CITY OF CHULA VISTA

Public Works Department

BAYFRONT TRANSPORTATION DEVELOPMENT IMPACT FEE NEXUS STUDY

OCTOBER 2014

EXECUTIVE SUMMARY

The City of Chula Vista has prepared this Engineer's Report (report) to analyze the impacts of development on certain transportation facilities located west of Interstate I-5 and to calculate development impact fees for those facilities in the Bayfront project area of Chula Vista. This report represents the 2014 Chula Vista Bayfront Area Transportation Development Impact Fee Program for Streets, also known as the Bayfront Transportation DIF, or "BFDIF".

The report includes a discussion of the rationale behind development of these impact fees, an analysis of the proposed fee program, the Average Daily Trip (ADT) rate assignments for each land use and associated Equivalent Dwelling Units (EDUs) and the transportation facility projects to be funded by future Bayfront development in accordance with this fee program. The methods used in the report to calculate fees satisfy all legal requirements governing such fees, including provisions of the U.S. Constitution, the California Constitution *and California Government Code* Section 66000 *et seq*. (the "California Mitigation Fee Act", "Mitigation Fee Act" or "Act").

The Bayfront area was originally included as part of the Western Chula Vista Transportation Development Impact Fee (WTDIF) area. This area included the portion of Chula Vista west of I-805 to the San Diego Bay. The WTDIF Program was originally established on March 18, 2008 by Ordinances 3106 through 3110. This program was intended to be similar to the Eastern Transportation Development Impact Fee (TDIF) Program, which was established on January 12, 1988. In addition to preparing the City for future growth in the western portion of the City, these ordinances were required to be acknowledged by the San Diego Association of Governments (SANDAG) in order to continue to receive annual Transnet funds for local streets.

Since the establishment of the WTDIF fee in 2008, the main change in western Chula Vista has been the completion and certification of the Bayfront planning process. In April 2010, the Chula Vista Bayfront Master Plan (CVBMP) and Final Environmental Impact Report (EIR) was completed. This document was adopted by the Chula Vista City Council on May 10, 2010. This document includes estimates of new Equivalent Dwelling Units planned in the Bayfront development area, traffic to be generated, significant impacts caused and proposed mitigation measures. These documents make it clear that the traffic impacts caused by the Bayfront development as noted in the CVBMP EIR, are significantly different than the impacts caused by development in the rest of western Chula Vista. For this reason, staff recommends that a separate Bayfront Development Impact Fee (BFDIF) program be established and separated from the WTDIF program.

The BFDIF is a single program with two separate funding roles. The first portion of the fee is to be used to fund traffic impact mitigations as noted in the CVBMP EIR. The second role of this program is to fund Regional Arterial System (RAS) and non-RAS roadway projects. These roadways generally lie within the area of Chula Vista along and west of Interstate 5 but outside of and separate from the CVBMP area. RAS roadways are generally described as those roads that act as critical links in providing direct connections between communities ensuring system continuity and congestion relief in high volume corridors. Non-RAS roadways are typically smaller in classification and of less importance to the region.

Most of the existing RAS projects, such as E Street, H Street do not extend west of the I-5, so staff recommends that certain RAS roadways be extended to the bayfront area in order to comply with San Diego Association of Governments' (SANDAG) minimum RAS fee

requirements and to provide a comprehensive vehicular circulation system. Staff also recommends that some CVBMP roadways be included in the new list of RAS roadways, such as Marina Parkway and sections of J Street.

The BFDIF will be charged to residential as well as non-residential units. The exact amount charged per dwelling unit varies based on the type of residential and non-residential unit type. The exact amount charged per non-residential land use also varies by type. The fees calculated in this study for all land uses provide for the regional component of the Regional Transportation Congestion Improvement Program (RTCIP).

The focus of this report is as follows:

- To provide justification for the establishment of the BFDIF and memorialize the source of information for the new program as the CVBMP EIR. The process includes describing the area to be removed from the existing WTDIF benefit area, delineating the new boundaries of the BFDIF service area, and the fee to be charged.

- To document the average daily trip (ADT) traffic volumes, Equivalent Dwelling Unit (EDU) values projected for residential and non-residential land uses, due to planned growth in the BFDIF area again based on the CVBMP EIR.

- To provide justifications, descriptions and cost estimates for BFDIF projects all of which have been provided by the San Diego Unified Port District.

- To provide for the justification for future automatic increases of the fee based on construction cost indices.

Additionally, the report will discuss the principles and requirements of *California Government Code* Section 66000 concerning how any proposed fees will not exceed the estimated reasonable cost of providing the new transportation improvements, i.e., the Reasonable Relationship Requirement.

The Mitigation Fee Act requires that for fees subject to its provisions, the following findings must be made:

- Identify the purpose of the fee.

- Identify the use to which the fee is to be put.

- Determine how there is a reasonable relationship between the use of the fee and the type of development on which it is imposed.

- Determine how there is a reasonable relationship between the need for a public facility and the type of development on which a fee is imposed.

- Determine how there is a reasonable relationship between the amount of the fee and the facility cost attributable to the development on which the fee is imposed.

TRANSNET

In November 2004, San Diego County voters approved local Proposition A extending the TransNet ½ cent sales tax for transportation programs through 2048. Included in Proposition A and the TransNet Extension Ordinance is the Regional Transportation Congestion Improvement Program (RTCIP). The purpose of the RTCIP is to ensure that new development directly invests in the region's transportation system to offset the negative impacts of growth on congestion and mobility. The RTCIP provides for the collection of a fee for each new residential unit. The RTCIP originally documented the need to collect a County-wide fee of $2,000 per residential unit for roadways that are determined to be Regional Arterial System (RAS) facilities. This amount has been updated annually; on July 1, 2014, this amount was $2,254. RAS roadways are listed in San Diego Association of Government's (SANDAG's) *Regional Transportation Plan (RTP),* dated November, 2007.

The ordinance states, *"Revenue collected through the Funding Programs shall be used to construct transportation improvements on the Regional Arterial System such as new arterial roadway lanes, turning lanes, reconfigured freeway-arterial interchanges, railroad grade separations and new regional express bus services, or similar types of improvements, preliminary and final engineering, right of way acquisition, and construction that will be needed to accommodate future travel demand generated by new development throughout the San Diego region. A reasonable portion of the program revenue, up to a maximum of three percent, may be used for fund administration."*

SECTION 1 INTRODUCTION

A. DEVELOPMENT IMPACT FEES

Development impact fees are imposed upon development in an area of benefit, often containing a number of different properties, property owners, and land use types.

The BFDIF has two main purposes: (1) To fund the construction of facilities needed to mitigate traffic impacts, including but not limited to, direct and cumulative impacts resulting from development within the benefit area as shown in the "The Chula Vista Bayfront Master Plan (CVBMP) and Port Master Plan Amendment Volume 2: Final Environmental Impact Report (EIR)", dated April 2010" (CVBMP EIR); and (2) To spread the costs associated with construction of the facilities equitably among the developing properties within the benefit area. The amended benefit area described herein is that area within the jurisdictional area of the bayfront portion of the City of Chula Vista, generally meaning that area of the city located between I-5 on the east, San Diego Bay on the west, the Sweetwater Marsh on the north and Naples Street on the south, as shown on the map and attached as Exhibit 1.

In the environmental review process, such as in the *California Environmental Quality Act* (CEQA) process, a project's potential impacts are identified and, where feasible, a method of mitigating those impacts (reducing the actual impact to a level of insignificance) is identified. In the case of larger projects, the Environmental Impact Report (EIR) identifies direct and cumulative traffic impacts resulting from the project. In the case of the Bayfront area, most of the property is undeveloped and currently owned by the San Diego Unified Port District or other public agencies. The development of this area is covered under the CVBMP EIR. It is anticipated that the project will be constructed in phases and broken down into individual projects. Each project's fair share of the impact will be based upon the amount of traffic the proposed project generates as measured by ADT and by EDU's.

B. BAYFRONT DEVELOPMENT IMPACT FEE (BFDIF)

A transportation development impact fee is an impact fee designed to mitigate direct and cumulative impacts on the local transportation network as a result of new development, in this case the CVBMP. Generally, development of property produces impacts on the local road network resulting in decreased available traffic capacity on the street system. To measure the effects of traffic, cities establish capacity or Level of Service (LOS) standards that they each consider appropriate for their jurisdictions. Where potential impacts resulting from development are projected to reduce the capacity on streets to the point where the identified LOS will not be maintained, the impacts are deemed to be significant, and should be mitigated. Typical mitigation for traffic related impacts to the system would provide improvements designed to restore capacity and maintain the desirable level of service. Examples of capacity-increasing improvements include but are not limited to such enhancements as constructing entirely new roads in the circulation network, widening or improving existing roads, installing new traffic signals or improving signalization, freeway interchange improvements, and improving signal coordination (management of traffic operations). For the City of Chula Vista, other non-traditional improvements were included in the calculation of the fee as a result of the City's goal of improving pedestrian and bicycle capacities as shown below from the City's General Plan.

GENERAL PLAN GOALS, OBJECTIVES AND POLICIES

The following discussion of Goals, Objectives and Policies is taken from the City's General Plan approved on December 13, 2005 in the Land Use and Transportation (LUT) section and is the basis for including bicycle and pedestrian facilities in the fee calculation.

GOAL 7.9 - Improving Vehicular and Transit Mobility

The City of Chula Vista will continue its efforts to develop and maintain a safe and efficient transportation system with adequate roadway capacity; however, the City's ability to widen roads to accommodate increased demand from automobile traffic is limited. Additionally, road widening in some areas is not consistent with goals to create streets that are pedestrian-friendly and safe. Therefore, the City must seek alternative ways to increase the capacity to move both people and cars. This includes more efficient use of roadways, traffic demand reduction, and increased use of transit, bicycles, and walking.

Objective - LUT 18
Reduce traffic demand through Transportation Demand Management (TDM) strategies, increased use of transit, bicycles, walking, and other trip reduction measures.

POLICY LUT 18.3 Provide and enhance all feasible alternatives to the automobile, such as bicycling and walking, and encourage public transit ridership on existing and future transit routes.

GOAL 7.11 - Increase Mobility Through Use of Bicycles and Walking

Bicycles are an alternative to driving, accommodating longer trips than walking, especially when combined with transit. Every trip begins and ends with walking, so the pedestrian environment becomes the primary transportation element that connects all travel modes. For walking and bicycling to be viable alternatives to travel by car, the bicycle and pedestrian systems must efficiently and conveniently connect residential areas and activity centers in a safe and comfortable manner, and within an interesting environment.

Objective – LUT 23
Promote the use of non-polluting and renewable alternatives for mobility through a system of bicycle and pedestrian paths and trails that are safe, attractive and convenient forms of transportation.

POLICY LUT 23.1 Encourage the use of bicycles and walking as alternatives to driving.

POLICY LUT 23.2 Foster the development of a system of inter-connecting bicycle routes throughout the City and region.

Non-vehicular Travel

The City has two additional documents that pertain to pedestrian and bicycle mobility. First, the latest version of the City's Bikeway Master Plan was adopted by Council on February 1, 2011. This document recommended and prioritized Class I (bike path), Class II (bikeway along the roadway) and Class III (bike route) bicycle facilities. Second, the City's first Pedestrian Master Plan was adopted by Council on June 22, 2010. Twenty seven street corridors in western Chula Vista and three intersections in eastern Chula Vista were recommended and prioritized for pedestrian improvements.

C. HISTORICAL BACKGROUND OF CHULA VISTA'S TRANSPORTATION DIF PROGRAM

In February 1986, the Chula Vista City Council adopted a schedule of development impact fees (DIF) for the Eastlake I development. Eastlake was the first major planned development that added significant traffic to the street system. Fees were established to ensure that Eastlake contributed to the cost of certain street improvements, including a four-lane interim facility in the State Route 125 (SR-125) corridor. Also included in the development impact fee was the cost of constructing a fire station and a community park in Eastlake I. While the fees were imposed as a condition of development on Eastlake, City staff recommended to the Council that a development impact fee ordinance be prepared to provide for the financing of transportation improvements by all of the developments that would benefit from the improvements.

Therefore, in January 1987, the Council authorized the preparation of a development impact fee program for the financing of street improvements in the area east of Interstate 805.

In December 1987, a report entitled *"The Interim Eastern Area Development Impact Fees for Streets"* was completed. The "Area of Benefit" included all of the undeveloped lands that benefited from the proposed transportation improvements, within the City of Chula Vista and County of San Diego, east of Interstate 805. The Council adopted an Eastern Area Transportation Development Impact Fee in January 1988 by Ordinance Number 2251 (TDIF). The fee was established at $2,101 per EDU.

In October 1993, the City Council approved the General Plan Amendment for the Otay Ranch. As a result, the TDIF program was updated in December 1993, including the first phase of the Otay Ranch. For the first time since the adoption of the original TDIF in 1988, a comprehensive general plan of land uses and circulation system requirements was in place in the Otay Valley area.

The TDIF program was subsequently updated again in 1999, 2002 and 2005 to reflect changes to the circulation element of the General Plan, land use changes and to adjust the construction cost estimates. The TDIF will also be revised in 2014.

On March 18, 2008, Council adopted the Western Transportation Development Impact Fee (WTDIF) by Ordinances 3106 through 3110. In addition to preparing the City for future growth in the Western portion of the City, these ordinances were required to be enacted by the City in order to continue to receive annual TransNet funds for local streets. The original rate was established at $3,243 per equivalent dwelling unit (EDU).

In a letter dated December 15, 2010, SANDAG informed the City that a one percent administrative fee would not be collected. This fee had been included as part of the WTDIF since its inception. The City subsequently went to Council on October 25, 2011 and November 15, 2011 to enact Ordinance 3214, which deleted the one percent SANDAG fee from the WTDIF rates. City staff subsequently processed refunds of this fee to all permit holders who had paid it.

SECTION 2 FEE DEVELOPMENT

A. PROCESS FOR DEVELOPING BFDIF FEE

A fundamental principle in the formulation of a development impact fee is that the need for additional public facilities is generated by new development, and thus the cost of the facilities should be paid by that new development. Generally, existing facilities have adequate capacity to support the existing state of development, and any capacity that is added to the street network is in response to the need created by subsequent development, i.e. new demand. It is, therefore, incumbent upon new development to fully mitigate these impacts.

In the case of transportation development impact fee programs, the accepted method of distributing costs in an equitable manner is to compare traffic generated by each project that will potentially affect the overall system. This can be done by establishing a uniform list of trip generation factors typical for the types of uses contemplated for the developments.

In preparation of this Engineer's Report, City staff reviewed and relied on the CVBMP EIR, April 2010 (see http//www.portofsandiego.org/chula-vista-bayfront-master-plan.html). The CVBMP EIR utilized the "Not So Brief Guide of Vehicular Traffic Generation Rates" published by SANDAG in 2002, Exhibit 2. Staff also reviewed the General Plan Environmental Impact Report, and the Urban Core Specific Plan (UCSP) Traffic Impact Report and Environmental Impact Report.

A variety of issues had to be addressed as part of the calculation process.

Existing Development The calculation of trips for existing Bayfront development is shown on Exhibit 3 and taken from the CVBMP EIR. Existing development is not responsible to pay BFDIF fees. The fee can only be charged to new development therefore these land uses were subtracted from the fee calculations. The existing land uses (4,627 ADT) plus an existing but relocated RV Park [S-1] (1,185 ADT), generate 5,812 daily trips (ADT) and are subtracted from the fee calculation (Exhibit 4).

Public Facilities Table A calculates the amount of ADTs that are associated with public facilities, such as parks and public buildings that will not be charged these fees. As shown below, the number of exempt ADT's totals 2,111 trips, or 211 EDU's.

Table A below lists the public land uses taken from the CVBMP EIR.

TABLE A

DEDUCTIONS FOR PUBLIC FACILITIES

EXISTING LAND USE	EXISTING ADT	BUILDOUT LAND USE	PROPOSED ADT	DIFFERENCE
S-5 Park	**5**	S-2 Park	**900**	**895**
H-17 Open Space	**9**	H-17 Fire Station	**400**	**391**
HP-07 Marina Park	**330**	H-1/H-8 Park	**900**	**570**
HP-15 Bayfront Park	**440**	OP-1/OP-3 South Park	**255**	**(-185)**

		HP-28 H Street Pier	**40**	**40**
		H-23 Cultural	**400**	**400**
TOTAL	**784**		**2,895**	**2,111**

Parcel Relocation As part of the WTDIF fee calculation, the city relocated one parcel that was originally in the WTDIF calculation and moved it into the BFDIF calculation, due to its physical location. The parcel is located at the southwest corner of Bay Boulevard and F Street i.e. west of I-5 and is owned by the adjacent United Technology Aerospace Systems Company (UTAS) (previously the ROHR Corporation). It includes 6.7 acres of Industrial land use (603 trips). This same UTAS parcel was then subtracted from the WTDIF calculations.

