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DRAFT AND CONFIDENTIAL

September 5, 2017

Mr. Kenneth C. Farfsing
City Manager
City of Carson
701 E Carson Street
Carson, CA 90745

SUBJECT: INTERIM DEVELOPMENT IMPACT FEE (IDIF) STUDY

Dear Mr. Farfsing:

Kelly Associates Management Group LLC (KAMG) has completed its Interim Development Impact Fee Study for the City of Carson pursuant to our agreement and as discussed and agreed to. This report includes background information and a discussion of the current state of development in the City, projections of new development and related capital costs, and calculations of conceptual interim development impact fees subject to further review and analysis as required by state law. In addition, the report includes as attachments KAMG's revised Phase I Development Impact Fee White Paper (which was originally dated March 1, 2017) as well as a series of technical and back-up documents.

Based on our assessment, KAMG recommends that the City of Carson proceed with the presentation of the required technical studies for Interim Development Impact Fees (IDIF). These fees would help offset the capital improvement cost associated with new growth and development over the next 5-year period until the General Plan update is complete and a more comprehensive DIF study is done to establish ongoing fees.

KAMG staff who participated in the preparation of this report includes Christine Kelly (Executive Vice President), Alice Angus (Managing Principal), and me.

Sincerely,

KELLY ASSOCIATES MANAGEMENT GROUP, LLC

William R. Kelly
President/CEO



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Management Group

City of Carson Interim Development Impact Fee (IDIF) Study

Prepared by Kelly Associates Management Group

September 5, 2017

Recommendation

Accept the Interim Development Impact Fee (IDIF) Study to begin the process to help offset the capital improvement cost associated with new growth and development over the next 5-year period until the General Plan update is complete and a more comprehensive DIF study is done to establish ongoing fees. The IDIF would be charged to new Industrial (including Truck Yards), Commercial (hotel), and Multi-Family Residential Development (including Resident Halls). The recommended overall IDIF per land use type is a necessary step to ensure that Carson requires new development to pay towards its fair share of new capital improvement costs and that the City does not have to carry the burden of the additional costs with its already limited budget. Before the City Council can implement the fess, however, state law requires the completion of specific, technical analysis and review by experts in each of the fee areas.

Background

The City of Carson retained Kelly Associates Management Group (KAMG) to provide project management for Development Impact Fee Coordination. The first phase of the contract resulted in the attached Phase I White Paper (Attachment A). As documented in the White Paper, KAMG found enabling language in the City's General Plan regarding establishing Development Impact Fees (DIFs), although to date the City has yet to adopt any DIFs. The City has negotiated some DIFs on a case by case basis via Development Agreements and collected impact fees as mitigation measures for large developments as called for via Negative Declarations or Environmental Impact Reports. The City has also conditioned a number of projects to pay the IDIF once adopted.

The White Paper presented a detailed comparison table of DIFs currently charged by other adjacent and nearby cities. Most of the cities have DIFs in place for a variety of capital improvement areas such as parks, public safety, traffic and circulation and other public infrastructure needs. An aggregate of the overall DIFs charged by a few of those cities (Compton, Hawthorne, Long Beach, Signal Hill and Torrance) range from \$0.59 - \$4.47/sq. ft. for Industrial; \$2.43 - \$7.07/sq. ft. for Commercial; \$2,318- \$19,419 per unit for single family residential plus Quimby Act park fees (note: Torrance has an exemption for single family residential); and \$2,040 - \$33,796 per unit for multi-family residential.

The City of Carson incorporated in 1968 as a “low property tax” community as conditioned by the County of Los Angeles. Carson receives only 6.7 cents on each property tax dollar collected in the City compared to full property tax cities like Long Beach that receive 35 cents on each property tax dollar to help fund municipal services and capital improvements. The low property tax designation also makes it difficult for Carson to both fund maintenance and operations and to fund capital improvements needed to serve new growth and development. This being the case, it is even more fitting that Carson seriously consider the adoption of DIFs to help fund the needed capital improvements related to new growth and development.

Since DIFs are used to enhance capacity and serve the new development, there needs to be a rational nexus between the improvement and the new development. The fee cannot be imposed to address existing deficiencies except where they are exacerbated by the new development.

Status of Current Development

Recently, Carson adopted a moratorium on new or expanded logistics (industrial) facility development. This moratorium does allow for consideration of proposed development as an exception on a case by case basis with certain provisos including: 1) the willingness of the developer to form or participate in future Community Facility Districts (CFDs) to help offset the ongoing increased cost of public services related to the new growth and development and 2) entering into an agreement to pay a fair share DIFs to help offset the necessary capital improvements needed to accommodate the new growth and development. Several development proposals are being considered as exceptions.

Over the last 11 years, the City of Carson has annually adopted budgets with deficits between operating expenditures and annual revenue. On June 20, 2017 the City Council adopted a General Fund budget with an actual deficit of \$3.45 million. When one also considers that the FY 2017-18 General Fund budget includes a \$3.1 million hiring freeze and non-recurring resources of \$1.35 million, the structural deficit is calculated to be \$7.9 million or 10.4% of General Fund revenue.

The City’s General Plan is in need of an update to adequately consider the appropriate amount and type of future growth and to ensure that Carson grows to its intended future vision of an attractive environment for its citizens with a balance of sustainable land uses. The City has a General Plan update in process by Dyett & Bhatia that will be completed in mid-2019. The Plan will provide a solid foundation upon which to plan for future infrastructure needs in coordination with future growth and new development.

Until the General Plan update is complete and adopted, it is premature to fully develop a complete analysis and recommendation for all appropriate DIFs, but it is crucial that the City not wait to put interim fees in place. If the City continues to wait, it runs the risk of the City falling further behind as new developments continue to not pay their fair share.

Interim Projections of New Development and Related Capital Costs

Carson is in an excellent location in the heart of the South Bay/Harbor area close to freeways, the ports, airports and transit. Development proposals are still forthcoming and the City needs to balance the benefits of new growth and development with the extra cost burden that this growth brings in terms of needed capital improvements. The City has prepared a list (Attachment B) of anticipated new development and clarified which of those projects are likely to be developed within the next 5 years, i.e. the short term. Just this list alone anticipates approximately 2,100 new residential units, 1,405,000 sq. ft. of Commercial development, 2,235,000 sq. ft. of Industrial development and 300 new residential hall beds within the next 5 years as part of a much larger anticipated surge in new development.

Some of these developments are within the former The Boulevards site and subject to specific funding agreements and others are within the Industrial moratorium area and subject to negotiated funding agreements.

To develop a reasonable IDIF, KAMG and City staff considered known areas of needed public infrastructure improvements (Capital Improvements) to accommodate this level of growth. For the IDIF, the focus includes five areas: Public Safety (Sheriff and Fire), Parks, Traffic and Circulation, Sound Walls, and Drainage and Flood Protection (Storm Water Pollution Prevention Compliance).

Public Safety Component

Carson contracts with the Los Angeles County Sheriffs Department (LASD) for law enforcement. The Los Angeles County Fire Department (LACoFD) provides fire service to the City as a separate taxing entity, similar to the Los Angeles County Unified School District. LASD recognizes a need to make improvements to their headquarters to accommodate the extra demand of new growth. The current estimate for the building modification cost is approximately \$1,600,000. Although the LACoFD is a separate taxing entity, it has identified the need for a new station within the City and expansion of another station. Costs estimates for new station development is in the range of \$10,000,000 - \$10,500,000. The station expansion cost is not known but would require additional land acquisition. The LACoFD has DIF's in place for unincorporated areas of high growth within its jurisdiction. Their rates effective since February 1, 2017 range from \$0.918 to \$1.1846 per sq.ft.

As a separate taxing entity, LACoFD would be the entity that would need to establish and adopt the fee. LACoFD could do so and then authorize the City to collect the fee on their behalf. Carson and the County are discussing this option. This authorization would require a Memorandum of Understanding (MOU) between LACoFD and Carson and be subject to the review of the Fire District's Special Counsel and the Carson City Attorney prior to adoption by both the County Board of Supervisors and Carson City Council.

These assumptions will need to be reviewed and analyzed by a separate technical study prior to submission of final DIF rates to the City Council.

Parks Component

Carson has an adopted Quimby Act Ordinance which establishes the park land development fee based on 3 acres of parkland per 1000 population. The ordinance applies to new residential subdivisions only as defined by the Quimby Act. The City's current General Plan goal is higher at 4 acres/1000 population. Cities can adopt a DIF that allows for a greater fee than allowed by the Quimby Act. Also since Quimby applies to subdivisions only, the apartment developments which are being proposed are not subject to that fee. A DIF could impose a similar park land development fee on this type of new development. In terms of park land need, it is irrelevant whether the population is from single family development or apartments or condominiums.

In May 2016, LA County completed a comprehensive study of parkland needs as part of Proposition A (Safe Neighborhoods Park Tax set to expire in 2019), which included Carson's participation. The study (Los Angeles Countywide Comprehensive Park & Recreation Needs Assessment) concluded that in addition to various improvements within existing parks, Carson needs a couple of additional parks at a cost of approximately \$2,852,761 for land plus \$3,280,000 for general infrastructure each. These two parks total 3 acres. On a per acre basis these costs estimate to approximately \$2,044,000 for land and basic infrastructure. This cost does not include any specific park improvements such as buildings, picnic structures, benches, play equipment, etc.

Park land costs are estimated at approximately \$ 1,350,000 per acre (2017 estimate). Carson's survey of land sales between 2014 and 2016 calculated the average value of one acre at \$1,037,396. Added to development costs results in a total land and development cost per acre of \$2,387,396. For the purposes of this interim fee study, KAMG is using this lower cost estimate.

While most of the visitors/users of city parks are its residents, often there is some component of use by its non-resident population whereby local employees visit the parks to exercise, relax, take lunch breaks, etc. A 2015 Fiscal Study by Allan D. Kotin & Associates prepared for the City concluded that each non-resident employee equates to 0.33 resident for estimating the cost of services.

In the case of parks, the DIF could be used to acquire additional parkland and construct improvements in the area that will benefit the new development. These improvements could also be at an existing park if the location is such that it will serve the new development, but only on a proportional basis. For example, assume an existing neighborhood park serves an existing population of 5,000 residents and a new development will add 1,000 residents. The park would undergo renovation to update its facilities to accommodate the increased capacity. In this instance, the DIF from new development would cover 1/6th of the cost of renovation.

For the purpose of this interim fee study, KAMG is using the lower 3 acres per 1,000 people ratio and the lower LACoParks estimate of \$2,044,00 per acre.

These assumptions will need to be reviewed and analyzed by a separate technical study prior to submission of final DIF rates to the City Council.

Traffic and Circulation Component

The present estimated cost of needed improvements to accommodate the projected 5-year growth is \$14,964,900. This cost estimate for roadway related capital improvements is based on trip generation rates related to the projected increase of 63,310 daily trips associated with the 5-year development projections. This translates into a cost per trip of \$236. See Attachment C.

These numbers will need to be reviewed and analyzed by a separate technical study prior to resubmission to the Council.

