordation of aviation easements, obstruction lighting and marking, and airport proximity disclosures and signage shall be provided as required by the per Orange County Airport Environs Land Use Plan standards for John Wayne Airport.
2. Building heights shall not penetrate Federal Aviation Regulation (FAR) Part 77 Imaginary Surfaces for John Wayne Airport.
3. Residential land uses shall be prohibited in John Wayne Airport Safety Zone 3.
4. Sound Attenuation. For all residential dwelling units within the 60 CNEL contour of John Wayne Airport, the maximum interior noise levels shall not exceed 45 dBA CNEL with windows closed, and shall not exceed the single event noise criteria outlined in the Noise Element of the General Plan of the loudest 10 percent of single noise events (Lmax10) shall not exceed 65 dBA daytime (7 a.m. to 7 p.m.) and 55 dBA nighttime (7 p.m. to 7 a.m.).
5. Parks located within the John Wayne Airport 60 dBA CNEL shall include signage indicating proximity to John Wayne Airport and related overflight and noise.
6. Residential uses are prohibited within the 1985 John Wayne Airport Master Plan 65 dBA CNEL contour.
7. Applicants for a conditional use permit for a heliport or helistop shall provide evidence that the proposed heliport or helistop complies fully with State of California permit procedures and with any and all conditions of approval imposed by the Federal Aviation Administration (FAA), the Airport Land Use Commission for Orange County (ALUC), and by the Caltrans Division of Aeronautics.

D. Additional Requirements

1. Libraries. In the event that a city-wide library impact fee is adopted and in force at the time of discretionary project approval, the project applicant shall pay this fee prior to issuance of building permits.
2. San Diego Creekwalk
 - a. Prior to approval of the design for the San Diego Creek Trail improvements/extension, the City shall examine alternative locations of the proposed trail and methods that could be used to minimize potential impacts (e.g., fencing and buffers). The design shall consider an alternative that excludes a trail segment along the most sensitive part of San Diego Creek (the northwestern side of the creek between Campus Drive and MacArthur Boulevard).
 - b. Prior to issuance of grading permits for the San Diego Creek Trail, a note shall be placed on all grading plans that construction activities involving the use of heavy equipment are prohibited during the bird nesting season (March 15 to September 15). If minor construction activities are carried out during the bird nesting season, a

qualified biologist shall conduct a preconstruction survey in the off-site habitat to determine the location of any active bird nests in the area, including but not limited to raptors and least Bell's vireo. The survey should begin not more than three days prior to the beginning of construction activities. The wildlife agencies shall be notified if any nesting least Bell's vireo are found. During construction, active nesting sites shall be monitored to ensure that construction levels do not exceed 60 dBA Leq. Should these noise levels be exceeded, the City shall implement noise attenuation measures, potentially including the erection of temporary noise curtains sufficient to reduce noise levels at occupied nesting sites to acceptable levels. Nest monitoring should continue until fledglings have dispersed or the nest has been determined to be a failure, as approved by the wildlife agencies.

3. Accessory Retail For project sites located more than ¼ mile from existing neighborhood-oriented retail services, applicants for residential development of 500 units or more, or non-residential developments of 250,000 sq. ft. or more are strongly encouraged to provide accessory retail uses as defined in the City of Irvine Zoning Code. Should accessory retail uses not be provided, applicants shall provide written rationale for not doing so, as part of the Conditional Use Permit application.

5-8-5 Urban Neighborhood (UN) Standards.

The UN District incorporates portions of the IBC appropriate for sustainable residential neighborhoods, employment, and mixed-use blocks. This district is intended for residential projects to cluster in nodes around local services. Small scattered residential projects are discouraged within the UN District. Mixed-use is encouraged with ground floor uses including residential, retail, offices, and restaurants, and upper floors accommodating offices or residential. New, smaller, non-arterial streets within this district are proposed to be pedestrian-oriented with highly articulated residential frontages. Roadways will be defined by both residential and non-residential building facades and characterized by a lush, dominant landscape.

- A. Maximum Building Height: As specified in Figure 1 in Section 5-8-3.
- B. Creekwalk. All properties abutting the San Diego Creek channel shall consider the San Diego Creek edge as a street frontage. Where feasible, private ways, public and private streets shall be located adjacent to the Creek edge.

5-8-6. Business Complex (BC)

The intent of the Business Complex District is to maintain the existing industrial character of the northwesterly portion of the IBC, consistent with the Council-adopted goal of protecting existing businesses in the IBC. Due to a number of constraints, including the proximity of John Wayne airport and the extent of existing industrial uses, residential uses are not appropriate for this area and are therefore prohibited. Properties in the BC District are subject to the requirements of the underlying IBC base zoning and as specified in Section 5-8-4.C Airport Restrictions.

CHAPTER 9-36. PLANNING AREA 36 (IRVINE BUSINESS COMPLEX)

- Sec. 9-36-1. Generally.
- Sec. 9-36-2. Land use zoning map.
- Sec. 9-36-3. Introduction.
- Sec. 9-36-4. Intent.
- Sec. 9-36-5. Statistical analysis.
- Sec. 9-36-6. Reserved.
- Sec. 9-36-7. Special development requirements.
- Sec. 9-36-8. Irvine Business Complex land use and development intensity value database.
- Sec. 9-36-9. Subdivisions, mergers and adjustments.
- Sec. 9-36-10. Procedure for analysis of average daily development intensity values.
- Sec. 9-36-11. High-traffic-generating commercial uses.
- Sec. 9-36-12. Reserved.
- Sec. 9-36-13. Sites providing amenities.
- Sec. 9-36-14. IBC Transportation Improvement Fee Program.
- Sec. 9-36-15. IBC Neighborhood Infrastructure Improvement Fee Program
- Sec. 9-36-16. Affordable housing.
- Sec. 9-36-17. Required participation in mitigation measures.
- Sec. 9-36-18. Transfer of development rights.
- Sec. 9-36-19. Procedure for analysis of trip capture within 5.0 IBC Mixed-Use District.
- Sec. 9-36-20. Environmental Standards
- Sec. 9-36-21. Transportation Management Association
- Sec. 9-36-22. Heliports
- Sec. 9-36-23. Accessory Retail

Sec. 9-36-1. Generally.

Please see this chapter 9-36 for the development standards and sections 3-30-29, 3-30-31 and 3-30-32 to see which uses are permitted and conditionally permitted.

(Code 1976, § V.E-836; Ord. No. 92-3, 4-14-92; Ord. No. 92-20, § 6, 11-10-92; Ord. No. 93-14, § 3, 10-12-93; Ord. No. 94-2, § 3, 2-8-94; Ord. No. 94-3, § 2, 4-26-94; Ord. No. 94-7, § 3, 6-14-94; Ord. No. 95-4, 5-9-95; Ord. No. 95-6, § 3, 5-27-95; Ord. No. 95-22, § 3, 11-28-95)

Sec. 9-36-2. Land use zoning map.

(See Planning Area 36 map following section 9-36-5.)

(Code 1976, § V.E-836.1; Ord. No. 92-3, 4-14-92; Ord. No. 92-20, § 6, 11-10-92; Ord. No. 93-14, § 3, 10-12-93; Ord. No. 94-2, § 3, 2-8-94; Ord. No. 94-3, § 2, 4-26-94; Ord. No. 94-7, § 3, 6-14-94; Ord. No. 95-4, 5-9-95; Ord. No. 95-6, § 3, 5-27-95; Ord. No. 95-22, § 3, 11-28-95; Ord. No. 03-15, § 5, 5-13-03; Ord. No. 03-28, § 5, 9-9-03; Ord. No. 03-34, § 5, 1-22-04; Ord. No. 04-08, § 5, 8-24-04; Ord. No. 04-09, § 6, 9-14-04; Ord. No. 05-15, § 6, 7-12-05; Ord. No. 05-18, § 6, 9-27-05; Ord. No. 05-22, § 5, 10-11-05; Ord. No. 05-23, § 6, 10-21-05; Ord. No. 05-27, § 5, 1-10-06; Ord. No. 06-08, § 6, 7-11-06; Ord. No. 06-11, § 5, 8-22-06; Ord. No. 06-13, § 6, 8-22-06; Ord. No. 07-05, § 5, 4-10-07; Ord. No. 07-07, § 5, 4-10-07; Ord. No. 07-09, 4-10-07)

Sec. 9-36-3. Introduction.

A. Planning Area 36, Irvine Business Complex, is located along the western edge of the City. Boundaries include State Route 55 (Costa Mesa Freeway) and the John Wayne/Orange County Airport to the west, former USMCAS Tustin to the north, Peters Canyon Wash, the San Diego Creek and the San Joaquin Marsh to the east, and MacArthur Boulevard and Campus Drive (Newport Beach) to the south.

B. The planning area is divided into four districts. The Multi-Use District is comprised of nearly all portions of the planning area located south of Barranca Parkway. The Residential and Mixed-Use Districts are located in several areas within the Multi-Use District boundaries. The Industrial District is comprised of all portions of the planning area north of Barranca Parkway.

(Code 1976, § V.E-836.2; Ord. No. 92-3, 4-14-92; Ord. No. 92-20, § 6, 11-10-92; Ord. No. 93-14, § 3, 10-12-93; Ord. No. 94-2, § 3, 2-8-94; Ord. No. 94-3, § 2, 4-26-94; Ord. No. 94-7, § 3, 6-14-94; Ord. No. 95-4, 5-9-95; Ord. No. 95-6, § 3, 5-27-95; Ord. No. 95-22, § 3, 11-28-95; Ord. No. 00-02, § 4, 2-8-00; Ord. No. 03-34, § 5, 1-22-04; Ord. No. 04-08, § 5, 8-24-04; Ord. No. 04-09, § 6, 9-14-04)

Sec. 9-36-4. Intent.

It is the intent of this chapter to specify regulations to maintain the development and traffic intensity at the levels analyzed in and mitigated by the final program environmental impact report for the 2010 IBC Vision Plan project.

(Code 1976, § V.E-836.2.A; Ord. No. 92-3, 4-14-92; Ord. No. 92-20, § 6, 11-10-92; Ord. No. 93-14, § 3, 10-12-93; Ord. No. 94-2, § 3, 2-8-94; Ord. No. 94-3, § 2, 4-26-94; Ord. No. 94-7, § 3, 6-14-94; Ord. No. 95-4, 5-9-95; Ord. No. 95-6, § 3, 5-27-95; Ord. No. 95-22, § 3, 11-28-95)

Sec. 9-36-5. Statistical analysis.

GROSS SQUARE FOOTAGE

TABLE INSET:

Land Use Category	Area Number	Gross Acreage	Net Acreage	Maximum Number of Dwelling Units	Estimated Number of Gross Square Feet
Mixed-Use (IBC)	5.0	40.3	50.08		
Multi-Use (IBC)	5.1	2,518.83	2,015.58		
Industrial (IBC)	5.2	123	92		
Residential (IBC)	5.3	81.87	85.34		

IBC Vision Plan Residential/Mixed Use Overlay				<u>15,000</u>	
TOTAL*		2,764	2,243	15,000	48,787,662

DEVELOPMENT INTENSITY VALUES

TABLE INSET:

	Area Number	A.M.	P.M.	Average Daily	
TOTAL		63,476	76,173	812,673	

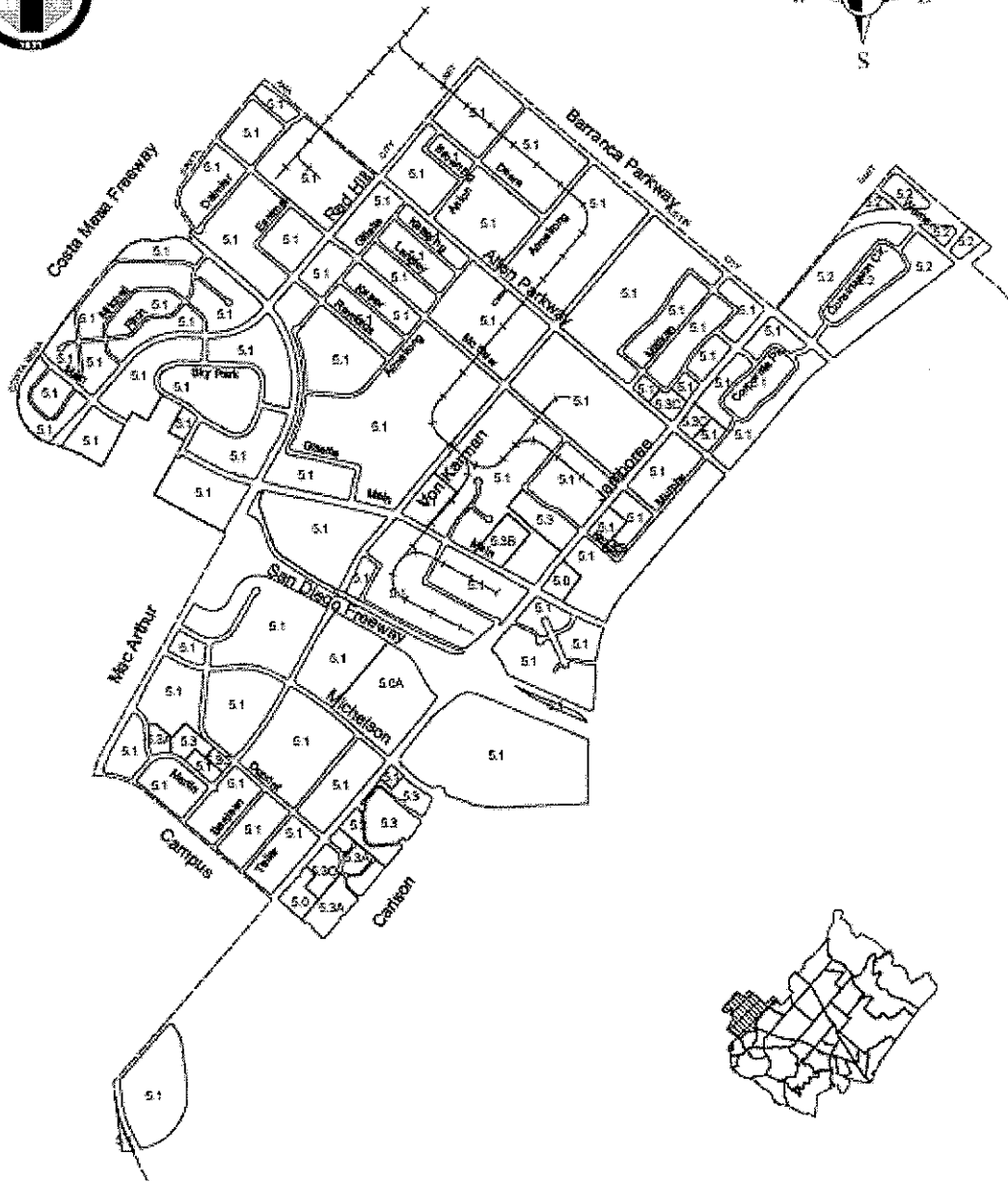
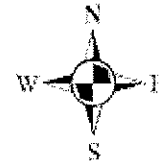
*The "Estimated Number of Gross Square Feet" within Planning Area 36 can adjust upward or downward based upon the mix of land uses and is not considered a development cap as is the case in other planning areas. This estimated number can be adjusted as needed by City Staff as long as the resulting Planning Area development intensity is within the Planning Area Development Intensity Value budget. Land uses may be changed to any permitted or conditionally permitted use within the corresponding zoning district, within the established development intensity values.

(Code 1976, § V.E-836.3; Ord. No. 92-3, 4-14-92; Ord. No. 92-20, § 6, 11-10-92; Ord. No. 93-14, § 3, 10-12-93; Ord. No. 94-2, § 3, 2-8-94; Ord. No. 94-3, § 2, 4-26-94; Ord. No. 94-7, § 3, 6-14-94; Ord. No. 95-4, 5-9-95; Ord. No. 95-6, § 3, 5-27-95; Ord. No. 95-22, § 3, 11-28-95; Ord. No. 99-10, § 3, 5-11-99; Ord. No. 01-03, § 4, 3-13-01; Ord. No. 03-15, § 5, 5-13-03; Ord. No. 03-26, § 6, 9-9-03; Ord. No. 03-34, § 5, 1-22-04; Ord. No. 04-08, § 5, 8-24-04; Ord. No. 04-09, § 6, 9-14-04; Ord. No. 05-15, § 6, 7-12-05; Ord. No. 05-18, § 6, 9-27-05; Ord. No. 05-22, § 5, 10-11-05; Ord. No. 05-23, § 6, 10-11-05; Ord. No. 05-27, § 5, 1-10-06; Ord. No. 06-08, § 6, 7-11-06; Ord. No. 06-11, § 5, 8-22-06; Ord. No. 06-13, § 6, 8-22-06; Ord. No. 07-05, § 5, 4-10-07; Ord. No. 07-07, § 5, 4-10-07; Ord. No. 07-09, 4-10-07)

Sec. 9-36-6. Reserved.



ZONING ORDINANCE MAP
PLANNING AREA 36
 IRVINE BUSINESS COMPLEX



ZONE#	ZONING DISTRICT	ZONE#	ZONING DISTRICT
5.0	Irvine Business Complex Mixed-Use	5.3A	Irvine Business Complex Residential
5.1	Irvine Business Complex Multi-Use	5.3B	Irvine Business Complex Residential
5.2	Irvine Business Complex Industrial	5.3C	Irvine Business Complex Residential
5.3	Irvine Business Complex Residential		

Sec. 9-36-7. Special development requirements.

See Division 3 and Chapter 5-8 for applicable general development requirements.

(Code 1976, § V.E-836.4; Ord. No. 92-3, 4-14-92; Ord. No. 92-20, § 6, 11-10-92; Ord. No. 93-14, § 3, 10-12-93; Ord. No. 94-2, § 3, 2-8-94; Ord. No. 94-3, § 2, 4-26-94; Ord. No. 94-7, § 3, 6-14-94; Ord. No. 95-4, 5-9-95; Ord. No. 95-6, § 3, 5-27-95; Ord. No. 95-22, § 3, 11-28-95)

Sec. 9-36-8. Irvine Business Complex land use development intensity value database.

A. *Intent of this section.* It is the intent of this section to define the policies used to maintain a land use and development intensity value database for monitoring and regulating the types of land uses and intensity for each property in the Irvine Business Complex.

B. The Director of Community Development shall maintain a land use and development intensity value database for the Irvine Business Complex.

1. The IBC land use and development intensity value database shall specify the quantity, in gross square footage, dwelling units and hotel rooms as defined by the Zoning Code, for all existing, approved and zoned development in the planning area by legal parcel and according to the following general land use categories:

- a. Office.
- b. Industrial.
- c. Retail.
- d. Hotel
- e. Residential.
- f. Zoning potential.
- g. Miniwarehouse.
- h. Hotel, Extended-Stay

2. The land use and development intensity value database shall specify the corresponding a.m., p.m. and average daily? development intensity values allocated for both existing and build-out conditions for each legal parcel in the planning area, which correspond to the traffic intensity levels (vehicle trips) analyzed in and mitigated by the final program environmental impact report for the 2010 IBC Vision Plan project.

Development Intensity Value allocations for a.m. and p.m. represent a five-day average weekday, and may vary plus or minus ten percent each day. These allocations shall be based upon the following trip factors:

TABLE INSET:

Use	A.M.	P.M.	Average Daily	Unit
Office	.0013	.00138	.01377	sq. ft.
Industrial	.00045	.00042	.00462	sq. ft.
Retail	.00254	.00696	.084	sq. ft.
Hotel;	0.42	0.68	10.00	room
Residential	0.50	0.52	6.30	du*
Zoning potential	.0013	.00138	.01377	sq. ft.
Mini-warehouse	0.00029	.00027	.00304	sq. ft.
Hotel, extended stay	0.38	0.42	5.14	Room

*Dwelling unit.

3. a. The applicable general land use category for each permitted and conditional use within Planning Area 36 is specified through the use of general land use codes. These codes are included in the land use matrix of this zoning ordinance (see section 3-3-1) and are defined as follows:

29 Office

30 Industrial

31 Commercial

32 Hotel

33 Residential

34 Zoning potential

35 Undefined uses

36 Uses assumed to have no traffic generation

37 Mini-warehouse

38 Hotel, extended stay

b. The following two codes deal with uses, which require special treatment:

35 Undefined uses: Undefined uses include, but are not limited to the following: churches, community facilities, government facilities, commercial recreation, outdoor storage, commercial schools, private schools and public schools, accessory uses, manufactured structures, warehouse and sales outlet, and drive-thru facilities. The general land use categories and corresponding development intensity value rates shall be based upon the City's adopted development intensity value rates as defined in the Table Inset above for the specific land uses proposed. The Directors of Public Works and Community Development shall determine which of the general land use category trip rates and corresponding fee most closely resembles the trip generation of the proposed use, based upon the above-noted development intensity value rates, for purposes of establishing a development intensity value.

36 Uses assumed to have no traffic generation: These include parks, pushcarts and heliports for which no traffic generation shall be assumed. Several conditional and permitted uses have also been identified as potential high-traffic-generating uses. Refer to section 9-36-11 for additional regulations concerning these uses.

4. *Adjustments to database.* The Director of Community Development shall regularly adjust the land use and development intensity value database to reflect the status of existing and approved development in relation to the maximum square footage, dwelling unit and trip allocations for the planning area. In the event the approved development case (i.e. conditional use permit, master plan, development agreement, site design or zoning compliance) has expired, the trip allocation and development intensity associated with the approved development shall remain available for use on the site, subject to the terms and conditions of any required discretionary approval. If the proposed development requires a discretionary approval as identified in Division 2 of this Zoning Code, that discretionary case must be approved prior to the use of the development intensity. If no discretionary case is required and the use is a "permitted use", the development of the intensity shall be subject to all applicable development standards.

Unused development intensity may be transferred to another location within the Irvine Business Complex with the approval of a transfer of development rights per Section 9-36-17.

a. If, as a result of periodic monitoring, the City finds that the allocated intensity for a particular location in the database is inconsistent with what is approved, all necessary adjustments shall be made to the database to reflect what has been documented as approved. Applicants wishing to challenge the intensity allocations for a particular site shall submit floor plans and/or other documentation acceptable to the Director of Community Development to receive credit for existing square footage which was previously approved and inspected by the City.

5. *Credit for existing square footage uses and intensity.* In cases where an existing structure is located on the site of a proposed project, credit can be granted for the existing gross building square footage, by use, for purposes of applying the intensity to the proposed project. The procedure for granting credit is as follows:

a. The applicant shall submit a floor plan of the existing building illustrating the uses and gross square footage devoted to each use prior to the project proposal. The Community Development Department shall verify that appropriate approvals were granted for the establishment of these uses (i.e. building permits). The Department shall calculate the number of a.m., p.m., and average daily development intensity values attributable to the approved uses using the ratios specified in this section 9-36-8.

b. Requests for credit for existing gross square footage shall be reviewed and approved by the Director of Community Development for projects which do not require a conditional use permit and by the approval authority for projects requiring a use permit. Credit can only be retained by the applicant if it obtains appropriate permits from the City for any interior alterations or demolitions of buildings. Any demolition must proceed prior to the issuance of any building permits for new structures on the site, or in accordance with a phasing plan approved by the Director of Community Development. (Code 1976, § V.E-836.5.1; Ord. No. 92-3, 4-14-92; Ord. No. 92-20, § 6, 11-10-92; Ord. No. 93-14, § 3, 10-12-93; Ord. No. 94-2, § 3, 2-8-94; Ord. No. 94-3, § 2, 4-26-94; Ord. No. 94-7, § 3, 6-14-94; Ord. No. 95-4, 5-9-95; Ord. No. 95-6, § 3, 5-27-95; Ord. No. 95-

22, § 3, 11-28-95; Ord. No. 98-20, § 2, 12-8-98; Ord. No. 99-10, § 3, 5-11-99; Ord. No. 01-07, § 2, 5-8-01; Ord. No. 03-02, § 4, 1-14-03; Ord. No. 03-34, § 5, 1-22-04; Ord. No. 04-09, § 6, 9-14-04; Ord. No. 05-16, § 2, 7-12-05)

Sec. 9-36-9. Subdivisions, mergers and adjustments.

A. *Intent.* The following regulations are intended to ensure that the finite quantities of development allocated to each legal parcel in the IBC land use and development intensity value database are accurate and current and that allocated development intensity to each legal parcel is not exceeded as subsequent subdivisions occur.

B. *Applicability.* These regulations apply to all applications submitted for properties located in Planning Area 36 (IBC) for tentative parcel maps, tentative tract maps, lot mergers and lot line adjustments.

C. *Development intensity distribution.*

1. Prior to the approval of any final map, lot merger or lot line adjustment for properties located in Planning Area 36, applicants shall submit to the Director of Community Development for review and approval a document specifying the proposed distribution of development intensity for each legal parcel. The approved document shall then be recorded by the County of Orange Recorder's Office.

2. All initial intensity allocations made to a legal parcel shall be carried through to subsequent subdivisions.

3. Total development intensity shall not exceed the intensity allocated under the original subdivision configuration existing at the time of the adoption of the 2010 IBC Vision Plan project and associated zone change. (Code 1976, § V.E-836.5.2; Ord. No. 92-3, 4-14-92; Ord. No. 92-20, § 6, 11-10-92; Ord. No. 93-14, § 3, 10-12-93; Ord. No. 94-2, § 3, 2-8-94; Ord. No. 94-3, § 2, 4-26-94; Ord. No. 94-7, § 3, 6-14-94; Ord. No. 95-4, 5-9-95; Ord. No. 95-6, § 3, 5-27-95; Ord. No. 95-22, § 3, 11-28-95)

Sec. 9-36-10. Procedure for analysis of average daily development intensity values

A. *Intent.* This section provides a procedure for (1) analyzing average daily development intensity value for development proposals and (2) identifying and mitigating anticipated traffic impacts (if any) of developments that propose to exceed allocated Average Daily development intensity values .

B. *Applicability.* This section applies to development applications which propose to exceed the Average Daily development intensity values limits specified for a parcel in the IBC database.

C. *Traffic study.*

1. A traffic study shall be required for development applications proposing to exceed the Average Daily development intensity value limits for a parcel within the Irvine Business Complex. Assigned general land use category development intensity values shall be utilized for determining whether Average Daily development intensity values a.m./p.m. development intensity value allocations in the IBC database are exceeded

2. The traffic study shall be reviewed and findings shall be made and approved by the Directors of Public Works and Community Development.

D. *Findings.* The following findings must be made in order to approve projects proposing to exceed the Average Daily Development Intensity Values limits specified for a site in the IBC database:

1. Approval of the project will not result in exceeding the a.m. and p.m. development intensity value established for the project site in the IBC database. The average daily development intensity value limits established for the project site in the IBC database may be exceeded only if the traffic analysis has identified impacts and mitigation measures that show the circulation system has the capacity to accommodate the project.
2. Approval of the project will not jeopardize the ability of the City of Irvine to qualify for funding sources, including but not limited to the Orange County congestion management program (CMP).

E. *Waiver* Should any of the findings listed above not be made, the application shall submit a request for a waiver for review and approval by the Director of Community Development.

(Code 1976, § V.E-836.5.3; Ord. No. 92-3, 4-14-92; Ord. No. 92-20, § 6, 11-10-92; Ord. No. 93-14, § 3, 10-12-93; Ord. No. 94-2, § 3, 2-8-94; Ord. No. 94-3, § 2, 4-26-94; Ord. No. 94-7, § 3, 6-14-94; Ord. No. 95-4, 5-9-95; Ord. No. 95-6, § 3, 5-27-95; Ord. No. 95-22, § 3, 11-28-95)

Sec. 9-36-11. High-traffic-generating commercial uses.

A. *Intent of this section.* It is the intent and purpose of this section to assure that certain land uses which generate high levels of traffic are prevented from exceeding the levels of traffic originally analyzed in the environmental documents for Planning Area 36. These specific land uses are identified with a footnote (T) in the City-wide land use matrix (see section 3-3-1).

B. In projects which include uses identified with a footnote (T) in the land use matrix (section 3-3-1), a conditional use permit shall be required. In addition to the required materials listed in section 2-9-3, the conditional use permit application shall include a traffic analysis prepared under the direction of the Director of Community Development. Assigned general land use category development intensity value rates shall be utilized for determining whether Average Daily or a.m./p.m. development intensity value allocations in the database are exceeded. Traffic study requirements may be waived if the project does not meet the minimum traffic generation threshold specified in the traffic study guidelines.

C. Prior to approval of an extended stay hotel project, the applicant shall submit a vehicle trip generation rate verification study. This study shall demonstrate that the individual project's trip generation rates are consistent with the IBC extended stay hotel development intensity value rates. The Planning Commission shall review and render a decision on whether the individual project's vehicle trip rates are consistent with the IBC extended stay hotel development intensity value rate prior to planning commission review of the project.

D. *Findings.* In addition to the findings listed in section 2-9-7, the following findings shall be made in order to approve a conditional use permit for High-traffic-generating commercial uses:

1. Approval of the project will not result in exceeding the a.m. and p.m. development intensity value allocations established for the project site in the IBC land use and development intensity value database. The average daily development intensity value limits established for the project site in the IBC land use and development intensity value database may be exceeded only if no impacts are identified, or the traffic analysis has

identified impacts and mitigation measures that show the circulation system has the capacity to accommodate the project.

2. Approval of the project will not jeopardize the ability of the City of Irvine to qualify for funding sources such as but not limited to the Orange County Congestion Management Program (CMP) or Measure M.

(Code 1976, § V.E-836.5.4; Ord. No. 92-3, 4-14-92; Ord. No. 92-20, § 6, 11-10-92; Ord. No. 93-14, § 3, 10-12-93; Ord. No. 94-2, § 3, 2-8-94; Ord. No. 94-3, § 2, 4-26-94; Ord. No. 94-7, § 3, 6-14-94; Ord. No. 95-4, 5-9-95; Ord. No. 95-6, § 3, 5-27-95; Ord. No. 95-22, § 3, 11-28-95; Ord. No. 99-10, § 3, 5-11-99; Ord. No. 04-03, § 3, 2-24-04)
Sec. 9-36-12. Reserved.

Sec. 9-36-13. Sites providing amenities.

A. *Intent of this section.*

1. The intent of this section is to recognize developments which were built during the period in which the Extraordinary Amenities section of the IBC Mixed-Use zoning ordinance was in place (June 30, 1982 to October 23, 1990) and which constructed amenities during that period in conformance with the ordinance.

2. As part of the database for the Irvine Business Complex, special square footage allocations shall be included to account for amenity credits for eligible locations. To apply for these allocations, applicants must obtain a conditional use permit which must be approved by the City of Irvine Planning Commission.

B. *Eligibility.* Limited to those properties which were built and actually constructed qualifying amenities during the period between June 30, 1982, and October 23, 1990. (See IBC database for reserved intensity for amenities.)

C. *Review procedure.*

1. Types of amenities allowed: Amenities such as extraordinary open space, parks, plazas, facilities for the arts, athletic facilities, and child care centers. They shall provide a benefit not only to the site, but also to the larger community. The City shall receive assurance that any structure or area proposed for credit will be used for that purpose for the life of the project receiving this credit through the provision of a document to be recorded separate from the deed.

2. The site in which the amenity area is located shall be a minimum of ten gross acres (as recorded on the legal map) in order for the area to qualify. If the site consists of more than one parcel, then the parcels which comprise the ten-gross-acre minimum site must be linked by a comprehensive plan such as a conditional use permit, or master plan, approved by the Planning Commission or Zoning Administrator between June 30, 1982, and October 23, 1990.

3. For each gross square foot of amenity area provided, one gross square foot of office development may be added, up to a maximum of 2,178 gross square feet per gross acre.

4. Any open space, park, or plaza for which credit is being requested shall comply with the criteria noted below. These criteria shall not apply to areas devoted to lakes or other water elements.

a. The area must be in addition to that necessary to meet landscaping, park and setback requirements.

b. *Minimum size.* The area must contain a minimum of 4,000 gross square feet.

c. *Sunlight patterns.* The amenity area shall be able to receive direct sunlight on at least 30 percent of the surface area from 10:00 a.m. to 2:00 p.m. between the fall and spring equinox.

d. *Design and landscaping.* At least one major element, such as but not limited to artwork or water, shall be included in the amenity area. The dominant landscape elements shall be trees and turf. The amount of impervious surface should not exceed 40 percent of the amenity area unless unique design considerations are offered.

5. Approval of extraordinary amenity credit shall be granted through a conditional use permit.

(Code 1976, § V.E-836.5.5; Ord. No. 92-3, 4-14-92; Ord. No. 92-20, § 6, 11-10-92; Ord. No. 93-14, § 3, 10-12-93; Ord. No. 94-2, § 3, 2-8-94; Ord. No. 94-3, § 2, 4-26-94; Ord. No. 94-7, § 3, 6-14-94; Ord. No. 95-4, 5-9-95; Ord. No. 95-6, § 3, 5-27-95; Ord. No. 95-22, § 3, 11-28-95)

Sec. 9-36-14. IBC Traffic Improvement Fee Program.

A. *Intent.* The intent of the 2010 IBC Traffic Improvement Fee program is to provide partial funding for the implementation of the areawide circulation mitigation program identified in the Final Program Environmental Impact Report, for the Irvine Business Complex Vision Plan/Mixed Use Overlay Zoning Code.

B. *Basis for the fee program.*

1. This fee program is based upon demonstrated projected development and its anticipated circulation impacts. As such, development which necessitates circulation mitigation measures beyond those identified for existing development and future development with vesting approvals (as defined in section 9-36-14.E) shall pay the current fee in effect at the time of building permit issuance.

2. The IBC Traffic Improvement Fee program establishes variable fees per unit of development for specific land uses, which in turn correspond to the trip generation of each land use. Fair share cost is derived by dividing the total cost of the required circulation improvements for future development into the total number of trips assumed to be generated by projects that are subject to this fee program. The cost per trip is then converted into cost per unit of development for the corresponding land use. (Refer to the IBC circulation improvements funding program for matrices showing the fee calculations.)

C. *Boundaries of the final fee district.* All property within the Irvine Business Complex (Planning Area 36) as shown in section 9-36-2 of this zoning ordinance is included in the final fee district.

D. *Final fee schedule.*

1. Section 9-36-5 of this zoning ordinance specifies the maximum amount of development intensity values (vehicular trips from the 1992 IBC EIR) allowed to be generated as a result of the build-out of the Irvine Business Complex. As part of the traffic study prepared for the 2010 IBC Vision Plan *project*, a study was performed which identifies the traffic impacts of future development within IBC. The traffic study also identifies specific circulation improvements necessary to mitigate the impacts of the projected future development and the cost of the implementation of such improvements.

2. A final fee schedule based upon the nexus analysis and the estimated cost of improvements shall be established by resolution of the City Council.

E. *Applicability.*

1. The 2010 IBC Traffic Improvement Fee program shall apply to all development for which building permits are issued subsequent to the adoption of the 2010 IBC Vision Plan project, regardless of when the development case was approved. These provisions apply to permits for new structures, and additions of square footage to existing structures.
2. Development agreements, and projects for which building permit applications approved prior to the effective date of these regulations, are exempt from the requirements of this fee program.

F. *Timing of compliance.*

1. All development projects within the Irvine Business Complex for which building permits are issued after the effective date of the 2010 IBC zoning ordinance shall comply with the requirements of the 2010 IBC Transportation Improvement fee program. Fees required by this section shall be paid prior to the issuance of any building permits or as specified by procedures adopted by the City Council and in effect at the time building permits are issued.
2. Applicants can elect to pre-pay the IBC Traffic Improvement fees for their projects at any time prior to the issuance of building permits; however, payment of fees solely does not constitute final approval or vesting entitlement for the project.

G. *Construction of areawide improvements in lieu of payment of fees.* Where an applicant is required to pay fees for areawide improvements (improvements which serve the IBC or mitigate impacts to the IBC) under the provisions of these regulations, with the approval of the Directors of Public Works and Community Development, the applicant may construct improvements which are included in the 2010 IBC Vision Plan final program EIR and equivalent in cost to the fees owed. The applicant shall submit an estimate of the construction cost for each improvement it proposes to construct. The Director of Public Works shall verify the estimated construction cost, or make any necessary revisions thereto. The value of the proposed improvements must equal or exceed the required fee in order for the Director of Public Works to approve the applicant's request to substitute construction of improvements for payment of fees.

H. *Exemptions from fees.* The following types of land uses shall be exempt from payment of fees for circulation improvements:

1. Square footage within a building used to provide recreation or services exclusively to employees who work within the building. The uses shall benefit the employees, and, by providing recreation or services on-site, have the potential to reduce the number of trips employees make to other locations. Examples of such uses include cafeterias, exercise facilities, and employee credit unions. Determination of whether or not a proposed use qualifies for this exemption shall be made by the Director of Community Development. This exemption can only be granted if the property owner enters into an agreement with the City and recorded against the property, ensuring that the square footage remains in the exempt use.
2. Square footage within the principal building(s) on a site or in a separate building(s) used for resident, employee or customer parking. This exemption does not apply to areas within a building(s) used for vehicle storage.

I. *Adjustments to fees.* The Director of Public Works shall, on July 1st of each year, apply an adjustment to the Irvine Business Complex (IBC) development fee rates according to the following methodology:

1. *Adjustment in construction cost.* The development fee program shall be evaluated annually in comparison with the California Highway Construction Cost Index (CCI) as published by Caltrans. The fee rates shall be adjusted to reflect fluctuations in the CCI.
2. *Adjustment in land cost.* In addition to the annual adjustment in construction costs, the fee rates shall be adjusted to account for the projected land acquisition costs for the right-of-way necessary to construct the roadway improvements. A land value appraisal assessment will be conducted every three years. The fees shall be adjusted to reflect the latest land cost estimates based on the findings of the appraisal assessment. The land cost adjustment shall be applied every three years. There will be no adjustment rate utilized in years in which no land value appraisals are conducted. As part of this review, the Director of Public Works shall also review the IBC development fees to ensure that the fees would not, over time, exceed the reasonable cost of constructing the required improvements.
3. *Calculation of Fees.* An average of the past five years of fees will be utilized to determine the current year fee.
4. *Changes to Fee Methodology.* At its first meeting in June of each year, the Planning Commission shall be informed if adjustments to fee rates in June of each year. Any change to the methodology for annual adjustment of fees for the IBC Traffic Improvement fee program shall be approved by a resolution of the City Council.

J. *Creation of IBC fee account.*

1. The City shall establish an IBC circulation improvement fee account immediately after the adoption of the 2010 IBC Vision Plan/Overlay Zoning Code project.
2. The City of Irvine shall maintain the funds in this account separate from other funds of the City of Irvine. Fees collected pursuant to this fee program shall be deposited at the time collected into the IBC circulation fee account; and both the fees and the accrued interest shall be expended only for the implementation (i.e., project reports, design, construction) of the IBC circulation improvements as specified in the IBC Vision Plan/Overlay Zoning Code EIR, and any amendments and revisions thereto.
3. On an annual basis, the Manager of Fiscal Services shall present a report on the status of the IBC circulation fee program to the City Council. The report shall provide information on the fee account revenues, expenditures and the projected fee revenues and expenditure.

K. *IBC Traffic Study Update.* Every five years following the certification of the Final EIR for the 2010 Vision Plan project, the City shall undertake an updated comprehensive traffic study for the IBC, to evaluate the implementation of the original traffic study and update mitigation as needed. The study shall review both interim and buildout year scenarios.

L. *Requirements for provision of local improvements.* In addition to the responsibility to participate in funding the areawide improvements, applicants may be required to construct local improvements if such improvements as identified in the conditions of approval are deemed necessary by the Directors of Public Works *and Community Development*.

1. *Review and determination process.* In conjunction with applications for development proposals, the applicant may be required to provide a traffic study analysis to identify any local improvements necessary to address the traffic impacts of the project. If as a result of this analysis the Directors of Public Works and Community Development determine that

local improvements are needed, the applicant shall be required to provide these improvements as a condition of approval of the development project.

2. *Payment of fees in lieu of construction of local improvements.* Applicants may pay fees in lieu of construction of required local improvements subject to the approval of the Directors of Public Works *and Community Development*. The in-lieu fee shall be equal to the construction cost of the required improvements.

3. *Timing of compliance.* Prior to the issuance of building permits, the applicant shall submit an estimate of the construction cost for each required improvement. The Director of Public Works shall verify the estimated construction cost, or shall revise the estimate. The fees paid by the applicant shall equal the cost accepted by the Director of Public Works..

(Code 1976, § V.E-836.5.6; Ord. No. 92-3, 4-14-92; Ord. No. 92-20, § 6, 11-10-92; Ord. No. 93-14, § 3, 10-12-93; Ord. No. 94-2, § 3, 2-8-94; Ord. No. 94-3, § 2, 4-26-94; Ord. No. 94-7, § 3, 6-14-94; Ord. No. 95-4, 5-9-95; Ord. No. 95-6, § 3, 5-27-95; Ord. No. 95-22, § 3, 11-28-95; Ord. No. 04-03, § 3, 2-24-04; Ord. No. 05-21, § 3, 10-11-05)

Sec.9-36-15. IBC *Neighborhood* Infrastructure Improvement Fee Program.

A. *Intent.* The intent of the 2010 IBC *Neighborhood* Infrastructure Improvement Fee Program is to *provide funding for* the implementation of the areawide neighborhood infrastructure improvements identified in the 2010 IBC Vision Plan.

B. *Basis for the fee program.*

1. The fee program is based upon a program of neighborhood and pedestrian-oriented infrastructure improvements endorsed by the City Council as part of the development of the IBC Vision Plan. As such, new development which necessitates construction of these improvements beyond those identified for existing development and future development with vesting approvals (as defined in section 5-8-7.E) shall pay its fair share of the cost for the infrastructure improvements.

2. The IBC Infrastructure Improvement Fee establishes variable fees per unit of residential development, based on provision of affordable units on or off site, and whether said units are for rent or for sale. Fair Share cost is a per unit amount per type of unit as determined during the Vision Plan process, and analyzed in the associated nexus study.

3. Timing of implementation and phasing, and final design of the improvements identified as part of the Vision Plan project shall be determined by the City Council.

C. *Boundaries of the final fee district.* All property on which residential or residential mixed use development is proposed within the Urban Neighborhood district within the Irvine Business Complex Residential Mixed Use Overlay Zone as shown in section 5-8-3 of this zoning ordinance is included in the final fee district.

D. *Final fee schedule.*

1. A final fee schedule based upon the nexus analysis and the estimated cost of improvements shall be established by resolution of the City Council.

E. *Applicability.*

1. The 2010 IBC Neighborhood Infrastructure Improvement Fee program shall apply to all residential or residential mixed-use development for which building permits are issued subsequent to the adoption of the 2010 IBC Vision Plan project, regardless of when the

development case was approved. These provisions apply to permits for new units, and additions to existing residential or residential mixed-use development.

2. Development agreements, and projects for which building permit applications are approved prior to the effective date of these regulations, are exempt from the requirements of this fee program.

F. Timing of compliance.

1. All projects within Urban Neighborhood Overlay District (as defined in Chapter 5-8 of this code) within the Irvine Business Complex for which building permits are issued after the effective date of the 2010 IBC zoning ordinance shall comply with the requirements of the 2010 IBC Neighborhood Infrastructure Improvement Fee Program. Fees required by this section shall be paid prior to the issuance of any building permits or as specified by procedures adopted by the City Council and in effect at the time building permits are issued.

2. Applicants can elect to pre-pay the IBC Infrastructure Improvement Fees for their projects at any time prior to the issuance of building permits; however, payment of fees solely does not constitute final approval or vesting entitlement for the project and will not be refundable.

G. Exemptions from fees. The following types of land uses shall be exempt from payment of fees for infrastructure improvements pursuant to this section:

H. Adjustments to fees. The Directors of Public Works *and Community Development* shall, on July 1st of each year, commencing in 2010, apply an adjustment to the Irvine Business Complex (IBC) Infrastructure Improvement Fee rates according to the following methodology:

1. *Adjustment in construction cost.* The public benefit amounts endorsed by City Council motion on July 25, 2006 shall be adjusted annually, pursuant to the Engineering News Record, Construction Cost Index.

2. *Adjustment in land cost.* In addition to the annual adjustment in construction costs, the fee rates shall be adjusted to account for the projected land acquisition costs for the right-of-way necessary to construct the infrastructure improvements. A land value appraisal assessment will be conducted every three years, beginning in 2010. The fees shall be calculated to reflect the latest land cost estimates based on the findings of the appraisal assessment. The land cost adjustment shall be applied every three years. There will be no adjustment rate utilized in years in which no land value appraisals are conducted. As part of this review, the Director of Public Works shall also review the IBC Infrastructure Improvement Fees to ensure that the fees would not, over time, exceed the reasonable cost of constructing the required improvements.

3. *Calculation of Fees.* Once available, an average of the past five years of fees will be utilized to determine the current year fee.

4. *Changes to Fee Methodology.* At its first meeting in June of each year, the Planning Commission shall be informed if adjustments to fee rates in June of each year. Any change to the methodology for annual adjustment of fees for the IBC Traffic Improvement fee program shall be approved by a resolution of the City Council

I. Creation of IBC Neighborhood Infrastructure Improvement Fee Account.

1. The City shall establish an IBC Neighborhood Infrastructure Improvement Fee Account immediately after the adoption of the 2010 IBC Vision Plan/Overlay Zoning Code project.

2. The City of Irvine shall maintain the funds in this account separate from other funds of the City of Irvine. Fees collected pursuant to this fee program shall be deposited at the time collected into the IBC Infrastructure Improvement Fee Account; and both the fees and the accrued interest shall be expended only for the implementation (i.e., project reports, design, construction) of the IBC circulation improvements as specified in the IBC Vision Plan/Overlay Zoning Code EIR, and any amendments and revisions thereto.

Sec. 9-36-16. Affordable housing.

Applications for conditional use permits for residential development shall demonstrate compliance with the housing element of the general plan and City Council Resolution No. 91-28, or subsequent resolution. The conditional use permit will be conditioned to assure compliance with the housing element.

(Code 1976, § V.E-836.5.7; Ord. No. 92-3, 4-14-92; Ord. No. 92-20, § 6, 11-10-92; Ord. No. 93-14, § 3, 10-12-93; Ord. No. 94-2, § 3, 2-8-94; Ord. No. 94-3, § 2, 4-26-94; Ord. No. 94-7, § 3, 6-14-94; Ord. No. 95-4, 5-9-95; Ord. No. 95-6, § 3, 5-27-95; Ord. No. 95-22, § 3, 11-28-95)

Sec. 9-36-17. Required participation in mitigation measures.

All parcels located within the Irvine Business Complex (Planning Area 36) are subject to the applicable mitigation measures and conditions of approval adopted by the City as part of the Irvine Business Complex Vision Plan/Overlay Zoning Code project approval and the final environmental impact report =

(Code 1976, § V.E-836.5.8; Ord. No. 92-3, 4-14-92; Ord. No. 92-20, § 6, 11-10-92; Ord. No. 93-14, § 3, 10-12-93; Ord. No. 94-2, § 3, 2-8-94; Ord. No. 94-3, § 2, 4-26-94; Ord. No. 94-7, § 3, 6-14-94; Ord. No. 95-4, 5-9-95; Ord. No. 95-6, § 3, 5-27-95; Ord. No. 95-22, § 3, 11-28-95)

Sec. 9-36-18. Transfer of development rights.

A. *Intent.* It is the intent of this section to allow transfer of development rights between sites within the Irvine Business Complex. Development rights may be transferred from a sending site to a receiving site within the Irvine Business Complex subject to the approval of a master plan development case for the transfer of development rights (TDRMP) and/or conditional use permit, depending upon what is otherwise required, except as specified in subsection H of this Section. Approved TDRMP and/or CUP development cases shall include conceptual project plans and other required information which describe how the intensity on the receiving site shall be used. Development intensity transferred to a receiving site through an approved TDR shall remain available for use on the project site in accordance with this section until it is used for development or transferred to another eligible site through appropriate mechanisms described in this section. All conditions of approval affiliated with a TDR approval shall continue to apply

to the use of the intensity on the subject site regardless of discretionary approval expiration. If the proposed use requires a discretionary approval separate from the TDR approval, and the separate entitlement either has not been approved or has been approved but has expired, the transferred intensity may not be used unless and until the separate discretionary approval is approved. In the event the intensity is transferred to another site via a new transfer of development rights conditional use permit or master plan, any new conditions of approval shall take precedence.

B. *Determination of TDR eligibility.* Both the sending and receiving sites shall be located within the boundaries of the Irvine Business Complex (Planning Area 36).

C. *Master plan application.*

1. Applications to conduct a transfer of development rights shall include the following information for the receiving site:

a. Conceptual site plan.

b. Access plan option.

2. The application shall conceptually identify the proposed use of the total intensity for the receiving site and the adjusted AM, PM and Average Daily development intensity value budget for both the sending and receiving sites. All three components (i.e. AM, PM and Average Daily) of intensity must be transferred as a block of intensity.

D. *Determination of development rights to be transferred.*

1. The master plan application is required to facilitate review of the conceptual site plan for the receiving site. As such, the materials required for a TDR master plan development case shall conceptually identify the approximate locations and configurations of development and potential access points on the receiving site as well as the corresponding distribution of intensity by legal parcel: a.m., p.m. and average daily development intensity values,, gross square feet of building area, by use; dwelling units; and hotel rooms.

2. The application shall also identify the intensity to be transferred from the sending site to the receiving site.

3. The sending site shall retain sufficient a.m. and p.m. and average daily development intensity values to achieve 0.125 floor area ratio (FAR) office equivalency on the site.

4. The City shall have the discretion to permit an applicant to transfer development intensity values in excess of those which would result in the sending parcel being developed at less than a 0.125 FAR office equivalency. In such case, the applicant shall have the option of either (1) providing an irrevocable offer of dedication of the parcel to the City for public purposes or (2) demonstrating that a viable project exists which will reasonably function with less than 0.125 FAR of office equivalency. Such offer or demonstration shall occur prior to the issuance of building permits.

E. *Transfer of development rights fee.* A fee shall be charged for the transfer of development rights payable within 30 calendar days after the recordation of the TDR agreement.

1. *Fee rate.* Transfer of development rights fees shall be charged as established by resolution through the City Council.

2. *Fee calculation.*

Development intensity Value Fee × Transferred P.M. Development intensity Values = Total TDR Fee

F. *Findings.* The following findings shall be made in order to approve a transfer of development rights development case (MP and/or CUP). These findings are in addition to the findings required in division 2 (chapter 2-9 and chapter 2-17) of this ordinance.

1. The project shall not adversely affect City infrastructure and services.
2. There is no adverse impact on the surrounding circulation system. The performance criteria as established in the 2010 -IBC Vision Plan/Overlay Zoning Code project final program EIR is maintained as a result of no impact, or adequate mitigation.

G. *IBC database adjustments.* A site which transfers development intensity values ("sending site") shall retain sufficient a.m., p.m., and average daily development intensity values to achieve 0.125 floor area ratio (FAR) office equivalency on the site, except as provided below:

1. The following requirements apply to all master plan and/or conditional use permit applications for transfers of development rights:
 - a. Prior to submittal of applications for building permits for either the sending or receiving site, the applicant shall submit an instrument prepared to the satisfaction of the Director of Community Development and the City Attorney executing a transfer of development rights agreement between the receiving and sending site(s). The following information shall be included in the agreement:
 - (1) The amount of a.m., p.m., and average daily development intensity values transferred values;
 - (2) The remaining amount of a.m., p.m., and average daily development intensity values, including gross square feet of building area, for each site.
 - b. Prior to issuance of building permits for either the sending or receiving site, the agreement between the sending and receiving site as described above shall be recorded in the office of the Orange County Recorder.

H. A CUP or Master Plan shall not be required for transfers of development intensity values for *permitted land uses* between parcels located within the same Traffic Analysis Zones (TAZ's as defined in the 2010 IBC Vision Plan and Overlay Zoning Code EIR. Such transfers may also be permitted between adjacent zones without the requirement for a CUP or Master Plan if a direct physical relationship between sites in adjacent TAZ's can be demonstrated to the satisfaction of the Director of Community Development. Such transfers shall also be exempt from TDR fee requirements. All other TDR provisions of this section shall apply.

(Code 1976, § V.E-836.5.9; Ord. No. 92-3, 4-14-92; Ord. No. 92-20, § 6, 11-10-92; Ord. No. 93-14, § 3, 10-12-93; Ord. No. 94-2, § 3, 2-8-94; Ord. No. 94-3, § 2, 4-26-94; Ord. No. 94-7, § 3, 6-14-94; Ord. No. 95-4, 5-9-95; Ord. No. 95-6, § 3, 5-27-95; Ord. No. 95-22, § 3, 11-28-95; Ord. No. 01-07, § 2, 5-8-01)

Sec. 9-36-19. Procedure for analysis of development intensity and vehicle trip capture within 5.0 IBC Mixed-Use and 5.1 IBC Multi-Use Districts.

A. *Intent.* This section provides a procedure for analysis of development intensity and vehicle trip capture rates for mixed-use projects locating within the 5.0 IBC Mixed-Use and 5.1 IBC Multi-Use Zoning Districts.

B. *Applicability.* This section applies only to development applications for mixed-use projects that propose to locate within the 5.0 IBC Mixed-Use and 5.1 IBC Multi-Use Zoning Districts and formally request a development intensity and vehicle trip capture.

C. *Traffic study*

1. A traffic study shall be required for development applications proposing to utilize trip capture for a parcel within the 5.0 IBC Mixed-Use Zoning District. The most recent ITE formulas and methodologies, as determined by the Directors of Public Works and *Community Development*, shall be used for calculating the appropriate development intensity and vehicle trip capture rates.

2. The traffic study shall be reviewed and findings shall be made and approved by the Director of Public Works and Community Development.

D. *Findings.* The following findings must be made in order to approve an on-site trip capture rate for a mixed-use project located within the 5.0 IBC Mixed-Use and 5.1 IBC Multi-Use Zoning Districts.

1. Approval of the project will not result in exceeding the development intensity value identified in the IBC database. The trip capture rate may be used only if the traffic analysis has identified *no* impacts, or if impacts have been identified, demonstrate mitigation measures that show the circulation system has the capacity to accommodate the project.

2. Average Daily development intensity values may be exceeded subject to the provisions of Section 9-36-11 E of this Chapter.

3. Approval of the project will not jeopardize the ability of the City of Irvine to qualify for funding sources, including but not limited to the Orange County Congestion Management Program (CMP).

(Ord. No. 04-09, § 6, 9-14-04)

Sec 9-36-20 Environmental Standards

1. Applicants for new developments in the Irvine Business Complex shall require that the construction contractor provide alternative transportation mode incentives, such as bus passes, and/or carpooling for workers to and from the worksite on days that construction activities require 200 or more workers. These requirements shall be noted on the grading plan cover sheet.

2. Applicants for new developments in the Irvine Business Complex shall submit evidence to the satisfaction of the Director of Community Development or Director of Public Works that the project uses recycled materials for at least 20 percent of construction materials. Recycled materials may include salvaged, reused, and recycled content materials. Recycled and/or salvaged building materials shall be shown on building plans and product cut sheets submitted to the City.

3. Applicants for new developments in the Irvine Business Complex shall require that the construction contractor utilize off-road construction equipment that conforms to Tier 3 of the United States Environmental Protection Agency, or higher emissions standards for construction equipment over 50 horsepower that are commercially available. The construction contractor shall be made aware of this requirement prior to the start of construction activities.

4. Applicants for new developments in the Irvine Business Complex shall submit evidence to the satisfaction of the Director of Community Development that toilets, urinals, sinks, showers, and other water fixtures installed on-site are ultra-low-flow water fixtures that exceed the Uniform Plumbing Code. Such examples include: 1.28 average gallon/flush high efficiency toilets; 2 GPM efficient bathroom faucets, 2.2 GPM efficient kitchen faucets, and 2.2 GPM efficient shower heads.
5. Applicants for new developments in the Irvine Business Complex shall submit evidence to the satisfaction of the Director of Community Development that landscaping irrigation systems installed the project are automated, high-efficient irrigation systems that reduce water use, such as an evapotranspiration (ET) “smart” weather-based irrigation controller, dual piping, bubbler irrigation; low-angle, low-flow spray heads; moisture sensors, and use of a California Friendly Landscape Palette. These features will make the project consistent with the intent of California Water Conservation in Landscaping Act of 2006 (AB 1881), including provisions to reduce the wasteful, uneconomic, inefficient, and unnecessary consumption of water.
6. Reclaimed water shall be used on all master landscaped areas: This will include master landscapes commercial, multifamily, common, roadways, and park areas. The use of reclaimed water directly offsets potable water demand and reduces the GHG emissions associated with irrigation by approximately 70 percent. Master landscapes will also incorporate weather-based ET controllers and efficient irrigation system design to reduce over watering combined with the application of a California Friendly Landscape Palette.
7. New parking lots shall include tree plantings designed to result in 50 percent shading of parking lot surface areas within 15 years. These shading requirements shall apply to all impervious surfaces on which a vehicle can drive, including parking stalls, driveways, drive aisles, and other maneuvering areas within parking areas. Landscaping shall be provided with drought-tolerant species and groundcovers rather than pavement, in order to reduce heat deflection.
8. On-site recycling facilities shall be provided on all new developments as required by the Director or Public Works.
9. Applicants for new non-residential developments in the Irvine Business Complex shall submit evidence to the satisfaction of the Director of Community Development that proposed buildings are designed and constructed to achieve the ‘Designed to Earn the Energy Star’ rating. In order achieve the ‘Designed to Earn the Energy Star’ rating, the architect/design firm must demonstrate that the final estimate of the building’s energy use correspond to a rating of 75 or better using the US EPA’s Energy Performance Rating from the Internet based tool Target Finder.

9-36-21 Transportation Management Association

This section allows for the formation of a Transportation Management Association (TMA) within the Irvine Business Complex, the structure and operation of which shall be

determined by the Director of Public Works. The objectives of the TMA shall include, but not be limited to the following:

1. Monitor travel demand at employment sites and provide reports on trip generation to the City of Irvine;
2. Offer employees and property owners assistance with transportation services on a voluntary basis.
3. Deliver transportation services to commuters, such as ridesharing, transit and Metrolink information.
4. Represent the IBC in local transportation matters
5. Oversee and fund the implementation and expansion of the i-shuttle system.

9-36-22 Heliports

Applicants for a conditional use permit for a heliport or helistop shall provide evidence that the proposed heliport or helistop complies fully with State of California permit procedures and with any and all conditions of approval imposed by the Federal Aviation Administration (FAA), the Airport Land Use Commission for Orange County (ALUC), and by the Caltrans Division of Aeronautics.

9-36-23 Accessory Retail

For project sites located more than ¼ mile from existing neighborhood-oriented retail services, applicants for residential development of 500 units or more, or non-residential developments of 250,000 sq. ft. or more are strongly encouraged to provide accessory retail uses as defined in the City of Irvine Zoning Code. Should accessory retail uses not be provided, applicants shall provide written rationale for not doing so, as part of the Conditional Use Permit application.

Sec. 1-2-1. General definitions.

Development intensity Value: A measure of development intensity utilized within the City's Irvine Business Complex (IBC) database, Development intensity values for a.m., p.m, and average daily correspond to "vehicle trips" previously identified in the IBC database originally established following the adoption of the 1992 IBC rezoning and intensity allocations.

General land use category: A designation for one of the categories in the Irvine Business Complex land use and development intensity value database with a specific development intensity value rate and utilized to calculate building intensity. These categories are not zoning districts as described elsewhere in this zoning ordinance. The database is based upon eight general land use categories: Office, Industrial, Residential, Retail, Zoning Potential, Lodging. Two other categories describe special situations: undefined uses and uses assumed to have no traffic generation. See section 9-36-8 additional information regarding development intensity value rates for each general land use code. (Note: this term is not to be confused with "General Land Use Category" as described in the City of Irvine general plan.)

IBC Development intensity: development intensity and affiliated development intensity values associated with either a 0.25 FAR Office Equivalency or a discretionary approval which may grant intensity and development intensity values above and beyond a 0.25 FAR Office Equivalency. IBC Development intensity is tracked through the Irvine Business Complex land use and development intensity value database. See section 9-36-8.

IBC Industrial: A general land use category used in the Irvine Business Complex database where the manufacturing, assembly, storage or wholesale distribution of a product occurs. (See section 3-3-1 for specific land uses permitted or conditionally permitted in each zoning district.)

IBC Lodging: A general land use category used in the Irvine Business Complex database which includes specific uses such as transient lodging to the general public and additional services such as restaurants, hotels, motels, meeting rooms, and recreation facilities. (See section 3-3-1 for specific land uses permitted or conditionally permitted in each zoning district.)

IBC Office: A general land use category used in the Irvine Business Complex database comprising all office uses where the managerial, administrative and clerical functions of a business or industry are conducted, or where members of a profession such as attorneys or accountants conduct business. (See section 3-3-1 for specific land uses permitted or conditionally permitted in each zoning district.)

IBC Residential: A general land use category used in the Irvine Business Complex database which comprises all dwelling units and supporting facilities such as neighborhood community facilities and parks. (See section 3-3-1 for specific land uses permitted or conditionally permitted in each zoning district.)

IBC Retail: A general land use category used in the Irvine Business Complex database which is devoted to retail uses such as the sales of goods and services. (See section 3-3-1 for specific land uses permitted or conditionally permitted in each zoning district.)

IBC Zoning Potential: A general land use category used in the Irvine Business Complex database which represents the difference between the calculated 0.25 FAR standard intensity allocation for a given vacant or under-utilized parcel and the built

and/or approved gross square footage for that parcel. Development intensity value rates for Zoning Potential correspond to those associated with IBC Office development intensity value rates.

Office equivalency: Development intensity within PA 36 (IBC) which is based upon vehicle development intensity value rates commensurate with office development.

Receiving site (TDR): A site within the IBC to which development rights (gross square feet based upon an development intensity value budget) may be transferred in accordance with the provisions of section 9-36-17 (TDR).

Sending site (TDR): A site within the IBC that has the ability to transfer development rights (gross square feet based upon an development intensity value budget in the IBC database) in accordance with the provisions of section 9-36-17 (TDR).

Undefined uses: A general land use category used in the Irvine Business Complex zoning ordinance which includes accessory uses, manufactured structures, and drive-thru, churches, community and government facilities, commercial recreation, outdoor storage, and commercial, private and public schools. Corresponding vehicle trip rates shall be determined by the Director of Public Works at the time of project submittal consistent with development intensity value rates approved by the City, and shall be based upon the specific land uses proposed.

Uses assumed to have no traffic generation: A general land use category used within the Irvine Business Complex (PA 36) that describes uses for which no development intensity value is assumed. These include parks, pushcarts and heliports for which no development intensity value shall be assumed.

CHAPTER 3-27. SETBACK STANDARDS

Sec. 3-27-1. Applicability.

Sec. 3-27-2. General setback requirements.

Sec. 3-27-3. Exceptions to setback requirements.

Sec. 3-27-4. Intrusions into required setbacks.

Sec. 3-27-5. Setback requirements for legal nonconforming structures.

Sec. 3-27-6. Reserved.

Sec. 3-27-7. Lattice/trellis patio cover, cabana, pool house and gazebo setback requirements.

Sec. 3-27-8. Pools and spas and mechanical equipment setback requirements.

Sec. 3-27-9. Open parking area setback requirements.

Sec. 3-27-10. Garage and carport setback requirements.

Sec. 3-27-11. Mobile home park building setback requirements.

Sec. 3-27-12. Reserved.

Sec. 3-27-13. Residential building additions.

Sec. 3-27-1. Applicability.

Setback standards apply to all residential and nonresidential developments. In addition to the general requirements, this chapter identifies specific standards as well as the exceptions to the setback standards.

(Code 1976, § V.E-318.1; Ord. No. 92-3, 4-14-92; Ord. No. 92-20, § 6, 11-10-92; Ord. No. 92-21, 11-24-92; Ord. No. 94-7, § 3, 6-14-94; Ord. No. 95-1, § 5, 1-10-95; Ord. No. 95-4, § 1, 5-9-95)

Sec. 3-27-2. General setback requirements.

A. *Streets.* The setback is measured from the curb face corresponding to the ultimate right-of-way. Refer to chapter 3-37 for specific setback distances for each land use category and arterial roadway designation. Exceptions to setback distances for specific roadways are shown in the setback exceptions matrix (at the end of this section). Please refer to the footnotes found in each Irvine Business Complex (IBC) zoning category regarding exceptions to the measurement of streetside (building) setbacks.

1. When a planning area edge exists between a residential use and a street, the interior setbacks shall apply.
2. When a planning area edge exists between a commercial use and a street, the planning area edge boundary or the streetside setback shall apply, whichever is greater.
3. When a residential lot has two street frontages (e.g., corner lot), the streetside setback or the side yard property line setback requirement shall apply, whichever is more restrictive.
4. When residential buildings are located where the side yard is dedicated by easement in perpetuity to the adjacent property, the walls directly adjacent to the easement are permitted to have eaves as described below:
 - a. In situations where the easement is less than three feet in width, eaves are prohibited.
 - b. In situations where the easement is three feet in width, the entire width of the eave, including any rain gutter, shall be no greater than one foot, measured from the face of the exterior wall.

c. In situations where the easement is at least five feet in width, the entire width of the eave, including any rain gutter, shall be no greater than three feet, measured from the face of the exterior wall.

d. In situations where eaves are permitted and the slope of the roofline causes water to drain toward the easement, rain gutters are required to ensure water does not flow onto the easement.

e. In all instances the face of the eave, including any rain gutter, shall be setback a minimum of two feet from any property line, consistent with Section 503.2.1 and table 5-A of the Uniform Building Code.

B. *Interior boundaries.* The setbacks are measured from the side or rear property line of the site (see definition of "Site").

1. Rear and side setbacks may be zero. See development standards in chapter 3-37.

C. *Planning Area 4.* For setbacks along arterials and the planning area edge within Planning Area 4 (Lower Peters Canyon), see section 9-4-7.C.1.

SETBACK EXCEPTIONS MATRIX

If a project is adjacent to any of the following roadway segments, use the setback distance (in feet) listed under the appropriate land use category below. If the project is not adjacent to any of the following roadway segments, refer to the setback distance requirements found in sections 3-37-2 through 3-37-38.

TABLE INSET:

ROADWAY SEGMENT 5.0 IBC Mixed-Use 5.1 IBC Multi-Use 5.2 IBC Industrial 5.3 IBC Residential

Alton:

Redhill to Culver 40

Campus:

Jamboree to University 40 30

Main Street:

SR-55 to Harvard 40 2 40 30 1

Michelson:

Von Karman to Jamboree 30 3 40

Jamboree to Harvard 40

Redhill:

I-405 to Main 40

Von Karman:

Michelson to Main 40

Main to Barranca 40

Footnotes:

1. In 5.3B, 20 feet.
2. For the property located on the northeast corner of Jamboree and Main Street located in the 5.0 IBC Mixed Use district, the setbacks for residential land uses from Jamboree and Main Street frontage shall be no less than 20 feet as measured from the ultimate right-of-way/property line of this parcel. For the non-residential portions of this same project site, the setbacks from Main Street shall be no less than 12 feet as measured from the ultimate right-of-way/property line of this parcel.
3. For the property located at the northwest corner of Jamboree Road and Michelson Drive and designated in 5.0A IBC Mixed-Use district, the minimum setback from Michelson Drive, between Teller and Obsidian, shall be no less than 23 feet as measured from the ultimate curb face of Michelson Drive. This reduced setback shall override the applicable requirements for special landscaped street in Section 3-15-9.
(Code 1976, § V.E-318.2; Ord. No. 92-3, 4-14-92; Ord. No. 92-20, § 6, 11-10-92; Ord. No. 92-21, 11-24-92; Ord. No. 94-7, § 3, 6-14-94; Ord. No. 95-1, § 5, 1-10-95; Ord. No. 95-4, § 1, 5-9-95; Ord. No. 97-05, 5-13-97; Ord. No. 97-06, § 3, 5-13-97; Ord. No. 03-15, § 5, 5-13-03; Ord. No. 03-34, § 5, 1-27-04; Ord. No. 04-09, § 6, 9-14-04; Ord. No. 05-16, § 2, 7-12-05; Ord. 05-29, § 3, 1-10-06)

Sec. 3-27-3. Exceptions to setback requirements.

The following are allowed in any required setback area but shall not obstruct sight distance for access (this shall be determined by performing a sight distance measurement pursuant to Engineering Standard Plan 403):

- A. Driveway entrances.
- B. Flagpoles (see chapter 3-9 and chapter 3-13).
- C. Fountains.
- D. Landscaping.
- E. Lattice/trellis patio cover (see section 3-27-7).
- F. Mechanical equipment (see section 3-27-8).
- G. Patios (uncovered).
- H. Detached fireplace/chimney
- I. Walks.
- J. Walls and fences (see chapter 3-35).

See Chapter 5-8 and IBC Residential/Mixed Use Design Criteria for exceptions to setback requirements for residential or residential mixed use projects within the Irvine Business Complex.