Shared Roadways WTDIF – BFDIF The new roadways west of Bay Blvd. are intended for the uses associated with the Bayfront, so they are solely the responsibility of the BFDIF. However, other roadways are shared between the WTDIF and the BFDIF. These roadways are associated with improvements to the Interstate-5, certain Regional Arterial System improvements (such as the grade separation projects), and the Bayshore Bikeway (bike path) parallel to Bay Blvd. In order to fairly reflect the shared benefit of these facilities, it is appropriate to allocate project costs to both the WTDIF and BFDIF programs. Projected new ADTs reasonably reflect future facility use, and have therefore been used to calculate the proportional cost sharing between the two fee programs. With 74,593 projected new trips in the BFDIF area and 103,649 projected new trips in the WTDIF area, the BFDIF's share is calculated as follows:

$$\frac{74{,}593 \text{ ADT}}{74{,}593 + 103{,}649 \text{ ADT}} = 42\%$$

I-5 Shared Calculation Not all facilities planned for the BFDIF program area are required solely to serve new development. As discussed above, in order to fairly reflect the shared benefit of these facilities, it is appropriate to allocate costs between existing development and new development. These "joint impetus" projects serve not only new development, but may also be related to the need to upgrade for less than satisfactory traffic levels (below LOS C) or to keep pace with technological improvements.

Table B presents the calculation of the fair share allocated to new development based on traffic along the I-5 corridor within the jurisdiction of the city of Chula Vista. As above, ADTs have been used to calculate proportional cost sharing. The ADT volumes reflect the change in traffic attributable to new development, in both the WTDIF and BFDIF areas. Therefore, of the 883,500 in buildout ADTs, 74,593 are associated with the Bayfront increase, while 809,644 are attributed to the WTDIF area (see WTDIF Nexus Study for additional information). The percentage shown (38%) will subsequently be multiplied by the percentage attributable to the BFDIF alone (42%).

Table B

I-5 Traffic Volume Growth Estimate

	Trips		Change
	2008 Report	**Buildout**	
Volumes (ADT)	546,850	883,500	336,650
Percent of Total			38%

Non-Vehicular Improvements Certain improvements, such as bikeways and pedestrian facilities, are not proportional to average daily traffic. For these improvements, the increase in population was used. The existing population used in the 2008 WTDIF Nexus Study was 110,493. Since there were no permanent residents in the Bayfront area, the existing population of the Bayfront is zero. Section 4.17 of the 2010 CVBMP EIR states that the planned residential development on the Bayfront consists of a maximum of 1,500 mixed low rise, medium rise and high rise residential units on approximately 14 acres of land. This is expected to increase the population in the Bayfront to approximately 3,780 people or 2.71%.

Bikeway and pedestrian projects will be shared with existing users based on population increase from the 2008 Nexus Study. The projected buildout population for the WTDIF area, as shown below in Table C is 135,733, an increase of 25,240 over the 2008 population of 110,493. The Bayfront population is projected to increase by 3,780, which results in a total buildout population of 139,513, an increase of 29,020. The City of Chula Vista's share for bicycle and pedestrian projects is calculated as a percentage of 110,493 divided by the buildout population of 139,513 or 79.20%. The WTDIF's share for bicycle and pedestrian projects is calculated as a percentage of the increase in population within the WTDIF area of 25,240 divided by the buildout population of 139,513 or 18.09%. The fractional portion of the shared bicycle and pedestrian facilities that shall be paid by the BFDIF is 2.71%, as shown.

$$\frac{3{,}780}{(3{,}780 + 25{,}240 + 110{,}493)} = 2.71\%$$

Table C

Population Growth Estimate

DIF Benefit Area	Existing Population	Population at Buildout	Net Increase in Population	Percentage of Total
WTDIF	**110,493**	**135,733**	**25,240**	18.09%
BFDIF	**0**	**3,780**	**3,780**	2.71%
TOTAL		**139,513**		20.8%

B. Proposed Project Costs (The Numerator)

City staff determined which projects are to be included in the program. The entire process for calculating impact fees involves two steps and is likened to a fraction with the numerator or top number representing the total cost of infrastructure improvements divided by the lower number (denominator) which is allocated to the various land use types and their consequent trips/EDU's as discussed below. The following is staff's method for calculating the total cost of infrastructure improvements.

The following categories of improvements are included in the BFDIF.

- Interstate 5 Improvements: These improvements are shared with the WTDIF and were originally included in the 2008 WTDIF report.

- Regional Arterial System (RAS) Projects: These improvements are also shared with the WTDIF.

- Bicycle and Pedestrian Facilities: The Bayshore Bikeway projects BP-1 and BP-9 are shared with both current and existing users in the WTDIF area. The Bayfront Loop is entirely within the Bayfront area and will be 100% funded by the BFDIF.

- Bayfront Roadways – RAS: These new streets are shown in CVBMP but are not currently in the RAS network approved by SANDAG. They are backbone collectors/arterials west of I-5 that are, in most cases, extensions of streets already in the RAS. It is important for them to be shown in SANDAG's RAS listing. A resolution will be taken to Council to recommend inclusion of these streets in the RAS network. Cost estimates and locations are provided in Appendix A.

- Bayfront Roadways – non-RAS: These streets are all west of the I-5 and are shown in the CVBMP and are local streets that would not be considered eligible for inclusion in the RAS. Cost estimates are provided in Appendix B.

A discussion of the roadways above follows.

Interstate 5 Improvement Projects

All the projects in this section were originally included in the 2008 WTDIF Nexus Study. Most of these projects were considered to be mitigation for deficiencies cited in the Urban Core Specific Plan (UCSP) or by the Growth Management Oversight Committee (GMOC). Because of the creation of the new BFDIF program they are now split proportionally by the increase in respective traffic, at 42%/ 58% BFDIF to WTDIF as discussed previously.

I-5-11: L Street bridge widening over I-5 including a sidewalk for pedestrians – (300' x 12')(2.71%)

Since this project is intended to benefit pedestrians, which includes existing users, only 2.71 percent is payable through the BFDIF funds as determined above.

I-5-17: I-5 HOV & Managed Lanes from SR905 to SR54

This project was originally in the 2008 WTDIF Nexus study. At that time, it was determined that approximately 50 percent of this portion of I-5 is within the City of Chula Vista. It was

also calculated that 8.2 percent of the traffic in this area within the City was due to new development.

Regional Arterial System (RAS) Projects

All the projects in this section were originally included in the 2008 WTDIF Nexus Study. The grade separation projects are considered to be mitigation for deficiencies cited in the CVBMP EIR and other previous noted documents.

RAS-5 and RAS-6: E Street and H Street LRT grade separation projects:

Environmental and Preliminary Engineering (PE) costs only are included at an estimated cost of $950,000 for each project.

RAS-9: H Street widening to 6-lanes from Interstate 5 to Broadway

$500,000 of the total cost is included under the BFDIF to cover the cost of preparing a General Plan Amendment (GPA) for this project. The GPA will determine whether it is necessary to widen H Street to six lanes or if a lesser improvement is warranted. It will also determine the cost of the improvements and how much of the improvements should be payable by the BFDIF.

Bicycle and Pedestrian Facilities

BP-1: Bayshore Bikeway (bike path) between E Street & F Street

Costs for this facility were split among existing EDUs, the WTDIF and the BFDIF based on population as described above. The revised cost estimate from the 2011 Bikeway Master Plan (Class 1 Rank #1) was used. This cost is $449,165.75 in 2014 dollars (including the Administrative fee). The cost estimate is included in Exhibit 5, Bayshore Bikeway Cost Estimates.

BP-9: Bayshore Bikeway (bike path) between F Street & H Street

Costs for this facility were split among existing EDUs, the WTDIF and the BFDIF based on population. This project includes a 12-foot wide AC bike path with parallel 24-inch gravel paths on either side. Fencing, drainage and a pedestrian signal crossing at H Street are included. This is the third ranking bike path in the Bikeway Master Plan. This cost is $669,278.46 in 2014 dollars (including the administrative fee). The cost estimate is included in Exhibit 5.

BAY-15: Lagoon Drive Bike and Pedestrian Trail (950 LF)

This facility includes demolition of an existing portion of Lagoon Drive to E Street and conversion to a bicycle and pedestrian trail. The cost estimate and map are found in Appendix B.

BAY-27: Bayshore Bikeway Bayfront Loop (14,400 LF) with bike bridge

This is a new facility which begins and ends on Bay Blvd. and loops around various new streets in the Bayfront area, including E Street, Marina Parkway, and several local streets. It primarily consists of bike paths, although bike trails and a pedestrian/bike bridge are included. The cost estimate and map are found in Appendix B.

Bayfront Roadways

The summary of the estimates prepared for the Bayfront projects is included as Exhibit 6. These estimates were prepared in 2013 and 2014. The following streets are considered to be Regional Arterial System (RAS) Roadway Projects and will be included in the list of streets that the City will request SANDAG to add to the approved RAS list. The cost estimates and location maps for the RAS roadways are included in Appendix A.

RAS

- BAY-9: I-5/J Street NB on ramp add EB-LT and WB-RT lanes
- BAY-13: E Street extension Bay Blvd. to H Street
- BAY-17: H Street from E Street to Marina Parkway
- BAY-18: Marina Parkway 2-lane from H Street to C Street
- BAY-20: Marina Parkway 2-lane from J Street to C Street
- BAY-22: J Street to Marina Parkway to Bay Blvd.
- BAY-29: Pump Station and Sewer Relocation Costs (Marina Pkwy. And J St.)

The following projects are considered to be non-Regional Arterial System Projects, since they are local streets and facilities that serve local streets. The cost estimates and location maps for the non-RAS roadways are included in Appendix B.

NON-RAS

- BAY-14: F Street from railroad to west cul-de-sac
- BAY-15: Lagoon Drive
- BAY-16: G Street (300 LF)
- BAY-19: “Street A” from H Street to C Street
- BAY-21: “Street A” from C Street to J Street
- BAY-23: Street C from Marina Parkway to Bay Blvd.
- BAY-24: Marina Way (1100 LF)
- BAY-25: Street “A” – South of J Street to Street “B”
- BAY-26: Street “B:” – “A” Street to Bay Blvd.
- BAY-27: Bayshore Bikeway
- BAY-28: Traffic Signals (seven)

All of the CVBMP projects are listed as mitigation measures for specific traffic impacts addressed in Section 4.2 of the CVBMP EIR. These impacts and mitigation measures are summarized in the Executive Summary of the CVBMP EIR and are included in Appendix C.

ADDITIONAL PROJECT COST ESTIMATES

The new cost estimates are included in Appendices A and B and were obtained from the San Diego Unified Port District. Hard costs relate to the actual construction costs paid to a contractor. Contingency costs are a percentage of the construction cost and relate to the amount of uncertainty of the cost estimate. The following percentages of the hard costs were used to calculate "soft costs" for the Bayfront cost estimates obtained from the Port District, with the exception of Project BAY-9.

1. Design Fees: 7.814%
2. Permitting and Plan Check Fees: 1.5%
3. Construction Management Fees: 4.0%
4. Misc. Consultant Fees: 1.0%
5. Owner's Contingency: 10.0%

Summary Cost Estimates for the projects that were originally included in the 2008 WTDIF Nexus Study are provided in Appendix D.

COST ESCALATION AND OTHER FACTORS

The base year for the cost estimates was 2013. Therefore, all estimates prepared during 2013 and 2014 are current.

The escalation factor for the BFDIF rate is intended to approximate the rate of inflation in the construction industry. The construction cost indices to be used shall be either the CalTrans Highway Construction cost index or the Engineering News Record (ENR) Construction Cost Index for Los Angeles. The current ENR index is assumed to be the index for July 2014 (10737.43), and estimates prepared prior to 2014 used the index for July of the year of preparation/approval. The index for July 2007 (8861.27) was therefore used for projects that were estimated in the original WTDIF Nexus Study, and the index for July 2011 (10062.80) was used for the projects estimated in the 2011 Bikeway Master Plan (BP-1 and BP-9).

Because this program is being established and run in conjunction with the TransNet program, fee adjustments have been set in line with the RTCIP. The RTCIP states *"Local agencies and SANDAG can fund the administrative costs of the RTCIP with a charge added to the RTCIP impact fee… Local agencies may add up to 2 percent for their program administration costs. These charges are similar to any other user fees imposed by local agencies and are not subject to the Act. These charges must be justified based on the actual program administration costs of each agency. Agencies should keep cost records and adjust the administrative charge as appropriate based on actual costs."*

Therefore, the following costs to the BFDIF program will be included:

BFDIF Project Administration: Two (2%) percent of the program's direct construction costs to fund activities related to general administration of the BFDIF including the following:

- Strategic planning and funding advocacy;

- Staff time spent in administering the fee program and the various credits of each developer;
- Growth Management Activities;
- Geographic Information System (GIS);
- BFDIF program updates;
- Supplies and equipment used to administer the program; and
- Feasibility studies.

The final calculation includes a discussion on additional costs to the program. Two spreadsheets are included as part of Exhibit 6: Project Cost Categories – one for the bayfront projects and one for shared projects. This exhibit breaks down the total project estimate into hard costs, soft costs, and the 2% administrative fee. Since the administrative fee percentage is based on only the hard cost, its percentage of the total cost is less – approximately 1.6%. This percentage may be used at the time the fee is collected to determine the amount to be placed in the account for the administrative fee.

C. Equivalent Dwelling Units (EDUs)(The Denominator)

One of the more common methods used to compare trip generation potential among the different land uses involves the conversion of trips from a particular land use type into "Equivalent Dwelling Units" or EDUs. Residential dwellings of 0 – 6 dwelling units per acre (LOW density) are assigned one (1.0) EDU per unit and become the base for assigning EDU factors to other land uses by comparing the relationship and nature of vehicular trips generated by those land uses to the ADTs generated by this residential density category.

In other words, EDUs are units of measure that standardize all land use types (housing, retail, office, etc.) to the level of demand created by one single-family housing unit. For example, in the case of traffic generation, one EDU is equivalent to the amount of two-way traffic (i.e., ADT) generated from and attracted to a single-detached household. A small business calculated to generate three times as much traffic as an average single-detached dwelling unit would have a value of three EDUs in terms of traffic; a large industrial complex that generates a thousand times as much traffic each day would have a demand of 1,000 EDUs. The basis and methodology used in calculating the fee in this Engineer's Report is consistent with the basis and methodology used in previous Western and Eastern TDIF reports and Western and Eastern TDIF ordinances as amended.

As shown at the bottom of Exhibit 4, the total number of trips at buildout of the CVBMP is estimated to be 79,802 trips. The final number of trips after adding the relocated parcel is 80,405 (79,802 plus 603). From this value we subtracted existing land uses and public facilities as discussed above. The total number of remaining EDUs that can be charged the BFDIF Fee is then 7,248 EDUs.

D. Final Fee Discussion

Exhibit 7 is the summary conclusion table that determines the final CVBMP "BFDIF" costs. This spreadsheet sums the new applicable infrastructure costs and applies the appropriate factors to each project. The sum total of all new costs is **$68,438,679.98**. This value is divided by the total number of applicable EDU's, as calculated above, **7,248**, (Exhibit 4) and calculates the fee to be **$9,442.42, rounded to $9,442/EDU**.

Note that the total contribution to the Regional Arterial System (RAS) will be $3,438.28 + $1,104.71 = $4,542.99. This will meet SANDAG's requirements as long as the streets west of I-5 are accepted into the RAS.

E. Fee Adjustments and Collection

The WTDIF program will allow for the construction of eligible transportation projects by developers in lieu of paying the WTDIF at building permit issuance with approval of City Engineer. Any projects constructed by a developer would be audited and credits issued incrementally as the facility is constructed. If the total construction costs amount to more than the total WTDIF fees for the developer's project, the developer is entitled to receive WTDIF credits in the amount of the excess of construction costs over the required WTDIF fees. The same builder can use this WTDIF credit to satisfy the fee obligations for a future development, or the developer will receive cash reimbursement when funds are available, as determined by the City Manager.