Sound Walls Component

Carson has identified a growing need for sound walls along its roadways to buffer residential and other sensitive land uses from the increased noise associated with more heavy truck traffic throughout the City. The potential location of these sound walls is shown on the map in Attachment D. The identified need is for approximately 85,361 linear feet of sound walls at a cost of \$10,926,208, based on \$128/linear foot. Industrial and Commercial uses both have significant amounts of heavy truck traffic. The estimate for Commercial use is that 5% of its traffic is truck related, for Industrial it is 20% of its

traffic. Existing truck traffic within the City is 53,200 daily trips; growth will add another 11,920 daily trips.

These assumptions will need to be reviewed and analyzed by a separate technical study prior to submission of final DIF rates to the City Council.

Drainage and Flood Control/Storm Water Compliance Component

Carson has been highly involved in studying the necessary actions and costs pertaining to Storm Water Pollution Prevention. The existing General Plan states that as development intensifies the City needs to ensure that its storm drain systems are adequate. Due to Carson's flat low-lying topography and proximity to the Dominguez channel, the City has recently experienced flooding.

The City is regulated by the 2012 National Pollution Prevention Discharge Elimination System (NPDES) for the control of storm water. Carson is part of the Dominguez Creek Watershed Group which adopted the Enhanced Water Shed Management Program (EWMP) in 2015. The NPDES permit requires the identification of control measures including Best Management Practices (BMPs) to address water quality and flood prevention issues. Carson's plan relies on two regional projects to retain, divert or treat storm water. The main subcategories are Low Impact Development (LID), Green Streets and regional BMPs.

Carson is included in four watershed areas. A summary of cumulative implementation costs is \$411,654,951 of which Carson would need to invest \$95,970,056 by 2026 to meet the required 50% pollution reduction milestone. This investment cost is over \$9 million annually over the next decade.

The L.A. County Flood Control District Clean Water Fee Engineer's Report prepared by Willdan in 2012 identified 23,883 parcels in the Carson portion of the Dominguez Channel Watershed, approximately 16.09 square miles. The Engineer's Report identified typical percentages of impervious surface per land use. Industrial development ranges from 65% - 91% impervious surface when developed.

While implementation of LID can significantly reduce the amount of run-off, various sites in Carson cannot take advantage of LID due to factors including prior soil or ground water contamination or high ground water conditions. Still, in instances where LID is attainable or sites have implemented prior retention facilities on-site, the impact is lessened and the remaining IDIF should reflect this. Yet even with successful retention or LID implementation, the storm diversion is only at the 85 percentile storm size. The current LA County design standard is for the 95 percentile storm size. Thus, there will still be a fair share need basis for such development and land uses in the City.

Since Industrial sites typically have the highest amount of impervious surfaces when developed, the interim DIF will only focus on Industrial Uses including Truck Yards. Nevertheless, as the City updates its General Plan, it should consider expanding its storm water compliance DIF component to include other non-residential land uses especially commercial and institutional uses.

These assumptions will need to be reviewed and analyzed by a separate technical study prior to submission of final DIF rates to the City Council.

Calculation of Interim Development Impact Fee

An IDIF would allow the City to offset some of the costs of needed capital improvements associated with new growth and development on a fair share basis. Due to the different components of the proposed IDIF, it would vary depending upon the type of development. The detailed calculation sheet is attached as Attachment F. While, it may be justified to adopt even higher fees, the calculation sheets keep the fees adjusted to a reasonable fair share level based on the available data pertaining to projected development and improvement costs with the next 5 year period. For a quick comparison with neighboring cities, KAMG developed a summary comparison table (Attachment G).

The calculation sheets do include a fee component for Fire. As noted previously in this report, the Fire fee is not one that the City can adopt, instead LACoFD would be the entity to adopt the fee and then could authorize the City to collect it on their behalf. While the City and County are discussing this option, it is currently unknown if the County will proceed with this fee. Still, it is included in the calculations to provide information on the overall magnitude of the proposed interim DIF assuming that LACoFD does also proceed with an impact fee.

Based on these calculations, the overall IDIF for each development type would be as follows (subject to review and analysis by a separate technical study):

- **Industrial - \$3.44/sq. ft.** - Potential storm water compliance component reduction with implementation of LID, and a traffic and circulation fee credit could be applied for existing development. Interim Industrial development DIF components include Public Safety (Sheriff and Fire), Parks, Traffic and Circulation, Sound Walls and Drainage/Storm Water.
- **Truck yard - \$807.56/space plus \$0.52/sq. ft. of site area** - A traffic and circulation fee credit could be applied for existing development. Interim Truck Yard development DIF components include Traffic and Circulation, Sound Walls and Drainage/Storm Water.

- **Commercial - \$7.77/sq. ft.** - A traffic and circulation fee credit could be applied for existing development. Interim Commercial development DIF components include Public Safety (Sheriff and Fire), Parks, Traffic and Circulation, Sound Wall and Drainage/Storm Water.
- **Multi-Family Residential - \$19,037/DU** - Potential credit for on-site recreational space that exceeds required on-site open space, and a traffic and circulation fee credit could be applied for existing development. Interim Multi-Family Residential development DIF components include Public Safety (Sheriff and Fire), Parks, and Traffic and Circulation.
- **Resident Hall/Dorms - \$1,214/bed** - Potential credit for on-site recreational space that exceeds required on-site open space, and a traffic and circulation fee credit could be applied for existing development. Interim Resident Hall/Dormitory development DIF components include Public Safety (Sheriff and Fire), Parks and Traffic and Circulation. If the resident hall/dorms are developed on University property by the University and used for student housing, the development would be exempt from this IDIF.

Whatever DIF is ultimately adopted, all projects will still be subject to City code requirements and any other conditions applicable to the specific project.

Credit for Existing Development

DIFs are established to offset the impact of new development growth that creates the added need for new or expanded facilities. Some new development sites have existing development in place. This existing development is considered the baseline of the level of development for today's infrastructure. Therefore, the City needs to provide a credit for this existing development on a site-by-site basis to reduce the IDIF applied to such sites. For example, if a site already has a 10,000 sq. ft. industrial building and its owner proposes to raze the existing development and build a 25,000 sq. ft. development, the IDIF would be calculated on the net increase of 15,000 sq. ft. of new development.

Attachments

The following documents are included as Attachments to this report:

- A. Development Impact Study (3-13-17) Phase I White Paper
- B. Projected Development Table and Map

- C. Traffic Projections and Fee Calculations
- D. Sound Walls location and costs
- E. Drainage and Storm Water Compliance analysis
- F. Interim DIF Calculations
- G. DIF Summary Comparison Table

In addition, other documents referenced throughout this report are available at Carson City Hall. These include the following:

- Carson General Plan
- Moratorium Ordinance No.17-1618-U
- Los Angeles Countywide Comprehensive Park & Recreational Needs Assessment, May 2016 (Proposition A)
- LACoFD fee calculation
- 2015 Fiscal Study by Allan D. Kotin & Associates
- L.A. County Flood Control District Clean Water Fee Engineer's Report prepared by Willdan, 2012

Attachment A

Development Impact Study Phase I White Paper

March 1, 2017 (Revised July 18, 2017)

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City of Carson - Development Impact Fee Study White Paper

Prepared by Kelly Associates Management Group

March 1, 2017 (revised July 18, 2017)

Introduction

The City of Carson retained Kelly Associates Management Group LLC (KAMG) to assist in the coordination of the City's Development Impact Fee Study. Development Impact Fees (DIFs) are valuable tools to fund infrastructure needs associated with new/additional development within the City. Currently, Carson does not have any DIFs.

As part of this study, KAMG was to review the General Plan, Zoning Code, Specific Plans, fiscal and environmental information, and land-use data related to proposed development opportunities. KAMG was to then prepare a "white paper" summary that discusses how this data relates to development impact fees, specifically, the City's existing basis for DIFs, future development potential in Carson, and the associated need for infrastructure improvements.

Additionally, KAMG was to conduct a case study analysis of comparison cities in terms of industry best practices (fees assessed, applicability, management, accounting, etc.).

Finally, KAMG was to prepare a summary report reviewing industry best practices and outlining a suggested course of action for the City's adoption of development impact fees.

Following are the results of the document analysis and comparison cities study discussed above. The final summary report suggesting a course of action for the City's adoption of development fees will be presented once KAMG has received all capital improvement and operational master plans and has met with the City Executive Team to gain agreement on final development potential throughout the City of Carson.

I. Legal Basis for Development Impact Fees (AB 1600) and Quimby Act Fees (Subdivision Parkland Fees)

The legal framework for development exactions, including development impact fees (DIFs), like all land use regulations is subject to the Fifth amendment of the U.S. Constitution which prohibits the taking of private property for public use without just compensation. The courts have recognized the imposition of DIFs as a legitimate form of land use regulations if the fees are shown to substantially advance a legitimate government interest. That interest is the protection of the public health, safety and welfare by ensuring that development is not detrimental to the quality of essential public services.

The U.S. Supreme Court has found that a government agency imposing exactions on development must demonstrate an “essential nexus” between the exaction and the interest being protected. The Court has also made clear that the exaction be “roughly proportional” to the burden created by development.

The California Constitution grants broad police power to local government including the authority to regulate land use and development. That police power is the source of authority for imposing DIFs to pay for infrastructure and capital facilities. These fees must not exceed the cost of providing capital facilities needed to serve the new development otherwise they would run afoul of the U.S. Constitution and the California Mitigation Fee Act.

The California Mitigation Fee Act was first adopted in the late 1980s via AB 1600 which added various sections to the Government Code beginning with Section 66000. Since then the impact fee statute has been amended from time to time and in 1997 was officially titled the “Mitigation Fee Act”.

The Mitigation Fee Act does not limit the types of capital improvements for which DIFs may be charged but instead defines public facilities very broadly to include public improvements, public services and community amenities. Other provisions of the Government Code prohibit the use of DIFs for maintenance or operating costs. Thus, DIFs are limited to capital costs only.

The Mitigation Fee Act requires that an agency establishing, increasing or imposing DIFs must make finding to:

- a) identify the purpose of the fee
- b) identify the use of the fee and
- c) determine that there is a reasonable relationship between the use of the fee and the development type on which it is imposed; the need for the facility and the type of development on which the fee is imposed; and the amount of the fee and the facility cost attributable to the development project.

Five general rules for local government to follow when setting development standards and fees are as follows:

- 1) Be fair. Do not try to make new development pay for problems it did not create. Don't charge new development for remedies of existing deficiencies.
- 2) Plan ahead. Use the facilities plans in your Capital Improvement Program (CIP), or General Plan to forecast growth and projected needs for a realistic time period.
- 3) Avoid over-generalizing. Connect the impacts of the project with the benefits of each facility or class of facilities.
- 4) Don't be greedy. DIFs should reflect a reasonable cost estimate to build the facility and a fair allocation of the new project's demand for the facility.
- 5) Consider alternative to exactions. New development may be unable to carry the full burden of unlimited levels of exactions. Demanding too much of development may be counter-productive to the local economy.