(Code 1976, § V.E-318.3; Ord. No. 92-3, 4-14-92; Ord. No. 92-20, § 6, 11-10-92; Ord. No. 92-21, 11-24-92; Ord. No. 94-7, § 3, 6-14-94; Ord. No. 95-1, § 5, 1-10-95; Ord. No. 95-4, § 1, 5-9-95; Ord. No. 03-02, § 4, 1-14-03)

Sec. 3-27-4. Intrusions into required setbacks.

The following are allowed to intrude a maximum of three feet into a required setback:

- A. Architectural features.
- B. Eaves (see Section 3-27-2.5).

- C. Fireplaces.
- D. Steps and staircases (open).
- E. Balconies on all floors of only mid-rise and high-rise residential developments of four stories and above (applies only to zoning categories 5.0, 5.1 and 5.3 in the IBC).

See Chapter 5-8 and IBC Residential/Mixed Use Design Criteria for exceptions to setback requirements for residential or residential mixed use projects within the Irvine Business Complex.

(Code 1976, § V.E-318.4; Ord. No. 92-3, 4-14-92; Ord. No. 92-20, § 6, 11-10-92; Ord. No. 92-21, 11-24-92; Ord. No. 94-7, § 3, 6-14-94; Ord. No. 95-1, § 5, 1-10-95; Ord. No. 95-4, § 1, 5-9-95; Ord. No. 05-16, § 2, 7-12-05)

Sec. 3-37-28.1. 5.0 IBC Mixed Use.

A. *Intent* . The Mixed-Use land use district is intended as a zoning designation in which a wide variety of uses are allowed on the same site. This district allows a mix of commercial, retail and residential uses and also restricts the amount of traditional industrial/warehouse uses that can be found in other IBC districts. This category encourages mixed-use projects by allowing a combination of commercial, office, residential, and institutional uses within the same project site. Specific uses, particularly those proposed to serve the needs of the residential and employee populations of this district, such as residential, retail, office, schools, parks, libraries and theatres, are especially encouraged in this area. Special provisions apply to several of the conditional commercial uses in this area that generate high levels of traffic.

B. *Permitted uses.*

TABLE INSET:

GLU 1 Category	Use
35	Accessory use
36	Agriculture (interim use)
31	Bar, tavern and cocktail lounge 2
35 T	Commercial recreation (under 1,500 square feet)
31	Financial institution (except drive-thru)
35 T	Government facility
31 T	Health club
35	Home care
35	Home occupation permit
29	Information center
29	Large family day care
35	Manufactured structure permit (up to two years)
33	Model home sales complex
29	Office, administrative, business, professional
29	Office, design professional
29	Office, headquarters
29 T	Office, medical
31	Outdoor vendor

36	Park
36	Parking Structure
36	Public park facility
36	Pushcart
29	Research and development
31 T	Restaurant
31 T	Restaurant, fast food
31	Retail and/or service business, general (except drive-thru)
36	Reverse vending machine
35	School, commercial
35	School, private
35	School, public
33	Senior housing
31	Supermarket
29	Veterinary services, domestic
35	Wireless Communication Facility (may require a wireless communication facility permit, a minor conditional use permit, a major conditional use permit or may be prohibited, depending on the type of installation and the location of the installation site, pursuant to the review procedures matrix in Section 2-37.5-3.

C. *Conditional uses* .

TABLE INSET:

GLU 1 Category	Use
31	Arcade, game
34	Caretaker's quarters
29	Child care center
35 T	Commercial recreation (over 1,500 square feet)
35	Community facility
29 T	Conference/convention facility
30	Congregate care facility
30	Convalescent home
31 T	Convenience, liquor store

31 T	Financial institution, drive-thru
31 T	Fraternal and service club
36	Heliport
29	Hospital
38 T	Hotel, extended stay
32	Hotel, motel
35	Manufactured structure (over two years)
31	Massage establishment and related business
31	Outdoor sales
33	Residential, attached
33	Residential care facility
33	Residential shelter
31	Restaurant, "Type 47" ABC License operating after 12:00 a.m.
30	Small collection facility
35	Utility building and facility

D. *Maximum building intensity.*

1. The IBC land use database specifies maximum development allocations in a.m. and p.m. peak hour and average daily automobile development intensity values for each legal parcel or site. It also identifies the existing gross square feet, number of dwelling units and hotel rooms for each legal parcel in the IBC. In addition, the database estimates the build-out potential based on the 0.25 FAR in office equivalency for each site. Developments shall not exceed the allocated a.m. and p.m. development intensity values specified in the database for a particular site.

2. A traffic study shall be required for development proposals that exceed the maximum ADT limitation. A conditional use permit may also be required. Refer to Section 9-36-10 for special regulations that pertain to applications proposing to exceed the maximum ADT limit.

3. The minimum allowable density shall be 30 units per acre. For calculation of residential intensity, density averaging shall be allowed, whereby the total number of dwelling units proposed is divided by the net acreage of the residential and open space/park portions of the project site. The maximum residential density shall be 30-52 dwelling units per net acre, except that the maximum allowable density may be increased to 30-56 dwelling units per net acre if the development provides twenty percent of the units in the development as on-site affordable housing in accordance with the following criteria:

- a. Five percent of the units for Income II (30--50 percent of median area income); and
- b. Five percent of the units for Income III (50--80 percent of median area income); and
- c. Ten percent of the units for Income IV (80--120 percent of median area income); and

E. *Minimum site size.* 3

- 1. General commercial/retail uses: 10,000 square feet.
- 2. All other nonresidential uses: 30,000 square feet.

3. Residential uses: One-half (0.5) acre.
- F. *Maximum site coverage.* 4
 1. Nonresidential uses: 65 percent.
 2. Residential and mixed-use developments: 75 percent.
- G. *Maximum building height.* FAA height limits as determined in accordance with part 77 of the FAA regulations.
- H. *Landscaping.*
 1. Site landscaping. A minimum of 15 percent landscaping is required for each improved nonresidential building site.
- I. *Setbacks.*

See Chapter 5-8 and IBC Residential/Mixed Use Design Criteria for setbacks for residential and residential mixed use developments).

1. Freeways, transportation corridors:
 - Residential uses: 40 feet (30 feet from I-405 right-of-way (5.0A))
 - Nonresidential uses: 25 feet
2. Major highways:
 - Nonresidential uses: 25 feet
3. Primary highways:
 - Nonresidential uses: 20 feet
4. Secondary highways:
 - Nonresidential uses: 20 feet
5. Commuter highways and local streets:
 - Nonresidential uses: 15 feet
6. Private drives: 10 feet
7. Building to building setbacks: 10 feet
8. Side setbacks: 10 feet
9. Rear setbacks:
 - Nonresidential uses: 5 feet
10. Improvements permitted within the setback area:
 - a. Steps, and open and enclosed stairways, except that they may not be located within ten feet of the face of curb.
 - b. Architectural projections such as eaves, column and buttresses may extend six feet into a 30-foot setback, and three feet into a setback of less than 30 feet.
 - c. On-site recreational amenities as required by Zoning Code Chapter 2-22, and further outlined in the Park Plan and Park Design for the site.
 - d. Balconies on all floors of only mid-rise and high-rise residential developments of four stories and above.
 - e. See Chapter 5-8 and IBC Residential/Mixed Use Design Criteria for improvements allowed in setback areas for residential and residential mixed use developments.
- J. *Sidewalks.* Sidewalks shall be installed along all frontages in the planning area in accordance with the sidewalk plan for the Irvine Business Complex adopted by the City of Irvine. Additional sidewalks and other pedestrian access facilities shall be required as needed to facilitate pedestrian circulation between places of employment, restaurants, parks, and institutional, retail and residential uses. The width of sidewalks adjacent to and around retail areas and/or park and open space areas shall be determined during the master plan process or established through grading plan reviews.
- K. *Lighting.*

1. Exterior lighting is required for all employee and visitor parking areas, walkways, and building entrances and exits.
2. No light standard shall exceed ten feet in height unless the light standard has a light cutoff of 90 degrees or less, in which case the maximum height shall be 30 feet.
3. No light source shall be affixed to any building so that rays are perpendicular to the building face.
4. All direct rays shall be confined to the site.

L. *Screening.*

1. All building operating mechanical equipment shall be screened from off-site view.

M. *Parking.* Parking shall be provided in accordance with division 4 of the zoning ordinance except for the following:

1. For mixed-use buildings and/or parcels, each use shall have parking as per the requirements of division 4 of the zoning ordinance. If an applicant desires a reduction in these standards when applying for City approval, the applicant must submit a parking study stating the request and the reasons why the reduced ratio is appropriate for the proposed use. This study shall be reviewed and approved by the approval body prior to, or concurrent with, the approval of the project.
2. Vehicle parking shall not be permitted within the streetside setback where the property abuts a street designated as a special landscaped street, or within ten feet of the ultimate right-of-way line for property along other public streets. On street parking on interior private courts, street and/or drives shall be allowed based on the City-adopted Standard Plans.
3. Parking requirements for all residential units shall be based on the parking standards as set forth in division 4 of the zoning ordinance. If an applicant desires a reduction in these standards when applying for a conditional use permit approval, the applicant must submit a parking study stating the request and the reasons why the reduced ratio is appropriate for the proposed rental residential units. This study shall be reviewed and approved by the Planning Commission prior to, or concurrent with, the approval of the master plan.
4. See Chapter 5-8 and IBC Residential/Mixed Use Design Criteria for parking requirements for residential and residential mixed use developments.

N. *Private drives.* For residential projects that propose to include private drives, all private drives shall meet the standards stated in the City's private drive policy in effect at the time of conditional use permit approval.

O. *Affordable housing requirement.* Any residential units built must comply with chapters 2-3 and 9-36 of this zoning ordinance.

Footnotes:

T A traffic study is required for this use; see section 9-36-11. No traffic study will be required for any use with this footnote if the use was considered as part of a traffic study prepared for any mixed-use development provided the traffic study was prepared and approved within the past 12 months. For "31T Restaurant" and "31T Restaurant, fast food," the Director of Public Works shall determine whether a traffic study approved more than 12 months ago is adequate.

1 General land use (GLU) categories identify the development intensity value generation rates used for analyzing a corresponding permitted or conditional use in the IBC. See section 9-36-8 for additional information regarding development intensity value rates for each general land use category.

2 Any "Bar, Tavern Cocktail Lounge" proposing to locate in the same building as a residential use, shall be subject to the Conditional Use Permit procedures contained in Zoning Code Chapter 2-9.

3 This requirement shall not be construed to prevent condominium-type developments that have smaller lot sizes as long as they have a mandatory owners' association, and the land area under the jurisdiction of the owners' association meets the minimum lot size requirements.

4 If useable open space, landscape or hardscape is placed over the parking structure, then that portion of the parking structure covered by these areas shall not count towards building site coverage, provided that the parking structure is designed in keeping with the architectural theme of the residential units, and is screened from off site views either completely or with a berm having a minimum height of five feet. In any non-residential projects which propose the use of parking structure(s), those portions of the structure which meet the following criteria shall not be counted in determining compliance with the limits on building site coverage:

- a. The roof of the structure is within five feet of the surface grade existing on the site prior to the development of the project; and
- b. The roof of the structure is, in effect, replacing the ground surface in the functions that it performs (i.e., it will be covered by such improvements as surface parking, access drives, landscaping, walkways, and plazas in a manner similar to the design that would be used if the roof were land surface); and
- c. Any portion of the parking structure that is above the existing grade is screened from off-site views.

5 On-site parking shall not be permitted within 25 feet of exterior boundaries of the site.

6 If the use of the adjoining parcel is residential, then the building setback may be a minimum of five feet, but in no instance shall any structure be located closer than ten feet to another structure. Additionally, for buildings within the 5.0A IBC Mixed-Use district, and located on lots immediately adjacent to any private park, the setback may be five feet, but in no instance shall any structure be located closer than ten feet to another structure.

7 Other than the improvements noted, streetside setbacks shall be landscaped.

8 For the property located at the northwest corner of Jamboree Road and Michelson Drive and designated in 5.0A IBC Mixed-Use district, the minimum setback from Michelson Drive, between Teller and Obsidian, shall be no less than 23 feet as measured from the ultimate curb face of Michelson Drive. This reduced setback shall override the applicable requirements for special landscaped street in Section 3-15-9. (Ord. No. 03-34, § 5, 1-22-04; Ord. No. 04-08, § 5, 8-24-04; Ord. No. 04-09, § 6, 9-14-04; Ord. No. 05-13, § 4, 7-12-05; Ord. No. 05-16, § 2, 7-12-05)

Sec. 3-37-29. 5.1 IBC Multi-Use.

A. *Intent.* The Multi-Use land use district is intended as an area in which a wide variety of uses are allowed. Specific institutional uses, particularly those proposed to serve the needs of the residential and employee populations of this district, such as schools, parks, libraries and theaters, are especially encouraged in this area. Special provisions apply to several of the conditional commercial uses in this area which generate high levels of traffic.

B. *Permitted uses.*

TABLE INSET:

GLU 1 Category	Use
35	Accessory use
36	Agriculture (interim use)
35 T	Commercial recreation (under 1,500 square feet)
31	Equipment rental
30	Greenhouse
29	Industry, service
29	Information center
35	Manufactured structure permit (up to two years)
30	Manufacturing, light
29	Office, administrative, business, professional
29	Office, design professional
29	Office, headquarters
31	Outdoor vendor
36	Park
36	Public park facility
36	Pushcart
30	Recreational vehicle storage, private
29	Research and development
31	Retail and/or service business, general (except drive-thru)
35	Retail business, home improvement related
36	Reverse vending machine
35	School, public
31	Supermarket
29	Veterinary services, domestic
35	Warehouse and sales outlet
30	Warehousing, storage, and distribution

35	Wireless Communication Facility (may require a wireless communication facility permit, a minor conditional use permit, a major conditional use permit or may be prohibited, depending on the type of installation and the location of the installation site, pursuant to the review procedures matrix in Section 2-37.5-3.
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C. *Conditional uses.*

TABLE INSET:

GLU 1 Category	Use
29	Ambulance service
31	Bar, tavern and cocktail lounge
34	Caretaker's quarters
31 T	Carwash
29	Child care center
35	Church 2
35 T	Commercial recreation (over 1,500 square feet)
35	Community facility
35	Composting facility
29 T	Conference/convention facility
30	Congregate care facility
30	Convalescent home
31 T	Convenience, liquor store
31 T	Department store
35 T	Drive-thru
31	Escort bureau/introductory service
31 T	Financial institution (except drive-thru)
31 T	Financial institution, drive-thru
31 T	Fraternal and service club
31	Funeral home, mortuary
31 T	Gas station/fuel dispenser
35 T	Government facility
31 T	Health club
36	Heliport

29	Hospital
38 T	Hotel, extended stay
32	Hotel, motel
30 T	Large collection facility
35	Manufactured structure (over two years)
30	Manufacturing, heavy
31	Massage establishment and related business
37	Miniwarehouse
29 T	Office, medical 5
31	Outdoor sales
35	Outdoor storage
33	Residential, attached
31 T	Restaurant 3
31 T	Restaurant, fast food (drive-thru)
31 T	Restaurant, fast food (except drive-thru)
31 T	Restaurant, "Type 47" ABC License operating after 12:00 a.m.
35	School, commercial 4
35	School, private 4
30	Small collection facility
35	Utility building and facility
30	Vehicle body repair, paint, or restoration
31	Vehicle leasing and rental
31	Vehicle repair
31	Vehicle sales

D. *Maximum building intensity.*

1. The IBC land use database specifies maximum development allocations in a.m. and p.m. peak hour and average daily development intensity values for each legal parcel or site. It also identifies the existing gross square feet, number of dwelling units and hotel rooms for each legal parcel in the IBC. In addition, the database estimates the build-out potential based on the 0.25 FAR in office equivalency for each site. Developments shall not exceed the allocated a.m. and p.m. development intensity values allocations specified in the database for a particular site.

2. A traffic study shall be required for development proposals which exceed the maximum ADT limitation. A conditional use permit may also be required. Refer to section

9-36-10 for special regulations that pertain to applications proposing to exceed the maximum ADT limit.

E. *Minimum site size.*

1. General commercial/retail uses: 10,000 square feet.6
2. All other uses: 30,000 square feet.6

F. *Maximum site coverage.* 7

1. Structures with at least 75 percent of gross floor area in manufacturing or warehouse uses: 65 percent.
2. All other uses: 50 percent.8

G. *Maximum building height.* FAA height limits as determined in accordance with part 77 of the FAA regulations.

H. *Landscaping.*

1. *Site landscaping.* A minimum of 15 percent landscaping is required for each improved building site.

I. *Setbacks.*

See Chapter 5-8 and IBC Residential/Mixed Use Design Criteria for setbacks for residential and residential mixed use developments).

1. Street setbacks: 40 feet 9,10
2. Side setbacks: 10 feet 11
3. Rear setbacks: 0 feet 12
4. Improvements permitted within the setback area:
 - a. Steps, and open and unenclosed stairways, except that they may not be located within ten feet of the streetside property line.
 - b. Architectural projections such as eaves, columns and buttresses may extend six feet into a 30-foot or 40-foot street setback, and three feet into a setback less than 30 feet (for streets widened since 6/30/82; see footnote 10). However, for those parcels along Main Street, MacArthur Boulevard, and Jamboree Road, the architectural projections indicated above may encroach six feet into the 12-foot, eight-foot, and 15-foot streetside setbacks, respectively.
 - c. Balconies on all floors of only mid-rise and high-rise residential developments of four stories and above.
 - d. See Chapter 5-8 and IBC Residential/Mixed Use Design Criteria for improvements allowed in setback areas for residential and residential mixed use developments.
5. Setbacks for structures built over public streets:
 - a. Intent: Structures spanning public street rights-of-way require special design considerations. This section is intended to serve several purposes. The first of these is to ensure that a tunnel-like effect is avoided along public street rights-of-way, even if such structures are developed on a series of properties. In addition, such developments are intended to observe setback requirements consistent with those applied to all other structures in the area. Finally, these regulations are intended to ensure that adequate vertical clearance for vehicular traffic across the impacted street rights-of-way is maintained.
 - b. Buildings which are located on either side of a public street must maintain the following setbacks and clearances.
 - (1) The vertical plane of the building which faces the street must be at or outside the required building setback from that street.

(2) A clearance of at least 20 feet from the surface of the roadway to the underside of the bridge or useable floor area must be maintained. Signs shall be provided on bridges indicating the vertical clearance from the street.

(3) If more than one bridge is proposed over the same street, the bridges can be no closer together than the width of the two bridges added together.

(4) This section does not apply to pedestrian and/or bicycle overcrossings.

J. *Sidewalks.* Sidewalks shall be installed along all street frontages in the planning area in accordance with the sidewalk plan for the Irvine Business Complex adopted by the City of Irvine. Additional sidewalks and other pedestrian access facilities shall be required as needed to facilitate pedestrian circulation between places of employment, restaurants, parks, and institutional, retail and residential uses.

K. *Lighting.*

1. Exterior lighting is required for all employee and visitor parking areas, walkways, and building entrances and exits.

2. No light standard shall exceed ten feet in height unless the light standard has a light cutoff of 90 degrees or less, in which case the maximum height shall be 30 feet.

3. No light source shall be affixed to any building so that rays are perpendicular to the building face.

4. All direct rays shall be confined to the site.

L. *Screening.*

1. All building operating mechanical equipment shall be screened from off-site view.

2. All outside storage areas shall be screened with an opaque wall or fence.

M. *Parking.* Parking shall be provided in accordance with division 4 of the zoning ordinance except for the following:

1. In no instance shall parking exceed one space per 500 square feet for an industrial, storage, or warehouse use.

2. For mixed use buildings, each use shall have parking as per the requirements of the City's zoning ordinance. Those portions devoted to an industrial, storage or warehousing use shall not exceed one space per 500 square feet of gross floor area.

3. Vehicle parking shall not be permitted within the streetside setback where the property abuts a street designated as a special landscaped street, or within ten feet of the ultimate right-of-way line for property along other streets.

4. See Chapter 5-8 and IBC Residential/Mixed Use Design Criteria for parking requirements for residential and residential mixed use developments.

T A traffic study is required for this use; see section 9-36-11.

1 General land use (GLU) categories identify the development intensity value rates used for analyzing a corresponding permitted or conditional use in the IBC. See section 9-36-8 for additional information regarding development intensity value rates for each general land use category.

2 A church that proposes to locate in an existing permanent building and meets all the general development standards will not require a conditional use permit (CUP). However, churches with permanent child care or private school activities shall be subject to a conditional use permit.

3 A restaurant that proposes to locate in an existing building previously approved for restaurant use, and meets all the general development standards, including parking, will not require a conditional use permit.

4 A commercial or private school for adults (18 years and older) that proposes to locate in an existing permanent building and meets all the general development standards will not require a conditional use permit. However, private school activities that

are to be a part of a church located in this zoning district shall be subject to a conditional use permit.

5 A medical office located in an existing retail development which meets all the general development standards, including parking, will not require a conditional use permit and no traffic study will be required.

6 This requirement shall not be construed to prevent condominium-type developments which have smaller lot sizes as long as they have a mandatory owners' association, and the land area under the jurisdiction of the owners' association meets the minimum lot size requirements.

7 In projects which include a parking structure, those portions of the structure which meet the following criteria shall not be counted in determining compliance with the limits on building site coverage:

- a. The roof of the structure is within five feet of the surface grade existing on the site prior to the development of the project; and
- b. The roof of the structure is, in effect, replacing the ground surface in the functions that it performs, i.e., it will be covered by such improvements as surface parking, access drives, landscaping, walkways, and plazas in a manner similar to the design that would be used if the roof were land surface; and
- c. Any portion of the parking structure which is above the existing grade is screened from off-site views.

8 In projects which include an aboveground parking structure, the limit on building site coverage shall be determined as follows:

- a. Coverage attributable to the buildings containing the primary use of the parcel shall not exceed 50 percent; and
- b. Total coverage, which includes the primary buildings(s) and the parking structure(s), shall not exceed 65 percent.

9 Building streetside setbacks have been reduced for portions of Main Street, MacArthur Boulevard and Jamboree Road due to road widening projects located along these streets within the IBC. The setback for the portions of each street affected by these setback reductions are set forth and described as follows:

- a. Main Street: 12 feet.
 1. Those parcels located along the north side of Main Street beginning at the Costa Mesa (I-55) Freeway extending east to the San Diego Creek Channel;
 2. Those parcels along the south side of Main Street beginning at the Costa Mesa (I-55) Freeway extending east to MacArthur Boulevard; and
 3. One parcel (Lot 5 of Tract 65/46-47) located on the southwest corner of Main Street and Jamboree Road.
- b. MacArthur Boulevard: 8 feet.
 1. Those parcels located on the east side of MacArthur Boulevard beginning at Douglas and extending to the San Diego (I-405) Freeway.
- c. Jamboree Road: 15 feet.
 1. Those parcels located on the east and west side of Jamboree Road beginning at Main Street and north to Alton Parkway; and
 2. Those parcels located on the west side of Jamboree Road beginning at Alton Parkway extending to the first parcel (Lot 5 of Tract 7815) on the northwest corner of Beckman and Jamboree Road.

These building streetside setbacks shall be measured from the ultimate right-of-way/property line of each parcel. Refer to appendix A, chapter 9-36, for properties affected by the IBC roadway widening project.

The minimum special landscaped street setback may be equal to or greater than the building setback associated with those streets affected by roadway widenings.

10 If the ultimate right-of-way for any street, with the exception of those portions of Main Street, MacArthur Boulevard, or Jamboree Road, as specified in footnote 9 above, is widened subsequent to June 30, 1982, then the minimum setback may be 30 feet from the right-of-way/property line. This provision shall not be construed to allow existing structures to expand by virtue of the reduced setback, except for those structures that are located on a parcel that is adjacent to those portions of Main Street, MacArthur Boulevard, or Jamboree Road and as specified in footnote 9 above.

11 May be zero feet provided that the main building on the abutting lot is at zero feet, and both parcels are developed at the same time.

12 Any parcel with two or more street frontages may have one interior property line with a setback of zero feet.

(Code 1976, § V.E-325.5.1; Ord. No. 92-3, 4-14-92; Ord. No. 93-14, § 3, 10-12-93; Ord. No. 94-2, § 3, 2-8-94; Ord. No. 94-7, § 3, 6-14-94; Ord. No. 94-15, § 3, 12-13-94; Ord. No. 94-16, 12-13-94; Ord. No. 95-3, § 3B, 4-25-95; Ord. No. 95-4, § 1, 5-9-95; Ord. No. 95-7, § 4, 7-11-95; Ord. No. 95-8, § 3, 7-11-95; Ord. No. 95-12, § 3, 9-12-95; Ord. No. 95-16, § 2, 10-10-95; Ord. No. 96-2, § 2, 1-23-96; Ord. No. 96-18, § 4, 12-10-96; Ord. No. 97-05, 5-13-97; Ord. No. 98-20, § 2, 12-8-98; Ord. No. 99-10, § 3, 5-11-99; Ord. No. 03-29, § 3, 9-23-03; Ord. No. 05-13, § 4, 7-12-05; Ord. No. 05-16, § 2, 7-12-05)

Sec. 3-37-30. Reserved.

Sec. 3-37-31. 5.2 IBC Industrial.

A. *Intent.* It is the intent of this section to preserve a viable industrial base in the IBC and to protect nonindustrial land uses from the nuisances and hazards often associated with industrial activities, by establishing an exclusively industrial district. The area designated for this district has historically been exclusively industrial, and is currently unsuitable for most nonindustrial uses (e.g., residential, retail).

B. *Permitted uses.*

TABLE INSET:

GLU 1 Category	Use
35	Accessory use
36	Agriculture (interim use)
34	Caretaker's quarters
31	Equipment rental
30	Greenhouse
29	Information center
29	Industry, service
35	Manufactured structure permit (up to two years)
30	Manufacturing, light
29	Office, design professional

31	Outdoor vendor
30	Packing plants for agriculture products
36	Park
36	Pushcart
30	Recreational vehicle storage, public
36	Reverse vending machine
35	School, public
35	Sexually oriented business
30	Vehicle assembly
31	Vehicle repair
30	Vehicle storage
30	Warehousing, storage and distribution
35	Wireless Communication Facility (may require a wireless communication facility permit, a minor conditional use permit, a major conditional use permit or may be prohibited, depending on the type of installation and the location of the installation site, pursuant to the review procedures matrix in Section 2-37.5-3.

C. *Conditional uses.*

TABLE INSET:

GLU 1 Category	Use
36	Ambulance service
31 T	Carwash
29	Child care center
35	Church 2
31 T	Convenience, liquor store
35 T	Community facility
30	Composting facility
30 T	Concrete recycling facility
35 T	Drive-thru
31 T	Gas station/fuel dispenser
35 T	Government facility
30 T	Hazardous waste facility

36	Heliport
38	Hotel, extended stay
32	Hotel, motel
30 T	Large collection facility
35	Manufactured structure permit (over two years)
30	Manufacturing, heavy
30 T	Materials recovery facility
37	Miniwarehouse
31	Outdoor sales
35	Outdoor storage
31 T	Restaurant 3
31 T	Restaurant (fast food, except drive-thru)
31 T	Restaurant, "Type 47" ABC License operating after 12:00 a.m.
31 T	Retail and/or service business, general (except drive-thru)
30	Small collection facility
31 T	Solid waste transfer station
30 T	Truck terminal
35	Utility building and facility
30	Vehicle body repair, paint or restoration
30	Vehicle impound yard
31	Vehicle leasing and rental
31	Vehicle sales
30	Vehicle wrecking yard
31	Warehouse and sales outlet

D. *Maximum building intensity.*

1. The IBC land use database specifies maximum development allocations in a.m. and p.m. peak hour and average daily development intensity values for each legal parcel or site. It also identifies the existing gross square feet, number of dwelling units and hotel rooms for each legal parcel in the IBC. In addition, the database estimates the build-out potential based on the 0.25 FAR in office equivalency for each site. Developments shall not exceed the allocated a.m. and p.m. development intensity values specified in the database for a particular site.

2. No tenant shall have more than 15 percent of the gross square footage of their use devoted to accessory offices use in support of the primary industrial use.

3. A traffic study shall be required for development proposals which exceed the maximum ADT limitation. A conditional use permit may also be required. Refer to section 9-36-10 for special regulations that pertain to applications proposing to exceed the maximum ADT limit.

E. *Minimum site size.* One acre. 4

F. *Maximum site coverage:* 5 65 percent.

G. *Maximum building height.* 35 feet. 6

H. *Landscaping.*

1. *Site landscaping.* A minimum of 15 percent landscaping is required for each improved building site.

I. *Setbacks.*

1. Streetside setbacks: 40 feet.7,8

2. Side setbacks: 10 feet.8,9

3. Rear setbacks: 0 feet.10

4. Improvements permitted within the setback area:

a. Steps, and open and unenclosed stairways, except that they may not be located within ten feet of the streetside property line.

b. Architectural projections such as eaves, columns and buttresses may extend six feet into a 30-foot setback, and three feet into a setback less than 30 feet.

5. Setbacks for structures built over public streets:

a. Intent: Structures spanning public street rights-of-way require special design considerations. This section is intended to serve several purposes. The first of these is to ensure that a tunnel-like effect is avoided along public street rights-of-way, even if structures such as bridges are developed on a series of properties. In addition, such developments are intended to observe setback requirements consistent with those applied to all other structures in the area. Finally, these regulations are intended to ensure that adequate vertical clearance for vehicular traffic across the impacted street rights-of-way is maintained.

b. Buildings which are located on either side of a public street must maintain the following setbacks and clearances:

(1) The vertical plane of the building which faces the street must be at or outside the required building setback from that street.

(2) A clearance of at least 20 feet from the surface of the roadway to the underside of the bridge or usable floor area must be maintained. Signs shall be provided on bridges indicating the vertical clearance from the street.

(3) If more than one bridge is proposed over the same street, the bridges can be no closer together than the width of the two bridges added together.

(4) This section does not apply to pedestrian and/or bicycle overcrossings.

J. *Sidewalks.* Sidewalks shall be installed along all street frontages in the planning area in accordance with the sidewalk plan for the Irvine Business Complex adopted by the City of Irvine. Additional sidewalks and other pedestrian access facilities shall be required as needed to facilitate pedestrian circulation between places of employment, restaurants, parks, and institutional, retail and residential uses.

K. *Lighting.*

1. Exterior lighting is required for all employee and visitor parking areas, walkways, and building entrances and exits.

2. No light standard shall exceed ten feet in height unless the light standard has a light cutoff of 90 degrees or less, in which case the maximum height shall be 30 feet.

3. No light source shall be affixed to any building so that rays are perpendicular to the building face.

4. All direct rays shall be confined to the site.

L. *Screening.*

1. All building operating mechanical equipment shall be screened from off-site view.

2. All outside storage areas shall be screened with an opaque wall or fence.

M. *Parking.* Parking shall be provided in accordance with division 4 of the zoning ordinance except for the following:

1. In no instance shall the City require parking to exceed one space per 500 square feet for an industrial, storage, or warehouse use.

2. For mixed use buildings, each use shall have parking as per the requirements of the City's zoning ordinance. Those portions devoted to an industrial, storage or warehousing use shall not exceed one space per 500 square feet of gross floor area.

3. Vehicle parking shall not be permitted within the streetside setback where the property abuts a street designated as a special landscaped street, or within ten feet of the ultimate right-of-way line for property along other streets.

T A traffic study is required for this use; see section 9-36-11.

1 General land use (GLU) categories identify the development intensity values used for analyzing a corresponding permitted or conditional use in the IBC. See section 9-36-8 for additional information regarding development intensity values for each general land use category.

2 A church that proposes to locate in an existing permanent building and meets all the general development standards will not require a conditional use permit (CUP). However, churches with permanent child care or private school activities shall be subject to a conditional use permit.

3 A restaurant that proposes to locate in an existing building previously approved for restaurant use, and meets all the general development standards, including parking, will not require a conditional use permit.

4 This requirement shall not be construed to prevent condominium-type developments which have smaller lot sizes as long as they have a mandatory owners' association, and the land area under the jurisdiction of the owners' association meets the minimum lot size requirements.

5 In projects which include a parking structure, those portions of the structure which meet the following criteria shall not be counted in determining compliance with the limits on building site coverage:

a. The roof of the structure is within five feet of the surface grade existing on the site prior to the development of the project; and

b. The roof of the structure is, in effect, replacing the ground surface in the functions that it performs, i.e., it will be covered by such improvements as surface parking, access drives, landscaping, walkways, and plazas in a manner similar to the design that would be used if the roof were land surface; and

c. Any portion of the parking structure which is above the existing grade is screened from off-site views.

6 The height of equipment or machinery which is necessary to the operation of a permitted use may exceed 35 feet but may not exceed FAA height limits.

7 If the ultimate right-of-way for a street is widened subsequent to June 30, 1982, then the minimum setback may be 30 feet from the right-of-way/property line. This provision shall not be construed to allow existing structures to expand by virtue of the reduced setback.

8 Transfer station and material recovery facility enclosure setbacks to be determined by the Planning Commission at time of CUP review.

9 May be zero feet provided that the main building on the abutting lot is at zero feet, and both parcels are developed at the same time.

10 Any parcel with two or more street frontages may have one interior property line with a setback of zero feet.

(Code 1976, § V.E-325.5.2; Ord. No. 92-3, 4-14-92; Ord. No. 92-21, § 6, 11-24-92; Ord. No. 93-7, 6-22-93; Ord. No. 93-14, § 3, 10-12-93; Ord. No. 94-2, § 3, 2-8-94; Ord. No. 94-7, § 3, 6-14-94; Ord. No. 94-15, § 3, 12-13-94; Ord. No. 94-16, 12-13-94; Ord. No. 95-3, § 3B, 4-25-95; Ord. No. 95-4, § 1, 5-9-95; Ord. No. 95-7, § 4, 7-11-95; Ord. No. 95-8, § 3, 7-11-95; Ord. No. 95-12, § 3, 9-12-95; Ord. No. 95-16, § 2, 10-10-95; Ord. No. 96-2, § 2, 1-23-96; Ord. No. 96-18, § 4, 12-10-96; Ord. No. 98-20, § 2, 12-8-98; Ord. No. 99-10, § 3, 5-11-99; Ord. No. 99-14, § 2, 6-8-99; Ord. No. 05-13, § 4, 7-12-05; Ord. No. 05-16, § 2, 7-12-05)

Sec. 3-37-32. 5.3 IBC Residential.

A. *Intent.* It is the intent of this section to ensure that previously approved but unbuilt residential projects are not threatened by the development of noncompatible land uses (e.g., hazardous materials). The regulation is intended, however, to permit the development of nonresidential uses, provided they are compatible with residential development. Special provisions are also included to allow for other uses under certain circumstances.

TABLE INSET:

(5.3)	Irvine Business Complex Residential
(5.3A)	
(5.3B)	Lot 2 of Parcel Map 43/6
(5.3C)	
(5.3D)	Lot 17, Tract 8018

B. *Intensity standard.*

30-45 dwelling units per net acre (5.3)

30-50 dwelling units per net acre (5.3A, 5.3B)

30-52 dwelling units per net acre (5.3C)

30-58 dwelling units per net acre (5.3D)

Sites with approved applications for residential development shall be limited to the quantity of dwelling units approved.

C. *Permitted uses.*

TABLE INSET:

GLU 1 Category	Use
35	Accessory use
36	Agriculture (interim use)
36	Home care
36	Home occupation permit

35	Manufactured structure permit (less than two years)
36	Park
36	Public park facility
36	Pushcart
29	Residential shelter
35	Schools, public
35	Wireless Communication Facility (may require a wireless communication facility permit, a minor conditional use permit, a major conditional use permit or may be prohibited, depending on the type of installation and the location of the installation site, pursuant to the review procedures matrix in Section 2-37.5-3.

D. *Conditional uses.*

TABLE INSET:

GLU 1 Category	Use
29	Child care center
35	Church 2
35	Community facility
30	Congregate care facility
30	Convalescent home
29	Information center
35	Manufactured structure (over two years)
31	Model home sales complex
30	Recreational vehicle storage, private
33	Residential, attached
29	Residential care facility
33	Residential, single-family detached
33	Residential, second unit
35	School, private 3
33	Senior housing
35	Utility building and facility

E. *Minimum site size.* One-half (0.5) acre. 4

F. *Maximum site coverage.* 65 percent. 5

G. *Maximum building height.* FAA height limits as determined in accordance with part 77 of the FAA regulations.

H. *Setbacks.* 7,8

See Chapter 5-8 and IBC Residential/Mixed Use Design Criteria for setbacks for residential and residential mixed use developments.

1. From:

TABLE INSET:

Freeways, transportation corridors	30 feet
Major highways	30 feet 5.3B: 20 feet (Main Street only)
Primary highways	30 feet
Secondary highways	30 feet
Commuter highways and local streets	30 feet 5.3C: 20 feet 5.3D: 20 feet
Private drives	10 feet
Interior boundary 6,7 :	30 feet 5.3B: Minimum 10-foot interior setback from easterly property line. 5.3C: 10 feet 5.3D: 10 feet

2. Improvements permitted in the setback area:9

- a. Steps, and open and unenclosed staircases, except that they shall not be permitted within ten feet of the face of curb.
- b. Architectural projections such as eaves, columns, buttresses, bay windows and fireplaces may extend six feet into a 30-foot setback, and three feet into any setback less than 30 feet. However, for those parcels along Jamboree Road, the architectural projections indicated above may encroach six feet into the 15-foot streetside setback only.
- c. Balconies on all floors of only mid-rise and high-rise residential developments of four stories and above.
- d. See Chapter 5-8 and IBC Residential/Mixed Use Design Criteria for improvements allowed in setback areas for residential and residential mixed use developments.

I. *Sidewalks.* Sidewalks shall be installed along all street frontages in the planning area in accordance with the sidewalk plan for the Irvine Business Complex adopted by the City of Irvine. Additional sidewalks and other pedestrian access facilities shall be

required as needed to facilitate pedestrian circulation between places of employment, restaurants, parks, and institutional, retail and residential uses.

J. *Parking.* Parking requirements for all residential units shall be based on the parking standards as set forth in division 4 of the zoning ordinance. If an applicant desires a reduction in these standards when applying for a conditional use permit approval, the applicant must submit a parking study stating the request and the reasons why the reduced ratio is appropriate for the proposed rental and/or for-sale residential units. This study shall be reviewed and approved by the Planning Commission prior to, or concurrent with, the approval of the conditional use permit. See Chapter 5-8 and IBC Residential/Mixed Use Design Criteria for parking requirements for residential and residential mixed use developments.

K. *Private drives.* All private drives shall meet the standards stated in the City's private drive policy in effect at the time of conditional use permit approval.

L. *Fences.* The height and materials of all fences, berms and walls constructed as acoustical barriers shall be reviewed and approved as part of conditional use permit approval. All other fences shall be limited to a maximum of six feet.

M. *Affordable housing requirement.* Any residential units built must comply with chapter 9-36 of this zoning ordinance.

N. *Special note.* If due to environmental considerations (i.e., hazardous materials) the City denies a development application for a residential project, the total allocated development intensity values to the parcel can be used for uses permitted or conditionally permitted within the multiple-use district. Conversions shall be subject to all regulations and policies in effect at time of approval.

1 General land use (GLU) categories identify the development intensity value rates used for analyzing a corresponding permitted or conditional use in the IBC. See section 9-36-8 for additional information regarding development intensity value rates for each general land use category.

2 A church that proposes to locate in an existing permanent building and meets all the general development standards will not require a conditional use permit (CUP).

3 A private school for adults (18 years and older) that proposes to locate in an existing permanent building and meets all the general development standards will not require a conditional use permit. However, private school activities that are to be a part of a church located in this zoning district shall be subject to a conditional use permit.

4 This requirement shall not be construed to prevent condominium-type developments which have smaller lot sizes as long as they have a mandatory owners' association, and the land area under the jurisdiction of the owners' association meets the minimum lot size requirements.

5 If usable open space, landscape or hardscape is placed over the parking structure, then that portion of the parking structure covered by these areas shall not count towards building site coverage, provided that the parking structure is designed in keeping with the architectural theme of the residential units, and is screened with a berm having a minimum height of five feet.

6 If the use of the adjoining parcel is residential, then the building setback shall be a minimum of five feet, but in no instance shall any structure be located closer than ten feet to another structure.

7 On-site parking shall not be permitted within 30 feet of exterior boundaries of the site, except for the parcel (Lot 1 of Tract 13037) located on the southwest corner of Jamboree Road and Kelvin which is impacted by the IBC road widening. However, on-

site parking is permitted to cross parcel lines within a site as long as a legal document is executed ensuring that the parking area will continue to function as a single entity.

8 For those parcels that are located along Jamboree Road, and are impacted by the IBC roadway widening project, the building streetside setback will be reduced to 15 feet. This building streetside setback shall be measured from the new ultimate right-of-way/property line of each parcel.

9 Other than the improvements noted, streetside setbacks shall be landscaped. (Code 1976, § V.E-325.5.3; Ord. No. 92-3, 4-14-92; Ord. No. 92-21, § 6, 11-24-92; Ord. No. 93-7, 6-22-93; Ord. No. 93-14, § 3, 10-12-93; Ord. No. 94-2, § 3, 2-8-94; Ord. No. 94-7, § 3, 6-14-94; Ord. No. 94-15, § 3, 12-13-94; Ord. No. 94-16, 12-13-94; Ord. No. 95-3, § 3B, 4-25-95; Ord. No. 95-4, § 1, 5-9-95; Ord. No. 95-7, § 4, 7-11-95; Ord. No. 95-8, § 3, 7-11-95; Ord. No. 95-12, § 3, 9-12-95; Ord. No. 95-16, § 2, 10-10-95; Ord. No. 96-2, § 2, 1-23-96; Ord. No. 96-18, § 4, 12-10-96; Ord. No. 0-1-03, § 4, 3-13-01; Ord. No. 03-15, § 5, 5-13-03; Ord. No. 03-26, § 6, 9-9-03; Ord. No. 05-13, § 4, 7-12-05; Ord. No. 05-15, § 6, 7-12-05; Ord. No. 05-16, § 2, 7-12-05; Ord. No. 05-23, § 6, 10-11-05; Ord. No. 06-08, § 6, 7-11-06; Ord. No. 07-07, § 5, 4-10-07)

Sec. 2-17-3. Application requirements.

A. *Persons eligible.* The property owner or authorized agent of the property owner, the City Council, the Planning Commission, and the Director of Community Development may initiate a master plan application.

B. The information listed below is required at the time a master plan application is submitted to the Community Development Department:

1. A complete development case application signed by the property owner or its authorized representative.
2. A deposit or fee as set forth by an ordinance or resolution of the City Council.
3. A letter of justification describing and explaining how the proposed project will satisfy the findings required in section 2-17-7.
4. Information required for public meetings and hearings, as determined by the Director of Community Development (see chapter 2-23).
5. Information as required by City of Irvine master plan information sheet.
6. Other information as required by the Director of Community Development.
7. When a master plan involves park amenity credits or the dedication of park land, the application shall incorporate all the requirements listed in chapter 2-22 (Park Procedure).
8. Special requirements for projects located in the Irvine Business Complex (Planning Area 36): In addition to the application requirements specified in this section, the required plans shall also:
 - a. Detail the quantity and distribution of a.m. and p.m. peak hour development intensity values, and average daily development intensity values, both existing and proposed, for each corresponding legal parcel within the site.
 - b. Detail the quantity and distribution of uses and gross square feet, hotel rooms, and residential dwelling units (as appropriate), both existing and proposed, for each corresponding legal parcel within the site.
 - c. Illustrate the legal boundaries on the site plan and provide both gross and net acreage figures for each legal parcel within the site.
9. Special requirements for transfer of development rights project applications proposed for receiving site locations within the Irvine Business Complex (Planning Area 36): In addition to the application requirements specified in this section, the required plans shall also:
 - a. Submit a traffic analysis scope of work for the project consistent with the traffic study guidelines and prepare an analysis to the satisfaction of the Director of Public Works . (Code 1976, § V.E-212.3; Ord. No. 92-3, 4-14-92; Ord. No. 92-20, § 6, 11-10-92; Ord. No. 93-14, § 3, 10-12-93; Ord. No. 94-7, § 3, 6-14-94; Ord. No. 95-4, § 1, 5-9-95; Ord. No. 96-18, § 4, 12-10-96)

Sec. 3-3-1. Land use matrix.

The following land use matrix shows the uses which are permitted, conditionally permitted, and prohibited in specific zoning districts in the City of Irvine. The land use matrix is intended to serve as a mere guide for the convenience of the user of this zoning ordinance. Where the text of this zoning ordinance differs from the land use matrix, the text shall prevail. This section 3-3-1 does not cover Planning Areas 33, 34, and 38 because they are covered by a development agreement and/or vesting tentative map (during the period in which vesting maps are valid). See chapters 9-33, 9-34 and 9-38.

TABLE INSET:

<i>Some permitted and conditionally</i> NOTE: permitted uses may require a master plan application; see chapter 2-17.		
<i>Prohibited = .</i> <i>Conditionally Permitted = C</i> <i>Permitted = P</i>		
LAND USE	5.0 IBC Mixed Use	5.1 IBC Multi-Use
Residential, attached	C (93)	C (93)

**ZONING ORDINANCE LAND USE
MATRIX-ENDNOTES**

- 1 All agricultural uses are prohibited on the frontal slopes of Quail Hill within Planning Area 16, except cattle grazing.
- 2 Prior to open space dedication to a public agency.
- 3 Interim use.
- 4 4.2A: Prohibited (Walnut Village).
- 5 Uses in 4.2C ("Old Town Irvine"), subject to provisions of the Historic Overlay District. See chapter 5-5.
- 6 Permitted only in Planning Areas 12, 13, 17, 31, 32, 34, 35, 40.
- 7 Permitted only in 5.5B Jamboree Business Center, East; 5.5C Planning Area 17; 5.5D Irvine Spectrum 8, if located 225 feet or more from the Jeffery Open Space Spine; and 5.5A Irvine Spectrum 6.
- 8 Reserved.
- 9 Reserved.
- 10 Only in 1.3A (Planning Area 12), otherwise, prohibited.
- 11 4.2B: Conditional.
- 12 4.1C: Prohibited (Rancho San Joaquin).
- 13 Only in public parks.
- 14 Only in conjunction with a health club and/or hotel/motel.
- 15 Only in conjunction with a health club.
- 16 3.1A: Prohibited (University Town Center).
- 17 3.1B: 31.0--51.0 dwelling units per acre (Westpark).
- 18 4.1A: Freestanding restaurants: Conditional (Northwood).
- 19 4.1B: Conditional (Northwood).
- 20 Only in 1.2B (Planning Area 27), otherwise, prohibited.
- 21 4.2B: Prohibited.
- 22 4.1B: Prohibited (Northwood).
- 23 4.2A: Only with auto parts sales, otherwise, prohibited (Walnut Village).
- 24 Agricultural products, only.

- 25 Permitted only in Planning Areas 12, 13, 32, 34, 35.
- 26 5.4A: Prohibited.
- 27 Only in Planning Areas 23 and 51.
- 28 Only in 4.3B (Planning Area 13), 4.3D (Planning Area 34), and 4.3 (Planning Area 35), otherwise prohibited.
- 29 Office development intensity values apply to this use. Consult section 9-36-8.B.3 (IBC General Land Uses) for more information.
- 30 Industrial development intensity values apply to this use. Consult section 9-36-8.B.3 (IBC General Land Uses) for more information.
- 31 Retail development intensity values apply to this use. Consult section 9-36-8.B.3 (IBC General Land Uses) for more information.
- 32 Lodging development intensity values apply to this use. Consult section 9-36-8.B.3 (IBC General Land Uses) for more information.
- 33 Residential development intensity values apply to this use. Consult section 9-36-8.B.3 (IBC General Land Uses) for more information.
- 34 Zoning Potential development intensity values apply to this use. Consult section 9-36-8.B.3 (IBC General Land Uses) for more information.
- 35 This use is designated "Undefined" for development intensity value budgeting purposes. Consult section 9-36-8.B.3 (IBC General Land Uses) for more information.
- 36 This use is assumed to have no traffic generation for development intensity value budgeting purposes. Consult section 9-36-8.B.3 (IBC General Land Uses) for more information.
- 37 Incidental offices in conjunction with permitted or conditionally permitted uses may occupy up to 50% of a parcel or site.
- 38 A church, commercial and private school for adults (18 years and older) that proposes to locate in an existing permanent building and meets all the general development standards, will not require a conditional use permit (CUP). However, churches with permanent child care or private school activities to be located in Zoning Districts 5.1, 5.2 and 5.4 shall be subject to a conditional use permit.
- 39 A restaurant that proposes to locate in an existing building previously approved for restaurant use, and meets all the general development standards including parking, will not require a conditional use permit (CUP).
- 40 A conditional use permit is not required for this land use. See chapter 2-28 of the zoning ordinance for requirements to obtain a sexually-oriented business permit.
- 41 All proposed non-classroom related activities on school sites (as defined by California state law) shall require a conditional use permit (CUP) subject to the review of the appropriate approval body as cited in chapter 2-9.
- 42 Conditionally permitted in Planning Areas 12 only.
- 43 Reserved.
- 44 Prohibited in Planning Area 30.
- 45 Reserved.
- 46 Prohibited in Planning Areas 30 and 51.
- 47 Conditionally permitted in Planning Area 51.
- 48 Permitted in Planning Area 51.
- 49 May be permanent in Planning Areas 30 and 51 only.
- 50 Reserved.
- 51 A medical office located in an existing retail development which meets all the general development standards including parking, will not require a conditional use permit and no traffic study will be required.
- 52 Reserved.
- 53 Reserved.

- 54 Reserved.
- 55 Manufacturing, storage, handling, and distribution of munitions, explosives, petrochemicals, or gasoline and related petroleum products, are prohibited within the Browning and G.C.A. Corridors except that nothing herein shall prohibit underground storage of petrochemicals or gasoline and related petroleum products incidental to a permitted use. See special development requirement #14 in section 9-10-7 for further clarification and exhibits.
- 56 Any auditorium, amphitheater, and assembly halls with seating capacity for more than 1,500 persons shall be prohibited within the Browning and G.C.A. Corridors. See special development requirement #14 in section 9-10-7 for further clarification and exhibits.
- 57 Conditionally permitted in zoning district 5.5A only (Planning Area).
- 58 4.2L: Permitted in Planning Area 17.
- 59 4.2M: Conditionally Permitted in Planning Area 17.
- 60 4.2M: Prohibited in Planning Area 17.
- 61 Only in 5.5B Jamboree Business Center East, 5.5C Planning Area 17, and 5.5A Spectrum 6.
- 62 5.5C: Permitted in Planning Area 17; 5.5D Irvine Spectrum 8; 5.5E Planning Area 9; and 5.5F Planning Area 6.
- 63 Only in 5.5B Jamboree Center East, and 5.5C Planning Area 17.
- 64 A conditional use permit for a mini-warehouse in the 3.1D (Woodbridge) Multi-Use district and 3.1G (Northwood) Multi-Use district shall require review and approval by the Planning Commission.
- 65 All certified sober living facilities shall be subject to County certification guidelines.
- 66 1.4A: Conditionally permitted in Planning Area 16 only.
- 67 5.5E and 5.5F if located on a parcel more than 200 feet from a street intervening between residential and Medical and Science uses. If less than 200 feet, conditionally permitted.
- 68 Permitted only in 5.5B Jamboree Business Center, East; 5.5C Planning Area 17; and 5.5D Irvine Spectrum 8, if located 225 feet or more from the Jeffery Open Space Spine.
- 69 Prohibited in 5.5E and 5.5F.
- 70 Prohibited in 5.5B Jamboree Business Center, East.
- 71 Prohibited in 5.5B Jamboree Business Center, East; 5.5E and 5.5F.
- 72 Prohibited in 5.5B Jamboree Business Center, East; conditionally permitted in 5.5D Irvine Spectrum 8, if located 225 feet or more from the Jeffery Open Space Spine.
- 73 Any "Bar, Tavern Cocktail Lounge" proposing to locate within the same building as a residential use, shall be subject to the conditional use permit procedures contained in Zoning Code Chapter 2-9.
- 74 A wireless communication facility, depending on the proposed type of antenna, may be permitted in any zoning district through wireless communication facility permit, a minor conditional use permit or a major conditional use permit as indicated in the table provided in Section 2-37.5.3.
- 75 Only in 4.2C: Planning Area 13; 4.2E: Planning Area 34; 4.2E: Planning Area 35; and 4.2E: Planning Area 10, otherwise, prohibited.
- 76 4.2N: Drive-thru permitted subject to master plan
- 77 4.2N: permitted subject to master plan
- 78 4.2L: Drive-thru permitted; 4.2N and 4.2O: permitted subject to master plan
- 79 Permitted in 4.2L, 4.2M, 4.2N and 4.2O only.
- 80 Mini warehouse development intensity values apply to this use. Consult section 9-36-8.B.3 (IBC General Land Uses) for more information.

81 A financial institution located in an existing building which meets all the general development standards including parking, will not require a conditional use permit and no traffic study will be required.

82 Only in 8.1A.

83 In conjunction with demolition, removal and recovery of existing buildings, structures and landscaping associated with the former military use of the property.

84 Only within agriculture area.

85 3.1E only.

86 Prohibited in 3.1F.

87 3.1H only.

88 Permitted in 3.1H.

89 Prohibited in 3.1H.

90 Conditionally permitted in 3.1H.

91 4.2O: subject to master plan.

92 4.2O: prohibited use.

93. 93. Conditionally permitted in Urban Neighborhood overlay zone as defined in Chapter 5-8. Prohibited outside of this overlay zone.

T A traffic study is required for this use, see section 9-36-11 for additional information.

Traffic study requirement may be waived if project does not meet minimum traffic generation threshold specified in traffic study guidelines.

(Code 1976, § V.E-3002; Ord. No. 92-3, 4-14-92; Ord. No. 92-20, § 6, 11-10-92; Ord. No. 93-14, § 3, 10-12-93; Ord. No. 94-10, § 2, 7-12-94; Ord. No. 94-7, § 3, 6-14-94; Ord. No. 95-3, § 3A, 4-25-95; Ord. No. 95-4, § 1, 5-9-95; Ord. No. 95-8, § 3, 7-11-95; Ord. No. 96-2, § 2, 1-23-96; Ord. No. 96-18, § 4, 12-10-96; Ord. No. 97-05, 5-13-97; Ord. No. 99-10, § 3, 5-11-99; Ord. No. 99-14, § 2, 6-8-99; Ord. No. 99-21, § 4, 11-30-99; Ord. No. 00-03, § 4, 2-22-00; Ord. No. 00-11, § 3.A, 10-10-00; Ord. No. 00-14, § 4.A, 11-14-00; Ord. No. 01-15, § 4, 9-25-01; Ord. No. 03-02, § 4, 1-14-03; Ord. No. 03-07, § 5, 3-11-03; Ord. No. 03-13, § 9, 5-13-03; Ord. No. 03-18, § 4, 6-10-03; Ord. No. 03-29, § 3, 9-23-03; Ord. No. 03-34, § 5, 1-22-04; Ord. No. 04-04, § 5, 2-24-04; Ord. No. 05-05, § 4, 2-8-05; Ord. No. 05-12, § 6, 6-28-05; Ord. No. 05-13, § 4, 7-12-05; Ord. No. 05-16, § 2, 7-12-05; Ord. No. 05-19, § 4, 9-27-05; Ord. No. 06-18, § 4, 10-24-06; Ord. No. 07-16, § 6, 8-14-07; Ord. No. 08-06, § 5, 7-8-08; Ord. No. 08-08, § 5, 8-12-08; Ord. No. 08-12, § 3, 9-9-08)

Sec. 2-28-5. Findings.

The Planning Commission shall approve and issue a sexually oriented business permit if the Planning Commission finds that:

- A. The sexually oriented business is located in the General Industrial or IBC Industrial zones.
- B. The sexually oriented business is not proposed to be located within 2,300 feet of any residential zone or residential use approved by the Cities of Irvine, Lake Forest, Laguna Hills, and Tustin, or the United States Marine Corps.
- C. The sexually oriented business is not proposed to be located within 2,300 feet of any lot upon which there is located a religious institution, public park facility, child care center or school.
- D. *Reserved.*
- E. The sexually oriented business is not proposed to be located within 500 feet of another sexually oriented business.
- F. The distance of separation required by findings B, C, D and E shall be made using a straight line, without regard to intervening structures or objects, from the property line of the lot on which the sexually oriented business shall be located to the nearest property line of the lot upon which is located a residential use, a religious institution, the Irvine Multi-Modal Transportation Center, the James Musick Facility, a public park facility, a school, a child care center or a sexually oriented business. If the use to which the measurement is being taken is located on the same lot as the sexually oriented business, the distance between the two shall be measured in a straight line between the front doors of each use without regard to intervening structures or objects.
- G. The sexually oriented business complies with the City's parking standards for the underlying use. Where no City parking standard exists for a particular use, a parking study shall be prepared and completed for the use in question. The study shall demonstrate that the sexually oriented business for which the applicant is seeking approval provides parking sufficient to satisfy the demand demonstrated by the parking study.
- H. The sexually oriented business is not proposed to be located completely, or partially, within any mobile structure or pushcart.
- I. The sexually oriented business will not stage any special events, promotions, festivals, concerts or the like that would increase the demand for parking beyond the approved number of spaces for the particular use.
- J. The sexually oriented business will not conduct any massage, acupuncture, tattooing, acupressure, fortunetelling or escort services on the premises.
- K. The sexually oriented business provides a security system that visually records and monitors parking lot areas.
- L. The sexually oriented business complies with the City's sign regulations as contained in division 7 of the zoning ordinance.
- M. The sexually oriented business complies with the development and design requirements of the planning area in which it is to be located.
- N. The sexually oriented business will not display any sexually oriented material or sexually oriented merchandise which would be visible from any location other than from within the sexually oriented business.
- O. The sexually oriented business will not be accessible to any person under the age of 18 if no liquor is served, or 21 if liquor is served.
- P. The sexually oriented business shall not operate between the hours of 10:00 p.m. and 7:00 a.m.
- Q. Neither the applicant, if an individual, nor any of the officers or general partners, if a corporation or partnership, of the sexually oriented business shall have been found guilty

within the past two years of violating any of the provisions of a sexually oriented business permit or similar permit or license in any city, county, territory or state, or of any misdemeanor or felony classified by the state as a sex related offence including but not limited to a violation of the following penal code sections and their sub parts and sub sections: 220, 261, 262, 264, 264.1, 265, 266, (inc. 266a--266k) 267, 286, 286.5, 288, 288a, 289, 647, 647b 647d 647.6.

R. The sexually oriented business shall provide separate restroom facilities for male and female patrons. The restrooms shall be free from sexually oriented materials and sexually oriented merchandise. Only one person shall be allowed in the restroom at any time.

S. The interior of the adult oriented business will be configured such that there is an unobstructed view, by use of the naked eye, and unaided by video, closed circuit cameras or any other means, of every public area of the premises, including but not limited to the interior of all individual viewing areas, from a manager's station which is no larger than 32 square feet of floor area with no single dimension being greater than eight (8) feet and located in a public portion of the establishment. No public area, including but not limited to the interior of any individual viewing area, will be obscured by any door, curtain, wall, two-way mirror, or other device which would prohibit a person from seeing into the interior of the individual viewing area, solely with the use of the naked eye and unaided by video, closed circuit cameras or any other means, from the manager's station. A manager will be stationed in the manager's station at all times the business is in operation or open to the public in order to enforce all rules and regulations. No individual viewing area will be designated or operated to permit occupancy of more than one person at any one time.

T. All areas of the sexually oriented business shall be illuminated at a minimum of 1.25 footcandles, minimally maintained and evenly distributed at ground level.

U. The individual viewing areas of the sexually oriented business shall be operated and maintained with no holes or other openings or means of direct visual or physical access between the interior space of two or more individual viewing areas. "Individual viewing area" shall mean a viewing area designed for occupancy by one person.

V. The sexually oriented business complies with the objective design and development requirements for the zone in which the use will occur.

W. A traffic study has been prepared for the sexually oriented business in conformance with the City of Irvine traffic study guidelines. The applicant shall make all necessary improvements to reduce all project-related traffic impacts which exceed the applicable planning area's adopted trip or IBC development intensity value cap or any street, roadway or arterial's adopted level of service are reduced to the adopted levels. Said improvements have been made conditions of project approval.

Sec. 4-3-4. - Automobile parking matrix.

53.	Private park, less than 1 acre:	3 spaces (minimum) plus additional parking provided for major facilities per section 4-3-4.53 ^{1, 2}	100%	¹ One space must be reserved for handicapped parking. ² No parking required for private parks in PA 36
54.	Private and public neighborhood park, equal to or greater than 1 acre:	5 spaces, minimum, for first 2 acres, and 1 space (minimum) for each additional acre. Additional parking provided for major facilities per section 4-3-4.53 ^{1, 2}	100%	¹ One space must be reserved for handicapped parking. If 25 or more parking spaces, refer to Title 24 of the State of California. ² No parking required for private parks in PA 36
56.	Major facilities:			
	Athletic Field 1)	15 stalls per play field plus 1 stall/3 fixed seats ¹	100%	¹ Including a 50-foot long curbside drop-off area for buses that shall not encroach into the drive aisle. ² For purposes of calculating parking requirements, community center square footage shall include only the assembly space of the facility (classrooms, media rooms, multi-purpose rooms, club rooms). Staff offices, if any, shall require 1 stall per on-site employee. ³ Applicant shall submit a parking study. See Section 4-3-3.B. In addition, swimming pools with spectator seating shall provide parking at 1 stall/3 seats plus a fifty-foot long drop-off area for buses. The drop-off area must not encroach into the drive aisle.
	Community Center, Public 2) Community center, private (separate lot within a master homeowner's association) Community center, private (apartments of any density and attached or detached residential condominiums over 31 units per acre)	1 stall per 50 square feet of gross floor area ² 1 stall per 100 square feet of gross floor area ² 1 stall per 200 square feet of gross floor area. ^{2, 4, 6, 7}	100%	⁴ No parking required for private community centers or private pools in PA 36
	Olympic Pool 3)	To be determined by the approval body for the proposed use 3,4	100%	

	<p>Junior Olympic pool 5)</p>	<p>1 stall/150 square feet of water surface area 4</p>	<p>100%</p>	<p>5Wading pool and spa square footage shall not be considered in this calculation.</p> <p>6Reductions of up to a maximum of 75% from this standard may be approved by the Director of Community Development with the recommendation of the Director of Community Services.</p> <p>7No parking is required for recreational Improvements within this category that do not receive park credit.</p>

CITY COUNCIL ORDINANCE NO. 10-08

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF IRVINE AMENDING CHAPTER 10, DEDICATIONS, OF DIVISION 5, SUBDIVISIONS, OF THE CITY'S MUNICIPAL CODE, TO ADD A NEW SECTION TO INCORPORATE NEW URBAN PARK STANDARDS INTO THE CITY'S PARK DEDICATION REQUIREMENTS FOR THE IBC AND AMEND SECTION 5-5-1000D(1) TO REMOVE A 50 UNIT PER ACRE DENSITY CAP FOR DETERMINING PERSONS PER HOUSEHOLD

WHEREAS, the City of Irvine, as part of the Irvine Business Complex (IBC) Vision Plan project, is proposing to amend the Municipal Code to update park standards for the IBC; and

WHEREAS, the City of Irvine has an adopted Municipal Code; and

WHEREAS, the proposed Municipal Code Amendment is considered a part of the overall Vision Plan project for the IBC (Vision Plan Project) pursuant to the California Environmental Quality Act (CEQA); and

WHEREAS, the City Council has considered information presented by the applicant, the Community Development Department, and other interested parties at public meetings and hearings held on July 11, 2006, July 25, 2006, February 27, 2007, October 23, 2007, February 26, 2008, April 27, 2010, and July 13, 2010.

NOW, THEREFORE, the City Council of the City of Irvine DOES HEREBY ORDAIN as follows:

SECTION 1. That pursuant to Section 15205 of the State CEQA Guidelines, the City Council reviewed and considered the Final Environmental Impact Report (SCH# 2007011024) (FEIR) in making its recommendation on the Zone Change and the Vision Plan Project.

SECTION 2. Most of the potentially significant environmental impacts of the Vision Plan Project identified in the FEIR have been determined to be less than significant or mitigated to a level that is considered less than significant or changes have been required or incorporated into the Vision Plan Project which avoid or substantially lessen the significant environmental effects.

SECTION 3. Certain impacts of the Vision Plan Project to Air Quality, Noise, Land Use and Traffic have been identified in the FEIR as significant and unavoidable. The specific impacts are summarized in Exhibit A to Resolution No 10-79. Based upon specific economic, social, technical or other considerations, the City Council finds these effects acceptable and adopts the required facts and findings and Statement of Overriding Considerations (attached as Exhibit B to Resolution No. 10-79).

SECTION 4. Although the FEIR identifies certain significant environmental effects that would result if the Vision Plan Project is approved, most environmental effects can feasibly be avoided or mitigated. The applicable mitigation measures, included within the FEIR as Table 1-2 and incorporated herein as Exhibit C to Resolution No. 10-79, have been incorporated into the Vision Plan Project or identified as requirements of the Vision Plan Project.

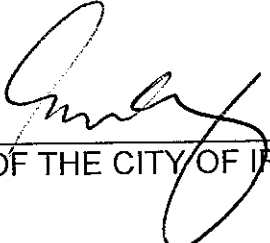
SECTION 5. In accordance with Section 8 of the City of Irvine CEQA Procedures, the Planning Commission recommends that the City Council find that the FEIR has been completed in compliance with CEQA and the State CEQA Guidelines, and the City's CEQA Procedures. The Planning Commission also recommends that the City Council, having final approval authority over the project, certify as complete and adequate the Final EIR.

SECTION 6. Pursuant to Fish and Game Code Section 7.11.4 (C), all required Fish and Game filing fees will be paid subsequent to certification of the FEIR for the Vision Plan Project.

SECTION 7. Chapter 10, Dedications, of Division 5, Subdivisions, of the Irvine Municipal Code is hereby amended as outlined in Exhibit A.

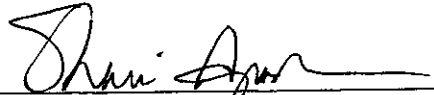
SECTION 8. If any section, subsection, subdivision, sentence, clause, phrase, or portion of this Ordinance is, for any reason, held to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this Ordinance. The City Council hereby declares that it would have adopted this Ordinance and each section, subsection, subdivision, sentence, clause, phrase, or portion thereof, irrespective of the fact that any one or more sections, subsection, subdivision, sentence, clause, phrase, or portions thereof be declared invalid or unconstitutional.

PASSED AND ADOPTED by the City Council of the City of Irvine at an adjourned regular meeting held on the 27th day of July, 2010.



MAYOR OF THE CITY OF IRVINE

ATTEST:



CITY CLERK OF THE CITY OF IRVINE

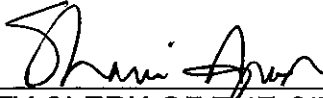
STATE OF CALIFORNIA)
COUNTY OF ORANGE)
CITY OF IRVINE)

I, SHARIE APODACA, City Clerk of the City of Irvine, HEREBY DO CERTIFY that the foregoing Ordinance was introduced for first reading on July 13th, 2010, and duly adopted at an adjourned regular meeting of the City Council of the City of Irvine held on the 27th day of July, 2010, by the following vote:

AYES: 5 COUNCILMEMBERS: Agran, Choi, Krom, Shea and Kang

NOES: 0 COUNCILMEMBERS: None

ABSENT: 0 COUNCILMEMBERS: None



CITY CLERK OF THE CITY OF IRVINE

Sec. 5-5-1004. Park dedication.

A. Requirements:

1. As a condition of approval of a tentative map, the subdivider shall dedicate land, and/or improvements/amenities, and/or pay a fee for the purpose of developing new or rehabilitating existing park or recreational facilities to serve the subdivision. This requirement shall apply to all subdivisions except those exempted by section 66477 of the Government Code (sometimes referred to hereinafter as the 'Quimby Act') or any successor statute.
2. Except as provided in subsection A.3 below, if the proposed subdivision contains 50 parcels or less, the subdivider shall not be required to dedicate any land for park and recreational purposes without his or her consent, but shall pay a fee in accordance with subsection D.2 below.
3. When a condominium project, stock cooperative, or community apartment project exceeds 50 dwelling units, dedication of land may be required notwithstanding that the number of parcels may be less than 50.

B. Terms defined: The following definitions shall govern the meaning of words in this section unless from the context in which the word is used, a different meaning is clearly intended.

1. Fair market value: The estimated per acre value of entitled land with basic infrastructure abutting the property in the proposed project as determined by the Planning Commission based upon an appraisal by a qualified appraiser. Basic infrastructure to the site shall include rough grading, installation of streets, curbs and gutters, and installation of trunk line utilities. Off-site basic infrastructure improvements costs are not eligible for park credit since they are considered in the land appraisal. Items potentially eligible to receive park dedication credits (i.e., minimum improvements, recreational amenities, and associated improvement costs) are not included as part of the appraisal process. Only development projects seeking credits for park dedication in-lieu fees, improvements, and/or amenities shall undergo an independent fair market value land appraisal process specified in the City of Irvine park/facility standards manual. In the event the applicant disagrees with the fair market value determination, the applicant shall use the appeal process specified in the park/facility standards manual. All appraisal costs shall be paid by the applicant prior to the recordation of any final map or issuance of any grading or building permit.
2. Improvements:
 - a. Minimum improvements: Improvements as are deemed necessary by the City to develop land for park and recreation facilities. Such improvements may include but are not limited to site grading, automatic irrigation systems, adequate drainage, lawn, shrubs, trees, concrete walkways and walkway lighting.