The fee shall be collected as a condition of building permit issuance. The TransNet ordinance currently provides for an annual inflation adjustment to the RTCIP impact fee on July 1 of each year beginning in 2009. In the future, the WTDIF and BFDIF will be adjusted on October 1 based on July indices in order to keep the timing consistent with the City's other impact fee programs. The annual inflation adjustment will be an increase of at least 2 per cent or based on the Caltrans highway construction cost index or the Engineering News Record (ENR) Construction Cost 20-City Index for Los Angeles. All fees collected shall be deposited in an interest-accruing fund, and shall be expended only with the approval of the City Council for the Proposed Projects listed in this report. These automatic adjustments do not require further action by the City Council.

The TransNet ordinance states, "Each jurisdiction shall have up to but no more than seven fiscal years to expend Funding Program revenues on the Regional Arterial Systems projects. The seven year term shall commence on the first day of July following the jurisdiction's receipt of the revenue. At the time of the review and audit by the Independent Taxpayer Oversight Committee, each jurisdiction collecting a development impact fee to meet the requirements of its Funding Program shall provide the Committee with written findings for any expended, unexpended and uncommitted fees in their Program Fund and demonstrates a reasonable relationship between the fee and the purpose for which it was charged, consistent with the requirements of Government Code Section 66000 et seq."

Exhibits

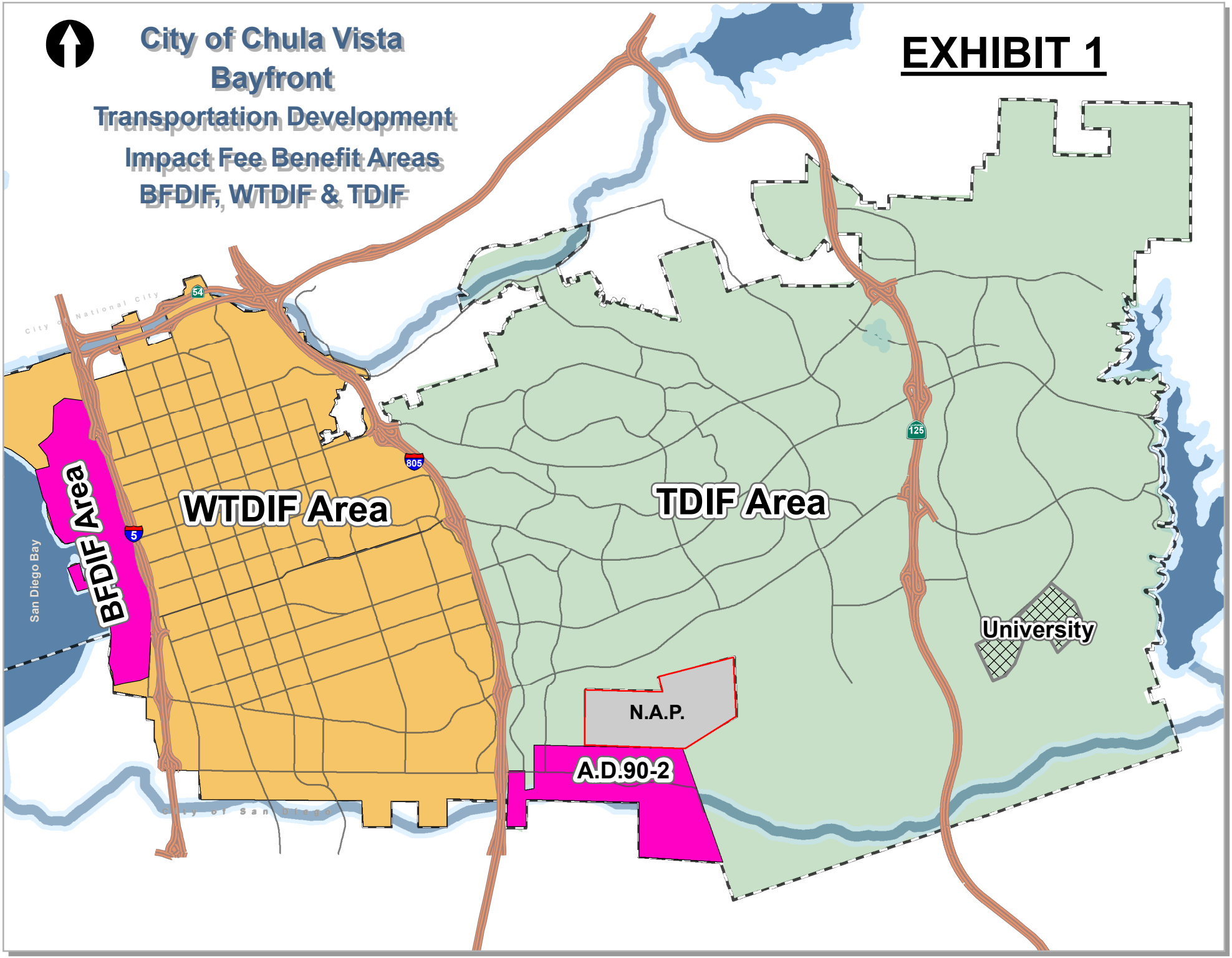
1. Transportation DIF Benefit Areas Map
2. Not So Brief Guide of Vehicular Traffic Generation Rates" published by the San Diego Association of Governments (SANDAG) in 2002
3. Traffic Generated by Existing Land Uses
4. EDU Calculations - Bayfront
5. Bayshore Bikeway Cost Estimates
6. Project Cost Categories: Shared Projects and Bayfront Projects
7. Bayfront TDIF Cost Calculations

Appendices

A. Bayfront Roadways RAS Estimates
B. Bayfront Roadways non-RAS Estimates
C. Traffic Impacts and Mitigation Measures
D. Cost Estimates from the 2008 WTDIF Nexus Study

EXHIBIT 1

City of Chula Vista
Bayfront
Transportation Development
Impact Fee Benefit Areas
BFDIF, WTDIF & TDIF



(NOT SO)

BRIEF GUIDE OF VEHICULAR TRAFFIC GENERATION RATES FOR THE SAN DIEGO REGION

APRIL 2002

SANDAG
401 B Street, Suite 800
San Diego, California 92101
(619) 699-1900 • Fax (619) 699-1950

NOTE: This listing only represents a *guide* of average, or estimated, traffic generation "driveway" rates and some very general trip data for land uses (emphasis on acreage and building square footage) in the San Diego region. These rates (both local and national) are subject to change as future documentation becomes available, or as regional sources are updated. For more specific information regarding traffic data and trip rates, please refer to the San Diego Traffic Generators manual. ***Always check with local jurisdictions for their preferred or applicable rates.***

LAND USE	TRIP CATEGORIES (PRIMARY:DIVERTED:PASS-BY)[a]	ESTIMATED WEEKDAY VEHICLE TRIP GENERATION RATE (DRIVEWAY)	HIGHEST PEAK HOUR % (plus IN:OUT ratio) Between 6:00-9:30 A.M.	Between 3:00-6:30 P.M.	TRIP LENGTH (Miles)[b]
AGRICULTURE (Open Space)	[80:16:2]	2/acre**			10.8
AIRPORT	[78:20:2]				12.5
Commercial		60/acre, 100/flight, 70/1000 sq. ft.* **	5% (6:4)	6% (5:5)	
General Aviation		6/acre, 2/flight, 6/based aircraft* **	9% (7:3)	15% (5:5)	
Heliports		100/acre**			
AUTOMOBILE[3]					
Car Wash					
Automatic		900/site, 600/acre**	4% (5:5)	9% (5:5)	
Self-serve		100/wash stall**	4% (5:5)	8% (5:5)	
Gasoline	[21:51:28]				2.8
with/Food Mart		160/vehicle fueling space**	7% (5:5)	8% (5:5)	
with/Food Mart & Car Wash		155/vehicle fueling space**	8% (5:5)	9% (5:5)	
Older Service Station Design		150/vehicle fueling space, 900/station**	7% (5:5)	9% (5:5)	
Sales (Dealer & Repair)		50/1000 sq. ft., 300/acre, 60/service stall* **	5% (7:3)	8% (4:6)	
Auto Repair Center		20/1000 sq. ft., 400/acre, 20/service stall*	8% (7:3)	11% (4:6)	
Auto Parts Sales		60/1000 sq. ft. **	4%	10%	
Quick Lube		40/service stall**	7% (6:4)	10% (5:5)	
Tire Store		25/1000 sq. ft., 30/service stall**	7% (6:4)	11% (5:5)	
CEMETERY		5/acre*			
CHURCH (or Synagogue)	[64:25:11]	9/1000 sq. ft., 30/acre** (quadruple rates for Sunday, or days of assembly)	5% (6:4)	8% (5:5)	5.1
COMMERCIAL/RETAIL[3]					
Super Regional Shopping Center (More than 80 acres, more than 800,000 sq. ft., w/usually 3+ major stores)		36/1000 sq. ft.,[c] 400/acre*	4% (7:3)	10% (5:5)	
Regional Shopping Center (40-80acres, 400,000-800,000 sq. ft., w/usually 2+ major stores)	[54:35:11]	50/1000 sq. ft.,[c] 500/acre*	4% (7:3)	9% (5:5)	5.2
Community Shopping Center (15-40 acres, 125,000-400,000 sq. ft., w/usually 1 major store, detached restaurant(s), grocery and drugstore)	[47:31:22]	80/1000 sq. ft., 700/acre* **	4% (6:4)	10% (5:5)	3.6
Neighborhood Shopping Center (Less than 15 acres, less than 125,000 sq. ft., w/usually grocery & drugstore, cleaners, beauty & barber shop, & fast food services)		120/1000 sq. ft., 1200/acre* **	4% (6:4)	10% (5:5)	
Commercial Shops	[45:40:15]				
Specialty Retail/Strip Commercial		40/1000 sq. ft., 400/acre*	3% (6:4)	9% (5:5)	4.3
Electronics Superstore		50/1000 sq. ft.**		10% (5:5)	
Factory Outlet		40/1000 sq. ft.**	3% (7:3)	9% (5:5)	
Supermarket		150/1000 sq. ft., 2000/acre* **	4% (7:3)	10% (5:5)	
Drugstore		90/1000 sq. ft.**	4% (6:4)	10% (5:5)	
Convenience Market (15-16 hours)		500/1000 sq. ft.**	8% (5:5)	8% (5:5)	
Convenience Market (24 hours)		700/1000 sq. ft.**	9% (5:5)	7% (5:5)	
Convenience Market (w/gasoline pumps)		850/1000 sq. ft., 550/vehicle fueling space**	6% (5:5)	7% (5:5)	
Discount Club		60/1000 sq. ft., 600/acre* **	1% (7:3)	9% (5:5)	
Discount Store		60/1000 sq. ft., 600/acre**	3% (6:4)	8% (5:5)	
Furniture Store		6/1000 sq. ft., 100/acre**	4% (7:3)	9% (5:5)	
Lumber Store		30/1000 sq. ft., 150/acre**	7% (6:4)	9% (5:5)	
Home Improvement Superstore		40/1000 sq. ft.**	5% (6:4)	8% (5:5)	
Hardware/Paint Store		60/1000 sq. ft., 600/acre**	2% (6:4)	9% (5:5)	
Garden Nursery		40/1000 sq. ft., 90/acre**	3% (6:4)	10% (5:5)	
Mixed Use: Commercial (w/supermarket)/Residential		110/1000 sq. ft., 2000/acre* (commercial only) 5/dwelling unit, 200/acre* (residential only)	3% (6:4) 9% (3:7)	9% (5:5) 13% (6:4)	
EDUCATION					
University (4 years)	[91:9:0]	2.4/student, 100 acre*	10% (8:2)	9% (3:7)	8.9
Junior College (2 years)	[92:7:1]	1.2/student, 24/1000 sq. ft., 120/acre* **	12% (8:2)	9% (6:4)	9.0
High School	[75:19:6]	1.3/student, 15/1000 sq. ft., 60/acre* **	20% (7:3)	10% (4:6)	4.8
Middle/Junior High	[63:25:12]	1.4/student, 12/1000 sq. ft. 50/acre**	30% (6:4)	9% (4:6)	5.0
Elementary	[57:25:10]	1.6/student, 14/1000 sq. ft., 90/acre* **	32% (6:4)	9% (4:6)	3.4
Day Care	[28:58:14]	5/child, 80/1000 sq. ft.**	17% (5:5)	18% (5:5)	3.7
FINANCIAL[3]	[35:42:23]				3.4
Bank (Walk-in only)		150/1000 sq. ft., 1000/acre* **	4% (7:3)	8% (4:6)	
with Drive-Through		200/1000 sq. ft., 1500/acre*	5% (6:4)	10% (5:5)	
Drive-Through only		250 (125 one-way)/lane*	3% (5:5)	13% (5:5)	
Savings & Loan		60/1000 sq. ft., 600/acre**	2%	9%	
Drive-Through only		100 (50 one-way)/lane**	4%	15%	
HOSPITAL	[73:25:2]				8.3
General		20/bed, 25/1000 sq. ft., 250/acre*	8% (7:3)	10% (4:6)	
Convalescent/Nursing		3/bed**	7% (6:4)	7% (4:6)	
INDUSTRIAL					
Industrial/Business Park (commercial included)	[79:19:2]	16/1000 sq. ft., 200/acre* **	12% (8:2)	12% (2:8)	9.0
Industrial Park (no commercial)		8/1000 sq. ft., 90/acre**	11% (9:1)	12% (2:8)	
Industrial Plant (multiple shifts)	[92:5:3]	10/1000 sq. ft., 120/acre*	14% (8:2)	15% (3:7)	11.7
Manufacturing/Assembly		4/1000 sq. ft., 50/acre**	19% (9:1)	20% (2:8)	
Warehousing		5/1000 sq. ft., 60/acre**	13% (7:3)	15% (4:6)	
Storage		2/1000 sq. ft., 0.2/vault, 30/acre*	6% (5:5)	9% (5:5)	
Science Research & Development		8/1000 sq. ft., 80/acre*	16% (9:1)	14% (1:9)	
Landfill & Recycling Center		6/acre	11% (5:5)	10% (4:6)	

(OVER)