Certain impact fees related to new development are exempted from the requirements of the Mitigation Fee Act, including in lieu park land dedication as authorized by the Quimby Act (Government Code Section 66477). The Quimby Act dates to the 1960s and allows local government to require parkland dedication or in-lieu fees in conjunction with residential subdivision approval. Under the Quimby Act, the local agency may set a minimum requirement of 3 acres of parkland for each 1,000 residents. If the local government has neighborhood and community parkland in excess of that basic standard, they may choose to impose a higher ratio of up to 5 acres per 1,000 residents (if the requirement does not exceed the existing supply ratio). Since the Quimby Act pertains exclusively to residential subdivisions it does not allow local government to impose the parkland dedication or in lieu fee exaction on most new condominium nor apartment developments. These types of new residential developments while not subject to the Quimby Act could be subject to a similar exaction under the Mitigation Fee Act.

II. Study of Carson Documents as they Relate to Development Impact Fees

Carson General Plan

A review of various Carson documents to ascertain the potential need for, and benefit of, Development Impact Fees (DIFs) begins with the City's General Plan. The Carson General Plan was last comprehensively updated in 2004 with a more recent update to the Housing Element for 2014-2021 and 2015 update to the Land Use Element. (Carson recently approved a contract for the update of its General Plan which is to be completed in mid-2019.) While Carson has yet to adopt any DIFs, the General Plan does include many implementation measures that focus on the fiscal impacts and public service costs of development.

Land Use Element

A quick overview of Carson's future development potential is found in the Land Use (LU) Element of the General Plan. Overall, the General Plan concludes that 9% of the land is still vacant and an additional 8.5% is underutilized. Much of this land is slated for intensification as part of the Carson Vision to incorporate various intensities of Mixed Use development. Specifically, the General Plan lists a number of "Study Areas" that encompass the following development sites: The Carson Street Mixed Use Corridor, the Area Southwest of the I-405 and north of Torrance Boulevard, South Bay Pavilion, the Area south of Sepulveda Boulevard between Marbella and Avalon, the northeast corner of Central and Victoria (Dominguez Hills Village), the Dominguez Golf Course and the Cal Compact sites. All of these sites were studied as part of the comprehensive General Plan update.

The Land Use Element's implementation measures (LU-IM) that focus on fiscal impact of new development include LU-IM-4.1, LU-IM-5.9, LU-IM-6.1 and LU-IM-6.6. These measures include requirements for fiscal impact analysis of large commercial and industrial projects, targeting improvements through the Capital Improvement Program, identification of the effect of land use development on City revenues and costs of providing facilities and services, and systematic monitoring of the impact and intensity of development to ensure that facilities and services in support of that development can be provided.

The Land Use Element sets the stage for potential adoption of Development Impact Fees (DIFs).

Transportation and Infrastructure Element

Other chapters of the General Plan, besides Land Use, also make mention of infrastructure needs associated with development. Specifically, Chapter 4 Transportation and Infrastructure (TI) has Policy TI-2.5 which directs the establishment of a comprehensive traffic impact fee program. Related Implementation Measures include TI-IM-2.5 pertaining to evaluating traffic impacts and requiring implementation of improvements on a fair share basis; TI-IM-2.7 pertaining to the prioritization of capital improvements and TI-IM-2.9 that directs the City to conduct the necessary feasibility and nexus studies and establish a comprehensive traffic impact fee program.

The Transportation and Infrastructure Element very explicitly calls for the establishment of a Traffic Impact Fee program.

Safety Element

Chapter 6 pertaining to Safety (SAF) states that the City is served by the Los Angeles County Sheriff for law enforcement and Los Angeles County Fire for fire prevention, suppression and emergency medical response. Based on 2002 data (used when the General Plan Safety element was last updated) the City had approximately 2.1 sworn law enforcement officers per 1,000 residents. This was above the 1.7 sworn officers per 1,000 resident standard which is considered excellent, and potentially could allow for growth without having to increase the number of officers. Despite this analysis in the General Plan, subsequent studies showed that the actual number of law enforcement officers (versus budgeted number) fell far short of the standard and in fact was closer to 1.3 sworn officers per 1,000 residents (Carson Marketplace EIR, circulated in 2005, FEIR certified in 2006). In 2017, the Finance Director shared that the currently budgeted staffing is even lower at 0.667 sworn officers per 1,000 residents. There is one Sheriff station located within the City limits at 21356 South Avalon. The City is served by 6 primary Fire and EMS stations of which 4 are located within the City.

There are several Safety policies and implementation measures that pertain to future growth and the potential for new facility needs. SAF-2.4 states that as development intensifies the City needs to ensure that the storm drain systems are adequate; SAF-IM-2.1 pertains to target areas through the CIP; SAF-6.9 states the need to evaluate the need for future Sheriff facilities; and SAF-IM-6.7 regards identifying the needs and alternatives for providing new facilities.

The Safety Element lays a basis for further study of DIFs for Law Enforcement, Fire and Storm Drain infrastructure expansion related to growth. Both Law Enforcement and Fire are provided via contract with Los Angeles County.

Parks, Recreational and Human Services Element

Chapter 9 pertaining to Parks, Recreation and Human Services (P) also has several Implementation Measures that could lead to a DIF for park improvements. P-IM-1.1 directs the development of a Master Plan of Parks and Recreation, P-IM-1.6 calls for an update to the Quimby Act Implementation and P-IM-1.12 states that parkland requirements be included in all Development Agreements. The City currently applies a Quimby Act standard of 3 acres per 1000 population to new subdivisions for residential development. The General Plan puts forth a goal of 4 acres per 1000 population. The Quimby Act sets a

baseline of 3 acres per 1000 population and allows for a higher standard up to 5 acres per 1000 population to match the existing ratio of neighborhood and community parks to population. According to the Finance Director, in 2017 the City's current ratio of neighborhood and community parks to population is approximately 1.5 acres per 1,000 residents.

The Parks, Recreation and Human Services Element lays a basis for further study of parks and recreation needs and funding.

Capital Improvement Program

KAMG also found various references to the Capital Improvement Program in the General Plan. The recent budgets include a list of capital projects and have a line item for revenue labeled "developer in-lieu fees" with \$0 budgeted for the current FY2016-17. The current CIP totals \$17.1 million of which \$15 million is for infrastructure. Depending upon the specific nature of these capital improvements, DIFs may be an appropriate, but currently unused, tool for funding. DIFs are appropriate when the capital improvements are needed to serve the new, increased development.

Growth Potential

A closer look at potential growth revealed that the General Plan as adopted in 2004 and amended in 2015 projected substantial growth of over 1,800 dwelling units and nearly 15 million square feet of commercial, mixed use, business park and industrial development. Over the past 10 to 15 years the growth projections have been revised slightly as new development potential is analyzed. The 2016 Carson Vision Plan alone has growth projections of 2,344 residential units and nearly 6 million square feet of commercial, industrial, office and other nonresidential development. Clearly, the City has significant land to accommodate future development and redevelopment at a higher intensity.

The Boulevards

Much of this potential growth is concentrated in the 168 acre The Boulevards at South Bay area (former Carson Marketplace), of which 157 acres is now under the control of the City's Reclamation Authority and the surrounding 640 acres which have since been studied as the Carson Vision Plan in 2016. The Boulevards at South Bay Specific Plan foresees up to 1,550 dwelling units, 2 million square feet of commercial development and 300 hotel rooms. More analysis of The Boulevards is included in the next section on past funding efforts.

This past summer, the City entered into an Exclusive Negotiating Agreement (ENA) with Macerich for commercial center development of approximately 560,000 square feet on 46 acres at The Boulevards. The City is currently in active negotiations with three developers, Macerich, Vestar and Lincoln for completion of The Boulevards plan. Carson will likely pursue a Development Agreement for this project.

Carson Vision Plan (2016)

The latest Carson Vision Plan prepared by PlaceWorks and Kosmont Companies and adopted in 2016 projects new development capacity of 2,344 dwelling units, 1.2 million square feet of commercial, 4.8 million square feet of industrial, 500,000 square feet of office, 120,000 square feet of other non-residential development and 225 hotel rooms.

The Carson Vision Plan is a first step in identifying desired redevelopment/development to plan for a Carson Street Downtown and to realize a growth corridor along the I-405. Implementation of the Carson Vision Plan will require the adoption of Specific Plans, changes to the Zoning Code development standards and possible amendments to the General Plan. It is an opportune time to consider financing methods for future infrastructure improvements that will be needed to support this development.

The Carson Vision Plan lists potential funding/financing tools and includes DIFs along with Community Facility Districts (CFDs) or Mello-Roos and Enhanced Infrastructure Financing Districts (EIFDs).

Other potential new growth areas

In conversations with the City, KAMG also learned of additional potential new development proposals for mixed use and residential redevelopment on the Kott Family (former auto sales) 14 acre site, redevelopment of an existing mobile home park to high density residential on 11 acres and redevelopment of the Civic Center with mixed use/residential and new city hall. These three proposals are all expected in early 2017. In addition, Cal State Dominguez Hills is considering major redevelopment planning to include non-university housing and commercial uses within the next 5 years.

The city has also compiled a Development Potential matrix for use as part of this study. This matrix covers 20 sites including some analyzed in the Carson Vision Plan and others located within the central and northern part of the City. These 20 sites have a total development potential of 7,153 dwelling units, and over 8 million square feet of commercial, industrial, office, hotel and other uses. The matrix includes both sites that are currently vacant and ones that could be redeveloped at a higher intensity. The matrix does not account for the amount of existing development on each of the sites.

To move ahead with specific studies for DIFs will require an accurate growth projection upon which to base future infrastructure improvement needs.

Past Efforts to Fund Capital Improvements

In the past, the City has relied on mitigation measures to ensure some fair share funding of infrastructure necessitated by new development. The City also required fiscal impact studies for development proposals on sites of 10 acres or larger. In some cases, the City entered into a Development Agreement. Each of these methods can be useful in offsetting the cost associated with new development, but not all development would fall within the parameters of an environmental review, fiscal impact study or development agreement being required or proposed.

KAMG reviewed the history of the Carson Marketplace, now The Boulevards, development approval consisting of a Specific Plan, Environmental Impact Report and Development Agreement. Clearly on-site improvements related to the development are identified and a responsibility of the developer. The project was required to construct and or contribute to related traffic improvements associated with its share of future traffic increase to various intersections and roadway segments. The EIR set forth various triggers for traffic improvements. The project had an inclusionary housing requirement to meet on-site. The project was also required to contribute to the local bus line operations including purchase of a clean air shuttle and paying its fair share funding on an annual basis. Other mitigation measures include paying its fair share to Los Angeles County Public Library and Los Angeles County Fire to offset impacts

related to the need for new or expanded facilities. The project also was subject to mitigation measures pertaining to law enforcement including providing private security, providing a Community Safety Center for use by both its private security and the Sheriff, funding Deputy Sheriffs on an overtime basis during peak times and paying its fair share for deployment of a one-person patrol unit.

The Development Agreement stated that future development fees could still be applied to the project if these DIFs were adopted city-wide. The exception was that the project would not be subject to any future traffic or inclusionary housing DIFs. Also, the project was limited to having to pay up to \$500,000 plus the annual CPI increase to any and all future DIFs. It is not uncommon for Development Agreements to cap or limit future fees.