- b. Recreational amenities: Park improvements which provide a recreational opportunity for the user, such as ball fields, trails, play/tot lots, and community buildings as described by the schedule of improvements in the Park/Public Facility Standards. To receive park dedication credit, the amenities must be developed to City design standards outlined in the park/facility standards manual.
 - c. Improvement costs: Costs that are associated with the development and construction of minimum improvements and/or recreational amenities. These costs must be directly attributable to the park project to be eligible for park credit as described in the schedule of improvement values in the Park/Public Facility Standards.
3. Park: A parcel or contiguous parcels of land which is/are owned, operated, and maintained by a public agency or private association and which provides recreational land and facilities for the benefit and enjoyment of the residents and visitors of the City. The City designates parks in the following classifications:
- a. Community parks: Parks that serve a minimum population of 10,000 and more than one planning area. Community parks are preferred to be a minimum of 20 acres in size, excluding encumbrances that limit design opportunities, such as eucalyptus windrows, creek beds and/or washes, detention basins, easements, greenbelts, and school grounds. Typical facilities include community centers, athletic facilities, large multi-use swimming pools, picnic areas, day care centers, and cultural centers. Community parks are owned and maintained by the City. Siting of community parks shall be in accordance with criteria established in the community park site identification and evaluation section of the community parks master plan.
 - b. Public neighborhood parks: Parks that serve a minimum population of 2,500. These parks are to be a minimum of four acres in size, excluding encumbrances that limit design opportunities, such as eucalyptus windrows, creek beds and/or washes, detention basins, easements, greenbelts, and school grounds. Typical facilities include active and passive open space, playground equipment, sports fields and picnic areas. Public neighborhood parks are owned and maintained by the City. No public park shall be located within a residential gated community. Public neighborhood park sites shall be publicly accessible by two existing or proposed public streets and visible to the general public. If possible, public neighborhood park sites should be adjacent to a school and/or public trail.
 - c. Private neighborhood parks: Those parks that serve the immediate subdivision/development or specific planned community in which they are located and meet requirements specified in subsection F.2.a of this section, except where noted in Section F.2.a. Typical facilities include passive and active play areas, swimming pools, spas, tennis courts and clubhouses. Private neighborhood parks are owned and maintained by a homeowner's association. Private

neighborhood parks larger than one acre in size located within a gated community must remain accessible to pedestrians and bicyclists of the general public. Except to the extent otherwise required by law, including but not limited to the Quimby Act, no access requirement prescribed herein shall have the effect of superseding a homeowner association's right to restrict the use of private neighborhood parks under its ownership. Private neighborhood parks one acre or less in size located within a gated community are not required to provide pedestrian, bicyclist or vehicle access.

- C. Park dedication standards: All standards for park dedication shall comply with the Quimby Act (State of California Government Code section 66477), the California Subdivision Map Act and the City of Irvine general plan - parks and recreation element.

The developer of residential subdivisions shall dedicate park land and/or fees in lieu, at the rate of five acres per 1,000 population, apportioned as follows:

Two acres -- Community parks

Three acres -- Neighborhood parks

Where:

The public/private distribution of neighborhood park land shall be left to the discretion of the Planning Commission upon the recommendation of the Community Services Commission during the approval of the park plan.

- D. Manner of compliance: The requirements of subsections A and C may be complied with by the provision of park land, park improvements/recreational amenities, the payment of a park fee, or combination of park land, fees, and/or improvements/amenities in accordance with the provisions of this section.

1. When the requirements of subsections A and C are complied with solely on the basis of providing park land, the minimum amount of land to be provided shall be based on the dedication standard and the density classifications and persons per dwelling unit included in the following table:

TABLE INSET:

Dwelling Units per Net acre	Average Number of Persons per Dwelling Unit	Acres per Dwelling Unit
0 to 1.0	3.25*	0.0163*
1.1 to 6.5	2.94	0.0146
6.6 to 12.5	2.57	0.0128
12.6 to 31.0	2.29	0.0115
31.1 and above	1.30	0.0065

- * There were no developed units in the Estate category at the time of the 2000 Census. Therefore, the data was left unchanged.

Notwithstanding any calculation made pursuant to the figures provided in this table, the amount of land required for dedication shall not exceed the statutory maximum of five acres per 1,000 persons.

2. Whenever the requirements of subsections A and C are complied with solely on the basis of the payment of park fees, the amount of such fees shall be computed by multiplying the number of proposed dwelling units by the acres per dwelling unit shown in the table in subsection D.1 and by multiplying the resultant acreage amount by the fair market value of land being developed.
3. Whenever the requirements of subsections A and C are complied with by both the provision of park land and payment of a park fee, the amount of the park fee shall be computed by determining the required amount of park land in accordance with the provisions of subsection D.1 and subtracting the amount of park land actually provided. The remainder shall be converted to a fee in accordance with the provisions of subsection D.2.

E. Disposition of land or fees:

1. The amount and location of land to be dedicated or the fees to be paid shall bear a reasonable relationship to the use of the park and recreational facilities by the future inhabitants of the subdivision.
2. All park fees shall be paid directly to the City Cashier prior to the issuance of any residential building permits for the building site or sites from which fees are to be derived. These fees are to be used only for the purpose of developing new or rehabilitating existing park or recreational facilities to serve the subdivision.
3. The Director of Community Services shall include in the strategic business plan and the annual budget how, when, and where the land or fees, or both, which were dedicated to the city to develop park and recreational facilities will be used to serve the residents of the subdivision. Any fees collected under subsections D.2. and 3. of this chapter shall be committed within five years after the payment of such fees or the issuance of building permits on one half of the lots created by the subdivision, whichever occurs later. If such fees are not committed, they shall be distributed and paid to the then record owners of the subdivision in the same proportion that the size of their lot bears to the total area of all lots within the subdivision.
4. A park phasing plan is required as part of the park plan when more than one park is proposed in a subdivision. The park phasing plan shall specify when each park shall be developed to best serve the residents of the subdivision. This schedule will be required as a condition of subdivision map approval.

- F. Credits: All parks must comply with the most current, applicable national and state codes, regulations, and standards. All public park improvements/recreational amenities (park dedication credit or no park dedication credit) and private park improvements/recreational amenities receiving park dedication credits must comply with the most current, applicable City codes and standards in the Park/Public Facility Standards.

The subdivider may be eligible to receive credit for park and recreational improvements and apply that credit toward park dedication requirements under the following provisions:

1. Public parks: The value of all eligible minimum improvements, recreational amenities, and improvement costs for the development of public parks shall be a credit against the payment of fees or dedication of land established by this section and the park standards manual. Public park credit shall be granted only when pedestrian, bicyclist, and vehicle access are maintained in perpetuity.
2. Private neighborhood parks: Private land and associated recreational amenities/improvement costs for park and recreational purposes in a proposed development may be eligible to be credited against the requirement for dedication of park land, as set forth in subsection D. Such park land and recreational amenities are to be privately owned and perpetually maintained and operated by the future residents or owner of the development. Eligibility of private park land and associated recreational amenities/improvement costs for park dedication credit shall be subject to approval by the Planning Commission upon recommendation of the Community Services Commission in conjunction with the approval of a park plan. In no event shall such amount of credit exceed the value of the amenities. The value of the amenities to be credited will be determined on the same cost basis as prescribed in subsections B.1., 2. and D.1., 3. Evaluation of private neighborhood park land, recreational amenities, and improvement costs for park dedication credit shall be based on the following criteria:
 - a. That the private park land meet the minimum size requirement of one-third acre, except as follows:
 - i. Developments with densities over 31 dwelling units per net acre located in any Planning Area except in Planning Area 36, where the following requirements shall apply:
 - (i) For developments with less than 200 units, the main private park or recreation area shall be a minimum 6,000 square feet in size; For developments over 200 units, the main private park or recreation area shall be minimum 0.33 acres in size;
 - (ii) The minimum size of the private park or recreation area may include the entire area used for active recreation, including areas that are not eligible for park land credit for example because they are located on a podium, a rooftop or a parking garage, or have units above; However, only the portion of the private park or recreation area that is used exclusively for

- recreation (no other uses above or below) may receive park land credit;
 - (iii) Smaller areas within the same development may receive neighborhood park land and/or improvement credit if they contain active recreational amenities (such as pools, recreation buildings, tot lots, sports courts, etc.) and are connected with pedestrian walkways to the main recreation area or park that is at least 6,000 square feet in size.
 - ii. Developments located in Planning Area 36, where requirements contained in IBC Residential Mixed Use Design Criteria shall apply;
 - b. That the proposed private park land is reasonably adaptable for use for park and recreational purposes, taking into consideration such factors as size, shape, topography, geology, access, and location of the private park land;
 - c. That the private neighborhood park shall meet the pedestrian, bicyclist and vehicular access requirements as prescribed in subsection B.
 - d. That the following areas or subdivision design features are ineligible for private park credit: Leasing offices, yards, court areas (except in Planning Area 36), setbacks, village edges, landscaped village entries, greenbelts (paseos), meandering streams, eucalyptus windrows and circulation improvements such as bicycle, hiking and equestrian trails;
 - e. That the location of the land provides convenient access to housing and schools;
 - f. That the perpetual private ownership and maintenance of the land is adequately provided for by a recorded written agreement;
 - g. That the use of the private park land is perpetually restricted for park and recreational purposes which cannot be defeated or eliminated without the consent of the City Council and in no event without providing equivalent park and recreational space elsewhere in the development;
 - h. That the proposed amenities be suitable to meet the recreation needs of the residents the park is to serve;
 - i. That the amenities accepted for full credit for private parks shall be those amenities typically found in public parks as described in section 5-5-1004B.3; and
 - j. That for private parks in excess of one acre, access to the public (excluding vehicular access) shall not be prevented to the extent as described in subsection B.3.
3. Banking park credits: Park dedication credits may be eligible to be banked in the form of acres under the following circumstances:
- a. Community parks: Park dedication credit for a community park may be banked and applied towards other community park sites within nearby planning area(s) as determined during approval of the park plan.
 - b. Neighborhood parks: When the timing of park development is not synchronized with residential development within a planning area, neighborhood park dedication credits may be eligible to be banked, as determined during approval of the park plan, if the following conditions are met:
 - (i) Banked public neighborhood park credits may only be applied towards any neighborhood park site in the planning area within one-half mile from the units which generated the dedication.

- (ii) Banked private neighborhood park credits may only be applied towards private parks within the subject tract map boundaries.
- (iii) Banked private neighborhood park credits generated by gated residential developments may only be applied towards private parks within the privacy gates of the units which pay for the park's maintenance.

4. Use of Quimby Act fees:

- a. Developers of in-fill housing projects with 50 or less units may comply with park dedication requirements solely by payment of in-lieu fees. Neighborhood park in-lieu fees shall be used at the nearest public neighborhood park. Community park in-lieu fees shall be used at the nearest community park(s).
- b. Developers of residential projects needing to meet park dedication requirements must select one of the following to satisfy their obligation. For the private park requirement, the developer shall either construct park improvements/recreational amenities at new or existing private parks or pay in lieu fees to the City which shall be applied towards public parks and/or amenities. The in-lieu fees shall be applied towards public parks and/or amenities. The in-lieu fees shall not be granted to existing private homeowner associations. The disposition of City in-lieu fees shall be included in the annual strategic business plan and budget processes.

5. Urban plazas and courtyards: Urban plazas and courtyards are ineligible for park dedication credit, except in Planning Area 36. An urban plaza or courtyard is an area such that the subject land and water is not covered with buildings or structures. The area may have been created as part of the urban building or landscaping design process and be between buildings. The area may or may not be landscaped. Such areas provide limited recreational opportunities and primarily serve passive and circulation uses.

G. Dedication standard reductions: In order to encourage the construction of low- and moderate-income housing, the city has adopted the following policy:

- 1. The developer of new units affordable for households of low and moderate income, as defined in the City of Irvine General Plan - Housing Element, may be allowed to reduce the dedication standard to a minimum of three and one-half acres per 1,000 population, upon review of the Community Services Commission and approval by the Planning Commission during the approval of the park plan. The distribution of the three and one-half acres shall be as follows: One and one-half acres - community parks, and two acres - neighborhood parks. The public/private distribution of neighborhood park land shall be determined during the approval of the park plan.
- 2. Dedication standard reduction requests shall be subject to the park plan processing procedures as described in Zoning Ordinance section 2-22-3. Approval of a request for this reduction shall be subject to the applicant's provision of documentation

regarding the following criteria:

- a. That the reduction in park dedication will help lower the cost of construction of the units planned for low-or moderate-income households.
- b. That the new rental units will be guaranteed as rentals for low-income households for a minimum of ten years.
- c. That projects for family units will be located within one-half mile of a publicly maintained park and/or school playground.

H. Appeals:

1. Any person may appeal a determination of the Planning Commission regarding the interpretation of this division. Appeals shall be filed with the City Clerk and shall be accompanied by a letter stating the reasons for the appeal. Any such appeals shall be filed within 15 calendar days from the date of determination.
2. An appeal shall be accompanied by a fee/deposit as required by City Council resolution. An appeal by a member of the City Council shall not be subject to the payment of a deposit/fee.
3. The City Clerk shall schedule the appeal for a hearing within 60 days of receipt of the appeal. Notice of the time and place the City Council will consider the appeal shall be mailed by the City Clerk to the applicant and to the person who filed the appeal (if other than the applicant).
4. The City Council shall hold at least one public hearing on any appeal in accordance with Zoning Ordinance chapter 2-5.
5. The City Council may affirm, reverse or modify the previous decision. The decision of the City Council shall be final.

*Appendix D. Amendments to Park Standards
Manual*



Appendices

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A. PUBLIC PARK DEDICATION

Land proposed to be dedicated for public park purposes shall be shown on the tentative tract map. All dedications of land shall be in accordance with the Subdivision Map Act. Land shall be conveyed in fee simple to the City of Irvine free and clear of all encumbrances, except those which will not interfere with the use of the land for its intended purposes as defined in the City's General Plan and which the City of Irvine agrees to accept. It is preferred that dedications occur on the final map, however, a separate document, (i.e. Grant Deed, Irrevocable Offer of Dedication) may be used to convey land. When a separate document is used, a Subdivision Application shall be submitted to the City Engineer for processing. The Subdivision Application and conveyance document must comply with all pertinent conditions of approval for public park dedications. Upon approval by the City, the conveyance document will be recorded.

B. PRIVATE PARK DEDICATION

Private park dedications shall be evaluated on a case-by-case basis per Subdivision Ordinance Section 5-5-1004 (F). Per Section 5-5-1004 (B) (3), private neighborhood parks shall be a minimum of one-third (0.33) acre in size for developments with densities under 31 dwelling units per acre and minimum 6,000 square feet in size for developments with densities over 31 dwelling units per acre, except for developments in Planning Area 36 where the parks will comply with provisions contained in the IBC Residential/Mixed Use Design Criteria and Chapter 5-8 of the City of Irvine Zoning Code. If several areas are proposed for park dedication credit, they should be physically linked together to form a network of recreational opportunities; however each individual area shall be evaluated for a minimum of 100 feet wide or special design considerations. Subdivisions which include land required as a private park shall be required to submit a written instrument reserving such required park land in perpetuity prior to the issuance of building permits to be approved by the Directors of Community Development and Community Services.

Please note that for subdivisions and/or residential development projects, conditions of approval for private park dedications may be applied on a case-by-case basis depending upon the specifics of the application.

*Appendix E. IBC Residential/Mixed Use Design
Criteria*



Appendices

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CITY COUNCIL RESOLUTION NO. 10-81

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF IRVINE RECOMMENDING TO THE CITY COUNCIL APPROVAL OF MASTER PLAN 00497860-PMP TO ESTABLISH DESIGN CRITERIA FOR RESIDENTIAL-MIXED USE PROJECTS WITHIN THE IRVINE BUSINESS COMPLEX

WHEREAS, the City of Irvine has an adopted General Plan and Zoning Ordinance; and

WHEREAS, the City of Irvine has proposed 00497860-PMP to establish design criteria for residential-mixed use projects within the Irvine Business Complex; and

WHEREAS, Master Plan 00497860-PMP (Master Plan) is considered a part of the overall Vision Plan project for the IBC (Vision Plan Project) pursuant to the California Environmental Quality Act (CEQA); and

WHEREAS, the City Council has considered information presented by the applicant, the Community Development Department, and other interested parties at public meetings and hearings held on July 11, 2006, July 25, 2006, February 27, 2007, October 23, 2007, February 26, 2008, April 27, 2010, and July 13, 2010.

NOW, THEREFORE, the City Council of the City of Irvine DOES HEREBY RESOLVE as follows:

SECTION 1. That pursuant to Section 15205 of the State CEQA Guidelines, the City Council reviewed and considered the Final Environmental Impact Report (SCH# 2007011024) (FEIR) in making its recommendation on the Zone Change and the Vision Plan Project.

SECTION 2. Most of the potentially significant environmental impacts of the Vision Plan Project identified in the FEIR have been determined to be less than significant or mitigated to a level that is considered less than significant or changes have been required or incorporated into the Vision Plan Project which avoid or substantially lessen the significant environmental effects.

SECTION 3. Certain impacts of the Vision Plan Project to Air Quality, Noise, Land Use and Traffic have been identified in the FEIR as significant and unavoidable. The specific impacts are summarized in Exhibit A to Resolution No. 10-79. Based upon specific economic, social, technical or other considerations, the City Council finds these effects acceptable and adopts the required facts and findings and Statement of Overriding Considerations (attached as Exhibit B to Resolution No. 10-79).

SECTION 4. Although the FEIR identifies certain significant environmental effects that would result if the Vision Plan Project is approved, most environmental effects can

feasibly be avoided or mitigated. The applicable mitigation measures, included within the FEIR as Table 1-2 and incorporated herein as Exhibit C to Resolution No. 10-79, have been incorporated into the Vision Plan Project or identified as requirements of the Vision Plan Project.

SECTION 5. In accordance with Section 8 of the City of Irvine CEQA Procedures, the Planning Commission recommends that the City Council find that the FEIR has been completed in compliance with CEQA and the State CEQA Guidelines, and the City's CEQA Procedures. The Planning Commission also recommends that the City Council, having final approval authority over the project, certify as complete and adequate the Final EIR.

SECTION 6. Pursuant to Fish and Game Code Section 7.11.4 (C), all required Fish and Game filing fees will be paid subsequent to certification of the FEIR for the Vision Plan Project.

SECTION 7. That, in accordance with Section 2-17-7 of the City of Irvine Zoning Code, the following findings for approving a master plan have been established:

1. That the proposed plan is consistent with applicable general and specific plans.

The design criteria in the Master Plan are consistent with the General Plan, and implement the neighborhood identify and mobility goals and objectives of the IBC Element.

2. The proposed master plan is consistent with the City's Zoning Ordinance.

In accordance with Section 5-8 of the Zoning Code, the design criteria in the Master Plan were established to ensure proper design flexibility be allowed for residential development projects while maintaining neighborhood character and pedestrian scale design. Therefore, the proposed Master Plan is consistent with the City's Zoning Ordinance.

3. The proposed master plan is in the best interests of the public health, safety and welfare of the community.

The proposed design criteria in the Master Plan implement goals of sustainable planning and smart growth by ensuring a strong level of neighborhood pedestrian oriented design. Therefore, the criteria are consistent with all applicable provisions of the General Plan and Zoning Code and the Master Plan is determined to be in the best interests of the health, safety and welfare of the community.

4. The proposed master plan complies with all applicable requirements set forth within division 8 pertaining to the dedication of permanent open space through a phased dedication implementation program for affected planning areas and zoning districts

The project is not subject to this provision.

5. If the proposed master plan affects land located within the coastal zone, the proposed master plan will comply with the provisions of the land use plan of the certified local coastal program.

A portion of the IBC is located within the coastal zone, but the design criteria do not apply to this area as no residential development is permitted in this area

6. In Planning Area 30, the proposed master plan provides for compatibility between existing and future uses within the City of Irvine, to the extent those uses are known.

The project is not located in Planning Area 30.

NOW, THEREFORE, based on the above findings the City Council of the City of Irvine DOES HEREBY APPROVE Master Plan 00497860-PMP (Exhibit A).

PASSED AND ADOPTED by the City Council of the City of Irvine at a regular meeting held on the 13th day of July, 2010.



MAYOR OF THE CITY OF IRVINE

ATTEST:



CITY CLERK OF THE CITY OF IRVINE

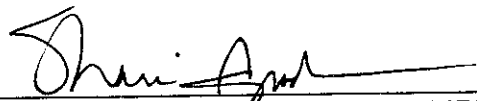
STATE OF CALIFORNIA)
COUNTY OF ORANGE)
CITY OF IRVINE)

I, SHARIE APODACA, City Clerk of the City of Irvine, HEREBY DO CERTIFY that the foregoing resolution was duly adopted at a regular meeting of the City Council of the City of Irvine, held on the 13th day of July, 2010.

AYES: 4 COUNCILMEMBERS: Agran, Choi, Krom and Kang

NOES: 0 COUNCILMEMBERS: None

ABSENT: 1 COUNCILMEMBERS: Shea


CITY CLERK OF THE CITY OF IRVINE

**Irvine Business Complex
Residential/Mixed-Use
Design Criteria
April 2010**

1.0 Introduction

1.1 Purpose and Intent

To ensure a consistent standard of residential mixed-use design quality throughout the IBC, the City of Irvine has established a set of Residential Mixed-Use Design Criteria. These Design Criteria are intended to guide the physical development of any residential or mixed use project that contains a component of residential use located within the boundaries of the Irvine Business Complex (IBC). They are intended to assist in ensuring that the design of each development remains true to the principles established in the IBC Vision process and Vision summary document. These Design Criteria have been approved by the City Council in conjunction with the General Plan Amendment and Zone Change implementing the IBC Residential/Mixed Use Vision Plan and Overlay Zoning Code. Subsequent amendments to these criteria may be approved by the Planning Commission.

This document establishes the framework through which design continuity can be achieved while accommodating varying tastes, materials and building methods. It provides standards and criteria for new construction and for remodels or additions.

These criteria are intended to complement the IBC Residential Mixed-Use Overlay Zone (Chapter 5-8 of the Zoning Code).

Recognition of and compliance with the Design Criteria is required for all residential and residential mixed-use development projects unless an alternative criteria meeting the same intent is approved by the Planning Commission as part of the discretionary project approval. In addition, exemptions to complying with certain specific criteria may be granted by the Planning Commission if it can be demonstrated that a particular criteria would be either inapplicable or inappropriate for a given project.

Therefore, while greater flexibility than is typically allowed within traditional zoning standards are permitted in the implementation of these Design Criteria, they nevertheless are deemed critical to the success of the mixed use environment within the IBC and should not be considered voluntary.

For discretionary residential projects in process with the City at the time of the adoption of these criteria, the City acknowledges the applicants have worked towards meeting the intent of these criteria as the criteria were being developed. Therefore, these criteria do not apply to residential projects in process at the time of criteria adoption, so long as the project design following adoption of the criteria is in substantial conformance with the design as proposed prior to criteria adoption.

1.2 Project Location and Description

These criteria shall be utilized for new residential and residential/mixed use developments in all areas within the Irvine Business Complex, generally defined as the area between John Wayne Airport, the San Diego Creek, Barranca Parkway and Campus Drive and located within the City of Irvine.

Consistency

These criteria are intended to define standards consistent with the Vision established for residential and mixed-use projects within the IBC. Should these criteria be found in conflict with regulatory codes, building codes and/or other statutes pertaining to construction within the IBC, those codes and statutes should supersede.

2.0 Limitations on the Location of Residential Development within the IBCRMU Overlay

- A. Required Street Frontage.** In order to provide adequate emergency and public access, all proposed development sites should have a minimum frontage of 100 feet along a public or private street. An IBC Private Service Street or IBC Walking Street as defined in this criteria does not qualify as a frontage street for purposes of this requirement.
- B. Distance from Freeways.** All outdoor public recreational areas should be located more than 500 feet from the nearest lane of traffic on the Interstate 405, unless adequate building screening can be provided.

3.0 Frontage Type Standards

3.1 Purpose

This section identifies the frontage types (architectural design definition representing the front of the building facing the street) allowed within the Overlay District area, and for each type, provides a description of the type's intent and design standards to ensure that proposed development is consistent with the City's goals for building form and character within the IBC. Design flexibility is encouraged by the use of different frontage types within a specific project.

3.2 Allowable Frontage Types by Overlay District

The Frontage Types allowed in each District are identified in Table 3-1.

Table 3-1: Frontage Requirements

BUILDING FRONTAGE TYPE	BUILDING FRONTAGE ALLOWED
Arcade	Y
Exposed Parking Garage	E
Forecourt	Y
Gallery	N
Residential Edge	Y
Stoop	Y
Storefront	Y

UN = Urban Neighborhood

MU = Multiple Use District

Y = Permitted

N = Not Permitted

E = Permitted by exception only *

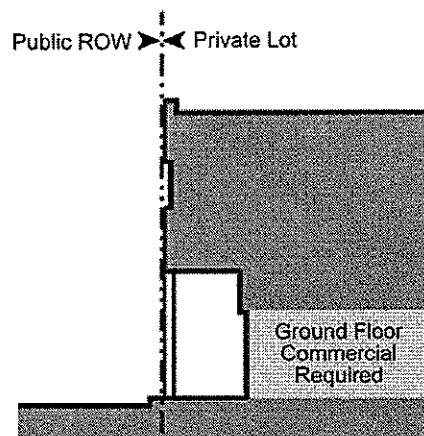
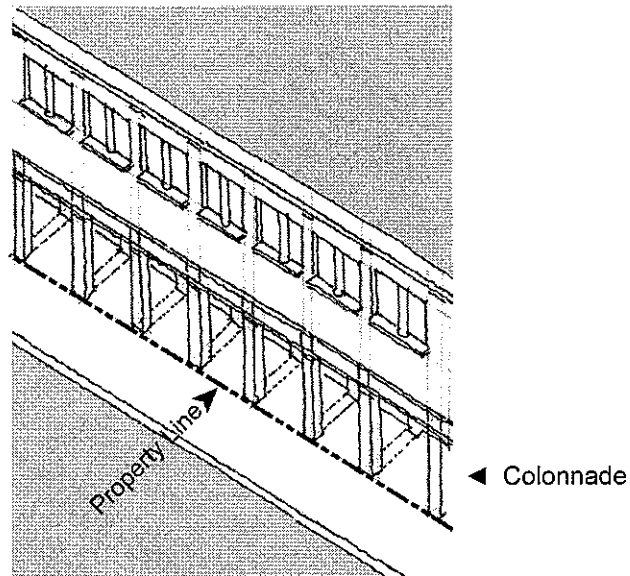
- * Exceptions include parking garages located on property boundaries not adjacent to public or private streets except on IBC service streets.

3.3 Standards

Arcade

Arcades are façades with an attached colonnade which are covered by upper stories. This type is ideal for retail use, but only when the sidewalk is fully incorporated under the roof. This frontage type cannot cover the public right-of-way as can the Gallery frontage type.

- Arcades should be no less than 10 feet wide clear in all directions.
- At least 65% of the first floor storefront wall area oriented to the street should consist of transparent glazed windows or glazed entries.

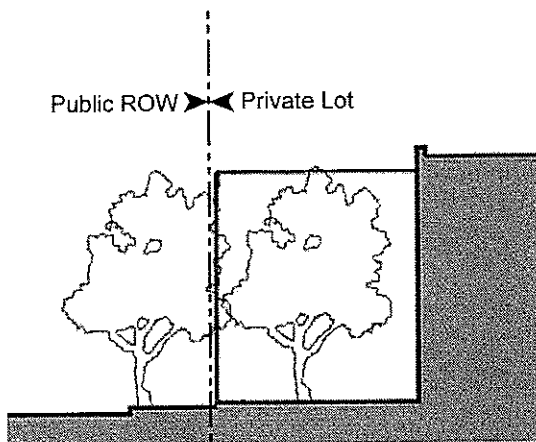
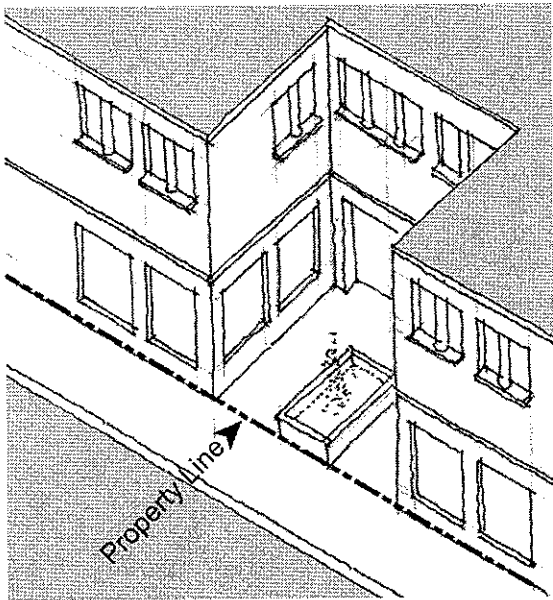


Arcade Diagrams

Forecourt

Forecourts are recessed courts within a storefront, gallery, or arcade frontage. The forecourt is suitable for gardens, vehicular drop offs, and utility off loading.

- The forecourt on a street frontage occupied by primarily commercial uses should not be deeper than 50 feet.
- A fence or wall at the property line may be used to define the private space of the yard. The fence or wall shall not exceed 42" in height. When forecourts are more than 18" above grade, completely solid privacy walls are discouraged.
- The forecourt may also be raised from the sidewalk, but should not exceed 36" above the sidewalk grade.

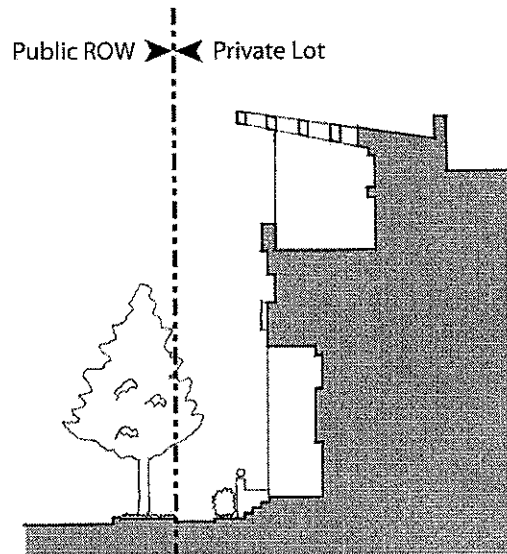
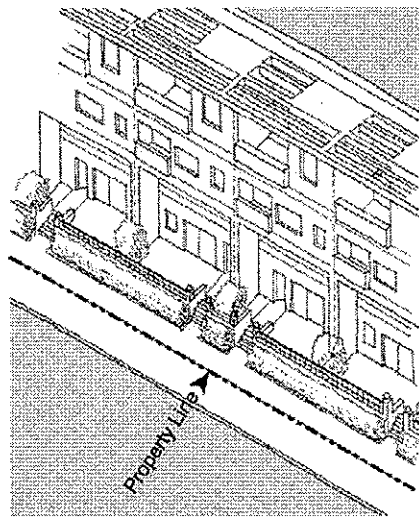


Forecourt Diagrams

Residential Edge

On multi-story buildings that have residential as a ground floor use, a pedestrian-friendly, “human scale” edge needs to be maintained along collector and local level street frontages. This is achieved by providing ground floor residential dwellings with individual entries, porches, stoops, overhangs and other devices that communicate individual home identity.

- Ground floor dwellings should have individual entries and walkway connections connecting to the adjacent street, considering sensitivity to surrounding land uses.
- Parallel on-street parking should be provided along adjacent street edges in front of dwellings where allowed for by the Director of Public Works.
- Exposed parking structure frontage along the ground level is highly discouraged and should be screened from adjacent streets with ground floor residential units, live-work, commercial use, community facilities or other uses.
- Building entries should be articulated with stoops, porches, balconies, overhangs and other architectural devices that articulate the façade and create visual interest.
- Fences or walls defining the front yard, or patio should not exceed 42” in height. When patios are more than 18” above grade, completely solid privacy walls are discouraged.

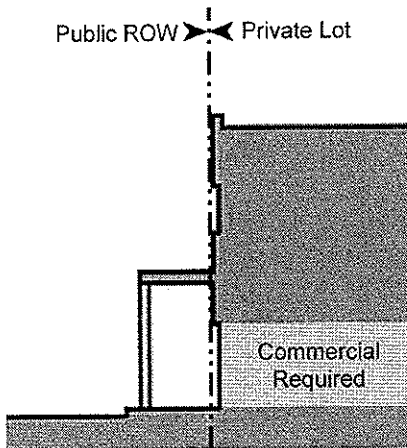
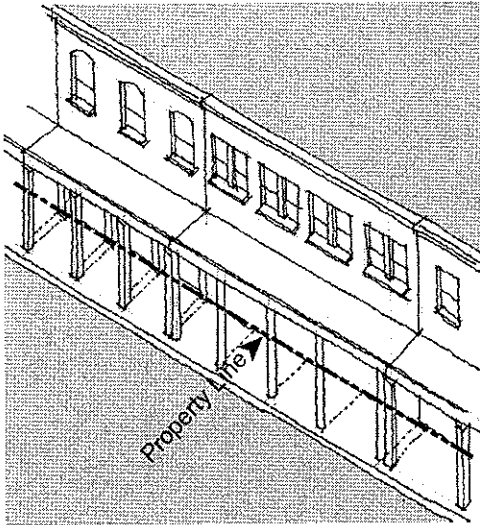


Residential Edge Diagrams

Gallery

Galleries are storefronts with an attached colonnade that projects over the sidewalk and encroaches into the public right-of-way. This frontage type is ideal for retail use but only when the sidewalk is fully incorporated under the roof.

- Galleries should be no less than 15 feet wide clear in all directions.
- At least 65% of the first floor storefront wall area should consist of transparent glazed windows or glazed entries.

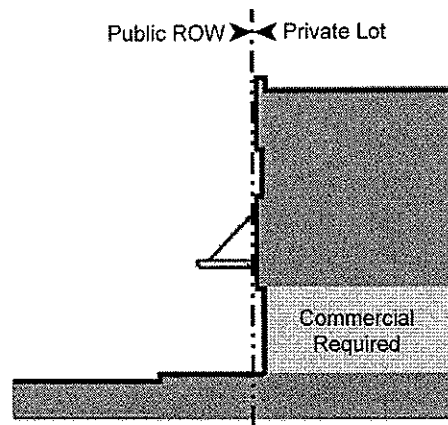
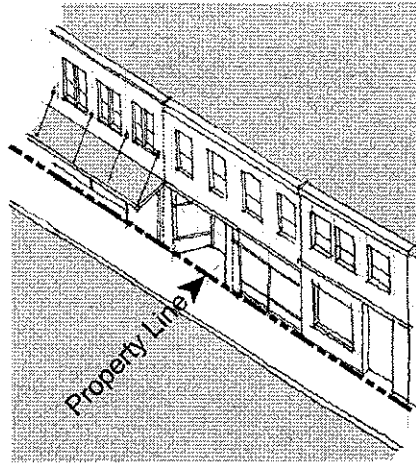


Gallery Diagrams

Storefront

Storefronts are façades placed at or close to the property line with the entrance at sidewalk grade and commonly equipped with cantilevered shed roof(s) or awning(s). Recessed storefronts are also acceptable.

- Storefronts should be between 12 and 16 feet tall, as measured from the adjacent sidewalk.
- At least 65% of the first floor wall area should consist of transparent glazed storefront or glazed entries
- A maximum 18 inch deep area, measured out from the face of the building so long as a 5 foot clear path of travel on the adjacent sidewalk is maintained, is permitted within which a commercial tenant may customize store front design.



Storefront Diagrams

4.0 Architectural Design Criteria

A. Building Massing, Height, and Architectural Detail

The intent of these criteria is to provide housing projects that have a variety in building massing, height as well as architectural detail. Large building masses should be articulated through variations in roof lines and building heights, as well as the introduction of arcades, colonnades, recessed entrances, window bays, separated wall surfaces, and variations in setbacks. Façades adjacent to public and private streets should be enhanced with architectural detail, contrasting materials and colors, cornices, window details and fenestrations.

There are four primary design criteria that all new residential projects within the IBC should comply with. Additionally, projects should also comply with 4 out of 6 additional secondary design standards.

Primary Design-Criteria

1. Maximum length of building frontage

Any single building frontage may not be longer than 220 feet without a break of at least 15 feet in depth and 15 feet in width.

2. Active ground floor

Ground floor dwellings oriented to public or private streets should be accessed individually and directly from the abutting street, with individual front stoops or porches. Ground floor units may be provided with an additional/secondary entry from interior building courts/corridors.

- Exceptions are dwellings facing arterial streets, private service streets, or within courtyards.
- Where site grades prohibit direct access, a separate walkway may be provided at the top or bottom of the finished grade.
- Towers (over 5 stories) should be designed with a base of two to five stories located at the minimum building setback, lined by residential, community facility and/or commercial uses accessed at the ground level. Building frontages exceeding 5 stories should set back an additional 20 feet from the three to five story building base. Tower elements at corners are not included.

3. Building base, middle and cap

All buildings should be composed of three parts: base, middle and cap regardless of architectural style.

- The base or ground floor treatments generally articulated by individual dwelling entries, stoops and porches (except commercial ground floors).
- A middle consisting of a multi-story façade element with varied fenestration, color and/or breaks in wall plane.

- A top floor or cornice level that is recessed, modulated, exhibits a strong cornice line or overhang, or is otherwise emphasized.

4. **Corner Articulation**

Buildings at corners of collectors and/or arterial street intersections (as defined by the General Plan Circulation Element) should receive special treatment to enhance the pedestrian experience and create visual corner focal points.

Corner treatments may include but are not limited to:

- Tower elements, variation in height should be at least 1 story up or down.
- Larger scale of windows, openings and entry ways.
- Shift of color and material.
- Enhanced or articulated massing.
- Public art, such as murals or sculptural elements.

Secondary Design Standards

Residential projects should incorporate at least 4 out the following 6 secondary design standards in their design:

1. **Building façade** - The wall plane of a building façade should not extend longer than 120 feet without a break in the plane not less than six (6) feet in depth. Balconies do not qualify.
2. **Building tops** - Tops of building façades should be visually terminated through the use of articulated rooftops; stepped parapets, hip and/or vaulted roofs, stepped terraces, domes and/or other forms of multifaceted building tops.
3. **Architectural window articulation** - **Architectural window articulation** should be designed to create visual interest and distinctive building façades. This may be done through a variation in opening size, varied and/or orderly grouping of windows, or the use of recessed windows. Large total blank wall areas in excess of 20 linear feet and more than one-story in height (without windows, detail or entrances) are prohibited.
4. **Varied building heights** - Buildings should be designed with variations in building heights to help create visual interest and a distinctive street frontage. On buildings of five or more stories, one dominant building height should not exceed 70 percent of the building footprint, and 80 percent for buildings up to four stories. Parking structures, either podium or freestanding, are not included in the calculation.
5. **Building color** - Building façades should be designed to incorporate the use of contrasting/complementary colors and materials which reflect rather than absorb the hot/harsh Southern California sun. The predominant building colors (65% or more) should be white, off-white, light ochre, beige, or other light earth tones with other darker tones/colors used to accentuate door or window openings, cornices and other architectural elements/features.

6. **Glass building wall** - Building elevations that include a glass curtain wall should be designed to incorporate a contrast/ratio between punched openings and curtain wall elements. Curtain wall elements shall not exceed 85 percent of any one building façade.

- The use of reflective glass is prohibited.

B. Courtyard Space

In order to provide light, ventilation, and usable outdoor areas for residents, buildings oriented toward the interiors of blocks should be formed around courtyards of reasonable proportion and scale.

1. Courtyard housing, liner buildings and podium buildings should be designed to provide courtyard space of a size at least 15% of the total aggregate site size.
2. Tower blocks should be designed to provide courtyard space of a size of at least 20% of the total site size.
3. Minimum courtyard space dimensions should be 40 feet.
4. Courtyard spaces should be connected to each other and/or to the street by landscaped walkways.
5. Courtyard spaces may be located on podiums.

C. Pedestrian Access

1. Primary pedestrian entries for commercial/retail uses should be directly from a street or plaza.
2. For projects proposed adjacent to creeks, retail uses, or recreational areas, the project developer shall participate in the development of pedestrian connections to these facilities on a fair-share basis, including provision of pedestrian bridges as needed, consistent with the connectivity goals of the IBC Element of the General Plan. These connections are separate from and in addition to those outlined in the IBC Public Infrastructure Improvement Program adopted as part of the IBC Vision Plan.

D. Utility Service Areas

Utility/service areas and mechanical/electrical/backflow prevention equipment shall be located and screened to reduce their visibility from public and communal gathering areas and set back from the roadway as far as possible; methods of screening that are compatible with the project's architecture should be utilized.

5.0 Block Standards

- A. Purpose.** This section establishes the standards for residential and mixed-use block size. A maximum block size criteria has been established to create and maintain a connected network of streets that improve connectivity, walkability, emergency access, and a variety of building types.
- B. Applicability.** Each block within a project should be designed in compliance with the standards of this Chapter, and is subject to the review of the Community Development Department.
- C. Maximum Block Size.** Blocks should not be longer than 600 feet on the long dimension and 400 feet on the short dimension. If either dimension is exceeded a new street should be added to create a block size not exceeding said dimensions.
- D. Street Types.** Street types to be used to define and create allowed block sizes are as follows.
- Any existing public arterial streets;
 - Any existing public collector streets;
 - Any existing public local streets; and
 - For any new private way except IBC Private Service Street, which is intended for service and emergency access only; however, the Walking Street should be used only when vehicular connectivity to an arterial is infeasible, as determined by the Director of Public Works.
- E. Street Connectivity.** Streets should be aligned and located in a manner to create a connected street pattern.
- New streets should link, or be aligned to ultimately link, to other local, collector, and/or arterial streets.
 - In cases where new streets cannot connect to arterials due to intersection spacing constraints, or other constraints as determined by the Directors of Public Works and Community Development, the street may:
End before the arterial with adequate vehicular turnaround area, and continue as a pedestrian walkway connecting to the arterial adjacent sidewalk, or
Provide a “walking street” as depicted in Section 6.0.

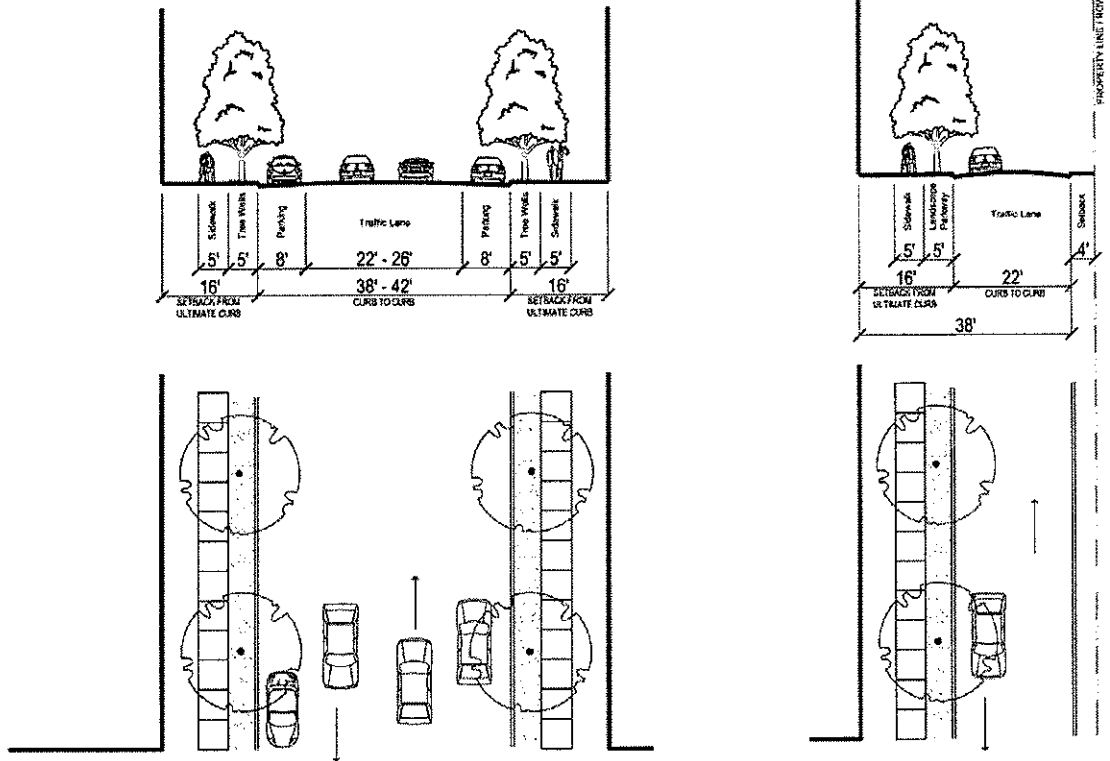
6.0 Street Standards

As provided in these criteria, new ungated streets should be provided in new residential/residential mixed-use developments to enhance the walkability and circulation and to create smaller blocks.

- A. **Conceptual Location.** New streets should be located in general conformance with the Conceptual Street Locations Plan defined in General Plan Figure N-7
- B. **Width Variations for Emergency Access.** The curb to curb dimension may vary depending on adjacent building heights in order to meet OCFA access and operational requirements.
- C. **Bus Stops.** Bus stops should be located and designed in accordance with the Orange County Transportation Authority (OCTA) Bus Stop Safety and Design Guidelines, i-Shuttle routes, and in consultation with City and OCTA staff. Applicants should be required to install bus turnouts, shelters, and related amenities, or pay an in-lieu fee to the City, as determined by the Director of Public Works.

D. IBC Private Way

Interim Section



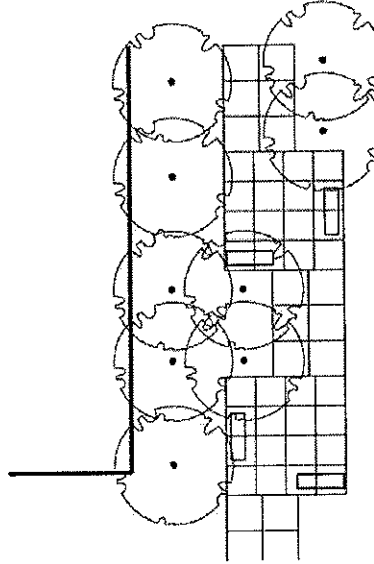
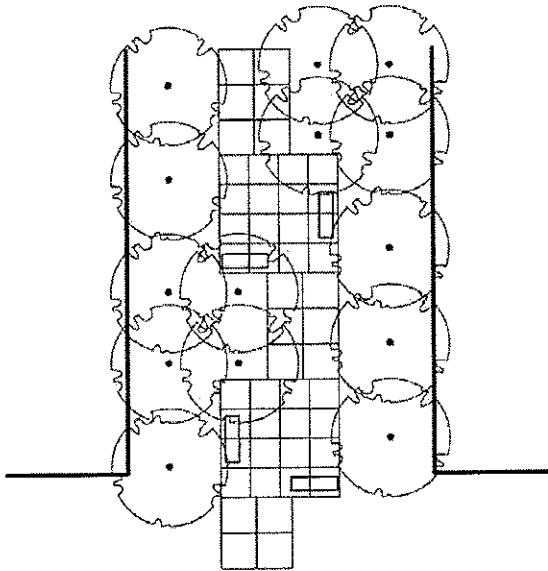
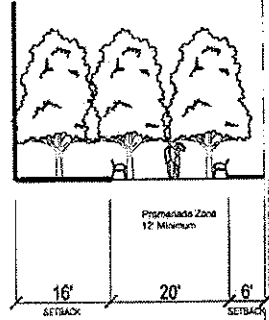
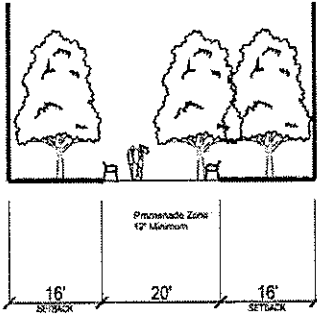
Design Speed	20 mph	Design Speed	20 mph
Curb to Curb Width	36'-42'	Curb to Curb Width	22'
Traffic Lanes	1 lane each direction	Traffic Lanes	1 lane each direction
Avg. Daily Trips	Not to exceed 850	Bike Lane	none
Bike Lane	none	Curb Type	vertical
Parking	parallel on both sides (opt.)	Curb Radius	20'
Curb Type	vertical	Sidewalk Width	5' on one side
Curb Radius	20'	Parkway Width	None
Sidewalk Width	5'	Planter Width	5'
		Planter type	Continuous landscape parkway
		Street Lighting	City standard

NOTES:

1. 42 feet pavement width required when adjacent building height is greater than 65 feet (for Orange County Fire Authority requirements).
2. On-street parking is required where residential fronts the street, except for the interim section.
3. Where the sidewalk is set back from the curb with a landscaped parkway, and curbside parking is allowed, the landscaping within the parkway shall include hard, flat, traversable surfaces for motorist and passengers to get to the sidewalk.

E. IBC Walking Street

Interim Section



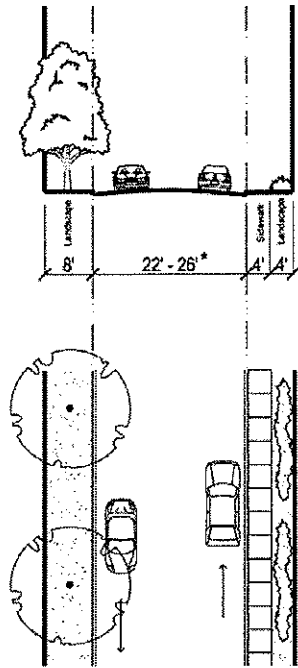
**Right-of-way
Planter Type
Street Lighting**

**52''
tree wells (5' wide)
Special Type**

**Right-of-way
Planter Type
Street Lighting**

**42'
tree wells (5' wide)
Special Type**

F. IBC Private Service Street Court



Design Speed	20 mph
Curb to Curb Width*	22'-26'
Right-of-way width	N/A
Traffic Lanes	1 lane each direction
Avg. Daily Trips	Not to exceed 120
Median	none
Bike Lane	none
Parking	none
Curb Type	vertical
Curb Radius	20'
Sidewalk Width	4' on one side
Parkway Width	none
Planted Area	4' one side/8' other side
Planter Type	none
Street Lighting	City standard
Maximum length	300 feet from curb face of abutting private court, way or street

*NOTE: Shall be 26 feet wide when adjacent building height is greater than 65 feet (for Orange County Fire Authority requirements).

7.0 Setbacks

Every building or structure built under the provisions of these criteria ~~this zone~~ should provide setbacks as follows:

A. Setbacks Abutting Public Rights-of-Way and Private Streets.

1. **Minimum Setback.** All properties should have a minimum setback for the full width of the property as indicated in Table 7-2 Setbacks.
 - a. Setbacks shall be measured from the ultimate curb face location.

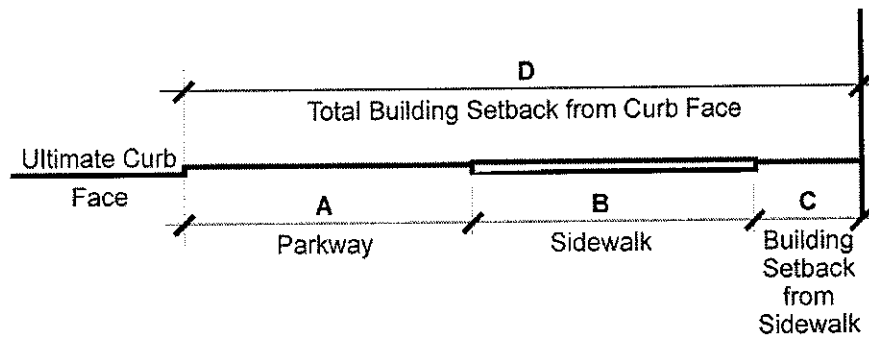


Table 7-2: Setbacks

Street	A Parkway Width (feet)	B Sidewalk Width (feet)	C Building Setback from Sidewalk (feet)	D Total Building Setback from Curb (feet)
NEW STREETS				
IBC Private Court	0	8	0	8
IBC Private Way	5	5	6	16
IBC Service Street	0	8	0	8
EXISTING STREETS				
Alton Parkway*	8	8	14	30
Armstrong Avenue	6	6	8	20
Barranca Parkway*	8	10	22	30
Bardeen Avenue	6	6	8	20
Beckman Avenue	6	6	8	20
Business Center Drive	6	6	8	20

Street	A Parkway Width (feet)	B Sidewalk Width (feet)	C Building Setback from Sidewalk (feet)	D Total Building Setback from Curb (feet)
Campus Drive*	8	8	14	30
Cartwright Road	6	6	8	20
Corporate Park	6	6	8	20
Derian Avenue	6	6	8	20
Douglas Drive	6	6	8	20
DuBridge Avenue	6	6	8	20
Gates Avenue	6	6	8	20
Gillette Avenue	6	6	8	20
Hale Avenue	6	6	8	20
Kelvin Avenue	6	6	8	20
Jamboree Road (north of Main Street)*	8	8	14	30
Jamboree Road (between Main Street and Michelson Drive)*	8	8	8	24
Jamboree Road (south of Michelson Drive)*	8	8	12	30
Macarthur Boulevard*	8	8	14	30
Main Street*	8	8	8	24
McCabe Way	6	6	8	20
McGaw Avenue	6	6	8	20
Martin Street	6	6	8	20
Michelson Drive*	8	8	8	24
Millikan Avenue	6	6	8	20
Murphy	6	6	8	20
Morse Avenue	6	6	8	20
Noyes Avenue	6	6	8	20
Quartz	6	6	8	20
Richter Avenue	6	6	8	20
Teller Avenue	6	6	8	20
Union	6	6	8	20

Street	A Parkway Width (feet)	B Sidewalk Width (feet)	C Building Setback from Sidewalk (feet)	D Total Building Setback from Curb (feet)
Von Karman Avenue (Main Street to Barranca Parkway)*	8	8	14	30
Von Karman Avenue (Michelson Dr. to Campus)*	8	8	8	24
Wade Street	6	6	8	20
White Road	6	6	8	20

***Existing Arterial Streets**

NOTES:

1. Additional sidewalk width may be required around schools or other locations where pedestrians congregate (such as theaters, restaurants and churches).
2. Seating and fountains, statuary, or street art should not be situated such that pedestrians viewing them are unaware of, or inadvertently get too close to, traffic along the adjacent traveled way.
3. Should Building Code requirements specify lesser setbacks, the Building Code requirements shall prevail.

2. **Required Improvement within Setbacks.** Setbacks abutting public rights-of-way, private streets, private service streets, and private ways should be improved and maintained as noted below:
 - a. For projects adjacent to streets identified in Table 7-2, as well as newly constructed public and private streets, the portion of the setback adjacent to the right-of-way should be improved with a parkway and sidewalk consistent with dimensions identified in this Section. On public streets, a private property easement for the sidewalk should be provided to the City.
 - b. Setback areas should be fully landscaped with turf or groundcover, trees, shrubs or other plants, and/or decorated paving and walking surfaces.
 - c. Setback areas should be permanently maintained in a neat and orderly manner by the property owner, homeowners association, or maintenance district.

3. **Acceleration and Right Turn Lanes.** Required setbacks from the curb should be maintained where right turn lanes, acceleration lanes or deceleration lanes and bus turn outs are required, except in the following condition:
 - a. A full or partial height building mass may be extended out to the ~~normal~~ setback line consistent with the ultimate curb face of the nearby through lane if located on the corner or if deceleration lane is required on a non-corner property, and not exceeding 30% of the length of the increased setback. The extended building mass must represent a corner architectural elevation and form unique to the block and designed to accentuate the arterial corner location., unless the building is not located on the corner of two public streets.

4. **Permitted Encroachments within Setbacks:** Setbacks abutting public rights-of-way, private streets, private service streets, and private ways may include the following encroachments, in addition to those outlined in Section 3-27 of the City of Irvine Zoning Code:
 - a. Encroachments as permitted in Chapter 3-27 of the Zoning Ordinance.
 - b. Stoops and balconies may encroach not more that five (5) feet into the required setback.
 - c. Patios and courtyards may encroach not more that five (5) feet into the required setback.
 - d. Ramps for disabled access.
 - e. Outdoor seating and dining areas in conjunction with full-service restaurants and food retailers i.e. coffee shops, ice cream shops, sandwich shops, outdoor vending, and pushcarts provided that such areas shall be designed to not adversely affect safe and efficient pedestrian circulation, subject to review and approval by the Director of Community Development.
 - f. Public art displays, fountains, ponds, planters, outdoor seating areas, benches, decorative trash receptacles, way finding signs, planters, public plazas, or other similar amenities and attractive street furnishings that create public gathering places, as permitted by existing regulations.
 - g. News racks that are designed to be aesthetically harmonious with the character of the area and not cause obstruction or adversely affect the safe and efficient circulation of pedestrian and vehicular traffic.
 - h. Awnings, canopies, galleries, and arcades.
 - h. Signs as permitted in section 8 of these Design Criteria.

5. **Permitted Encroachments within Public Rights of Ways:** All Right of Way encroachments need to maintain a five (5) foot clear path of travel.
 - a. Encroachments as permitted in Chapter 3-32 of the Zoning Ordinance
 - b Ramps for disabled access.
 - b. Improvements for bus transit and shuttle stops.

-
- d. Outdoor seating and dining areas in conjunction with full-service restaurants and food retailers i.e. coffee shops, ice cream shops, sandwich shops, outdoor vending, and pushcarts provided that such areas shall be designed to not adversely affect the safe and efficient circulation of pedestrian and vehicular traffic, subject to review and approval by the Director of Community Development and Director of Public Works.
 - e. News racks that are designed to be aesthetically harmonious with the character of the area and not cause obstruction or adversely affect the safe and efficient circulation of pedestrian and vehicular traffic.
 - f. Galleries as defined in Frontage Type Standards (Section 3 of these Design Criteria)
 - g. Signs as permitted in Section 8 of these Design Criteria

8.0 Signs

- A. Applicability of Other Regulations.** The signage provisions in Division 7 of the Irvine Municipal Code shall apply to projects within the IBCRMU Overlay, except that the following signage elements are permitted when a coordinated sign program is provided as described in Subsection Below.

- B.** A sign program for residential and mixed use projects should be submitted for review pursuant to the procedures outlined in Sections 2-21-2, 2-31-3 and Division 7 of the Zoning Code. The approval body for the sign program shall be as specified in Section 2-21-4 of the Zoning Code, with the exception of neon signs, which are permitted pursuant to this section as part of the required sign program, subject to review and approval by the Planning Commission.
 - 1. Awning signs and projecting signs are permitted for buildings with ground floor commercial uses, pursuant to the sign regulations in the Zoning Code.
 - 2. Thematic elements or three-dimensional object or non-habitable structure such as a gateway, tower, sculpture, spire, and similar architectural features to entertain pedestrians are permitted.

9.0 Parking Structure, Parking Demand, Loading, and Vehicle Access

A. Townhomes, Live/Work and Courtyard Homes

Townhomes, live/work, and courtyard homes should provide vehicular access from the rear of the unit, with access to garages by private service drives located at the rear or side of the building. Garages access is prohibited on primary street (as defined in the General Plan Circulation Element) frontages except where necessary to provide access to podium or subterranean parking.

B. Freestanding Parking Structure Treatments

Portions of any parking structure facing a street should be “lined” with residential units or community/commercial facilities so that at least 70% of the ground floor length of the parking structure is visually screened from the street.

1. Parking structures that are located along property lines, not directly adjacent to streets and/or parks or within an industrial buffer zone should utilize architectural detailing, façade treatment, artwork, or other architectural features to enhance the façade.
2. The landscape area should be a minimum of 8 feet in depth at the ground level where the landscaping is the only means of visual screening.
3. Upper levels of any structures should be of similar color and material to adjacent buildings, and include enhanced architectural treatment to provide façade variation. View of cars should be screened by a 42-inch high parapet.
4. Parking structures should incorporate a squeal-free floor treatment.

C. Podium Parking Structure Treatments

Podium parking garages should be depressed so that no more than 3.5 feet of the podium above grade is exposed to view from public or private streets. Exposed portions should be architecturally treated with stoops, porches, courtyards, vents and screened with landscape plantings. Exceptions are the following:

1. Along an arterial street or greater (as defined by the General Plan Circulation Element) up to 5 feet of enclosed or naturally ventilated parking structure may be exposed. Such exposed areas should be screened with berming, landscape material, or other devices.
2. Where it can be demonstrated to the satisfaction of the Chief Building Official that water table conditions preclude the prescribed maximum 3.5 foot podium height without incurring extraordinary costs, up to 5 feet may be exposed. In addition to stoops and porches, such exposed areas should be screened with berming, landscape material, or other devices.
3. Where existing site slope conditions preclude maintaining the maximum 3.5 foot podium height, up to 50% of a podium side may extend up to 5 feet above grade.

-
4. Where a podium parking structure extends higher than 3.5 feet above grade (or 5 feet on an arterial street), except in the cases noted above, it should be treated as a freestanding parking structure with at least 70% of the ground-level exposed parking structure lined with residential, community or commercial uses, and enhanced architectural treatment to provide façade variation for upper levels. In such a case the same exceptions shall also be granted as listed for free standing parking structures.

D. Parking Demand Study. The integration of multiple uses to capitalize on shared parking dynamics leading to reduced parking requirements and intensification of use is highly encouraged. Refer to zoning code Sec. 4-6-3.A for shared parking requirements. Further requirements are below.

1. A shared parking demand analysis may be requested of the applicant for including the design of the parking areas, including ingress and egress. Reductions in standard parking requirements, should be determined as part of the discretionary case application based upon information contained in a parking demand study prepared by a licensed traffic engineer.
2. The parking demand study shall be prepared at the property owner/developer's expense and be provided at the time of discretionary application for the use, and subject to the provisions of Section 4-6-3 of the Zoning Code..

E. Number of Spaces for Residential Uses. Parking requirements for residential uses shall be as provided in Chapter 4 of the Zoning Code; except however, in such an instance when the parking demand study supports a different parking ratio as approved by the Planning Commission as part of the discretionary action.

1. **Valet Parking.** Valet parking may be permitted pursuant to Section 4-8-1 provided that valet services are provided for and managed by an on-site management company or homeowner's association.

Where tandem parking is provided for non-residential uses, a valet attendant is required.

The portions of the parking lot or structure where the valet attendant parks vehicles, if it is within the drive aisles, shall be physically separated from the areas of self-parking, such that the vehicular circulation is not impeded, and dead-ends are not created, for those who wish to self-park (if allowed).

2. **Drop-off and Pick-up Locations.** Drop-off and pick-up locations should be incorporated into the design of parking areas, as determined by an access study or part of a larger traffic analysis to be submitted at the time of the discretionary case application.

The drop off and pick up locations should not impede the vehicular circulation for those who wish to access the self-parking areas (if provided), nor should they obstruct emergency vehicle access to the buildings.

- F. **Vehicle Access.** All vehicle access should be designed and improved in accordance with the City of Irvine Standards and Transportation Design Procedures..

- G. **Credit for On-Street Parking.** Residential visitor parking required by the Zoning Ordinance may be located on new streets created by the residential or mixed-use development pursuant to this overlay Zone.

- H. **Shared Visitor Parking.** For mixed-use residential projects containing greater than two percent of the project square footage of neighborhood-serving uses (as defined by the accessory retail provisions of the Zoning Code, shared parking may be requested through the Administrative Relief Process outlined in the Zoning Code, based on City review and approval of a shared parking demand analysis for the project submitted by the project applicant. Existing local streets that are deemed by Director of Public Works for on-street parking may also be credited for visitor parking. Required parking for recreational areas will not be eligible for use as shared visitor parking.

- I. **Parking Location.** The location of spaces for residential uses shall be provided per in Chapter 4.3, except that the location of visitor parking may not exceed 500 feet from the primary entrance to the residence.

1. Parking entrances to subterranean garages and/or driveways shall be located to the side or rear of each lot, except for towers, which may allow for such access from the front of the lot via a circular or plaza-type driveway entrance from the street.

- J. **Loading Areas.** Off-street loading spaces should be provided as follows:

1. **Non-residential.** Non-residential off-street loading requirements should be located as far as feasible from residential units to minimize noise and odor impacts.

2. Residential.

- a. Residential uses should have one off-street loading space or moving plaza for every 150 units.
Loading spaces shall be conveniently located near an entrance to the building and in close proximity to the freight elevator. The path of travel of those loading and unloading should not obstruct access to the parking structure.
- c. Loading spaces or moving plazas should be incorporated into the design of vehicular access areas.
- d. Decorative paving, removable bollards, and potted plants are permitted and encouraged to enhance loading spaces or moving plazas .plazas.
- e. Loading spaces or moving plazas may be located on a local street, or private way subject to the approval of the Director of Public Works. The adjacent parkway and setback landscape treatment should be designed to allow for loading and unloading. The applicant must demonstrate that the loading space can not be accommodated within the property or along a private street. The property management must monitor and provide signage to reserve the loading space for exclusive use by moving vans and delivery vehicles.

10.0 Park and Recreation Criteria

- A. **Purpose.** This section identifies the range of park types and alternative park design standards for parks to be developed in the IBCRMU Overlay District. Private Neighborhood Parks may be accommodated entirely on the subject property or combined with an adjacent property being developed through dedication or through payment of in-lieu fees to comply with the requirements of this section.
- B. **Approvals - Park Credit Exceptions.** Parks shall be designed in compliance with the standards of this section, and Section 2-22 of the Zoning Ordinance and Section 5-5-1004 of the Irvine Municipal Code. Areas not eligible for park credits are: required setbacks, fire lanes, sidewalks that provide access to individual units, trails, leasing offices, property management offices, business centers, conference rooms, and other non-recreational spaces.
- C. **Park Dedication Distribution.** Parks should be provided as required in Section 5-5-1004 of the Municipal Code Park Dedication at five acres per 1,000 residents. Community Parks Dedication in the IBCRMU should only be provided through payment of in-lieu fees for the two acres per 1,000 residents Community Park requirement. However within the IBCRMU Overlay, the public/private distribution of neighborhood park land should be allocated as follows:

Public

Two acres per 1,000 residents

Public and/or Private One acre per 1,000 residents

- D. When 750 units are provided within a project the public neighborhood park requirement should be met on-site and must be accessible for the general public. This park should be at least one acre in size.
- E. For projects over 375 units but less than 750 units, the property owner has the option to provide a 0.5 acre public park that is privately maintained. This park will count towards the public park requirement if public access is retained in perpetuity.
- F. **Locations of Public Parks.** Public parks should not be located along streets designated as arterials, freeway onramps or off-ramps, bridges, or similar areas, and should be subject to the City noise attenuation requirements for exterior residential areas. Parks should be located in such a way as to minimize pedestrian hazards and maximize pedestrian access.
- G. **Playgrounds in IBC Residential Projects.** Projects with fewer than 500 units will be exempt from this requirement if located within ¼ mile walking distance from a public playground. For residential projects less than 275 units, tot-lots will not be required on site. For projects with 275 or more units, tot-lots will be required at a rate of 1.2 sq. ft. per person, and will be located on site. The minimum total tot-lot size shall be 400 sq. ft. and may include use of space efficient play features such as climbing rocks, sculptures designed for children, and interactive water features.
- H. **Allowable Types and Requirements.** The following urban open space types are summarized in Table 10-1, Types and Requirements of Neighborhood Parks. In addition, each type is further described and its specific design and programmatic standards are identified.

Table 10-1: Types and Requirements of Neighborhood Parks

Public Park Types	Requirements and Characteristics		
	Minimum Size (ac)	Parking Required	Public Park Credit
Urban Plaza/Square	0.25 ac	No	Yes
Neighborhood Park	0.5 ac	Yes*	Yes**
Community Building	750 sq. ft.	Yes	Yes

* No, if street parking is available on adjacent street.

** If HOA maintained with public access in perpetuity or publicly maintained.

Private Park Types	Requirements and Characteristics			
	Minimum Size (ac)	Parking Required	Private Park Credit	
Community Building	750 sq. ft	No	Yes	(amenity credit)
Courtyard, ungated	6,000 sq. ft	No	Yes	
Recreational Area	0.137 ac	No	Yes	
Roof Garden	0.137 ac	No	Yes	(amenity credit)
Neighborhood Park (private)	0.5 ac	No	Yes	
Urban Plaza/Square	0.25 ac	No	Yes	

1. **Community Building.** A building, where the community can meet and have social interaction with other residents. Typically community buildings act as a focal point within the development, located adjacent to important streets.

a. Spatial Configuration.