LAND USE	TRIP CATEGORIES (PRIMARY:DIVERTED:PASS-BY)[a]	ESTIMATED WEEKDAY VEHICLE TRIP GENERATION RATE (DRIVEWAY)	HIGHEST PEAK HOUR % (plus IN:OUT ratio) Between 6:00-9:30 A.M.		Between 3:00-6:30 P.M.		TRIP LENGTH (Miles)[b]
LIBRARY	[44:44:12]	50/1000 sq. ft., 400/acre[*,**]	2%	(7:3)	10%	(5:5)	3.9
LODGING	[58:38:4]						7.6
Hotel (w/convention facilities/restaurant)		10/occupied room, 300/acre	6%	(6:4)	8%	(6:4)	
Motel		9/occupied room, 200/acre[*]	8%	(4:6)	9%	(6:4)	
Resort Hotel		8/occupied room, 100/acre[*]	5%	(6:4)	7%	(4:6)	
Business Hotel		7/occupied room[*,**]	8%	(4:6)	9%	(6:4)	
MILITARY	[82:16:2]	2.5/military & civilian personnel[*]	9%	(9:1)	10%	(2:8)	11.2
OFFICE							
Standard Commercial Office (less than 100,000 sq. ft.)	[77:19:4]	20/1000 sq. ft.,[o] 300/acre[*]	14%	(9:1)	13%	(2:8)	8.8
Large (High-Rise) Commercial Office (more than 100,000 sq. ft., 6 + stories)	[82:15:3]	17/1000 sq. ft.,[o] 600/acre[*]	13%	(9:1)	14%	(2:8)	10.0
Office Park (400,000 + sq. ft.)		12/1000 sq.ft., 200/acre[*,**]	13%	(9:1)	13%	(2:8)	
Single Tenant Office		14/1000 sq. ft., 180/acre[*]	15%	(9:1)	15%	(2:8)	8.8
Corporate Headquarters		7/1000 sq. ft., 110/acre[*]	17%	(9:1)	16%	(1:9)	
Government (Civic Center)	[50:34:16]	30/1000 sq. ft.[*,**]	9%	(9:1)	12%	(3:7)	6.0
Post Office							
Central/Walk-In Only		90/1000 sq. ft.[*,**]	5%		7%		
Community (not including mail drop lane)		200/1000 sq. ft., 1300/acre[*]	8%	(6:4)	9%	(5:5)	
Community (w/mail drop lane)		300/1000 sq. ft., 2000/acre[*]	7%	(5:5)	10%	(5:5)	
Mail Drop Lane only		1500 (750 one-way)/lane[*]	7%	(5:5)	12%	(5:5)	
Department of Motor Vehicles		180/1000 sq. ft., 900/acre[*,**]	6%	(6:4)	10%	(4:6)	
Medical-Dental	[60:30:10]	50/1000 sq. ft., 500/acre[*]	6%	(8:2)	11%	(3:7)	6.4
PARKS	[66:28:6]		4%		8%		5.4
City (developed w/meeting rooms and sports facilities)		50/acre[*]	13%	(5:5)	9%	(5:5)	
Regional (developed)		20/acre[*]					
Neighborhood/County (undeveloped)		5/acre (add for specific sport uses), 6/picnic site[*,**]					
State (average 1000 acres)		1/acre, 10/picnic site[*,**]					
Amusement (Theme)		80/acre, 130/acre (summer only)[*,**]			6%	(6:4)	
San Diego Zoo		115/acre[*]					
Sea World		80/acre[*]					
RECREATION							
Beach, Ocean or Bay	[52:39:9]	600/1000 ft. shoreline, 60/acre[*]					6.3
Beach, Lake (fresh water)		50/1000 ft. shoreline, 5/acre[*]					
Bowling Center		30/1000 sq. ft., 300/acre, 30/lane[*,**]	7%	(7:3)	11%	(4:6)	
Campground		4/campsite[*,**]	4%		8%		
Golf Course		7/acre, 40/hole, 700/course[*,**]	7%	(8:2)	9%	(3:7)	
Driving Range only		70/acre, 14/tee box[*]	3%	(7:3)	9%	(5:5)	
Marinas		4/berth, 20/acre[*,**]	3%	(3:7)	7%	(6:4)	
Multi-purpose (miniature golf, video arcade, batting cage, etc.)		90/acre	2%		6%		
Racquetball/Health Club		30/1000 sq. ft., 300/acre, 40/court[*]	4%	(6:4)	9%	(6:4)	
Tennis Courts		16/acre, 30/court[*,**]	5%		11%	(5:5)	
Sports Facilities							
Outdoor Stadium		50/acre, 0.2/seat[*]					
Indoor Arena		30/acre, 0.1/seat[*]					
Racetrack		40/acre, 0.6 seat[*]					
Theaters (multiplex w/matinee)	[66:17:17]	80/1000 sq. ft., 1.8/seat, 360/screen[*]	1/2%		8%	(6:4)	6.1
RESIDENTIAL	[86:11:3]						7.9
Estate, Urban or Rural (average 1-2 DU/acre)		12/dwelling unit[*,**]	8%	(3:7)	10%	(7:3)	
Single Family Detached (average 3-6 DU/acre)		10/dwelling unit[*,**]	8%	(3:7)	10%	(7:3)	
Condominium (or any multi-family 6-20 DU/acre)		8/dwelling unit[*,**]	8%	(2:8)	10%	(7:3)	
Apartment (or any multi-family units more than 20 DU/acre)		6/dwelling unit[*,**]	8%	(2:8)	9%	(7:3)	
Military Housing (off-base, multi-family)							
(less than 6 DU/acre)		8/dwelling unit	7%	(3:7)	9%	(6:4)	
(6-20 DU/acre)		6/dwelling unit	7%	(3:7)	9%	(6:4)	
Mobile Home							
Family		5/dwelling unit, 40/acre[*]	8%	(3:7)	11%	(6:4)	
Adults Only		3/dwelling unit, 20/acre[*]	9%	(3:7)	10%	(6:4)	
Retirement Community		4/dwelling unit[*,**]	5%	(4:6)	7%	(6:4)	
Congregate Care Facility		2.5/dwelling unit[*,**]	4%	(6:4)	8%	(5:5)	
RESTAURANT[s]	[51:37:12]						4.7
Quality		100/1000 sq. ft., 3/seat, 500/acre[*,**]	7%	(6:4)	8%	(7:3)	
Sit-down, high turnover		160/1000 sq. ft., 6/seat, 1000/acre[*,**]	6%	(5:5)	8%	(6:4)	
Fast Food (w/drive-through)		650/1000 sq. ft., 20/seat, 3000/acre[*,**]	7%	(5:5)	7%	(5:5)	
Fast Food (without drive-through)		700/1000 sq. ft.[*,**]	5%	(6:4)	7%	(5:5)	
Delicatessen (7am-4pm)		150/1000 sq. ft., 11/seat[*]	9%	(6:4)	3%	(3:7)	
TRANSPORTATION							
Bus Depot		25/1000 sq. ft.[*,**]					
Truck Terminal		10/1000 sq. ft., 7/bay, 80/acre[*,**]	9%	(4:6)	8%	(5:5)	
Waterport/Marine Terminal		170/berth, 12/acre[*,**]					
Transit Station (Light Rail w/parking)		300/acre, 2[1/3]/parking space (4/occupied)[*,**]	14%	(7:3)	15%	(3:7)	
Park & Ride Lots		400/acre (600/paved acre), 5/parking space (8/occupied)[*,**]	14%	(7:3)	15%	(3:7)	

[*] Primary source: *San Diego Traffic Generators*.

[**] Other sources: *ITE Trip Generation Report [6th Edition]*, Trip Generation Rates (other agencies and publications), various SANDAG & CALTRANS studies, reports and estimates.

[a] Trip category percentage ratios are daily from local household surveys, often cannot be applied to very specific land uses, and do not include non-resident drivers (draft SANDAG *Analysis of Trip Diversion*, revised November, 1990):
PRIMARY - one trip directly between origin and primary destination.
DIVERTED - linked trip (having one or more stops along the way to a primary destination) whose distance compared to direct distance ≥ 1 mile.
PASS-BY - undiverted or diverted < 1 mile.

[b] Trip lengths are average weighted for all trips to and from general land use site. (All trips system-wide average length = 6.9 miles)

[c] Fitted curve equation: $Ln(t) = 0.502\ Ln(x) + 6.945$

[o] Fitted curve equation: $Ln(t) = 0.756\ Ln(x) + 3.950$

t = total trips, x = 1,000 sq. ft.

[*] Fitted curve equation: $t = -2.169\ Ln(d) + 12.85$ t = trips/DU, d = density (DU/acre), DU = dwelling unit

[s] Suggested PASS-BY (undiverted or diverted < 1 mile) percentages for trip rate reductions only during P.M. peak period (based on combination of local data/review and Other sources[**]):

COMMERCIAL/RETAIL	
Regional Shopping Center	20%
Community " "	30%
Neighborhood " "	40%
Specialty Retail/Strip Commercial (other)	10%
Supermarket	40%
Convenience Market	50%
Discount Club/Store	30%
FINANCIAL	
Bank	25%
AUTOMOBILE	
Gasoline Station	50%
RESTAURANT	
Quality	10%
Sit-down high turnover	20%
Fast Food	40%

[t] Trip Reductions - In order to help promote regional "smart growth" policies, and acknowledge San Diego's expanding mass transit system, consider vehicle trip rate reductions (with proper documentation and necessary adjustments for peak periods). The following are some examples:

[1] A 5% daily trip reduction for land uses with transit access or near transit stations accessible within 1/4 mile.

[2] Up to 10% daily trip reduction for mixed-use developments where residential and commercial retail are combined (demonstrate mode split of walking trips to replace vehicular trips).

TABLE 4.2-9
Traffic Generated by Existing Land Uses

								A.M. Peak Hour			P.M. Peak Hour		
Parcel	Land Use	Units[1]		Trip Rate[2]			Daily Trips	In	Out	Total	In	Out	Total
Sweetwater District													
S-5	Existing Park	1.06	ac	5	/	ac	5	0	0	0	0	0	0
Harbor District													
H-17	Existing Open Space	2	ac	5	/	ac	9	0	0	0	0	0	0
HP-07	Existing Marina Park View	6.6	ac	50	/	ac	330	21	22	43	15	15	30
HP-15	Existing Bayfront Park	8.8	ac	50	/	ac	440	29	28	57	20	20	40
HW-01-05	Existing Marina	911.0	berth	4	/	berth	3,644	33	76	109	153	102	255
HW-06	Boat Yard	12.0	ac	50	/	ac	600	103	11	114	24	96	120
Otay District													
0-4	Industrial Business Park	33.13	ac	6	/	ac	199	11	11	22	8	12	20
Total							**4,627**	**94**	**137**	**231**	**196**	**149**	**345**

SOURCE: Kimley-Horn and Associates 2008.

Notes:

[1] The intensity of each land use was provided by the Port of San Diego.

[2] Trip Generation rates are based on SANDAG's *(Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region*, April 2002.

EXHIBIT 4
EDU CALCULATIONS - Bayfront and other land Parcels west of I-5 - All Phases

Phase	Parcel	Land Use	Units		Trip Rate (Trips)		Daily Trips (ADT)		EDU's		BFDIF Rate		CHECK SUM
Sweetwater District													
I	***S-2****	***Signature Park***	***18***	***ac***	***50***	***ac***	***900***		***Exempt***				
I	S-1	RV Park	237	Stall	5	stall	1,185		0.5	EDU/stall	$4,572.00	/stall	$1,083,564.00
IV	S-3	Mixed Use Commercial	120	ksf	17	ksf	2,040		1.7	EDU/ksf	$15,544.80	/ksf	$1,865,376.00
IV	S-4	Office	120	ksf	17	ksf	2,040		1.7	EDU/ksf	$15,544.80	/ksf	$1,865,376.00
Subtotal							**6,165**						
Harbor District													
I	H-3	Resort Conference Center	1,600	rm	10	rm	16,000		1	EDU/rm	9,144.00	/rm	$14,630,400.00
I	H-13, H-14	Residential	1,500	du	6	du	9,000		0.6	EDU/rm	5,486.40	/du	$8,229,600.00
I	***H-8, HP-1****	***Signature Park***	***18***	***ac***	***50***	***ac***	***900***		***Exempt***				
I	***H-17****	***Fire Station***	***2***	***ac***	***200***	***ac***	***400***		***Exempt***				
I	HP-3	Shoreline Promenade	8	ac	5	ac	42		4	EDU/ac	$36,576.00	/ac	$307,238.40
II	H-9	Retail/Commercial Recreation	50	ksf	40	ksf	2,000		4	EDU/ksf	$36,576.00	/ksf	$1,828,800.00
II	H-15	Mixed Use Office	210	ksf	17	ksf	3,570		1.7	EDU/ksf	$15,544.80	/ksf	$3,264,408.00
II	H-15	Visitor Hotel	250	rm	8	rm	2,000		0.8	EDU/rm	$7,315.20	/rm	$1,828,800.00
II	H-15	Retail	120	ksf	40	ksf	4,800		4	EDU/ksf	$36,576.00	/ksf	$4,389,120.00
II	H-15	General Office	90	ksf	20	ksf	1,800		2	EDU/ksf	$18,288.00	/ksf	$1,645,920.00
II	H-23	Resort Hotel	1,250	rm	10	rm	12,500		1	EDU/rm	$9,144.00	/rm	$11,430,000.00
II	***H-23****	***Cultural***	***25***	***ksf***	***16***	***ksf***	***400***		***Exempt***				
II	H-23	Retail	175	ksf	40	ksf	7,000		4	EDU/ksf	$36,576.00	/ksf	$6,400,800.00
II	***HP-28****	***H Street Pier***	***0.4***	***ac***	***50***	***ac***	***20***		***Exempt***				
III	H-21	Retail	150	ksf	40	ksf	6,000		4	EDU/ksf	$36,576.00	/ksf	$5,486,400.00
III	HP-23A	Industrial Business Park	1.0	ac	50	ac	50		5	EDU/ac	$45,720.00	/ac	$45,720.00
IV	H-12	Ferry Terminal/Restaurant	25	ksf	100	ksf	2,500		10	EDU/ksf	$91,440.00	/ksf	$2,286,000.00
IV	H-18	Office	100	ksf	20	ksf	2,000		2	EDU/ksf	$18,288.00	/ksf	$1,828,800.00
IV	***HP-28****	***H Street Pier***	***0.4***	***ac***	***50***	***ac***	***20***		***Exempt***				
Subtotal							**71,002**						
Otay District													
III	O-1/O-2	Industrial Business Park					1,200		20	EDU/ac	$182,880	Total contributio	$182,880.00
III	O-3	RV Park	236	Stall	5	stall	1,180		0.5	EDU/stall	$4,572.00	/stall	1,078,992
III	***OP-1/OP-3****	***South Park***	***51***	***ac***	***5***	***ac***	***255***		***Exempt***				
Subtotal							**2,635**						
Bayfront Total Trips							**79,802**						
ADJUSTMENTS													
Plus Additonal Industrial Parcel at Bay/F Street			6.7	ac	90	ac	603		9	EDU/ac	$82,296.00	/ac	$551,383.20
Minus Existing Relocated RV Park in S-1 above							-1,185	trips					
Minus Existing land Uses Table (Table 4.2-9 in EIR)							-4,627						
Sub Total Trips							74,593	trips				7459	EDU's
Minus Public Facilities per Table A in BFDIF Nexus study							-2111	Trips				-211	EDU's
Total Trips							**72,482**					**7248**	**BFDIF Total EDUs**

* Denotes Public Facility

Source: Unified Port District of San Diego

\\citywide2000\home\Engineer\ADVPLAN\WTDIF\BFDIF Engineer's Report\Exhibit 4 Trip Gen and EDU Table 9-25-2014 DEK.xlsx

Exhibit 5:

Bayshore Bikeway Cost Estimates

COST ESTIMATE

FACILITY BP-1

Bayshore Bikeway (bike path) between E Street & F Streets

ITEM	DESCRIPTION	UNITS	QTY.	UNIT COST	TOTAL
1	Bike Path striping/signing	MI	0.25	$ 3,300.00	$ 825.00
2	144 " (12') AC path (3" thick) w/CAB (3/16")	SF	10,560	$ 3.50	$ 36,960.00
3	2-24" parallel DG side paths (3")	SF	10,560	$ 2.10	$ 22,176.00
4	Clear & grub	SF	10,560	$ 1.00	$ 10,560.00
5	Subgrade preparation/excavation	CY	587	$ 16.50	$ 9,685.50
6	Drainage (PVC drainage system)	LF	1,320	$ 5.50	$ 7,260.00
7	Fencing or guardrail	LF	1,320	$ 35.00	$ 46,200.00
8	Pedestrian signal crossing including ADA ramps	LS	1	$ 150,000.00	$ 150,000.00
					$ 283,667.00
	Admin (2% hard costs)				$ 5,673.34
		TOTAL HARD COSTS			**$ 289,340.34**
	SOFT COSTS				
	Contingencies and soft costs				$ 131,621.00
	TOTAL SOFT COSTS & CONTINGENCIES				**$ 131,621.00**
		PROJECT COST			**$ 420,961.34**
		ENR Index Increase to 2014: 1.067			
		TOTAL PROJECT COST			**$ 449,165.75**

COST ESTIMATE

FACILITY BP-9

Bayshore Bikeway (bike path) between F Street & H Streets

ITEM	DESCRIPTION	UNITS	QTY.	UNIT COST	TOTAL
1	Bike Path striping/signing	MI	0.51	$ 3,300.00	$ 1,683.00
2	144 " (12') AC path (3" thick) w/CAB (3/16")	SF	21542	$ 3.50	$ 75,397.00
3	2-24" parallel DG side paths (3")	SF	21542	$ 2.10	$ 45,238.20
4	Clear & grub	SF	21542	$ 1.00	$ 21,542.00
5	Subgrade preparation/excavation	CY	1197	$ 16.50	$ 19,750.50
6	Drainage (PVC drainage system)	LF	2693	$ 5.50	$ 14,811.50
7	Fencing or guardrail	LF	2693	$ 35.00	$ 94,255.00
8	Pedestrian signal crossing including ADA ramps	LS	1	$ 150,000.00	$ 150,000.00
					$ 422,677.00
	Admin (2% hard costs)				$ 8,453.54
		TOTAL HARD COSTS			**$ 431,130.54**

SOFT COSTS

Contingencies and soft costs	$	196,122.00
TOTAL SOFT COSTS & CONTINGENCIES	**$**	**196,122.00**
PROJECT COST	**$**	**627,252.54**
ENR Index Increase to 2014: 1.067		
TOTAL PROJECT COST	**$**	**669,278.46**