It is interesting that this language regarding future DIFs was included within the Development Agreement originally approved in 2006. This indicates an acknowledgement that the City may have been considering future DIFs at that time. That seems to be in keeping with the General Plan which was adopted in 2004. Also based on a conversation with Sheri-Repp, former Planning Manager, she confirmed that the staff intended to move ahead with the development of DIF studies.

Past Fiscal Studies

KAMG reviewed a couple of past fiscal studies (Annexation Fiscal Impact Estimate complete in 2015 by Allan D. Kotin & Associates and 21900 Wilmington Avenue Fiscal Impact Report completed in 2016 by Rosenow Spevacek Group, Inc.) and found that the City has used a resident equivalency factor of 0.33 residents for each employee to calculate average service costs. Average service costs include personnel, equipment and infrastructure. Fiscal Impact studies look more at the balance between revenue received from property tax, in-lieu property tax (VLF), utility users' tax and business tax and the average cost of general government, public works and planning services. In the case of the Fiscal Impact Report done in 2015 by for the possible annexation of the Rancho Dominguez territory (1,710 acres), it also included specific improvement project costs including expansions and upgrades to bus lines and roadways.

It is important to know that Carson incorporated as a "low property tax" community in 1968 as a condition imposed by the County of Los Angeles. Carson is considered a "low property tax city" since it receives only 6.7 cents of each property tax dollar collected in the community. There are a number of full property tax cities like Long Beach, which receive 35 cents of each property tax dollar to help fund municipal services and capital improvements. Fiscal analysis for Carson reveals that the costs of providing services to its residents is more than the revenues generated by residential units, creating a deficit. This "low property tax" designation also makes it difficult for Carson to fund maintenance and operations, and capital improvements needed to serve new growth and development.

Of interest is the resident to employee equivalency factor which could be applied in the future to a DIF for parks or other community facilities.

Conclusions Relating to the Review of Carson Documents

The City of Carson has laid the groundwork for future Development Impact Fees (DIFs) with references in its General Plan, including some specific language directing the preparation of studies and

development of a fee. The City has identified considerable growth potential in the next 5 to 20 years. This growth will be associated with needed infrastructure improvements and expansion to maintain appropriate service levels. To move ahead with the development of any DIFs, Carson will need to more fully define the growth for each area of the city or city-wide and ensure that its master plans account for that growth. The City will also need to identify which impacts to study. Carson may want to focus on traffic/transportation improvements, parkland and improvements and perhaps other public service facility improvements. The amount of potential new development could significantly impact both the roadway and transit system capacity, create a greater burden on the city's park and recreational facilities and create the need for larger and/or updated public facilities such as city hall, community centers, and public works facilities.

Even though the City contracts with the County of Los Angeles for law enforcement, fire services, and library services, there are identified needs for capital facility improvements within the city for a new fire station, addition/major renovation of the Sheriff Station and library expansion/major renovation. Therefore, it is prudent to consider DIFs for these service areas in addition to the others previously listed.

III. Comparison Cities' Development Impact Fees (DIFs)

Development Impact Fee (DIFs) are fees charged to new development to offset the impact of such development. DIFs can only be used to fund facilities or improvements which are needed due to the increased demand attributable to new development. Facilities and improvements that can be the subject of DIFs include public buildings; facilities for the storage, treatment and distribution of water; facilities for the collection, treatment and disposal of sewage; facilities for the collection and disposal of storm waters for flood control; facilities for the generation of electricity and distribution of gas and electricity; parks and recreation facilities; transportation and transit facilities; and other public capital projects. DIFs need to be based on accurate development growth projections and associated master plans for capital improvements based upon those growth projections. There needs to be a direct nexus between the DIF and the impact of new development.

While Development Impact Fees (DIFs) for one jurisdiction cannot be based upon what other jurisdictions charge because each has its own specific infrastructure and facility needs associated with future development, it is still valuable to review the DIFs of surrounding cities. DIFs are adopted pursuant to the "Mitigation Fee Act", commonly referred to as AB1600 and documented in California Government Code (G.C.) section 66000 et seq. In the case of Carson, no DIFs have been adopted. DIFs are a valuable tool to ensure that future development that increases the need for public infrastructure and facilities pays its fair share toward that increase. Carson does not have this tool in place to offset public costs associated with new development.

To look at a comparison of DIFs in the Carson area, the following surrounding and nearby cities were surveyed: Long Beach, Compton, Signal Hill, Torrance, Hawthorne, Lawndale and Gardena. These cities range in size and future growth potential. Each of these cities have one or more DIF, in addition to Quimby Park Fees and school district School Impact Fees. Generally, Park Fees are governed by the Quimby Act (G.C. 66477) which specifically allows for Park Impact Fees on new residential subdivision

development. Quimby fees are limited to residential subdivision and therefore do not include apartments or even all condominium developments. Since the need for park and recreational facilities can be impacted by all increases in the city's population, both by residents and employees, some Jurisdictions also adopt park impact fees subject to AB1600 for residential development not covered by Quimby and nonresidential development for the acquisition of land and/or the construction of park improvements. School Impact Fees are also subject to different legislation (G.C.65995) and are levied on new development by the local school districts.

The most common DIFs in addition to park impact fees for nonresidential development are traffic impact fees and police and/or fire protection impact fees. Other less common DIFs are for the more general category of Government and typically consist of items such as utilities, sewers, storm drains and water infrastructure. Often, cities may also charge Water and Sewer Connection Fees on new development.

The attached table provides a comparison of DIFS which are in place in each of the surrounding/nearby cities. A few highlights are: Torrance exempts single family residential development; both Torrance and Gardena combine various DIFs into one overall fee; and Long Beach charges a different amount for its Traffic DIF for commercial development within its downtown district. Also Long Beach charges a DIF for drainage/stormwater for developments that are unable to comply with Low Impact Development (LID) standards. The table provides information on how recently the DIFs have been adopted or updated. It is important for each city to review their DIFs on a periodic basis to ensure that the development assumptions, infrastructure growth needs and pricing remains accurate.

In addition to looking at comparison cities, KAMG also contacted LACoFD to determine if they charge DIFs in other areas of their service jurisdiction. LACoFD has adopted DIFS for new development in a few higher growth areas. These fees have been recently updated effective February 2017 and range from \$0.918 to \$1.1846 per sq.ft.

IV. Conclusion and Future Direction

Based on a review of the City of Carson documents, as well as an analysis of Development Impact Fees for surrounding cities, it is apparent that Carson has previously planned for and would benefit from a DIF program.

Prior to suggesting a course of action, KAMG still needs to receive from the City and complete their review of all capital improvement and operational master plans. Additionally, final potential development capacity numbers and location of development will need to be ascertained in agreement with the City. This process will require at least one additional meeting with the City Executive Team to gain an understanding and ultimately an agreement on final development potential throughout the City of Carson.

ATTACHMENT 1 – COMPARISON OF DEVELOPMENT IMPACT FEES (DIF'S)

CITY	TYPE OF DEVELOPMENT	FIRE	PARKS	POLICE/LAW ENFORCE.	GOV'T	PUBLIC WORKS	TRANSPORTATION/ TRAFFIC	SEWER	WATER	STORM WATER
Long Beach	Single family residential	\$490	Quimby	\$703			\$1125	\$101.61		
	Multifamily	\$378	\$3562.78	\$537			\$1125	\$101.61		
	Senior Citizen						\$663.75			
	Commercial/s.f.	\$0.267		\$0.442				\$101.61		\$ 3.02 (w/o LID)
	Commercial citywide, except downtown:									
	Retail						\$3.00 (retail s.f.)			
	Hotel						\$750 (room)			
	Movie						\$140 (seat)			
	Industrial Office						\$1.10 (ind s.f.)			
	Commercial downtown:						\$2.00 (office s.f.)			
	Retail						\$4.50 (retail s.f.)			
	Hotel						\$1125 (room)			
	Movie						\$90 (seat)			
	Office						\$3.00 (office s.f.)			
	Office/s.f.	\$0.325		\$0.538						\$3.02 (w/o LID)
	Industrial/s.f	\$0.132		\$0.218						\$3.02 (w/o LID)
Long Beach updates their DIFs on a regular basis; the fees listed above were updated effective 10/2016. The sewer fee is described as a sewer capacity fee.										
Compton	Single family residential	\$385	Quimby	\$138	\$1362	\$710	\$1115			
	Multifamily	\$306	\$3480	\$108	\$1078	\$562	\$775			
	Commercial /1000 s.f.	\$163		\$26	\$260	\$134	\$1849			
	Office/1000 s.f.	\$216		\$35	\$347	\$179	\$1410			
	Industrial/1000 s.f.	\$109		\$17	\$173	\$89	\$202			
Compton adopted DIFs in July 2015. The Government category is general for various public improvements.										
Signal Hill	Single family Residential		Quimby				\$497		\$11743-\$19698	
	Multifamily		\$13334				\$497		\$11743-\$19698	
	Commercial/s.f.		\$0.63						\$3.50	
	Commercial high intensity use/s.f.						\$5.88			
	Office use/s.f.						\$1.15			

ATTACHMENT 1 – COMPARISON OF DEVELOPMENT IMPACT FEES (DIF'S)