- (1) Size: Minimum 750 square feet.
- (2) Minimum Public Streets Adjacent to Building:
Public buildings: one.
Private buildings: zero.
- (3) Access: Can be restricted for private facilities.

b. Typical Program and Use.

- (1) Including but not limited to meeting rooms, open play area, fitness center, arts and crafts rooms, restrooms.
- (2) Parking: Per City Code.

c. Location. Community buildings can be located in public or private space.

2. **Courtyard.** The smallest of park types, the ungated courtyard is intended to satisfy passive park needs between streetscapes at the corners of development, within projects or between developments, to create areas of urban recreational space within the neighborhood.

a. Spatial Configuration.

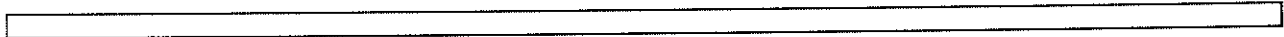
- (1) Minimum size: 6,000 square feet (.137 acres).
- (2) Minimum dimension: Height of the tallest adjacent building or 40 feet, whichever is greater.
- (3) Public Streets Siding Park: Not required.
- (4) Pedestrian access: Ungated with at least two pedestrian access points required.

- b. **Typical Program and Use.**
 - (1) Including but not limited to seating area, landscaping, picnic tables, tot lot, water feature, garden, and/or structure (i.e. gazebo) - 1,000 square feet maximum.
 - (2) Parking: none.
 - c. **Design and Style**
 - (1) Landscape coverage: 10% minimum.
 - (2) Tree size: Minimum 24-inch box

- 3. **Private Recreational Area.** A recreational area with recreational facilities to meet the needs of the residents within the site.
 - a. **Spatial Configuration.**
 - (1) Size: 6,000 square feet. (0.137 acres) (2) Minimum number of public streets siding park: Not required
 - (3) Access: Restricted (considered private neighborhood park).
 - b. **Typical Program and Use.**
 - (1) Including but not limited to: athletic courts, swimming pool, playground, walking/fitness trail, dog park, putting green, restrooms, private community building or structures: 1,500 square feet maximum.
 - (2). Parking: Per the Zoning Ordinance.

- 4. **Roof Garden.** A private garden or urban space on top of the roof or upper floors of a building or a parking structure, which provides usable outdoor space in an urban setting. The size of the structure restricts the size and form of the space.
 - a. **Spatial Configuration.**
 - (1) Size: 6,000 square feet (0.137 acres).
 - (2) Minimum Public Streets Siding Park: not applicable.
 - (3) Access: Restricted (considered private neighborhood park).
 - (4) Pedestrian Circulation.
 - b. **Typical Program and Use.**
 - (1) Including but not limited to swimming pool, spa, sun terrace, running track, athletic courts, gardens, structure.
 - (2) Parking: none.
 - c. **Design and Style.**
 - (1) Landscape Coverage: 5% minimum.
 - (2) Tree size: Minimum 24-inch box.

- 5. **Neighborhood Park.** A public or private park situated between or at the center of neighborhoods that accommodates various recreational needs, such as a neighborhood gathering space, open turf, tennis or basketball courts, picnic area, dog parks, play equipment, but excludes large muscle sport facilities.



a. Spatial Configuration.

- (1) Size: Minimum 0.5 acre with a minimum dimension of 100 feet.
- (2) Minimum Public Streets Siding Park: one; two are preferred.
- (3) Access: Can be public or private ownership. Pool area, courts, or buildings may have restricted access in private parks. If public park credit is requested, the park must be publicly maintained, or be privately maintained with public access retained in perpetuity.

b. Typical Program and Use.

- (1) Including but not limited to athletic courts, fitness trail, walking trail, restrooms, dog park, playground, pool complex, community building, multi-use turf area structures: 1,500 square feet maximum.
- (2) Parking: Per the Zoning Ordinance.

c. Location. Public neighborhood parks receiving park credits cannot be located on major arterials, unless it meets the General Plan Noise Standards for parks.

6. Urban Plaza/Square. A public urban space, typically located adjacent to streets, or as focal points. Buildings should define edges.

a. Spatial Configuration.

- (1) Size: 0.25 to 0.75 acre.
- (2) Minimum Public Streets Siding Park: one; two are preferred
- (3) Access: Unrestricted.

b. Typical Program and Use.

- (1). Urban/civic space, including but not limited to benches, amphitheater, shade trees, water feature, artwork, pavilion - 1,500 square feet maximum.
- (2) Parking: none.

c. Design and Style.

- (1) Landscape coverage: 10% minimum.
- (2) Tree size: Minimum 24-inch box

Definitions

A. Purpose. This Section provides definitions of terms and phrases used in these Design Criteria that are technical or specialized, or that may not reflect common usage. If any of the definitions in this Section conflict with definitions in the Zoning Ordinance or other provisions of the Municipal Code, these definitions shall control for the purposes of this Code. If a word is not defined in this Section, or in other provisions of the Municipal Code, the Director of Community Development shall determine the correct definition.

B. Definitions of Specialized Terms and Phrases.

As used in this Code, each of the following terms and phrases shall have the meaning ascribed to them in this Section, unless the context in which they are used clearly requires otherwise.

Arcade: A series of arches linked together, usually as an element of a building.

Architectural (Building) Type: A structure defined by the combination of configuration, placement and function.

Avigation Easement: As defined by the John Wayne Airport Land Use Commission.

Block: The aggregate of private/public lots, passages, common drives and, lanes, circumscribed by thoroughfares.

Buffer: Physical separation between uses.

Civic: The term defining not-for-profit organizations dedicated to the arts, culture, education, government, transit, and municipal parking facilities.

Civic, Governmental and Culture: This land use type applies to community facilities, municipal offices, district headquarters, education, theaters, museums, galleries and other similar gathering places for the purpose of public meetings or events.

Civic Space: An open area dedicated for public use, typically for community gatherings.

Colonnade: A series of columns similar to an arcade but spanned by straight lintels rather than arches, linked together, usually as an element of a building.

Context: The particular combination of elements that create a specific environment. A Context Zone (e.g., UN) is administratively similar to the land use zones in conventional zoning ordinances, except that in addition to specifying the building use, density, height and setback, all the relevant elements and characteristics of the intended environment are integrated. The integration includes the characteristics of the private lot and building as well as those of the enfronting public streetscape. Their combination and the ratio of natural-urban intensity is determined by their location on the Transect.

Cornice: Any molded projection which finishes or crowns the part to which it is attached.

Curb: The upright edge at the back edge of the gutter of the vehicular pavement detailed as a raised curb or a swale. The curb usually incorporates the drainage system.

Design Speed: The velocity at which a thoroughfare can be comfortably driven without the constraints of signage or enforcement. There are 4 ranges of speed: Very Low: below 20mph, Low: 20-25mph, Moderate: 25-35mph and High: above 35mph. This factor determines the character and context for a particular segment of the Thoroughfare system.

Elevation (Building): The exterior walls of a building not along a frontage. Also referred to as 'Facade' when the elevation is along a frontage line.

Entrance (Principal): The principal point of access for pedestrians to a building. In the support of pedestrian activity, the Principal Entrance should address the frontage rather than to the parking.

Facade: The exterior wall of a building that is set along a frontage line. Facades support the public realm and are subject to frontage requirements additional to those required of elevations.

Fenestration: The arrangement of windows in a building to provide interior light; also used as decorative elements in a facade.

Flats: A single floor residence.

Flex space: An integrated residence and working space.

Forecourt: A semi-public exterior space partially surrounded by a building and also opening to a thoroughfare. These spaces usually lead to a Court, which is a private

exterior space. It is often used as a vehicular entrance or drop-off, and its landscape may be improved with paving.

Frontage Type: The architectural element of a building between the public right-of-way and the private property associated with the building. Frontage Types combined with the public realm create the perceptible streetscape.

IBC Service Street: An IBC Service Street is a street providing access to service and parking within a project, not a through street typically connected to the general street system.

IBC Private Way: An IBC Private Way is a new street created to reduce the block size within the IBC conceptually located as per the Vision Plan.

IBC Vision Plan: Element N of the City of Irvine General Plan

IBC Walking Street: A pedestrian connection used to create smaller blocks in the IBC (See Section 5-8-13 G.).

Liner: A building that conceals a larger building, such as a public garage, that is designed for occupancy by retail, service, and/or office uses on the ground floor, with upper floors also configured for those uses or for residences.

Lintel: A horizontal beam of wood or stone over an opening of a door or window to support the weight above it.

Live/Work: An integrated residence and working space, occupied and utilized by a single household in a structure, either single-family or multi-family, that has been designed or structurally modified to accommodate joint residential occupancy and work activity.

Loft: A two-story volume residence with a mezzanine. Second stories of lofts on the top level of a building shall be counted as a separate story for purposes of the Zoning Ordinance. Exceptions to this definition are permitted as allowed by the Building Code for purposes of building plan check.

Lot Width: The length of the Principal Frontage Line.

Mixed-Use Main Street: A Mixed Use Main street is a street characterized by continuous active ground floor retail storefronts and convenient parking to encourage pedestrian activity.

Moving Plaza: Temporary loading area for deliveries to a residential complex.

Net Developable Area: The area defined by blocks which is not to remain for public uses such as Plazas, Squares, Streets or Streetscapes.

Planter: The layer of the streetscape which accommodates street trees. Planters may be continuous or individual according to the Thoroughfare and location within the neighborhood.

Podium: A building type with a partially or fully submerged parking garage that uses the deck of the garage as the base of the building.

Porch: An open air room added to the mass of a building with floor and roof, with no walls on at least two sides. Different from a balcony or deck as surrounds main entry; provides transition from the public space of the street to the private space of the dwelling unit.

Rear-loaded: A Rear Loaded residential building is one that has vehicular access from the back of the building accessible through a service way.

Service Rooms: Residential rooms such as laundry rooms or closet which do not serve as sleeping, dining, cooking or gathering rooms.

Sidewalk: The paved layer of the public frontage dedicated exclusively to pedestrian activity.

Stoop: A small porch or platform at the entrance of a residence. This element is typically raised 1.5 to 3 feet from grade to correspond to the adjacent first floor. The building types that use this element do so to maintain the occupant's sense of privacy because of their typically short distance from the frontage line. A stoop provides a transition from the public space of the street to the private space of the dwelling unit.

Thoroughfare: A vehicular way incorporating moving lanes and parking lanes (except private service streets/lanes) within a right-of-way.

Townhomes: Attached residential units that are two to three stories high.

Tuck-under parking: Individual parking garages that are located under the living unit of residential buildings but still accessed by surface driveways.

Type: A form physically defined by its function, its disposition on the lot and its configuration, including frontage and height.

Urban Open Space: Public (or private, but open to the public) open spaces or recreational areas within the IBC, meeting the criteria defined within these Design Criteria, as distinguished from open space and recreation areas as defined for other areas of the City in the General Plan, and Zoning and Subdivision Codes.

Appendix F. RDEIR Air Quality Appendix



Appendices

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Irvine Business Center

Caline Results

Ambient CO

For Source Receptor Area 18/17

AQMD Projected CO Concentrations

	Year	One Hour	Year	Eight Hour
Ambient	2010	5.8	2010	4.7
	2020	5.8	2020	4.7
	2015	5.8	2015	4.7

1 hr/8hr deterioration 70%

SCAQMD CEQA website: <http://www.aqmd.gov/ceqa/handbook/CO/CO.html>

	One-Hour CO Concentrations		Eight-Hour CO Concentrations		
Intersections	Loop Road at Warner Ave		Loop Road at Warner Ave		Significant Impact?
Receptor	Project		Project	1 hour	8 Hour
NE	6.3		4.4	NO	NO
SE	6.3		4.4	NO	NO
SW	6.2		4.3	NO	NO
NW	6.4		4.5	NO	NO
Intersections	Jamboree at Barranca		Jamboree at Barranca		Significant Impact?
Receptor	Proj		Project	1 hour	8 Hour
NE	6.7		4.7	NO	NO
SE	6.7		4.7	NO	NO
SW	6.8		4.8	NO	NO
NW	6.6		4.6	NO	NO
Intersections	Jamboree at Main		Jamboree at Main		Significant Impact?
Receptor	Project		Project	1 hour	8 Hour
NE	6.8		4.8	NO	NO
SE	6.8		4.8	NO	NO
SW	6.5		4.6	NO	NO
NW	6.7		4.7	NO	NO
Intersections	Jamboree at I-405 SB Ramps		Jamboree at I-405 SB Ramps		Significant Impact?
Receptor	Project		Project	1 hour	8 Hour
NE	7.3		5.1	NO	NO
SE	7.0		4.9	NO	NO
SW	7.0		4.9	NO	NO
NW	7.4		5.2	NO	NO
Intersections	Jamboree at Michelson		Jamboree at Michelson		Significant Impact?
Receptor	Project		Project	1 hour	8 Hour
NE	6.7		4.7	NO	NO
SE	6.8		4.8	NO	NO
SW	6.8		4.8	NO	NO
NW	6.6		4.6	NO	NO
Intersections	Franklin at Walnut		Franklin at Walnut		Significant Impact?
Receptor	Project		Project	1 hour	8 Hour
NE	6.2		4.3	NO	NO
SE	6.3		4.4	NO	NO
SW	6.2		4.3	NO	NO
NW	6.2		4.3	NO	NO

Table 2**Projected Future Year 1-hour CO Concentrations (ppm)**

Monitoring Site Location		Y E A R				
		1999	2000	2010	2015	2020
1	Central LA	7	6.7	5.1	5.1	5.1
2	West LA	6	5.8	4.4	4.4	4.4
3	Hawthorne	10	9.6	7.3	7.3	7.3
4	Long Beach	7	6.7	5.1	5.1	5.1
6	Reseda	9	8.6	6.5	6.6	6.6
7	Burbank	9	8.6	6.5	6.6	6.6
8	Pasadena	9	8.6	6.5	6.6	6.6
9	Azusa	5	4.8	3.6	3.6	3.6
10	Pomona	10	9.6	7.3	7.3	7.3
11	Pico Rivera	7	6.7	5.1	5.1	5.1
12	Lynwood	19	18.2	13.8	13.8	13.9
12	Compton	19	18.2	13.8	13.8	13.9
13	Santa Clarita	7	6.7	5.1	5.1	5.1
16	La Habra	11	10.5	8.0	8.0	8.0
17	Anaheim*	8	7.7	5.8	5.8	5.8
18	Costa Mesa	8	7.7	5.8	5.8	5.8
19	El Toro	4	3.8	2.9	2.9	2.9
23	Rubidoux	7	6.7	5.1	5.1	5.1
23	Banning AP**	7	6.7	5.1	5.1	5.1
30	Palm Springs	3	2.9	2.2	2.2	2.2
34	San Bernardino	5	4.8	3.6	3.6	3.6

*Anaheim data recovery rate: 33.7%

**Banning AP data recovery rate: 82.2%

Table 3**Projected Future Year 8-hour CO Concentrations (ppm)**

Monitoring Site Location		Y E A R				
		1999	2000	2010	2015	2020
1	Central LA	6.3	6.0	4.6	4.6	4.6
2	West LA	3.8	3.6	2.8	2.8	2.8
3	Hawthorne	8.4	8.1	6.1	6.1	6.1
4	Long Beach	5.4	5.2	3.9	3.9	3.9
6	Reseda	7.6	7.3	5.5	5.5	5.5
7	Burbank	9	8.6	6.5	6.6	6.6
8	Pasadena	6.6	6.3	4.8	4.8	4.8
9	Azusa	3.9	3.7	2.8	2.8	2.8
10	Pomona	6.7	6.4	4.9	4.9	4.9
11	Pico Rivera	5.6	5.4	4.1	4.1	4.1
12	Lynwood	11	10.5	8.0	8.0	8.0
12	Compton	11.7	11.2	8.5	8.5	8.5
13	Santa Clarita	3.6	3.5	2.6	2.6	2.6
16	La Habra	5.3	5.1	3.9	3.9	3.9
17	Anaheim*	5.3	5.1	3.9	3.9	3.9
18	Costa Mesa	6.4	6.1	4.7	4.7	4.7
19	El Toro	2.5	2.4	1.8	1.8	1.8
23	Rubidoux	4.4	4.2	3.2	3.2	3.2
23	Banning AP**	4.1	3.9	3.0	3.0	3.0
30	Palm Springs	1.8	1.7	1.3	1.3	1.3
34	San Bernardino	4	3.8	2.9	2.9	2.9

*Anaheim data recovery rate: 33.7%

**Banning AP data recovery rate: 82.2%

Table B.9 Arterial Classification According to Their Functional and Design Categories

DESIGN CATEGORY	FUNCTIONAL CATEGORY	
	PRINCIPAL ARTERIAL	MINOR ARTERIAL
Typical suburban	I	II
Intermediate	II	II or III
Typical Urban	II or III	III

Source: Highway Capacity Manual (TRB, 1994)

Table B.10 Average Cruise Speed as a Function of Arterial Classification and Free-Flow Speed

ARTERIAL CLASSIFICATION	I			II		III		
FREE-FLOW SPEED (MPH)	45	40	35	35	30	35	30	25
AVERAGE CRUISE SPEED (MPH)	33	31	29	28	27	28	24	22

Derived from Table 11-4 of the Highway Capacity Manual (TRB, 1994)

NOTE: It is best to have an estimate of free-flow speed. If one is lacking, however, use the above table assuming the following default values:

For Classification	Free-Flow Speed (mph)
I	40
II	35
III	30

B.4 Calculating 1-Hour CO Concentrations

Microscale dispersion models are used to calculate 1-hour CO concentrations. The protocol recommends the use of CALINE4, a model that has been widely used in California¹. There is one restriction to the use of CALINE4. The *intersection link* option of CALINE4 should not be used because it calculates modal emissions based on an algorithm developed for an outdated vehicle fleet. Guidance on the input parameters required by CALINE4 is presented in the remainder of this section, including guidance on how to set up the link network for intersection analyses (see Sections B.4.4 and B.4.5).

B.4.1 Present Background Concentration

Background concentration is a very important element in a microscale CO analysis. The background concentration is added to the project contribution to assess the impact of the project on the air quality. The methodology shown in Figure B.1 should be used to

¹ The recommendation to use CALINE4 does not preclude the use of other models approved by EPA such as CAL3QHC.

EMFAC2007 - CO Hotspot Analysis

Title: OrangeCounty2013
 Version: Emfac2007 V2.3 1-Nov-06
 Run Date: 11/9/2009 9:16:33
 Scenario Year: 2015 - All model years in the range 1971 to 2015 selected
 Season: Winter
 Area: Orange

Emfac2007 Emission Factors
 County Average Orange County

Table 1:00 Running Exhaust (grams/mile, grams/idle-hour)

Pollutant Name	Carbon Monoxide	Temperature	60F	Relative Humidity	70%			
Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL	
0	0	0	20.718	46.876	0	0	4.527	
5	2.47	3.489	4.889	12.981	30.524	27.805	3.705	
10	2.191	3.08	4.008	8.765	20.012	23.372	3.126	
15	1.965	2.752	3.401	6.105	13.888	20.488	2.706	
20	1.778	2.483	2.963	4.531	10.2	18.7	2.395	
25	1.621	2.26	2.636	3.68	7.927	17.763	2.16	
30	1.488	2.072	2.387	3.109	6.518	17.577	1.976	
35	1.375	1.914	2.195	2.733	5.67	18.157	1.832	
40	1.279	1.781	2.049	2.506	5.218	19.638	1.723	
45	1.199	1.671	1.944	2.404	5.079	22.316	1.647	
50	1.133	1.582	1.878	2.418	5.23	26.73	1.607	

Franklin_walnut.txt

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
 JUNE 1989 VERSION
 PAGE 1

JOB: Franklin at walnut
 RUN: Hour 1 (WORST CASE ANGLE)
 POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 1.0 M/S Z0= 175. CM ALT= 0. (M)
 BRG= WORST CASE VD= .0 CM/S
 CLAS= 7 (G) VS= .0 CM/S
 MIXH= 1000. M AMB= 5.8 PPM
 SIGTH= 5. DEGREES TEMP= 15.0 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	* * X1	LINK COORDINATES (M)	* * Y1	X2	* * Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. NF	* 5	-450	* 5	-150	* AG	271	1.9	.0	13.2	
B. NA	* 7	-150	* 7	0	* AG	23	3.5	.0	10.8	
C. ND	* 7	0	* 7	150	* AG	163	2.4	.0	9.9	
D. NE	* 5	150	* 5	450	* AG	163	1.9	.0	13.2	
E. SF	* -5	450	* -5	150	* AG	601	1.9	.0	13.2	
F. SA	* -7	150	* -7	0	* AG	538	3.5	.0	10.8	
G. SD	* -7	0	* -7	-150	* AG	327	2.4	.0	9.9	
H. SE	* -5	-150	* -5	-450	* AG	327	1.9	.0	13.2	
I. WF	* 450	5	* 150	5	* AG	1028	1.9	.0	13.2	
J. WA	* 150	7	* 0	7	* AG	780	2.5	.0	10.8	
K. WD	* 0	7	* -150	7	* AG	1415	2.1	.0	9.9	
L. WE	* -150	5	* -450	5	* AG	1415	1.9	.0	13.2	
M. EF	* -450	-5	* -150	-5	* AG	1588	2.0	.0	13.2	
N. EA	* -150	-7	* 0	-7	* AG	1576	2.7	.0	10.8	
O. ED	* 0	-7	* 150	-7	* AG	1583	2.2	.0	9.9	
P. EE	* 150	-5	* 450	-5	* AG	1583	2.0	.0	13.2	
Q. NL	* 0	-150	* 0	0	* AG	248	3.5	.0	9.9	
R. SL	* 0	150	* 0	0	* AG	63	3.5	.0	9.9	
S. WL	* 150	0	* 0	0	* AG	248	2.5	.0	9.9	
T. EL	* -150	0	* 0	0	* AG	12	2.6	.0	9.9	

FF

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
 JUNE 1989 VERSION
 PAGE 2

Franklin_walnut.txt
 JOB: Franklin at Walnut
 RUN: Hour 1 (WORST CASE ANGLE)
 POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M)		
		X	Y	Z
1. NE	*	16	16	1.8
2. SE	*	16	-16	1.8
3. SW	*	-16	-16	1.8
4. NW	*	-16	16	1.8

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	*	BRG (DEG)	* PRED * CONC * (PPM)	CONC/LINK (PPM)								
				A	B	C	D	E	F	G	H	
1. NE	*	264.	* 6.2 *	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. SE	*	276.	* 6.3 *	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	*	84.	* 6.2 *	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NW	*	96.	* 6.2 *	.0	.0	.0	.0	.0	.0	.0	.0	.0

RECEPTOR	*	CONC/LINK (PPM)											
		I	J	K	L	M	N	O	P	Q	R	S	T
1. NE	*	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. SE	*	.0	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0
3. SW	*	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0
4. NW	*	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

FF

Jamboree_Barranca.txt
 JOB: Jamboree at Barranca
 RUN: Hour 1 (WORST CASE ANGLE)
 POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M)		
		X	Y	Z
1. NE	*	28	25	1.8
2. SE	*	28	-17	1.8
3. SW	*	-28	-17	1.8
4. NW	*	-28	25	1.8

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	*	BRG (DEG)	* PRED * CONC * (PPM)	CONC/LINK (PPM)								
				A	B	C	D	E	F	G	H	
1. NE	*	187.	* 6.7 *	.0	.5	.0	.0	.0	.0	.0	.0	.1
2. SE	*	342.	* 6.7 *	.0	.1	.3	.0	.0	.1	.0	.0	.0
3. SW	*	81.	* 6.8 *	.0	.1	.0	.0	.0	.0	.2	.0	.0
4. NW	*	165.	* 6.6 *	.0	.1	.0	.0	.0	.0	.3	.0	.0

RECEPTOR	*	CONC/LINK (PPM)											
		I	J	K	L	M	N	O	P	Q	R	S	T
1. NE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. SE	*	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0
3. SW	*	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0	.1	.0
4. NW	*	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0

FF

Jamboree_I-405SB.txt

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
 JUNE 1989 VERSION
 PAGE 2

JOB: Jamboree at I-405 SB Ramps
 RUN: Hour 1 (WORST CASE ANGLE)
 POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	* * BRG * (DEG)	* PRED * CONC * (PPM)	CONC/LINK (PPM)									
			A	B	C	D	E	F	G	H		
1. NE	* 189.	* 7.3	* .0	* .8	* .0	* .0	* .0	* .0	* .0	* .0	* .0	* .1
2. SE	* 343.	* 7.0	* .0	* .2	* .4	* .0	* .0	* .3	* .0	* .0	* .0	* .0
3. SW	* 81.	* 7.0	* .0	* .2	* .0	* .0	* .0	* .0	* .0	* .0	* .3	* .0
4. NW	* 96.	* 7.4	* .0	* .0	* .2	* .0	* .0	* .3	* .0	* .0	* .0	* .0

RECEPTOR	CONC/LINK (PPM)							
	I	J	K	L	M	N	O	
1. NE	* .0	* .2	* .0	* .0	* .1	* .0	* .2	
2. SE	* .0	* .0	* .0	* .0	* .1	* .0	* .1	
3. SW	* .0	* .1	* .0	* .0	* .3	* .0	* .2	
4. NW	* .0	* .4	* .1	* .0	* .1	* .0	* .4	

FF

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
 JUNE 1989 VERSION
 PAGE 1

JOB: Jamboree at Main
 RUN: Hour 1 (WORST CASE ANGLE)
 POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 1.0 M/S Z0= 175. CM ALT= 0. (M)
 BRG= WORST CASE VD= .0 CM/S
 CLAS= 7 (G) VS= .0 CM/S
 MIXH= 1000. M AMB= 5.8 PPM
 SIGTH= 5. DEGREES TEMP= 15.0 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	* * * * *	LINK COORDINATES (M)	* * * * *	TYPE	VPH	EF (G/MI)	H (M)	W (M)
	* * * * *	X1 Y1 X2 Y2	* * * * *					
A. NF	* * * * *	11 -450 11 -150	* * * * *	AG	3701	1.9	.0	20.4
B. NA	* * * * *	14 -150 14 0	* * * * *	AG	3149	2.8	.0	21.6
C. ND	* * * * *	14 0 14 150	* * * * *	AG	3993	2.6	.0	14.4
D. NE	* * * * *	11 150 11 450	* * * * *	AG	3993	1.9	.0	20.4
E. SF	* * * * *	-11 450 -11 150	* * * * *	AG	2758	1.9	.0	20.4
F. SA	* * * * *	-16 150 -16 0	* * * * *	AG	2447	2.6	.0	25.2
G. SD	* * * * *	-16 0 -16 -150	* * * * *	AG	3006	2.2	.0	14.4
H. SE	* * * * *	-11 -150 -11 -450	* * * * *	AG	3006	1.9	.0	20.4
I. WF	* * * * *	450 9 150 9	* * * * *	AG	2379	1.9	.0	16.8
J. WA	* * * * *	150 13 0 13	* * * * *	AG	1926	3.5	.0	18.0
K. WD	* * * * *	0 13 -150 13	* * * * *	AG	1911	3.0	.0	10.8
L. WE	* * * * *	-150 9 -450 9	* * * * *	AG	1911	1.9	.0	16.8
M. EF	* * * * *	-450 -9 -150 -9	* * * * *	AG	1230	1.9	.0	16.8
N. EA	* * * * *	-150 -13 0 -13	* * * * *	AG	644	3.2	.0	18.0
O. ED	* * * * *	0 -13 150 -13	* * * * *	AG	1158	2.4	.0	10.8
P. EE	* * * * *	150 -9 450 -9	* * * * *	AG	1158	1.9	.0	16.8
Q. NL	* * * * *	0 -150 0 0	* * * * *	AG	552	2.6	.0	9.9
R. SL	* * * * *	0 150 0 0	* * * * *	AG	311	2.6	.0	9.9
S. WL	* * * * *	150 0 0 0	* * * * *	AG	453	3.2	.0	9.9
T. EL	* * * * *	-150 0 0 0	* * * * *	AG	586	3.4	.0	9.9

FF

Jamboree_Main.txt
 JOB: Jamboree at Main
 RUN: Hour 1 (WORST CASE ANGLE)
 POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M)		
		X	Y	Z
1. NE	*	28	25	1.8
2. SE	*	28	-25	1.8
3. SW	*	-32	-25	1.8
4. NW	*	-32	25	1.8

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	*	BRG (DEG)	* PRED * CONC * (PPM)	CONC/LINK (PPM)								
				A	B	C	D	E	F	G	H	
1. NE	*	187.	* 6.8 *	.0	.5	.0	.0	.0	.0	.0	.0	.1
2. SE	*	347.	* 6.8 *	.0	.1	.4	.0	.0	.0	.0	.0	.0
3. SW	*	76.	* 6.5 *	.0	.1	.0	.0	.0	.0	.0	.2	.0
4. NW	*	97.	* 6.7 *	.0	.0	.1	.0	.0	.0	.2	.0	.0

RECEPTOR	*	CONC/LINK (PPM)											
		I	J	K	L	M	N	O	P	Q	R	S	T
1. NE	*	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. SE	*	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	*	.0	.1	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0
4. NW	*	.0	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

FF

Jamboree_Michelson.txt
 JOB: Jamboree at Michelson
 RUN: Hour 1 (WORST CASE ANGLE)
 POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M)		
		X	Y	Z
1. NE	*	26	21	1.8
2. SE	*	26	-21	1.8
3. SW	*	-28	-21	1.8
4. NW	*	-28	21	1.8

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	*	BRG (DEG)	* PRED * CONC * (PPM)	CONC/LINK (PPM)								
				A	B	C	D	E	F	G	H	
1. NE	*	187.	* 6.7 *	.0	.4	.0	.0	.0	.0	.0	.0	.1
2. SE	*	342.	* 6.8 *	.0	.1	.2	.0	.0	.1	.0	.0	.0
3. SW	*	80.	* 6.8 *	.0	.1	.0	.0	.0	.0	.0	.2	.0
4. NW	*	164.	* 6.6 *	.0	.1	.0	.0	.0	.1	.3	.0	.0

RECEPTOR	*	CONC/LINK (PPM)											
		I	J	K	L	M	N	O	P	Q	R	S	T
1. NE	*	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0
2. SE	*	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0
3. SW	*	.0	.0	.0	.0	.0	.0	.4	.0	.0	.0	.1	.0
4. NW	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

FF

Loop_Warner.txt

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
 JUNE 1989 VERSION
 PAGE 1

JOB: Loop Road at Warner Ave
 RUN: Hour 1 (WORST CASE ANGLE)
 POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 1.0 M/S Z0= 175. CM ALT= 0. (M)
 BRG= WORST CASE VD= .0 CM/S
 CLAS= 7 (G) VS= .0 CM/S
 MIXH= 1000. M AMB= 5.8 PPM
 SIGTH= 5. DEGREES TEMP= 15.0 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	* * X1	LINK COORDINATES (M)	* * Y1	X2	* * Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. NF	* 4	-450	* 4	-150	* AG	727	2.1	.0	9.6	
B. NA	* 5	-150	* 5	0	* AG	661	3.5	.0	9.9	
C. ND	* 5	0	* 5	150	* AG	517	2.7	.0	9.9	
D. NE	* 4	150	* 4	450	* AG	517	2.1	.0	9.6	
E. SF	* -4	450	* -4	150	* AG	759	2.1	.0	9.6	
F. SA	* -5	150	* -5	0	* AG	561	3.5	.0	9.9	
G. SD	* -5	0	* -5	-150	* AG	378	2.5	.0	9.9	
H. SE	* -4	-150	* -4	-450	* AG	378	2.1	.0	9.6	
I. WF	* 450	7	* 150	7	* AG	1863	1.9	.0	13.2	
J. WA	* 150	13	* 0	13	* AG	1830	2.7	.0	18.0	
K. WD	* 0	13	* -150	13	* AG	2104	2.6	.0	9.9	
L. WE	* -150	7	* -450	7	* AG	2104	1.9	.0	13.2	
M. EF	* -450	-7	* -150	-7	* AG	754	1.9	.0	13.2	
N. EA	* -150	-11	* 0	-11	* AG	459	2.6	.0	14.4	
O. ED	* 0	-11	* 150	-11	* AG	1104	2.1	.0	9.9	
P. EE	* 150	-7	* 450	-7	* AG	1104	1.9	.0	13.2	
Q. NL	* 0	-150	* 0	0	* AG	66	3.4	.0	9.9	
R. SL	* 0	150	* 0	0	* AG	198	3.4	.0	9.9	
S. WL	* 150	0	* 0	0	* AG	33	2.6	.0	9.9	
T. EL	* -150	0	* 0	0	* AG	295	2.6	.0	9.9	

FF

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
 JUNE 1989 VERSION
 PAGE 2

Loop_Warner.txt

JOB: Loop Road at Warner Ave
 RUN: Hour 1 (WORST CASE ANGLE)
 POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M)		
		X	Y	Z
1. NE	*	12	25	1.8
2. SE	*	12	-21	1.8
3. SW	*	-12	-21	1.8
4. NW	*	-12	25	1.8

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	*	BRG (DEG)	* PRED * CONC * (PPM)	CONC/LINK (PPM)								
				A	B	C	D	E	F	G	H	
1. NE	*	262.	* 6.3 *	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. SE	*	351.	* 6.3 *	.0	.0	.1	.0	.0	.0	.0	.0	.0
3. SW	*	6.	* 6.2 *	.0	.0	.0	.0	.0	.2	.0	.0	.0
4. NW	*	97.	* 6.4 *	.0	.0	.0	.0	.0	.0	.0	.0	.0

RECEPTOR	*	CONC/LINK (PPM)											
		I	J	K	L	M	N	O	P	Q	R	S	T
1. NE	*	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. SE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NW	*	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

FF

Project: **Irvine Business Center**

% COLD START

PROJ * 30%
NO PROJ 30%

% HOT START

PROJ 30%
NO PROJ 30%

*COMPOSITE BASED ON TABLE B.6 of the Caltrans Transportation Project-Level Carbon Monoxide Protocol.

Traffic Volumes, roadway configurations, and speed limits based on Traffic Study provided by Parson Brinkerhoff, 2009

Traffic data:

Intersection: Jamboree at I-405 SB Ramps

Peak Hour: **PM** Speed Limit
Year: **2015** Jamboree 50
I-405 SB Ramps 35

Scenario: **W Project**

North Link			South - Link			West - Link			East - Link			TOTAL
LT	THRU	RT	LT	THRU	RT	LT	THRU	RT	LT	THRU	RT	
0	2880	1060	0	2778	640	1520	0	1092	0	0	0	9,970

Intersection: Jamboree at Michelson

Peak Hour: **PM** Speed Limit
Year: **2015** Jamboree 50
Scenario: **W Project** Michelson 45

North Link			South - Link			West - Link			East - Link			TOTAL
LT	THRU	RT	LT	THRU	RT	LT	THRU	RT	LT	THRU	RT	
66	2372	561	1114	2006	421	1055	384	171	314	263	704	9,431

Intersection: Franklin at Walnut

Peak Hour: **PM** Speed Limit
Year: **2015** Franklin 45
Scenario: **W Project** Walnut 45

North Link			South - Link			West - Link			East - Link			TOTAL
LT	THRU	RT	LT	THRU	RT	LT	THRU	RT	LT	THRU	RT	
248	11	12	63	11	527	248	640	140	12	1508	68	3,488

Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: P:\COI-21\Technical Studies\Air\Modeling\construction\RecirculatedConstruction.urb924

Project Name: Recirculated IBC Vision Plan - Construction

Project Location: Orange County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10 Dust</u>	<u>PM10 Exhaust</u>	<u>PM10</u>	<u>PM2.5 Dust</u>	<u>PM2.5 Exhaust</u>	<u>PM2.5</u>	<u>CO2</u>
2010 TOTALS (tons/year unmitigated)	19.93	92.74	234.06	0.33	178.39	4.32	182.71	37.46	3.92	41.39	35,379.82
2010 TOTALS (tons/year mitigated)	19.93	92.74	234.06	0.33	31.41	4.32	35.73	6.77	3.92	10.69	35,379.82
Percent Reduction	0.00	0.00	0.00	0.00	82.39	0.00	80.44	81.94	0.00	74.17	0.00
2011 TOTALS (tons/year unmitigated)	18.84	84.36	217.73	0.33	177.71	4.00	181.70	37.32	3.62	40.94	35,238.63
2011 TOTALS (tons/year mitigated)	18.84	84.36	217.73	0.33	31.29	4.00	35.29	6.74	3.62	10.36	35,238.63
Percent Reduction	0.00	0.00	0.00	0.00	82.39	0.00	80.58	81.94	0.00	74.69	0.00
2012 TOTALS (tons/year unmitigated)	17.91	76.88	203.72	0.33	178.39	3.66	182.05	37.46	3.31	40.78	35,370.49
2012 TOTALS (tons/year mitigated)	17.91	76.88	203.72	0.33	31.41	3.66	35.08	6.77	3.31	10.08	35,370.49
Percent Reduction	0.00	0.00	0.00	0.00	82.39	0.00	80.73	81.94	0.00	75.28	0.00
2013 TOTALS (tons/year unmitigated)	16.98	69.45	189.56	0.33	178.39	3.35	181.74	37.46	3.03	40.49	35,368.59
2013 TOTALS (tons/year mitigated)	16.98	69.45	189.56	0.33	31.41	3.35	34.77	6.77	3.03	9.79	35,368.59
Percent Reduction	0.00	0.00	0.00	0.00	82.39	0.00	80.87	81.94	0.00	75.81	0.00
2014 TOTALS (tons/year unmitigated)	16.14	62.41	176.88	0.33	178.39	3.04	181.43	37.46	2.74	40.20	35,366.79
2014 TOTALS (tons/year mitigated)	16.14	62.41	176.88	0.33	31.41	3.04	34.45	6.77	2.74	9.51	35,366.79
Percent Reduction	0.00	0.00	0.00	0.00	82.39	0.00	81.01	81.94	0.00	76.36	0.00
2015 TOTALS (tons/year unmitigated)	15.32	55.72	164.89	0.33	178.39	2.79	181.18	37.46	2.51	39.97	35,365.47
2015 TOTALS (tons/year mitigated)	15.32	55.72	164.89	0.33	31.41	2.79	34.20	6.77	2.51	9.28	35,365.47
Percent Reduction	0.00	0.00	0.00	0.00	82.39	0.00	81.12	81.94	0.00	76.79	0.00
2016 TOTALS (tons/year unmitigated)	14.62	50.14	154.43	0.33	178.39	2.55	180.94	37.46	2.29	39.75	35,362.96
2016 TOTALS (tons/year mitigated)	14.62	50.14	154.43	0.33	31.41	2.55	33.96	6.77	2.29	9.05	35,362.96
Percent Reduction	0.00	0.00	0.00	0.00	82.39	0.00	81.23	81.94	0.00	77.22	0.00
2017 TOTALS (tons/year unmitigated)	13.94	45.13	144.00	0.33	177.71	2.35	180.06	37.32	2.10	39.42	35,225.88
2017 TOTALS (tons/year mitigated)	13.94	45.13	144.00	0.33	31.29	2.35	33.64	6.74	2.10	8.84	35,225.88
Percent Reduction	0.00	0.00	0.00	0.00	82.39	0.00	81.32	81.94	0.00	77.57	0.00

2018 TOTALS (tons/year unmitigated)	13.42	41.08	135.38	0.33	178.39	2.18	180.57	37.46	1.95	39.41	35,360.27
2018 TOTALS (tons/year mitigated)	13.42	41.08	135.38	0.33	31.41	2.18	33.60	6.77	1.95	8.72	35,360.27
Percent Reduction	0.00	0.00	0.00	0.00	82.39	0.00	81.40	81.94	0.00	77.89	0.00
2019 TOTALS (tons/year unmitigated)	12.90	37.35	126.88	0.33	178.39	2.02	180.41	37.46	1.80	39.26	35,359.63
2019 TOTALS (tons/year mitigated)	12.90	37.35	126.88	0.33	31.41	2.02	33.43	6.77	1.80	8.57	35,359.63
Percent Reduction	0.00	0.00	0.00	0.00	82.39	0.00	81.47	81.94	0.00	78.18	0.00
2020 TOTALS (tons/year unmitigated)	12.46	34.24	119.44	0.34	179.07	1.93	181.00	37.61	1.72	39.32	35,494.52
2020 TOTALS (tons/year mitigated)	12.46	34.24	119.44	0.34	31.53	1.93	33.46	6.79	1.72	8.51	35,494.52
Percent Reduction	0.00	0.00	0.00	0.00	82.39	0.00	81.51	81.94	0.00	78.36	0.00
2021 TOTALS (tons/year unmitigated)	11.18	27.47	90.87	0.33	178.39	1.76	180.15	37.46	1.56	39.02	35,355.09
2021 TOTALS (tons/year mitigated)	11.18	27.47	90.87	0.33	31.41	1.76	33.18	6.77	1.56	8.33	35,355.09
Percent Reduction	0.00	0.00	0.00	0.00	82.39	0.00	81.58	81.94	0.00	78.66	0.00
2022 TOTALS (tons/year unmitigated)	11.14	27.37	90.53	0.33	177.71	1.76	179.46	37.32	1.56	38.87	35,219.63
2022 TOTALS (tons/year mitigated)	11.14	27.37	90.53	0.33	31.29	1.76	33.05	6.74	1.56	8.30	35,219.63
Percent Reduction	0.00	0.00	0.00	0.00	82.39	0.00	81.58	81.94	0.00	78.66	0.00
2023 TOTALS (tons/year unmitigated)	11.14	27.37	90.53	0.33	177.71	1.76	179.46	37.32	1.56	38.87	35,219.63
2023 TOTALS (tons/year mitigated)	11.14	27.37	90.53	0.33	31.29	1.76	33.05	6.74	1.56	8.30	35,219.63
Percent Reduction	0.00	0.00	0.00	0.00	82.39	0.00	81.58	81.94	0.00	78.66	0.00
2024 TOTALS (tons/year unmitigated)	11.22	27.58	91.22	0.33	179.07	1.77	180.84	37.61	1.57	39.17	35,490.55
2024 TOTALS (tons/year mitigated)	11.22	27.58	91.22	0.33	31.53	1.77	33.30	6.79	1.57	8.36	35,490.55
Percent Reduction	0.00	0.00	0.00	0.00	82.39	0.00	81.58	81.94	0.00	78.66	0.00
2025 TOTALS (tons/year unmitigated)	11.18	27.47	90.87	0.33	178.39	1.76	180.15	37.46	1.56	39.02	35,355.09
2025 TOTALS (tons/year mitigated)	11.18	27.47	90.87	0.33	31.41	1.76	33.18	6.77	1.56	8.33	35,355.09
Percent Reduction	0.00	0.00	0.00	0.00	82.39	0.00	81.58	81.94	0.00	78.66	0.00
2026 TOTALS (tons/year unmitigated)	10.57	24.97	76.12	0.33	178.39	1.70	180.09	37.46	1.51	38.97	35,353.42
2026 TOTALS (tons/year mitigated)	10.57	24.97	76.12	0.33	31.41	1.70	33.11	6.77	1.51	8.27	35,353.42
Percent Reduction	0.00	0.00	0.00	0.00	82.39	0.00	81.61	81.94	0.00	78.77	0.00
2027 TOTALS (tons/year unmitigated)	10.57	24.97	76.12	0.33	178.39	1.70	180.09	37.46	1.51	38.97	35,353.42
2027 TOTALS (tons/year mitigated)	10.57	24.97	76.12	0.33	31.41	1.70	33.11	6.77	1.51	8.27	35,353.42
Percent Reduction	0.00	0.00	0.00	0.00	82.39	0.00	81.61	81.94	0.00	78.77	0.00
2028 TOTALS (tons/year unmitigated)	10.52	24.88	75.83	0.33	177.71	1.70	179.40	37.32	1.50	38.82	35,217.96

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2028 TOTALS (tons/year mitigated)	10.52	24.88	75.83	0.33	31.29	1.70	32.99	6.74	1.50	8.24	35,217.96
Percent Reduction	0.00	0.00	0.00	0.00	82.39	0.00	81.61	81.94	0.00	78.77	0.00
2029 TOTALS (tons/year unmitigated)	10.57	24.97	76.12	0.33	178.39	1.70	180.09	37.46	1.51	38.97	35,353.42
2029 TOTALS (tons/year mitigated)	10.57	24.97	76.12	0.33	31.41	1.70	33.11	6.77	1.51	8.27	35,353.42
Percent Reduction	0.00	0.00	0.00	0.00	82.39	0.00	81.61	81.94	0.00	78.77	0.00

Phase Assumptions

Phase: Demolition 1/1/2010 - 12/31/2029 - Default Demolition Description

Building Volume Total (cubic feet): 1.198854E+07

Building Volume Daily (cubic feet): 45375

On Road Truck Travel (VMT): 630.21

Off-Road Equipment:

3 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day

2 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 8 hours per day

Phase: Mass Grading 1/1/2010 - 12/31/2029 - Default Mass Site Grading/Excavation Description

Total Acres Disturbed: 140

Maximum Daily Acreage Disturbed: 35

Fugitive Dust Level of Detail: Default

38.2 lbs per acre-day

On Road Truck Travel (VMT): 164.67

Off-Road Equipment:

1 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day

1 Graders (174 hp) operating at a 0.61 load factor for 8 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 8 hours per day

3 Scrapers (313 hp) operating at a 0.72 load factor for 8 hours per day

3 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Trenching 1/1/2010 - 12/31/2029 - Default Trenching Description

Off-Road Equipment:

4 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day

2 Other General Industrial Equipment (238 hp) operating at a 0.51 load factor for 8 hours per day

2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 0 hours per day

Phase: Paving 1/1/2010 - 12/31/2029 - Default Paving Description

Acres to be Paved: 348.94

Off-Road Equipment:

1 Pavers (100 hp) operating at a 0.62 load factor for 8 hours per day

2 Paving Equipment (104 hp) operating at a 0.53 load factor for 8 hours per day

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2 Rollers (95 hp) operating at a 0.56 load factor for 6 hours per day

Phase: Building Construction 1/1/2010 - 12/31/2029 - Default Building Construction Description

Off-Road Equipment:

1 Cranes (399 hp) operating at a 0.43 load factor for 7 hours per day

3 Forklifts (145 hp) operating at a 0.3 load factor for 8 hours per day

1 Generator Sets (49 hp) operating at a 0.74 load factor for 8 hours per day

3 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

1 Welders (45 hp) operating at a 0.45 load factor for 8 hours per day

Phase: Architectural Coating 1/1/2010 - 12/31/2029 - Default Architectural Coating Description

Rule: Residential Interior Coatings begins 1/1/2005 ends 6/30/2008 specifies a VOC of 100

Rule: Residential Interior Coatings begins 7/1/2008 ends 12/31/2040 specifies a VOC of 50

Rule: Residential Exterior Coatings begins 1/1/2005 ends 6/30/2008 specifies a VOC of 250

Rule: Residential Exterior Coatings begins 7/1/2008 ends 12/31/2040 specifies a VOC of 100

Rule: Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Construction Mitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Annual Tons Per Year, Mitigated

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10 Dust</u>	<u>PM10 Exhaust</u>	<u>PM10</u>	<u>PM2.5 Dust</u>	<u>PM2.5 Exhaust</u>	<u>PM2.5</u>	<u>CO2</u>
2010	19.93	92.74	234.06	0.33	31.41	4.32	35.73	6.77	3.92	10.69	35,379.82
Asphalt 01/01/2010-12/31/2029	0.45	2.61	1.56	0.00	0.00	0.22	0.23	0.00	0.21	0.21	218.74
Paving Off-Gas	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	0.42	2.50	1.37	0.00	0.00	0.22	0.22	0.00	0.20	0.20	185.16
Paving On Road Diesel	0.01	0.10	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.28
Paving Worker Trips	0.00	0.01	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.30
Building 01/01/2010-12/31/2029	10.22	63.78	218.82	0.33	1.40	2.84	4.25	0.50	2.56	3.06	32,470.12
Building Off Road Diesel	0.53	3.04	1.87	0.00	0.00	0.22	0.22	0.00	0.20	0.20	294.84
Building Vendor Trips	4.18	50.31	38.17	0.09	0.34	2.04	2.37	0.11	1.87	1.98	9,576.45
Building Worker Trips	5.51	10.43	178.78	0.24	1.07	0.59	1.65	0.38	0.49	0.88	22,598.83
Coating 01/01/2010-12/31/2029	6.28	0.01	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.13
Architectural Coating	6.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.01	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.13
Demolition 01/01/2010-12/31/2029	0.91	8.57	4.50	0.00	2.50	0.39	2.89	0.52	0.36	0.88	908.16
Fugitive Dust	0.00	0.00	0.00	0.00	0.13	0.00	0.13	0.03	0.00	0.03	0.00
Demo Off Road Diesel	0.72	6.06	3.42	0.00	0.00	0.29	0.29	0.00	0.27	0.27	539.29
Demo On Road Diesel	0.18	2.50	0.92	0.00	0.01	0.10	0.11	0.00	0.09	0.09	348.58
Demo Worker Trips	0.00	0.01	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.30
Mass Grading 01/01/2010-	1.52	13.14	6.64	0.00	27.51	0.64	28.14	5.74	0.58	6.33	1,285.67

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Mass Grading Dust	0.00	0.00	0.00	0.00	27.50	0.00	27.50	5.74	0.00	5.74	0.00
Mass Grading Off Road Diesel	1.46	12.47	6.08	0.00	0.00	0.61	0.61	0.00	0.56	0.56	1,153.99
Mass Grading On Road Diesel	0.05	0.65	0.24	0.00	0.00	0.03	0.03	0.00	0.02	0.02	91.08
Mass Grading Worker Trips	0.01	0.02	0.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	40.60
Trenching 01/01/2010-12/31/2029	0.55	4.63	2.40	0.00	0.00	0.23	0.23	0.00	0.21	0.21	480.00
Trenching Off Road Diesel	0.54	4.62	2.14	0.00	0.00	0.23	0.23	0.00	0.21	0.21	447.52
Trenching Worker Trips	0.01	0.01	0.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	32.48
2011	18.84	84.36	217.73	0.33	31.29	4.00	35.29	6.74	3.62	10.36	35,238.63
Asphalt 01/01/2010-12/31/2029	0.43	2.47	1.52	0.00	0.00	0.21	0.22	0.00	0.20	0.20	217.89
Paving Off-Gas	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	0.39	2.37	1.34	0.00	0.00	0.21	0.21	0.00	0.19	0.19	184.45
Paving On Road Diesel	0.01	0.09	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.23
Paving Worker Trips	0.00	0.01	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.22
Building 01/01/2010-12/31/2029	9.36	57.42	203.24	0.33	1.40	2.63	4.03	0.50	2.36	2.86	32,340.10
Building Off Road Diesel	0.49	2.84	1.81	0.00	0.00	0.20	0.20	0.00	0.19	0.19	293.71
Building Vendor Trips	3.84	45.06	35.39	0.09	0.33	1.81	2.15	0.11	1.66	1.77	9,539.60
Building Worker Trips	5.03	9.52	166.04	0.24	1.06	0.61	1.68	0.38	0.52	0.90	22,506.80
Coating 01/01/2010-12/31/2029	6.26	0.01	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.06
Architectural Coating	6.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.01	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.06
Demolition 01/01/2010-12/31/2029	0.86	7.93	4.23	0.00	2.49	0.36	2.85	0.52	0.33	0.85	904.68
Fugitive Dust	0.00	0.00	0.00	0.00	0.13	0.00	0.13	0.03	0.00	0.03	0.00
Demo Off Road Diesel	0.69	5.68	3.26	0.00	0.00	0.27	0.27	0.00	0.25	0.25	537.22
Demo On Road Diesel	0.17	2.24	0.82	0.00	0.01	0.09	0.10	0.00	0.08	0.08	347.24
Demo Worker Trips	0.00	0.01	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.22
Mass Grading 01/01/2010-	1.42	12.26	6.27	0.00	27.40	0.58	27.98	5.72	0.53	6.26	1,280.74
Mass Grading Dust	0.00	0.00	0.00	0.00	27.40	0.00	27.40	5.72	0.00	5.72	0.00
Mass Grading Off Road Diesel	1.36	11.66	5.75	0.00	0.00	0.56	0.56	0.00	0.51	0.51	1,149.57
Mass Grading On Road Diesel	0.04	0.58	0.22	0.00	0.00	0.02	0.03	0.00	0.02	0.02	90.73
Mass Grading Worker Trips	0.01	0.02	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	40.43
Trenching 01/01/2010-12/31/2029	0.51	4.28	2.34	0.00	0.00	0.21	0.22	0.00	0.20	0.20	478.15
Trenching Off Road Diesel	0.51	4.27	2.10	0.00	0.00	0.21	0.21	0.00	0.20	0.20	445.81
Trenching Worker Trips	0.01	0.01	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	32.35
2012	17.91	76.88	203.72	0.33	31.41	3.66	35.08	6.77	3.31	10.08	35,370.49
Asphalt 01/01/2010-12/31/2029	0.41	2.35	1.50	0.00	0.00	0.20	0.20	0.00	0.19	0.19	218.73
Paving Off-Gas	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	0.37	2.26	1.34	0.00	0.00	0.20	0.20	0.00	0.18	0.18	185.16
Paving On Road Diesel	0.01	0.08	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.28
Paving Worker Trips	0.00	0.01	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.29
Building 01/01/2010-12/31/2029	8.59	51.67	189.80	0.33	1.40	2.41	3.81	0.50	2.16	2.66	32,460.84

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Building Off Road Diesel	0.45	2.67	1.78	0.00	0.00	0.19	0.19	0.00	0.17	0.17	294.84
Building Vendor Trips	3.53	40.28	32.90	0.09	0.34	1.60	1.94	0.11	1.47	1.58	9,576.45
Building Worker Trips	4.60	8.73	155.12	0.24	1.07	0.62	1.68	0.38	0.52	0.90	22,589.55
Coating 01/01/2010-12/31/2029	6.28	0.01	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.12
Architectural Coating	6.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.01	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.12
Demolition 01/01/2010-12/31/2029	0.81	7.38	4.02	0.00	2.50	0.33	2.83	0.52	0.30	0.82	908.15
Fugitive Dust	0.00	0.00	0.00	0.00	0.13	0.00	0.13	0.03	0.00	0.03	0.00
Demo Off Road Diesel	0.65	5.37	3.14	0.00	0.00	0.25	0.25	0.00	0.23	0.23	539.29
Demo On Road Diesel	0.15	2.00	0.74	0.00	0.01	0.08	0.09	0.00	0.07	0.07	348.58
Demo Worker Trips	0.00	0.01	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.29
Mass Grading 01/01/2010-	1.35	11.49	5.96	0.00	27.51	0.53	28.04	5.74	0.49	6.24	1,285.66
Mass Grading Dust	0.00	0.00	0.00	0.00	27.50	0.00	27.50	5.74	0.00	5.74	0.00
Mass Grading Off Road Diesel	1.30	10.95	5.49	0.00	0.00	0.51	0.51	0.00	0.47	0.47	1,153.99
Mass Grading On Road Diesel	0.04	0.52	0.19	0.00	0.00	0.02	0.02	0.00	0.02	0.02	91.08
Mass Grading Worker Trips	0.01	0.02	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	40.58
Trenching 01/01/2010-12/31/2029	0.48	3.99	2.31	0.00	0.00	0.19	0.19	0.00	0.18	0.18	479.99
Trenching Off Road Diesel	0.47	3.98	2.09	0.00	0.00	0.19	0.19	0.00	0.18	0.18	447.52
Trenching Worker Trips	0.01	0.01	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	32.47
2013	16.98	69.45	189.56	0.33	31.41	3.35	34.77	6.77	3.03	9.79	35,368.59
Asphalt 01/01/2010-12/31/2029	0.38	2.22	1.48	0.00	0.00	0.19	0.19	0.00	0.17	0.18	218.72
Paving Off-Gas	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	0.35	2.15	1.32	0.00	0.00	0.19	0.19	0.00	0.17	0.17	185.16
Paving On Road Diesel	0.01	0.07	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.28
Paving Worker Trips	0.00	0.01	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.29
Building 01/01/2010-12/31/2029	7.80	45.98	176.23	0.33	1.40	2.19	3.60	0.50	1.96	2.46	32,458.95
Building Off Road Diesel	0.42	2.48	1.74	0.00	0.00	0.17	0.17	0.00	0.15	0.15	294.84
Building Vendor Trips	3.21	35.51	30.34	0.09	0.34	1.41	1.74	0.11	1.29	1.40	9,576.86
Building Worker Trips	4.17	7.98	144.15	0.24	1.07	0.62	1.69	0.38	0.52	0.90	22,587.25
Coating 01/01/2010-12/31/2029	6.28	0.01	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.12
Architectural Coating	6.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.01	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.12
Demolition 01/01/2010-12/31/2029	0.77	6.82	3.80	0.00	2.50	0.30	2.80	0.52	0.28	0.80	908.15
Fugitive Dust	0.00	0.00	0.00	0.00	0.13	0.00	0.13	0.03	0.00	0.03	0.00
Demo Off Road Diesel	0.63	5.06	3.02	0.00	0.00	0.23	0.23	0.00	0.22	0.22	539.29
Demo On Road Diesel	0.14	1.76	0.65	0.00	0.01	0.07	0.08	0.00	0.06	0.06	348.58
Demo Worker Trips	0.00	0.01	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.29
Mass Grading 01/01/2010-	1.29	10.73	5.66	0.00	27.51	0.49	28.00	5.74	0.45	6.20	1,285.65
Mass Grading Dust	0.00	0.00	0.00	0.00	27.50	0.00	27.50	5.74	0.00	5.74	0.00
Mass Grading Off Road Diesel	1.24	10.26	5.23	0.00	0.00	0.47	0.47	0.00	0.44	0.44	1,153.99
Mass Grading On Road Diesel	0.04	0.46	0.17	0.00	0.00	0.02	0.02	0.00	0.02	0.02	91.08

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Mass Grading Worker Trips	0.01	0.01	0.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	40.58
Trenching 01/01/2010-12/31/2029	0.45	3.70	2.29	0.00	0.00	0.18	0.18	0.00	0.16	0.16	0.16	479.98
Trenching Off Road Diesel	0.45	3.68	2.08	0.00	0.00	0.18	0.18	0.00	0.16	0.16	0.16	447.52
Trenching Worker Trips	0.01	0.01	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	32.46
2014	16.14	62.41	176.88	0.33	31.41	3.04	34.45	6.77	2.74	9.51		35,366.79
Asphalt 01/01/2010-12/31/2029	0.36	2.10	1.46	0.00	0.00	0.18	0.18	0.00	0.16	0.16		218.72
Paving Off-Gas	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00
Paving Off Road Diesel	0.33	2.04	1.31	0.00	0.00	0.18	0.18	0.00	0.16	0.16		185.16
Paving On Road Diesel	0.00	0.06	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00		13.28
Paving Worker Trips	0.00	0.01	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00		20.29
Building 01/01/2010-12/31/2029	7.13	40.71	164.06	0.33	1.40	1.99	3.40	0.50	1.77	2.27		32,457.16
Building Off Road Diesel	0.38	2.30	1.70	0.00	0.00	0.14	0.14	0.00	0.13	0.13		294.84
Building Vendor Trips	2.91	31.08	27.97	0.09	0.34	1.23	1.57	0.11	1.12	1.24		9,577.17
Building Worker Trips	3.83	7.32	134.38	0.24	1.07	0.62	1.69	0.38	0.52	0.90		22,585.15
Coating 01/01/2010-12/31/2029	6.28	0.01	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		17.12
Architectural Coating	6.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00
Coating Worker Trips	0.00	0.01	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		17.12
Demolition 01/01/2010-12/31/2029	0.73	6.26	3.60	0.00	2.50	0.27	2.77	0.52	0.25	0.77		908.15
Fugitive Dust	0.00	0.00	0.00	0.00	0.13	0.00	0.13	0.03	0.00	0.03		0.00
Demo Off Road Diesel	0.60	4.72	2.91	0.00	0.00	0.21	0.21	0.00	0.19	0.19		539.29
Demo On Road Diesel	0.13	1.53	0.57	0.00	0.01	0.06	0.07	0.00	0.05	0.06		348.58
Demo Worker Trips	0.00	0.01	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00		20.29
Mass Grading 01/01/2010-	1.22	9.93	5.42	0.00	27.51	0.45	27.95	5.74	0.41	6.15		1,285.65
Mass Grading Dust	0.00	0.00	0.00	0.00	27.50	0.00	27.50	5.74	0.00	5.74		0.00
Mass Grading Off Road Diesel	1.18	9.51	5.02	0.00	0.00	0.43	0.43	0.00	0.40	0.40		1,153.99
Mass Grading On Road Diesel	0.03	0.40	0.15	0.00	0.00	0.01	0.02	0.00	0.01	0.01		91.08
Mass Grading Worker Trips	0.01	0.01	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00		40.58
Trenching 01/01/2010-12/31/2029	0.42	3.41	2.25	0.00	0.00	0.15	0.16	0.00	0.14	0.14		479.98
Trenching Off Road Diesel	0.42	3.40	2.06	0.00	0.00	0.15	0.15	0.00	0.14	0.14		447.52
Trenching Worker Trips	0.01	0.01	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00		32.46
2015	15.32	55.72	164.89	0.33	31.41	2.79	34.20	6.77	2.51	9.28		35,365.47
Asphalt 01/01/2010-12/31/2029	0.34	1.97	1.43	0.00	0.00	0.16	0.17	0.00	0.15	0.15		218.72
Paving Off-Gas	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00
Paving Off Road Diesel	0.31	1.91	1.30	0.00	0.00	0.16	0.16	0.00	0.15	0.15		185.16
Paving On Road Diesel	0.00	0.05	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00		13.28
Paving Worker Trips	0.00	0.01	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00		20.29
Building 01/01/2010-12/31/2029	6.49	35.91	152.54	0.33	1.40	1.83	3.23	0.50	1.62	2.12		32,455.86
Building Off Road Diesel	0.35	2.11	1.67	0.00	0.00	0.13	0.13	0.00	0.12	0.12		294.84
Building Vendor Trips	2.63	27.06	25.76	0.09	0.34	1.07	1.41	0.11	0.98	1.10		9,577.62
Building Worker Trips	3.51	6.74	125.11	0.24	1.07	0.62	1.69	0.38	0.52	0.90		22,583.40

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Coating 01/01/2010-12/31/2029	6.28	0.01	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.12
Architectural Coating	6.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.01	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.12
Demolition 01/01/2010-12/31/2029	0.67	5.68	3.42	0.00	2.50	0.24	2.74	0.52	0.22	0.75	0.75	908.15
Fugitive Dust	0.00	0.00	0.00	0.00	0.13	0.00	0.13	0.03	0.00	0.03	0.03	0.00
Demo Off Road Diesel	0.56	4.35	2.80	0.00	0.00	0.20	0.20	0.00	0.18	0.18	0.18	539.29
Demo On Road Diesel	0.11	1.33	0.50	0.00	0.01	0.05	0.06	0.00	0.04	0.05	0.05	348.58
Demo Worker Trips	0.00	0.01	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.29
Mass Grading 01/01/2010-	1.14	9.10	5.18	0.00	27.51	0.41	27.91	5.74	0.38	6.12	6.12	1,285.65
Mass Grading Dust	0.00	0.00	0.00	0.00	27.50	0.00	27.50	5.74	0.00	5.74	5.74	0.00
Mass Grading Off Road Diesel	1.10	8.74	4.82	0.00	0.00	0.39	0.39	0.00	0.36	0.36	0.36	1,153.99
Mass Grading On Road Diesel	0.03	0.35	0.13	0.00	0.00	0.01	0.02	0.00	0.01	0.01	0.01	91.08
Mass Grading Worker Trips	0.01	0.01	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	40.57
Trenching 01/01/2010-12/31/2029	0.39	3.05	2.23	0.00	0.00	0.15	0.15	0.00	0.13	0.13	0.13	479.98
Trenching Off Road Diesel	0.39	3.04	2.05	0.00	0.00	0.14	0.14	0.00	0.13	0.13	0.13	447.52
Trenching Worker Trips	0.01	0.01	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	32.46
2016	14.62	50.14	154.43	0.33	31.41	2.55	33.96	6.77	2.29	9.05	9.05	35,362.96
Asphalt 01/01/2010-12/31/2029	0.32	1.84	1.42	0.00	0.00	0.15	0.15	0.00	0.14	0.14	0.14	218.72
Paving Off-Gas	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	0.29	1.79	1.29	0.00	0.00	0.15	0.15	0.00	0.14	0.14	0.14	185.16
Paving On Road Diesel	0.00	0.04	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.28
Paving Worker Trips	0.00	0.01	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.28
Building 01/01/2010-12/31/2029	5.95	32.06	142.48	0.33	1.40	1.68	3.09	0.50	1.49	1.99	1.99	32,453.36
Building Off Road Diesel	0.32	1.94	1.65	0.00	0.00	0.11	0.11	0.00	0.11	0.11	0.11	294.84
Building Vendor Trips	2.40	23.91	23.96	0.09	0.34	0.95	1.29	0.11	0.87	0.98	0.98	9,577.87
Building Worker Trips	3.23	6.22	116.88	0.24	1.07	0.62	1.69	0.38	0.52	0.90	0.90	22,580.66
Coating 01/01/2010-12/31/2029	6.28	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.12
Architectural Coating	6.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.12
Demolition 01/01/2010-12/31/2029	0.63	5.18	3.26	0.00	2.50	0.22	2.72	0.52	0.21	0.73	0.73	908.14
Fugitive Dust	0.00	0.00	0.00	0.00	0.13	0.00	0.13	0.03	0.00	0.03	0.03	0.00
Demo Off Road Diesel	0.52	4.01	2.70	0.00	0.00	0.18	0.18	0.00	0.17	0.17	0.17	539.29
Demo On Road Diesel	0.10	1.17	0.45	0.00	0.01	0.04	0.05	0.00	0.04	0.04	0.04	348.58
Demo Worker Trips	0.00	0.01	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.28
Mass Grading 01/01/2010-	1.07	8.34	4.98	0.00	27.51	0.37	27.87	5.74	0.34	6.08	6.08	1,285.64
Mass Grading Dust	0.00	0.00	0.00	0.00	27.50	0.00	27.50	5.74	0.00	5.74	5.74	0.00
Mass Grading Off Road Diesel	1.04	8.02	4.66	0.00	0.00	0.36	0.36	0.00	0.33	0.33	0.33	1,153.99
Mass Grading On Road Diesel	0.03	0.31	0.12	0.00	0.00	0.01	0.01	0.00	0.01	0.01	0.01	91.08
Mass Grading Worker Trips	0.01	0.01	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	40.57
Trenching 01/01/2010-12/31/2029	0.37	2.71	2.21	0.00	0.00	0.12	0.12	0.00	0.11	0.11	0.11	479.97
Trenching Off Road Diesel	0.36	2.70	2.04	0.00	0.00	0.12	0.12	0.00	0.11	0.11	0.11	447.52

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Trenching Worker Trips	0.00	0.01	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	32.45
2017	13.94	45.13	144.00	0.33	31.29	2.35	33.64	6.74	2.10	8.84		35,225.88
Asphalt 01/01/2010-12/31/2029	0.30	1.72	1.39	0.00	0.00	0.14	0.14	0.00	0.13	0.13		217.88
Paving Off-Gas	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00
Paving Off Road Diesel	0.27	1.67	1.28	0.00	0.00	0.14	0.14	0.00	0.13	0.13		184.45
Paving On Road Diesel	0.00	0.04	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00		13.23
Paving Worker Trips	0.00	0.01	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		20.20
Building 01/01/2010-12/31/2029	5.44	28.72	132.46	0.33	1.40	1.57	2.97	0.50	1.38	1.88		32,327.44
Building Off Road Diesel	0.29	1.77	1.62	0.00	0.00	0.10	0.10	0.00	0.09	0.09		293.71
Building Vendor Trips	2.21	21.27	22.30	0.09	0.33	0.85	1.18	0.11	0.77	0.89		9,541.52
Building Worker Trips	2.94	5.68	108.54	0.24	1.06	0.62	1.68	0.38	0.52	0.90		22,492.22
Coating 01/01/2010-12/31/2029	6.26	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00		17.05
Architectural Coating	6.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00
Coating Worker Trips	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00		17.05
Demolition 01/01/2010-12/31/2029	0.60	4.70	3.11	0.00	2.49	0.20	2.69	0.52	0.19	0.71		904.66
Fugitive Dust	0.00	0.00	0.00	0.00	0.13	0.00	0.13	0.03	0.00	0.03		0.00
Demo Off Road Diesel	0.50	3.66	2.60	0.00	0.00	0.17	0.17	0.00	0.15	0.15		537.22
Demo On Road Diesel	0.09	1.04	0.40	0.00	0.01	0.04	0.05	0.00	0.03	0.04		347.24
Demo Worker Trips	0.00	0.01	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		20.20
Mass Grading 01/01/2010-	1.01	7.60	4.78	0.00	27.40	0.33	27.73	5.72	0.30	6.03		1,280.71
Mass Grading Dust	0.00	0.00	0.00	0.00	27.40	0.00	27.40	5.72	0.00	5.72		0.00
Mass Grading Off Road Diesel	0.98	7.32	4.48	0.00	0.00	0.32	0.32	0.00	0.30	0.30		1,149.57
Mass Grading On Road Diesel	0.02	0.27	0.11	0.00	0.00	0.01	0.01	0.00	0.01	0.01		90.73
Mass Grading Worker Trips	0.01	0.01	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		40.41
Trenching 01/01/2010-12/31/2029	0.34	2.39	2.19	0.00	0.00	0.11	0.11	0.00	0.10	0.10		478.13
Trenching Off Road Diesel	0.34	2.38	2.03	0.00	0.00	0.11	0.11	0.00	0.10	0.10		445.81
Trenching Worker Trips	0.00	0.01	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00		32.33
2018	13.42	41.08	135.38	0.33	31.41	2.18	33.60	6.77	1.95	8.72		35,360.27
Asphalt 01/01/2010-12/31/2029	0.29	1.61	1.38	0.00	0.00	0.13	0.13	0.00	0.12	0.12		218.72
Paving Off-Gas	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00
Paving Off Road Diesel	0.26	1.57	1.28	0.00	0.00	0.13	0.13	0.00	0.12	0.12		185.16
Paving On Road Diesel	0.00	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00		13.28
Paving Worker Trips	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00		20.28
Building 01/01/2010-12/31/2029	5.03	26.11	124.09	0.33	1.40	1.48	2.88	0.50	1.30	1.80		32,450.70
Building Off Road Diesel	0.27	1.63	1.60	0.00	0.00	0.09	0.09	0.00	0.08	0.08		294.84
Building Vendor Trips	2.05	19.21	20.97	0.09	0.34	0.77	1.11	0.11	0.70	0.81		9,578.59
Building Worker Trips	2.72	5.27	101.52	0.24	1.07	0.62	1.69	0.38	0.52	0.90		22,577.28
Coating 01/01/2010-12/31/2029	6.28	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00		17.12
Architectural Coating	6.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00
Coating Worker Trips	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00		17.12