EXHIBIT 6: PROJECT COST CATEGORIES
SHARED PROJECTS

Project No	Project Name	Hard + Admin Costs	Contingencies + Soft Costs	Total	Total + Escalation
I5-1	I-5/E Street NB off-ramp restriping add lane	$ 10,514.16	$ 2,319.30	$ 12,833.46	$ 15,528.49
I-5-2	I-5/E Street/Bay Blvd SB off-ramp restriping add lane	$ 10,514.16	$ 2,319.30	$ 12,833.46	$ 15,528.49
I-5-4	E Street bridge widening over I-5 (250' X 20')	$ 1,785,000.00	$ 393,750.00	$ 2,178,750.00	$ 2,636,287.50
I-5-5	F Street bridge widening over I-5 (250' X 20')	$ 1,785,000.00	$ 393,750.00	$ 2,178,750.00	$ 2,636,287.50
I-5-6	I-5/H Street NB off-ramp restriping add lane:	$ 10,514.16	$ 2,319.30	$ 12,833.46	$ 15,528.49
I-5-7	I-5/H Street SB off-ramp restriping add lane:	$ 10,514.16	$ 2,319.30	$ 12,833.46	$ 15,528.49
I-5-8	H Street bridge widening over I-5 (200'X40'):	$ 2,856,000.00	$ 630,000.00	$ 3,486,000.00	$ 4,218,060.00
I-5-9	I-5/J Street NB off-ramp restriping add lane:	$ 10,514.16	$ 2,319.30	$ 12,833.46	$ 15,528.49
I-5-11	L Street bridge widening over I-5 (S/W for peds 300' X 12')(38%)(58%):	$ 1,285,200.00	$ 283,500.00	$ 1,568,700.00	$ 1,898,127.00
I-5-12	I-5/Bay Blvd (south of L St.) SB on/off ramps traffic signal:	$ 214,574.69	$ 47,332.65	$ 261,907.35	$ 316,907.89
I-5-13	I-5/Industrial Blvd NB on/off ramps traffic signal:	$ 214,574.69	$ 47,332.65	$ 261,907.35	$ 316,907.89
I-5-14	I-5/Palomar Street bridge widening (275lf X 50lf):	$ 4,908,750.00	$ 1,082,812.50	$ 5,991,562.50	$ 7,249,790.63
I-5-16	I-5/Main Street bridge widening (275lf X 20lf):	$ 1,602,857.14	$ 353,571.43	$ 1,956,428.57	$ 2,367,278.57
I-5-17	I-5 HOV & Managed Lanes from SR905 to SR54 (63.4% in CV)**	$ 180,363,419.66	$ 39,786,048.46	$ 220,149,468.12	$ 266,380,856.43
					$ -
RAS-5	E Street LRT grade separation (underpass LRT option)****:		$ 950,000.00	$ 950,000.00	$ 950,000.00
RAS-6	H Street LRT grade separation (underpass LRT option)****:		$ 950,000.00	$ 950,000.00	$ 950,000.00
	**** Environmental and PE Costs only				$ -
RAS-9	H Street widening to 6-lanes from Interstate-5 to Broadway:	$ 9,513,211.97	$ 2,098,502.64	$ 11,611,714.61	$ 14,050,174.68
					$ -
BP-9	Bayshore Bikeway (bike path) between F Street & H Streets	$ 431,130.54	$ 196,122.00	$ 627,252.54	$ 669,278.46
BP-1	Bayshore Bikeway (bike path) between E Street & F Streets	$ 289,340.34	$ 131,621.00	$ 420,961.34	$ 449,165.75
	TOTAL			**$ 252,657,569.67**	**$ 305,166,764.72**

EXHIBIT 6: Project Cost Categories

Bayfront Projects

		Hard + Admin Costs	Soft Costs	Total
	Bayfront Roadways -RAS			
BAY-09	I-5/J Street NB on-ramp add (EB-LT) & WB-RT lanes	$ 510,000.00		$ 510,000.00
BAY-13	E Street extension Bay Blvd to H Street (52'X5450')(BAY-2)	$ 7,561,070.28	$ 1,802,336.00	$ 9,363,406.28
BAY-17	H Street from E Street to Marina Pkwy (52'X1650')(BAY-6) (excludes SDUPD Section)	$ 3,816,225.96	$ 909,675.00	$ 4,725,900.96
BAY-18	Marina Parkway 2-lane from H St. to C St. (52'X1100') (GP-2)(BAY-8)	$ 1,858,094.22	$ 442,915.00	$ 2,301,009.22
BAY-20	Marina Parkway 2-lane from J St. to C St. (52'X1450') (GP-2)(BAY-8)	$ 1,978,127.82	$ 471,527.00	$ 2,449,654.82
BAY-22	J Street from Marina Pkwy to Bay Blvd (1650 LF) (GP-8): SB-WB Rt. Lane	$ 2,914,648.98	$ 694,766.20	$ 3,609,415.18
BAY-29	Pump Station and Sewer Relocation Costs (Marina Pkwy. and J St.)	$ 1,577,685.00	$ 383,598.33	$ 1,961,283.33
		$ 20,215,852.26	**$ 4,704,817.53**	**$ 24,920,669.79**
	Bayfront Roadways -non-RAS			
BAY-14	F Street from railroad to west cul-de-sac (1863 LF)	$ 2,185,841.64	$ 521,040.00	$ 2,706,881.64
BAY-15	Lagoon Drive (950 LF) Bike and Pedestrian Trail	$ 1,535,207.10	$ 365,948.00	$ 1,901,155.10
BAY-16	G Street (300 LF)	$ 328,970.40	$ 78,417.00	$ 407,387.40
BAY-19	"Street A" from H Street to C Street (74'X1150')(BAY-11)	$ 2,123,641.02	$ 506,213.00	$ 2,629,854.02
BAY-21	"Street A" from C Street to J Street (1400 LF)(BAY-11)	$ 2,249,274.42	$ 536,160.62	$ 2,785,435.04
BAY-23	Street C - Marina Parkway to Bay Blvd.(2600 LF)	$ 2,076,620.04	$ 495,004.97	$ 2,571,625.01
BAY-24	Marina Way (1100 LF)	$ 1,187,346.30	$ 283,028.29	$ 1,470,374.59
BAY-25	"Street A - South of J Street to Street "B"	$ 6,209,507.04	$ 1,480,163.01	$ 7,689,670.05
BAY-26	Street B - "A" Street to Bay Blvd. (2600 LF)	$ 6,642,688.80	$ 1,583,420.92	$ 8,226,109.72
BAY-27	Bayshore Bikeway Bayfront Loop (14,400 LF) with bike bridge	$ 1,754,423.46	$ 418,202.71	$ 2,172,626.17
BAY-28	Traffic Signals (seven)(H/RCC)(Bay/J)(Bay/L)(I-5SB/Bay)	$ 2,357,671.86	$ 562,000.12	$ 2,919,671.98
	Total:	**$ 28,651,192.08**	**$ 6,829,598.64**	**$ 35,480,790.72**
	Grand Total	**$ 48,867,044.34**	**$ 11,534,416.17**	**$ 60,401,460.51**

BAYFRONT TRANSPORTATION DEVELOPMENT IMPACT FEE COST CALCULATIONS (EXHIBIT 7) 10 24 2014

A	B	C	C	D	E		F	G	H		K
	BFDIF IMPROVEMENT LOCATIONS	ORIGINAL PROJECT COST	YEAR 2014 PROJECT COST	BFDIF SHARE%	YEAR 2014 BFDIF COSTS	2% ADMIN COSTS	EX. COND.	2030 COND.s	Source		Int. No.
	Interstate-5 Improvements*										
I-5-1	I-5/E Street NB off-ramp restriping add lane:	$12,833.46	$15,528.49	42.00%	$6,521.96	$104.77	LOS **C**	LOS **E**	UCSP T- 5.8-4 INT #		2
I-5-2	I-5/E Street/Bay Blvd SB off-ramp restriping add lane:	$12,833.46	$15,528.49	42.00%	$6,521.96	$104.77	**4.2-7**		UCSP T- 5.8-4 INT #		1
I-5-4	E Street bridge widening over I-5 (250' X 20'):	$2,178,750.00	$2,636,287.50		See I5-17		LOS **D**		GMOCTMP	AM & PM	
I-5-5	F Street bridge widening over I-5 (250' X 20'):	$2,178,750.00	$2,636,287.50		See I5-17						
I-5-6	I-5/H Street NB off-ramp restriping add lane:	$12,833.46	$15,528.49	42.00%	$6,521.96	$104.77	LOS **B**	LOS **F**	UCSP T- 5.8-4 INT #		25
I-5-7	I-5/H Street SB off-ramp restriping add lane:	$12,833.46	$15,528.49	42.00%	$6,521.96	$104.77	LOS **C**	LOS **F**	UCSP T- 5.8-4 INT #		24
I-5-8	H Street bridge widening over I-5 (200'X40'):	$3,486,000.00	$4,218,060.00	42.00%	$1,771,585.20	$28,459.20	LOS **DDE**		GMOCTMP	AM/M/PM	
I-5-9	I-5/J Street NB off-ramp restriping add lane:	$12,833.46	$15,528.49	42.00%	$6,521.96	$104.77	LOS **B**	LOS **F**	UCSP T- 5.8-4 INT #		59
I-5-11	L Street bridge widening over I-5 (S/W for peds 300' X 12'):	$1,568,700.00	$1,898,127.00	2.71%	$51,439.24	$826.33					
I-5-12	I-5/Bay Blvd (south of L St.) SB on/off ramps traffic signal:	$261,907.35	$316,907.89	42.00%	$133,101.32	$2,138.17	LOS **E**	LOS F	UCSP T- 5.8-4 INT #		63
I-5-13	I-5/Industrial Blvd NB on/off ramps traffic signal:	$261,907.35	$316,907.89	42.00%	$133,101.32	$2,138.17	LOS **C**	LOS **F**	UCSP T- 5.8-4 INT #		64
I-5-14	I-5/Palomar Street bridge widening (275lf X 50lf):	$5,991,562.50	$7,249,790.63		See I5-17		LOS **DEE**		GMOCTMP	AM/M/PM	
I-5-16	I-5/Main Street bridge widening (275lf X 20lf):	$1,956,428.57	$2,367,278.57		See I5-17						
I-5-17	I-5 HOV & Managed Lanes from SR905 to SR54 (50% in CV)**	$220,149,468.12	$266,380,856.43	1.72%	$4,587,078.35	$73,688.01	LOS **D**	LOS **F**	SANDAG I-5 Study 6/05, 4.2-8		
	**(BFDIF % $239.2M X 0.50 X 0.082 X 0.42 is based on CV volumes.)										
	*Estimated in 2007				**$6,708,915.24**						
	Regional Arterial System (RAS) Projects										
RAS-5	E Street LRT grade separation (underpass LRT option)****:		$950,000.00	42.00%	$399,000.00		**4.2-10**		GMOCTMP	AM/PM	GPTS
RAS-6	H Street LRT grade separation (underpass LRT option)****:		$950,000.00	42.00%	$399,000.00		**4.2-10**		General Plan Traffic Study Appendix A		
	****Environmental and PE costs only. Costs divided 58% WTDIF/ 42% BFDIF										
RAS-9	H St. widening to 6 lanes from I-5 to Broadway*	$11,611,714.61	$14,050,174.68	3.56%	$500,000.00	$8,032.13			General Plan Amendment Cost		
	SUBTOTAL: Current RAS Roadways		**$304,048,320.52**		**$1,298,000.00**						
	TOTAL: RAS + I-5 Improvements				**$8,006,915.24**						
					7248.00		**EDUS**				
					$ 1,104.71		**/EDU**				

BAYFRONT TRANSPORTATION DEVELOPMENT IMPACT FEE COST CALCULATIONS (EXHIBIT 7) 10 24 2014

A	B	C	C	D	E		F	G	H	K
	BFDIF IMPROVEMENT LOCATIONS	ORIGINAL PROJECT COST	YEAR 2014 PROJECT COST	BFDIF SHARE%	YEAR 2014 BFDIF COSTS	2% ADMIN COSTS	EX. COND.	2030 COND.s	Source	Int. No.
	Bicycle & Pedestrian Facilities (2.71% BFDIF share BP-1 & BP-9)		NOTE: Pedestrian share equals 2.71% (3,780/139,513) due to increase in population growth on west side to Year 2030 per Nexus study							
BP-1	Bayshore Bikeway (bike path) between E Street & F Streets*****	$420,961.34	$449,165.75	2.71%	$12,169.81	$164.01				
BP-9	Bayshore Bikeway (bike path) between F Street & H Streets*****	$627,252.54	$669,278.46	2.71%	$18,133.60	$244.39				
BAY-15	Lagoon Drive (950 LF) Bike and Pedestrian Trail		$1,901,155.00	100.00%	$1,901,155.00	$30,102.10		None Listed		
BAY-27	Bayshore Bikeway Bayfront Loop (14,400 LF) with bike bridge		$2,172,626.00	100.00%	$2,172,626.00	$34,400.46				
	SUBTOTAL: BIKEWAYS				**$4,104,084.41**					
	*****From Chula Vista Bikeway Master Plan, approved February 2011									
	Bayfront Roadways -RAS (new estimates prepared in 2014)							**CVBMP EIR MITIGATION**		
BAY-13	E Street extension Bay Blvd to H Street (52'X5450')(BAY-2)	$2,211,066.00	$9,363,406.00	100.00%	$9,363,406.00	$148,256.28		4.2-1, 4.2-24, 4.2-26, 4.2-28//6.5-2, 6.5- 4, 6.5-6		
BAY-17	H Street from E Street to Marina Pkwy (52'X1650')(BAY-6) (excludes SDUPD Section)	$530,655.84	$4,725,901.00	100.00%	$4,725,901.00	$74,827.96		4.2-1, 4.2-3, 4.2-9, 4.2-12		
BAY-18	Marina Parkway 2-lane from H St. to C St. (52'X1100') (GP-2)(BAY-8)	$1,973,400.00	$2,301,009.00	100.00%	$2,301,009.00	$36,433.22		4.2-1		
BAY-20	Marina Parkway 2-lane from J St. to C St. (52'X1450') (GP-2)(BAY-8)		$2,449,655.00	100.00%	$2,449,655.00	$38,786.82		4.2-1		
BAY-9	I-5/J Street NB on-ramp add (EB-LT) & WB-RT lanes	$214,800.00	$510,000.00	100.00%	$510,000.00	$10,000.00		4.2-23, 6.5-3, 6.5-8		59
BAY-22	J Street from Marina Pkwy to Bay Blvd (1650 LF) (GP-8): SB-WB Rt. Lane	$880,600.00	$3,609,415.00	100.00%	$3,609,415.00	$57,149.98		4.2-13, 4.2-16, 4.2-19, 4.2-22, 4.2-29 6.5-7		
BAY-29	Pump Station and Sewer Relocation Costs (Marina Pkwy. And J Street)		$1,961,283.33	100.00%	$1,961,283.33	$30,935.00				
	SUBTOTAL				**$24,920,669.33**					
	Bayfront Roadways -non-RAS (new estimates prepared in 2014)									
BAY-14	F Street from railroad to west cul-de-sac (1863 LF)		$2,706,882.00	100.00%	$2,706,882.00	$42,859.64		4.2-25,		
BAY-19	"Street A" from H Street to C Street (74'X1150')(BAY-11)	$1,698,300.00	$2,629,855.00	100.00%	$2,629,855.00	$41,640.02		4.2-1, 4.2-11, 4.2-21 6.5-5		
BAY-21	"Street A" from C Street to J Street (1400 LF)(BAY-11)		$2,785,435.00	100.00%	$2,785,435.00	$44,103.42		4.2-1, 4.2-14, 4.2-19, 4.2-30 6.5-5		
BAY-25	"Street A - South of J Street to Street "B"		$7,689,670.00	100.00%	$7,689,670.00	$121,755.04		4.2-20		
BAY-23	Street C - Marina Parkway to Bay Blvd.(2600 LF)		$2,571,625.00	100.00%	$2,571,625.00	$40,718.04		4.2-11		
BAY-26	Street B - "A" Street to Bay Blvd. (2600 LF)		$8,226,110.00	100.00%	$8,226,110.00	$130,248.80		4.2-20		
BAY-24	Marina Way (1100 LF)		$1,470,375.00	100.00%	$1,470,375.00	$23,281.30		None Listed		
BAY-28	Traffic Signals (seven)(H/RCC)(Bay/J)(Bay/L)(I-5SB/Bay)		$2,919,672.00	100.00%	$2,919,672.00	$46,228.86		4.2-1, 4.2-5, 4.2-6, 4.2-7, 4.2-15, 4.2-17, 4.2-18, 4.2-19		
BAY-16	G Street (300 LF)	$407,387.00		100.00%	$407,387.00	$6,450.40		4.2-2		
					$31,407,011.00					
	Non-RAS				**$35,511,095.41**					
	Bayfront Roadways RAS subtotal (I-5 costs in Bayfront share).				**$24,920,669.33**			All numbers from San Diego Unified Port District		
	Total Program Cost				**$68,438,679.98**					
					7,248 EDUs					
	Additional RAS Contribution				**$3,438.28 /EDU**					

NOTE 1: Includes costs of: design, surveying, civil & geotechnical engineering, inspection, remediation, mitigation, R/W, utility coordination & construction contingencies.