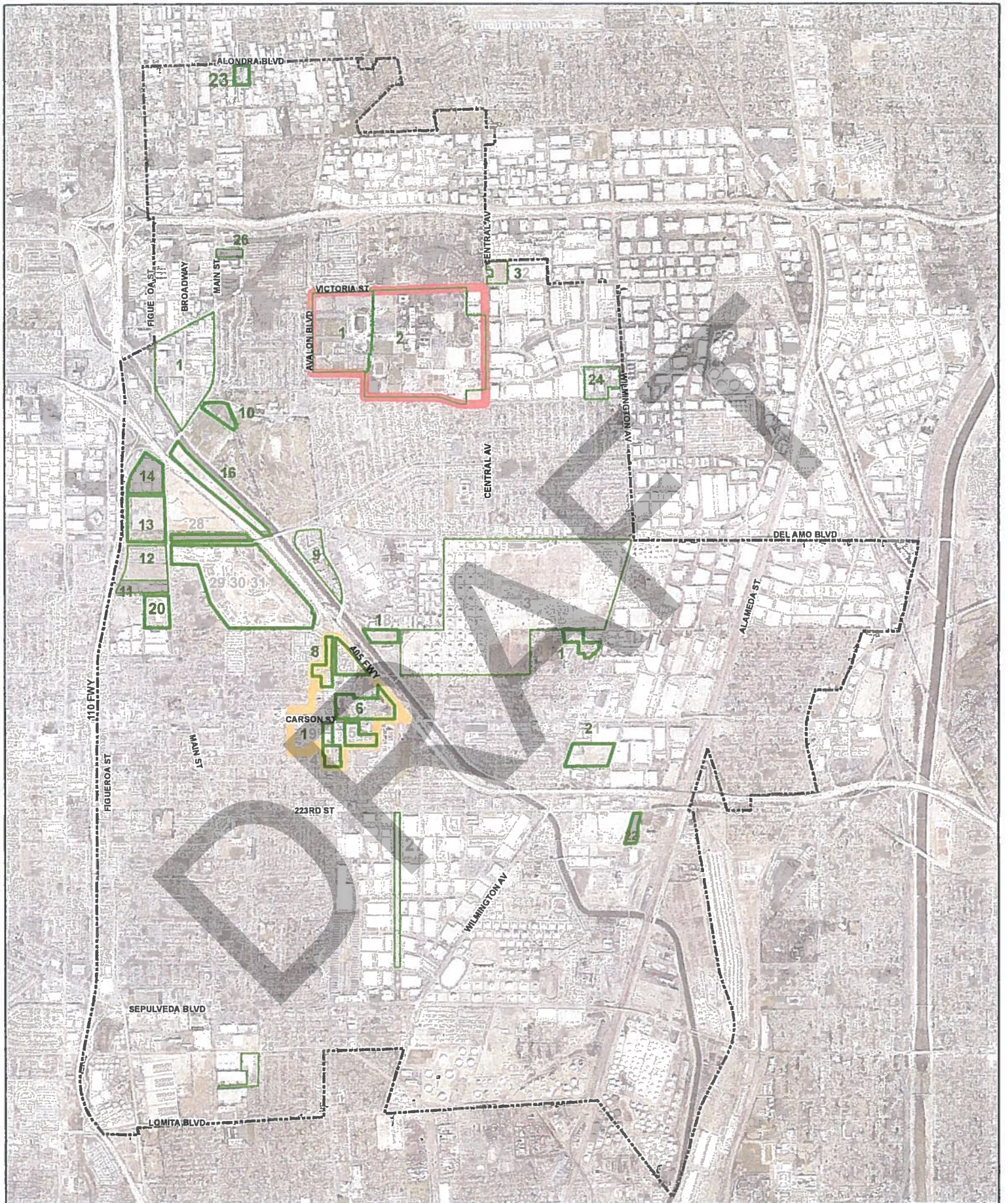
CITY	TYPE OF DEVELOPMENT	FIRE	PARKS	POLICE/LAW ENFORCE.	GOV'T	PUBLIC WORKS	TRANSPORTATION/ TRAFFIC	SEWER	WATER	STORM WATER
	All other commercial						\$2.94			
	Industrial/s.f.						\$0.71			
Signal Hill updates its DIFs on a regular basis, the fees listed above were updated effective 2017. The Water fee is based on meter size.										
Torrance										
	Single family residential				exempt					
	multifamily				\$2276.23					
	Commercial general/ 1000 s.f.				\$5438.75					
	Commercial center/1000 s.f.				\$1773.61					
	Industrial light/1000 s.f.				\$1264.13					
	Industrial heavy/1000 s.f.				\$1433.85					
	Industrial Bus. Park/1000 s.f.				\$1832.80					
DIF for Torrance includes transportation services, undergrounding, sewer and storm drain improvements and Police and Fire facilities. Torrance adopted its Phase I DIFs for transportation, undergrounding, sewer and storm drain improvements in 2005, added Phase II for Police and Fire facilities in 2007 and updates them of a regular basis. The fees listed above were updated effective July 2017										
Hawthorne										
	Single family res.		\$1011	\$904			\$1121			
	multifamily		\$718	\$643			\$785			
	Group quarters						\$326			
	Comm. up to 299,000 s.f./1000 s.f.			\$180			\$3666			
	Comm. 300,000+ s.f./1000 s.f.			\$180			\$2936			
	Eating and drinking place/1000 s.f.			\$180			\$11047			
	Lodging/1000 s.f.			\$180			\$1189			
	Office up to 49,000 s.f./1000 s.f.			\$242			\$2664			
	Office 50,000-299,000 s.f./1000 s.f.			\$242			\$1731			
	Office 300,000 s.f.+ /1000 s.f.			\$242			\$1212			
	Medical/1000 s.f.			\$242			\$2787			
	Gov't/1000 s.f.			\$242			\$3455			
	Educ./1000 s.f.			\$242			\$1267			
	Ind. /1000 s.f.			\$90			\$1003			
Hawthorne originally adopted DIFs in 1990, a comprehensive study in 2006 resulted in significantly increased fee levels. By 2009, the level of the 2006 fees were viewed as a potential deterrent to development. An update in 2010 lowered the fees substantially from the 2006 level and are still currently in place.										
Lawndale										
	Residential							\$204		

ATTACHMENT 1 – COMPARISON OF DEVELOPMENT IMPACT FEES (DIF'S)

CITY	TYPE OF DEVELOPMENT	FIRE	PARKS	POLICE/LAW ENFORCE.	GOV'T	PUBLIC WORKS	TRANSPORTATION/ TRAFFIC	SEWER	WATER	STORM WATER
Lawndale's DIF is described as a sewer capacity or connection fee.										
Gardena	Multifamily					\$1000				
Gardena's DIF is for public services including utilities, water, drainage and sewer improvements and was adopted to offset impacts from new mostly condominium development in a city that previously had been mostly single family residential in nature. Both affordable and senior housing units are exempt.										

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Attachment B
Projected Development Table and Map



0 0.1250.25 0.5 Miles

City of Carson Planning Study Areas

Date Printed: Tuesday, August 22, 2017
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Attachment B
Projected Development Table and Map

Development Potential (As of May 2017)																				
		Residential Dwelling Units	Commercial Sq. Ft.	Industrial Sq. Ft.	Hotel Rooms	Residential Hall Beds	Child Care Sq. Ft.	Community Conv. Center Sq. Ft.	Office Sq. Ft.	Truck Spaces	Notes	Residential DUs	Commercial Sq. Ft.	Industrial Sq. Ft.	Hotel Rooms	Residential Hall Beds	Child Care Sq. Ft.	Community Conv. Ctr. Sq. Ft.	Office Sq. Ft.	Truck Spaces
	Name																			
1	StubHub				200						New	-	-	-	-	-	-	-	-	-
2	Cal State DH	2,232	299,280	572,400		998	5,000				New	200	50,000	150,000	-	300	-	-	-	-
3	Shell		100,000	1,600,000							New	-	-	-	-	-	-	-	-	-
4	Strip Commercial	450	30,000								Existing	-	-	-	-	-	-	-	-	-
5	Park Avalon	700	30,000								Existing	-	-	-	-	-	-	-	-	-
6	Civic Center	956	445,000		192			80,000			Existing	-	-	-	-	-	-	-	-	-
7	Kott 14	650	120,000		150				100,000		Existing	200	20,000	-	-	-	-	-	-	-
8	Kott	450	20,000								Existing	200	10,000	-	-	-	-	-	-	-
9	Carson Plaza																			
9	Office Park	535	245,000						70,000		Existing	100	-	-	-	-	-	-	-	-
10	Old Nursery			39,000							Existing	-	-	-	-	-	-	-	-	-
11	Rand	900	40,000								Existing	250	-	-	-	-	-	-	-	-
12	KL Fenix/Storage			660,000							New	-	-	250,000	-	-	-	-	-	-
13	GS nursery/Old Drive-In	120		914,000							New	60	-	-	-	-	-	-	-	-
14	WM/Pepsi/ Penske		544,000		225						Existing	-	-	-	-	-	-	-	-	-
15	Existing Industrial			1,450,000							Existing	-	-	350,000	-	-	-	-	-	-
16	Watson		215,000								New	-	-	-	-	-	-	-	-	-
17	Rainbow			130,000							Existing	-	-	-	-	-	-	-	-	-
18	Kott, Chico			91,000							New	-	-	-	-	-	-	-	-	-
19	Ralphs	280		20,000							Existing	-	-	-	-	-	-	-	-	-
	Eni Oil and Gas (behind Kmart)			175,000							Existing	-	-	-	-	-	-	-	-	-
20											New	-	-	-	-	-	-	-	-	-
21	Alpert and Alpert			420,000							New	-	-	420,000	-	-	-	-	-	-
22	Panatoni			120,000							New	-	-	120,000	-	-	-	-	-	-
23	Alere			146,000							New	-	-	146,000	-	-	-	-	-	-
24	Prologis Tech Center			443,000							New	-	-	443,000	-	-	-	-	-	-
25	Bridge																			
25	Development			253,000							New	-	-	253,000	-	-	-	-	-	-
26	Cal Pac			103,000							New	-	-	103,000	-	-	-	-	-	-
27	Truck Yard									580	New	300	-	-	-	-	-	-	-	580
28	11 Acre	300									New	-	595,000	-	-	-	-	-	-	-
29	Macerich		595,000								New	-	730,000	-	-	-	-	-	-	-
30	Vestar		730,000		300						New	600	-	-	-	-	-	-	-	-
31	Lincoln	1,200									New	-	-	-	-	-	-	-	-	-
32	Victoria and Central	177									New	177	-	-	-	-	-	-	-	-
32	TOTAL	8,950	3,413,280	7,136,400	1,067	998	5,000	80,000	170,000	580	-	2,087	1,405,000	2,235,000	-	300	-	-	-	580

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Attachment C

Traffic Projections and Fee Calculations

(Subject to review and analysis by a separate technical study)

Attachment C

Traffic Projections and Fee Calculations

GENERATED TRAFFIC VOLUMES FOR 5-YEAR DEVELOPMENT PROJECTIONS

Project/Land Use	Quantity*	Trip Generation** Rate (trips per day)	Generated Traffic (per day)
2. CSUDH			
Residential	200 DUs	6.23/DU	1,250
Commercial	50,000 s.f.	28.81/ksf	1,440
Industrial	150,000 s.f.	4.54/ksf	680
Dorms	300 beds	2.00/bed	600
7. Kott 14			
Residential	200 DUs	6.23/DU	1,250
Commercial	20,000 s.f.	28.81/ksf	580
8. Kott			
Residential	200 DUs	6.23/DU	1,250
Commercial	10,000 s.f.	28.81/ksf	290
9. Carson Plaza Ofc Park	100 DUs	6.23/DU	620
11. Rand	250 DUs	6.23/DU	1,560
12. KLFenix/Storage			
Industrial	250,000 s.f.	4.54/ksf Ind	1,140
13. GS Nursery	60 DUs	6.23/DU	370
15. Existing Industrial	350,000 s.f.	4.54/ksf	1,590
21. Alpert & Alpert			
Industrial	420,000 s.f.	4.54/ksf	1,910
22. Panatoni Industrial	120,000 s.f.	4.54/ksf	540
23. Alere Industrial	146,000 s.f.	4.54/ksf	660
24. Prologis Tech Center			
Industrial	443,000 s.f.	4.54/ksf	2,010
25. Bridge Development			
Industrial	253,000 s.f.	4.54/ksf	1,150
26. Cal Pac Industrial	103,000 s.f.	4.54/ksf	470
27. Truck Yard	580 spaces	2.00/space	1,160
28. 11 Acre	300 DUs	6.23/DU	1,870
29. Macerich Outlet Ctr	595,000 s.f.	26.59/ksf	15,820
30. Vestar Regl Comm	730,000 s.f.	27.76/ksf	20,260
31. Lincoln	600 DUs	6.23/DU	3,740
32. Victoria & Central	177 DUs	6.23/DU	1,100
TOTAL			63,310

* Source: City of Carson Planning Division

** Source: Institute of Transportation Engineers *Trip Generation Manual*. For Residential, the rate is the average for apartments and condos. For Outlet Center, the rate is for factory outlet center. For Commercial, the rate is for specialty retail with a 35% reduction for passby traffic. For Regional Commercial, the rate is for shopping centers with a 35% reduction for passby traffic. For Industrial, the rate is the average for light industrial, heavy industrial, industrial park, manufacturing, and warehouse. For Truck Yard, the rate is an estimate and for Dorm, the rate is an estimate as these categories are not included in the *Trip Generation Manual*.