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Demolition 01/01/2010-12/31/2029	0.56	4.30	3.00	0.00	2.50	0.18	2.68	0.52	0.17	0.69	908.14
Fugitive Dust	0.00	0.00	0.00	0.00	0.13	0.00	0.13	0.03	0.00	0.03	0.00
Demo Off Road Diesel	0.47	3.36	2.54	0.00	0.00	0.15	0.15	0.00	0.14	0.14	539.29
Demo On Road Diesel	0.09	0.94	0.37	0.00	0.01	0.03	0.04	0.00	0.03	0.03	348.58
Demo Worker Trips	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.28
Mass Grading 01/01/2010-	0.94	6.96	4.65	0.00	27.51	0.30	27.80	5.74	0.27	6.02	1,285.63
Mass Grading Dust	0.00	0.00	0.00	0.00	27.50	0.00	27.50	5.74	0.00	5.74	0.00
Mass Grading Off Road Diesel	0.91	6.71	4.37	0.00	0.00	0.29	0.29	0.00	0.26	0.26	1,153.99
Mass Grading On Road Diesel	0.02	0.24	0.10	0.00	0.00	0.01	0.01	0.00	0.01	0.01	91.08
Mass Grading Worker Trips	0.00	0.01	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	40.56
Trenching 01/01/2010-12/31/2029	0.32	2.10	2.18	0.00	0.00	0.10	0.10	0.00	0.09	0.09	479.97
Trenching Off Road Diesel	0.32	2.10	2.03	0.00	0.00	0.10	0.10	0.00	0.09	0.09	447.52
Trenching Worker Trips	0.00	0.01	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	32.45
2019	12.90	37.35	126.88	0.33	31.41	2.02	33.43	6.77	1.80	8.57	35,359.63
Asphalt 01/01/2010-12/31/2029	0.27	1.51	1.36	0.00	0.00	0.12	0.12	0.00	0.11	0.11	218.71
Paving Off-Gas	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	0.24	1.47	1.27	0.00	0.00	0.11	0.11	0.00	0.11	0.11	185.16
Paving On Road Diesel	0.00	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.28
Paving Worker Trips	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.28
Building 01/01/2010-12/31/2029	4.64	23.72	115.88	0.33	1.40	1.40	2.80	0.50	1.22	1.72	32,450.06
Building Off Road Diesel	0.25	1.49	1.58	0.00	0.00	0.07	0.07	0.00	0.07	0.07	294.84
Building Vendor Trips	1.91	17.39	19.69	0.09	0.34	0.70	1.04	0.11	0.64	0.75	9,578.96
Building Worker Trips	2.49	4.84	94.60	0.24	1.07	0.62	1.69	0.38	0.52	0.90	22,576.26
Coating 01/01/2010-12/31/2029	6.28	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.11
Architectural Coating	6.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.11
Demolition 01/01/2010-12/31/2029	0.52	3.92	2.89	0.00	2.50	0.16	2.66	0.52	0.15	0.67	908.14
Fugitive Dust	0.00	0.00	0.00	0.00	0.13	0.00	0.13	0.03	0.00	0.03	0.00
Demo Off Road Diesel	0.44	3.07	2.47	0.00	0.00	0.13	0.13	0.00	0.12	0.12	539.29
Demo On Road Diesel	0.08	0.85	0.34	0.00	0.01	0.03	0.04	0.00	0.03	0.03	348.58
Demo Worker Trips	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.28
Mass Grading 01/01/2010-	0.89	6.35	4.51	0.00	27.51	0.26	27.77	5.74	0.24	5.99	1,285.63
Mass Grading Dust	0.00	0.00	0.00	0.00	27.50	0.00	27.50	5.74	0.00	5.74	0.00
Mass Grading Off Road Diesel	0.87	6.12	4.26	0.00	0.00	0.25	0.25	0.00	0.23	0.23	1,153.99
Mass Grading On Road Diesel	0.02	0.22	0.09	0.00	0.00	0.01	0.01	0.00	0.01	0.01	91.08
Mass Grading Worker Trips	0.00	0.01	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	40.56
Trenching 01/01/2010-12/31/2029	0.30	1.84	2.16	0.00	0.00	0.08	0.09	0.00	0.08	0.08	479.97
Trenching Off Road Diesel	0.29	1.84	2.03	0.00	0.00	0.08	0.08	0.00	0.08	0.08	447.52
Trenching Worker Trips	0.00	0.01	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	32.45
2020	12.46	34.24	119.44	0.34	31.53	1.93	33.46	6.79	1.72	8.51	35,494.52

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Asphalt 01/01/2010-12/31/2029	0.25	1.41	1.36	0.00	0.00	0.11	0.11	0.00	0.10	0.10	219.55
Paving Off-Gas	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	0.22	1.38	1.26	0.00	0.00	0.11	0.11	0.00	0.10	0.10	185.86
Paving On Road Diesel	0.00	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.33
Paving Worker Trips	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.36
Building 01/01/2010-12/31/2029	4.29	21.78	108.63	0.33	1.41	1.36	2.77	0.50	1.19	1.69	32,573.81
Building Off Road Diesel	0.22	1.38	1.58	0.00	0.00	0.07	0.07	0.00	0.06	0.06	295.97
Building Vendor Trips	1.79	15.92	18.61	0.09	0.34	0.64	0.98	0.11	0.59	0.70	9,616.02
Building Worker Trips	2.28	4.49	88.44	0.24	1.07	0.65	1.72	0.39	0.54	0.93	22,661.83
Coating 01/01/2010-12/31/2029	6.31	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.18
Architectural Coating	6.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.18
Demolition 01/01/2010-12/31/2029	0.49	3.60	2.81	0.00	2.51	0.15	2.66	0.52	0.14	0.66	911.62
Fugitive Dust	0.00	0.00	0.00	0.00	0.13	0.00	0.13	0.03	0.00	0.03	0.00
Demo Off Road Diesel	0.41	2.82	2.42	0.00	0.00	0.13	0.13	0.00	0.12	0.12	541.35
Demo On Road Diesel	0.08	0.77	0.31	0.00	0.01	0.03	0.04	0.00	0.02	0.03	349.91
Demo Worker Trips	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.36
Mass Grading 01/01/2010-	0.84	5.82	4.42	0.00	27.61	0.23	27.84	5.77	0.21	5.98	1,290.56
Mass Grading Dust	0.00	0.00	0.00	0.00	27.61	0.00	27.61	5.77	0.00	5.77	0.00
Mass Grading Off Road Diesel	0.82	5.61	4.18	0.00	0.00	0.23	0.23	0.00	0.21	0.21	1,158.42
Mass Grading On Road Diesel	0.02	0.20	0.08	0.00	0.00	0.01	0.01	0.00	0.01	0.01	91.43
Mass Grading Worker Trips	0.00	0.01	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	40.71
Trenching 01/01/2010-12/31/2029	0.28	1.62	2.16	0.00	0.00	0.08	0.08	0.00	0.07	0.07	481.81
Trenching Off Road Diesel	0.27	1.62	2.03	0.00	0.00	0.08	0.08	0.00	0.07	0.07	449.24
Trenching Worker Trips	0.00	0.01	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	32.57
2021	11.18	27.47	90.87	0.33	31.41	1.76	33.18	6.77	1.56	8.33	35,355.09
Asphalt 01/01/2010-12/31/2029	0.25	1.40	1.33	0.00	0.00	0.11	0.11	0.00	0.10	0.10	218.71
Paving Off-Gas	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	0.22	1.37	1.26	0.00	0.00	0.11	0.11	0.00	0.10	0.10	185.16
Paving On Road Diesel	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.28
Paving Worker Trips	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.27
Building 01/01/2010-12/31/2029	3.07	15.38	80.35	0.33	1.40	1.21	2.61	0.50	1.05	1.55	32,445.56
Building Off Road Diesel	0.22	1.37	1.57	0.00	0.00	0.06	0.06	0.00	0.06	0.06	294.84
Building Vendor Trips	1.35	10.90	14.44	0.09	0.34	0.47	0.80	0.11	0.42	0.54	9,580.60
Building Worker Trips	1.50	3.12	64.34	0.24	1.07	0.67	1.74	0.38	0.57	0.95	22,570.12
Coating 01/01/2010-12/31/2029	6.28	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.11
Architectural Coating	6.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.11
Demolition 01/01/2010-12/31/2029	0.47	3.34	2.69	0.00	2.50	0.14	2.64	0.52	0.13	0.65	908.13
Fugitive Dust	0.00	0.00	0.00	0.00	0.13	0.00	0.13	0.03	0.00	0.03	0.00
Demo Off Road Diesel	0.41	2.81	2.41	0.00	0.00	0.13	0.13	0.00	0.12	0.12	539.29

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Demo On Road Diesel	0.06	0.53	0.22	0.00	0.01	0.02	0.03	0.00	0.01	0.02	348.58
Demo Worker Trips	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.27
Mass Grading 01/01/2010-	0.83	5.73	4.34	0.00	27.51	0.23	27.74	5.74	0.21	5.96	1,285.62
Mass Grading Dust	0.00	0.00	0.00	0.00	27.50	0.00	27.50	5.74	0.00	5.74	0.00
Mass Grading Off Road Diesel	0.81	5.58	4.16	0.00	0.00	0.22	0.22	0.00	0.21	0.21	1,153.99
Mass Grading On Road Diesel	0.02	0.14	0.06	0.00	0.00	0.00	0.01	0.00	0.00	0.00	91.08
Mass Grading Worker Trips	0.00	0.01	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	40.55
Trenching 01/01/2010-12/31/2029	0.27	1.62	2.12	0.00	0.00	0.08	0.08	0.00	0.07	0.07	479.96
Trenching Off Road Diesel	0.27	1.61	2.03	0.00	0.00	0.08	0.08	0.00	0.07	0.07	447.52
Trenching Worker Trips	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	32.44
2022	11.14	27.37	90.53	0.33	31.29	1.76	33.05	6.74	1.56	8.30	35,219.63
Asphalt 01/01/2010-12/31/2029	0.25	1.39	1.32	0.00	0.00	0.11	0.11	0.00	0.10	0.10	217.87
Paving Off-Gas	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	0.22	1.37	1.26	0.00	0.00	0.11	0.11	0.00	0.10	0.10	184.45
Paving On Road Diesel	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.23
Paving Worker Trips	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.20
Building 01/01/2010-12/31/2029	3.06	15.32	80.04	0.33	1.40	1.20	2.60	0.50	1.04	1.54	32,321.25
Building Off Road Diesel	0.22	1.36	1.56	0.00	0.00	0.06	0.06	0.00	0.06	0.06	293.71
Building Vendor Trips	1.34	10.85	14.39	0.09	0.33	0.47	0.80	0.11	0.42	0.54	9,543.90
Building Worker Trips	1.50	3.11	64.09	0.24	1.06	0.67	1.73	0.38	0.56	0.95	22,483.64
Coating 01/01/2010-12/31/2029	6.26	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.04
Architectural Coating	6.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.04
Demolition 01/01/2010-12/31/2029	0.47	3.33	2.68	0.00	2.49	0.14	2.63	0.52	0.13	0.65	904.66
Fugitive Dust	0.00	0.00	0.00	0.00	0.13	0.00	0.13	0.03	0.00	0.03	0.00
Demo Off Road Diesel	0.41	2.80	2.40	0.00	0.00	0.13	0.13	0.00	0.12	0.12	537.22
Demo On Road Diesel	0.06	0.53	0.22	0.00	0.01	0.02	0.03	0.00	0.01	0.02	347.24
Demo Worker Trips	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.20
Mass Grading 01/01/2010-	0.83	5.71	4.32	0.00	27.40	0.23	27.63	5.72	0.21	5.93	1,280.70
Mass Grading Dust	0.00	0.00	0.00	0.00	27.40	0.00	27.40	5.72	0.00	5.72	0.00
Mass Grading Off Road Diesel	0.81	5.56	4.15	0.00	0.00	0.22	0.22	0.00	0.21	0.21	1,149.57
Mass Grading On Road Diesel	0.02	0.14	0.06	0.00	0.00	0.00	0.01	0.00	0.00	0.00	90.73
Mass Grading Worker Trips	0.00	0.01	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	40.39
Trenching 01/01/2010-12/31/2029	0.27	1.61	2.11	0.00	0.00	0.08	0.08	0.00	0.07	0.07	478.12
Trenching Off Road Diesel	0.27	1.61	2.02	0.00	0.00	0.07	0.07	0.00	0.07	0.07	445.81
Trenching Worker Trips	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	32.31
2023	11.14	27.37	90.53	0.33	31.29	1.76	33.05	6.74	1.56	8.30	35,219.63
Asphalt 01/01/2010-12/31/2029	0.25	1.39	1.32	0.00	0.00	0.11	0.11	0.00	0.10	0.10	217.87
Paving Off-Gas	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	0.22	1.37	1.26	0.00	0.00	0.11	0.11	0.00	0.10	0.10	184.45

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Paving On Road Diesel	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.23
Paving Worker Trips	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.20
Building 01/01/2010-12/31/2029	3.06	15.32	80.04	0.33	1.40	1.20	2.60	0.50	1.04	1.54		32,321.25
Building Off Road Diesel	0.22	1.36	1.56	0.00	0.00	0.06	0.06	0.00	0.06	0.06		293.71
Building Vendor Trips	1.34	10.85	14.39	0.09	0.33	0.47	0.80	0.11	0.42	0.54		9,543.90
Building Worker Trips	1.50	3.11	64.09	0.24	1.06	0.67	1.73	0.38	0.56	0.95		22,483.64
Coating 01/01/2010-12/31/2029	6.26	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00		17.04
Architectural Coating	6.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00
Coating Worker Trips	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00		17.04
Demolition 01/01/2010-12/31/2029	0.47	3.33	2.68	0.00	2.49	0.14	2.63	0.52	0.13	0.65		904.66
Fugitive Dust	0.00	0.00	0.00	0.00	0.13	0.00	0.13	0.03	0.00	0.03		0.00
Demo Off Road Diesel	0.41	2.80	2.40	0.00	0.00	0.13	0.13	0.00	0.12	0.12		537.22
Demo On Road Diesel	0.06	0.53	0.22	0.00	0.01	0.02	0.03	0.00	0.01	0.02		347.24
Demo Worker Trips	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00		20.20
Mass Grading 01/01/2010-	0.83	5.71	4.32	0.00	27.40	0.23	27.63	5.72	0.21	5.93		1,280.70
Mass Grading Dust	0.00	0.00	0.00	0.00	27.40	0.00	27.40	5.72	0.00	5.72		0.00
Mass Grading Off Road Diesel	0.81	5.56	4.15	0.00	0.00	0.22	0.22	0.00	0.21	0.21		1,149.57
Mass Grading On Road Diesel	0.02	0.14	0.06	0.00	0.00	0.00	0.01	0.00	0.00	0.00		90.73
Mass Grading Worker Trips	0.00	0.01	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00		40.39
Trenching 01/01/2010-12/31/2029	0.27	1.61	2.11	0.00	0.00	0.08	0.08	0.00	0.07	0.07		478.12
Trenching Off Road Diesel	0.27	1.61	2.02	0.00	0.00	0.07	0.07	0.00	0.07	0.07		445.81
Trenching Worker Trips	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00		32.31
2024	11.22	27.58	91.22	0.33	31.53	1.77	33.30	6.79	1.57	8.36		35,490.55
Asphalt 01/01/2010-12/31/2029	0.25	1.40	1.33	0.00	0.00	0.11	0.11	0.00	0.10	0.10		219.55
Paving Off-Gas	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00
Paving Off Road Diesel	0.22	1.38	1.26	0.00	0.00	0.11	0.11	0.00	0.10	0.10		185.86
Paving On Road Diesel	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00		13.33
Paving Worker Trips	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00		20.35
Building 01/01/2010-12/31/2029	3.09	15.44	80.66	0.33	1.41	1.21	2.62	0.50	1.05	1.55		32,569.87
Building Off Road Diesel	0.22	1.38	1.58	0.00	0.00	0.07	0.07	0.00	0.06	0.06		295.97
Building Vendor Trips	1.35	10.94	14.50	0.09	0.34	0.47	0.81	0.11	0.43	0.54		9,617.31
Building Worker Trips	1.51	3.13	64.59	0.24	1.07	0.68	1.75	0.39	0.57	0.95		22,656.59
Coating 01/01/2010-12/31/2029	6.30	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00		17.18
Architectural Coating	6.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00
Coating Worker Trips	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00		17.18
Demolition 01/01/2010-12/31/2029	0.47	3.36	2.70	0.00	2.51	0.14	2.65	0.52	0.13	0.66		911.61
Fugitive Dust	0.00	0.00	0.00	0.00	0.13	0.00	0.13	0.03	0.00	0.03		0.00
Demo Off Road Diesel	0.41	2.82	2.42	0.00	0.00	0.13	0.13	0.00	0.12	0.12		541.35
Demo On Road Diesel	0.06	0.53	0.22	0.00	0.01	0.02	0.03	0.00	0.01	0.02		349.91
Demo Worker Trips	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00		20.35
Mass Grading 01/01/2010-	0.83	5.75	4.35	0.00	27.61	0.23	27.84	5.77	0.21	5.98		1,290.55

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Mass Grading Dust	0.00	0.00	0.00	0.00	27.61	0.00	27.61	5.77	0.00	5.77	0.00
Mass Grading Off Road Diesel	0.82	5.61	4.18	0.00	0.00	0.23	0.23	0.00	0.21	0.21	1,158.42
Mass Grading On Road Diesel	0.02	0.14	0.06	0.00	0.00	0.00	0.01	0.00	0.00	0.00	91.43
Mass Grading Worker Trips	0.00	0.01	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	40.70
Trenching 01/01/2010-12/31/2029	0.27	1.62	2.13	0.00	0.00	0.08	0.08	0.00	0.07	0.07	481.80
Trenching Off Road Diesel	0.27	1.62	2.03	0.00	0.00	0.08	0.08	0.00	0.07	0.07	449.24
Trenching Worker Trips	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	32.56
2025	11.18	27.47	90.87	0.33	31.41	1.76	33.18	6.77	1.56	8.33	35,355.09
Asphalt 01/01/2010-12/31/2029	0.25	1.40	1.33	0.00	0.00	0.11	0.11	0.00	0.10	0.10	218.71
Paving Off-Gas	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	0.22	1.37	1.26	0.00	0.00	0.11	0.11	0.00	0.10	0.10	185.16
Paving On Road Diesel	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.28
Paving Worker Trips	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.27
Building 01/01/2010-12/31/2029	3.07	15.38	80.35	0.33	1.40	1.21	2.61	0.50	1.05	1.55	32,445.56
Building Off Road Diesel	0.22	1.37	1.57	0.00	0.00	0.06	0.06	0.00	0.06	0.06	294.84
Building Vendor Trips	1.35	10.90	14.44	0.09	0.34	0.47	0.80	0.11	0.42	0.54	9,580.60
Building Worker Trips	1.50	3.12	64.34	0.24	1.07	0.67	1.74	0.38	0.57	0.95	22,570.12
Coating 01/01/2010-12/31/2029	6.28	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.11
Architectural Coating	6.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.11
Demolition 01/01/2010-12/31/2029	0.47	3.34	2.69	0.00	2.50	0.14	2.64	0.52	0.13	0.65	908.13
Fugitive Dust	0.00	0.00	0.00	0.00	0.13	0.00	0.13	0.03	0.00	0.03	0.00
Demo Off Road Diesel	0.41	2.81	2.41	0.00	0.00	0.13	0.13	0.00	0.12	0.12	539.29
Demo On Road Diesel	0.06	0.53	0.22	0.00	0.01	0.02	0.03	0.00	0.01	0.02	348.58
Demo Worker Trips	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.27
Mass Grading 01/01/2010-	0.83	5.73	4.34	0.00	27.51	0.23	27.74	5.74	0.21	5.96	1,285.62
Mass Grading Dust	0.00	0.00	0.00	0.00	27.50	0.00	27.50	5.74	0.00	5.74	0.00
Mass Grading Off Road Diesel	0.81	5.58	4.16	0.00	0.00	0.22	0.22	0.00	0.21	0.21	1,153.99
Mass Grading On Road Diesel	0.02	0.14	0.06	0.00	0.00	0.00	0.01	0.00	0.00	0.00	91.08
Mass Grading Worker Trips	0.00	0.01	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	40.55
Trenching 01/01/2010-12/31/2029	0.27	1.62	2.12	0.00	0.00	0.08	0.08	0.00	0.07	0.07	479.96
Trenching Off Road Diesel	0.27	1.61	2.03	0.00	0.00	0.08	0.08	0.00	0.07	0.07	447.52
Trenching Worker Trips	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	32.44
2026	10.57	24.97	76.12	0.33	31.41	1.70	33.11	6.77	1.51	8.27	35,353.42
Asphalt 01/01/2010-12/31/2029	0.25	1.39	1.31	0.00	0.00	0.11	0.11	0.00	0.10	0.10	218.71
Paving Off-Gas	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	0.22	1.37	1.26	0.00	0.00	0.11	0.11	0.00	0.10	0.10	185.16
Paving On Road Diesel	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.28
Paving Worker Trips	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.27
Building 01/01/2010-12/31/2029	2.47	12.99	65.71	0.33	1.40	1.15	2.55	0.50	1.00	1.49	32,443.90

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Building Off Road Diesel	0.22	1.37	1.57	0.00	0.00	0.06	0.06	0.00	0.06	0.06	294.84
Building Vendor Trips	1.17	9.19	12.46	0.09	0.34	0.41	0.75	0.11	0.37	0.48	9,581.44
Building Worker Trips	1.08	2.43	51.68	0.24	1.07	0.67	1.74	0.38	0.57	0.95	22,567.62
Coating 01/01/2010-12/31/2029	6.28	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.11
Architectural Coating	6.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.11
Demolition 01/01/2010-12/31/2029	0.47	3.26	2.65	0.00	2.50	0.14	2.64	0.52	0.13	0.65	908.13
Fugitive Dust	0.00	0.00	0.00	0.00	0.13	0.00	0.13	0.03	0.00	0.03	0.00
Demo Off Road Diesel	0.41	2.81	2.41	0.00	0.00	0.13	0.13	0.00	0.12	0.12	539.29
Demo On Road Diesel	0.05	0.45	0.19	0.00	0.01	0.01	0.02	0.00	0.01	0.02	348.58
Demo Worker Trips	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.27
Mass Grading 01/01/2010-	0.83	5.71	4.31	0.00	27.51	0.23	27.73	5.74	0.21	5.96	1,285.62
Mass Grading Dust	0.00	0.00	0.00	0.00	27.50	0.00	27.50	5.74	0.00	5.74	0.00
Mass Grading Off Road Diesel	0.81	5.58	4.16	0.00	0.00	0.22	0.22	0.00	0.21	0.21	1,153.99
Mass Grading On Road Diesel	0.01	0.12	0.05	0.00	0.00	0.00	0.01	0.00	0.00	0.00	91.08
Mass Grading Worker Trips	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	40.54
Trenching 01/01/2010-12/31/2029	0.27	1.62	2.10	0.00	0.00	0.08	0.08	0.00	0.07	0.07	479.96
Trenching Off Road Diesel	0.27	1.61	2.03	0.00	0.00	0.08	0.08	0.00	0.07	0.07	447.52
Trenching Worker Trips	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	32.44
2027	10.57	24.97	76.12	0.33	31.41	1.70	33.11	6.77	1.51	8.27	35,353.42
Asphalt 01/01/2010-12/31/2029	0.25	1.39	1.31	0.00	0.00	0.11	0.11	0.00	0.10	0.10	218.71
Paving Off-Gas	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	0.22	1.37	1.26	0.00	0.00	0.11	0.11	0.00	0.10	0.10	185.16
Paving On Road Diesel	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.28
Paving Worker Trips	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.27
Building 01/01/2010-12/31/2029	2.47	12.99	65.71	0.33	1.40	1.15	2.55	0.50	1.00	1.49	32,443.90
Building Off Road Diesel	0.22	1.37	1.57	0.00	0.00	0.06	0.06	0.00	0.06	0.06	294.84
Building Vendor Trips	1.17	9.19	12.46	0.09	0.34	0.41	0.75	0.11	0.37	0.48	9,581.44
Building Worker Trips	1.08	2.43	51.68	0.24	1.07	0.67	1.74	0.38	0.57	0.95	22,567.62
Coating 01/01/2010-12/31/2029	6.28	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.11
Architectural Coating	6.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.11
Demolition 01/01/2010-12/31/2029	0.47	3.26	2.65	0.00	2.50	0.14	2.64	0.52	0.13	0.65	908.13
Fugitive Dust	0.00	0.00	0.00	0.00	0.13	0.00	0.13	0.03	0.00	0.03	0.00
Demo Off Road Diesel	0.41	2.81	2.41	0.00	0.00	0.13	0.13	0.00	0.12	0.12	539.29
Demo On Road Diesel	0.05	0.45	0.19	0.00	0.01	0.01	0.02	0.00	0.01	0.02	348.58
Demo Worker Trips	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.27
Mass Grading 01/01/2010-	0.83	5.71	4.31	0.00	27.51	0.23	27.73	5.74	0.21	5.96	1,285.62
Mass Grading Dust	0.00	0.00	0.00	0.00	27.50	0.00	27.50	5.74	0.00	5.74	0.00
Mass Grading Off Road Diesel	0.81	5.58	4.16	0.00	0.00	0.22	0.22	0.00	0.21	0.21	1,153.99
Mass Grading On Road Diesel	0.01	0.12	0.05	0.00	0.00	0.00	0.01	0.00	0.00	0.00	91.08

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Mass Grading Worker Trips	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	40.54
Trenching 01/01/2010-12/31/2029	0.27	1.62	2.10	0.00	0.00	0.08	0.08	0.00	0.07	0.07	0.07	479.96
Trenching Off Road Diesel	0.27	1.61	2.03	0.00	0.00	0.08	0.08	0.00	0.07	0.07	0.07	447.52
Trenching Worker Trips	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	32.44
2028	10.52	24.88	75.83	0.33	31.29	1.70	32.99	6.74	1.50	8.24		35,217.96
Asphalt 01/01/2010-12/31/2029	0.25	1.39	1.31	0.00	0.00	0.11	0.11	0.00	0.10	0.10		217.87
Paving Off-Gas	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00
Paving Off Road Diesel	0.22	1.37	1.26	0.00	0.00	0.11	0.11	0.00	0.10	0.10		184.45
Paving On Road Diesel	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00		13.23
Paving Worker Trips	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00		20.19
Building 01/01/2010-12/31/2029	2.46	12.94	65.45	0.33	1.40	1.14	2.54	0.50	0.99	1.49		32,319.59
Building Off Road Diesel	0.22	1.36	1.56	0.00	0.00	0.06	0.06	0.00	0.06	0.06		293.71
Building Vendor Trips	1.16	9.16	12.41	0.09	0.33	0.41	0.74	0.11	0.37	0.48		9,544.73
Building Worker Trips	1.08	2.42	51.48	0.24	1.06	0.67	1.73	0.38	0.56	0.95		22,481.15
Coating 01/01/2010-12/31/2029	6.26	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00		17.04
Architectural Coating	6.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00
Coating Worker Trips	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00		17.04
Demolition 01/01/2010-12/31/2029	0.46	3.25	2.64	0.00	2.49	0.14	2.63	0.52	0.13	0.65		904.65
Fugitive Dust	0.00	0.00	0.00	0.00	0.13	0.00	0.13	0.03	0.00	0.03		0.00
Demo Off Road Diesel	0.41	2.80	2.40	0.00	0.00	0.13	0.13	0.00	0.12	0.12		537.22
Demo On Road Diesel	0.05	0.45	0.19	0.00	0.01	0.01	0.02	0.00	0.01	0.02		347.24
Demo Worker Trips	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00		20.19
Mass Grading 01/01/2010-	0.82	5.68	4.29	0.00	27.40	0.23	27.63	5.72	0.21	5.93		1,280.69
Mass Grading Dust	0.00	0.00	0.00	0.00	27.40	0.00	27.40	5.72	0.00	5.72		0.00
Mass Grading Off Road Diesel	0.81	5.56	4.15	0.00	0.00	0.22	0.22	0.00	0.21	0.21		1,149.57
Mass Grading On Road Diesel	0.01	0.12	0.05	0.00	0.00	0.00	0.01	0.00	0.00	0.00		90.73
Mass Grading Worker Trips	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00		40.39
Trenching 01/01/2010-12/31/2029	0.27	1.61	2.09	0.00	0.00	0.08	0.08	0.00	0.07	0.07		478.12
Trenching Off Road Diesel	0.27	1.61	2.02	0.00	0.00	0.07	0.07	0.00	0.07	0.07		445.81
Trenching Worker Trips	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00		32.31
2029	10.57	24.97	76.12	0.33	31.41	1.70	33.11	6.77	1.51	8.27		35,353.42
Asphalt 01/01/2010-12/31/2029	0.25	1.39	1.31	0.00	0.00	0.11	0.11	0.00	0.10	0.10		218.71
Paving Off-Gas	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00
Paving Off Road Diesel	0.22	1.37	1.26	0.00	0.00	0.11	0.11	0.00	0.10	0.10		185.16
Paving On Road Diesel	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00		13.28
Paving Worker Trips	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00		20.27
Building 01/01/2010-12/31/2029	2.47	12.99	65.71	0.33	1.40	1.15	2.55	0.50	1.00	1.49		32,443.90
Building Off Road Diesel	0.22	1.37	1.57	0.00	0.00	0.06	0.06	0.00	0.06	0.06		294.84
Building Vendor Trips	1.17	9.19	12.46	0.09	0.34	0.41	0.75	0.11	0.37	0.48		9,581.44
Building Worker Trips	1.08	2.43	51.68	0.24	1.07	0.67	1.74	0.38	0.57	0.95		22,567.62

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Coating 01/01/2010-12/31/2029	6.28	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.11
Architectural Coating	6.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.11
Demolition 01/01/2010-12/31/2029	0.47	3.26	2.65	0.00	2.50	0.14	2.64	0.52	0.13	0.65		908.13
Fugitive Dust	0.00	0.00	0.00	0.00	0.13	0.00	0.13	0.03	0.00	0.03		0.00
Demo Off Road Diesel	0.41	2.81	2.41	0.00	0.00	0.13	0.13	0.00	0.12	0.12		539.29
Demo On Road Diesel	0.05	0.45	0.19	0.00	0.01	0.01	0.02	0.00	0.01	0.02		348.58
Demo Worker Trips	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00		20.27
Mass Grading 01/01/2010-	0.83	5.71	4.31	0.00	27.51	0.23	27.73	5.74	0.21	5.96		1,285.62
Mass Grading Dust	0.00	0.00	0.00	0.00	27.50	0.00	27.50	5.74	0.00	5.74		0.00
Mass Grading Off Road Diesel	0.81	5.58	4.16	0.00	0.00	0.22	0.22	0.00	0.21	0.21		1,153.99
Mass Grading On Road Diesel	0.01	0.12	0.05	0.00	0.00	0.00	0.01	0.00	0.00	0.00		91.08
Mass Grading Worker Trips	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00		40.54
Trenching 01/01/2010-12/31/2029	0.27	1.62	2.10	0.00	0.00	0.08	0.08	0.00	0.07	0.07		479.96
Trenching Off Road Diesel	0.27	1.61	2.03	0.00	0.00	0.08	0.08	0.00	0.07	0.07		447.52
Trenching Worker Trips	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00		32.44

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Mass Grading 1/1/2010 - 12/31/2029 - Default Mass Site Grading/Excavation Description

For Soil Stabilizing Measures, the Replace ground cover in disturbed areas quickly mitigation reduces emissions by:

PM10: 5% PM25: 5%

For Soil Stabilizing Measures, the Water exposed surfaces 2x daily watering mitigation reduces emissions by:

PM10: 55% PM25: 55%

For Soil Stabilizing Measures, the Equipment loading/unloading mitigation reduces emissions by:

PM10: 69% PM25: 69%

For Unpaved Roads Measures, the Reduce speed on unpaved roads to less than 15 mph mitigation reduces emissions by:

PM10: 44% PM25: 44%

For Unpaved Roads Measures, the Manage haul road dust 2x daily watering mitigation reduces emissions by:

PM10: 55% PM25: 55%

Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: P:\COI-21\Technical Studies\Air\Modeling\construction\RecirculatedConstruction.urb924

Project Name: Recirculated IBC Vision Plan - Construction

Project Location: Orange County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10 Dust</u>	<u>PM10 Exhaust</u>	<u>PM10</u>	<u>PM2.5 Dust</u>	<u>PM2.5 Exhaust</u>	<u>PM2.5</u>	<u>CO2</u>
2010 TOTALS (lbs/day unmitigated)	152.72	710.62	1,793.58	2.56	1,366.97	33.12	1,400.09	287.06	30.07	317.13	271,109.71
2010 TOTALS (lbs/day mitigated)	152.72	710.62	1,793.58	2.56	240.70	33.12	273.82	51.85	30.07	81.92	271,109.71
2011 TOTALS (lbs/day unmitigated)	144.90	648.95	1,674.84	2.56	1,366.97	30.75	1,397.72	287.06	27.87	314.93	271,066.35
2011 TOTALS (lbs/day mitigated)	144.90	648.95	1,674.84	2.56	240.70	30.75	271.45	51.85	27.87	79.72	271,066.35
2012 TOTALS (lbs/day unmitigated)	137.27	589.11	1,561.09	2.56	1,366.97	28.07	1,395.05	287.06	25.40	312.46	271,038.20
2012 TOTALS (lbs/day mitigated)	137.27	589.11	1,561.09	2.56	240.70	28.07	268.78	51.85	25.40	77.25	271,038.20
2013 TOTALS (lbs/day unmitigated)	130.12	532.21	1,452.60	2.56	1,366.97	25.70	1,392.67	287.06	23.20	310.26	271,023.67
2013 TOTALS (lbs/day mitigated)	130.12	532.21	1,452.60	2.56	240.70	25.70	266.40	51.85	23.20	75.05	271,023.67
2014 TOTALS (lbs/day unmitigated)	123.66	478.24	1,355.42	2.56	1,366.97	23.31	1,390.28	287.06	20.98	308.05	271,009.86
2014 TOTALS (lbs/day mitigated)	123.66	478.24	1,355.42	2.56	240.70	23.31	264.01	51.85	20.98	72.84	271,009.86
2015 TOTALS (lbs/day unmitigated)	117.37	426.94	1,263.52	2.56	1,366.97	21.39	1,388.37	287.06	19.22	306.28	270,999.75
2015 TOTALS (lbs/day mitigated)	117.37	426.94	1,263.52	2.56	240.70	21.39	262.10	51.85	19.22	71.07	270,999.75
2016 TOTALS (lbs/day unmitigated)	112.03	384.19	1,183.41	2.56	1,366.97	19.56	1,386.53	287.06	17.53	304.59	270,980.54
2016 TOTALS (lbs/day mitigated)	112.03	384.19	1,183.41	2.56	240.70	19.56	260.26	51.85	17.53	69.38	270,980.54
2017 TOTALS (lbs/day unmitigated)	107.27	347.16	1,107.69	2.56	1,366.97	18.07	1,385.04	287.06	16.16	303.22	270,968.28
2017 TOTALS (lbs/day mitigated)	107.27	347.16	1,107.69	2.56	240.70	18.07	258.77	51.85	16.16	68.01	270,968.28
2018 TOTALS (lbs/day unmitigated)	102.85	314.81	1,037.36	2.56	1,366.97	16.74	1,383.71	287.06	14.93	301.99	270,959.96
2018 TOTALS (lbs/day mitigated)	102.85	314.81	1,037.36	2.56	240.70	16.74	257.44	51.85	14.93	66.78	270,959.96

2019 TOTALS (lbs/day unmitigated)	98.88	286.23	972.25	2.56	1,366.97	15.49	1,382.47	287.06	13.79	300.85	270,954.99
2019 TOTALS (lbs/day mitigated)	98.88	286.23	972.25	2.56	240.70	15.49	256.20	51.85	13.79	65.64	270,954.99
2020 TOTALS (lbs/day unmitigated)	95.10	261.36	911.74	2.56	1,366.97	14.74	1,381.71	287.06	13.10	300.16	270,950.54
2020 TOTALS (lbs/day mitigated)	95.10	261.36	911.74	2.56	240.70	14.74	255.44	51.85	13.10	64.95	270,950.54
2021 TOTALS (lbs/day unmitigated)	85.66	210.51	696.35	2.56	1,366.97	13.52	1,380.49	287.06	11.97	299.03	270,920.26
2021 TOTALS (lbs/day mitigated)	85.66	210.51	696.35	2.56	240.70	13.52	254.23	51.85	11.97	63.82	270,920.26
2022 TOTALS (lbs/day unmitigated)	85.66	210.51	696.35	2.56	1,366.97	13.52	1,380.49	287.06	11.97	299.03	270,920.26
2022 TOTALS (lbs/day mitigated)	85.66	210.51	696.35	2.56	240.70	13.52	254.23	51.85	11.97	63.82	270,920.26
2023 TOTALS (lbs/day unmitigated)	85.66	210.51	696.35	2.56	1,366.97	13.52	1,380.49	287.06	11.97	299.03	270,920.26
2023 TOTALS (lbs/day mitigated)	85.66	210.51	696.35	2.56	240.70	13.52	254.23	51.85	11.97	63.82	270,920.26
2024 TOTALS (lbs/day unmitigated)	85.66	210.51	696.35	2.56	1,366.97	13.52	1,380.49	287.06	11.97	299.03	270,920.26
2024 TOTALS (lbs/day mitigated)	85.66	210.51	696.35	2.56	240.70	13.52	254.23	51.85	11.97	63.82	270,920.26
2025 TOTALS (lbs/day unmitigated)	85.66	210.51	696.35	2.56	1,366.97	13.52	1,380.49	287.06	11.97	299.03	270,920.26
2025 TOTALS (lbs/day mitigated)	85.66	210.51	696.35	2.56	240.70	13.52	254.23	51.85	11.97	63.82	270,920.26
2026 TOTALS (lbs/day unmitigated)	80.96	191.35	583.27	2.56	1,366.97	13.05	1,380.02	287.06	11.54	298.60	270,907.41
2026 TOTALS (lbs/day mitigated)	80.96	191.35	583.27	2.56	240.70	13.05	253.75	51.85	11.54	63.39	270,907.41
2027 TOTALS (lbs/day unmitigated)	80.96	191.35	583.27	2.56	1,366.97	13.05	1,380.02	287.06	11.54	298.60	270,907.41
2027 TOTALS (lbs/day mitigated)	80.96	191.35	583.27	2.56	240.70	13.05	253.75	51.85	11.54	63.39	270,907.41
2028 TOTALS (lbs/day unmitigated)	80.96	191.35	583.27	2.56	1,366.97	13.05	1,380.02	287.06	11.54	298.60	270,907.41
2028 TOTALS (lbs/day mitigated)	80.96	191.35	583.27	2.56	240.70	13.05	253.75	51.85	11.54	63.39	270,907.41
2029 TOTALS (lbs/day unmitigated)	80.96	191.35	583.27	2.56	1,366.97	13.05	1,380.02	287.06	11.54	298.60	270,907.41
2029 TOTALS (lbs/day mitigated)	80.96	191.35	583.27	2.56	240.70	13.05	253.75	51.85	11.54	63.39	270,907.41

Phase Assumptions

Phase: Demolition 1/1/2010 - 12/31/2029 - Default Demolition Description

Building Volume Total (cubic feet): 1.198854E+07

Building Volume Daily (cubic feet): 45375

On Road Truck Travel (VMT): 630.21

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Off-Road Equipment:

3 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day

2 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 8 hours per day

Phase: Mass Grading 1/1/2010 - 12/31/2029 - Default Mass Site Grading/Excavation Description

Total Acres Disturbed: 140

Maximum Daily Acreage Disturbed: 35

Fugitive Dust Level of Detail: Default

38.2 lbs per acre-day

On Road Truck Travel (VMT): 164.67

Off-Road Equipment:

1 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day

1 Graders (174 hp) operating at a 0.61 load factor for 8 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 8 hours per day

3 Scrapers (313 hp) operating at a 0.72 load factor for 8 hours per day

3 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Trenching 1/1/2010 - 12/31/2029 - Default Trenching Description

Off-Road Equipment:

4 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day

2 Other General Industrial Equipment (238 hp) operating at a 0.51 load factor for 8 hours per day

2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 0 hours per day

Phase: Paving 1/1/2010 - 12/31/2029 - Default Paving Description

Acres to be Paved: 348.94

Off-Road Equipment:

1 Pavers (100 hp) operating at a 0.62 load factor for 8 hours per day

2 Paving Equipment (104 hp) operating at a 0.53 load factor for 8 hours per day

2 Rollers (95 hp) operating at a 0.56 load factor for 6 hours per day

Phase: Building Construction 1/1/2010 - 12/31/2029 - Default Building Construction Description

Off-Road Equipment:

1 Cranes (399 hp) operating at a 0.43 load factor for 7 hours per day

3 Forklifts (145 hp) operating at a 0.3 load factor for 8 hours per day

1 Generator Sets (49 hp) operating at a 0.74 load factor for 8 hours per day

3 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

1 Welders (45 hp) operating at a 0.45 load factor for 8 hours per day

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Phase: Architectural Coating 1/1/2010 - 12/31/2029 - Default Architectural Coating Description

Rule: Residential Interior Coatings begins 1/1/2005 ends 6/30/2008 specifies a VOC of 100

Rule: Residential Interior Coatings begins 7/1/2008 ends 12/31/2040 specifies a VOC of 50

Rule: Residential Exterior Coatings begins 1/1/2005 ends 6/30/2008 specifies a VOC of 250

Rule: Residential Exterior Coatings begins 7/1/2008 ends 12/31/2040 specifies a VOC of 100

Rule: Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Construction Mitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Summer Pounds Per Day, Mitigated

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10 Dust</u>	<u>PM10 Exhaust</u>	<u>PM10</u>	<u>PM2.5 Dust</u>	<u>PM2.5 Exhaust</u>	<u>PM2.5</u>	<u>CO2</u>
Time Slice 1/1/2010-12/31/2010	<u>152.72</u>	<u>710.62</u>	<u>1,793.58</u>	<u>2.56</u>	<u>240.70</u>	<u>33.12</u>	<u>273.82</u>	<u>51.85</u>	<u>30.07</u>	<u>81.92</u>	<u>271,109.71</u>
Asphalt 01/01/2010-12/31/2029	3.47	19.97	11.97	0.00	0.01	1.71	1.72	0.00	1.58	1.58	1,676.13
Paving Off-Gas	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	3.20	19.17	10.47	0.00	0.00	1.68	1.68	0.00	1.55	1.55	1,418.81
Paving On Road Diesel	0.05	0.73	0.27	0.00	0.00	0.03	0.03	0.00	0.03	0.03	101.76
Paving Worker Trips	0.04	0.07	1.23	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.56
Building 01/01/2010-12/31/2029	78.30	488.72	1,676.77	2.52	10.75	21.79	32.54	3.82	19.65	23.47	248,813.14
Building Off Road Diesel	4.08	23.31	14.31	0.00	0.00	1.67	1.67	0.00	1.54	1.54	2,259.28
Building Vendor Trips	32.01	385.49	292.47	0.70	2.58	15.62	18.19	0.87	14.32	15.19	73,382.76
Building Worker Trips	42.22	79.93	1,369.99	1.81	8.17	4.50	12.68	2.95	3.79	6.74	173,171.11
Coating 01/01/2010-12/31/2029	48.15	0.06	1.04	0.00	0.01	0.00	0.01	0.00	0.00	0.01	131.28
Architectural Coating	48.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.03	0.06	1.04	0.00	0.01	0.00	0.01	0.00	0.00	0.01	131.28
Demolition 01/01/2010-12/31/2029	6.99	65.69	34.48	0.03	19.15	2.99	22.14	4.00	2.75	6.74	6,959.09
Fugitive Dust	0.00	0.00	0.00	0.00	19.06	0.00	19.06	3.96	0.00	3.96	0.00
Demo Off Road Diesel	5.54	46.44	26.23	0.00	0.00	2.22	2.22	0.00	2.05	2.05	4,132.45
Demo On Road Diesel	1.41	19.18	7.02	0.02	0.09	0.76	0.85	0.03	0.70	0.73	2,671.08
Demo Worker Trips	0.04	0.07	1.23	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.56
Mass Grading 01/01/2010-	11.64	100.69	50.91	0.01	210.77	4.87	215.64	44.02	4.48	48.50	9,851.90
Mass Grading Dust	0.00	0.00	0.00	0.00	210.73	0.00	210.73	44.01	0.00	44.01	0.00
Mass Grading Off Road Diesel	11.19	95.53	46.62	0.00	0.00	4.66	4.66	0.00	4.29	4.29	8,842.87
Mass Grading On Road Diesel	0.37	5.01	1.84	0.01	0.02	0.20	0.22	0.01	0.18	0.19	697.93
Mass Grading Worker Trips	0.08	0.14	2.46	0.00	0.01	0.01	0.02	0.01	0.01	0.01	311.11
Trenching 01/01/2010-12/31/2029	4.18	35.49	18.40	0.00	0.01	1.76	1.77	0.00	1.62	1.62	3,678.17

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Trenching Off Road Diesel	4.12	35.38	16.43	0.00	0.00	1.75	1.75	0.00	1.61	1.61	3,429.28
Trenching Worker Trips	0.06	0.11	1.97	0.00	0.01	0.01	0.02	0.00	0.01	0.01	248.89
Time Slice 1/3/2011-12/30/2011	<u>144.90</u>	<u>648.95</u>	<u>1,674.84</u>	<u>2.56</u>	<u>240.70</u>	<u>30.75</u>	<u>271.45</u>	<u>51.85</u>	<u>27.87</u>	<u>79.72</u>	<u>271,066.35</u>
Asphalt 01/01/2010-12/31/2029	3.28	18.97	11.73	0.00	0.01	1.65	1.66	0.00	1.52	1.52	1,676.09
Paving Off-Gas	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	3.02	18.25	10.34	0.00	0.00	1.62	1.62	0.00	1.49	1.49	1,418.81
Paving On Road Diesel	0.05	0.66	0.24	0.00	0.00	0.03	0.03	0.00	0.02	0.02	101.76
Paving Worker Trips	0.03	0.07	1.15	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.52
Building 01/01/2010-12/31/2029	72.01	441.67	1,563.42	2.52	10.75	20.21	30.96	3.82	18.18	22.01	248,770.03
Building Off Road Diesel	3.77	21.85	13.95	0.00	0.00	1.57	1.57	0.00	1.45	1.45	2,259.28
Building Vendor Trips	29.53	346.62	272.23	0.70	2.58	13.93	16.50	0.87	12.76	13.63	73,381.54
Building Worker Trips	38.70	73.20	1,277.24	1.81	8.17	4.71	12.89	2.95	3.97	6.92	173,129.21
Coating 01/01/2010-12/31/2029	48.15	0.06	0.97	0.00	0.01	0.00	0.01	0.00	0.00	0.01	131.24
Architectural Coating	48.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.03	0.06	0.97	0.00	0.01	0.00	0.01	0.00	0.00	0.01	131.24
Demolition 01/01/2010-12/31/2029	6.62	61.00	32.54	0.03	19.15	2.77	21.93	4.00	2.55	6.55	6,959.05
Fugitive Dust	0.00	0.00	0.00	0.00	19.06	0.00	19.06	3.96	0.00	3.96	0.00
Demo Off Road Diesel	5.29	43.71	25.06	0.00	0.00	2.10	2.10	0.00	1.93	1.93	4,132.45
Demo On Road Diesel	1.30	17.22	6.33	0.02	0.09	0.67	0.76	0.03	0.62	0.64	2,671.08
Demo Worker Trips	0.03	0.07	1.15	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.52
Mass Grading 01/01/2010-	10.89	94.31	48.19	0.01	210.77	4.46	215.23	44.02	4.10	48.12	9,851.83
Mass Grading Dust	0.00	0.00	0.00	0.00	210.73	0.00	210.73	44.01	0.00	44.01	0.00
Mass Grading Off Road Diesel	10.48	89.68	44.24	0.00	0.00	4.27	4.27	0.00	3.93	3.93	8,842.87
Mass Grading On Road Diesel	0.34	4.50	1.65	0.01	0.02	0.17	0.20	0.01	0.16	0.17	697.93
Mass Grading Worker Trips	0.07	0.13	2.29	0.00	0.01	0.01	0.02	0.01	0.01	0.01	311.04
Trenching 01/01/2010-12/31/2029	3.95	32.95	17.99	0.00	0.01	1.65	1.66	0.00	1.52	1.52	3,678.11
Trenching Off Road Diesel	3.90	32.84	16.15	0.00	0.00	1.64	1.64	0.00	1.51	1.51	3,429.28
Trenching Worker Trips	0.06	0.11	1.84	0.00	0.01	0.01	0.02	0.00	0.01	0.01	248.83
Time Slice 1/2/2012-12/31/2012	<u>137.27</u>	<u>589.11</u>	<u>1,561.09</u>	<u>2.56</u>	<u>240.70</u>	<u>28.07</u>	<u>268.78</u>	<u>51.85</u>	<u>25.40</u>	<u>77.25</u>	<u>271,038.20</u>
Asphalt 01/01/2010-12/31/2029	3.12	17.98	11.52	0.00	0.01	1.56	1.57	0.00	1.43	1.44	1,676.07
Paving Off-Gas	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.86	17.34	10.24	0.00	0.00	1.53	1.53	0.00	1.41	1.41	1,418.81
Paving On Road Diesel	0.05	0.58	0.22	0.00	0.00	0.02	0.03	0.00	0.02	0.02	101.76
Paving Worker Trips	0.03	0.06	1.07	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.49
Building 01/01/2010-12/31/2029	65.83	395.92	1,454.42	2.52	10.75	18.43	29.18	3.82	16.53	20.35	248,742.05
Building Off Road Diesel	3.48	20.42	13.62	0.00	0.00	1.42	1.42	0.00	1.31	1.31	2,259.28

Building Vendor Trips	27.07	308.64	252.14	0.70	2.58	12.28	14.86	0.87	11.25	12.12	73,382.76
Building Worker Trips	35.28	66.86	1,188.65	1.81	8.17	4.73	12.90	2.95	3.97	6.92	173,100.01
Coating 01/01/2010-12/31/2029	48.15	0.05	0.90	0.00	0.01	0.00	0.01	0.00	0.00	0.01	131.22
Architectural Coating	48.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.03	0.05	0.90	0.00	0.01	0.00	0.01	0.00	0.00	0.01	131.22
Demolition 01/01/2010-12/31/2029	6.21	56.52	30.82	0.03	19.15	2.51	21.66	4.00	2.31	6.31	6,959.02
Fugitive Dust	0.00	0.00	0.00	0.00	19.06	0.00	19.06	3.96	0.00	3.96	0.00
Demo Off Road Diesel	4.99	41.17	24.10	0.00	0.00	1.92	1.92	0.00	1.77	1.77	4,132.45
Demo On Road Diesel	1.18	15.30	5.66	0.02	0.09	0.58	0.67	0.03	0.54	0.57	2,671.08
Demo Worker Trips	0.03	0.06	1.07	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.49
Mass Grading 01/01/2010-	10.31	88.05	45.70	0.01	210.77	4.10	214.87	44.02	3.77	47.79	9,851.78
Mass Grading Dust	0.00	0.00	0.00	0.00	210.73	0.00	210.73	44.01	0.00	44.01	0.00
Mass Grading Off Road Diesel	9.94	83.94	42.08	0.00	0.00	3.94	3.94	0.00	3.62	3.62	8,842.87
Mass Grading On Road Diesel	0.31	4.00	1.48	0.01	0.02	0.15	0.18	0.01	0.14	0.15	697.93
Mass Grading Worker Trips	0.06	0.12	2.14	0.00	0.01	0.01	0.02	0.01	0.01	0.01	310.98
Trenching 01/01/2010-12/31/2029	3.66	30.58	17.73	0.00	0.01	1.47	1.48	0.00	1.35	1.36	3,678.06
Trenching Off Road Diesel	3.61	30.48	16.02	0.00	0.00	1.46	1.46	0.00	1.35	1.35	3,429.28
Trenching Worker Trips	0.05	0.10	1.71	0.00	0.01	0.01	0.02	0.00	0.01	0.01	248.79
Time Slice 1/1/2013-12/31/2013	130.12	532.21	1,452.60	2.56	240.70	25.70	266.40	51.85	23.20	75.05	271,023.67
Asphalt 01/01/2010-12/31/2029	2.93	17.03	11.34	0.00	0.01	1.46	1.47	0.00	1.34	1.34	1,676.05
Paving Off-Gas	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.69	16.46	10.15	0.00	0.00	1.43	1.43	0.00	1.32	1.32	1,418.81
Paving On Road Diesel	0.04	0.51	0.19	0.00	0.00	0.02	0.02	0.00	0.02	0.02	101.76
Paving Worker Trips	0.03	0.05	0.99	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.48
Building 01/01/2010-12/31/2029	59.79	352.31	1,350.41	2.52	10.75	16.80	27.55	3.82	15.01	18.84	248,727.62
Building Off Road Diesel	3.19	19.04	13.34	0.00	0.00	1.26	1.26	0.00	1.16	1.16	2,259.28
Building Vendor Trips	24.63	272.13	232.46	0.70	2.58	10.79	13.37	0.87	9.88	10.75	73,385.93
Building Worker Trips	31.97	61.15	1,104.61	1.81	8.17	4.74	12.92	2.95	3.97	6.92	173,082.41
Coating 01/01/2010-12/31/2029	48.14	0.05	0.84	0.00	0.01	0.00	0.01	0.00	0.00	0.01	131.21
Architectural Coating	48.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.02	0.05	0.84	0.00	0.01	0.00	0.01	0.00	0.00	0.01	131.21
Demolition 01/01/2010-12/31/2029	5.92	52.25	29.13	0.03	19.15	2.31	21.46	4.00	2.12	6.12	6,959.01
Fugitive Dust	0.00	0.00	0.00	0.00	19.06	0.00	19.06	3.96	0.00	3.96	0.00
Demo Off Road Diesel	4.82	38.74	23.13	0.00	0.00	1.80	1.80	0.00	1.65	1.65	4,132.45
Demo On Road Diesel	1.07	13.45	5.01	0.02	0.09	0.50	0.59	0.03	0.46	0.49	2,671.08
Demo Worker Trips	0.03	0.05	0.99	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.48
Mass Grading 01/01/2010-	9.87	82.24	43.37	0.01	210.77	3.77	214.54	44.02	3.47	47.49	9,851.74

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Paving Off Road Diesel	2.38	14.65	9.98	0.00	0.00	1.25	1.25	0.00	1.15	1.15	1,418.81
Paving On Road Diesel	0.03	0.39	0.15	0.00	0.00	0.01	0.02	0.00	0.01	0.01	101.76
Paving Worker Trips	0.02	0.05	0.86	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.45
Building 01/01/2010-12/31/2029	49.72	275.18	1,168.89	2.52	10.75	14.01	24.76	3.82	12.43	16.26	248,703.88
Building Off Road Diesel	2.69	16.17	12.80	0.00	0.00	1.03	1.03	0.00	0.94	0.94	2,259.28
Building Vendor Trips	20.14	207.39	197.42	0.70	2.58	8.23	10.81	0.87	7.52	8.39	73,391.70
Building Worker Trips	26.89	51.62	958.67	1.81	8.17	4.76	12.93	2.95	3.97	6.92	173,052.90
Coating 01/01/2010-12/31/2029	48.14	0.04	0.73	0.00	0.01	0.00	0.01	0.00	0.00	0.01	131.19
Architectural Coating	48.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.02	0.04	0.73	0.00	0.01	0.00	0.01	0.00	0.00	0.01	131.19
Demolition 01/01/2010-12/31/2029	5.16	43.55	26.17	0.03	19.15	1.87	21.02	4.00	1.72	5.72	6,958.98
Fugitive Dust	0.00	0.00	0.00	0.00	19.06	0.00	19.06	3.96	0.00	3.96	0.00
Demo Off Road Diesel	4.27	33.33	21.45	0.00	0.00	1.50	1.50	0.00	1.38	1.38	4,132.45
Demo On Road Diesel	0.87	10.18	3.86	0.02	0.09	0.37	0.46	0.03	0.34	0.37	2,671.08
Demo Worker Trips	0.02	0.05	0.86	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.45
Mass Grading 01/01/2010-	8.73	69.71	39.67	0.01	210.77	3.13	213.90	44.02	2.88	46.90	9,851.69
Mass Grading Dust	0.00	0.00	0.00	0.00	210.73	0.00	210.73	44.01	0.00	44.01	0.00
Mass Grading Off Road Diesel	8.46	66.95	36.93	0.00	0.00	3.02	3.02	0.00	2.78	2.78	8,842.87
Mass Grading On Road Diesel	0.23	2.66	1.01	0.01	0.02	0.10	0.12	0.01	0.09	0.10	697.93
Mass Grading Worker Trips	0.05	0.09	1.72	0.00	0.01	0.01	0.02	0.01	0.01	0.01	310.90
Trenching 01/01/2010-12/31/2029	3.00	23.37	17.07	0.00	0.01	1.12	1.13	0.00	1.03	1.03	3,678.00
Trenching Off Road Diesel	2.97	23.30	15.70	0.00	0.00	1.11	1.11	0.00	1.02	1.02	3,429.28
Trenching Worker Trips	0.04	0.07	1.38	0.00	0.01	0.01	0.02	0.00	0.01	0.01	248.72
Time Slice 1/1/2016-12/30/2016	<u>112.03</u>	<u>384.19</u>	<u>1,183.41</u>	<u>2.56</u>	<u>240.70</u>	<u>19.56</u>	<u>260.26</u>	<u>51.85</u>	<u>17.53</u>	<u>69.38</u>	<u>270,980.54</u>
Asphalt 01/01/2010-12/31/2029	2.45	14.10	10.84	0.00	0.01	1.16	1.17	0.00	1.07	1.07	1,676.01
Paving Off-Gas	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.22	13.72	9.91	0.00	0.00	1.14	1.14	0.00	1.05	1.05	1,418.81
Paving On Road Diesel	0.03	0.34	0.13	0.00	0.00	0.01	0.02	0.00	0.01	0.01	101.76
Paving Worker Trips	0.02	0.04	0.80	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.43
Building 01/01/2010-12/31/2029	45.58	245.66	1,091.81	2.52	10.75	12.91	23.66	3.82	11.41	15.24	248,684.78
Building Off Road Diesel	2.47	14.84	12.61	0.00	0.00	0.88	0.88	0.00	0.81	0.81	2,259.28
Building Vendor Trips	18.39	183.18	183.57	0.70	2.58	7.27	9.85	0.87	6.63	7.51	73,393.63
Building Worker Trips	24.72	47.64	895.63	1.81	8.17	4.76	12.93	2.95	3.97	6.92	173,031.87
Coating 01/01/2010-12/31/2029	48.14	0.04	0.68	0.00	0.01	0.00	0.01	0.00	0.00	0.01	131.17
Architectural Coating	48.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.02	0.04	0.68	0.00	0.01	0.00	0.01	0.00	0.00	0.01	131.17
Demolition 01/01/2010-12/31/2029	4.83	39.71	24.95	0.03	19.15	1.72	20.87	4.00	1.58	5.58	6,958.96

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Fugitive Dust	0.00	0.00	0.00	0.00	19.06	0.00	19.06	3.96	0.00	3.96	0.00
Demo Off Road Diesel	4.02	30.70	20.71	0.00	0.00	1.40	1.40	0.00	1.29	1.29	4,132.45
Demo On Road Diesel	0.79	8.97	3.44	0.02	0.09	0.32	0.41	0.03	0.29	0.32	2,671.08
Demo Worker Trips	0.02	0.04	0.80	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.43
Mass Grading 01/01/2010-	8.22	63.92	38.19	0.01	210.77	2.83	213.60	44.02	2.60	46.63	9,851.65
Mass Grading Dust	0.00	0.00	0.00	0.00	210.73	0.00	210.73	44.01	0.00	44.01	0.00
Mass Grading Off Road Diesel	7.96	61.49	35.68	0.00	0.00	2.74	2.74	0.00	2.52	2.52	8,842.87
Mass Grading On Road Diesel	0.21	2.34	0.90	0.01	0.02	0.08	0.11	0.01	0.08	0.08	697.93
Mass Grading Worker Trips	0.04	0.09	1.61	0.00	0.01	0.01	0.02	0.01	0.01	0.01	310.86
Trenching 01/01/2010-12/31/2029	2.82	20.76	16.94	0.00	0.01	0.94	0.95	0.00	0.86	0.87	3,677.97
Trenching Off Road Diesel	2.79	20.70	15.65	0.00	0.00	0.93	0.93	0.00	0.86	0.86	3,429.28
Trenching Worker Trips	0.04	0.07	1.29	0.00	0.01	0.01	0.02	0.00	0.01	0.01	248.69
Time Slice 1/2/2017-12/29/2017	<u>107.27</u>	<u>347.16</u>	<u>1,107.69</u>	<u>2.56</u>	<u>240.70</u>	<u>18.07</u>	<u>258.77</u>	<u>51.85</u>	<u>16.16</u>	<u>68.01</u>	<u>270,968.28</u>
Asphalt 01/01/2010-12/31/2029	2.31	13.20	10.70	0.00	0.01	1.07	1.08	0.00	0.98	0.99	1,675.99
Paving Off-Gas	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.09	12.86	9.83	0.00	0.00	1.05	1.05	0.00	0.97	0.97	1,418.81
Paving On Road Diesel	0.03	0.30	0.12	0.00	0.00	0.01	0.01	0.00	0.01	0.01	101.76
Paving Worker Trips	0.02	0.04	0.75	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.42
Building 01/01/2010-12/31/2029	41.85	220.96	1,018.90	2.52	10.75	12.07	22.82	3.82	10.64	14.47	248,672.61
Building Off Road Diesel	2.25	13.62	12.45	0.00	0.00	0.77	0.77	0.00	0.71	0.71	2,259.28
Building Vendor Trips	16.96	163.65	171.50	0.70	2.58	6.54	9.11	0.87	5.96	6.83	73,396.28
Building Worker Trips	22.64	43.69	834.96	1.81	8.17	4.76	12.93	2.95	3.97	6.92	173,017.06
Coating 01/01/2010-12/31/2029	48.14	0.03	0.63	0.00	0.01	0.00	0.01	0.00	0.00	0.01	131.16
Architectural Coating	48.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.02	0.03	0.63	0.00	0.01	0.00	0.01	0.00	0.00	0.01	131.16
Demolition 01/01/2010-12/31/2029	4.58	36.15	23.89	0.03	19.15	1.55	20.71	4.00	1.43	5.43	6,958.95
Fugitive Dust	0.00	0.00	0.00	0.00	19.06	0.00	19.06	3.96	0.00	3.96	0.00
Demo Off Road Diesel	3.84	28.13	20.04	0.00	0.00	1.27	1.27	0.00	1.17	1.17	4,132.45
Demo On Road Diesel	0.72	7.99	3.10	0.02	0.09	0.28	0.37	0.03	0.26	0.28	2,671.08
Demo Worker Trips	0.02	0.04	0.75	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.42
Mass Grading 01/01/2010-	7.74	58.46	36.76	0.01	210.77	2.55	213.32	44.02	2.34	46.37	9,851.63
Mass Grading Dust	0.00	0.00	0.00	0.00	210.73	0.00	210.73	44.01	0.00	44.01	0.00
Mass Grading Off Road Diesel	7.51	56.29	34.45	0.00	0.00	2.47	2.47	0.00	2.27	2.27	8,842.87
Mass Grading On Road Diesel	0.19	2.09	0.81	0.01	0.02	0.07	0.10	0.01	0.07	0.07	697.93
Mass Grading Worker Trips	0.04	0.08	1.50	0.00	0.01	0.01	0.02	0.01	0.01	0.01	310.83
Trenching 01/01/2010-12/31/2029	2.64	18.35	16.81	0.00	0.01	0.83	0.84	0.00	0.76	0.77	3,677.94
Trenching Off Road Diesel	2.61	18.29	15.61	0.00	0.00	0.82	0.82	0.00	0.76	0.76	3,429.28

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Trenching Worker Trips	0.03	0.06	1.20	0.00	0.01	0.01	0.02	0.00	0.01	0.01	248.67
Time Slice 1/1/2018-12/31/2018	<u>102.85</u>	<u>314.81</u>	<u>1,037.36</u>	<u>2.56</u>	<u>240.70</u>	<u>16.74</u>	<u>257.44</u>	<u>51.85</u>	<u>14.93</u>	<u>66.78</u>	<u>270,959.96</u>
Asphalt 01/01/2010-12/31/2029	2.19	12.33	10.60	0.00	0.01	0.98	0.99	0.00	0.90	0.90	1,675.98
Paving Off-Gas	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	1.97	12.02	9.79	0.00	0.00	0.96	0.96	0.00	0.89	0.89	1,418.81
Paving On Road Diesel	0.03	0.27	0.11	0.00	0.00	0.01	0.01	0.00	0.01	0.01	101.76
Paving Worker Trips	0.02	0.04	0.70	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.41
Building 01/01/2010-12/31/2029	38.57	200.05	950.88	2.52	10.75	11.33	22.08	3.82	9.96	13.78	248,664.35
Building Off Road Diesel	2.03	12.45	12.26	0.00	0.00	0.67	0.67	0.00	0.62	0.62	2,259.28
Building Vendor Trips	15.70	147.23	160.69	0.70	2.58	5.90	8.48	0.87	5.37	6.24	73,399.13
Building Worker Trips	20.84	40.37	777.92	1.81	8.17	4.76	12.93	2.95	3.97	6.92	173,005.95
Coating 01/01/2010-12/31/2029	48.13	0.03	0.59	0.00	0.01	0.00	0.01	0.00	0.00	0.01	131.15
Architectural Coating	48.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.02	0.03	0.59	0.00	0.01	0.00	0.01	0.00	0.00	0.01	131.15
Demolition 01/01/2010-12/31/2029	4.28	32.93	22.95	0.03	19.15	1.40	20.55	4.00	1.28	5.28	6,958.94
Fugitive Dust	0.00	0.00	0.00	0.00	19.06	0.00	19.06	3.96	0.00	3.96	0.00
Demo Off Road Diesel	3.59	25.73	19.44	0.00	0.00	1.15	1.15	0.00	1.06	1.06	4,132.45
Demo On Road Diesel	0.67	7.17	2.81	0.02	0.09	0.24	0.33	0.03	0.22	0.25	2,671.08
Demo Worker Trips	0.02	0.04	0.70	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.41
Mass Grading 01/01/2010-	7.21	53.35	35.65	0.01	210.77	2.27	213.04	44.02	2.09	46.11	9,851.61
Mass Grading Dust	0.00	0.00	0.00	0.00	210.73	0.00	210.73	44.01	0.00	44.01	0.00
Mass Grading Off Road Diesel	7.00	51.40	33.52	0.00	0.00	2.20	2.20	0.00	2.02	2.02	8,842.87
Mass Grading On Road Diesel	0.18	1.87	0.73	0.01	0.02	0.06	0.09	0.01	0.06	0.07	697.93
Mass Grading Worker Trips	0.04	0.07	1.40	0.00	0.01	0.01	0.02	0.01	0.01	0.01	310.81
Trenching 01/01/2010-12/31/2029	2.46	16.12	16.69	0.00	0.01	0.76	0.77	0.00	0.70	0.70	3,677.93
Trenching Off Road Diesel	2.43	16.06	15.57	0.00	0.00	0.75	0.75	0.00	0.69	0.69	3,429.28
Trenching Worker Trips	0.03	0.06	1.12	0.00	0.01	0.01	0.02	0.00	0.01	0.01	248.65
Time Slice 1/1/2019-12/31/2019	<u>98.88</u>	<u>286.23</u>	<u>972.25</u>	<u>2.56</u>	<u>240.70</u>	<u>15.49</u>	<u>256.20</u>	<u>51.85</u>	<u>13.79</u>	<u>65.64</u>	<u>270,954.99</u>
Asphalt 01/01/2010-12/31/2029	2.05	11.55	10.45	0.00	0.01	0.89	0.90	0.00	0.82	0.82	1,675.98
Paving Off-Gas	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	1.83	11.27	9.70	0.00	0.00	0.88	0.88	0.00	0.81	0.81	1,418.81
Paving On Road Diesel	0.02	0.25	0.10	0.00	0.00	0.01	0.01	0.00	0.01	0.01	101.76
Paving Worker Trips	0.02	0.03	0.65	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.40
Building 01/01/2010-12/31/2029	35.59	181.77	887.95	2.52	10.75	10.70	21.45	3.82	9.38	13.21	248,659.43
Building Off Road Diesel	1.88	11.39	12.14	0.00	0.00	0.57	0.57	0.00	0.52	0.52	2,259.28
Building Vendor Trips	14.61	133.29	150.89	0.70	2.58	5.38	7.95	0.87	4.89	5.76	73,401.96