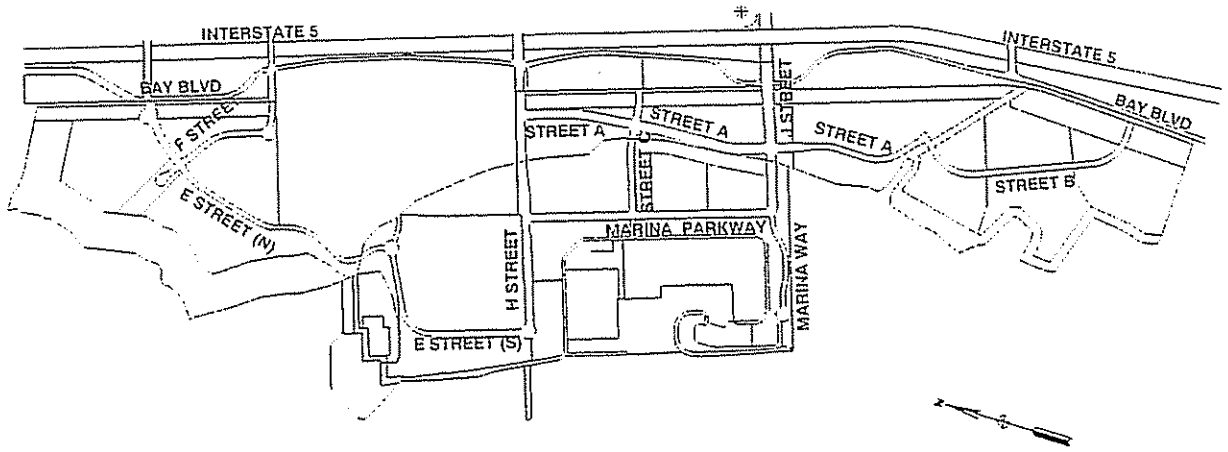
BFDIF: 7248 EDU's **$9,442.42**

Percent BFDIF for Regional Arterial System (I-5 & RAS) ***48.11%*** **/EDU**

Appendix A:

Bayfront Roadways RAS

CHULA VISTA BFDIF FACILITY EXHIBIT
FACILITY NO. BAY-9



RICK ENGINEERING COMPANY
9620 FRIARS ROAD
SAN DIEGO, CA 92186
619.291.0707
(FAX)619.291.4165

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7/11/14

BAYFRONT DEVELOPMENT IMPACT FEE (BFDIF)

October 10, 2014

COST ESTIMATE

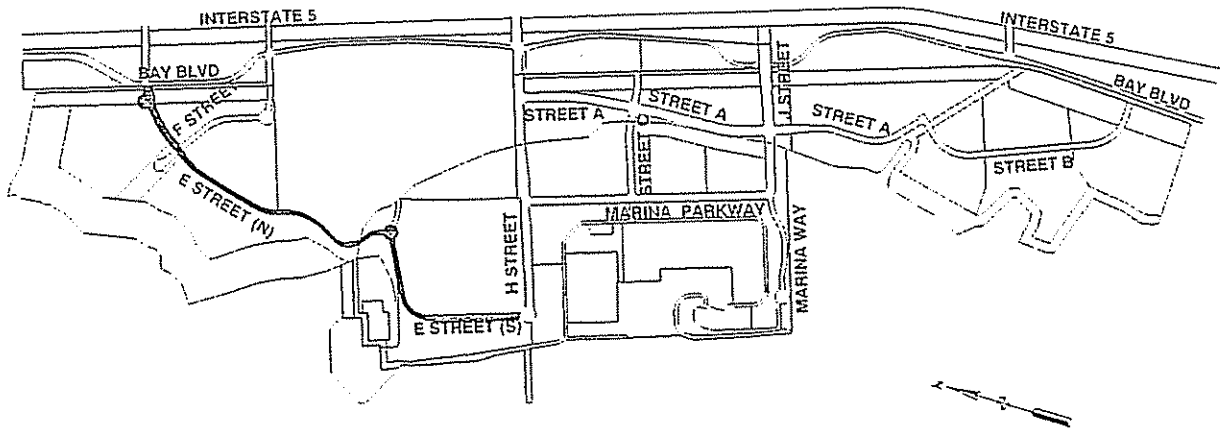
FACILITY ID: BAY - 9

Intersection of J Street and Interstate 5 North-bound
This project includes improvements to improve circulation from west to north.

ITEM	DESCRIPTION	TOTAL
	Construction of Improvements at J Street and I-5	$500,000
	City Project Administration (2%)	$10,000
	PROJECT COST	**$ 510,000**

Notes:
(1) The source of this estimate is Cumming Corp.
(2) Dewatering cost prorated based on length of storm drain. Sewer dewatering is not included.
(3) Storm drain cost does not include cost of site drainage. Only roadway drainage is included.
(4) Hard costs include General Contractor mark-ups.
(5) Cost does not include property acquisition.
(6) Costs are based on 2013 estimates. No escalation factor has been applied.

CHULA VISTA BFDIF FACILITY EXHIBIT
FACILITY NO. BAY-13



RICK ENGINEERING COMPANY
5620 FRIARS ROAD
SAN DIEGO, CA 92110
619.291.0707
(FAX)619.291.4165

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7/11/14

BAYFRONT DEVELOPMENT IMPACT FEE (BFDIF)

July 11, 2014

COST ESTIMATE

FACILITY ID: BAY - 13

E STREET

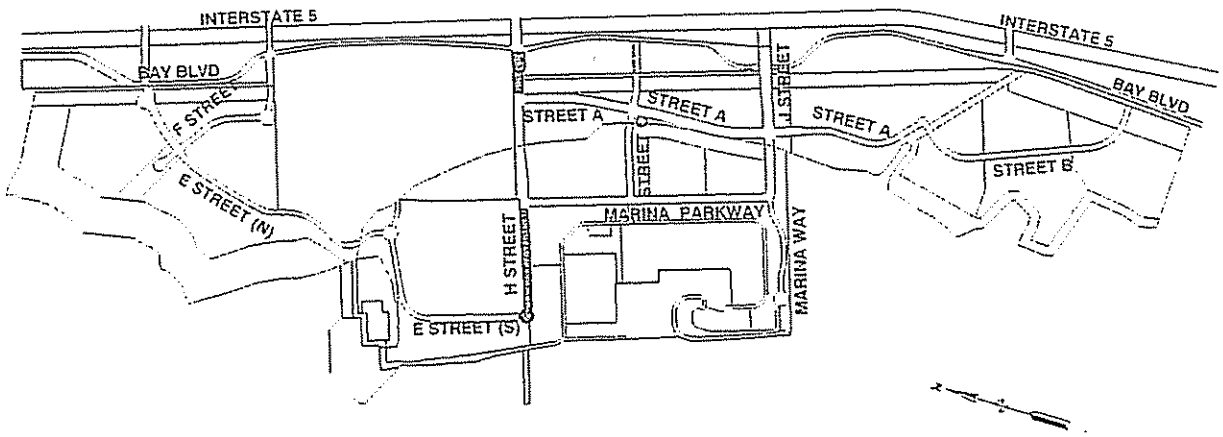
This project includes construction of a new two-lane road from Bay Blvd to H Street to allow for redevelopment of the area as part of the Chula Vista Bayfront Master Plan. Street Improvements will include streetscape enhancements such as street trees, lighting, furnishings, etc.

Length (LF) = 5,450 LF

ITEM	DESCRIPTION	TOTAL
1	Site Preparation	$ 116,600
2	Demolition	$ 320,258
3	Earthwork	$ 994,098
4	Irrigation	$ 10,746
5	Storm Drainage for Roadway	$ 695,618
6	Street Lighting	$ 471,743
7	Roadways	$ 2,329,272
8	Streetscape	$ 1,638,738
9	Hazmat Earthwork	$ 46,035
10	Hazmat Disposal Fee	$ 60,100
11	Water Quality	$ 517,216
12	Dewatering	$ 212,390
	TOTAL HARD COSTS	$ 7,412,814
	SOFT COSTS	
	Soft Costs	$ 1,802,336
	City Project Administration (2% of total hard costs)	$ 148,256
	TOTAL SOFT COSTS	$ 1,950,592
	PROJECT COST	$ 9,363,406

Notes:
(1) The source of this estimate is Cumming Corp.
(2) Dewatering cost prorated based on length of storm drain. Sewer dewatering is not included.
(3) Storm drain cost does not include cost of site drainage. Only roadway drainage is included.
(4) Hard costs include General Contractor mark-ups.
(5) Cost does not include property acquisition.
(6) Costs are based on 2013 estimates. No escalation factor has been applied.

CHULA VISTA BFDIF FACILITY EXHIBIT
FACILITY NO. BAY-17



RICK ENGINEERING COMPANY
5620 FRIARS ROAD
SAN DIEGO, CA 92110
619.291.0707
(FAX)619.291.4165

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BAYFRONT DEVELOPMENT IMPACT FEE (BFDIF)

July 10, 2014

COST ESTIMATE

FACILITY ID: BAY - 17

H STREET

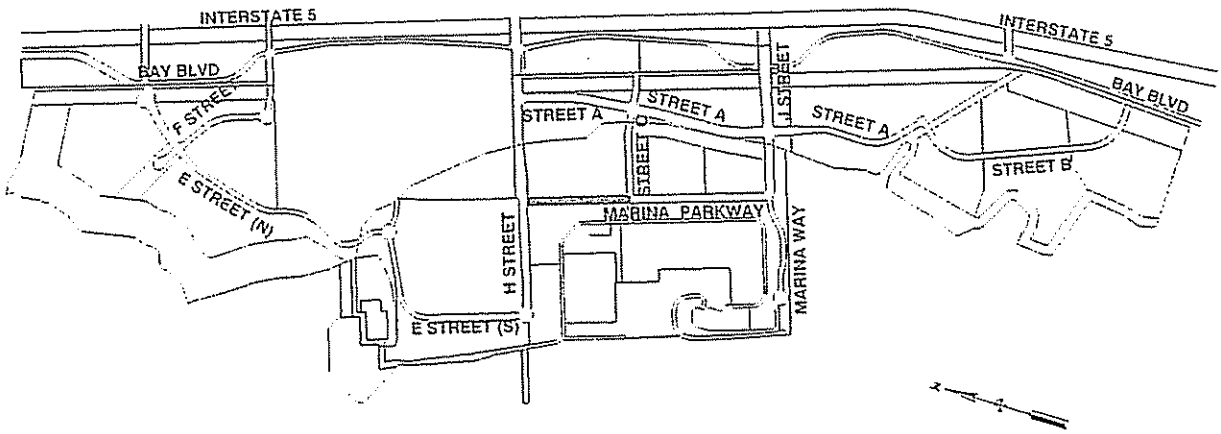
This project includes construction of a two to three lane road from E street to Marina Parkway and a five lane Major Road from Street A to Bay Boulevard to integrate with the new segment of H Street that is currently under construction for redevelopment of the area as part of the Chula Vista Bayfront Master Plan. Street Improvements will include streetscape enhancements such as street trees, lighting, furnishings, etc.

Length (LF) = 1,650 LF

ITEM	DESCRIPTION	TOTAL
1	Site Preparation	$ 54,140
2	Demolition	$ 191,046
3	Earthwork	$ 411,583
4	Irrigation	$ 3,107
5	Storm Drainage for Roadway	$ 372,198
6	Street Lighting	$ 142,821
7	Roadways	$ 1,391,842
8	Streetscape	$ 960,782
9	Hazmat Earthwork	$ 22,468
10	Hazmat Disposal Fee	$ 29,332
11	Water Quality	$ 113,417
12	Dewatering	$ 48,661
	TOTAL HARD COSTS	$ 3,741,398
	SOFT COSTS	
	Soft Costs	$ 909,675
	City Project Administration (2% of total hard costs)	$ 74,828
	TOTAL SOFT COSTS	$ 984,503
	PROJECT COST	$ 4,725,901

Notes:
(1) The source of this estimate is Cumming Corp.
(2) Dewatering cost prorated based on length of storm drain. Sewer dewatering is not included.
(3) Storm drain cost does not include cost of site drainage. Only roadway drainage is included.
(4) Hard costs include General Contractor mark-ups.
(5) Cost does not include property acquisition.
(6) Costs are based on 2013 estimates. No escalation factor has been applied.

CHULA VISTA BFDIF FACILITY EXHIBIT
FACILITY NO. BAY-18



RICK ENGINEERING COMPANY
5620 FRIARS ROAD
SAN DIEGO, CA 92110
619.291.0707
(FAX)619.291.4165

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BAYFRONT DEVELOPMENT IMPACT FEE (BFDIF)

July 10, 2014

COST ESTIMATE

FACILITY ID: BAY - 18

MARINA PARKWAY

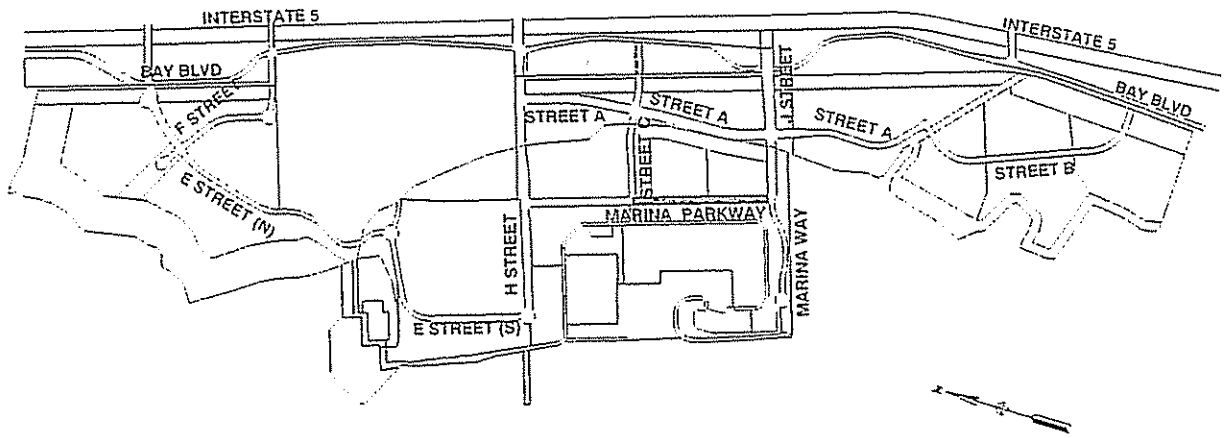
This project includes improvements to Marina Parkway by contructing a three-lane road from H Street to Street C to allow for redevelopment of the area as part of the Chula Vista Bayfront Master Plan. Street Improvements will include streetscape enhancements such as street trees, lighting, furnishings, etc.

Length (LF) = 1,100 LF

ITEM	DESCRIPTION	TOTAL
1	Site Preparation	$ 30,259
2	Demolition	$ 231,814
3	Earthwork	$ 242,035
4	Irrigation	$ 2,233
5	Storm Drainage for Roadway	$ 228,448
6	Street Lighting	$ 95,214
7	Roadways	$ 644,571
8	Streetscape	$ 289,582
9	Hazmat Earthwork	$ 15,956
10	Hazmat Disposal Fee	$ 20,831
11	Water Quality	$ -
12	Dewatering	$ 20,718
	TOTAL HARD COSTS	$ 1,821,661
	SOFT COSTS	
	Soft Costs	$ 442,915
	City Project Administration (2% of total hard costs)	$ 36,433
	TOTAL SOFT COSTS	$ 479,348
	PROJECT COST	$ 2,301,009

Notes:
(1) The source of this estimate is Cumming Corp.
(2) Dewatering cost prorated based on length of storm drain. Sewer dewatering is not included.
(3) Storm drain cost does not include cost of site drainage. Only roadway drainage is included.
(4) Hard costs include General Contractor mark-ups.
(5) Cost does not include property acquisition.
(6) Costs are based on 2013 estimates. No escalation factor has been applied.