Attachment C

Traffic Projections and Fee Calculations

COST ESTIMATES FOR ROADWAY-RELATED CAPITAL IMPROVEMENTS – 2017 TO 2022

Cost Estimates for Roadway-Related Capital Improvements – 2017 to 2022	\$14,964,900
Total Number of Trips Generated by Proposed Development	63,310 trips
Calculated Cost per Trip Generated	\$236/trip

(Subject to review and analysis by a separate technical study)

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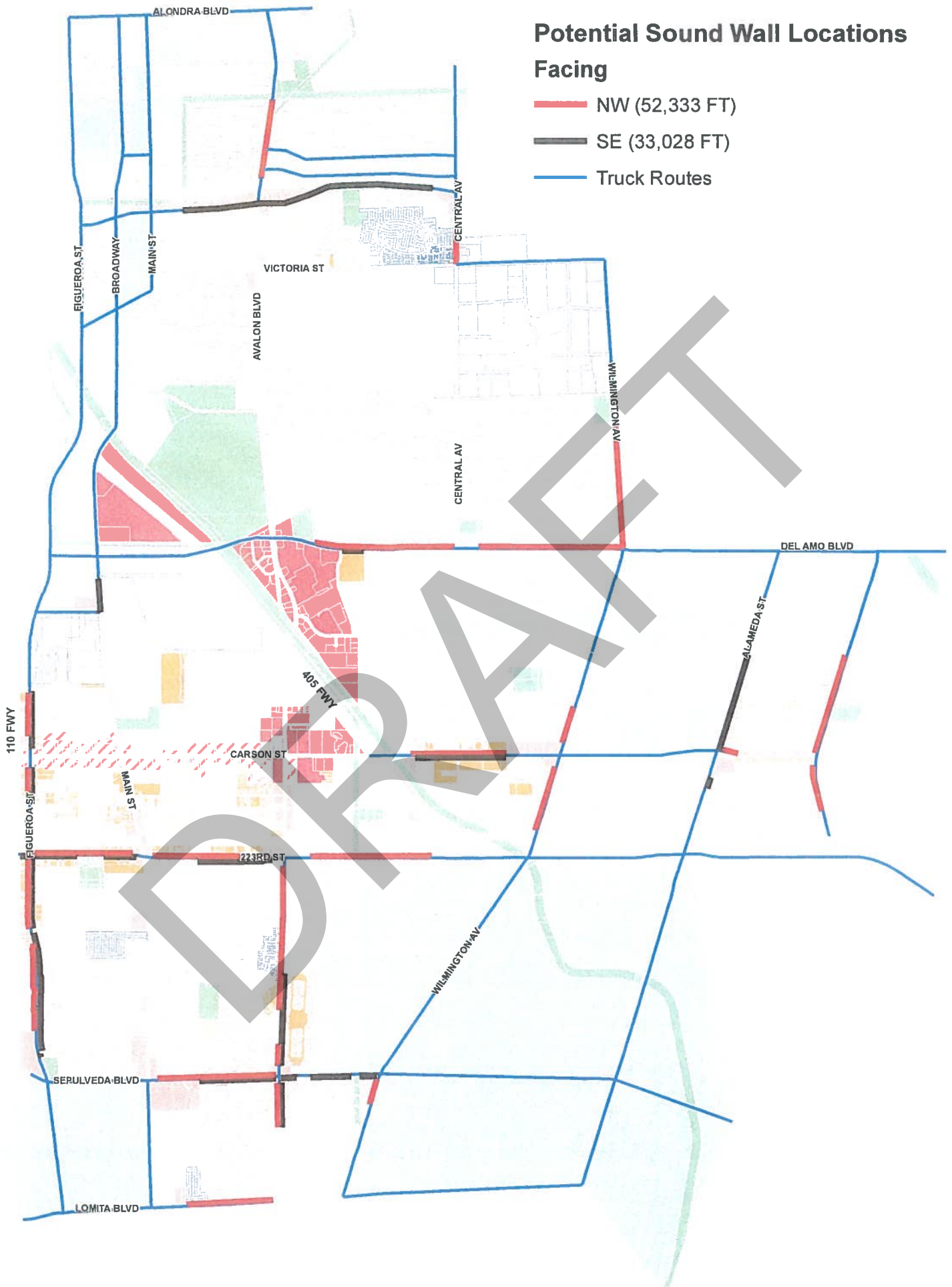
Attachment D

Sound Walls Location and Costs

(Subject to review and analysis by a separate technical study)

Potential Sound Wall Locations Facing

- NW (52,333 FT)
- SE (33,028 FT)
- Truck Routes



Attachment D

Sound Walls Location and Costs

CITY-WIDE TRAFFIC AND TRUCK VOLUMES

Land Use	Quantity	Trip Generation Rate (trips per day)	Generated Traffic (per day)
Residential – Low Density	18,244 DUs	9.52/DU	173,700
Residential – Medium/High Density	5,330 DUs	6.23 DU	33,200
General Commercial	2,383,114 s.f.	44.32/ksf (5% Trucks)	105,600 100,300 Non-Trucks 5,300 Trucks
Regional Commercial	1,652,268 s.f.	42.70/ksf (5% Trucks)	70,600 67,100 Non-Trucks 3,500 Trucks
Industrial	48,850,426 s.f.	4.54/ksf (20% Trucks)	221,800 177,400 Non-Trucks 44,400 Trucks
Total			604,900 551,700 Non-Trucks 53,200 Trucks

Research indicates that a single truck trip is equivalent to 10,000 automobile trips with regard to pavement wear-and-tear and damage. So the 53,200 truck trips per day that are generated in Carson are equivalent to 532,000,000 automobile trips per day. Using these equivalencies, the total volumes relative to pavement wear-and-tear and damage are as follows:

TRUCK/TRAFFIC EQUIVALENT VOLUMES RELATIVE TO PAVEMENT WEAR/DAMAGE

Vehicle Type	Equivalent Volumes (trips per day)	Percent
Non-Trucks	551,700	0.1 %
Trucks – Commercial	88,000,000	16.5 %
Trucks - Industrial	444,000,000	83.4 %
Total	532,551,700	100 %

The table above indicates that trucks are responsible for 99.87 percent of the pavement wear and damage in the City of Carson. Truck traffic results in the following impacts:

- Pavement wear-and-tear and damage
- Increased safety risk for vehicles, pedestrians, and bicyclists
- Damage to City property/facilities from collisions (reported and unreported); i.e., street lights, traffic signal equipment, signs, trees, curbs, medians, etc.

Attachment D

Sound Walls Location and Costs

- Reduced levels of service on streets and at intersections
- Increased impacts from improperly over-loaded trucks
- Increased noise for residents
- Increased emissions and fuel consumption
- Increased costs to the City to administer and enforce trucking activities

(Subject to review and analysis by a separate technical study)

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Attachment E

Drainage and Storm Water Compliance Analysis

(Subject to review and analysis by a separate technical study)

Attachment E

Drainage and Storm Water Compliance Analysis

Background

The Carson General Plan states that as development intensifies the City needs to ensure that storm drain systems are adequate. The City has been subjected to periodic flooding due to its low lying topography and proximity to the Dominguez Channel, which is subject to tidal influences throughout Carson. Prior to the construction of the flood control system, significant portions of the area were tidal marshes. Several areas in the community experience high ground water levels.

Due to the flat topography and potential flooding, The County operates a large storm water detention basin at Del Amo Park and the City maintains a secondary pump system at this location. There are smaller detention basins located strategically throughout the community. Portions of the City lie in four watersheds – Compton Creek, the Dominguez Estuary, Machado Lake and the Wilmington Drain. The City was subjected to major flooding during El Nino rains of 1998 and most recently in 2017, resulting in property damage.

Carson has other soil and groundwater factors that must be taken into consideration when designing flood control and storm water controls. Oil was discovered in the Dominguez Oil Field in 1923 and in the Wilmington Field in the 1932. The Wilmington Field became the third largest oil field in the nation in terms of production. Combined with the Long Beach-Signal Hill oil field (discovered in 1921), the three oil fields required the construction of major storage, shipping and refining facilities. During World War II oil production and refining was increased to supply the war effort. Carson's largest refinery is over 1.7 square miles in size. The petroleum industry created soil and groundwater pollution, which is found in many areas of the community.

The most infamous of the soil and groundwater contamination examples is the former Kast Property Tank Farm, which is regulated under a Cleanup and Abatement Order R4-2001-0046 issued by the Los Angeles Regional Water Quality Control Board in 2015. Beginning in 1924, the 44-acre parcel was operated as a tank farm for the next forty years. The tank farm included three massive storage reservoirs. Two of the reservoirs stored 750,000 barrels of oil. The northern most reservoir stored 2 million barrels of oil. The main operator of the tank farm was Shell Oil.

The tank farm was sold in 1966 and developed with 275 homes, all without extensive soil remediation. The Regional Board's abatement order documents the history of the site, reporting that the concrete bottoms of these massive tanks and oil sludge were left in place by burying the concrete and drilling holes in the concrete to allow for water percolation. Documents from soils engineers at the time indicated the presence of highly oil stained soil and petroleum odors in the soil borings under the homes. Petroleum migrated to the near surface groundwater aquifer. Shell is now in the process of multi-year clean-up of the property under the abatement order.

Carson has two historic refineries, Tesoro (the former British Petroleum refinery) and Phillips 66. The City also has numerous tank farms, including a 200-acre facility owned by Shell Oil and a major petroleum distribution hub operated by Kinder Morgan. The City has also the home to major wrecking yards, steel fabricators, land-fills and other heavy industrial uses. Over time a number of these

industrial uses created both soil and groundwater contamination, making the capture and infiltration of storm water very challenging.

2012 NPDES Storm Water Permit and the Dominguez Channel Enhanced Watershed Management Program

Since the adoption of the General Plan, the City was required to join the 2012 National Pollution Discharge Elimination System (NPDES) permit for the control of storm water in the community. The permit is organized into the four watersheds in the Carson area. The largest watershed in Carson is the Dominguez Estuary, with approximately 88.4% of the entire City draining into the Dominguez Channel or 10,555.3 acres. Approximately 5.5% of the City (657.7 acres) flows to the Wilmington Drain, while 4.7% (560.8 acres) drains to the Machado Lake. The Compton Creek accounts for 1.4% of the City's total drainage (169.1 acres). The Los Angeles Regional Water Quality Control Board has merged the Compton Creek requirements into the Dominguez Channel requirements for the purposes of permit compliance.

The 2012 Permit required that all Los Angeles County municipalities and the County unincorporated areas prepare storm water plans for their watersheds and encouraged local governments within watershed to work collaboratively to solve the storm water issues in their watersheds. Carson joined the Dominguez Creek Watershed Group in December of 2015, adopting the amended Enhanced Water Shed Management Program (EWMP) developed for the watershed. The participating group consists of the cities of Carson, El Segundo, Hawthorn, Inglewood, Lawndale, Lomita, Los Angeles, Los Angeles County and the Los Angeles County Flood Control District. Carson has the second largest tributary area in the Dominguez Channel with 11, 942 acres (23.5%) flowing into the channel. The City of Los Angeles is the largest, with 19,177.3 acres (37.8%) flowing into the channel.