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Building Worker Trips	19.11	37.09	724.92	1.81	8.17	4.76	12.93	2.95	3.97	6.92	172,998.19
Coating 01/01/2010-12/31/2029	48.13	0.03	0.55	0.00	0.01	0.00	0.01	0.00	0.00	0.01	131.15
Architectural Coating	48.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.01	0.03	0.55	0.00	0.01	0.00	0.01	0.00	0.00	0.01	131.15
Demolition 01/01/2010-12/31/2029	3.98	30.07	22.14	0.03	19.15	1.24	20.40	4.00	1.14	5.14	6,958.93
Fugitive Dust	0.00	0.00	0.00	0.00	19.06	0.00	19.06	3.96	0.00	3.96	0.00
Demo Off Road Diesel	3.34	23.55	18.92	0.00	0.00	1.02	1.02	0.00	0.94	0.94	4,132.45
Demo On Road Diesel	0.62	6.48	2.57	0.02	0.09	0.22	0.31	0.03	0.20	0.23	2,671.08
Demo Worker Trips	0.02	0.03	0.65	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.40
Mass Grading 01/01/2010-	6.85	48.69	34.59	0.01	210.77	2.01	212.78	44.02	1.85	45.87	9,851.59
Mass Grading Dust	0.00	0.00	0.00	0.00	210.73	0.00	210.73	44.01	0.00	44.01	0.00
Mass Grading Off Road Diesel	6.65	46.93	32.62	0.00	0.00	1.94	1.94	0.00	1.79	1.79	8,842.87
Mass Grading On Road Diesel	0.16	1.69	0.67	0.01	0.02	0.06	0.08	0.01	0.05	0.06	697.93
Mass Grading Worker Trips	0.03	0.07	1.30	0.00	0.01	0.01	0.02	0.01	0.01	0.01	310.80
Trenching 01/01/2010-12/31/2029	2.28	14.13	16.57	0.00	0.01	0.65	0.66	0.00	0.60	0.60	3,677.92
Trenching Off Road Diesel	2.25	14.07	15.53	0.00	0.00	0.64	0.64	0.00	0.59	0.59	3,429.28
Trenching Worker Trips	0.03	0.05	1.04	0.00	0.01	0.01	0.02	0.00	0.01	0.01	248.64
Time Slice 1/1/2020-12/31/2020	95.10	261.36	911.74	2.56	240.70	14.74	255.44	51.85	13.10	64.95	270,950.54
Asphalt 01/01/2010-12/31/2029	1.91	10.79	10.35	0.00	0.01	0.83	0.84	0.00	0.77	0.77	1,675.97
Paving Off-Gas	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	1.70	10.53	9.66	0.00	0.00	0.82	0.82	0.00	0.75	0.75	1,418.81
Paving On Road Diesel	0.02	0.22	0.09	0.00	0.00	0.01	0.01	0.00	0.01	0.01	101.76
Paving Worker Trips	0.02	0.03	0.61	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.39
Building 01/01/2010-12/31/2029	32.78	166.27	829.20	2.52	10.75	10.37	21.12	3.82	9.08	12.91	248,655.02
Building Off Road Diesel	1.71	10.50	12.03	0.00	0.00	0.50	0.50	0.00	0.46	0.46	2,259.28
Building Vendor Trips	13.63	121.51	142.06	0.70	2.58	4.92	7.50	0.87	4.47	5.35	73,404.70
Building Worker Trips	17.44	34.26	675.11	1.81	8.17	4.95	13.13	2.95	4.15	7.10	172,991.04
Coating 01/01/2010-12/31/2029	48.13	0.03	0.51	0.00	0.01	0.00	0.01	0.00	0.00	0.01	131.14
Architectural Coating	48.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.01	0.03	0.51	0.00	0.01	0.00	0.01	0.00	0.00	0.01	131.14
Demolition 01/01/2010-12/31/2029	3.76	27.49	21.45	0.03	19.15	1.17	20.32	4.00	1.08	5.07	6,958.92
Fugitive Dust	0.00	0.00	0.00	0.00	19.06	0.00	19.06	3.96	0.00	3.96	0.00
Demo Off Road Diesel	3.17	21.56	18.48	0.00	0.00	0.97	0.97	0.00	0.89	0.89	4,132.45
Demo On Road Diesel	0.58	5.90	2.36	0.02	0.09	0.19	0.28	0.03	0.18	0.21	2,671.08
Demo Worker Trips	0.02	0.03	0.61	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.39
Mass Grading 01/01/2010-	6.41	44.39	33.73	0.01	210.77	1.78	212.55	44.02	1.64	45.66	9,851.58
Mass Grading Dust	0.00	0.00	0.00	0.00	210.73	0.00	210.73	44.01	0.00	44.01	0.00

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Mass Grading Off Road Diesel	6.23	42.79	31.90	0.00	0.00	1.72	1.72	0.00	1.58	1.58	8,842.87
Mass Grading On Road Diesel	0.15	1.54	0.62	0.01	0.02	0.05	0.07	0.01	0.05	0.05	697.93
Mass Grading Worker Trips	0.03	0.06	1.21	0.00	0.01	0.01	0.02	0.01	0.01	0.01	310.79
Trenching 01/01/2010-12/31/2029	2.10	12.40	16.50	0.00	0.01	0.58	0.59	0.00	0.54	0.54	3,677.91
Trenching Off Road Diesel	2.08	12.35	15.53	0.00	0.00	0.58	0.58	0.00	0.53	0.53	3,429.28
Trenching Worker Trips	0.03	0.05	0.97	0.00	0.01	0.01	0.02	0.00	0.01	0.01	248.63

Time Slice 1/1/2021-12/31/2021	<u>85.66</u>	<u>210.51</u>	<u>696.35</u>	<u>2.56</u>	<u>240.70</u>	<u>13.52</u>	<u>254.23</u>	<u>51.85</u>	<u>11.97</u>	<u>63.82</u>	<u>270,920.26</u>
Asphalt 01/01/2010-12/31/2029	1.90	10.71	10.16	0.00	0.01	0.83	0.84	0.00	0.76	0.77	1,675.93
Paving Off-Gas	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	1.70	10.53	9.66	0.00	0.00	0.82	0.82	0.00	0.75	0.75	1,418.81
Paving On Road Diesel	0.02	0.15	0.06	0.00	0.00	0.00	0.01	0.00	0.00	0.01	101.76
Paving Worker Trips	0.01	0.02	0.44	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.36
Building 01/01/2010-12/31/2029	23.56	117.88	615.72	2.51	10.75	9.25	20.00	3.82	8.04	11.86	248,624.97
Building Off Road Diesel	1.71	10.50	12.03	0.00	0.00	0.50	0.50	0.00	0.46	0.46	2,259.28
Building Vendor Trips	10.32	83.50	110.66	0.70	2.58	3.59	6.16	0.87	3.25	4.12	73,414.59
Building Worker Trips	11.53	23.89	493.04	1.81	8.17	5.16	13.34	2.95	4.33	7.28	172,951.10
Coating 01/01/2010-12/31/2029	48.13	0.02	0.37	0.00	0.01	0.00	0.01	0.00	0.00	0.01	131.11
Architectural Coating	48.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.01	0.02	0.37	0.00	0.01	0.00	0.01	0.00	0.00	0.01	131.11
Demolition 01/01/2010-12/31/2029	3.62	25.62	20.62	0.03	19.15	1.10	20.25	4.00	1.01	5.01	6,958.89
Fugitive Dust	0.00	0.00	0.00	0.00	19.06	0.00	19.06	3.96	0.00	3.96	0.00
Demo Off Road Diesel	3.17	21.56	18.48	0.00	0.00	0.97	0.97	0.00	0.89	0.89	4,132.45
Demo On Road Diesel	0.44	4.04	1.70	0.02	0.09	0.12	0.21	0.03	0.11	0.14	2,671.08
Demo Worker Trips	0.01	0.02	0.44	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.36
Mass Grading 01/01/2010-	6.36	43.89	33.23	0.01	210.77	1.76	212.53	44.02	1.62	45.64	9,851.51
Mass Grading Dust	0.00	0.00	0.00	0.00	210.73	0.00	210.73	44.01	0.00	44.01	0.00
Mass Grading Off Road Diesel	6.23	42.79	31.90	0.00	0.00	1.72	1.72	0.00	1.58	1.58	8,842.87
Mass Grading On Road Diesel	0.12	1.06	0.44	0.01	0.02	0.03	0.06	0.01	0.03	0.04	697.93
Mass Grading Worker Trips	0.02	0.04	0.89	0.00	0.01	0.01	0.02	0.01	0.01	0.01	310.72
Trenching 01/01/2010-12/31/2029	2.09	12.38	16.23	0.00	0.01	0.58	0.60	0.00	0.54	0.54	3,677.85
Trenching Off Road Diesel	2.08	12.35	15.53	0.00	0.00	0.58	0.58	0.00	0.53	0.53	3,429.28
Trenching Worker Trips	0.02	0.03	0.71	0.00	0.01	0.01	0.02	0.00	0.01	0.01	248.57

Time Slice 1/3/2022-12/30/2022	<u>85.66</u>	<u>210.51</u>	<u>696.35</u>	<u>2.56</u>	<u>240.70</u>	<u>13.52</u>	<u>254.23</u>	<u>51.85</u>	<u>11.97</u>	<u>63.82</u>	<u>270,920.26</u>
Asphalt 01/01/2010-12/31/2029	1.90	10.71	10.16	0.00	0.01	0.83	0.84	0.00	0.76	0.77	1,675.93
Paving Off-Gas	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	1.70	10.53	9.66	0.00	0.00	0.82	0.82	0.00	0.75	0.75	1,418.81

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Paving On Road Diesel	0.02	0.15	0.06	0.00	0.00	0.00	0.01	0.00	0.00	0.01	101.76
Paving Worker Trips	0.01	0.02	0.44	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.36
Building 01/01/2010-12/31/2029	23.56	117.88	615.72	2.51	10.75	9.25	20.00	3.82	8.04	11.86	248,624.97
Building Off Road Diesel	1.71	10.50	12.03	0.00	0.00	0.50	0.50	0.00	0.46	0.46	2,259.28
Building Vendor Trips	10.32	83.50	110.66	0.70	2.58	3.59	6.16	0.87	3.25	4.12	73,414.59
Building Worker Trips	11.53	23.89	493.04	1.81	8.17	5.16	13.34	2.95	4.33	7.28	172,951.10
Coating 01/01/2010-12/31/2029	48.13	0.02	0.37	0.00	0.01	0.00	0.01	0.00	0.00	0.01	131.11
Architectural Coating	48.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.01	0.02	0.37	0.00	0.01	0.00	0.01	0.00	0.00	0.01	131.11
Demolition 01/01/2010-12/31/2029	3.62	25.62	20.62	0.03	19.15	1.10	20.25	4.00	1.01	5.01	6,958.89
Fugitive Dust	0.00	0.00	0.00	0.00	19.06	0.00	19.06	3.96	0.00	3.96	0.00
Demo Off Road Diesel	3.17	21.56	18.48	0.00	0.00	0.97	0.97	0.00	0.89	0.89	4,132.45
Demo On Road Diesel	0.44	4.04	1.70	0.02	0.09	0.12	0.21	0.03	0.11	0.14	2,671.08
Demo Worker Trips	0.01	0.02	0.44	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.36
Mass Grading 01/01/2010-	6.36	43.89	33.23	0.01	210.77	1.76	212.53	44.02	1.62	45.64	9,851.51
Mass Grading Dust	0.00	0.00	0.00	0.00	210.73	0.00	210.73	44.01	0.00	44.01	0.00
Mass Grading Off Road Diesel	6.23	42.79	31.90	0.00	0.00	1.72	1.72	0.00	1.58	1.58	8,842.87
Mass Grading On Road Diesel	0.12	1.06	0.44	0.01	0.02	0.03	0.06	0.01	0.03	0.04	697.93
Mass Grading Worker Trips	0.02	0.04	0.89	0.00	0.01	0.01	0.02	0.01	0.01	0.01	310.72
Trenching 01/01/2010-12/31/2029	2.09	12.38	16.23	0.00	0.01	0.58	0.60	0.00	0.54	0.54	3,677.85
Trenching Off Road Diesel	2.08	12.35	15.53	0.00	0.00	0.58	0.58	0.00	0.53	0.53	3,429.28
Trenching Worker Trips	0.02	0.03	0.71	0.00	0.01	0.01	0.02	0.00	0.01	0.01	248.57
Time Slice 1/2/2023-12/29/2023	85.66	210.51	696.35	2.56	240.70	13.52	254.23	51.85	11.97	63.82	270,920.26
Asphalt 01/01/2010-12/31/2029	1.90	10.71	10.16	0.00	0.01	0.83	0.84	0.00	0.76	0.77	1,675.93
Paving Off-Gas	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	1.70	10.53	9.66	0.00	0.00	0.82	0.82	0.00	0.75	0.75	1,418.81
Paving On Road Diesel	0.02	0.15	0.06	0.00	0.00	0.00	0.01	0.00	0.00	0.01	101.76
Paving Worker Trips	0.01	0.02	0.44	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.36
Building 01/01/2010-12/31/2029	23.56	117.88	615.72	2.51	10.75	9.25	20.00	3.82	8.04	11.86	248,624.97
Building Off Road Diesel	1.71	10.50	12.03	0.00	0.00	0.50	0.50	0.00	0.46	0.46	2,259.28
Building Vendor Trips	10.32	83.50	110.66	0.70	2.58	3.59	6.16	0.87	3.25	4.12	73,414.59
Building Worker Trips	11.53	23.89	493.04	1.81	8.17	5.16	13.34	2.95	4.33	7.28	172,951.10
Coating 01/01/2010-12/31/2029	48.13	0.02	0.37	0.00	0.01	0.00	0.01	0.00	0.00	0.01	131.11
Architectural Coating	48.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.01	0.02	0.37	0.00	0.01	0.00	0.01	0.00	0.00	0.01	131.11
Demolition 01/01/2010-12/31/2029	3.62	25.62	20.62	0.03	19.15	1.10	20.25	4.00	1.01	5.01	6,958.89
Fugitive Dust	0.00	0.00	0.00	0.00	19.06	0.00	19.06	3.96	0.00	3.96	0.00

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Demo Off Road Diesel	3.17	21.56	18.48	0.00	0.00	0.97	0.97	0.00	0.89	0.89	4,132.45
Demo On Road Diesel	0.44	4.04	1.70	0.02	0.09	0.12	0.21	0.03	0.11	0.14	2,671.08
Demo Worker Trips	0.01	0.02	0.44	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.36
Mass Grading 01/01/2010-	6.36	43.89	33.23	0.01	210.77	1.76	212.53	44.02	1.62	45.64	9,851.51
Mass Grading Dust	0.00	0.00	0.00	0.00	210.73	0.00	210.73	44.01	0.00	44.01	0.00
Mass Grading Off Road Diesel	6.23	42.79	31.90	0.00	0.00	1.72	1.72	0.00	1.58	1.58	8,842.87
Mass Grading On Road Diesel	0.12	1.06	0.44	0.01	0.02	0.03	0.06	0.01	0.03	0.04	697.93
Mass Grading Worker Trips	0.02	0.04	0.89	0.00	0.01	0.01	0.02	0.01	0.01	0.01	310.72
Trenching 01/01/2010-12/31/2029	2.09	12.38	16.23	0.00	0.01	0.58	0.60	0.00	0.54	0.54	3,677.85
Trenching Off Road Diesel	2.08	12.35	15.53	0.00	0.00	0.58	0.58	0.00	0.53	0.53	3,429.28
Trenching Worker Trips	0.02	0.03	0.71	0.00	0.01	0.01	0.02	0.00	0.01	0.01	248.57
Time Slice 1/1/2024-12/31/2024	85.66	210.51	696.35	2.56	240.70	13.52	254.23	51.85	11.97	63.82	270,920.26
Asphalt 01/01/2010-12/31/2029	1.90	10.71	10.16	0.00	0.01	0.83	0.84	0.00	0.76	0.77	1,675.93
Paving Off-Gas	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	1.70	10.53	9.66	0.00	0.00	0.82	0.82	0.00	0.75	0.75	1,418.81
Paving On Road Diesel	0.02	0.15	0.06	0.00	0.00	0.00	0.01	0.00	0.00	0.01	101.76
Paving Worker Trips	0.01	0.02	0.44	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.36
Building 01/01/2010-12/31/2029	23.56	117.88	615.72	2.51	10.75	9.25	20.00	3.82	8.04	11.86	248,624.97
Building Off Road Diesel	1.71	10.50	12.03	0.00	0.00	0.50	0.50	0.00	0.46	0.46	2,259.28
Building Vendor Trips	10.32	83.50	110.66	0.70	2.58	3.59	6.16	0.87	3.25	4.12	73,414.59
Building Worker Trips	11.53	23.89	493.04	1.81	8.17	5.16	13.34	2.95	4.33	7.28	172,951.10
Coating 01/01/2010-12/31/2029	48.13	0.02	0.37	0.00	0.01	0.00	0.01	0.00	0.00	0.01	131.11
Architectural Coating	48.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.01	0.02	0.37	0.00	0.01	0.00	0.01	0.00	0.00	0.01	131.11
Demolition 01/01/2010-12/31/2029	3.62	25.62	20.62	0.03	19.15	1.10	20.25	4.00	1.01	5.01	6,958.89
Fugitive Dust	0.00	0.00	0.00	0.00	19.06	0.00	19.06	3.96	0.00	3.96	0.00
Demo Off Road Diesel	3.17	21.56	18.48	0.00	0.00	0.97	0.97	0.00	0.89	0.89	4,132.45
Demo On Road Diesel	0.44	4.04	1.70	0.02	0.09	0.12	0.21	0.03	0.11	0.14	2,671.08
Demo Worker Trips	0.01	0.02	0.44	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.36
Mass Grading 01/01/2010-	6.36	43.89	33.23	0.01	210.77	1.76	212.53	44.02	1.62	45.64	9,851.51
Mass Grading Dust	0.00	0.00	0.00	0.00	210.73	0.00	210.73	44.01	0.00	44.01	0.00
Mass Grading Off Road Diesel	6.23	42.79	31.90	0.00	0.00	1.72	1.72	0.00	1.58	1.58	8,842.87
Mass Grading On Road Diesel	0.12	1.06	0.44	0.01	0.02	0.03	0.06	0.01	0.03	0.04	697.93
Mass Grading Worker Trips	0.02	0.04	0.89	0.00	0.01	0.01	0.02	0.01	0.01	0.01	310.72
Trenching 01/01/2010-12/31/2029	2.09	12.38	16.23	0.00	0.01	0.58	0.60	0.00	0.54	0.54	3,677.85
Trenching Off Road Diesel	2.08	12.35	15.53	0.00	0.00	0.58	0.58	0.00	0.53	0.53	3,429.28
Trenching Worker Trips	0.02	0.03	0.71	0.00	0.01	0.01	0.02	0.00	0.01	0.01	248.57

Time Slice 1/1/2025-12/31/2025	<u>85.66</u>	<u>210.51</u>	<u>696.35</u>	<u>2.56</u>	<u>240.70</u>	<u>13.52</u>	<u>254.23</u>	<u>51.85</u>	<u>11.97</u>	<u>63.82</u>	<u>270,920.26</u>
Asphalt 01/01/2010-12/31/2029	1.90	10.71	10.16	0.00	0.01	0.83	0.84	0.00	0.76	0.77	1,675.93
Paving Off-Gas	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	1.70	10.53	9.66	0.00	0.00	0.82	0.82	0.00	0.75	0.75	1,418.81
Paving On Road Diesel	0.02	0.15	0.06	0.00	0.00	0.00	0.01	0.00	0.00	0.01	101.76
Paving Worker Trips	0.01	0.02	0.44	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.36
Building 01/01/2010-12/31/2029	23.56	117.88	615.72	2.51	10.75	9.25	20.00	3.82	8.04	11.86	248,624.97
Building Off Road Diesel	1.71	10.50	12.03	0.00	0.00	0.50	0.50	0.00	0.46	0.46	2,259.28
Building Vendor Trips	10.32	83.50	110.66	0.70	2.58	3.59	6.16	0.87	3.25	4.12	73,414.59
Building Worker Trips	11.53	23.89	493.04	1.81	8.17	5.16	13.34	2.95	4.33	7.28	172,951.10
Coating 01/01/2010-12/31/2029	48.13	0.02	0.37	0.00	0.01	0.00	0.01	0.00	0.00	0.01	131.11
Architectural Coating	48.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.01	0.02	0.37	0.00	0.01	0.00	0.01	0.00	0.00	0.01	131.11
Demolition 01/01/2010-12/31/2029	3.62	25.62	20.62	0.03	19.15	1.10	20.25	4.00	1.01	5.01	6,958.89
Fugitive Dust	0.00	0.00	0.00	0.00	19.06	0.00	19.06	3.96	0.00	3.96	0.00
Demo Off Road Diesel	3.17	21.56	18.48	0.00	0.00	0.97	0.97	0.00	0.89	0.89	4,132.45
Demo On Road Diesel	0.44	4.04	1.70	0.02	0.09	0.12	0.21	0.03	0.11	0.14	2,671.08
Demo Worker Trips	0.01	0.02	0.44	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.36
Mass Grading 01/01/2010-	6.36	43.89	33.23	0.01	210.77	1.76	212.53	44.02	1.62	45.64	9,851.51
Mass Grading Dust	0.00	0.00	0.00	0.00	210.73	0.00	210.73	44.01	0.00	44.01	0.00
Mass Grading Off Road Diesel	6.23	42.79	31.90	0.00	0.00	1.72	1.72	0.00	1.58	1.58	8,842.87
Mass Grading On Road Diesel	0.12	1.06	0.44	0.01	0.02	0.03	0.06	0.01	0.03	0.04	697.93
Mass Grading Worker Trips	0.02	0.04	0.89	0.00	0.01	0.01	0.02	0.01	0.01	0.01	310.72
Trenching 01/01/2010-12/31/2029	2.09	12.38	16.23	0.00	0.01	0.58	0.60	0.00	0.54	0.54	3,677.85
Trenching Off Road Diesel	2.08	12.35	15.53	0.00	0.00	0.58	0.58	0.00	0.53	0.53	3,429.28
Trenching Worker Trips	0.02	0.03	0.71	0.00	0.01	0.01	0.02	0.00	0.01	0.01	248.57
Time Slice 1/1/2026-12/31/2026	<u>80.96</u>	<u>191.35</u>	<u>583.27</u>	<u>2.56</u>	<u>240.70</u>	<u>13.05</u>	<u>253.75</u>	<u>51.85</u>	<u>11.54</u>	<u>63.39</u>	<u>270,907.41</u>
Asphalt 01/01/2010-12/31/2029	1.89	10.68	10.07	0.00	0.01	0.83	0.84	0.00	0.76	0.77	1,675.92
Paving Off-Gas	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	1.70	10.53	9.66	0.00	0.00	0.82	0.82	0.00	0.75	0.75	1,418.81
Paving On Road Diesel	0.02	0.13	0.06	0.00	0.00	0.00	0.01	0.00	0.00	0.00	101.76
Paving Worker Trips	0.01	0.02	0.36	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.34
Building 01/01/2010-12/31/2029	18.94	99.55	503.49	2.51	10.75	8.80	19.55	3.82	7.63	11.45	248,612.23
Building Off Road Diesel	1.71	10.50	12.03	0.00	0.00	0.50	0.50	0.00	0.46	0.46	2,259.28
Building Vendor Trips	8.94	70.45	95.47	0.70	2.58	3.15	5.72	0.87	2.84	3.71	73,421.01
Building Worker Trips	8.30	18.60	396.00	1.81	8.17	5.16	13.34	2.95	4.33	7.28	172,931.95

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Coating 01/01/2010-12/31/2029	48.12	0.01	0.30	0.00	0.01	0.00	0.01	0.00	0.00	0.01	131.10
Architectural Coating	48.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.01	0.01	0.30	0.00	0.01	0.00	0.01	0.00	0.00	0.01	131.10
Demolition 01/01/2010-12/31/2029	3.57	25.01	20.31	0.03	19.15	1.08	20.23	4.00	0.99	4.98	6,958.87
Fugitive Dust	0.00	0.00	0.00	0.00	19.06	0.00	19.06	3.96	0.00	3.96	0.00
Demo Off Road Diesel	3.17	21.56	18.48	0.00	0.00	0.97	0.97	0.00	0.89	0.89	4,132.45
Demo On Road Diesel	0.39	3.44	1.48	0.02	0.09	0.10	0.19	0.03	0.09	0.12	2,671.08
Demo Worker Trips	0.01	0.02	0.36	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.34
Mass Grading 01/01/2010-	6.34	43.72	33.00	0.01	210.77	1.76	212.52	44.02	1.61	45.64	9,851.47
Mass Grading Dust	0.00	0.00	0.00	0.00	210.73	0.00	210.73	44.01	0.00	44.01	0.00
Mass Grading Off Road Diesel	6.23	42.79	31.90	0.00	0.00	1.72	1.72	0.00	1.58	1.58	8,842.87
Mass Grading On Road Diesel	0.10	0.90	0.39	0.01	0.02	0.03	0.05	0.01	0.02	0.03	697.93
Mass Grading Worker Trips	0.01	0.03	0.71	0.00	0.01	0.01	0.02	0.01	0.01	0.01	310.68
Trenching 01/01/2010-12/31/2029	2.09	12.38	16.10	0.00	0.01	0.58	0.60	0.00	0.54	0.54	3,677.82
Trenching Off Road Diesel	2.08	12.35	15.53	0.00	0.00	0.58	0.58	0.00	0.53	0.53	3,429.28
Trenching Worker Trips	0.01	0.03	0.57	0.00	0.01	0.01	0.02	0.00	0.01	0.01	248.55
Time Slice 1/1/2027-12/31/2027	80.96	191.35	583.27	2.56	240.70	13.05	253.75	51.85	11.54	63.39	270,907.41
Asphalt 01/01/2010-12/31/2029	1.89	10.68	10.07	0.00	0.01	0.83	0.84	0.00	0.76	0.77	1,675.92
Paving Off-Gas	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	1.70	10.53	9.66	0.00	0.00	0.82	0.82	0.00	0.75	0.75	1,418.81
Paving On Road Diesel	0.02	0.13	0.06	0.00	0.00	0.00	0.01	0.00	0.00	0.00	101.76
Paving Worker Trips	0.01	0.02	0.36	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.34
Building 01/01/2010-12/31/2029	18.94	99.55	503.49	2.51	10.75	8.80	19.55	3.82	7.63	11.45	248,612.23
Building Off Road Diesel	1.71	10.50	12.03	0.00	0.00	0.50	0.50	0.00	0.46	0.46	2,259.28
Building Vendor Trips	8.94	70.45	95.47	0.70	2.58	3.15	5.72	0.87	2.84	3.71	73,421.01
Building Worker Trips	8.30	18.60	396.00	1.81	8.17	5.16	13.34	2.95	4.33	7.28	172,931.95
Coating 01/01/2010-12/31/2029	48.12	0.01	0.30	0.00	0.01	0.00	0.01	0.00	0.00	0.01	131.10
Architectural Coating	48.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.01	0.01	0.30	0.00	0.01	0.00	0.01	0.00	0.00	0.01	131.10
Demolition 01/01/2010-12/31/2029	3.57	25.01	20.31	0.03	19.15	1.08	20.23	4.00	0.99	4.98	6,958.87
Fugitive Dust	0.00	0.00	0.00	0.00	19.06	0.00	19.06	3.96	0.00	3.96	0.00
Demo Off Road Diesel	3.17	21.56	18.48	0.00	0.00	0.97	0.97	0.00	0.89	0.89	4,132.45
Demo On Road Diesel	0.39	3.44	1.48	0.02	0.09	0.10	0.19	0.03	0.09	0.12	2,671.08
Demo Worker Trips	0.01	0.02	0.36	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.34
Mass Grading 01/01/2010-	6.34	43.72	33.00	0.01	210.77	1.76	212.52	44.02	1.61	45.64	9,851.47
Mass Grading Dust	0.00	0.00	0.00	0.00	210.73	0.00	210.73	44.01	0.00	44.01	0.00
Mass Grading Off Road Diesel	6.23	42.79	31.90	0.00	0.00	1.72	1.72	0.00	1.58	1.58	8,842.87

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Mass Grading On Road Diesel	0.10	0.90	0.39	0.01	0.02	0.03	0.05	0.01	0.02	0.03	697.93
Mass Grading Worker Trips	0.01	0.03	0.71	0.00	0.01	0.01	0.02	0.01	0.01	0.01	310.68
Trenching 01/01/2010-12/31/2029	2.09	12.38	16.10	0.00	0.01	0.58	0.60	0.00	0.54	0.54	3,677.82
Trenching Off Road Diesel	2.08	12.35	15.53	0.00	0.00	0.58	0.58	0.00	0.53	0.53	3,429.28
Trenching Worker Trips	0.01	0.03	0.57	0.00	0.01	0.01	0.02	0.00	0.01	0.01	248.55
Time Slice 1/3/2028-12/29/2028	<u>80.96</u>	<u>191.35</u>	<u>583.27</u>	<u>2.56</u>	<u>240.70</u>	<u>13.05</u>	<u>253.75</u>	<u>51.85</u>	<u>11.54</u>	<u>63.39</u>	<u>270,907.41</u>
Asphalt 01/01/2010-12/31/2029	1.89	10.68	10.07	0.00	0.01	0.83	0.84	0.00	0.76	0.77	1,675.92
Paving Off-Gas	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	1.70	10.53	9.66	0.00	0.00	0.82	0.82	0.00	0.75	0.75	1,418.81
Paving On Road Diesel	0.02	0.13	0.06	0.00	0.00	0.00	0.01	0.00	0.00	0.00	101.76
Paving Worker Trips	0.01	0.02	0.36	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.34
Building 01/01/2010-12/31/2029	18.94	99.55	503.49	2.51	10.75	8.80	19.55	3.82	7.63	11.45	248,612.23
Building Off Road Diesel	1.71	10.50	12.03	0.00	0.00	0.50	0.50	0.00	0.46	0.46	2,259.28
Building Vendor Trips	8.94	70.45	95.47	0.70	2.58	3.15	5.72	0.87	2.84	3.71	73,421.01
Building Worker Trips	8.30	18.60	396.00	1.81	8.17	5.16	13.34	2.95	4.33	7.28	172,931.95
Coating 01/01/2010-12/31/2029	48.12	0.01	0.30	0.00	0.01	0.00	0.01	0.00	0.00	0.01	131.10
Architectural Coating	48.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.01	0.01	0.30	0.00	0.01	0.00	0.01	0.00	0.00	0.01	131.10
Demolition 01/01/2010-12/31/2029	3.57	25.01	20.31	0.03	19.15	1.08	20.23	4.00	0.99	4.98	6,958.87
Fugitive Dust	0.00	0.00	0.00	0.00	19.06	0.00	19.06	3.96	0.00	3.96	0.00
Demo Off Road Diesel	3.17	21.56	18.48	0.00	0.00	0.97	0.97	0.00	0.89	0.89	4,132.45
Demo On Road Diesel	0.39	3.44	1.48	0.02	0.09	0.10	0.19	0.03	0.09	0.12	2,671.08
Demo Worker Trips	0.01	0.02	0.36	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.34
Mass Grading 01/01/2010-	6.34	43.72	33.00	0.01	210.77	1.76	212.52	44.02	1.61	45.64	9,851.47
Mass Grading Dust	0.00	0.00	0.00	0.00	210.73	0.00	210.73	44.01	0.00	44.01	0.00
Mass Grading Off Road Diesel	6.23	42.79	31.90	0.00	0.00	1.72	1.72	0.00	1.58	1.58	8,842.87
Mass Grading On Road Diesel	0.10	0.90	0.39	0.01	0.02	0.03	0.05	0.01	0.02	0.03	697.93
Mass Grading Worker Trips	0.01	0.03	0.71	0.00	0.01	0.01	0.02	0.01	0.01	0.01	310.68
Trenching 01/01/2010-12/31/2029	2.09	12.38	16.10	0.00	0.01	0.58	0.60	0.00	0.54	0.54	3,677.82
Trenching Off Road Diesel	2.08	12.35	15.53	0.00	0.00	0.58	0.58	0.00	0.53	0.53	3,429.28
Trenching Worker Trips	0.01	0.03	0.57	0.00	0.01	0.01	0.02	0.00	0.01	0.01	248.55
Time Slice 1/1/2029-12/31/2029	<u>80.96</u>	<u>191.35</u>	<u>583.27</u>	<u>2.56</u>	<u>240.70</u>	<u>13.05</u>	<u>253.75</u>	<u>51.85</u>	<u>11.54</u>	<u>63.39</u>	<u>270,907.41</u>
Asphalt 01/01/2010-12/31/2029	1.89	10.68	10.07	0.00	0.01	0.83	0.84	0.00	0.76	0.77	1,675.92
Paving Off-Gas	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	1.70	10.53	9.66	0.00	0.00	0.82	0.82	0.00	0.75	0.75	1,418.81
Paving On Road Diesel	0.02	0.13	0.06	0.00	0.00	0.00	0.01	0.00	0.00	0.00	101.76

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Paving Worker Trips	0.01	0.02	0.36	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.34
Building 01/01/2010-12/31/2029	18.94	99.55	503.49	2.51	10.75	8.80	19.55	3.82	7.63	11.45	248,612.23
Building Off Road Diesel	1.71	10.50	12.03	0.00	0.00	0.50	0.50	0.00	0.46	0.46	2,259.28
Building Vendor Trips	8.94	70.45	95.47	0.70	2.58	3.15	5.72	0.87	2.84	3.71	73,421.01
Building Worker Trips	8.30	18.60	396.00	1.81	8.17	5.16	13.34	2.95	4.33	7.28	172,931.95
Coating 01/01/2010-12/31/2029	48.12	0.01	0.30	0.00	0.01	0.00	0.01	0.00	0.00	0.01	131.10
Architectural Coating	48.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.01	0.01	0.30	0.00	0.01	0.00	0.01	0.00	0.00	0.01	131.10
Demolition 01/01/2010-12/31/2029	3.57	25.01	20.31	0.03	19.15	1.08	20.23	4.00	0.99	4.98	6,958.87
Fugitive Dust	0.00	0.00	0.00	0.00	19.06	0.00	19.06	3.96	0.00	3.96	0.00
Demo Off Road Diesel	3.17	21.56	18.48	0.00	0.00	0.97	0.97	0.00	0.89	0.89	4,132.45
Demo On Road Diesel	0.39	3.44	1.48	0.02	0.09	0.10	0.19	0.03	0.09	0.12	2,671.08
Demo Worker Trips	0.01	0.02	0.36	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.34
Mass Grading 01/01/2010-	6.34	43.72	33.00	0.01	210.77	1.76	212.52	44.02	1.61	45.64	9,851.47
Mass Grading Dust	0.00	0.00	0.00	0.00	210.73	0.00	210.73	44.01	0.00	44.01	0.00
Mass Grading Off Road Diesel	6.23	42.79	31.90	0.00	0.00	1.72	1.72	0.00	1.58	1.58	8,842.87
Mass Grading On Road Diesel	0.10	0.90	0.39	0.01	0.02	0.03	0.05	0.01	0.02	0.03	697.93
Mass Grading Worker Trips	0.01	0.03	0.71	0.00	0.01	0.01	0.02	0.01	0.01	0.01	310.68
Trenching 01/01/2010-12/31/2029	2.09	12.38	16.10	0.00	0.01	0.58	0.60	0.00	0.54	0.54	3,677.82
Trenching Off Road Diesel	2.08	12.35	15.53	0.00	0.00	0.58	0.58	0.00	0.53	0.53	3,429.28
Trenching Worker Trips	0.01	0.03	0.57	0.00	0.01	0.01	0.02	0.00	0.01	0.01	248.55

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Mass Grading 1/1/2010 - 12/31/2029 - Default Mass Site Grading/Excavation Description

For Soil Stabilizing Measures, the Replace ground cover in disturbed areas quickly mitigation reduces emissions by:

PM10: 5% PM25: 5%

For Soil Stabilizing Measures, the Water exposed surfaces 2x daily watering mitigation reduces emissions by:

PM10: 55% PM25: 55%

For Soil Stabilizing Measures, the Equipment loading/unloading mitigation reduces emissions by:

PM10: 69% PM25: 69%

For Unpaved Roads Measures, the Reduce speed on unpaved roads to less than 15 mph mitigation reduces emissions by:

PM10: 44% PM25: 44%

For Unpaved Roads Measures, the Manage haul road dust 2x daily watering mitigation reduces emissions by:

PM10: 55% PM25: 55%

Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: P:\COI-21\Technical Studies\Air\Modeling\construction\ExistingGPCConstruction.urb924

Project Name: Recirculated IBC Existing General Plan - Construction

Project Location: Orange County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10 Dust</u>	<u>PM10 Exhaust</u>	<u>PM10</u>	<u>PM2.5 Dust</u>	<u>PM2.5 Exhaust</u>	<u>PM2.5</u>	<u>CO2</u>
2010 TOTALS (tons/year unmitigated)	16.88	69.97	169.51	0.23	177.96	3.35	181.32	37.31	3.05	40.36	25,342.86
2010 TOTALS (tons/year mitigated)	16.88	69.97	169.51	0.23	30.98	3.35	34.34	6.61	3.05	9.66	25,342.86
Percent Reduction	0.00	0.00	0.00	0.00	82.59	0.00	81.06	82.27	0.00	76.05	0.00
2011 TOTALS (tons/year unmitigated)	16.05	63.93	157.81	0.23	177.28	3.11	180.39	37.17	2.83	39.99	25,241.70
2011 TOTALS (tons/year mitigated)	16.05	63.93	157.81	0.23	30.86	3.11	33.98	6.59	2.83	9.42	25,241.70
Percent Reduction	0.00	0.00	0.00	0.00	82.59	0.00	81.16	82.27	0.00	76.46	0.00
2012 TOTALS (tons/year unmitigated)	15.37	58.55	147.81	0.23	177.96	2.86	180.82	37.31	2.59	39.90	25,336.12
2012 TOTALS (tons/year mitigated)	15.37	58.55	147.81	0.23	30.98	2.86	33.84	6.61	2.59	9.21	25,336.12
Percent Reduction	0.00	0.00	0.00	0.00	82.59	0.00	81.28	82.27	0.00	76.93	0.00
2013 TOTALS (tons/year unmitigated)	14.68	53.21	137.70	0.23	177.96	2.63	180.59	37.31	2.38	39.69	25,334.71
2013 TOTALS (tons/year mitigated)	14.68	53.21	137.70	0.23	30.98	2.63	33.61	6.61	2.38	8.99	25,334.71
Percent Reduction	0.00	0.00	0.00	0.00	82.59	0.00	81.39	82.27	0.00	77.35	0.00
2014 TOTALS (tons/year unmitigated)	14.05	48.10	128.66	0.23	177.96	2.39	180.35	37.31	2.15	39.46	25,333.38
2014 TOTALS (tons/year mitigated)	14.05	48.10	128.66	0.23	30.98	2.39	33.37	6.61	2.15	8.77	25,333.38
Percent Reduction	0.00	0.00	0.00	0.00	82.59	0.00	81.50	82.27	0.00	77.78	0.00
2015 TOTALS (tons/year unmitigated)	13.43	43.16	120.11	0.23	177.96	2.20	180.16	37.31	1.98	39.29	25,332.38
2015 TOTALS (tons/year mitigated)	13.43	43.16	120.11	0.23	30.98	2.20	33.18	6.61	1.98	8.59	25,332.38
Percent Reduction	0.00	0.00	0.00	0.00	82.59	0.00	81.58	82.27	0.00	78.13	0.00
2016 TOTALS (tons/year unmitigated)	12.90	38.97	112.65	0.23	177.96	2.01	179.97	37.31	1.80	39.11	25,330.54
2016 TOTALS (tons/year mitigated)	12.90	38.97	112.65	0.23	30.98	2.01	32.99	6.61	1.80	8.42	25,330.54
Percent Reduction	0.00	0.00	0.00	0.00	82.59	0.00	81.67	82.27	0.00	78.48	0.00
2017 TOTALS (tons/year unmitigated)	12.38	35.16	105.18	0.23	177.28	1.84	179.12	37.17	1.65	38.82	25,232.31
2017 TOTALS (tons/year mitigated)	12.38	35.16	105.18	0.23	30.86	1.84	32.71	6.59	1.65	8.24	25,232.31
Percent Reduction	0.00	0.00	0.00	0.00	82.59	0.00	81.74	82.27	0.00	78.77	0.00

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2018 TOTALS (tons/year unmitigated)	11.99	32.04	99.02	0.23	177.96	1.71	179.67	37.31	1.53	38.84	25,328.53
2018 TOTALS (tons/year mitigated)	11.99	32.04	99.02	0.23	30.98	1.71	32.69	6.61	1.53	8.14	25,328.53
Percent Reduction	0.00	0.00	0.00	0.00	82.59	0.00	81.80	82.27	0.00	79.03	0.00
2019 TOTALS (tons/year unmitigated)	11.59	29.14	92.95	0.23	177.96	1.57	179.54	37.31	1.41	38.71	25,328.03
2019 TOTALS (tons/year mitigated)	11.59	29.14	92.95	0.23	30.98	1.57	32.56	6.61	1.41	8.02	25,328.03
Percent Reduction	0.00	0.00	0.00	0.00	82.59	0.00	81.87	82.27	0.00	79.28	0.00
2020 TOTALS (tons/year unmitigated)	11.25	26.71	87.64	0.23	178.64	1.50	180.14	37.45	1.33	38.79	25,424.61
2020 TOTALS (tons/year mitigated)	11.25	26.71	87.64	0.23	31.10	1.50	32.60	6.64	1.33	7.98	25,424.61
Percent Reduction	0.00	0.00	0.00	0.00	82.59	0.00	81.90	82.27	0.00	79.44	0.00
2021 TOTALS (tons/year unmitigated)	10.36	22.30	67.40	0.23	177.96	1.39	179.36	37.31	1.24	38.55	25,324.58
2021 TOTALS (tons/year mitigated)	10.36	22.30	67.40	0.23	30.98	1.39	32.38	6.61	1.24	7.85	25,324.58
Percent Reduction	0.00	0.00	0.00	0.00	82.59	0.00	81.95	82.27	0.00	79.63	0.00
2022 TOTALS (tons/year unmitigated)	10.32	22.22	67.14	0.23	177.28	1.39	178.67	37.17	1.23	38.40	25,227.56
2022 TOTALS (tons/year mitigated)	10.32	22.22	67.14	0.23	30.86	1.39	32.25	6.59	1.23	7.82	25,227.56
Percent Reduction	0.00	0.00	0.00	0.00	82.59	0.00	81.95	82.27	0.00	79.63	0.00
2023 TOTALS (tons/year unmitigated)	10.32	22.22	67.14	0.23	177.28	1.39	178.67	37.17	1.23	38.40	25,227.56
2023 TOTALS (tons/year mitigated)	10.32	22.22	67.14	0.23	30.86	1.39	32.25	6.59	1.23	7.82	25,227.56
Percent Reduction	0.00	0.00	0.00	0.00	82.59	0.00	81.95	82.27	0.00	79.63	0.00
2024 TOTALS (tons/year unmitigated)	10.40	22.39	67.65	0.23	178.64	1.40	180.04	37.45	1.24	38.70	25,421.61
2024 TOTALS (tons/year mitigated)	10.40	22.39	67.65	0.23	31.10	1.40	32.50	6.64	1.24	7.88	25,421.61
Percent Reduction	0.00	0.00	0.00	0.00	82.59	0.00	81.95	82.27	0.00	79.63	0.00
2025 TOTALS (tons/year unmitigated)	10.36	22.30	67.40	0.23	177.96	1.39	179.36	37.31	1.24	38.55	25,324.58
2025 TOTALS (tons/year mitigated)	10.36	22.30	67.40	0.23	30.98	1.39	32.38	6.61	1.24	7.85	25,324.58
Percent Reduction	0.00	0.00	0.00	0.00	82.59	0.00	81.95	82.27	0.00	79.63	0.00
2026 TOTALS (tons/year unmitigated)	9.93	20.67	56.93	0.23	177.96	1.36	179.32	37.31	1.20	38.51	25,323.29
2026 TOTALS (tons/year mitigated)	9.93	20.67	56.93	0.23	30.98	1.36	32.34	6.61	1.20	7.82	25,323.29
Percent Reduction	0.00	0.00	0.00	0.00	82.59	0.00	81.97	82.27	0.00	79.70	0.00
2027 TOTALS (tons/year unmitigated)	9.93	20.67	56.93	0.23	177.96	1.36	179.32	37.31	1.20	38.51	25,323.29
2027 TOTALS (tons/year mitigated)	9.93	20.67	56.93	0.23	30.98	1.36	32.34	6.61	1.20	7.82	25,323.29
Percent Reduction	0.00	0.00	0.00	0.00	82.59	0.00	81.97	82.27	0.00	79.70	0.00
2028 TOTALS (tons/year unmitigated)	9.89	20.59	56.71	0.23	177.28	1.35	178.63	37.17	1.20	38.37	25,226.27
2028 TOTALS (tons/year mitigated)	9.89	20.59	56.71	0.23	30.86	1.35	32.22	6.59	1.20	7.79	25,226.27
Percent Reduction	0.00	0.00	0.00	0.00	82.59	0.00	81.97	82.27	0.00	79.70	0.00

2029 TOTALS (tons/year unmitigated)	9.93	20.67	56.93	0.23	177.96	1.36	179.32	37.31	1.20	38.51	25,323.29
2029 TOTALS (tons/year mitigated)	9.93	20.67	56.93	0.23	30.98	1.36	32.34	6.61	1.20	7.82	25,323.29
Percent Reduction	0.00	0.00	0.00	0.00	82.59	0.00	81.97	82.27	0.00	79.70	0.00

Phase Assumptions

Phase: Demolition 1/1/2010 - 12/31/2029 - Default Demolition Description

Building Volume Total (cubic feet): 1.198854E+07

Building Volume Daily (cubic feet): 45375

On Road Truck Travel (VMT): 630.21

Off-Road Equipment:

3 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day

2 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 8 hours per day

Phase: Mass Grading 1/1/2010 - 12/31/2029 - Default Mass Site Grading/Excavation Description

Total Acres Disturbed: 140

Maximum Daily Acreage Disturbed: 35

Fugitive Dust Level of Detail: Default

38.2 lbs per acre-day

On Road Truck Travel (VMT): 164.67

Off-Road Equipment:

1 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day

1 Graders (174 hp) operating at a 0.61 load factor for 8 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 8 hours per day

3 Scrapers (313 hp) operating at a 0.72 load factor for 8 hours per day

3 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Trenching 1/1/2010 - 12/31/2029 - Default Trenching Description

Off-Road Equipment:

4 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day

2 Other General Industrial Equipment (238 hp) operating at a 0.51 load factor for 8 hours per day

2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 0 hours per day

Phase: Paving 1/1/2010 - 12/31/2029 - Default Paving Description

Acres to be Paved: 348.94

Off-Road Equipment:

1 Pavers (100 hp) operating at a 0.62 load factor for 8 hours per day

2 Paving Equipment (104 hp) operating at a 0.53 load factor for 8 hours per day

2 Rollers (95 hp) operating at a 0.56 load factor for 6 hours per day

Phase: Building Construction 1/1/2010 - 12/31/2029 - Default Building Construction Description

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Coating Worker Trips	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.26
Demolition 01/01/2010-12/31/2029	0.81	7.38	4.02	0.00	2.50	0.33	2.83	0.52	0.30	0.82	0.82	908.15
Fugitive Dust	0.00	0.00	0.00	0.00	0.13	0.00	0.13	0.03	0.00	0.03	0.03	0.00
Demo Off Road Diesel	0.65	5.37	3.14	0.00	0.00	0.25	0.25	0.00	0.23	0.23	0.23	539.29
Demo On Road Diesel	0.15	2.00	0.74	0.00	0.01	0.08	0.09	0.00	0.07	0.07	0.07	348.58
Demo Worker Trips	0.00	0.01	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.29
Mass Grading 01/01/2010-	1.35	11.49	5.96	0.00	27.51	0.53	28.04	5.74	0.49	6.24	6.24	1,285.66
Mass Grading Dust	0.00	0.00	0.00	0.00	27.50	0.00	27.50	5.74	0.00	5.74	5.74	0.00
Mass Grading Off Road Diesel	1.30	10.95	5.49	0.00	0.00	0.51	0.51	0.00	0.47	0.47	0.47	1,153.99
Mass Grading On Road Diesel	0.04	0.52	0.19	0.00	0.00	0.02	0.02	0.00	0.02	0.02	0.02	91.08
Mass Grading Worker Trips	0.01	0.02	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	40.58
Trenching 01/01/2010-12/31/2029	0.48	3.99	2.31	0.00	0.00	0.19	0.19	0.00	0.18	0.18	0.18	479.99
Trenching Off Road Diesel	0.47	3.98	2.09	0.00	0.00	0.19	0.19	0.00	0.18	0.18	0.18	447.52
Trenching Worker Trips	0.01	0.01	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	32.47
2013	14.68	53.21	137.70	0.23	30.98	2.63	33.61	6.61	2.38	8.99	8.99	25,334.71
Asphalt 01/01/2010-12/31/2029	0.38	2.22	1.48	0.00	0.00	0.19	0.19	0.00	0.17	0.18	0.18	218.72
Paving Off-Gas	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	0.35	2.15	1.32	0.00	0.00	0.19	0.19	0.00	0.17	0.17	0.17	185.16
Paving On Road Diesel	0.01	0.07	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.28
Paving Worker Trips	0.00	0.01	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.29
Building 01/01/2010-12/31/2029	5.38	29.74	124.40	0.23	0.98	1.47	2.44	0.35	1.31	1.65	1.65	22,429.94
Building Off Road Diesel	0.42	2.48	1.74	0.00	0.00	0.17	0.17	0.00	0.15	0.15	0.15	294.84
Building Vendor Trips	1.95	21.49	18.58	0.06	0.20	0.85	1.06	0.07	0.78	0.85	0.85	5,827.65
Building Worker Trips	3.01	5.76	104.07	0.17	0.77	0.45	1.22	0.28	0.37	0.65	0.65	16,307.46
Coating 01/01/2010-12/31/2029	6.41	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.26
Architectural Coating	6.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.26
Demolition 01/01/2010-12/31/2029	0.77	6.82	3.80	0.00	2.50	0.30	2.80	0.52	0.28	0.80	0.80	908.15
Fugitive Dust	0.00	0.00	0.00	0.00	0.13	0.00	0.13	0.03	0.00	0.03	0.03	0.00
Demo Off Road Diesel	0.63	5.06	3.02	0.00	0.00	0.23	0.23	0.00	0.22	0.22	0.22	539.29
Demo On Road Diesel	0.14	1.76	0.65	0.00	0.01	0.07	0.08	0.00	0.06	0.06	0.06	348.58
Demo Worker Trips	0.00	0.01	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.29
Mass Grading 01/01/2010-	1.29	10.73	5.66	0.00	27.51	0.49	28.00	5.74	0.45	6.20	6.20	1,285.65
Mass Grading Dust	0.00	0.00	0.00	0.00	27.50	0.00	27.50	5.74	0.00	5.74	5.74	0.00
Mass Grading Off Road Diesel	1.24	10.26	5.23	0.00	0.00	0.47	0.47	0.00	0.44	0.44	0.44	1,153.99
Mass Grading On Road Diesel	0.04	0.46	0.17	0.00	0.00	0.02	0.02	0.00	0.02	0.02	0.02	91.08
Mass Grading Worker Trips	0.01	0.01	0.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	40.58
Trenching 01/01/2010-12/31/2029	0.45	3.70	2.29	0.00	0.00	0.18	0.18	0.00	0.16	0.16	0.16	479.98
Trenching Off Road Diesel	0.45	3.68	2.08	0.00	0.00	0.18	0.18	0.00	0.16	0.16	0.16	447.52
Trenching Worker Trips	0.01	0.01	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	32.46
2014	14.05	48.10	128.66	0.23	30.98	2.39	33.37	6.61	2.15	8.77	8.77	25,333.38

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Asphalt 01/01/2010-12/31/2029	0.36	2.10	1.46	0.00	0.00	0.18	0.18	0.00	0.16	0.16	218.72
Paving Off-Gas	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	0.33	2.04	1.31	0.00	0.00	0.18	0.18	0.00	0.16	0.16	185.16
Paving On Road Diesel	0.00	0.06	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.28
Paving Worker Trips	0.00	0.01	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.29
Building 01/01/2010-12/31/2029	4.92	26.40	115.87	0.23	0.98	1.34	2.31	0.35	1.19	1.54	22,428.62
Building Off Road Diesel	0.38	2.30	1.70	0.00	0.00	0.14	0.14	0.00	0.13	0.13	294.84
Building Vendor Trips	1.77	18.81	17.14	0.06	0.20	0.75	0.95	0.07	0.68	0.75	5,827.84
Building Worker Trips	2.77	5.28	97.02	0.17	0.77	0.45	1.22	0.28	0.37	0.65	16,305.94
Coating 01/01/2010-12/31/2029	6.41	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.26
Architectural Coating	6.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.26
Demolition 01/01/2010-12/31/2029	0.73	6.26	3.60	0.00	2.50	0.27	2.77	0.52	0.25	0.77	908.15
Fugitive Dust	0.00	0.00	0.00	0.00	0.13	0.00	0.13	0.03	0.00	0.03	0.00
Demo Off Road Diesel	0.60	4.72	2.91	0.00	0.00	0.21	0.21	0.00	0.19	0.19	539.29
Demo On Road Diesel	0.13	1.53	0.57	0.00	0.01	0.06	0.07	0.00	0.05	0.06	348.58
Demo Worker Trips	0.00	0.01	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.29
Mass Grading 01/01/2010-	1.22	9.93	5.42	0.00	27.51	0.45	27.95	5.74	0.41	6.15	1,285.65
Mass Grading Dust	0.00	0.00	0.00	0.00	27.50	0.00	27.50	5.74	0.00	5.74	0.00
Mass Grading Off Road Diesel	1.18	9.51	5.02	0.00	0.00	0.43	0.43	0.00	0.40	0.40	1,153.99
Mass Grading On Road Diesel	0.03	0.40	0.15	0.00	0.00	0.01	0.02	0.00	0.01	0.01	91.08
Mass Grading Worker Trips	0.01	0.01	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	40.58
Trenching 01/01/2010-12/31/2029	0.42	3.41	2.25	0.00	0.00	0.15	0.16	0.00	0.14	0.14	479.98
Trenching Off Road Diesel	0.42	3.40	2.06	0.00	0.00	0.15	0.15	0.00	0.14	0.14	447.52
Trenching Worker Trips	0.01	0.01	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	32.46
2015	13.43	43.16	120.11	0.23	30.98	2.20	33.18	6.61	1.98	8.59	25,332.38
Asphalt 01/01/2010-12/31/2029	0.34	1.97	1.43	0.00	0.00	0.16	0.17	0.00	0.15	0.15	218.72
Paving Off-Gas	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	0.31	1.91	1.30	0.00	0.00	0.16	0.16	0.00	0.15	0.15	185.16
Paving On Road Diesel	0.00	0.05	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.28
Paving Worker Trips	0.00	0.01	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.29
Building 01/01/2010-12/31/2029	4.48	23.36	107.79	0.23	0.98	1.23	2.21	0.35	1.09	1.44	22,427.63
Building Off Road Diesel	0.35	2.11	1.67	0.00	0.00	0.13	0.13	0.00	0.12	0.12	294.84
Building Vendor Trips	1.60	16.38	15.79	0.06	0.20	0.65	0.86	0.07	0.59	0.66	5,828.12
Building Worker Trips	2.53	4.86	90.32	0.17	0.77	0.45	1.22	0.28	0.37	0.65	16,304.68
Coating 01/01/2010-12/31/2029	6.41	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.26
Architectural Coating	6.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.26
Demolition 01/01/2010-12/31/2029	0.67	5.68	3.42	0.00	2.50	0.24	2.74	0.52	0.22	0.75	908.15
Fugitive Dust	0.00	0.00	0.00	0.00	0.13	0.00	0.13	0.03	0.00	0.03	0.00
Demo Off Road Diesel	0.56	4.35	2.80	0.00	0.00	0.20	0.20	0.00	0.18	0.18	539.29
Demo On Road Diesel	0.11	1.33	0.50	0.00	0.01	0.05	0.06	0.00	0.04	0.05	348.58

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Demo Worker Trips	0.00	0.01	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.29
Mass Grading 01/01/2010-	1.14	9.10	5.18	0.00	27.51	0.41	27.91	5.74	0.38	6.12	1,285.65	
Mass Grading Dust	0.00	0.00	0.00	0.00	27.50	0.00	27.50	5.74	0.00	5.74	0.00	
Mass Grading Off Road Diesel	1.10	8.74	4.82	0.00	0.00	0.39	0.39	0.00	0.36	0.36	1,153.99	
Mass Grading On Road Diesel	0.03	0.35	0.13	0.00	0.00	0.01	0.02	0.00	0.01	0.01	91.08	
Mass Grading Worker Trips	0.01	0.01	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	40.57	
Trenching 01/01/2010-12/31/2029	0.39	3.05	2.23	0.00	0.00	0.15	0.15	0.00	0.13	0.13	479.98	
Trenching Off Road Diesel	0.39	3.04	2.05	0.00	0.00	0.14	0.14	0.00	0.13	0.13	447.52	
Trenching Worker Trips	0.01	0.01	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	32.46	
2016	12.90	38.97	112.65	0.23	30.98	2.01	32.99	6.61	1.80	8.42	25,330.54	
Asphalt 01/01/2010-12/31/2029	0.32	1.84	1.42	0.00	0.00	0.15	0.15	0.00	0.14	0.14	218.72	
Paving Off-Gas	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Paving Off Road Diesel	0.29	1.79	1.29	0.00	0.00	0.15	0.15	0.00	0.14	0.14	185.16	
Paving On Road Diesel	0.00	0.04	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.28	
Paving Worker Trips	0.00	0.01	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.28	
Building 01/01/2010-12/31/2029	4.11	20.90	100.72	0.23	0.98	1.14	2.11	0.35	1.00	1.35	22,425.81	
Building Off Road Diesel	0.32	1.94	1.65	0.00	0.00	0.11	0.11	0.00	0.11	0.11	294.84	
Building Vendor Trips	1.46	14.47	14.69	0.06	0.20	0.58	0.78	0.07	0.53	0.59	5,828.28	
Building Worker Trips	2.33	4.49	84.38	0.17	0.77	0.45	1.22	0.28	0.37	0.65	16,302.70	
Coating 01/01/2010-12/31/2029	6.41	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.25	
Architectural Coating	6.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Coating Worker Trips	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.25	
Demolition 01/01/2010-12/31/2029	0.63	5.18	3.26	0.00	2.50	0.22	2.72	0.52	0.21	0.73	908.14	
Fugitive Dust	0.00	0.00	0.00	0.00	0.13	0.00	0.13	0.03	0.00	0.03	0.00	
Demo Off Road Diesel	0.52	4.01	2.70	0.00	0.00	0.18	0.18	0.00	0.17	0.17	539.29	
Demo On Road Diesel	0.10	1.17	0.45	0.00	0.01	0.04	0.05	0.00	0.04	0.04	348.58	
Demo Worker Trips	0.00	0.01	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.28	
Mass Grading 01/01/2010-	1.07	8.34	4.98	0.00	27.51	0.37	27.87	5.74	0.34	6.08	1,285.64	
Mass Grading Dust	0.00	0.00	0.00	0.00	27.50	0.00	27.50	5.74	0.00	5.74	0.00	
Mass Grading Off Road Diesel	1.04	8.02	4.66	0.00	0.00	0.36	0.36	0.00	0.33	0.33	1,153.99	
Mass Grading On Road Diesel	0.03	0.31	0.12	0.00	0.00	0.01	0.01	0.00	0.01	0.01	91.08	
Mass Grading Worker Trips	0.01	0.01	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	40.57	
Trenching 01/01/2010-12/31/2029	0.37	2.71	2.21	0.00	0.00	0.12	0.12	0.00	0.11	0.11	479.97	
Trenching Off Road Diesel	0.36	2.70	2.04	0.00	0.00	0.12	0.12	0.00	0.11	0.11	447.52	
Trenching Worker Trips	0.00	0.01	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	32.45	
2017	12.38	35.16	105.18	0.23	30.86	1.84	32.71	6.59	1.65	8.24	25,232.31	
Asphalt 01/01/2010-12/31/2029	0.30	1.72	1.39	0.00	0.00	0.14	0.14	0.00	0.13	0.13	217.88	
Paving Off-Gas	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Paving Off Road Diesel	0.27	1.67	1.28	0.00	0.00	0.14	0.14	0.00	0.13	0.13	184.45	
Paving On Road Diesel	0.00	0.04	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.23	
Paving Worker Trips	0.00	0.01	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.20	

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Building 01/01/2010-12/31/2029	3.76	18.75	93.66	0.23	0.97	1.06	2.03	0.35	0.94	1.28	22,338.71
Building Off Road Diesel	0.29	1.77	1.62	0.00	0.00	0.10	0.10	0.00	0.09	0.09	293.71
Building Vendor Trips	1.34	12.88	13.68	0.06	0.20	0.52	0.72	0.07	0.47	0.54	5,806.16
Building Worker Trips	2.13	4.10	78.37	0.17	0.77	0.45	1.21	0.28	0.37	0.65	16,238.84
Coating 01/01/2010-12/31/2029	6.38	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.21
Architectural Coating	6.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.21
Demolition 01/01/2010-12/31/2029	0.60	4.70	3.11	0.00	2.49	0.20	2.69	0.52	0.19	0.71	904.66
Fugitive Dust	0.00	0.00	0.00	0.00	0.13	0.00	0.13	0.03	0.00	0.03	0.00
Demo Off Road Diesel	0.50	3.66	2.60	0.00	0.00	0.17	0.17	0.00	0.15	0.15	537.22
Demo On Road Diesel	0.09	1.04	0.40	0.00	0.01	0.04	0.05	0.00	0.03	0.04	347.24
Demo Worker Trips	0.00	0.01	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.20
Mass Grading 01/01/2010-	1.01	7.60	4.78	0.00	27.40	0.33	27.73	5.72	0.30	6.03	1,280.71
Mass Grading Dust	0.00	0.00	0.00	0.00	27.40	0.00	27.40	5.72	0.00	5.72	0.00
Mass Grading Off Road Diesel	0.98	7.32	4.48	0.00	0.00	0.32	0.32	0.00	0.30	0.30	1,149.57
Mass Grading On Road Diesel	0.02	0.27	0.11	0.00	0.00	0.01	0.01	0.00	0.01	0.01	90.73
Mass Grading Worker Trips	0.01	0.01	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	40.41
Trenching 01/01/2010-12/31/2029	0.34	2.39	2.19	0.00	0.00	0.11	0.11	0.00	0.10	0.10	478.13
Trenching Off Road Diesel	0.34	2.38	2.03	0.00	0.00	0.11	0.11	0.00	0.10	0.10	445.81
Trenching Worker Trips	0.00	0.01	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	32.33
2018	11.99	32.04	99.02	0.23	30.98	1.71	32.69	6.61	1.53	8.14	25,328.53
Asphalt 01/01/2010-12/31/2029	0.29	1.61	1.38	0.00	0.00	0.13	0.13	0.00	0.12	0.12	218.72
Paving Off-Gas	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	0.26	1.57	1.28	0.00	0.00	0.13	0.13	0.00	0.12	0.12	185.16
Paving On Road Diesel	0.00	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.28
Paving Worker Trips	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.28
Building 01/01/2010-12/31/2029	3.47	17.06	87.76	0.23	0.98	1.00	1.98	0.35	0.88	1.23	22,423.82
Building Off Road Diesel	0.27	1.63	1.60	0.00	0.00	0.09	0.09	0.00	0.08	0.08	294.84
Building Vendor Trips	1.24	11.63	12.87	0.06	0.20	0.47	0.67	0.07	0.43	0.50	5,828.73
Building Worker Trips	1.96	3.80	73.29	0.17	0.77	0.45	1.22	0.28	0.37	0.65	16,300.25
Coating 01/01/2010-12/31/2029	6.41	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.25
Architectural Coating	6.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.25
Demolition 01/01/2010-12/31/2029	0.56	4.30	3.00	0.00	2.50	0.18	2.68	0.52	0.17	0.69	908.14
Fugitive Dust	0.00	0.00	0.00	0.00	0.13	0.00	0.13	0.03	0.00	0.03	0.00
Demo Off Road Diesel	0.47	3.36	2.54	0.00	0.00	0.15	0.15	0.00	0.14	0.14	539.29
Demo On Road Diesel	0.09	0.94	0.37	0.00	0.01	0.03	0.04	0.00	0.03	0.03	348.58
Demo Worker Trips	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.28
Mass Grading 01/01/2010-	0.94	6.96	4.65	0.00	27.51	0.30	27.80	5.74	0.27	6.02	1,285.63
Mass Grading Dust	0.00	0.00	0.00	0.00	27.50	0.00	27.50	5.74	0.00	5.74	0.00
Mass Grading Off Road Diesel	0.91	6.71	4.37	0.00	0.00	0.29	0.29	0.00	0.26	0.26	1,153.99
Mass Grading On Road Diesel	0.02	0.24	0.10	0.00	0.00	0.01	0.01	0.00	0.01	0.01	91.08