CHULA VISTA BFDIF FACILITY EXHIBIT
FACILITY NO. BAY-20



RICK ENGINEERING COMPANY
3620 FRIARS ROAD
SAN DIEGO, CA 92110
619.291.0707
FAX 619.291.4165

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7/11/14

BAYFRONT DEVELOPMENT IMPACT FEE (BFDIF)

July 10, 2014

COST ESTIMATE

FACILITY ID: BAY - 20

MARINA PARKWAY

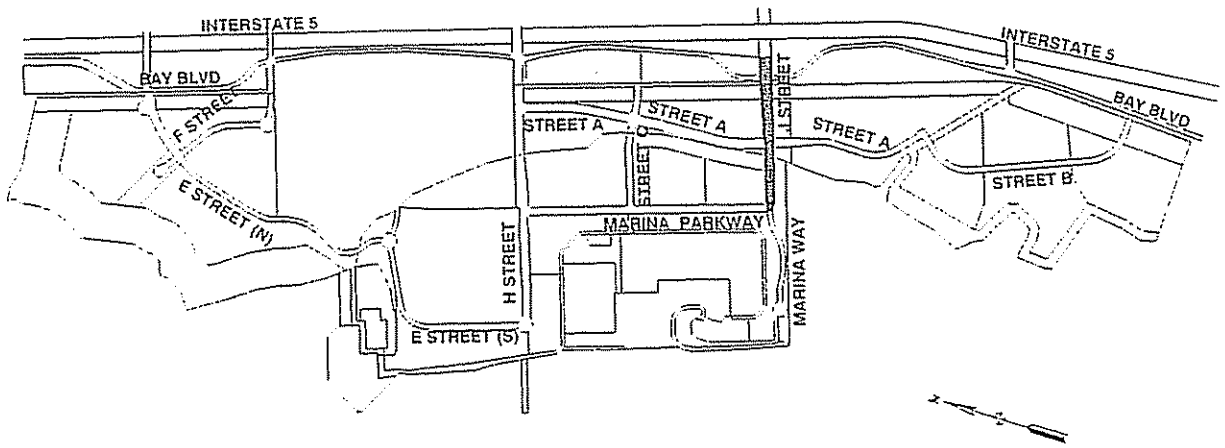
This project includes improvements to Marina Parkway by contructing a three-lane road from Street C to J Street to allow for redevelopment of the area as part of the Chula Vista Bayfront Master Plan. Street Improvements will include streetscape enhancements such as street trees, lighting, furnishings, etc.

Length (LF) = 1,450 LF

ITEM	DESCRIPTION	TOTAL
1	Site Preparation	$ 35,947
2	Demolition	$ 187,321
3	Earthwork	$ 284,174
4	Irrigation	$ 2,233
5	Storm Drainage for Roadway	$ 132,338
6	Street Lighting	$ 125,510
7	Roadways	$ 770,499
8	Streetscape	$ 352,404
9	Hazmat Earthwork	$ 18,051
10	Hazmat Disposal Fee	$ 23,566
11	Water Quality	$ -
12	Dewatering	$ 7,299
	TOTAL HARD COSTS	$ 1,939,341
	SOFT COSTS	
	Soft Costs	$ 471,527
	City Project Administration (2% of total hard costs)	$ 38,787
	TOTAL SOFT COSTS	$ 510,314
	PROJECT COST	$ 2,449,655

Notes:
(1) The source of this estimate is Cumming Corp.
(2) Dewatering cost prorated based on length of storm drain. Sewer dewatering is not included.
(3) Storm drain cost does not include cost of site drainage. Only roadway drainage is included.
(4) Hard costs include General Contractor mark-ups.
(5) Cost does not include property acquisition.
(6) Costs are based on 2013 estimates. No escalation factor has been applied.

CHULA VISTA BFDIF FACILITY EXHIBIT
FACILITY NO. BAY-22



RICK ENGINEERING COMPANY
5620 FRIARS ROAD
SAN DIEGO, CA 92110
619.291.0507
(FAX)619.291.4165

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BAYFRONT DEVELOPMENT IMPACT FEE (BFDIF)

July 10, 2014

COST ESTIMATE

FACILITY ID: BAY - 22

J Street

This project includes improvements to J Street by contructing a four-six lane road from Marina Parkway to Bay Boulevard to allow for redevelopment of the area as part of the Chula Vista Bayfront Master Plan. Street improvements will include streetscape enhancements such as street trees, lighting, furnishings, etc.

Length (Lf 1,650 LF

ITEM	DESCRIPTION		TOTAL
1	Site Preparation	$	43,797
2	Demolition	$	355,417
3	Earthwork	$	352,753
4	Irrigation	$	3,225
5	Storm Drainage for Roadway	$	126,696
6	Street Lighting	$	142,821
7	Roadways	$	1,116,899
8	Streetscape	$	497,057
9	Hazmat Earthwork	$	15,799
10	Hazmat Disposal Fee	$	20,626
11	Water Quality	$	119,232
12	Dewatering	$	63,178
	TOTAL HARD COSTS	$	2,857,499
	SOFT COSTS		
	Soft Costs	$	694,766.20
	City Project Administration (2% of total hard costs)	$	57,150
	TOTAL SOFT COSTS	$	751,916
	PROJECT COST	$	3,609,415

Notes:
(1) The source of this estimate is Cumming Corp.
(2) Dewatering cost prorated based on length of storm drain. Sewer dewatering is not included.
(3) Storm drain cost does not include cost of site drainage. Only roadway drainage is included.
(4) Hard costs include General Contractor mark-ups.
(5) Cost does not include property acquisition.
(6) Costs are based on 2013 estimates. No escalation factor has been applied.

COST ESTIMATE

FACILITY BAY-29

Pump Station and Sewer Relocation Costs (Marina Pkwy. and J St.)

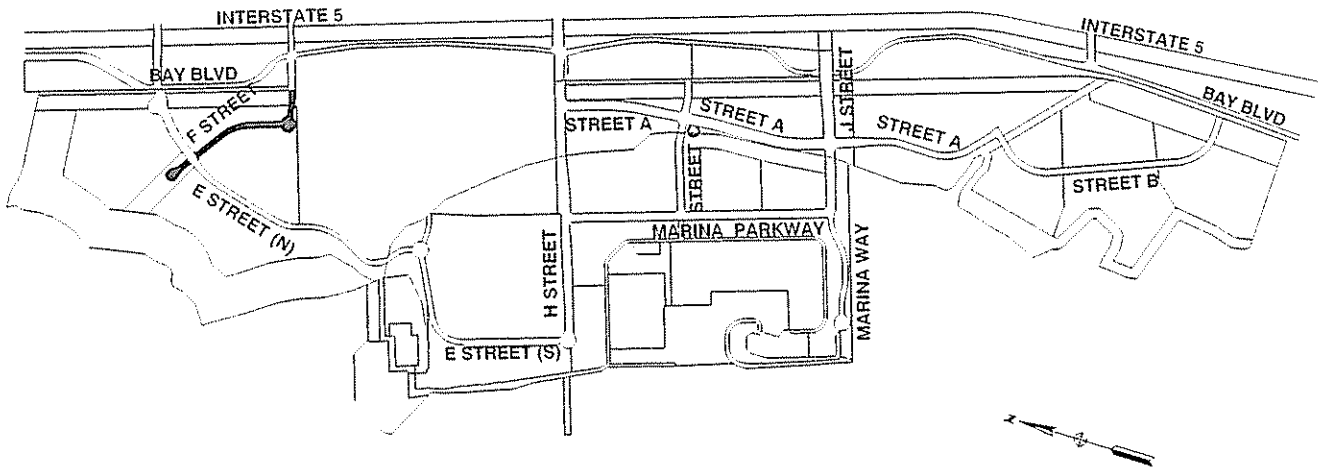
ITEM	DESCRIPTION	UNITS	QTY.	UNIT COST	TOTAL	ITEM TOTAL
1	Relocation, Pump Station 11 - Marina Parkway				$ 575,000.00	
2	Sewer and force main relocation - J Street				$ 270,000.00	
3	Sewer and force main relocation - Marina Parkway (C St to J St)				$ 500,000.00	
	Subtotal hard costs				**$ 1,345,000.00**	
	Hard costs contingencies (15%)				$ 201,750.00	
	Admin (2% hard costs)				$ 30,935.00	
	TOTAL HARD COSTS				**$ 1,577,685.00**	
	SOFT COSTS					
	Contingencies and soft costs (24.314%)				$ 383,598.33	
	TOTAL SOFT COSTS & CONTINGENCIES				**$ 383,598.33**	
	PROJECT COST				**$ 1,961,283.33**	
	TOTAL PROJECT COST				**$ 1,961,283.33**	

Source: Psomas Engineering

Appendix B:

Bayfront Roadways
Non-RAS

CHULA VISTA BFDIF FACILITY EXHIBIT
FACILITY NO. BAY-14



RICK ENGINEERING COMPANY
5620 FRIARS ROAD
SAN DIEGO, CA 92110
619.291.0707
(FAX)619.291.4165

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7/11/14

BAYFRONT DEVELOPMENT IMPACT FEE (BFDIF)

July 10, 2014

COST ESTIMATE

FACILITY ID: BAY - 14

F STREET

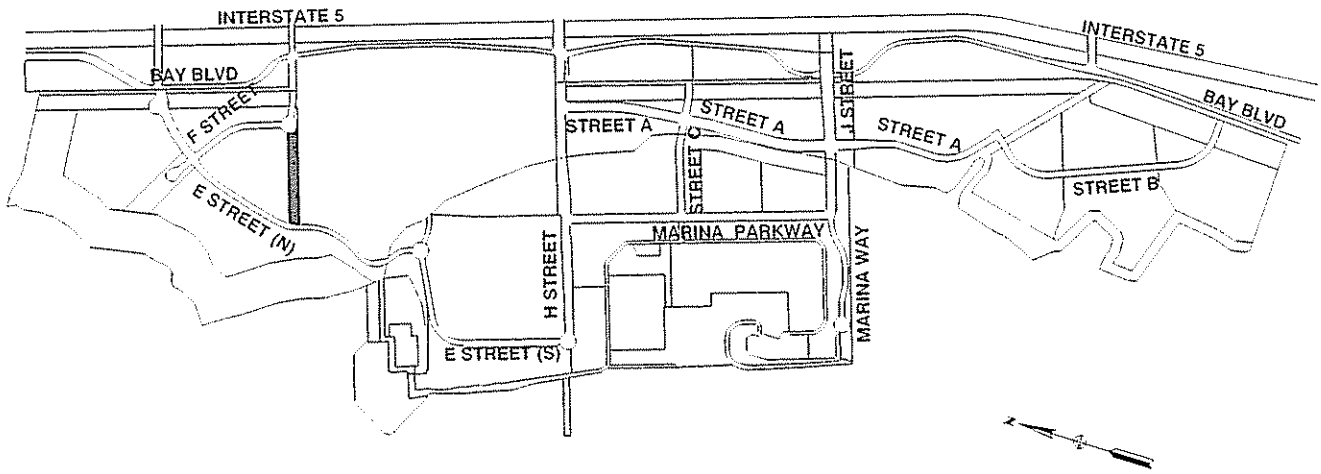
This project includes construction of a new two-lane road from the railroad to the cul-de-sac to allow for redevelopment of the area as part of the Chula Vista Bayfront Master Plan. Street Improvements will include streetscape enhancements such as street trees, lighting, furnishings, etc.

Length (LF) = 1,700 LF

ITEM	DESCRIPTION	TOTAL
1	Site Preparation	$ 31,834
2	Demolition	$ -
3	Earthwork	$ 416,139
4	Irrigation	$ 3,266
5	Storm Drainage for Roadway	$ 111,075
6	Street Lighting	$ 147,149
7	Roadways	$ 792,493
8	Streetscape	$ 436,849
9	Hazmat Earthwork	$ 7,036
10	Hazmat Disposal Fee	$ 9,185
11	Water Quality	$ 146,286
12	Dewatering	$ 41,669
	TOTAL HARD COSTS	$ **2,142,982**
	SOFT COSTS	
	Soft Costs	$ 521,040
	City Project Administration (2% of total hard costs)	$ 42,860
	TOTAL SOFT COSTS	$ **563,900**
	PROJECT COST	$ **2,706,882**

Notes:
(1) The source of this estimate is Cumming Corp.
(2) Dewatering cost prorated based on length of storm drain. Sewer dewatering is not included.
(3) Storm drain cost does not include cost of site drainage. Only roadway drainage is included.
(4) Hard costs include General Contractor mark-ups.
(5) Cost does not include property acquisition.
(6) Costs are based on 2013 estimates. No escalation factor has been applied.

CHULA VISTA BFDIF FACILITY EXHIBIT
FACILITY NO. BAY-15



RICK ENGINEERING COMPANY
5620 FRIARS ROAD
SAN DIEGO, CA 92110
619.291.0707
(FAX)619.291.4165

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BAYFRONT DEVELOPMENT IMPACT FEE (BFDIF)

July 10, 2014

COST ESTIMATE

FACILITY ID: BAY - 15

LAGOON DRIVE

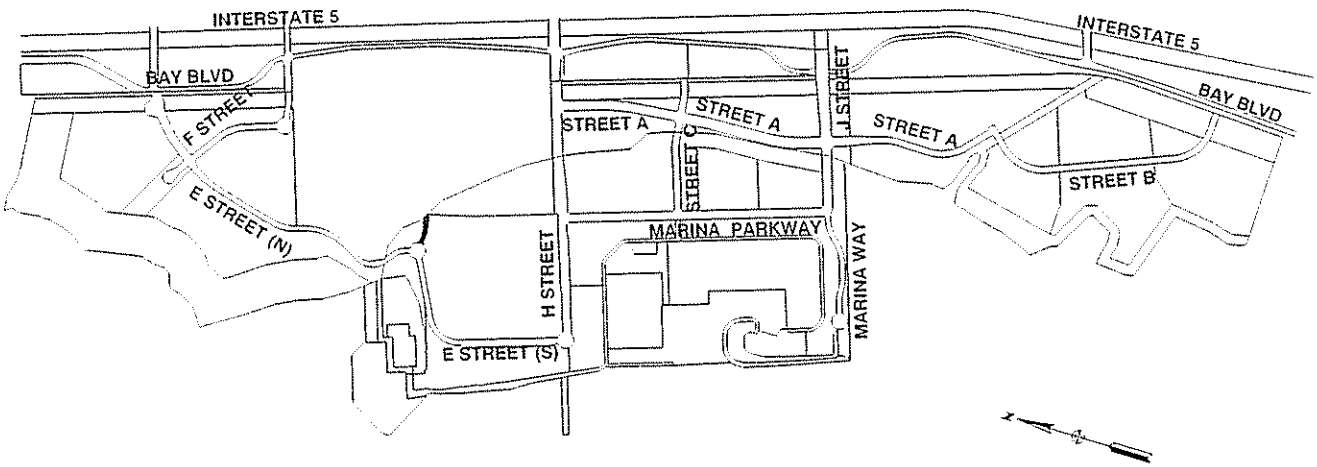
This project includes demolition of the existing road from Street to E Street to a bicycle and pedestrian access road as part of the Chula Vista Bayfront Master Plan.

Length (LF) = 950 LF

ITEM	DESCRIPTION	TOTAL
1	Site Preparation	$ -
2	Demolition	$ -
3	Earthwork	$ -
4	Irrigation	$ 11,789
5	Storm Drainage for Roadway	$ -
6	Street Lighting	$ -
7	Roadways	$ -
8	Streetscape	$ 1,493,315
9	Hazmat Earthwork	$ -
10	Hazmat Disposal Fee	$ -
11	Water Quality	$ -
12	Dewatering	$ -
	TOTAL HARD COSTS	**$ 1,505,105**
	SOFT COSTS	
	Soft Costs	$ 365,948
	City Project Administration (2% of total hard costs)	$ 30,102
	TOTAL SOFT COSTS	**$ 396,050**
	PROJECT COST	**$ 1,901,155**

Notes:
(1) The source of this estimate is Cumming Corp.
(2) Dewatering cost prorated based on length of storm drain. Sewer dewatering is not included.
(3) Storm drain cost does not include cost of site drainage. Only roadway drainage is included.
(4) Hard costs include General Contractor mark-ups.
(5) Cost does not include property acquisition.
(6) Costs are based on 2013 estimates. No escalation factor has been applied.