Dealing with the Effects of Climate Change and Growth

State and local policies have been evolving from viewing storm water as a flooding concern to viewing it as a resource. The policy change is based on the long-term unreliability of California's water sources (local, regional and imported), coupled with the continued increase in the State's population. The California Water Action Plan establishes the State's objectives as creating a more reliable water supply and more resilient and sustainable managed water infrastructure.

This shift can be seen in the voter approved Proposition 1 – the \$7.545 billion water bond approved in 2015. Section 79701 of the Public Resources Code states that *"California has been experiencing more frequent and severe droughts These droughts are magnifying the shortcomings of our current water infrastructure."* The water bond made \$810 million in grants available to improve regional water reliance (PRC Section 79740). The bond made \$200 million available for grants to multi-benefit storm water projects – *"Eligible projects may include, but shall not be limited to green infrastructure, rainwater, and storm water capture projects and storm water treatment facilities."* (PRC Section 78691.5c)

Watershed Control Measures

The Dominguez Channel Watershed Plan establishes priorities based on flooding and water quality impairments. The impairments include Zinc, Nitrogen and indicator bacteria. By addressing these three Water Quality Priorities, the other Water Quality Priorities will also be addressed. The NPDES Permit

requires the identification of control measures, which are strategies, institutional measures and best management practices (BMPs) to address the water quality and flooding issues. Carson's plan relies on two BMPs to retain, divert or treat storm water and are distributed throughout the watersheds or sited regionally. The main subcategories of structural BMPs are low impact development (LID), green streets and regional BMPs. LID is implemented on the parcel level and is normally less than 10 tributary acres. The green street BMPs are distributed to treat runoff on public rights-of-way and serve drainage areas of typically less than 10 tributary acres in size.

Regional projects are identified for the City in the Enhanced Watershed Management Program for the Dominguez Channel (December 16, 2015) prepared for the City by Paradigm Environmental. The Carriage Crest Regional Project is currently underway as a joint project between the Los Angeles County Sanitation Districts and the City of Carson. The project is funded through a \$13 million cooperative implementation grant with Caltrans. The Carriage Crest project intercepts 180 acres of wet weather runoff from Carson that flows into the Machado Lake and 938 acres of dry-weather watershed area. When completed this multi-benefit project will consist of storm water capture chambers installed below the park's baseball field. The project has the potential to be expanded since it is immediately adjacent to LACSD land that is leased out to a nursery business. A second major regional project has been identified in the Civic Center area and has the potential to intercept 1,110 acres of Dominguez Watershed area. This project would also consist of storm water capture chambers installed below ground. The plan identifies additional regional projects in the Compton Creek and for the Wilmington Drain.

Low Impact Development (LID)

The EWMP assumes that LID will be distributed throughout the watershed. This is defined as a series of structure practices that capture, infiltrate and/or treat runoff at the parcel scale. The City has an adopted LID ordinance which requires that structure BMPs be designed to capture the 85th percentile storm from the parcels in which they are located. The plan assumes that a number of properties will redevelop and incorporate LID into their planning. However, due to areas of high ground water, or areas with extensive soil and ground water contamination, infiltration cannot be used. For example, the Carriage Crest project is located in an area with extensive soil and ground water contamination. This results in a project which will capture, treat and reuse the storm water, in lieu of infiltrating it into the ground water. The proposed Development Impact Fee proposes a credit to developments that can rely on LID to meet their flood control and storm water requirements.

Summary of Cumulative Implementation Costs

The EMWP contains implementation milestones based on the TMDLs adopted for the four watersheds in Carson. The Compton Creek and Dominguez Channel Metals TMDLs require 50% milestones in 2026, with 75% milestones in 2029 and full compliance in 2032. Full compliance for the bacteria TMDL is 2040. The EWMP estimates that \$595,084 will be required to implement green streets in the Compton Creek Watershed, while \$123,855,219 will be required in the Dominguez Channel watershed. The EWMP estimates that \$10,554,292 in regional BMPs will be required for the Compton Creek and \$271,400,036 will be required for regional BMPs in the Dominguez Channel. The Wilmington Drain will require \$8,882,385 in regional BMPs. The total implementation costs for all four watersheds in Carson is \$411,654,951. The plan envisions that Carson will need to invest \$95,970,056 by 2026 to meet the 50% milestone, over \$9 million annually in the next decade. (See Table 7.3, Page 41)

Development Impact Fee Methodology

The Los Angeles County Flood Control District completed a countywide study of drainage and infiltration rates in 2012 (Engineer's Report, Los Angeles County Flood Control District Clean Water Fee, Wildan Financial Services, November 29, 2012). The study identified 23,883 parcels in the Carson portion of the Dominguez Channel Watershed, approximately 16.09 square miles in size. The Compton Creek watershed was a much smaller area in Carson, with 31 parcels, 0.24 square miles in size. The City is currently implementing the Carriage Crest project, which will control flooding and storm water in the Machado Lake watershed.

The Wildan report relied on the 2006 Hydrology Manual prepared by the Department of Public Works to address the impervious factors of parcels located in various land uses. The study found that the 2006 Hydrology Manual "reflects a reasonable estimate and typical percentage of the impervious areas that is appropriate for most parcels with in a given land use classification..." (See Wildan Report, Page 14). The report adjusts rates of impervious surfaces based on lot size in residential land use, ranging from 42% to 21% based on the lot size. A typical Carson lot of 5,000 square feet in size is assigned a 40% impervious factor, while a 7,000 square foot lot is assigned an impervious factor of 29%. (See Page 18, Wildan Report)

The Willdan Report also assigns impervious surface percentages to commercial and manufacturing uses. For example, industrial development ranges from 66% to 91% impervious surface. This generally tracks with industrial development practices in Carson, which are governed by the Carson Zoning Ordinance. After consideration of the building square footage, parking and outdoor storage areas, typical industrial development may have 10% for landscape setbacks and other open areas. (See Page 20 and 23, Wildan Report).

Development Impact Fees cannot be collected to correct for existing deficiencies. However, as new projects develop they can increase the impervious surface of the parcel by intensifying the land use. It is also clear that a certain percentage of parcels in the City will have either soil or ground water contamination factors, or high ground water conditions, where LID requirements cannot be met. These conditions would result in increased runoff, increasing the flood control and water quality costs for the City. In this case, a development impact fee is appropriate, since the funds collected would be used to assist the City in the implementation of regional BMPs and the Green Streets Program in the Dominguez Watershed EMW.

The City's LID ordinance was adopted in 2015 and few new developments have been regulated under the new requirements. The Building and Safety Division reports that seven (7) projects have been issued construction permits under the LID ordinance. These projects represent a total of less than 61 acres of development. Of the 16.09 square miles in the watershed area, there are 10,278 acres.

Drainage and Storm Water Impact Fee Methodology

The impact fee methodology is based on two factors. The first factor recognizes that many developments will implement the LID requirements of the NPDES Permit. It also recognizes that the NPDES permits have been evolving over time and developments that implemented prior retention requirements should also be considered for exemptions. The second factor recognizes that all developments in the City are served by public streets, which generate significant water pollution. The

City will be implementing a Green Streets program as part of compliance with the Dominguez EWMP. All new developments need to contribute to the Green Streets program.

Fee Reduction for Developments that implement LID requirements

We worked from the assumption in order to justify the 50 cents per square foot of building area drainage/storm water fee, that developments that implement LID on site should be granted a reduction in their impact fee. Developments that have previously installed storm water detention facilities on site should also be provided with a credit towards their impact fee based their specific detention capacity. Developments that implement the LID detention requirements under the NPDES Permit do so at the 85th percentile storm level. However, this design storm results in runoff from larger storm events. Recent County design standards are at the 95th percentile storm size.

Full Payment of the Fee

In order to justify the 50 cents per square foot charge on the drainage/storm water impact fee, we assumed that properties located above ground water contamination zones, or in areas with a high ground water table or properties containing soils not conducive to percolation, would be assessed the full impact fee. This is due to the fact that they cannot implement the LID requirements. The City should consider a credit for developments if they retain storm water on site with the use of cisterns.

Green Streets Requirements

The Dominguez Channel EWMP will implement a Green Streets program designed to meet 25% of the total permit compliance requirements. This is based on the fact that streets serving developments are major contributors to surface water pollution.

Fee Calculation

We rely on the 75% implementation milestone in the Dominguez EWMP instead of full compliance as the basis for the impact fee. The rationale is based on the facts that reaching full compliance in the out years of the plan will need to be reviewed with future updates to the General Plan and as the implementation of the EWMP progresses over time, prior to the 2032 full compliance date. As noted, the Wildan report only reviewed industrial uses. Consequently, further review and analysis is required for all other land uses.

Impact Fee Estimates

The estimated EWMP implementation costs to 2029 are \$259.8 million. This will achieve the 75% milestone in the Metals TMDL.

Green Streets - \$123.8 million in 2029

Regional BMPs - \$135.9 million in 2029

Parcel Count - 23,883

Square Miles - 16.09

Acres in Watershed - 10,278.4

Impervious Surfaces Estimate - 66% to 91% range based on type of industrial use

Total Implementation Costs = \$259.7 million in 2029

Cost per Acre of Implementation = $\$259.8 / 10,278.4 = \$25,270$ per acre

Impervious Surface Adjustment = 90%

Potential Impact Fee = \$22,743 per acre

Impact Fee Example

Assumption: 4.6 acre industrial property with 100,000 square foot industrial building

No LID – Full Fee

- 4.6 acres x \$22,742 per acre DIF = **\$116,242** total implementation costs
- 100,000 square foot building x 50 cents per square foot DIF (proposed) = **\$50,000** DIF payments

Low Impact Development – Credit Given

Relying on the same 4.6 acre parcel and 100,000 square foot building , the cost per acre is \$25,270, prior to the impervious surface adjustment.

- Cost per Acre of Implementation - $\$259.8 / 10,278.4 = \$25,270$
- Impervious Surface Adjustment = 35%
- Potential Impact Fee = \$11,371 per acre
- 4.6 acres x \$11,371 per acre DIF = \$52,306 total implementation costs
- 100,000 square foot building x 50 cents per square foot DIF (proposed) = \$50,000 DIF payments

(Subject to review and analysis by a separate technical study)

Attachment F

Interim DIF Calculations

(Subject to review and analysis by a separate technical study)

Attachment F

Interim DIF Calculation Back-Up Material

(Subject to review and analysis by a separate technical study)

Public Safety Component

LACoFD produced a per square foot fair share fee calculation in 2012 based on a new station cost of approximately 10.2 Million. This cost was \$0.749 per square foot of new development. LACoFD also estimated that due to increasing cost of land and development the station cost in 2016 would be closer to \$11.1 Million. For this interim DIF calculation the original cost was used but rounded to \$0.75/sq.ft. for the Fire component. (LACoFD has DIFs in place for unincorporated area of high growth within its jurisdiction. While the fee calculation for Fire is included here, the City is not the entity that can establish and adopt this fee since LACoFD is a separate taxing entity. According to the Mitigation Fee Act, the County is the entity that would need to establish and adopt the fee. The County may delegate the duty to collect the fee on their behalf to the City. The rates effective since 2/1/2017 range from \$0.918 - \$1.1846 per sq.ft.)