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2022	10.32	22.22	67.14	0.23	30.86	1.39	32.25	6.59	1.23	7.82	25,227.56
Asphalt 01/01/2010-12/31/2029	0.25	1.39	1.32	0.00	0.00	0.11	0.11	0.00	0.10	0.10	217.87
Paving Off-Gas	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	0.22	1.37	1.26	0.00	0.00	0.11	0.11	0.00	0.10	0.10	184.45
Paving On Road Diesel	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.23
Paving Worker Trips	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.20
Building 01/01/2010-12/31/2029	2.12	10.18	56.67	0.23	0.97	0.83	1.80	0.35	0.72	1.07	22,334.01
Building Off Road Diesel	0.22	1.36	1.56	0.00	0.00	0.06	0.06	0.00	0.06	0.06	293.71
Building Vendor Trips	0.81	6.57	8.83	0.06	0.20	0.28	0.49	0.07	0.26	0.33	5,807.65
Building Worker Trips	1.08	2.24	46.27	0.17	0.77	0.48	1.25	0.28	0.41	0.68	16,232.65
Coating 01/01/2010-12/31/2029	6.38	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.20
Architectural Coating	6.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.20
Demolition 01/01/2010-12/31/2029	0.47	3.33	2.68	0.00	2.49	0.14	2.63	0.52	0.13	0.65	904.66
Fugitive Dust	0.00	0.00	0.00	0.00	0.13	0.00	0.13	0.03	0.00	0.03	0.00
Demo Off Road Diesel	0.41	2.80	2.40	0.00	0.00	0.13	0.13	0.00	0.12	0.12	537.22
Demo On Road Diesel	0.06	0.53	0.22	0.00	0.01	0.02	0.03	0.00	0.01	0.02	347.24
Demo Worker Trips	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.20
Mass Grading 01/01/2010-	0.83	5.71	4.32	0.00	27.40	0.23	27.63	5.72	0.21	5.93	1,280.70
Mass Grading Dust	0.00	0.00	0.00	0.00	27.40	0.00	27.40	5.72	0.00	5.72	0.00
Mass Grading Off Road Diesel	0.81	5.56	4.15	0.00	0.00	0.22	0.22	0.00	0.21	0.21	1,149.57
Mass Grading On Road Diesel	0.02	0.14	0.06	0.00	0.00	0.00	0.01	0.00	0.00	0.00	90.73
Mass Grading Worker Trips	0.00	0.01	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	40.39
Trenching 01/01/2010-12/31/2029	0.27	1.61	2.11	0.00	0.00	0.08	0.08	0.00	0.07	0.07	478.12
Trenching Off Road Diesel	0.27	1.61	2.02	0.00	0.00	0.07	0.07	0.00	0.07	0.07	445.81
Trenching Worker Trips	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	32.31
2023	10.32	22.22	67.14	0.23	30.86	1.39	32.25	6.59	1.23	7.82	25,227.56
Asphalt 01/01/2010-12/31/2029	0.25	1.39	1.32	0.00	0.00	0.11	0.11	0.00	0.10	0.10	217.87
Paving Off-Gas	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	0.22	1.37	1.26	0.00	0.00	0.11	0.11	0.00	0.10	0.10	184.45
Paving On Road Diesel	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.23
Paving Worker Trips	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.20
Building 01/01/2010-12/31/2029	2.12	10.18	56.67	0.23	0.97	0.83	1.80	0.35	0.72	1.07	22,334.01
Building Off Road Diesel	0.22	1.36	1.56	0.00	0.00	0.06	0.06	0.00	0.06	0.06	293.71
Building Vendor Trips	0.81	6.57	8.83	0.06	0.20	0.28	0.49	0.07	0.26	0.33	5,807.65
Building Worker Trips	1.08	2.24	46.27	0.17	0.77	0.48	1.25	0.28	0.41	0.68	16,232.65
Coating 01/01/2010-12/31/2029	6.38	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.20
Architectural Coating	6.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.20
Demolition 01/01/2010-12/31/2029	0.47	3.33	2.68	0.00	2.49	0.14	2.63	0.52	0.13	0.65	904.66
Fugitive Dust	0.00	0.00	0.00	0.00	0.13	0.00	0.13	0.03	0.00	0.03	0.00
Demo Off Road Diesel	0.41	2.80	2.40	0.00	0.00	0.13	0.13	0.00	0.12	0.12	537.22

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Paving Worker Trips	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.27
Building 01/01/2010-12/31/2029	2.13	10.22	56.89	0.23	0.98	0.84	1.81	0.35	0.73	1.07		22,419.91
Building Off Road Diesel	0.22	1.37	1.57	0.00	0.00	0.06	0.06	0.00	0.06	0.06		294.84
Building Vendor Trips	0.82	6.60	8.87	0.06	0.20	0.29	0.49	0.07	0.26	0.33		5,829.99
Building Worker Trips	1.09	2.25	46.45	0.17	0.77	0.49	1.26	0.28	0.41	0.69		16,295.09
Coating 01/01/2010-12/31/2029	6.41	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00		12.25
Architectural Coating	6.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00
Coating Worker Trips	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00		12.25
Demolition 01/01/2010-12/31/2029	0.47	3.34	2.69	0.00	2.50	0.14	2.64	0.52	0.13	0.65		908.13
Fugitive Dust	0.00	0.00	0.00	0.00	0.13	0.00	0.13	0.03	0.00	0.03		0.00
Demo Off Road Diesel	0.41	2.81	2.41	0.00	0.00	0.13	0.13	0.00	0.12	0.12		539.29
Demo On Road Diesel	0.06	0.53	0.22	0.00	0.01	0.02	0.03	0.00	0.01	0.02		348.58
Demo Worker Trips	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00		20.27
Mass Grading 01/01/2010-	0.83	5.73	4.34	0.00	27.51	0.23	27.74	5.74	0.21	5.96		1,285.62
Mass Grading Dust	0.00	0.00	0.00	0.00	27.50	0.00	27.50	5.74	0.00	5.74		0.00
Mass Grading Off Road Diesel	0.81	5.58	4.16	0.00	0.00	0.22	0.22	0.00	0.21	0.21		1,153.99
Mass Grading On Road Diesel	0.02	0.14	0.06	0.00	0.00	0.00	0.01	0.00	0.00	0.00		91.08
Mass Grading Worker Trips	0.00	0.01	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00		40.55
Trenching 01/01/2010-12/31/2029	0.27	1.62	2.12	0.00	0.00	0.08	0.08	0.00	0.07	0.07		479.96
Trenching Off Road Diesel	0.27	1.61	2.03	0.00	0.00	0.08	0.08	0.00	0.07	0.07		447.52
Trenching Worker Trips	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00		32.44
2026	9.93	20.67	56.93	0.23	30.98	1.36	32.34	6.61	1.20	7.82		25,323.29
Asphalt 01/01/2010-12/31/2029	0.25	1.39	1.31	0.00	0.00	0.11	0.11	0.00	0.10	0.10		218.71
Paving Off-Gas	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00
Paving Off Road Diesel	0.22	1.37	1.26	0.00	0.00	0.11	0.11	0.00	0.10	0.10		185.16
Paving On Road Diesel	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00		13.28
Paving Worker Trips	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00		20.27
Building 01/01/2010-12/31/2029	1.71	8.69	46.53	0.23	0.98	0.80	1.78	0.35	0.69	1.04		22,418.63
Building Off Road Diesel	0.22	1.37	1.57	0.00	0.00	0.06	0.06	0.00	0.06	0.06		294.84
Building Vendor Trips	0.71	5.57	7.65	0.06	0.20	0.25	0.46	0.07	0.23	0.30		5,830.51
Building Worker Trips	0.78	1.75	37.31	0.17	0.77	0.49	1.26	0.28	0.41	0.69		16,293.28
Coating 01/01/2010-12/31/2029	6.41	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00		12.25
Architectural Coating	6.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00
Coating Worker Trips	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00		12.25
Demolition 01/01/2010-12/31/2029	0.47	3.26	2.65	0.00	2.50	0.14	2.64	0.52	0.13	0.65		908.13
Fugitive Dust	0.00	0.00	0.00	0.00	0.13	0.00	0.13	0.03	0.00	0.03		0.00
Demo Off Road Diesel	0.41	2.81	2.41	0.00	0.00	0.13	0.13	0.00	0.12	0.12		539.29
Demo On Road Diesel	0.05	0.45	0.19	0.00	0.01	0.01	0.02	0.00	0.01	0.02		348.58
Demo Worker Trips	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00		20.27
Mass Grading 01/01/2010-	0.83	5.71	4.31	0.00	27.51	0.23	27.73	5.74	0.21	5.96		1,285.62
Mass Grading Dust	0.00	0.00	0.00	0.00	27.50	0.00	27.50	5.74	0.00	5.74		0.00
Mass Grading Off Road Diesel	0.81	5.58	4.16	0.00	0.00	0.22	0.22	0.00	0.21	0.21		1,153.99

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Mass Grading On Road Diesel	0.01	0.12	0.05	0.00	0.00	0.00	0.01	0.00	0.00	0.00	91.08
Mass Grading Worker Trips	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	40.54
Trenching 01/01/2010-12/31/2029	0.27	1.62	2.10	0.00	0.00	0.08	0.08	0.00	0.07	0.07	479.96
Trenching Off Road Diesel	0.27	1.61	2.03	0.00	0.00	0.08	0.08	0.00	0.07	0.07	447.52
Trenching Worker Trips	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	32.44
2027	9.93	20.67	56.93	0.23	30.98	1.36	32.34	6.61	1.20	7.82	25,323.29
Asphalt 01/01/2010-12/31/2029	0.25	1.39	1.31	0.00	0.00	0.11	0.11	0.00	0.10	0.10	218.71
Paving Off-Gas	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	0.22	1.37	1.26	0.00	0.00	0.11	0.11	0.00	0.10	0.10	185.16
Paving On Road Diesel	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.28
Paving Worker Trips	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.27
Building 01/01/2010-12/31/2029	1.71	8.69	46.53	0.23	0.98	0.80	1.78	0.35	0.69	1.04	22,418.63
Building Off Road Diesel	0.22	1.37	1.57	0.00	0.00	0.06	0.06	0.00	0.06	0.06	294.84
Building Vendor Trips	0.71	5.57	7.65	0.06	0.20	0.25	0.46	0.07	0.23	0.30	5,830.51
Building Worker Trips	0.78	1.75	37.31	0.17	0.77	0.49	1.26	0.28	0.41	0.69	16,293.28
Coating 01/01/2010-12/31/2029	6.41	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.25
Architectural Coating	6.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.25
Demolition 01/01/2010-12/31/2029	0.47	3.26	2.65	0.00	2.50	0.14	2.64	0.52	0.13	0.65	908.13
Fugitive Dust	0.00	0.00	0.00	0.00	0.13	0.00	0.13	0.03	0.00	0.03	0.00
Demo Off Road Diesel	0.41	2.81	2.41	0.00	0.00	0.13	0.13	0.00	0.12	0.12	539.29
Demo On Road Diesel	0.05	0.45	0.19	0.00	0.01	0.01	0.02	0.00	0.01	0.02	348.58
Demo Worker Trips	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.27
Mass Grading 01/01/2010-	0.83	5.71	4.31	0.00	27.51	0.23	27.73	5.74	0.21	5.96	1,285.62
Mass Grading Dust	0.00	0.00	0.00	0.00	27.50	0.00	27.50	5.74	0.00	5.74	0.00
Mass Grading Off Road Diesel	0.81	5.58	4.16	0.00	0.00	0.22	0.22	0.00	0.21	0.21	1,153.99
Mass Grading On Road Diesel	0.01	0.12	0.05	0.00	0.00	0.00	0.01	0.00	0.00	0.00	91.08
Mass Grading Worker Trips	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	40.54
Trenching 01/01/2010-12/31/2029	0.27	1.62	2.10	0.00	0.00	0.08	0.08	0.00	0.07	0.07	479.96
Trenching Off Road Diesel	0.27	1.61	2.03	0.00	0.00	0.08	0.08	0.00	0.07	0.07	447.52
Trenching Worker Trips	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	32.44
2028	9.89	20.59	56.71	0.23	30.86	1.35	32.22	6.59	1.20	7.79	25,226.27
Asphalt 01/01/2010-12/31/2029	0.25	1.39	1.31	0.00	0.00	0.11	0.11	0.00	0.10	0.10	217.87
Paving Off-Gas	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	0.22	1.37	1.26	0.00	0.00	0.11	0.11	0.00	0.10	0.10	184.45
Paving On Road Diesel	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.23
Paving Worker Trips	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.19
Building 01/01/2010-12/31/2029	1.71	8.65	46.35	0.23	0.97	0.80	1.77	0.35	0.69	1.04	22,332.74
Building Off Road Diesel	0.22	1.36	1.56	0.00	0.00	0.06	0.06	0.00	0.06	0.06	293.71
Building Vendor Trips	0.70	5.54	7.62	0.06	0.20	0.25	0.45	0.07	0.23	0.29	5,808.17
Building Worker Trips	0.78	1.75	37.17	0.17	0.77	0.48	1.25	0.28	0.41	0.68	16,230.86

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Mass Grading 1/1/2010 - 12/31/2029 - Default Mass Site Grading/Excavation Description

For Soil Stabilizing Measures, the Replace ground cover in disturbed areas quickly mitigation reduces emissions by:

PM10: 5% PM25: 5%

For Soil Stabilizing Measures, the Water exposed surfaces 2x daily watering mitigation reduces emissions by:

PM10: 55% PM25: 55%

For Soil Stabilizing Measures, the Equipment loading/unloading mitigation reduces emissions by:

PM10: 69% PM25: 69%

For Unpaved Roads Measures, the Reduce speed on unpaved roads to less than 15 mph mitigation reduces emissions by:

PM10: 44% PM25: 44%

For Unpaved Roads Measures, the Manage haul road dust 2x daily watering mitigation reduces emissions by:

PM10: 55% PM25: 55%

Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: P:\COI-21\Technical Studies\Air\Modeling\construction\ExistingGPConstruction.urb924

Project Name: Recirculated IBC Existing General Plan - Construction

Project Location: Orange County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10 Dust</u>	<u>PM10 Exhaust</u>	<u>PM10</u>	<u>PM2.5 Dust</u>	<u>PM2.5 Exhaust</u>	<u>PM2.5</u>	<u>CO2</u>
2010 TOTALS (lbs/day unmitigated)	129.35	536.18	1,298.92	1.78	1,363.69	25.71	1,389.40	285.90	23.37	309.27	194,198.13
2010 TOTALS (lbs/day mitigated)	129.35	536.18	1,298.92	1.78	237.42	25.71	263.13	50.69	23.37	74.06	194,198.13
2011 TOTALS (lbs/day unmitigated)	123.48	491.73	1,213.89	1.78	1,363.69	23.94	1,387.63	285.90	21.73	307.63	194,166.95
2011 TOTALS (lbs/day mitigated)	123.48	491.73	1,213.89	1.78	237.42	23.94	261.36	50.69	21.73	72.42	194,166.95
2012 TOTALS (lbs/day unmitigated)	117.77	448.66	1,132.63	1.78	1,363.69	21.92	1,385.61	285.90	19.86	305.76	194,146.51
2012 TOTALS (lbs/day mitigated)	117.77	448.66	1,132.63	1.78	237.42	21.92	259.34	50.69	19.86	70.55	194,146.51
2013 TOTALS (lbs/day unmitigated)	112.51	407.77	1,055.20	1.78	1,363.69	20.13	1,383.82	285.90	18.20	304.10	194,135.71
2013 TOTALS (lbs/day mitigated)	112.51	407.77	1,055.20	1.78	237.42	20.13	257.55	50.69	18.20	68.89	194,135.71
2014 TOTALS (lbs/day unmitigated)	107.68	368.62	985.93	1.78	1,363.69	18.28	1,381.97	285.90	16.49	302.39	194,125.50
2014 TOTALS (lbs/day mitigated)	107.68	368.62	985.93	1.78	237.42	18.28	255.70	50.69	16.49	67.18	194,125.50
2015 TOTALS (lbs/day unmitigated)	102.94	330.73	920.39	1.78	1,363.69	16.83	1,380.52	285.90	15.16	301.06	194,117.87
2015 TOTALS (lbs/day mitigated)	102.94	330.73	920.39	1.78	237.42	16.83	254.25	50.69	15.16	65.85	194,117.87
2016 TOTALS (lbs/day unmitigated)	98.89	298.64	863.22	1.78	1,363.69	15.37	1,379.06	285.90	13.81	299.71	194,103.79
2016 TOTALS (lbs/day mitigated)	98.89	298.64	863.22	1.78	237.42	15.37	252.79	50.69	13.81	64.50	194,103.79
2017 TOTALS (lbs/day unmitigated)	95.27	270.42	809.08	1.78	1,363.69	14.18	1,377.87	285.90	12.72	298.62	194,094.67
2017 TOTALS (lbs/day mitigated)	95.27	270.42	809.08	1.78	237.42	14.18	251.60	50.69	12.72	63.41	194,094.67
2018 TOTALS (lbs/day unmitigated)	91.85	245.49	758.81	1.78	1,363.69	13.10	1,376.79	285.90	11.72	297.62	194,088.36
2018 TOTALS (lbs/day mitigated)	91.85	245.49	758.81	1.78	237.42	13.10	250.52	50.69	11.72	62.41	194,088.36
2019 TOTALS (lbs/day unmitigated)	88.80	223.32	712.25	1.78	1,363.69	12.06	1,375.75	285.90	10.77	296.67	194,084.48
2019 TOTALS (lbs/day mitigated)	88.80	223.32	712.25	1.78	237.42	12.06	249.48	50.69	10.77	61.46	194,084.48

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2020 TOTALS (lbs/day unmitigated)	85.85	203.89	669.02	1.78	1,363.69	11.43	1,375.12	285.90	10.19	296.09	194,080.99
2020 TOTALS (lbs/day mitigated)	85.85	203.89	669.02	1.78	237.42	11.43	248.85	50.69	10.19	60.88	194,080.99
2021 TOTALS (lbs/day unmitigated)	79.36	170.92	516.45	1.78	1,363.69	10.69	1,374.38	285.90	9.50	295.40	194,058.12
2021 TOTALS (lbs/day mitigated)	79.36	170.92	516.45	1.78	237.42	10.69	248.11	50.69	9.50	60.19	194,058.12
2022 TOTALS (lbs/day unmitigated)	79.36	170.92	516.45	1.78	1,363.69	10.69	1,374.38	285.90	9.50	295.40	194,058.12
2022 TOTALS (lbs/day mitigated)	79.36	170.92	516.45	1.78	237.42	10.69	248.11	50.69	9.50	60.19	194,058.12
2023 TOTALS (lbs/day unmitigated)	79.36	170.92	516.45	1.78	1,363.69	10.69	1,374.38	285.90	9.50	295.40	194,058.12
2023 TOTALS (lbs/day mitigated)	79.36	170.92	516.45	1.78	237.42	10.69	248.11	50.69	9.50	60.19	194,058.12
2024 TOTALS (lbs/day unmitigated)	79.36	170.92	516.45	1.78	1,363.69	10.69	1,374.38	285.90	9.50	295.40	194,058.12
2024 TOTALS (lbs/day mitigated)	79.36	170.92	516.45	1.78	237.42	10.69	248.11	50.69	9.50	60.19	194,058.12
2025 TOTALS (lbs/day unmitigated)	79.36	170.92	516.45	1.78	1,363.69	10.69	1,374.38	285.90	9.50	295.40	194,058.12
2025 TOTALS (lbs/day mitigated)	79.36	170.92	516.45	1.78	237.42	10.69	248.11	50.69	9.50	60.19	194,058.12
2026 TOTALS (lbs/day unmitigated)	76.10	158.38	436.23	1.78	1,363.69	10.39	1,374.08	285.90	9.22	295.12	194,048.20
2026 TOTALS (lbs/day mitigated)	76.10	158.38	436.23	1.78	237.42	10.39	247.81	50.69	9.22	59.91	194,048.20
2027 TOTALS (lbs/day unmitigated)	76.10	158.38	436.23	1.78	1,363.69	10.39	1,374.08	285.90	9.22	295.12	194,048.20
2027 TOTALS (lbs/day mitigated)	76.10	158.38	436.23	1.78	237.42	10.39	247.81	50.69	9.22	59.91	194,048.20
2028 TOTALS (lbs/day unmitigated)	76.10	158.38	436.23	1.78	1,363.69	10.39	1,374.08	285.90	9.22	295.12	194,048.20
2028 TOTALS (lbs/day mitigated)	76.10	158.38	436.23	1.78	237.42	10.39	247.81	50.69	9.22	59.91	194,048.20
2029 TOTALS (lbs/day unmitigated)	76.10	158.38	436.23	1.78	1,363.69	10.39	1,374.08	285.90	9.22	295.12	194,048.20
2029 TOTALS (lbs/day mitigated)	76.10	158.38	436.23	1.78	237.42	10.39	247.81	50.69	9.22	59.91	194,048.20

Phase Assumptions

Phase: Demolition 1/1/2010 - 12/31/2029 - Default Demolition Description

Building Volume Total (cubic feet): 1.198854E+07

Building Volume Daily (cubic feet): 45375

On Road Truck Travel (VMT): 630.21

Off-Road Equipment:

3 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day

2 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 8 hours per day

Phase: Mass Grading 1/1/2010 - 12/31/2029 - Default Mass Site Grading/Excavation Description

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Total Acres Disturbed: 140

Maximum Daily Acreage Disturbed: 35

Fugitive Dust Level of Detail: Default

38.2 lbs per acre-day

On Road Truck Travel (VMT): 164.67

Off-Road Equipment:

- 1 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day
- 1 Graders (174 hp) operating at a 0.61 load factor for 8 hours per day
- 1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 8 hours per day
- 3 Scrapers (313 hp) operating at a 0.72 load factor for 8 hours per day
- 3 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day
- 1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Trenching 1/1/2010 - 12/31/2029 - Default Trenching Description

Off-Road Equipment:

- 4 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day
- 2 Other General Industrial Equipment (238 hp) operating at a 0.51 load factor for 8 hours per day
- 2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 0 hours per day

Phase: Paving 1/1/2010 - 12/31/2029 - Default Paving Description

Acres to be Paved: 348.94

Off-Road Equipment:

- 1 Pavers (100 hp) operating at a 0.62 load factor for 8 hours per day
- 2 Paving Equipment (104 hp) operating at a 0.53 load factor for 8 hours per day
- 2 Rollers (95 hp) operating at a 0.56 load factor for 6 hours per day

Phase: Building Construction 1/1/2010 - 12/31/2029 - Default Building Construction Description

Off-Road Equipment:

- 1 Cranes (399 hp) operating at a 0.43 load factor for 7 hours per day
- 3 Forklifts (145 hp) operating at a 0.3 load factor for 8 hours per day
- 1 Generator Sets (49 hp) operating at a 0.74 load factor for 8 hours per day
- 3 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day
- 1 Welders (45 hp) operating at a 0.45 load factor for 8 hours per day

Phase: Architectural Coating 1/1/2010 - 12/31/2029 - Default Architectural Coating Description

Rule: Residential Interior Coatings begins 1/1/2005 ends 6/30/2008 specifies a VOC of 100

Rule: Residential Interior Coatings begins 7/1/2008 ends 12/31/2040 specifies a VOC of 50

Rule: Residential Exterior Coatings begins 1/1/2005 ends 6/30/2008 specifies a VOC of 250

Rule: Residential Exterior Coatings begins 7/1/2008 ends 12/31/2040 specifies a VOC of 100

Rule: Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Construction Mitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Summer Pounds Per Day, Mitigated

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10 Dust</u>	<u>PM10 Exhaust</u>	<u>PM10</u>	<u>PM2.5 Dust</u>	<u>PM2.5 Exhaust</u>	<u>PM2.5</u>	<u>CO2</u>
Time Slice 1/1/2010-12/31/2010	<u>129.35</u>	<u>536.18</u>	<u>1,298.92</u>	<u>1.78</u>	<u>237.42</u>	<u>25.71</u>	<u>263.13</u>	<u>50.69</u>	<u>23.37</u>	<u>74.06</u>	<u>194,198.13</u>
Asphalt 01/01/2010-12/31/2029	3.47	19.97	11.97	0.00	0.01	1.71	1.72	0.00	1.58	1.58	1,676.13
Paving Off-Gas	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	3.20	19.17	10.47	0.00	0.00	1.68	1.68	0.00	1.55	1.55	1,418.81
Paving On Road Diesel	0.05	0.73	0.27	0.00	0.00	0.03	0.03	0.00	0.03	0.03	101.76
Paving Worker Trips	0.04	0.07	1.23	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.56
Building 01/01/2010-12/31/2029	53.97	314.29	1,182.41	1.74	7.47	14.37	21.85	2.66	12.94	15.61	171,938.86
Building Off Road Diesel	4.08	23.31	14.31	0.00	0.00	1.67	1.67	0.00	1.54	1.54	2,259.28
Building Vendor Trips	19.42	233.28	179.00	0.43	1.57	9.46	11.03	0.53	8.67	9.20	44,654.18
Building Worker Trips	30.48	57.71	989.10	1.31	5.90	3.25	9.15	2.13	2.74	4.87	125,025.40
Coating 01/01/2010-12/31/2029	49.11	0.04	0.74	0.00	0.00	0.00	0.01	0.00	0.00	0.00	93.98
Architectural Coating	49.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.02	0.04	0.74	0.00	0.00	0.00	0.01	0.00	0.00	0.00	93.98
Demolition 01/01/2010-12/31/2029	6.99	65.69	34.48	0.03	19.15	2.99	22.14	4.00	2.75	6.74	6,959.09
Fugitive Dust	0.00	0.00	0.00	0.00	19.06	0.00	19.06	3.96	0.00	3.96	0.00
Demo Off Road Diesel	5.54	46.44	26.23	0.00	0.00	2.22	2.22	0.00	2.05	2.05	4,132.45
Demo On Road Diesel	1.41	19.18	7.02	0.02	0.09	0.76	0.85	0.03	0.70	0.73	2,671.08
Demo Worker Trips	0.04	0.07	1.23	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.56
Mass Grading 01/01/2010-	11.64	100.69	50.91	0.01	210.77	4.87	215.64	44.02	4.48	48.50	9,851.90
Mass Grading Dust	0.00	0.00	0.00	0.00	210.73	0.00	210.73	44.01	0.00	44.01	0.00
Mass Grading Off Road Diesel	11.19	95.53	46.62	0.00	0.00	4.66	4.66	0.00	4.29	4.29	8,842.87
Mass Grading On Road Diesel	0.37	5.01	1.84	0.01	0.02	0.20	0.22	0.01	0.18	0.19	697.93
Mass Grading Worker Trips	0.08	0.14	2.46	0.00	0.01	0.01	0.02	0.01	0.01	0.01	311.11
Trenching 01/01/2010-12/31/2029	4.18	35.49	18.40	0.00	0.01	1.76	1.77	0.00	1.62	1.62	3,678.17
Trenching Off Road Diesel	4.12	35.38	16.43	0.00	0.00	1.75	1.75	0.00	1.61	1.61	3,429.28
Trenching Worker Trips	0.06	0.11	1.97	0.00	0.01	0.01	0.02	0.00	0.01	0.01	248.89
Time Slice 1/3/2011-12/30/2011	<u>123.48</u>	<u>491.73</u>	<u>1,213.89</u>	<u>1.78</u>	<u>237.42</u>	<u>23.94</u>	<u>261.36</u>	<u>50.69</u>	<u>21.73</u>	<u>72.42</u>	<u>194,166.95</u>
Asphalt 01/01/2010-12/31/2029	3.28	18.97	11.73	0.00	0.01	1.65	1.66	0.00	1.52	1.52	1,676.09
Paving Off-Gas	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	3.02	18.25	10.34	0.00	0.00	1.62	1.62	0.00	1.49	1.49	1,418.81
Paving On Road Diesel	0.05	0.66	0.24	0.00	0.00	0.03	0.03	0.00	0.02	0.02	101.76
Paving Worker Trips	0.03	0.07	1.15	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.52
Building 01/01/2010-12/31/2029	49.63	284.46	1,102.75	1.74	7.47	13.41	20.88	2.66	12.05	14.71	171,907.92
Building Off Road Diesel	3.77	21.85	13.95	0.00	0.00	1.57	1.57	0.00	1.45	1.45	2,259.28

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Building Vendor Trips	17.92	209.77	166.66	0.43	1.57	8.44	10.00	0.53	7.73	8.26	44,653.49
Building Worker Trips	27.94	52.85	922.14	1.31	5.90	3.40	9.30	2.13	2.87	5.00	124,995.15
Coating 01/01/2010-12/31/2029	49.11	0.04	0.69	0.00	0.00	0.00	0.01	0.00	0.00	0.00	93.95
Architectural Coating	49.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.02	0.04	0.69	0.00	0.00	0.00	0.01	0.00	0.00	0.00	93.95
Demolition 01/01/2010-12/31/2029	6.62	61.00	32.54	0.03	19.15	2.77	21.93	4.00	2.55	6.55	6,959.05
Fugitive Dust	0.00	0.00	0.00	0.00	19.06	0.00	19.06	3.96	0.00	3.96	0.00
Demo Off Road Diesel	5.29	43.71	25.06	0.00	0.00	2.10	2.10	0.00	1.93	1.93	4,132.45
Demo On Road Diesel	1.30	17.22	6.33	0.02	0.09	0.67	0.76	0.03	0.62	0.64	2,671.08
Demo Worker Trips	0.03	0.07	1.15	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.52
Mass Grading 01/01/2010-	10.89	94.31	48.19	0.01	210.77	4.46	215.23	44.02	4.10	48.12	9,851.83
Mass Grading Dust	0.00	0.00	0.00	0.00	210.73	0.00	210.73	44.01	0.00	44.01	0.00
Mass Grading Off Road Diesel	10.48	89.68	44.24	0.00	0.00	4.27	4.27	0.00	3.93	3.93	8,842.87
Mass Grading On Road Diesel	0.34	4.50	1.65	0.01	0.02	0.17	0.20	0.01	0.16	0.17	697.93
Mass Grading Worker Trips	0.07	0.13	2.29	0.00	0.01	0.01	0.02	0.01	0.01	0.01	311.04
Trenching 01/01/2010-12/31/2029	3.95	32.95	17.99	0.00	0.01	1.65	1.66	0.00	1.52	1.52	3,678.11
Trenching Off Road Diesel	3.90	32.84	16.15	0.00	0.00	1.64	1.64	0.00	1.51	1.51	3,429.28
Trenching Worker Trips	0.06	0.11	1.84	0.00	0.01	0.01	0.02	0.00	0.01	0.01	248.83
Time Slice 1/2/2012-12/31/2012	<u>117.77</u>	<u>448.66</u>	<u>1,132.63</u>	<u>1.78</u>	<u>237.42</u>	<u>21.92</u>	<u>259.34</u>	<u>50.69</u>	<u>19.86</u>	<u>70.55</u>	<u>194,146.51</u>
Asphalt 01/01/2010-12/31/2029	3.12	17.98	11.52	0.00	0.01	1.56	1.57	0.00	1.43	1.44	1,676.07
Paving Off-Gas	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.86	17.34	10.24	0.00	0.00	1.53	1.53	0.00	1.41	1.41	1,418.81
Paving On Road Diesel	0.05	0.58	0.22	0.00	0.00	0.02	0.03	0.00	0.02	0.02	101.76
Paving Worker Trips	0.03	0.06	1.07	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.49
Building 01/01/2010-12/31/2029	45.37	255.48	1,026.21	1.74	7.47	12.28	19.75	2.66	10.99	13.65	171,887.64
Building Off Road Diesel	3.48	20.42	13.62	0.00	0.00	1.42	1.42	0.00	1.31	1.31	2,259.28
Building Vendor Trips	16.42	186.79	154.41	0.43	1.57	7.44	9.01	0.53	6.81	7.35	44,654.29
Building Worker Trips	25.47	48.27	858.18	1.31	5.90	3.41	9.31	2.13	2.87	5.00	124,974.07
Coating 01/01/2010-12/31/2029	49.11	0.04	0.65	0.00	0.00	0.00	0.01	0.00	0.00	0.00	93.94
Architectural Coating	49.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.02	0.04	0.65	0.00	0.00	0.00	0.01	0.00	0.00	0.00	93.94
Demolition 01/01/2010-12/31/2029	6.21	56.52	30.82	0.03	19.15	2.51	21.66	4.00	2.31	6.31	6,959.02
Fugitive Dust	0.00	0.00	0.00	0.00	19.06	0.00	19.06	3.96	0.00	3.96	0.00
Demo Off Road Diesel	4.99	41.17	24.10	0.00	0.00	1.92	1.92	0.00	1.77	1.77	4,132.45
Demo On Road Diesel	1.18	15.30	5.66	0.02	0.09	0.58	0.67	0.03	0.54	0.57	2,671.08
Demo Worker Trips	0.03	0.06	1.07	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.49
Mass Grading 01/01/2010-	10.31	88.05	45.70	0.01	210.77	4.10	214.87	44.02	3.77	47.79	9,851.78
Mass Grading Dust	0.00	0.00	0.00	0.00	210.73	0.00	210.73	44.01	0.00	44.01	0.00
Mass Grading Off Road Diesel	9.94	83.94	42.08	0.00	0.00	3.94	3.94	0.00	3.62	3.62	8,842.87
Mass Grading On Road Diesel	0.31	4.00	1.48	0.01	0.02	0.15	0.18	0.01	0.14	0.15	697.93

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Mass Grading Worker Trips	0.06	0.12	2.14	0.00	0.01	0.01	0.02	0.01	0.01	0.01	310.98
Trenching 01/01/2010-12/31/2029	3.66	30.58	17.73	0.00	0.01	1.47	1.48	0.00	1.35	1.36	3,678.06
Trenching Off Road Diesel	3.61	30.48	16.02	0.00	0.00	1.46	1.46	0.00	1.35	1.35	3,429.28
Trenching Worker Trips	0.05	0.10	1.71	0.00	0.01	0.01	0.02	0.00	0.01	0.01	248.79
Time Slice 1/1/2013-12/31/2013	<u>112.51</u>	<u>407.77</u>	<u>1,055.20</u>	<u>1.78</u>	<u>237.42</u>	<u>20.13</u>	<u>257.55</u>	<u>50.69</u>	<u>18.20</u>	<u>68.89</u>	<u>194,135.71</u>
Asphalt 01/01/2010-12/31/2029	2.93	17.03	11.34	0.00	0.01	1.46	1.47	0.00	1.34	1.34	1,676.05
Paving Off-Gas	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.69	16.46	10.15	0.00	0.00	1.43	1.43	0.00	1.32	1.32	1,418.81
Paving On Road Diesel	0.04	0.51	0.19	0.00	0.00	0.02	0.02	0.00	0.02	0.02	101.76
Paving Worker Trips	0.03	0.05	0.99	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.48
Building 01/01/2010-12/31/2029	41.21	227.89	953.25	1.74	7.47	11.23	18.70	2.66	10.02	12.68	171,876.94
Building Off Road Diesel	3.19	19.04	13.34	0.00	0.00	1.26	1.26	0.00	1.16	1.16	2,259.28
Building Vendor Trips	14.94	164.70	142.40	0.43	1.57	6.54	8.11	0.53	5.98	6.52	44,656.29
Building Worker Trips	23.08	44.15	797.50	1.31	5.90	3.42	9.33	2.13	2.87	5.00	124,961.37
Coating 01/01/2010-12/31/2029	49.11	0.03	0.60	0.00	0.00	0.00	0.01	0.00	0.00	0.00	93.93
Architectural Coating	49.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.02	0.03	0.60	0.00	0.00	0.00	0.01	0.00	0.00	0.00	93.93
Demolition 01/01/2010-12/31/2029	5.92	52.25	29.13	0.03	19.15	2.31	21.46	4.00	2.12	6.12	6,959.01
Fugitive Dust	0.00	0.00	0.00	0.00	19.06	0.00	19.06	3.96	0.00	3.96	0.00
Demo Off Road Diesel	4.82	38.74	23.13	0.00	0.00	1.80	1.80	0.00	1.65	1.65	4,132.45
Demo On Road Diesel	1.07	13.45	5.01	0.02	0.09	0.50	0.59	0.03	0.46	0.49	2,671.08
Demo Worker Trips	0.03	0.05	0.99	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.48
Mass Grading 01/01/2010-	9.87	82.24	43.37	0.01	210.77	3.77	214.54	44.02	3.47	47.49	9,851.74
Mass Grading Dust	0.00	0.00	0.00	0.00	210.73	0.00	210.73	44.01	0.00	44.01	0.00
Mass Grading Off Road Diesel	9.53	78.62	40.07	0.00	0.00	3.63	3.63	0.00	3.34	3.34	8,842.87
Mass Grading On Road Diesel	0.28	3.52	1.31	0.01	0.02	0.13	0.15	0.01	0.12	0.13	697.93
Mass Grading Worker Trips	0.06	0.11	1.98	0.00	0.01	0.01	0.02	0.01	0.01	0.01	310.95
Trenching 01/01/2010-12/31/2029	3.48	28.32	17.52	0.00	0.01	1.36	1.37	0.00	1.25	1.26	3,678.04
Trenching Off Road Diesel	3.43	28.24	15.94	0.00	0.00	1.35	1.35	0.00	1.25	1.25	3,429.28
Trenching Worker Trips	0.05	0.09	1.59	0.00	0.01	0.01	0.02	0.00	0.01	0.01	248.76
Time Slice 1/1/2014-12/31/2014	<u>107.68</u>	<u>368.62</u>	<u>985.93</u>	<u>1.78</u>	<u>237.42</u>	<u>18.28</u>	<u>255.70</u>	<u>50.69</u>	<u>16.49</u>	<u>67.18</u>	<u>194,125.50</u>
Asphalt 01/01/2010-12/31/2029	2.78	16.11	11.16	0.00	0.01	1.37	1.38	0.00	1.26	1.26	1,676.04
Paving Off-Gas	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.54	15.61	10.07	0.00	0.00	1.34	1.34	0.00	1.24	1.24	1,418.81
Paving On Road Diesel	0.04	0.45	0.17	0.00	0.00	0.02	0.02	0.00	0.02	0.02	101.76
Paving Worker Trips	0.03	0.05	0.92	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.46
Building 01/01/2010-12/31/2029	37.67	202.31	887.85	1.74	7.47	10.25	17.72	2.66	9.11	11.77	171,866.82
Building Off Road Diesel	2.93	17.65	13.06	0.00	0.00	1.11	1.11	0.00	1.02	1.02	2,259.28
Building Vendor Trips	13.54	144.17	131.36	0.43	1.57	5.71	7.28	0.53	5.22	5.75	44,657.80

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Building Worker Trips	21.21	40.48	743.44	1.31	5.90	3.43	9.34	2.13	2.87	5.00	124,949.75
Coating 01/01/2010-12/31/2029	49.10	0.03	0.56	0.00	0.00	0.00	0.01	0.00	0.00	0.00	93.92
Architectural Coating	49.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.02	0.03	0.56	0.00	0.00	0.00	0.01	0.00	0.00	0.00	93.92
Demolition 01/01/2010-12/31/2029	5.56	47.99	27.60	0.03	19.15	2.06	21.21	4.00	1.89	5.89	6,958.99
Fugitive Dust	0.00	0.00	0.00	0.00	19.06	0.00	19.06	3.96	0.00	3.96	0.00
Demo Off Road Diesel	4.57	36.20	22.26	0.00	0.00	1.62	1.62	0.00	1.49	1.49	4,132.45
Demo On Road Diesel	0.97	11.74	4.41	0.02	0.09	0.43	0.52	0.03	0.40	0.43	2,671.08
Demo Worker Trips	0.03	0.05	0.92	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.46
Mass Grading 01/01/2010-	9.31	76.06	41.49	0.01	210.77	3.42	214.18	44.02	3.14	47.16	9,851.72
Mass Grading Dust	0.00	0.00	0.00	0.00	210.73	0.00	210.73	44.01	0.00	44.01	0.00
Mass Grading Off Road Diesel	9.01	72.90	38.49	0.00	0.00	3.29	3.29	0.00	3.03	3.03	8,842.87
Mass Grading On Road Diesel	0.25	3.07	1.15	0.01	0.02	0.11	0.14	0.01	0.10	0.11	697.93
Mass Grading Worker Trips	0.05	0.10	1.85	0.00	0.01	0.01	0.02	0.01	0.01	0.01	310.92
Trenching 01/01/2010-12/31/2029	3.25	26.12	17.26	0.00	0.01	1.18	1.20	0.00	1.09	1.09	3,678.02
Trenching Off Road Diesel	3.21	26.04	15.78	0.00	0.00	1.18	1.18	0.00	1.08	1.08	3,429.28
Trenching Worker Trips	0.04	0.08	1.48	0.00	0.01	0.01	0.02	0.00	0.01	0.01	248.74
Time Slice 1/1/2015-12/31/2015	<u>102.94</u>	<u>330.73</u>	<u>920.39</u>	<u>1.78</u>	<u>237.42</u>	<u>16.83</u>	<u>254.25</u>	<u>50.69</u>	<u>15.16</u>	<u>65.85</u>	<u>194,117.87</u>
Asphalt 01/01/2010-12/31/2029	2.62	15.09	10.99	0.00	0.01	1.26	1.27	0.00	1.16	1.17	1,676.02
Paving Off-Gas	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.38	14.65	9.98	0.00	0.00	1.25	1.25	0.00	1.15	1.15	1,418.81
Paving On Road Diesel	0.03	0.39	0.15	0.00	0.00	0.01	0.02	0.00	0.01	0.01	101.76
Paving Worker Trips	0.02	0.05	0.86	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.45
Building 01/01/2010-12/31/2029	34.33	178.98	825.97	1.74	7.47	9.45	16.92	2.66	8.37	11.03	171,859.26
Building Off Road Diesel	2.69	16.17	12.80	0.00	0.00	1.03	1.03	0.00	0.94	0.94	2,259.28
Building Vendor Trips	12.22	125.53	121.03	0.43	1.57	4.99	6.56	0.53	4.56	5.09	44,659.92
Building Worker Trips	19.41	37.27	692.14	1.31	5.90	3.43	9.34	2.13	2.87	5.00	124,940.06
Coating 01/01/2010-12/31/2029	49.10	0.03	0.52	0.00	0.00	0.00	0.01	0.00	0.00	0.00	93.91
Architectural Coating	49.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.01	0.03	0.52	0.00	0.00	0.00	0.01	0.00	0.00	0.00	93.91
Demolition 01/01/2010-12/31/2029	5.16	43.55	26.17	0.03	19.15	1.87	21.02	4.00	1.72	5.72	6,958.98
Fugitive Dust	0.00	0.00	0.00	0.00	19.06	0.00	19.06	3.96	0.00	3.96	0.00
Demo Off Road Diesel	4.27	33.33	21.45	0.00	0.00	1.50	1.50	0.00	1.38	1.38	4,132.45
Demo On Road Diesel	0.87	10.18	3.86	0.02	0.09	0.37	0.46	0.03	0.34	0.37	2,671.08
Demo Worker Trips	0.02	0.05	0.86	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.45
Mass Grading 01/01/2010-	8.73	69.71	39.67	0.01	210.77	3.13	213.90	44.02	2.88	46.90	9,851.69
Mass Grading Dust	0.00	0.00	0.00	0.00	210.73	0.00	210.73	44.01	0.00	44.01	0.00
Mass Grading Off Road Diesel	8.46	66.95	36.93	0.00	0.00	3.02	3.02	0.00	2.78	2.78	8,842.87
Mass Grading On Road Diesel	0.23	2.66	1.01	0.01	0.02	0.10	0.12	0.01	0.09	0.10	697.93
Mass Grading Worker Trips	0.05	0.09	1.72	0.00	0.01	0.01	0.02	0.01	0.01	0.01	310.90

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Trenching 01/01/2010-12/31/2029	3.00	23.37	17.07	0.00	0.01	1.12	1.13	0.00	1.03	1.03	3,678.00
Trenching Off Road Diesel	2.97	23.30	15.70	0.00	0.00	1.11	1.11	0.00	1.02	1.02	3,429.28
Trenching Worker Trips	0.04	0.07	1.38	0.00	0.01	0.01	0.02	0.00	0.01	0.01	248.72
Time Slice 1/1/2016-12/30/2016	98.89	298.64	863.22	1.78	237.42	15.37	252.79	50.69	13.81	64.50	194,103.79
Asphalt 01/01/2010-12/31/2029	2.45	14.10	10.84	0.00	0.01	1.16	1.17	0.00	1.07	1.07	1,676.01
Paving Off-Gas	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.22	13.72	9.91	0.00	0.00	1.14	1.14	0.00	1.05	1.05	1,418.81
Paving On Road Diesel	0.03	0.34	0.13	0.00	0.00	0.01	0.02	0.00	0.01	0.01	101.76
Paving Worker Trips	0.02	0.04	0.80	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.43
Building 01/01/2010-12/31/2029	31.47	160.13	771.81	1.74	7.47	8.72	16.20	2.66	7.70	10.36	171,845.30
Building Off Road Diesel	2.47	14.84	12.61	0.00	0.00	0.88	0.88	0.00	0.81	0.81	2,259.28
Building Vendor Trips	11.16	110.89	112.58	0.43	1.57	4.41	5.98	0.53	4.02	4.56	44,661.15
Building Worker Trips	17.85	34.40	646.62	1.31	5.90	3.43	9.34	2.13	2.87	5.00	124,924.88
Coating 01/01/2010-12/31/2029	49.10	0.03	0.49	0.00	0.00	0.00	0.01	0.00	0.00	0.00	93.90
Architectural Coating	49.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.01	0.03	0.49	0.00	0.00	0.00	0.01	0.00	0.00	0.00	93.90
Demolition 01/01/2010-12/31/2029	4.83	39.71	24.95	0.03	19.15	1.72	20.87	4.00	1.58	5.58	6,958.96
Fugitive Dust	0.00	0.00	0.00	0.00	19.06	0.00	19.06	3.96	0.00	3.96	0.00
Demo Off Road Diesel	4.02	30.70	20.71	0.00	0.00	1.40	1.40	0.00	1.29	1.29	4,132.45
Demo On Road Diesel	0.79	8.97	3.44	0.02	0.09	0.32	0.41	0.03	0.29	0.32	2,671.08
Demo Worker Trips	0.02	0.04	0.80	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.43
Mass Grading 01/01/2010-	8.22	63.92	38.19	0.01	210.77	2.83	213.60	44.02	2.60	46.63	9,851.65
Mass Grading Dust	0.00	0.00	0.00	0.00	210.73	0.00	210.73	44.01	0.00	44.01	0.00
Mass Grading Off Road Diesel	7.96	61.49	35.68	0.00	0.00	2.74	2.74	0.00	2.52	2.52	8,842.87
Mass Grading On Road Diesel	0.21	2.34	0.90	0.01	0.02	0.08	0.11	0.01	0.08	0.08	697.93
Mass Grading Worker Trips	0.04	0.09	1.61	0.00	0.01	0.01	0.02	0.01	0.01	0.01	310.86
Trenching 01/01/2010-12/31/2029	2.82	20.76	16.94	0.00	0.01	0.94	0.95	0.00	0.86	0.87	3,677.97
Trenching Off Road Diesel	2.79	20.70	15.65	0.00	0.00	0.93	0.93	0.00	0.86	0.86	3,429.28
Trenching Worker Trips	0.04	0.07	1.29	0.00	0.01	0.01	0.02	0.00	0.01	0.01	248.69
Time Slice 1/2/2017-12/29/2017	95.27	270.42	809.08	1.78	237.42	14.18	251.60	50.69	12.72	63.41	194,094.67
Asphalt 01/01/2010-12/31/2029	2.31	13.20	10.70	0.00	0.01	1.07	1.08	0.00	0.98	0.99	1,675.99
Paving Off-Gas	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.09	12.86	9.83	0.00	0.00	1.05	1.05	0.00	0.97	0.97	1,418.81
Paving On Road Diesel	0.03	0.30	0.12	0.00	0.00	0.01	0.01	0.00	0.01	0.01	101.76
Paving Worker Trips	0.02	0.04	0.75	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.42
Building 01/01/2010-12/31/2029	28.89	144.24	720.47	1.74	7.47	8.18	15.65	2.66	7.20	9.86	171,836.26
Building Off Road Diesel	2.25	13.62	12.45	0.00	0.00	0.77	0.77	0.00	0.71	0.71	2,259.28
Building Vendor Trips	10.30	99.07	105.20	0.43	1.57	3.97	5.54	0.53	3.62	4.15	44,662.80
Building Worker Trips	16.35	31.54	602.82	1.31	5.90	3.43	9.34	2.13	2.87	5.00	124,914.18

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Coating 01/01/2010-12/31/2029	49.10	0.02	0.45	0.00	0.00	0.00	0.01	0.00	0.00	0.00	93.89
Architectural Coating	49.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.01	0.02	0.45	0.00	0.00	0.00	0.01	0.00	0.00	0.00	93.89
Demolition 01/01/2010-12/31/2029	4.58	36.15	23.89	0.03	19.15	1.55	20.71	4.00	1.43	5.43	6,958.95
Fugitive Dust	0.00	0.00	0.00	0.00	19.06	0.00	19.06	3.96	0.00	3.96	0.00
Demo Off Road Diesel	3.84	28.13	20.04	0.00	0.00	1.27	1.27	0.00	1.17	1.17	4,132.45
Demo On Road Diesel	0.72	7.99	3.10	0.02	0.09	0.28	0.37	0.03	0.26	0.28	2,671.08
Demo Worker Trips	0.02	0.04	0.75	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.42
Mass Grading 01/01/2010-	7.74	58.46	36.76	0.01	210.77	2.55	213.32	44.02	2.34	46.37	9,851.63
Mass Grading Dust	0.00	0.00	0.00	0.00	210.73	0.00	210.73	44.01	0.00	44.01	0.00
Mass Grading Off Road Diesel	7.51	56.29	34.45	0.00	0.00	2.47	2.47	0.00	2.27	2.27	8,842.87
Mass Grading On Road Diesel	0.19	2.09	0.81	0.01	0.02	0.07	0.10	0.01	0.07	0.07	697.93
Mass Grading Worker Trips	0.04	0.08	1.50	0.00	0.01	0.01	0.02	0.01	0.01	0.01	310.83
Trenching 01/01/2010-12/31/2029	2.64	18.35	16.81	0.00	0.01	0.83	0.84	0.00	0.76	0.77	3,677.94
Trenching Off Road Diesel	2.61	18.29	15.61	0.00	0.00	0.82	0.82	0.00	0.76	0.76	3,429.28
Trenching Worker Trips	0.03	0.06	1.20	0.00	0.01	0.01	0.02	0.00	0.01	0.01	248.67
Time Slice 1/1/2018-12/31/2018	91.85	245.49	758.81	1.78	237.42	13.10	250.52	50.69	11.72	62.41	194,088.36
Asphalt 01/01/2010-12/31/2029	2.19	12.33	10.60	0.00	0.01	0.98	0.99	0.00	0.90	0.90	1,675.98
Paving Off-Gas	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	1.97	12.02	9.79	0.00	0.00	0.96	0.96	0.00	0.89	0.89	1,418.81
Paving On Road Diesel	0.03	0.27	0.11	0.00	0.00	0.01	0.01	0.00	0.01	0.01	101.76
Paving Worker Trips	0.02	0.04	0.70	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.41
Building 01/01/2010-12/31/2029	26.60	130.73	672.50	1.74	7.47	7.69	15.16	2.66	6.75	9.41	171,830.02
Building Off Road Diesel	2.03	12.45	12.26	0.00	0.00	0.67	0.67	0.00	0.62	0.62	2,259.28
Building Vendor Trips	9.53	89.13	98.59	0.43	1.57	3.58	5.15	0.53	3.26	3.79	44,664.58
Building Worker Trips	15.04	29.14	561.64	1.31	5.90	3.43	9.34	2.13	2.87	5.00	124,906.16
Coating 01/01/2010-12/31/2029	49.10	0.02	0.42	0.00	0.00	0.00	0.01	0.00	0.00	0.00	93.89
Architectural Coating	49.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.01	0.02	0.42	0.00	0.00	0.00	0.01	0.00	0.00	0.00	93.89
Demolition 01/01/2010-12/31/2029	4.28	32.93	22.95	0.03	19.15	1.40	20.55	4.00	1.28	5.28	6,958.94
Fugitive Dust	0.00	0.00	0.00	0.00	19.06	0.00	19.06	3.96	0.00	3.96	0.00
Demo Off Road Diesel	3.59	25.73	19.44	0.00	0.00	1.15	1.15	0.00	1.06	1.06	4,132.45
Demo On Road Diesel	0.67	7.17	2.81	0.02	0.09	0.24	0.33	0.03	0.22	0.25	2,671.08
Demo Worker Trips	0.02	0.04	0.70	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.41
Mass Grading 01/01/2010-	7.21	53.35	35.65	0.01	210.77	2.27	213.04	44.02	2.09	46.11	9,851.61
Mass Grading Dust	0.00	0.00	0.00	0.00	210.73	0.00	210.73	44.01	0.00	44.01	0.00
Mass Grading Off Road Diesel	7.00	51.40	33.52	0.00	0.00	2.20	2.20	0.00	2.02	2.02	8,842.87
Mass Grading On Road Diesel	0.18	1.87	0.73	0.01	0.02	0.06	0.09	0.01	0.06	0.07	697.93
Mass Grading Worker Trips	0.04	0.07	1.40	0.00	0.01	0.01	0.02	0.01	0.01	0.01	310.81
Trenching 01/01/2010-12/31/2029	2.46	16.12	16.69	0.00	0.01	0.76	0.77	0.00	0.70	0.70	3,677.93

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Trenching Off Road Diesel	2.43	16.06	15.57	0.00	0.00	0.75	0.75	0.00	0.69	0.69	3,429.28
Trenching Worker Trips	0.03	0.06	1.12	0.00	0.01	0.01	0.02	0.00	0.01	0.01	248.65
Time Slice 1/1/2019-12/31/2019	88.80	223.32	712.25	1.78	237.42	12.06	249.48	50.69	10.77	61.46	194,084.48
Asphalt 01/01/2010-12/31/2029	2.05	11.55	10.45	0.00	0.01	0.89	0.90	0.00	0.82	0.82	1,675.98
Paving Off-Gas	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	1.83	11.27	9.70	0.00	0.00	0.88	0.88	0.00	0.81	0.81	1,418.81
Paving On Road Diesel	0.02	0.25	0.10	0.00	0.00	0.01	0.01	0.00	0.01	0.01	101.76
Paving Worker Trips	0.02	0.03	0.65	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.40
Building 01/01/2010-12/31/2029	24.54	118.87	628.11	1.74	7.47	7.27	14.74	2.66	6.36	9.02	171,826.19
Building Off Road Diesel	1.88	11.39	12.14	0.00	0.00	0.57	0.57	0.00	0.52	0.52	2,259.28
Building Vendor Trips	8.86	80.70	92.59	0.43	1.57	3.27	4.84	0.53	2.97	3.50	44,666.35
Building Worker Trips	13.80	26.78	523.38	1.31	5.90	3.43	9.34	2.13	2.87	5.00	124,900.56
Coating 01/01/2010-12/31/2029	49.10	0.02	0.39	0.00	0.00	0.00	0.01	0.00	0.00	0.00	93.88
Architectural Coating	49.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.01	0.02	0.39	0.00	0.00	0.00	0.01	0.00	0.00	0.00	93.88
Demolition 01/01/2010-12/31/2029	3.98	30.07	22.14	0.03	19.15	1.24	20.40	4.00	1.14	5.14	6,958.93
Fugitive Dust	0.00	0.00	0.00	0.00	19.06	0.00	19.06	3.96	0.00	3.96	0.00
Demo Off Road Diesel	3.34	23.55	18.92	0.00	0.00	1.02	1.02	0.00	0.94	0.94	4,132.45
Demo On Road Diesel	0.62	6.48	2.57	0.02	0.09	0.22	0.31	0.03	0.20	0.23	2,671.08
Demo Worker Trips	0.02	0.03	0.65	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.40
Mass Grading 01/01/2010-	6.85	48.69	34.59	0.01	210.77	2.01	212.78	44.02	1.85	45.87	9,851.59
Mass Grading Dust	0.00	0.00	0.00	0.00	210.73	0.00	210.73	44.01	0.00	44.01	0.00
Mass Grading Off Road Diesel	6.65	46.93	32.62	0.00	0.00	1.94	1.94	0.00	1.79	1.79	8,842.87
Mass Grading On Road Diesel	0.16	1.69	0.67	0.01	0.02	0.06	0.08	0.01	0.05	0.06	697.93
Mass Grading Worker Trips	0.03	0.07	1.30	0.00	0.01	0.01	0.02	0.01	0.01	0.01	310.80
Trenching 01/01/2010-12/31/2029	2.28	14.13	16.57	0.00	0.01	0.65	0.66	0.00	0.60	0.60	3,677.92
Trenching Off Road Diesel	2.25	14.07	15.53	0.00	0.00	0.64	0.64	0.00	0.59	0.59	3,429.28
Trenching Worker Trips	0.03	0.05	1.04	0.00	0.01	0.01	0.02	0.00	0.01	0.01	248.64
Time Slice 1/1/2020-12/31/2020	85.85	203.89	669.02	1.78	237.42	11.43	248.85	50.69	10.19	60.88	194,080.99
Asphalt 01/01/2010-12/31/2029	1.91	10.79	10.35	0.00	0.01	0.83	0.84	0.00	0.77	0.77	1,675.97
Paving Off-Gas	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	1.70	10.53	9.66	0.00	0.00	0.82	0.82	0.00	0.75	0.75	1,418.81
Paving On Road Diesel	0.02	0.22	0.09	0.00	0.00	0.01	0.01	0.00	0.01	0.01	101.76
Paving Worker Trips	0.02	0.03	0.61	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.39
Building 01/01/2010-12/31/2029	22.57	108.80	586.63	1.74	7.47	7.06	14.54	2.66	6.17	8.84	171,822.73
Building Off Road Diesel	1.71	10.50	12.03	0.00	0.00	0.50	0.50	0.00	0.46	0.46	2,259.28
Building Vendor Trips	8.27	73.57	87.19	0.43	1.57	2.99	4.56	0.53	2.72	3.25	44,668.05
Building Worker Trips	12.59	24.74	487.41	1.31	5.90	3.57	9.48	2.13	3.00	5.13	124,895.40
Coating 01/01/2010-12/31/2029	49.10	0.02	0.37	0.00	0.00	0.00	0.01	0.00	0.00	0.00	93.88

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Architectural Coating	49.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.01	0.02	0.37	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	93.88
Demolition 01/01/2010-12/31/2029	3.76	27.49	21.45	0.03	19.15	1.17	20.32	4.00	1.08	5.07	6,958.92	
Fugitive Dust	0.00	0.00	0.00	0.00	19.06	0.00	19.06	3.96	0.00	3.96	0.00	
Demo Off Road Diesel	3.17	21.56	18.48	0.00	0.00	0.97	0.97	0.00	0.89	0.89	4,132.45	
Demo On Road Diesel	0.58	5.90	2.36	0.02	0.09	0.19	0.28	0.03	0.18	0.21	2,671.08	
Demo Worker Trips	0.02	0.03	0.61	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.39	
Mass Grading 01/01/2010-	6.41	44.39	33.73	0.01	210.77	1.78	212.55	44.02	1.64	45.66	9,851.58	
Mass Grading Dust	0.00	0.00	0.00	0.00	210.73	0.00	210.73	44.01	0.00	44.01	0.00	
Mass Grading Off Road Diesel	6.23	42.79	31.90	0.00	0.00	1.72	1.72	0.00	1.58	1.58	8,842.87	
Mass Grading On Road Diesel	0.15	1.54	0.62	0.01	0.02	0.05	0.07	0.01	0.05	0.05	697.93	
Mass Grading Worker Trips	0.03	0.06	1.21	0.00	0.01	0.01	0.02	0.01	0.01	0.01	310.79	
Trenching 01/01/2010-12/31/2029	2.10	12.40	16.50	0.00	0.01	0.58	0.59	0.00	0.54	0.54	3,677.91	
Trenching Off Road Diesel	2.08	12.35	15.53	0.00	0.00	0.58	0.58	0.00	0.53	0.53	3,429.28	
Trenching Worker Trips	0.03	0.05	0.97	0.00	0.01	0.01	0.02	0.00	0.01	0.01	248.63	
Time Slice 1/1/2021-12/31/2021	79.36	170.92	516.45	1.78	237.42	10.69	248.11	50.69	9.50	60.19	194,058.12	
Asphalt 01/01/2010-12/31/2029	1.90	10.71	10.16	0.00	0.01	0.83	0.84	0.00	0.76	0.77	1,675.93	
Paving Off-Gas	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Paving Off Road Diesel	1.70	10.53	9.66	0.00	0.00	0.82	0.82	0.00	0.75	0.75	1,418.81	
Paving On Road Diesel	0.02	0.15	0.06	0.00	0.00	0.00	0.01	0.00	0.00	0.01	101.76	
Paving Worker Trips	0.01	0.02	0.44	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.36	
Building 01/01/2010-12/31/2029	16.29	78.30	435.93	1.74	7.47	6.41	13.88	2.66	5.56	8.23	171,800.08	
Building Off Road Diesel	1.71	10.50	12.03	0.00	0.00	0.50	0.50	0.00	0.46	0.46	2,259.28	
Building Vendor Trips	6.26	50.56	67.94	0.43	1.57	2.19	3.76	0.53	1.98	2.51	44,674.24	
Building Worker Trips	8.32	17.25	355.96	1.31	5.90	3.73	9.63	2.13	3.13	5.26	124,866.56	
Coating 01/01/2010-12/31/2029	49.09	0.01	0.27	0.00	0.00	0.00	0.01	0.00	0.00	0.00	93.86	
Architectural Coating	49.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Coating Worker Trips	0.01	0.01	0.27	0.00	0.00	0.00	0.01	0.00	0.00	0.00	93.86	
Demolition 01/01/2010-12/31/2029	3.62	25.62	20.62	0.03	19.15	1.10	20.25	4.00	1.01	5.01	6,958.89	
Fugitive Dust	0.00	0.00	0.00	0.00	19.06	0.00	19.06	3.96	0.00	3.96	0.00	
Demo Off Road Diesel	3.17	21.56	18.48	0.00	0.00	0.97	0.97	0.00	0.89	0.89	4,132.45	
Demo On Road Diesel	0.44	4.04	1.70	0.02	0.09	0.12	0.21	0.03	0.11	0.14	2,671.08	
Demo Worker Trips	0.01	0.02	0.44	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.36	
Mass Grading 01/01/2010-	6.36	43.89	33.23	0.01	210.77	1.76	212.53	44.02	1.62	45.64	9,851.51	
Mass Grading Dust	0.00	0.00	0.00	0.00	210.73	0.00	210.73	44.01	0.00	44.01	0.00	
Mass Grading Off Road Diesel	6.23	42.79	31.90	0.00	0.00	1.72	1.72	0.00	1.58	1.58	8,842.87	
Mass Grading On Road Diesel	0.12	1.06	0.44	0.01	0.02	0.03	0.06	0.01	0.03	0.04	697.93	
Mass Grading Worker Trips	0.02	0.04	0.89	0.00	0.01	0.01	0.02	0.01	0.01	0.01	310.72	
Trenching 01/01/2010-12/31/2029	2.09	12.38	16.23	0.00	0.01	0.58	0.60	0.00	0.54	0.54	3,677.85	
Trenching Off Road Diesel	2.08	12.35	15.53	0.00	0.00	0.58	0.58	0.00	0.53	0.53	3,429.28	

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Coating Worker Trips	0.01	0.01	0.27	0.00	0.00	0.00	0.01	0.00	0.00	0.00	93.86
Demolition 01/01/2010-12/31/2029	3.62	25.62	20.62	0.03	19.15	1.10	20.25	4.00	1.01	5.01	6,958.89
Fugitive Dust	0.00	0.00	0.00	0.00	19.06	0.00	19.06	3.96	0.00	3.96	0.00
Demo Off Road Diesel	3.17	21.56	18.48	0.00	0.00	0.97	0.97	0.00	0.89	0.89	4,132.45
Demo On Road Diesel	0.44	4.04	1.70	0.02	0.09	0.12	0.21	0.03	0.11	0.14	2,671.08
Demo Worker Trips	0.01	0.02	0.44	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.36
Mass Grading 01/01/2010-	6.36	43.89	33.23	0.01	210.77	1.76	212.53	44.02	1.62	45.64	9,851.51
Mass Grading Dust	0.00	0.00	0.00	0.00	210.73	0.00	210.73	44.01	0.00	44.01	0.00
Mass Grading Off Road Diesel	6.23	42.79	31.90	0.00	0.00	1.72	1.72	0.00	1.58	1.58	8,842.87
Mass Grading On Road Diesel	0.12	1.06	0.44	0.01	0.02	0.03	0.06	0.01	0.03	0.04	697.93
Mass Grading Worker Trips	0.02	0.04	0.89	0.00	0.01	0.01	0.02	0.01	0.01	0.01	310.72
Trenching 01/01/2010-12/31/2029	2.09	12.38	16.23	0.00	0.01	0.58	0.60	0.00	0.54	0.54	3,677.85
Trenching Off Road Diesel	2.08	12.35	15.53	0.00	0.00	0.58	0.58	0.00	0.53	0.53	3,429.28
Trenching Worker Trips	0.02	0.03	0.71	0.00	0.01	0.01	0.02	0.00	0.01	0.01	248.57
Time Slice 1/1/2024-12/31/2024	<u>79.36</u>	<u>170.92</u>	<u>516.45</u>	<u>1.78</u>	<u>237.42</u>	<u>10.69</u>	<u>248.11</u>	<u>50.69</u>	<u>9.50</u>	<u>60.19</u>	<u>194,058.12</u>
Asphalt 01/01/2010-12/31/2029	1.90	10.71	10.16	0.00	0.01	0.83	0.84	0.00	0.76	0.77	1,675.93
Paving Off-Gas	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	1.70	10.53	9.66	0.00	0.00	0.82	0.82	0.00	0.75	0.75	1,418.81
Paving On Road Diesel	0.02	0.15	0.06	0.00	0.00	0.00	0.01	0.00	0.00	0.01	101.76
Paving Worker Trips	0.01	0.02	0.44	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.36
Building 01/01/2010-12/31/2029	16.29	78.30	435.93	1.74	7.47	6.41	13.88	2.66	5.56	8.23	171,800.08
Building Off Road Diesel	1.71	10.50	12.03	0.00	0.00	0.50	0.50	0.00	0.46	0.46	2,259.28
Building Vendor Trips	6.26	50.56	67.94	0.43	1.57	2.19	3.76	0.53	1.98	2.51	44,674.24
Building Worker Trips	8.32	17.25	355.96	1.31	5.90	3.73	9.63	2.13	3.13	5.26	124,866.56
Coating 01/01/2010-12/31/2029	49.09	0.01	0.27	0.00	0.00	0.00	0.01	0.00	0.00	0.00	93.86
Architectural Coating	49.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.01	0.01	0.27	0.00	0.00	0.00	0.01	0.00	0.00	0.00	93.86
Demolition 01/01/2010-12/31/2029	3.62	25.62	20.62	0.03	19.15	1.10	20.25	4.00	1.01	5.01	6,958.89
Fugitive Dust	0.00	0.00	0.00	0.00	19.06	0.00	19.06	3.96	0.00	3.96	0.00
Demo Off Road Diesel	3.17	21.56	18.48	0.00	0.00	0.97	0.97	0.00	0.89	0.89	4,132.45
Demo On Road Diesel	0.44	4.04	1.70	0.02	0.09	0.12	0.21	0.03	0.11	0.14	2,671.08
Demo Worker Trips	0.01	0.02	0.44	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.36
Mass Grading 01/01/2010-	6.36	43.89	33.23	0.01	210.77	1.76	212.53	44.02	1.62	45.64	9,851.51
Mass Grading Dust	0.00	0.00	0.00	0.00	210.73	0.00	210.73	44.01	0.00	44.01	0.00
Mass Grading Off Road Diesel	6.23	42.79	31.90	0.00	0.00	1.72	1.72	0.00	1.58	1.58	8,842.87
Mass Grading On Road Diesel	0.12	1.06	0.44	0.01	0.02	0.03	0.06	0.01	0.03	0.04	697.93
Mass Grading Worker Trips	0.02	0.04	0.89	0.00	0.01	0.01	0.02	0.01	0.01	0.01	310.72
Trenching 01/01/2010-12/31/2029	2.09	12.38	16.23	0.00	0.01	0.58	0.60	0.00	0.54	0.54	3,677.85
Trenching Off Road Diesel	2.08	12.35	15.53	0.00	0.00	0.58	0.58	0.00	0.53	0.53	3,429.28
Trenching Worker Trips	0.02	0.03	0.71	0.00	0.01	0.01	0.02	0.00	0.01	0.01	248.57