To convert the square foot basis to multi-family residential dwelling units (DUs), an average unit size of 800 square feet was applied. $800 \times \$0.75 = \underline{\$600/\text{DU}}$. Similarly, for residential hall/dormitory beds an average size per bed area of 150 square feet was applied. $150 \times \$0.75 = \underline{\$112.50/\text{bed}}$.

The LACoFD cost was compared to the LASD cost using the same ratio per square foot. The estimated cost for station improvements/remodel was \$1.6 Million. $\$0.749x = \10.5 Million ; $x=14,018,692$; $\$1.6 \text{ Million} \div 14,018,692 \text{ sq. ft.} = \0.114 rounded to \$0.11/sq.ft. for the Sheriff component.

Conversion to multi-family residential dwelling units (DUs) resulted in a fee of \$88/DU ($800 \text{ sq.ft.} \times \$0.11 = \underline{\$88/\text{DU}}$) and \$16.50/bed for residence hall/dormitory ($150 \text{ sq.ft.} \times \$0.11 = \underline{\$16.50/\text{DU}}$)

Parks Component

LA County uses a basis cost component of \$2,044,000/acre. The City Engineer's estimate is \$1,350,000/acre for park development plus the land value of \$1,037,396/acre (2014-2016 sales prices). Thus the City's parkland per acre cost is \$2,387,396. While Carson has a stated goal of 4 acres of parkland per 1,000 people, KAMG used the lower ratio of 3 acres of parkland per 1,000 people (Please note: The calculation at 4 units an acre has been provided below in red for comparison purposes). KAMG also used the lower LACoParks lower cost component of \$2,044,000 to calculate the parks DIF.

For multi-family residential, the Census lists the population (pop) per unit as 2.75 pop/unit. $3 \text{ acres}/1,000 \text{ pop} = 1 \text{ acre}/333 \text{ pop}$; $\$2,044,000/333 = \$6,138$. $\$6,138 \times 2.75 = \underline{\$16,879/\text{unit}}$. (At 4 units/acre: \$22,484/unit)

For residential hall/dormitory beds - \$6138/person. Since students within the dormitories typically have recreational and open space facilities available on campus, KAMG reduced the per person fee estimate to 10%, \$613.80/bed. (At 4 units/acre: \$817.60/bed)

Industrial uses have an average of 1 employee per 1000 sq.ft. $\$6,138/1000 = \$6.138/\text{sq.ft.}$ KAMG then applied the 1/3 factor as documented in the prior fiscal study (which states that employees can equate to 1/3 resident for estimating cost factors of city services). $\$6,138/3 = \$2.04/\text{sq.ft.}$ To further ensure that the fee share is not over-estimated, KAMG anticipated limited use by Industrial employees and applied a 10% factor, **$\$0.20/\text{sq.ft.}$** (At 4 units/acre: $\$0.27/\text{sq.ft.}$)

Commercial uses have an average of 1 employee per 500 sq.ft. Using the same calculations as Industrial use the interim fee calculation is double that of Industrial, **$\$0.40/\text{sq.ft.}$** (At 4 units/acre: $\$0.54/\text{sq.ft.}$)

Traffic and Circulation

A 5-year growth projection was used to calculate the needed circulation system improvements and per trip cost basis of \$236/trip.

Industrial trip generation rates per ITE is 4.54 trips/1000 sq.ft. = 0.00454 trips/sq.ft. $\$236 \times 0.00454 =$ **$\$1.07/\text{sq.ft.}$**

Truck yards generate 2 trips per space. $\$236 \times 2 =$ **$\$472/\text{space.}$**

Commercial trip generation rates vary from 26.59 trips/1,000 sq.ft. to 28.81 trips/1,000 sq.ft. KAMG used the more conservative generation rate of 26.59 trips/1,000 sq.ft. = 0.2659 trips/sq.ft. $\$236 \times 0.2659 =$ **$\$6.27/\text{sq.ft.}$**

Multi-family residential use generates 6.23 trips/DU. $\$236 \times 6.23 =$ **$\$1,470.28/\text{DU.}$**

Residential Hall/Dorm use generates 2 trips/bed. $\$236 \times 2 =$ **$\$472/\text{bed.}$**

Sound Walls

An estimated cost of \$10,926,208 has been determined for needed sound walls associated with new growth of 11,920 truck trips added the 53,200 existing trucks trips generated in the city for a total of 65,120 total daily truck trips. The total cost of the sound walls $\$10,926,208/65,120 = \$167.78/\text{truck trip.}$

For Industrial use, truck trips account for 20% of the traffic. Industrial use generates 0.908 truck trips/1000 sq.ft. The future sound walls cost $\$167.78/\text{truck trip.}$ $\$167.78 \times 0.000908 =$ **$\$0.15/\text{sq.ft.}$**

Truck Yards generate 2 trips (100% truck trips) per space. $\$167.78 \times 2 =$ **$\$335.56/\text{space.}$**

For Commercial use, truck trips account for 5% of the traffic. Commercial use generates 1.44 truck trips/1000 sq.ft. $\$167.78 \times 0.00144 =$ **$\$0.24/\text{sq.ft.}$**

Drainage/Stormwater

Industrial cost per the report is \$22,742/acre. The example of a 4.6-acre site = \$116,242 for 100,000 sq.ft. of industrial development. $\$116,242/1000 =$ **$\$1.16/\text{sq.ft.}$**

For Truck Yards, the factor of \$22,742/acre is appropriate. $\$22,742/\text{acre}$ divided by 43,560 sq.ft. = **$\$0.522$ per sq.ft. of site area.**

DEVELOPMENT

TYPE FEE CATEGORY CALCULATION METHOD NOTES

INDUSTRIAL				
Sheriff		\$0.11 per sq. ft.	3%	Total projected cost: \$1.6 million.
Fire		\$0.75 per sq. ft.	22%	Total projected cost: \$10.5 million.
Parks		\$0.20 per sq. ft.	6%	Cost per acre: \$2.044 million.
Traffic & Circulation		\$1.07 per sq. ft.	31%	Converted \$236 per trip to sq. ft. Total projected cost: \$14,964,900 (based on 5-year growth).
Sound Walls		\$0.15 per sq. ft.	4%	Total projected cost: \$10,926,208.
Drainage/Stormwater		\$1.16 per sq. ft.	34%	With LID reduced to \$0.52 per sq. ft. Total projected cost: \$259,800,000.
Total Industrial		\$3.44 per sq. ft.	100%	
TRUCK YARD				
Traffic & Circulation		\$472.00 per space	36%	
Sound Walls		\$335.56 per space	26%	
Drainage/Stormwater		\$22,743.00 per acre	38%	
Total Truck Yard		\$807.56 per space plus \$22,743.00 per acre or \$0.522 per sq. ft. of site area	100%	
COMMERCIAL				
Sheriff		\$0.11 per sq. ft.	1%	
Fire		\$0.75 per sq. ft.	10%	
Parks		\$0.40 per sq. ft.	5%	
Traffic & Circulation		\$6.27 per sq. ft.	81%	Based on lower commercial traffic generation rate
Sound Walls		\$0.24 per sq. ft.	3%	
Total Commercial		\$7.77 per sq. ft.	100%	
MULTI-FAMILY RESIDENTIAL				
Sheriff		\$88.00 per DU	1%	
Fire		\$600.00 per DU	3%	
Parks		\$16,879.00 per DU	89%	Potential credit for recreation space provided on-site
Traffic & Circulation		\$1,470.28 per DU	8%	
Total Multi-Family Residential		\$19,037.28 per DU	100%	
RESIDENT HALL/DORMITORY				
Sheriff		\$16.50 per bed	1%	
Fire		\$112.50 per bed	9%	
Parks		\$613.80 per bed	51%	Potential credit for recreation space provided on-site
Traffic & Circulation		\$472.00 per bed	39%	
Total Resident Hall/Dormitory		\$1,214.80 per bed	100%	

(Subject to review and analysis by a separate technical study)

Attachment G

DIF Summary Comparison Table

(Subject to review and analysis by a separate technical study)

SUMMARY COMPARISON OF NEIGHBORING CITIES' DIFS AND PROPOSED CARSON INTERIM DIF

CITY	TYPE OF DEVELOPMENT	POLICE/LAW ENFORCE.	FIRE	PARKS	TRAFFIC	GOV'T.	PUBLIC WORKS	WATER	SOUND WALLS	DRAINAGE/STORMWATER	TOTAL
Long Beach Compton Hawthorne Signal Hill Torrance	Industrial/s.f.	\$0.132 \$0.017 \$0.09 - \$0.063	\$0.218 \$0.109 - \$0.107 -	- - - - -	\$1.10 \$0.202 \$1.003 \$0.71 \$0.247	- \$0.173 - - -	- \$0.089 - - \$0.232	- - - - -	- - - - -	\$3.02 (w/o LID) - - - \$0.784	\$1.45 - \$4.47 \$0.59 \$1.093 \$0.71 \$1.433
CARSON	Truck yard/space	\$0.11	\$0.75	\$0.20	\$1.07	-	-	-	\$0.15	\$1.16	\$3.44
Long Beach Compton Hawthorne Signal Hill Torrance	Commercial (retail)/s.f.	-	-	-	-	-	-	-	-	-	-
CARSON		-	-	-	\$472	-	-	-	\$335.56	\$22,743/acre	\$807.56 plus \$22,743/acre
Long Beach Compton Hawthorne Signal Hill Torrance		\$0.442 \$0.026 \$0.180 - \$0.135	\$0.267 \$0.163 - - \$0.228	- - - \$0.63 -	\$3.00 \$1.849 \$3.666 \$2.94 \$2.31	- \$0.260 - - -	- \$0.134 - - \$1.982	- - \$3.50 -	- - - -	\$3.02 (w/o LID) - - \$0.784 -	\$3.71 - \$6.73 \$2.432 \$3.846 \$7.07 \$5.439
CARSON		\$0.11	\$0.75	\$0.40	\$6.27	-	-	-	\$0.24	-	\$7.77
Long Beach Compton Hawthorne Signal Hill Torrance		\$537 \$108 \$643 - \$223.93	\$378 \$306 - - \$381.54	- - \$718 \$13,601 -	\$1,125 \$775 \$785 \$497 \$430.43	- \$1,078 - - -	- \$562 - - \$385.96	- - (\$11,743 - \$19,698) -	- - - -	- - - \$854.36	\$2,040 \$2,829 \$2,146 (\$25,841 - \$33,796) \$2,276.23
CARSON	Resident Hall/Dorm/bed	\$88	\$600	\$16,879	\$1,470.28	-	-	-	-	-	\$19037.28
Long Beach Compton Hawthorne Signal Hill Torrance		- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
CARSON		\$16.50	\$112.50	\$613.80	\$472	-	-	-	-	-	\$1,214.80

(Subject to review and analysis by a separate technical study)