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Time Slice 1/1/2025-12/31/2025	<u>79.36</u>	<u>170.92</u>	<u>516.45</u>	<u>1.78</u>	<u>237.42</u>	<u>10.69</u>	<u>248.11</u>	<u>50.69</u>	<u>9.50</u>	<u>60.19</u>	<u>194,058.12</u>
Asphalt 01/01/2010-12/31/2029	1.90	10.71	10.16	0.00	0.01	0.83	0.84	0.00	0.76	0.77	1,675.93
Paving Off-Gas	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	1.70	10.53	9.66	0.00	0.00	0.82	0.82	0.00	0.75	0.75	1,418.81
Paving On Road Diesel	0.02	0.15	0.06	0.00	0.00	0.00	0.01	0.00	0.00	0.01	101.76
Paving Worker Trips	0.01	0.02	0.44	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.36
Building 01/01/2010-12/31/2029	16.29	78.30	435.93	1.74	7.47	6.41	13.88	2.66	5.56	8.23	171,800.08
Building Off Road Diesel	1.71	10.50	12.03	0.00	0.00	0.50	0.50	0.00	0.46	0.46	2,259.28
Building Vendor Trips	6.26	50.56	67.94	0.43	1.57	2.19	3.76	0.53	1.98	2.51	44,674.24
Building Worker Trips	8.32	17.25	355.96	1.31	5.90	3.73	9.63	2.13	3.13	5.26	124,866.56
Coating 01/01/2010-12/31/2029	49.09	0.01	0.27	0.00	0.00	0.00	0.01	0.00	0.00	0.00	93.86
Architectural Coating	49.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.01	0.01	0.27	0.00	0.00	0.00	0.01	0.00	0.00	0.00	93.86
Demolition 01/01/2010-12/31/2029	3.62	25.62	20.62	0.03	19.15	1.10	20.25	4.00	1.01	5.01	6,958.89
Fugitive Dust	0.00	0.00	0.00	0.00	19.06	0.00	19.06	3.96	0.00	3.96	0.00
Demo Off Road Diesel	3.17	21.56	18.48	0.00	0.00	0.97	0.97	0.00	0.89	0.89	4,132.45
Demo On Road Diesel	0.44	4.04	1.70	0.02	0.09	0.12	0.21	0.03	0.11	0.14	2,671.08
Demo Worker Trips	0.01	0.02	0.44	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.36
Mass Grading 01/01/2010-	6.36	43.89	33.23	0.01	210.77	1.76	212.53	44.02	1.62	45.64	9,851.51
Mass Grading Dust	0.00	0.00	0.00	0.00	210.73	0.00	210.73	44.01	0.00	44.01	0.00
Mass Grading Off Road Diesel	6.23	42.79	31.90	0.00	0.00	1.72	1.72	0.00	1.58	1.58	8,842.87
Mass Grading On Road Diesel	0.12	1.06	0.44	0.01	0.02	0.03	0.06	0.01	0.03	0.04	697.93
Mass Grading Worker Trips	0.02	0.04	0.89	0.00	0.01	0.01	0.02	0.01	0.01	0.01	310.72
Trenching 01/01/2010-12/31/2029	2.09	12.38	16.23	0.00	0.01	0.58	0.60	0.00	0.54	0.54	3,677.85
Trenching Off Road Diesel	2.08	12.35	15.53	0.00	0.00	0.58	0.58	0.00	0.53	0.53	3,429.28
Trenching Worker Trips	0.02	0.03	0.71	0.00	0.01	0.01	0.02	0.00	0.01	0.01	248.57
Time Slice 1/1/2026-12/31/2026	<u>76.10</u>	<u>158.38</u>	<u>436.23</u>	<u>1.78</u>	<u>237.42</u>	<u>10.39</u>	<u>247.81</u>	<u>50.69</u>	<u>9.22</u>	<u>59.91</u>	<u>194,048.20</u>
Asphalt 01/01/2010-12/31/2029	1.89	10.68	10.07	0.00	0.01	0.83	0.84	0.00	0.76	0.77	1,675.92
Paving Off-Gas	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	1.70	10.53	9.66	0.00	0.00	0.82	0.82	0.00	0.75	0.75	1,418.81
Paving On Road Diesel	0.02	0.13	0.06	0.00	0.00	0.00	0.01	0.00	0.00	0.00	101.76
Paving Worker Trips	0.01	0.02	0.36	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.34
Building 01/01/2010-12/31/2029	13.12	66.58	356.53	1.74	7.47	6.14	13.61	2.66	5.32	7.98	171,790.27
Building Off Road Diesel	1.71	10.50	12.03	0.00	0.00	0.50	0.50	0.00	0.46	0.46	2,259.28
Building Vendor Trips	5.42	42.65	58.60	0.43	1.57	1.92	3.49	0.53	1.73	2.26	44,678.26
Building Worker Trips	5.99	13.43	285.90	1.31	5.90	3.73	9.63	2.13	3.13	5.26	124,852.73
Coating 01/01/2010-12/31/2029	49.09	0.01	0.21	0.00	0.00	0.00	0.01	0.00	0.00	0.00	93.85
Architectural Coating	49.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.01	0.21	0.00	0.00	0.00	0.01	0.00	0.00	0.00	93.85

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Demolition 01/01/2010-12/31/2029	3.57	25.01	20.31	0.03	19.15	1.08	20.23	4.00	0.99	4.98	6,958.87
Fugitive Dust	0.00	0.00	0.00	0.00	19.06	0.00	19.06	3.96	0.00	3.96	0.00
Demo Off Road Diesel	3.17	21.56	18.48	0.00	0.00	0.97	0.97	0.00	0.89	0.89	4,132.45
Demo On Road Diesel	0.39	3.44	1.48	0.02	0.09	0.10	0.19	0.03	0.09	0.12	2,671.08
Demo Worker Trips	0.01	0.02	0.36	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.34
Mass Grading 01/01/2010-	6.34	43.72	33.00	0.01	210.77	1.76	212.52	44.02	1.61	45.64	9,851.47
Mass Grading Dust	0.00	0.00	0.00	0.00	210.73	0.00	210.73	44.01	0.00	44.01	0.00
Mass Grading Off Road Diesel	6.23	42.79	31.90	0.00	0.00	1.72	1.72	0.00	1.58	1.58	8,842.87
Mass Grading On Road Diesel	0.10	0.90	0.39	0.01	0.02	0.03	0.05	0.01	0.02	0.03	697.93
Mass Grading Worker Trips	0.01	0.03	0.71	0.00	0.01	0.01	0.02	0.01	0.01	0.01	310.68
Trenching 01/01/2010-12/31/2029	2.09	12.38	16.10	0.00	0.01	0.58	0.60	0.00	0.54	0.54	3,677.82
Trenching Off Road Diesel	2.08	12.35	15.53	0.00	0.00	0.58	0.58	0.00	0.53	0.53	3,429.28
Trenching Worker Trips	0.01	0.03	0.57	0.00	0.01	0.01	0.02	0.00	0.01	0.01	248.55
Time Slice 1/1/2027-12/31/2027	<u>76.10</u>	<u>158.38</u>	<u>436.23</u>	<u>1.78</u>	<u>237.42</u>	<u>10.39</u>	<u>247.81</u>	<u>50.69</u>	<u>9.22</u>	<u>59.91</u>	<u>194,048.20</u>
Asphalt 01/01/2010-12/31/2029	1.89	10.68	10.07	0.00	0.01	0.83	0.84	0.00	0.76	0.77	1,675.92
Paving Off-Gas	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	1.70	10.53	9.66	0.00	0.00	0.82	0.82	0.00	0.75	0.75	1,418.81
Paving On Road Diesel	0.02	0.13	0.06	0.00	0.00	0.00	0.01	0.00	0.00	0.00	101.76
Paving Worker Trips	0.01	0.02	0.36	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.34
Building 01/01/2010-12/31/2029	13.12	66.58	356.53	1.74	7.47	6.14	13.61	2.66	5.32	7.98	171,790.27
Building Off Road Diesel	1.71	10.50	12.03	0.00	0.00	0.50	0.50	0.00	0.46	0.46	2,259.28
Building Vendor Trips	5.42	42.65	58.60	0.43	1.57	1.92	3.49	0.53	1.73	2.26	44,678.26
Building Worker Trips	5.99	13.43	285.90	1.31	5.90	3.73	9.63	2.13	3.13	5.26	124,852.73
Coating 01/01/2010-12/31/2029	49.09	0.01	0.21	0.00	0.00	0.00	0.01	0.00	0.00	0.00	93.85
Architectural Coating	49.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.01	0.21	0.00	0.00	0.00	0.01	0.00	0.00	0.00	93.85
Demolition 01/01/2010-12/31/2029	3.57	25.01	20.31	0.03	19.15	1.08	20.23	4.00	0.99	4.98	6,958.87
Fugitive Dust	0.00	0.00	0.00	0.00	19.06	0.00	19.06	3.96	0.00	3.96	0.00
Demo Off Road Diesel	3.17	21.56	18.48	0.00	0.00	0.97	0.97	0.00	0.89	0.89	4,132.45
Demo On Road Diesel	0.39	3.44	1.48	0.02	0.09	0.10	0.19	0.03	0.09	0.12	2,671.08
Demo Worker Trips	0.01	0.02	0.36	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.34
Mass Grading 01/01/2010-	6.34	43.72	33.00	0.01	210.77	1.76	212.52	44.02	1.61	45.64	9,851.47
Mass Grading Dust	0.00	0.00	0.00	0.00	210.73	0.00	210.73	44.01	0.00	44.01	0.00
Mass Grading Off Road Diesel	6.23	42.79	31.90	0.00	0.00	1.72	1.72	0.00	1.58	1.58	8,842.87
Mass Grading On Road Diesel	0.10	0.90	0.39	0.01	0.02	0.03	0.05	0.01	0.02	0.03	697.93
Mass Grading Worker Trips	0.01	0.03	0.71	0.00	0.01	0.01	0.02	0.01	0.01	0.01	310.68
Trenching 01/01/2010-12/31/2029	2.09	12.38	16.10	0.00	0.01	0.58	0.60	0.00	0.54	0.54	3,677.82
Trenching Off Road Diesel	2.08	12.35	15.53	0.00	0.00	0.58	0.58	0.00	0.53	0.53	3,429.28
Trenching Worker Trips	0.01	0.03	0.57	0.00	0.01	0.01	0.02	0.00	0.01	0.01	248.55

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Time Slice 1/3/2028-12/29/2028	<u>76.10</u>	<u>158.38</u>	<u>436.23</u>	<u>1.78</u>	<u>237.42</u>	<u>10.39</u>	<u>247.81</u>	<u>50.69</u>	<u>9.22</u>	<u>59.91</u>	<u>194,048.20</u>
Asphalt 01/01/2010-12/31/2029	1.89	10.68	10.07	0.00	0.01	0.83	0.84	0.00	0.76	0.77	1,675.92
Paving Off-Gas	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	1.70	10.53	9.66	0.00	0.00	0.82	0.82	0.00	0.75	0.75	1,418.81
Paving On Road Diesel	0.02	0.13	0.06	0.00	0.00	0.00	0.01	0.00	0.00	0.00	101.76
Paving Worker Trips	0.01	0.02	0.36	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.34
Building 01/01/2010-12/31/2029	13.12	66.58	356.53	1.74	7.47	6.14	13.61	2.66	5.32	7.98	171,790.27
Building Off Road Diesel	1.71	10.50	12.03	0.00	0.00	0.50	0.50	0.00	0.46	0.46	2,259.28
Building Vendor Trips	5.42	42.65	58.60	0.43	1.57	1.92	3.49	0.53	1.73	2.26	44,678.26
Building Worker Trips	5.99	13.43	285.90	1.31	5.90	3.73	9.63	2.13	3.13	5.26	124,852.73
Coating 01/01/2010-12/31/2029	49.09	0.01	0.21	0.00	0.00	0.00	0.01	0.00	0.00	0.00	93.85
Architectural Coating	49.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.01	0.21	0.00	0.00	0.00	0.01	0.00	0.00	0.00	93.85
Demolition 01/01/2010-12/31/2029	3.57	25.01	20.31	0.03	19.15	1.08	20.23	4.00	0.99	4.98	6,958.87
Fugitive Dust	0.00	0.00	0.00	0.00	19.06	0.00	19.06	3.96	0.00	3.96	0.00
Demo Off Road Diesel	3.17	21.56	18.48	0.00	0.00	0.97	0.97	0.00	0.89	0.89	4,132.45
Demo On Road Diesel	0.39	3.44	1.48	0.02	0.09	0.10	0.19	0.03	0.09	0.12	2,671.08
Demo Worker Trips	0.01	0.02	0.36	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.34
Mass Grading 01/01/2010-	6.34	43.72	33.00	0.01	210.77	1.76	212.52	44.02	1.61	45.64	9,851.47
Mass Grading Dust	0.00	0.00	0.00	0.00	210.73	0.00	210.73	44.01	0.00	44.01	0.00
Mass Grading Off Road Diesel	6.23	42.79	31.90	0.00	0.00	1.72	1.72	0.00	1.58	1.58	8,842.87
Mass Grading On Road Diesel	0.10	0.90	0.39	0.01	0.02	0.03	0.05	0.01	0.02	0.03	697.93
Mass Grading Worker Trips	0.01	0.03	0.71	0.00	0.01	0.01	0.02	0.01	0.01	0.01	310.68
Trenching 01/01/2010-12/31/2029	2.09	12.38	16.10	0.00	0.01	0.58	0.60	0.00	0.54	0.54	3,677.82
Trenching Off Road Diesel	2.08	12.35	15.53	0.00	0.00	0.58	0.58	0.00	0.53	0.53	3,429.28
Trenching Worker Trips	0.01	0.03	0.57	0.00	0.01	0.01	0.02	0.00	0.01	0.01	248.55
Time Slice 1/1/2029-12/31/2029	<u>76.10</u>	<u>158.38</u>	<u>436.23</u>	<u>1.78</u>	<u>237.42</u>	<u>10.39</u>	<u>247.81</u>	<u>50.69</u>	<u>9.22</u>	<u>59.91</u>	<u>194,048.20</u>
Asphalt 01/01/2010-12/31/2029	1.89	10.68	10.07	0.00	0.01	0.83	0.84	0.00	0.76	0.77	1,675.92
Paving Off-Gas	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	1.70	10.53	9.66	0.00	0.00	0.82	0.82	0.00	0.75	0.75	1,418.81
Paving On Road Diesel	0.02	0.13	0.06	0.00	0.00	0.00	0.01	0.00	0.00	0.00	101.76
Paving Worker Trips	0.01	0.02	0.36	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.34
Building 01/01/2010-12/31/2029	13.12	66.58	356.53	1.74	7.47	6.14	13.61	2.66	5.32	7.98	171,790.27
Building Off Road Diesel	1.71	10.50	12.03	0.00	0.00	0.50	0.50	0.00	0.46	0.46	2,259.28
Building Vendor Trips	5.42	42.65	58.60	0.43	1.57	1.92	3.49	0.53	1.73	2.26	44,678.26
Building Worker Trips	5.99	13.43	285.90	1.31	5.90	3.73	9.63	2.13	3.13	5.26	124,852.73
Coating 01/01/2010-12/31/2029	49.09	0.01	0.21	0.00	0.00	0.00	0.01	0.00	0.00	0.00	93.85
Architectural Coating	49.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.01	0.21	0.00	0.00	0.00	0.01	0.00	0.00	0.00	93.85
Demolition 01/01/2010-12/31/2029	3.57	25.01	20.31	0.03	19.15	1.08	20.23	4.00	0.99	4.98	6,958.87

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Fugitive Dust	0.00	0.00	0.00	0.00	19.06	0.00	19.06	3.96	0.00	3.96	0.00
Demo Off Road Diesel	3.17	21.56	18.48	0.00	0.00	0.97	0.97	0.00	0.89	0.89	4,132.45
Demo On Road Diesel	0.39	3.44	1.48	0.02	0.09	0.10	0.19	0.03	0.09	0.12	2,671.08
Demo Worker Trips	0.01	0.02	0.36	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.34
Mass Grading 01/01/2010-	6.34	43.72	33.00	0.01	210.77	1.76	212.52	44.02	1.61	45.64	9,851.47
Mass Grading Dust	0.00	0.00	0.00	0.00	210.73	0.00	210.73	44.01	0.00	44.01	0.00
Mass Grading Off Road Diesel	6.23	42.79	31.90	0.00	0.00	1.72	1.72	0.00	1.58	1.58	8,842.87
Mass Grading On Road Diesel	0.10	0.90	0.39	0.01	0.02	0.03	0.05	0.01	0.02	0.03	697.93
Mass Grading Worker Trips	0.01	0.03	0.71	0.00	0.01	0.01	0.02	0.01	0.01	0.01	310.68
Trenching 01/01/2010-12/31/2029	2.09	12.38	16.10	0.00	0.01	0.58	0.60	0.00	0.54	0.54	3,677.82
Trenching Off Road Diesel	2.08	12.35	15.53	0.00	0.00	0.58	0.58	0.00	0.53	0.53	3,429.28
Trenching Worker Trips	0.01	0.03	0.57	0.00	0.01	0.01	0.02	0.00	0.01	0.01	248.55

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Mass Grading 1/1/2010 - 12/31/2029 - Default Mass Site Grading/Excavation Description

For Soil Stabilizing Measures, the Replace ground cover in disturbed areas quickly mitigation reduces emissions by:

PM10: 5% PM25: 5%

For Soil Stabilizing Measures, the Water exposed surfaces 2x daily watering mitigation reduces emissions by:

PM10: 55% PM25: 55%

For Soil Stabilizing Measures, the Equipment loading/unloading mitigation reduces emissions by:

PM10: 69% PM25: 69%

For Unpaved Roads Measures, the Reduce speed on unpaved roads to less than 15 mph mitigation reduces emissions by:

PM10: 44% PM25: 44%

For Unpaved Roads Measures, the Manage haul road dust 2x daily watering mitigation reduces emissions by:

PM10: 55% PM25: 55%

Construction Scenario Assumptions

Construction timeline	20	years	Assumptions for URBEMIS	
Proposed GP	Increase from Existing			
New Retail	390,000		Grading	2,800 acres
New Hotel Rooms	982			140 acres/year
New Office	7,331,662			35 acres
Residential	12,027		Demolition/year:	200,108 sqft /year
Demolition	-4,002,152		width/length	447 for URBEMIS
Existing GP	Increase from Existing			
New Retail	296,000		width/length	758 sqft/day
New Hotel Rooms	610		width/length	27.5 for URBEMIS
New Office	9,933,389		Haul	601,350 CY haul
Warehouse	102,000			30,068 CY/year
Industrial	23,000			
Residential	4,444			
Demolition	-4,002,152			

URBEMIS DEFAULT CONSTRUCTION EQUIPMENT LIST

Paving		
Paving Equipment		2
Rollers		2
Pavers		1
Building Construction		
Forklifts		3
Tractor/Loader/Backhoes		3
Cranes		1
Generator Sets		1
Welders		1
Demolition		
Excavators		3
Rubber Tired Dozers		2
Rough Grading		
Scrapers		3
Tractor/Loader/Backhoes		3
Rubber Tired Dozers		1
Graders		1
Water Trucks		1
Excavators		1
Trenching		
Excavators		4
Other Gen. Ind. Equip.		2
Tractor/Loader/Backhoes		2

Construction Localized Significance Thresholds - IBC

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)
17	5.00	25	82

Source Receptor Central Orange County

Distance (meters)	25
NOx	183
CO	1323
PM10	13
PM2.5	7

	Acres	25	50	100	200	500
NOx	5	183	167	180	202	246
	5	183	167	180	202	246
			183	167	180	202
CO	5	1323	1830	2498	4018	9336
	5	1323	1830	2498	4018	9336
			1323	1830	2498	4018
PM10	5	13	39	55	88	188
	5	13	39	55	88	188
			13	39	55	88
PM2.5	5	7	9	15	32	109
	5	7	9	15	32	109
			7	9	15	32

Central Orange County

5.00 Acres						
NOx	25	50	100	200	500	
NOx	183	167	180	202	246	
CO	1323	1830	2498	4018	9336	
PM10	13	39	55	88	188	
PM2.5	7	9	15	32	109	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
17	5	17	5
Distance Increment Below			
25			
Distance Increment Above			
25			

Operation Localized Significance Thresholds - IBC

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)
17	5.00	25	82

Source Receptor Central Orange County

Distance (meters)	25
NOx	183
CO	1323
PM10	3
PM2.5	2

	Acres	25	50	100	200	500
NOx	5	183	167	180	202	246
	5	183	167	180	202	246
		183	167	180	202	246
CO	5	1323	1830	2498	4018	9336
	5	1323	1830	2498	4018	9336
		1323	1830	2498	4018	9336
PM10	5	3	10	14	22	45
	5	3	10	14	22	45
		3	10	14	22	45
PM2.5	5	2	3	4	8	27
	5	2	3	4	8	27
		2	3	4	8	27

Central Orange County

5.00 Acres

25	50	100	200	500
NOx 183	167	180	202	246
CO 1323	1830	2498	4018	9336
PM10 3	10	14	22	45
PM2.5 2	3	4	8	27

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
17	5	17	5
Distance Increment Below			
25			
Distance Increment Above			
25			

Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: P:\COI-21\Technical Studies\Air\Modeling\Stationary-URBEMIS\Irvine Business Center- Existing.urb924

Project Name: Recirculated DEIR - Existing

Project Location: Orange County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	543.06	259.66	206.92	0.00	0.50	0.50	315,232.01

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	543.06	259.66	206.92	0.00	0.50	0.50	315,232.01

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
Natural Gas	19.07	259.54	197.65	0.00	0.47	0.47	315,215.16
Hearth - No Summer Emissions							
Landscape	0.74	0.12	9.27	0.00	0.03	0.03	16.85
Consumer Products	257.06						
Architectural Coatings	266.19						
TOTALS (lbs/day, unmitigated)	543.06	259.66	206.92	0.00	0.50	0.50	315,232.01

Area Source Changes to Defaults

Percentage of residences with wood stoves changed from 10% to 0%

Percentage of residences with wood fireplaces changed from 5% to 0%

Percentage of residences with natural gas fireplaces changed from 85% to 100%

Urbemis 2007 Version 9.2.4
 Combined Winter Emissions Reports (Pounds/Day)

File Name: P:\COI-21\Technical Studies\Air\Modeling\Stationary-URBEMIS\Irvine Business Center- Existing.urb924
 Project Name: Recirculated DEIR - Existing
 Project Location: Orange County
 On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006
 Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	543.94	287.25	209.44	0.18	2.71	2.69	350,586.92

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	543.94	287.25	209.44	0.18	2.71	2.69	350,586.92

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
Natural Gas	19.07	259.54	197.65	0.00	0.47	0.47	315,215.16
Hearth	1.62	27.71	11.79	0.18	2.24	2.22	35,371.76
Landscaping - No Winter Emissions							
Consumer Products	257.06						
Architectural Coatings	266.19						
TOTALS (lbs/day, unmitigated)	543.94	287.25	209.44	0.18	2.71	2.69	350,586.92

Area Source Changes to Defaults

Percentage of residences with wood stoves changed from 10% to 0%
 Percentage of residences with wood fireplaces changed from 5% to 0%
 Percentage of residences with natural gas fireplaces changed from 85% to 100%

Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: P:\COI-21\Technical Studies\Air\Modeling\Stationary-URBEMIS\Irvine Business Center- Existing GP.urb924

Project Name: Recirculated DEIR - Existing GP

Project Location: Orange County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	849.75	377.20	287.59	0.00	0.72	0.71	459,609.30

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	849.75	377.20	287.59	0.00	0.72	0.71	459,609.30

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
Natural Gas	27.81	377.08	278.32	0.00	0.69	0.68	459,592.45
Hearth - No Summer Emissions							
Landscape	0.74	0.12	9.27	0.00	0.03	0.03	16.85
Consumer Products	485.04						
Architectural Coatings	336.16						
TOTALS (lbs/day, unmitigated)	849.75	377.20	287.59	0.00	0.72	0.71	459,609.30

Area Source Changes to Defaults

Percentage of residences with wood stoves changed from 10% to 0%

Percentage of residences with wood fireplaces changed from 5% to 0%

Percentage of residences with natural gas fireplaces changed from 85% to 100%

Urbemis 2007 Version 9.2.4
 Combined Winter Emissions Reports (Pounds/Day)

File Name: P:\COI-21\Technical Studies\Air\Modeling\Stationary-URBEMIS\Irvine Business Center- Existing GP.urb924
 Project Name: Recirculated DEIR - Existing GP
 Project Location: Orange County
 On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006
 Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	852.07	429.36	300.57	0.33	4.92	4.86	526,333.63

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	852.07	429.36	300.57	0.33	4.92	4.86	526,333.63

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
Natural Gas	27.81	377.08	278.32	0.00	0.69	0.68	459,592.45
Hearth	3.06	52.28	22.25	0.33	4.23	4.18	66,741.18
Landscaping - No Winter Emissions							
Consumer Products	485.04						
Architectural Coatings	336.16						
TOTALS (lbs/day, unmitigated)	852.07	429.36	300.57	0.33	4.92	4.86	526,333.63

Area Source Changes to Defaults

Percentage of residences with wood stoves changed from 10% to 0%
 Percentage of residences with wood fireplaces changed from 5% to 0%
 Percentage of residences with natural gas fireplaces changed from 85% to 100%

Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: P:\COI-21\Technical Studies\Air\Modeling\Stationary-URBEMIS\Irvine Business Center- Proposed GP.urb924

Project Name: Recirculated DEIR - Proposed GP

Project Location: Orange County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	1,232.15	438.08	307.92	0.00	0.84	0.83	538,364.97

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	1,232.15	438.08	307.92	0.00	0.84	0.83	538,364.97

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
Natural Gas	32.57	437.96	298.65	0.00	0.81	0.80	538,348.12
Hearth - No Summer Emissions							
Landscape	0.74	0.12	9.27	0.00	0.03	0.03	16.85
Consumer Products	874.05						
Architectural Coatings	324.79						
TOTALS (lbs/day, unmitigated)	1,232.15	438.08	307.92	0.00	0.84	0.83	538,364.97

Area Source Changes to Defaults

Percentage of residences with wood stoves changed from 10% to 0%

Percentage of residences with wood fireplaces changed from 5% to 0%

Percentage of residences with natural gas fireplaces changed from 85% to 100%

Urbemis 2007 Version 9.2.4
 Combined Winter Emissions Reports (Pounds/Day)

File Name: P:\COI-21\Technical Studies\Air\Modeling\Stationary-URBEMIS\Irvine Business Center- Proposed GP.urb924
 Project Name: Recirculated DEIR - Proposed GP
 Project Location: Orange County
 On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006
 Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	1,236.92	532.17	338.74	0.60	8.43	8.34	658,616.36

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	1,236.92	532.17	338.74	0.60	8.43	8.34	658,616.36

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
Natural Gas	32.57	437.96	298.65	0.00	0.81	0.80	538,348.12
Hearth	5.51	94.21	40.09	0.60	7.62	7.54	120,268.24
Landscaping - No Winter Emissions							
Consumer Products	874.05						
Architectural Coatings	324.79						
TOTALS (lbs/day, unmitigated)	1,236.92	532.17	338.74	0.60	8.43	8.34	658,616.36

Area Source Changes to Defaults

Percentage of residences with wood stoves changed from 10% to 0%
 Percentage of residences with wood fireplaces changed from 5% to 0%
 Percentage of residences with natural gas fireplaces changed from 85% to 100%

Greenhouse Gas Emissions - Transportation 2008

		Existing
	Trips/day	508,690
	VMT/day	3,047,574
Running Emission Rate (lbs/mile)		
CO	0.01	27,822
PM10	0.00	396
NOx	0.00	4,602
ROG	0.00	1,901
S02	0.00	47
Starting Emissions (lbs/trip)		
CO	0.03	16,805
PM10	0.00	18
NOx	0.00	1,078
ROG	0.00	1,479
S02	0.00	2
Evaporative Emissions		
VOC (HS)	0.00	276
VOC (Dirunal)	0.01	4,109
VOC (Resting)	0.00	1,068
VOC (Running)	0.00	63
Total ROG		5,515

Greenhouse Gas Emissions - Transportation 2008

Total Emissions	SCAQMD Threshold	
CO	550	44,627
PM10	150	414
PM2.5	55	410
NOx	55	5,680
ROG	55	8,896
S02	150	49

assumes PM2.5 is 99 percent of PM10 for mobile sources

1 Ton = 2,000 lbs		
CO		7,810
PM10		73
PM2.5		72
NOx		994
ROG		1,557
S02		9

1 Ton = 0.9071847 Mtons		
CO		7,085
PM10		66
PM2.5		65
NOx		902
ROG		1,412
S02		8

convert to MMTons

0.70

Greenhouse Gas Emissions - Transportation 2008

Assumptions

SCAQMD. CEQA Air Quality Handbook. Appendix Table A9-5-F, Input Assumptions to Determine Speed by Trip Type.

Assumes annual is daily * 350 days a year to account for weekend trip reductions.

County Average Speeds (miles per hour)

	1987	2010
San Bernardino County:	26.0	23.0

Based on SCAQMD. 1993. CEQA Air Quality Handbook. Table A9-5-I, Estimating Temperatures Needed to Choose Composite Emission Factors:

	Orange (Area 1)	
	CO	60
	NOx	70
	ROG/VOC	85
Average annual WRCC	CO2	75
Starting emissions:	assumes that cars rest for an average of 480 minutes between trips, based on an 8 hour workday (60 minutes/hour * 8 hours = 480 minutes)	
Hot Soak:	Assumes 20 minutes	
Diurnal Loss	Assumes 16 hours for partial day diurnal loss based on 16 hours between work end and next day start	
Resting Loss	Assumes 8 hours for partial day resting loss, based on an 8-hour workday	
Evaporative	Assumes 60 minutes for evaporative running loss emissions	

Greenhouse Gas Emissions - Transportation 2030

		Vehicle Miles Traveled			
		Existing - 2008	Existing No Project -2030	Existing General Plan	Project
Trips/day		508,690	508,690	672,309	697,308
VMT/day		3,047,574	3,064,337	3,974,097	3,909,327
Running Emission Rate (lbs/mile)		Emissions (lbs/day)			
CO	0.00	7,646	7,688	9,970	9,808
PM10	0.00	370	372	482	474
NOx	0.00	1,135	1,142	1,481	1,457
ROG	0.00	470	473	613	603
SO2	0.00	47	47	61	60
Starting Emissions (lbs/trip)		Emissions (lbs/day)			
CO	0.01	4,984	4,984	6,587	6,832
PM10	0.00	357	357	471	489
NOx	0.00	329	329	434	450
ROG	0.00	378	378	499	518
SO2	0.00	2	2	3	3
Evaporative Emissions		Emissions (lbs/day)			
VOC (HS)	0.00	120	120	159	164
VOC (Dirunal)	0.00	1,579	1,579	2,087	2,164
VOC (Resting)	0.00	467	467	617	640
VOC (Running)	0.00	28	28	37	38
Total ROG		2,194	2,194	2,899	3,007

Greenhouse Gas Emissions - Transportation 2030

Total Emissions	SCAQMD Threshold	Emissions (lbs/day)			
CO	550	12,630	12,672	16,557	16,640
PM10	150	726	728	953	963
PM2.5	55	719	721	944	953
NOx	55	1,464	1,470	1,915	1,907
ROG	55	3,042	3,044	4,012	4,128
SO2	150	49	50	64	63

assumes PM2.5 is 99 percent of PM10 for mobile sources

	1 Ton = 2,000 lbs	Emissions (tons/year)		
CO	2,210	2,218	2,897	2,912
PM10	127	127	167	169
PM2.5	126	126	165	167
NOx	256	257	335	334
ROG	532	533	702	722
SO2	9	9	11	11

	1 Ton = 0.9071847 Mtons	Emissions (Mtons/year)		
CO	2,005	2,012	2,629	2,642
PM10	115	116	151	153
PM2.5	114	114	150	151
NOx	232	233	304	303
ROG	483	483	637	655
SO2	8	8	10	10

convert to MMTons **0.71** **0.71** **0.93** **0.91**

Greenhouse Gas Emissions - Transportation 2030

Assumptions

SCAQMD. CEQA Air Quality Handbook. Appendix Table A9-5-F, Input Assumptions to Determine Speed by Trip Type.

Assumes annual is daily * 350 days a year to account for weekend trip reductions.

County Average Speeds (miles per hour)

	1987	2010	2035	2013
San Bernardino County:	26.0	23.0	19.7	22.6

Based on SCAQMD. 1993. CEQA Air Quality Handbook. Table A9-5-I, Estimating Temperatures Needed to Choose Composite Emission Factors:

Orange (Area 1)

CO 60

NOx 70

ROG/VOC 85

Starting emissions: assumes that cars rest for an average of 480 minutes between trips, based on an 8 hour workday (60 minutes/hour * 8 hours = 480 minutes)

Hot Soak: Assumes 20 minutes

Diurnal Loss Assumes 16 hours for partial day diurnal loss based on 16 hours between work end and next day start

Resting Loss Assumes 8 hours for partial day resting loss, based on an 8-hour workday

Evaporative Assumes 60 minutes for evaporative running loss emissions

TABLE A9 - 5 - E

FREEWAY/NON-FREEWAY AND WORK/NON-WORK VMT AND ADT PERCENT ASSUMPTIONS, BY PERIOD OF DAY
(in Percent)

First estimate project related ADT. By using the following ADT rates determine work and nonwork related percent of ADT for that time period. Using these rates determine vehicle miles traveled by trip-type. By using the following VMT rates determine percent VMT on freeways and non-freeways for that time period. Use next table to determine speeds. Speeds are needed to determine emission factors to be used.

Travel Period of the Day Types/Trip-Types		Year	Percent VMT By Road-Type and Period of the Day							
			Am Peak		Off Peak		Pm Peak		Daily	
			1987	2010	1987	2010	1987	2010	1987	2010
Percent VMT Traveled										
on Freeways			51.1	51.1	52.2	52.2	47.0	47.0	50.6	50.6
on Non-freeways			48.9	48.9	47.8	47.8	53.0	53.0	49.4	49.4
Percent Trips Associated With		Year	Percent ADT By Trip-Type and Period of the Day							
			Am Peak		Off Peak		Pm Peak		Daily	
			1987	2010	1987	2010	1987	2010	1987	2010
Work-ADT			58.88	58.95	26.47	26.6	32.46	32.61	--	--
Non work- ADT			41.12	41.05	73.53	73.4	67.54	67.38	--	--

Source: Based on LARTS (Prepared by CalTrans District 7, November 15, 1991)

TABLE A9 - 5 - F

INPUT ASSUMPTIONS TO DETERMINE SPEEDS BY TRIP-TYPE
(Miles per Hour)

Include an assumption for the road-type. Select recommended default for the travel period of the day for each pollutant. Include the appropriate speed for each trip-type. Select the emission factors from tables 9 - 5 - J, K, L, or N for that speed. Then use the formula at the beginning of Table A9 - 5. Weighted average between weekday and weekend speeds should be determined for each time period before selecting the emission factor.

Travel Period of the Day Area Types Road-Types			Year	Traveling Speeds by Counties, Road-type and Period of the Day							
				Am Peak*		Off Peak*		Pm Peak*		Daily	
				1987	2010	1987	2010	1987	2010	1987	2010
*Recommended Defaults				(CO, and NOx)		(ROCs)		(SOx, PM10 & Pb)			
Regional Average Speeds				22.8	21.2	31.8	30.4	19.6	17.4	25.4	23.2
HOV (mitigation)				34.0	31.0	58.0	53.0	35.0	28.0	49.0	40.0
Freeways				33.0	33.0	51.0	49.0	29.0	26.0	40.0	38.0
Non-Freeway				18.7	16.0	27.7	26.0	14.7	12.0	20.7	17.7
Major				17.0	15.0	29.0	28.0	15.0	12.0	21.0	18.0
Primary				21.0	15.0	29.0	25.0	15.0	11.0	22.0	17.0
Secondary				18.0	18.0	25.0	25.0	14.0	13.0	19.0	18.0
County Average Speeds											
Los Angeles				24.0	21.0	34.0	33.0	18.0	15.0	26.0	23.0
Orange County				22.0	21.0	36.0	36.0	19.0	18.0	27.0	26.0
Riverside				40.0	27.0	46.0	42.0	34.0	22.0	41.0	32.0
San Bernardino				34.0	27.0	39.0	35.0	30.0	20.0	35.0	28.0

* Use AM Peak Speeds to select emission factors for CO, and NOx, use Off Peak Speeds to select emission factors for ROC; use PM Peak Speeds for SOx, PM10 and Pb.

The District takes limited measurements of reactive organic compounds (ROCs). Temperature estimates are based on the 10 worst ozone exceedance days. Ozone is formed from reactions between ROC and NOx in the presence of sunlight. Greater levels of ozone are formed at higher temperatures. ROC emission increases are high during high temperatures due to evaporative and combustive emissions, with minimal evaporative emissions during cooler weather. For Areas 1 and 2, ROC emission factors were adjusted to 85°F, while for Area 3, these were adjusted to 100°F. (0.92 factor was used to convert Total Organic Compounds to Reactive Organic Gases.) Following are the pollutant concentrations exceedance day temperatures and selected temperatures for the composite emission factors:

Time of the Day	Exceedance Temperature			Temperatures For Each Area (°F)
	6-11	12-14	15-17	
Carbon Monoxide (CO)				
Orange (Area 1)	<u>60</u>	71	66	60
Los Angeles Coastal (Area 2)	<u>57.5</u>	70	65	60
Los Angeles Inland (Area 2)	<u>60.5</u>	73	64	60
Riverside (Area 3)	<u>64</u>	75	68	60
San Bernardino (Area 4)	<u>62.5</u>	79	73	60
Oxides of Nitrogen (NOx)				
Orange (Area 1)	<u>71</u>	82	77	70
Los Angeles Coastal (Area 2)	<u>67.5</u>	76	72	75
Los Angeles Inland (Area 2)	<u>82.5</u>	91	83	75
Riverside (Area 3)	<u>77</u>	87	81	80
San Bernardino (Area 4)	<u>82.5</u>	93	86	80
Reactive Organic Compounds (ROC)				
Orange (Area 1)	75	<u>83</u>	80	85
Los Angeles Coastal (Area 2)	71	<u>78</u>	75	85
Los Angeles Inland (Area 2)	83.5	<u>93.5</u>	88	85
Riverside (Area 3)	88.25	<u>99.5</u>	96	100
San Bernardino (Area 4)	86.0	<u>99.5</u>	97	100

Tables A9 - 5 - J - 1 thru 10, and Table A9 - 5 - L
Emission factors for passenger vehicles

Tables A9 - 5 - K - 1 thru 10, and Table A9 - 5 - L
Emission factors for trucks

Tables A9 - 5 - N - 1 thru 3
Emission factors for motorcycles

Tables A11 - 5 - H - 1 thru 10
Emission factors for buses

PA-36: IRVINE BUSINESS CENTER

Source: Fehr & Peers, 2009, revised. ITAM Model based on Parson Brinkerhoff, 2009.

TABLE 1
VMT SUMMARY FOR IBC AND CITY OF IRVINE

VMT Calculation	Scenario			
	2008	2030 General Plan	2030 No Project	2030 With Project
IBC VMT	3,047,574	3,974,097	3,064,337	3,909,327
IBC VT	508,690	672,309	508,690	697,308
IBC VMT/Trip	6.67	6.61	6.59	6.33
Increase in trips from existing			37%	188,618
Increase in VMT from existing			28%	861,753
Increase in trips from existing GP				24,999
Increase in VMT from existing GP				-64,770

Title: Orange County-2008
 Version: Emfac2007 V2.3 Nov, 1 2006
 Run Date: 2/19/2009 14:02:59
 Scen Year: 2008- All Model years in the range 1965 to 2008 selected
 Season: Annual
 Area: Orange County

Running Emissions (grams/mile)

Pollutant Name: Carbon Monoxide (CO) Temperature: 60F Relative Humidity: 70%

Speed	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
MPH							
0	0	0	20.418	42.354	0	0	4.257
15	4.017	4.394	5.202	12.598	16.185	28.383	4.744
20	3.571	3.911	4.447	9.461	11.891	25.832	4.141
23	3.352	3.672	4.102	8.254	10.155	25.002	3.862
25	3.222	3.53	3.907	7.593	9.244	24.707	3.7

Pollutant Name: PM10 Temperature: 60F Relative Humidity: 70%

Speed	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
MPH							
0	0	0	0.039	1.131	0	0	0.039
15	0.023	0.043	0.043	0.657	0.404	0.04	0.052
20	0.017	0.031	0.032	0.484	0.314	0.034	0.038
23	0.014	0.026	0.027	0.434	0.275	0.032	0.033
25	0.013	0.024	0.025	0.405	0.253	0.031	0.03

Pollutant Name: PM10 (Tire Wear) Temperature: 60F Relative Humidity: 70%

Speed	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
MPH							
0	0	0	0	0	0	0	0
15	0.008	0.008	0.009	0.02	0.009	0.004	0.008
20	0.008	0.008	0.009	0.02	0.009	0.004	0.008
23	0.008	0.008	0.009	0.02	0.009	0.004	0.008
25	0.008	0.008	0.009	0.02	0.009	0.004	0.008

Pollutant Name: PM10 (Break Wear) Temperature: 60F Relative Humidity: 70%

Speed	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
MPH							
0	0	0	0	0	0	0	0
15	0.013	0.013	0.013	0.018	0.013	0.006	0.013
20	0.013	0.013	0.013	0.018	0.013	0.006	0.013
23	0.013	0.013	0.013	0.018	0.013	0.006	0.013
25	0.013	0.013	0.013	0.018	0.013	0.006	0.013

Pollutant Name: Oxides of Nitrogen (NOx) Temperature: 70F Relative Humidity: 70%

Speed	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
MPH							
0	0	0	3.65	68.926	0	0	2.57
15	0.285	0.433	0.791	11.407	17.122	0.94	0.766
20	0.259	0.39	0.723	10.034	14.692	0.971	0.685
23	0.247	0.37	0.693	9.721	13.72	0.99	0.658
25	0.24	0.359	0.677	9.552	13.233	1.004	0.643

Pollutant Name: Total Organic Gases (ROG) Temperature: 85F Relative Humidity: 70%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
0	0	0	3.533	9.234	0	0	0.793
15	0.293	0.291	0.437	2.011	2.207	3.481	0.387
20	0.219	0.218	0.324	1.218	1.637	2.995	0.283
23	0.188	0.187	0.277	1.054	1.395	2.798	0.245
25	0.172	0.171	0.251	0.96	1.264	2.699	0.224

Pollutant Name: Carbon Dioxide (CO2) Temperature: 75F Relative Humidity: 70%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
0	0	0	824.898	4487.966	0	0	253.826
15	616.262	759.347	1035.796	1793.95	2326.995	171.255	760.002
20	501.024	617.673	835.523	1594.707	2273.433	151.204	621.69
23	450.951	556.1	749.595	1540.23	2251.621	141.577	562.691
25	423.669	522.549	703.083	1509.002	2240.145	136.01	530.542

Pollutant Name: Sulfur Dioxide (SO2) Temperature: 85F Relative Humidity: 70%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
0	0	0	0.008	0.043	0	0	0.002
15	0.007	0.008	0.011	0.017	0.022	0.002	0.008
20	0.005	0.007	0.009	0.015	0.022	0.002	0.007
23	0.005	0.006	0.008	0.015	0.022	0.002	0.006
25	0.005	0.006	0.007	0.014	0.022	0.002	0.006

Starting Emissions (grams/trip)

Pollutant Name: Carbon Monoxide (CO) Temperature: 60F Relative Humidity: All

Time min	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
5	1.124	1.094	2.476	7.077	4.291	5.612	1.696
10	1.932	1.959	4.557	10.741	7.316	5.594	2.888
20	3.464	3.603	8.48	17.639	12.995	5.622	5.143
30	4.886	5.13	12.085	23.965	18.178	5.737	7.227
40	6.197	6.542	15.37	29.719	22.865	5.939	9.139
50	7.398	7.839	18.337	34.9	27.057	6.227	10.88
60	8.488	9.019	20.984	39.509	30.753	6.602	12.449
120	11.542	12.167	21.298	33.321	25.966	8.227	14.558
180	8.509	9.098	18.858	35.504	27.147	9.657	11.92
240	9.055	9.688	19.779	37.582	28.306	11.731	12.636
300	9.556	10.227	20.652	39.556	29.441	13.576	13.3
360	10.013	10.715	21.477	41.424	30.554	15.191	13.913
420	10.425	11.153	22.254	43.187	31.644	16.577	14.475
480	10.794	11.54	22.982	44.845	32.711	17.732	14.985
540	11.118	11.876	23.663	46.399	33.755	18.658	15.444
600	11.398	12.161	24.295	47.847	34.776	19.354	15.851
660	11.634	12.395	24.879	49.191	35.775	19.82	16.207
720	11.826	12.579	25.416	50.429	36.75	20.057	16.512

Pollutant Name: Total Organic Gases (ROG) Temperature: 85F Relative Humidity: All

Time	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
min							
5	0.085	0.071	0.154	0.468	0.285	1.259	0.123
10	0.134	0.116	0.274	0.649	0.429	1.303	0.19
20	0.226	0.201	0.496	0.988	0.697	1.413	0.316
30	0.31	0.279	0.697	1.298	0.939	1.555	0.431
40	0.386	0.349	0.875	1.578	1.155	1.728	0.536
50	0.454	0.413	1.032	1.829	1.344	1.932	0.628
60	0.51	0.466	1.163	2.023	1.493	2.045	0.705
120	0.686	0.65	1.529	2.42	1.793	2.355	0.93
180	0.772	0.73	1.653	2.579	1.908	2.544	1.026
240	0.818	0.774	1.75	2.734	2.02	2.735	1.087
300	0.863	0.817	1.844	2.885	2.129	2.925	1.147
360	0.907	0.859	1.936	3.032	2.234	3.113	1.206
420	0.95	0.9	2.026	3.175	2.337	3.3	1.263
480	0.993	0.94	2.113	3.314	2.436	3.487	1.319
540	1.034	0.98	2.198	3.45	2.532	3.672	1.374
600	1.074	1.019	2.281	3.581	2.625	3.855	1.427
660	1.113	1.056	2.361	3.709	2.715	4.038	1.479
720	1.151	1.093	2.439	3.832	2.802	4.22	1.529

Pollutant Name: Carbon Dioxide (CO2) Temperature: 75F Relative Humidity: 70%

Time	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
min							
5	11.034	13.834	17.001	8.679	3.975	26.992	12.939
10	13.567	16.553	22.011	12.32	5.727	29.66	16.034
20	18.952	22.451	32.485	19.521	9.194	34.857	22.583
30	24.759	28.963	43.567	26.615	12.61	39.865	29.611
40	30.988	36.088	55.255	33.601	15.976	44.686	37.118
50	37.641	43.826	67.55	40.479	19.291	49.32	45.105
60	44.716	52.179	80.453	47.251	22.555	53.766	53.571
120	91.796	111.295	160.809	76.847	36.81	74.401	109.065
180	105.09	127.167	185.315	88.315	42.398	75.913	124.951
240	118.074	142.765	209.082	99.106	47.655	77.34	140.442
300	130.747	158.089	232.109	109.222	52.584	78.68	155.539
360	143.109	173.138	254.397	118.661	57.183	79.934	170.24
420	155.16	187.913	275.945	127.424	61.452	81.101	184.547
480	166.901	202.414	296.754	135.511	65.392	82.183	198.458
540	178.331	216.641	316.823	142.921	69.002	83.178	211.975
600	189.45	230.593	336.153	149.656	72.283	84.087	225.097
660	200.259	244.271	354.743	155.714	75.234	84.91	237.824
720	210.757	257.675	372.594	161.096	77.856	85.647	250.156

Pollutant Name: Sulfur Dioxide (SO2) **Temperature:** 85F **Relative Humidity:** 70%

Time min	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
5	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0
30	0	0	0.001	0.001	0	0	0
40	0	0	0.001	0.001	0	0.001	0
50	0	0	0.001	0.001	0	0.001	0.001
60	0.001	0.001	0.001	0.001	0.001	0.001	0.001
120	0.001	0.001	0.002	0.001	0.001	0.001	0.001
180	0.001	0.001	0.002	0.001	0.001	0.001	0.001
240	0.001	0.002	0.002	0.002	0.001	0.001	0.002
300	0.001	0.002	0.003	0.002	0.001	0.001	0.002
360	0.002	0.002	0.003	0.002	0.001	0.001	0.002
420	0.002	0.002	0.003	0.002	0.001	0.001	0.002
480	0.002	0.002	0.003	0.002	0.001	0.001	0.002
540	0.002	0.002	0.003	0.002	0.001	0.001	0.002
600	0.002	0.002	0.004	0.002	0.001	0.001	0.002
660	0.002	0.003	0.004	0.002	0.001	0.001	0.003
720	0.002	0.003	0.004	0.002	0.001	0.001	0.003

Hot Soak Emissions (grams/trip)

Pollutant Name: Total Organic Gases (ROG) **Temperature:** 85F **Relative Humidity:** All

Time min	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
5	0.094	0.07	0.048	0.017	0.086	0.234	0.076
10	0.175	0.129	0.089	0.032	0.159	0.436	0.142
20	0.303	0.225	0.156	0.056	0.272	0.759	0.246
30	0.396	0.295	0.207	0.073	0.35	0.999	0.322
40	0.432	0.323	0.227	0.079	0.379	1.094	0.352

Hot soak results are scaled to reflect zero emissions for trip lengths of less than 5 minutes (about 25% of in-use trips).

Partial Day Diurnal Loss Emissions (grams/hour)

Pollutant Name: Total Organic Gases (ROG) **Temperature:** All **Relative Humidity:** All

Temp degF	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
60	0.07	0.053	0.041	0.004	0.002	0.13	0.061
80	0.139	0.103	0.077	0.009	0.004	0.306	0.122
100	0.261	0.193	0.144	0.017	0.007	0.568	0.229

Partial Day Resting Loss Emissions (grams/hour)

Pollutant Name: Total Organic Gases (ROG) **Temperature:** All **Relative Humidity:** All

Temp degF	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
60	0.03	0.023	0.018	0.002	0.001	0.052	0.026
80	0.054	0.043	0.033	0.004	0.002	0.105	0.049
100	0.132	0.105	0.081	0.009	0.003	0.281	0.119

Evaporative Running Loss Emissions (grams/minute)

Pollutant Name: Total Organic Gases (ROG) Temperature: 85F Relative Humidity: All

Time min	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
1	0.026	0.31	0.278	0.194	0.431	0.104	0.163
2	0.031	0.162	0.147	0.107	0.236	0.14	0.095
3	0.036	0.115	0.104	0.079	0.171	0.159	0.075
4	0.04	0.093	0.084	0.065	0.139	0.17	0.066
5	0.042	0.08	0.073	0.057	0.12	0.178	0.061
10	0.048	0.057	0.052	0.041	0.082	0.2	0.052
15	0.051	0.053	0.048	0.036	0.07	0.212	0.052
20	0.053	0.053	0.048	0.034	0.065	0.222	0.053
25	0.054	0.055	0.05	0.033	0.062	0.23	0.055
30	0.055	0.056	0.051	0.034	0.062	0.232	0.055
35	0.055	0.056	0.051	0.034	0.063	0.233	0.055
40	0.055	0.057	0.051	0.034	0.063	0.235	0.056
45	0.056	0.057	0.052	0.034	0.063	0.236	0.056
50	0.055	0.057	0.052	0.034	0.064	0.234	0.056
55	0.055	0.058	0.052	0.034	0.064	0.231	0.056
60	0.054	0.058	0.053	0.035	0.064	0.229	0.056

Summary of Emission Rates

	Running Emissions (lbs/mile)	Starting Emissions (lbs/trip)	Hot Soak Emissions (lbs/trip)	Partial Day Diurnal Loss Emissions (lbs/hour)	Partial Day Resting Loss Emissions (lbs/hour)	Evaporative Resting Loss Emissions (lbs/minute)
Carbon Monoxide (CO)	0.009	0.033				
Particulate Matter (PM10)	0.000	0.000				
Oxides of Nitrogen (NOx)	0.002	0.002				
Reactive Organic Gases (ROG)	0.001	0.003	0.001	0.008	0.002	0.000
Carbon Dioxide (CO2)	1.371	0.438				
Sulfur Oxide (SO2)	0.000	0.000				

Hot Soak:

Assumes 20 minutes

Diurnal Loss

Assumes 16 hours for partial day diurnal loss based on 16 hours between work end and next day start

Resting Loss

Assumes 8 hours for partial day resting loss, based on an 8-hour workday

Evaporative

Assumes 60 minutes for evaporative running loss emissions

1 gram = 0.0022046 lbs

0.0022046

Title: Orange County-2030.
 Version: Emfac2007 V2.3 Nov, 1 2006
 Run Date: 2/12/2009 9:30:28
 Scen Year: 2030- All Model years in the range 1986 to 2030 selected
 Season: Annual
 Area: Orange County

Running Emissions (grams/mile)

Pollutant Name: Carbon Monoxide (CO) Temperature: 60F Relative Humidity: 70%

Speed	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
MPH							
0	0	0	20.041	38.233	0	0	4.459
15	0.794	1.343	1.675	2.222	8.741	17.903	1.268
20	0.727	1.228	1.506	1.629	6.416	16.365	1.138
23	0.69	1.165	1.419	1.456	5.476	15.766	1.076
25	0.667	1.126	1.367	1.364	4.983	15.485	1.038

Pollutant Name: PM10 Temperature: 60F Relative Humidity: 70%

Speed	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
MPH							
0	0	0	0.037	0.382	0	0	0.02
15	0.025	0.056	0.06	0.135	0.254	0.019	0.045
20	0.018	0.04	0.043	0.113	0.197	0.017	0.033
23	0.015	0.034	0.037	0.104	0.172	0.016	0.028
25	0.013	0.031	0.033	0.099	0.158	0.015	0.026

Pollutant Name: PM10 (Tire Wear) Temperature: 60F Relative Humidity: 70%

Speed	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
MPH							
0	0	0	0	0	0	0	0
15	0.008	0.008	0.009	0.022	0.009	0.004	0.009
20	0.008	0.008	0.009	0.022	0.009	0.004	0.009
23	0.008	0.008	0.009	0.022	0.009	0.004	0.009
25	0.008	0.008	0.009	0.022	0.009	0.004	0.009

Pollutant Name: PM10 (Break Wear) Temperature: 60F Relative Humidity: 70%

Speed	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
MPH							
0	0	0	0	0	0	0	0
15	0.013	0.013	0.013	0.019	0.013	0.006	0.013
20	0.013	0.013	0.013	0.019	0.013	0.006	0.013
23	0.013	0.013	0.013	0.019	0.013	0.006	0.013
25	0.013	0.013	0.013	0.019	0.013	0.006	0.013

Pollutant Name: Oxides of Nitrogen (NOx) Temperature: 70F Relative Humidity: 70%

Speed	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
MPH							
0	0	0	3.714	81.514	0	0	3.582
15	0.048	0.094	0.18	2.419	9.975	0.939	0.193
20	0.044	0.085	0.164	2.046	8.618	0.921	0.169
23	0.041	0.081	0.157	1.932	8.078	0.915	0.16
25	0.04	0.078	0.153	1.866	7.809	0.914	0.155

Pollutant Name: Total Organic Gases (ROG) **Temperature:** 85F **Relative Humidity:** 70%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
0	0	0	3.352	6.911	0	0	0.765
15	0.042	0.075	0.103	0.439	1.166	3.051	0.095
20	0.031	0.054	0.076	0.284	0.87	2.553	0.07
23	0.026	0.046	0.064	0.257	0.743	2.35	0.06
25	0.023	0.041	0.058	0.241	0.675	2.247	0.056

Pollutant Name: Carbon Dioxide (CO2) **Temperature:** 75F **Relative Humidity:** 70%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
0	0	0	894.491	4785.766	0	0	313.032
15	608.944	765.553	1036.801	1911.26	2023.698	190.618	774.215
20	494.885	622.226	835.1	1680.937	1927.419	168.656	633.366
23	445.338	559.946	748.668	1621.768	1888.212	158.96	573.872
25	418.347	526.013	701.915	1587.306	1867.583	153.723	541.43

Pollutant Name: Sulfur Dioxide (SO2) **Temperature:** 85F **Relative Humidity:** 70%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
0	0	0	0.009	0.046	0	0	0.003
15	0.007	0.008	0.011	0.018	0.019	0.002	0.008
20	0.005	0.007	0.009	0.016	0.019	0.002	0.007
23	0.005	0.006	0.008	0.015	0.018	0.002	0.006
25	0.005	0.006	0.007	0.015	0.018	0.002	0.006

Starting Emissions (grams/trip)

Pollutant Name: Carbon Monoxide (CO) **Temperature:** 60F **Relative Humidity:** All

Time min	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
5	0.13	0.224	0.622	1.133	3.147	3.365	0.335
10	0.258	0.443	1.229	2.22	6.166	4.329	0.644
20	0.502	0.865	2.395	4.255	11.82	6.162	1.235
30	0.733	1.265	3.501	6.107	16.963	7.866	1.791
40	0.952	1.643	4.544	7.774	21.595	9.443	2.311
50	1.157	2	5.527	9.257	25.715	10.89	2.795
60	1.349	2.335	6.447	10.556	29.323	12.209	3.244
120	2.103	3.647	9.594	8.945	24.847	16.315	4.539
180	1.485	2.595	7.023	9.206	25.574	12.254	3.424
240	1.607	2.815	7.607	9.476	26.324	13.364	3.683
300	1.716	3.008	8.124	9.755	27.098	14.385	3.914
360	1.81	3.177	8.574	10.042	27.896	15.318	4.118
420	1.89	3.319	8.956	10.338	28.718	16.162	4.295
480	1.956	3.436	9.27	10.643	29.565	16.918	4.444
540	2.009	3.527	9.517	10.956	30.435	17.585	4.565
600	2.047	3.593	9.696	11.278	31.328	18.163	4.659
660	2.071	3.633	9.808	11.608	32.246	18.653	4.726
720	2.081	3.648	9.852	11.947	33.188	19.055	4.765

Pollutant Name:		PM10		Temperature: 60F		Relative Humidity: All		
Time	min	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
5		0.046	0.107	0.635	0.218	0.886	0.165	0.193
10		0.049	0.113	0.674	0.328	1.335	0.207	0.21
20		0.055	0.124	0.745	0.522	2.123	0.281	0.242
30		0.06	0.134	0.805	0.68	2.765	0.342	0.268
40		0.064	0.142	0.855	0.802	3.262	0.39	0.289
50		0.067	0.149	0.895	0.888	3.612	0.425	0.306
60		0.07	0.154	0.925	0.939	3.817	0.448	0.317
120		0.075	0.167	1.005	0.953	3.874	0.453	0.34
180		0.078	0.173	1.014	0.949	3.859	0.451	0.345
240		0.077	0.172	1.007	0.944	3.838	0.444	0.343
300		0.076	0.17	0.994	0.937	3.808	0.435	0.339
360		0.075	0.167	0.977	0.927	3.772	0.424	0.333
420		0.074	0.163	0.955	0.917	3.727	0.412	0.326
480		0.072	0.158	0.928	0.904	3.676	0.397	0.318
540		0.069	0.153	0.896	0.889	3.616	0.381	0.308
600		0.067	0.147	0.86	0.873	3.549	0.362	0.296
660		0.063	0.139	0.819	0.855	3.475	0.342	0.284
720		0.06	0.132	0.773	0.834	3.393	0.32	0.269

Pollutant Name:		Oxides of Nitrogen (NOx)		Temperature: 70F		Relative Humidity: All		
Time	min	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
5		0.042	0.099	0.597	0.205	0.835	0.154	0.181
10		0.045	0.105	0.634	0.309	1.258	0.193	0.197
20		0.051	0.115	0.7	0.492	2.001	0.263	0.226
30		0.056	0.124	0.757	0.641	2.606	0.32	0.251
40		0.059	0.132	0.804	0.756	3.074	0.365	0.271
50		0.062	0.138	0.842	0.837	3.404	0.398	0.287
60		0.065	0.142	0.87	0.884	3.597	0.419	0.297
120		0.07	0.154	0.943	0.891	3.623	0.422	0.318
180		0.07	0.155	0.943	0.888	3.609	0.418	0.319
240		0.069	0.154	0.936	0.883	3.589	0.411	0.316
300		0.069	0.152	0.925	0.876	3.562	0.403	0.313
360		0.067	0.149	0.909	0.867	3.527	0.393	0.307
420		0.066	0.146	0.888	0.857	3.486	0.382	0.301
480		0.064	0.142	0.863	0.845	3.437	0.368	0.293
540		0.062	0.137	0.834	0.832	3.382	0.353	0.284
600		0.06	0.131	0.8	0.816	3.319	0.337	0.274
660		0.057	0.125	0.762	0.799	3.25	0.318	0.262
720		0.054	0.118	0.719	0.78	3.173	0.298	0.248

Pollutant Name: Total Organic Gases (ROG) Temperature: 85F Relative Humidity: All

Time	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
min							
5	0.005	0.009	0.033	0.054	0.163	0.637	0.019
10	0.01	0.017	0.065	0.104	0.319	0.783	0.034
20	0.02	0.033	0.127	0.198	0.604	1.064	0.063
30	0.029	0.048	0.185	0.281	0.856	1.33	0.089
40	0.037	0.062	0.24	0.353	1.075	1.581	0.114
50	0.044	0.076	0.291	0.413	1.261	1.817	0.136
60	0.051	0.088	0.339	0.463	1.414	1.988	0.157
120	0.08	0.144	0.55	0.561	1.711	2.371	0.237
180	0.092	0.165	0.593	0.595	1.815	2.52	0.259
240	0.098	0.175	0.63	0.628	1.916	2.68	0.275
300	0.103	0.186	0.667	0.66	2.014	2.837	0.291
360	0.109	0.196	0.704	0.691	2.108	2.99	0.307
420	0.114	0.206	0.74	0.721	2.2	3.141	0.322
480	0.12	0.216	0.776	0.75	2.288	3.288	0.337
540	0.125	0.226	0.812	0.778	2.372	3.432	0.352
600	0.13	0.236	0.847	0.804	2.453	3.572	0.367
660	0.136	0.246	0.883	0.83	2.531	3.71	0.382
720	0.141	0.255	0.917	0.854	2.606	3.844	0.397

Pollutant Name: Carbon Dioxide (CO2) Temperature: 75F Relative Humidity: 70%

Time	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
min							
5	12.21	15.367	21.663	2.852	3.038	13.326	14.537
10	13.709	17.262	24.532	5.688	6.06	15.525	16.504
20	17.207	21.681	31.144	11.312	12.053	19.843	21.019
30	21.372	26.939	38.921	16.874	17.978	24.053	26.305
40	26.203	33.035	47.862	22.372	23.836	28.156	32.363
50	31.701	39.969	57.967	27.807	29.627	32.151	39.193
60	37.866	47.742	69.237	33.179	35.351	36.039	46.796
120	88.224	111.159	159.552	56.432	60.126	53.502	107.307
180	100.144	126.187	181.329	66.67	71.034	57.729	121.972
240	112.044	141.189	203.022	76.304	81.298	61.707	136.569
300	123.925	156.164	224.629	85.333	90.919	65.437	151.098
360	135.787	171.112	246.152	93.758	99.896	68.92	165.559
420	147.629	186.034	267.59	101.579	108.228	72.154	179.952
480	159.452	200.93	288.942	108.796	115.918	75.14	194.278
540	171.256	215.799	310.21	115.409	122.963	77.878	208.535
600	183.041	230.641	331.392	121.417	129.364	80.368	222.725
660	194.806	245.457	352.49	126.821	135.122	82.611	236.847
720	206.551	260.246	373.503	131.62	140.236	84.605	250.901

Pollutant Name: Sulfur Dioxide (SO2) **Temperature:** 85F **Relative Humidity:** 70%

Time min	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
5	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0
40	0	0	0.001	0	0	0	0
50	0	0	0.001	0	0.001	0	0
60	0	0	0.001	0	0.001	0.001	0
120	0.001	0.001	0.002	0.001	0.001	0.001	0.001
180	0.001	0.001	0.002	0.001	0.001	0.001	0.001
240	0.001	0.001	0.002	0.001	0.001	0.001	0.001
300	0.001	0.002	0.002	0.001	0.001	0.001	0.002
360	0.001	0.002	0.003	0.001	0.001	0.001	0.002
420	0.001	0.002	0.003	0.001	0.002	0.001	0.002
480	0.002	0.002	0.003	0.001	0.002	0.001	0.002
540	0.002	0.002	0.003	0.001	0.002	0.001	0.002
600	0.002	0.002	0.003	0.001	0.002	0.001	0.002
660	0.002	0.002	0.004	0.001	0.002	0.001	0.002
720	0.002	0.003	0.004	0.001	0.002	0.001	0.002

Hot Soak Emissions (grams/trip)

Pollutant Name: Total Organic Gases (ROG) **Temperature:** 85F **Relative Humidity:** All

Time min	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
5	0.026	0.046	0.035	0.004	0.044	0.185	0.034
10	0.048	0.085	0.066	0.007	0.081	0.345	0.062
20	0.083	0.147	0.113	0.012	0.138	0.602	0.107
30	0.106	0.19	0.147	0.015	0.178	0.792	0.139
40	0.115	0.206	0.159	0.017	0.193	0.868	0.151

Hot soak results are scaled to reflect zero emissions for trip lengths of less than 5 minutes (about 25% of in-use trips).

Partial Day Diurnal Loss Emissions (grams/hour)

Pollutant Name: Total Organic Gases (ROG) **Temperature:** All **Relative Humidity:** All

Temp degF	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
60	0.02	0.039	0.038	0.001	0.001	0.138	0.031
80	0.031	0.059	0.057	0.002	0.002	0.306	0.049
100	0.056	0.103	0.1	0.003	0.004	0.563	0.088

Partial Day Resting Loss Emissions (grams/hour)

Pollutant Name: Total Organic Gases (ROG) **Temperature:** All **Relative Humidity:** All

Temp degF	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
60	0.012	0.026	0.026	0.001	0.001	0.054	0.019
80	0.014	0.04	0.041	0.001	0.001	0.104	0.028
100	0.025	0.069	0.071	0.002	0.002	0.3	0.052

Evaporative Running Loss Emissions (grams/minute)

Pollutant Name: Total Organic Gases (ROG) Temperature: 85F Relative Humidity: All

Time min	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
1	0.009	0.23	0.253	0.071	0.753	0.005	0.123
2	0.007	0.118	0.13	0.036	0.385	0.038	0.064
3	0.008	0.083	0.092	0.025	0.263	0.055	0.047
4	0.009	0.067	0.074	0.02	0.203	0.066	0.039
5	0.01	0.058	0.063	0.017	0.167	0.073	0.035
10	0.012	0.04	0.043	0.011	0.095	0.088	0.027
15	0.013	0.035	0.038	0.01	0.073	0.093	0.025
20	0.013	0.034	0.036	0.009	0.063	0.097	0.024
25	0.014	0.033	0.036	0.009	0.057	0.099	0.024
30	0.014	0.033	0.036	0.009	0.058	0.1	0.024
35	0.014	0.033	0.036	0.009	0.058	0.101	0.024
40	0.014	0.034	0.036	0.009	0.058	0.101	0.024
45	0.014	0.034	0.036	0.009	0.059	0.102	0.024
50	0.014	0.034	0.037	0.009	0.059	0.103	0.024
55	0.014	0.034	0.037	0.009	0.059	0.103	0.025
60	0.014	0.034	0.037	0.009	0.06	0.104	0.025

Summary of Emission Rates

	Running Emissions (lbs/mile)	Starting Emissions (lbs/trip)	Hot Soak Emissions (lbs/trip)	Partial Day Diurnal Loss Emissions (lbs/hour)	Partial Day Resting Loss Emissions (lbs/hour)	Evaporative Resting Loss Emissions (lbs/minute)
Carbon Monoxide (CO)	0.003	0.010				
Particulate Matter (PM10)	0.000	0.001				
Oxides of Nitrogen (NOx)	0.000	0.001				
Reactive Organic Gases (ROG)	0.000	0.001	0.000	0.003	0.001	0.000
Carbon Dioxide (CO2)	1.396	0.428				
Sulfur Oxide (SO2)	0.000	0.000				

Hot Soak:

Assumes 20 minutes

Diurnal Loss

Assumes 16 hours for partial day diurnal loss based on 16 hours between work end and next day start

Resting Loss

Assumes 8 hours for partial day resting loss, based on an 8-hour workday

Evaporative

Assumes 60 minutes for evaporative running loss emissions

1 gram = 0.0022046 lbs

0.0022046

*Appendix G. City Response to Records Requests
from Remy, Thomas, Moose and
Manley, LLP*



Appendices

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February 10, 2010

Mr. Jason W. Holder
Remy, Thomas, Moose, and Manley, LLP
455 Capitol Mall, Suite 210
Sacramento, CA 95814

Dear Mr. Holder:

Enclosed are responses to your two public record requests of February 3 and February 5, 2010. Also in your letter was a request for an additional 21-day extension of the period for comment. As you know, the City of Irvine already granted an earlier request from the City of Tustin for a 10-day extension of the period for comment, which concludes at the end of Monday, February 15, 2010.

We find no rationale in granting another substantial extension to the public review period as requested. Nevertheless, we will grant an additional two days until the end of business, Wednesday, February 17, 2010.

Sincerely,

Douglas Williford, AICP
Director of Community Development

cc: Sean Joyce, City Manager
Phil Kohn, City Attorney
Bill Jacobs, Principal Planner
Douglas Holland, Tustin City Attorney
Elizabeth Binsack, Tustin Director of Community Development
Dan Smith, Traffic Consultant



February 10, 2010

Jason W. Holder
Remy, Thomas, Moore and Manley, LLP
455 Capitol Mall, Suite 210
Sacramento, CA 95814

Dear Mr. Holder,

The attached information responds to your request of February 3, 2010 under the California Public Records Act (Government Code § 6250 et seq.) regarding the following:

1. The *Working Draft of 2008 Citywide Circulation Phasing Report*, PB 2009.
2. The most recent Traffic Monitoring Report for Irvine Business Complex Sliding Interim Year Analysis.
3. The proposed "downgrading" of the designation for seven IBC arterial segments and one interchange in the Master Plan of Arterial Highways ("MPAH").

Please find the documents provided by the City's Community Development Department for Items 1 & 2. The Department does not have any information to provide for Item 3.

Sincerely,

A handwritten signature in black ink, appearing to read "Jill M. Schoener".

JILL M. SCHOENER, CRM
Municipal Records Administrator
City Clerk's Office of Records and Information

JMS:jn



February 10, 2010

Jason W. Holder
Remy, Thomas, Moore and Manley, LLP
455 Capitol Mall, Suite 210
Sacramento, CA 95814

Dear Mr. Holder,

The attached information responds to your request of February 5, 2010 under the California Public Records Act (Government Code § 6250 et seq.). Please find the documents provided by the City's Community Development Department.

With regard to your request for trip information for all ITAM 8.4 external stations for all traffic analysis scenario runs of the model, please be advised that public records within the specific compilation of data that you request do not exist, as that information is stored as raw traffic model data.

Sincerely,

A handwritten signature in black ink, appearing to read "Jill M. Schoener".

JILL M. SCHOENER, CRM
Municipal Records Administrator
City Clerk's Office of Records and Information

JMS;jn