CHULA VISTA BFDIF FACILITY EXHIBIT
FACILITY NO. BAY-16



RICK ENGINEERING COMPANY
5620 FRIARS ROAD
SAN DIEGO, CA 92110
619.291.0707
(FAX)619.291.4165

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7/11/14

BAYFRONT DEVELOPMENT IMPACT FEE (BFDIF)

July 10, 2014

COST ESTIMATE

FACILITY ID: BAY - 16

G STREET

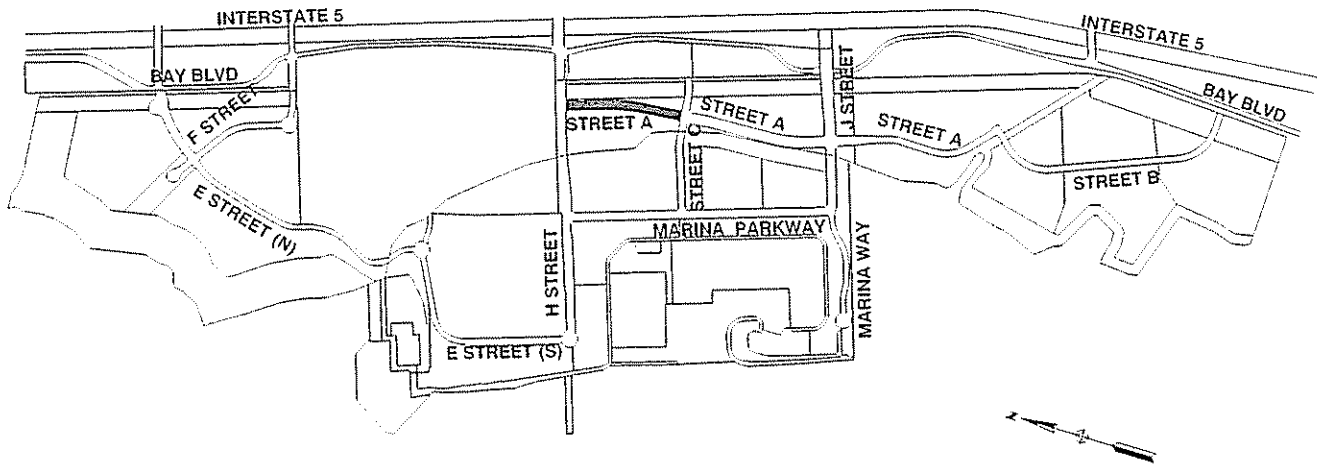
This project includes construction of a new two-lane commercial driveway off of E-Street to allow for access to the UTC property as part of the Chula Vista Bayfront Master Plan.

Length (LF) = 300 LF

ITEM	DESCRIPTION	TOTAL
1	Site Preparation	$ 4,422
2	Demolition	$ 26,109
3	Earthwork	$ 31,699
4	Irrigation	$ 577
5	Storm Drainage for Roadway	$ 12,750
6	Street Lighting	$ 25,968
7	Roadways	$ 116,969
8	Streetscape	$ 71,491
9	Hazmat Earthwork	$ 1,170
10	Hazmat Disposal Fee	$ 1,527
11	Water Quality	$ 26,678
12	Dewatering	$ 3,159
	TOTAL HARD COSTS	**$ 322,520**
	SOFT COSTS	
	Soft Costs	$ 78,417
	City Project Administration (2% of total hard costs)	$ 6,450
	TOTAL SOFT COSTS	**$ 84,867**
	PROJECT COST	**$ 407,387**

Notes:
(1) The source of this estimate is Cumming Corp.
(2) Dewatering cost prorated based on length of storm drain. Sewer dewatering is not included.
(3) Storm drain cost does not include cost of site drainage. Only roadway drainage is included.
(4) Hard costs include General Contractor mark-ups.
(5) Cost does not include property acquisition.
(6) Costs are based on 2013 estimates. No escalation factor has been applied.
(7) Cost does not include property acquisition.

CHULA VISTA BFDIF FACILITY EXHIBIT
FACILITY NO. BAY-19



RICK ENGINEERING COMPANY
5620 FRIARS ROAD
SAN DIEGO, CA 92110
619.291.0707
(FAX)619.291.4165

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BAYFRONT DEVELOPMENT IMPACT FEE (BFDIF)

July 10, 2014

COST ESTIMATE

FACILITY ID: BAY - 19

STREET A

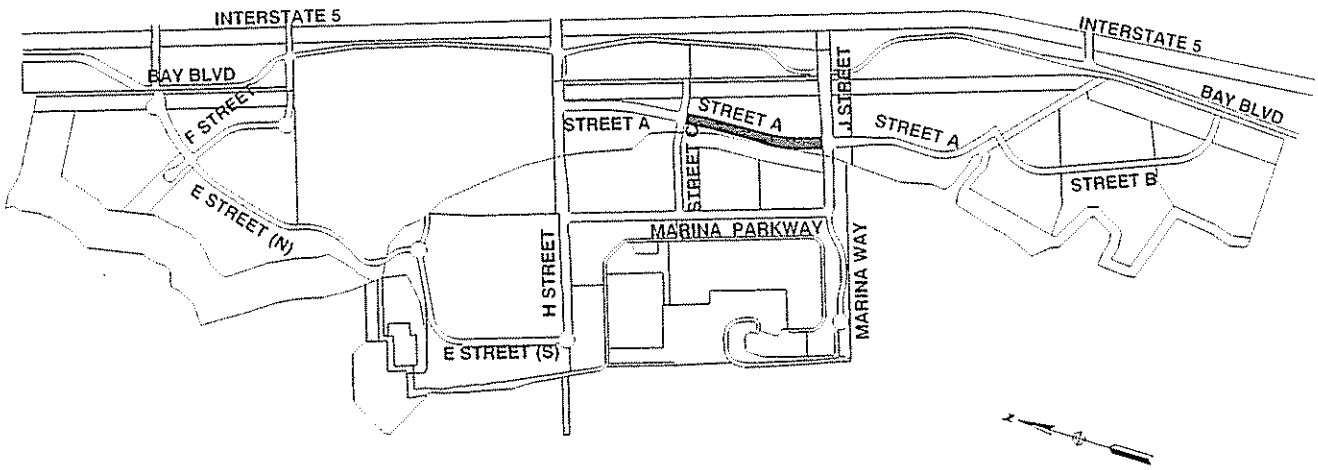
This project includes construction of a four-lane road from H Street to Street C to allow for redevelopment of the area as part of the Chula Vista Bayfront Master Plan. Street Improvements will include streetscape enhancements such as street trees, lighting, furnishings, etc.

Length (LF) = 1,150 LF

ITEM	DESCRIPTION	TOTAL
1	Site Preparation	$ 36,298
2	Demolition	$ 201,454
3	Earthwork	$ 274,214
4	Irrigation	$ 2,397
5	Storm Drainage for Roadway	$ 118,040
6	Street Lighting	$ 99,542
7	Roadways	$ 898,883
8	Streetscape	$ 308,392
9	Hazmat Earthwork	$ 6,442
10	Hazmat Disposal Fee	$ 8,410
11	Water Quality	$ 108,491
12	Dewatering	$ 19,436
	TOTAL HARD COSTS	**$ 2,082,001**
	SOFT COSTS	
	Soft Costs	$ 506,213
	City Project Administration (2% of total hard costs)	$ 41,640
	TOTAL SOFT COSTS	**$ 547,853**
	PROJECT COST	**$ 2,629,855**

Notes:
(1) The source of this estimate is Cumming Corp.
(2) Dewatering cost prorated based on length of storm drain. Sewer dewatering is not included.
(3) Storm drain cost does not include cost of site drainage. Only roadway drainage is included.
(4) Hard costs include General Contractor mark-ups.
(5) Cost does not include property acquisition.
(6) Costs are based on 2013 estimates. No escalation factor has been applied.

CHULA VISTA BFDIF FACILITY EXHIBIT
FACILITY NO. BAY-21



RICK ENGINEERING COMPANY
5620 FRIARS ROAD
SAN DIEGO, CA 92110
619.291.0707
(FAX)619.291.4165

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BAYFRONT DEVELOPMENT IMPACT FEE (BFDIF)

July 10, 2014

COST ESTIMATE

FACILITY ID: BAY - 21

STREET A

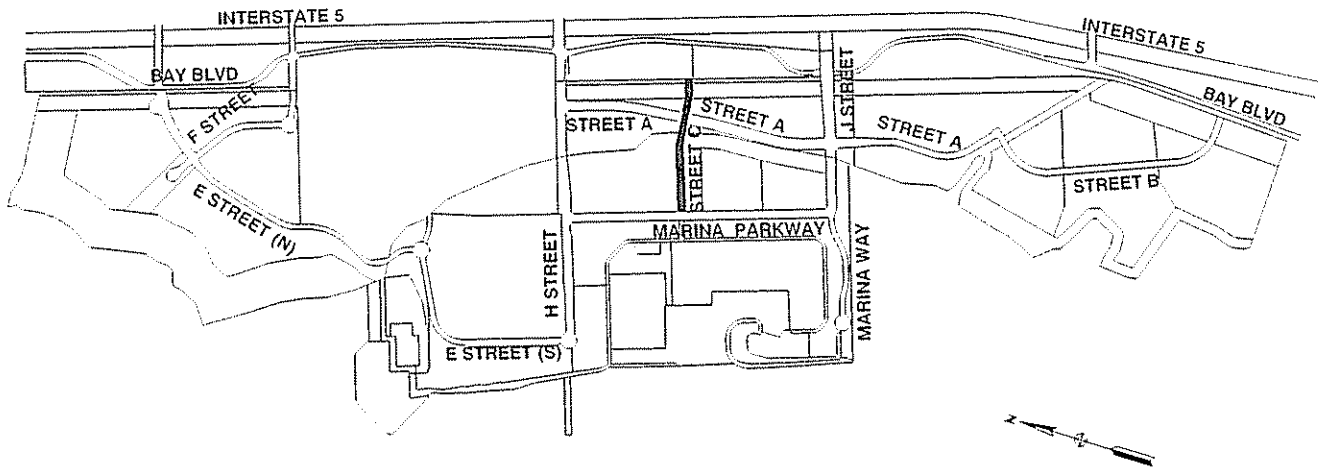
This project includes construction of a four-lane road from Street C to J Street to allow for redevelopment of the area as part of the Chula Vista Bayfront Master Plan. Street Improvements will include streetscape enhancements such as street trees, lighting, furnishings, etc.

Length (LF) = 1,400 LF

ITEM	DESCRIPTION	TOTAL
1	Site Preparation	$ 41,633
2	Demolition	$ 173,471
3	Earthwork	$ 526,532
4	Irrigation	$ 2,700
5	Storm Drainage for Roadway	$ 187,221
6	Street Lighting	$ 121,182
7	Roadways	$ 591,097
8	Streetscape	$ 379,056
9	Hazmat Earthwork	$ 12,517
10	Hazmat Disposal Fee	$ 16,341
11	Water Quality	$ 146,731
12	Dewatering	$ 6,689
	TOTAL HARD COSTS	**$ 2,205,171**
	SOFT COSTS	
	Soft Costs	$ 536,160.62
	City Project Administration (2% of total hard costs)	$ 44,103
	TOTAL SOFT COSTS	**$ 580,264**
	PROJECT COST	**$ 2,785,435**

Notes:
(1) The source of this estimate is Cumming Corp.
(2) Dewatering cost prorated based on length of storm drain. Sewer dewatering is not included.
(3) Storm drain cost does not include cost of site drainage. Only roadway drainage is included.
(4) Hard costs include General Contractor mark-ups.
(5) Cost does not include property acquisition.
(6) Costs are based on 2013 estimates. No escalation factor has been applied.

CHULA VISTA BFDIF FACILITY EXHIBIT
FACILITY NO. BAY-23



RICK ENGINEERING CORPORATION
5620 FRIARS ROAD
SAN DIEGO, CA 92110
619.291.0707
(FAX)619.291.4165

FINAL DRAFT
7/11/14

BAYFRONT DEVELOPMENT IMPACT FEE (BFDIF)

July 10, 2014

COST ESTIMATE

FACILITY ID: BAY - 23

STREET C

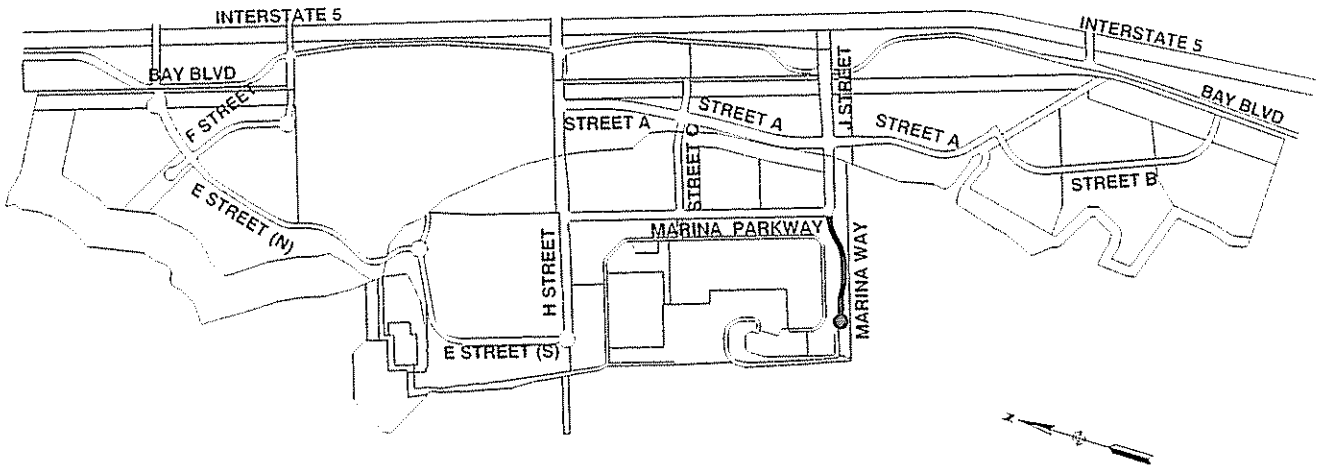
This project includes construction of a two-lane road from Marina Parkway to Bay Boulevard to allow for redevelopment of the area as part of the Chula Vista Bayfront Master Plan. Street Improvements will include streetscape enhancements such as street trees, lighting, furnishings, etc.

Length (LF) = 1,350 LF

ITEM	DESCRIPTION	TOTAL
1	Site Preparation	$ 26,224
2	Demolition	$ 119,055
3	Earthwork	$ 196,404
4	Irrigation	$ 3,080
5	Storm Drainage for Roadway	$ 240,083
6	Street Lighting	$ 116,854
7	Roadways	$ 750,661
8	Streetscape	$ 379,598
9	Hazmat Earthwork	$ 7,629
10	Hazmat Disposal Fee	$ 9,960
11	Water Quality	$ 134,759
12	Dewatering	$ 51,595
	TOTAL HARD COSTS	$ **2,035,902**
	SOFT COSTS	
	Soft Costs	$ 495,004.97
	City Project Administration (2% of total hard costs)	$ 40,718
	TOTAL SOFT COSTS	$ **535,723**
	PROJECT COST	$ **2,571,625**

Notes:
(1) The source of this estimate is Cumming Corp.
(2) Dewatering cost prorated based on length of storm drain. Sewer dewatering is not included.
(3) Storm drain cost does not include cost of site drainage. Only roadway drainage is included.
(4) Hard costs include General Contractor mark-ups.
(5) Cost does not include property acquisition.
(6) Costs are based on 2013 estimates. No escalation factor has been applied.

CHULA VISTA BFDIF FACILITY EXHIBIT
FACILITY NO. BAY-24



RICK ENGINEERING CORPORATION
5620 FRIARS ROAD
SAN DIEGO, CA 92110
619.291.0707
(FAX)619.291.4165

FINAL DRAFT
7/11/14

BAYFRONT DEVELOPMENT IMPACT FEE (BFDIF)

July 10, 2014

COST ESTIMATE

FACILITY ID: BAY - 24

MARINA WAY

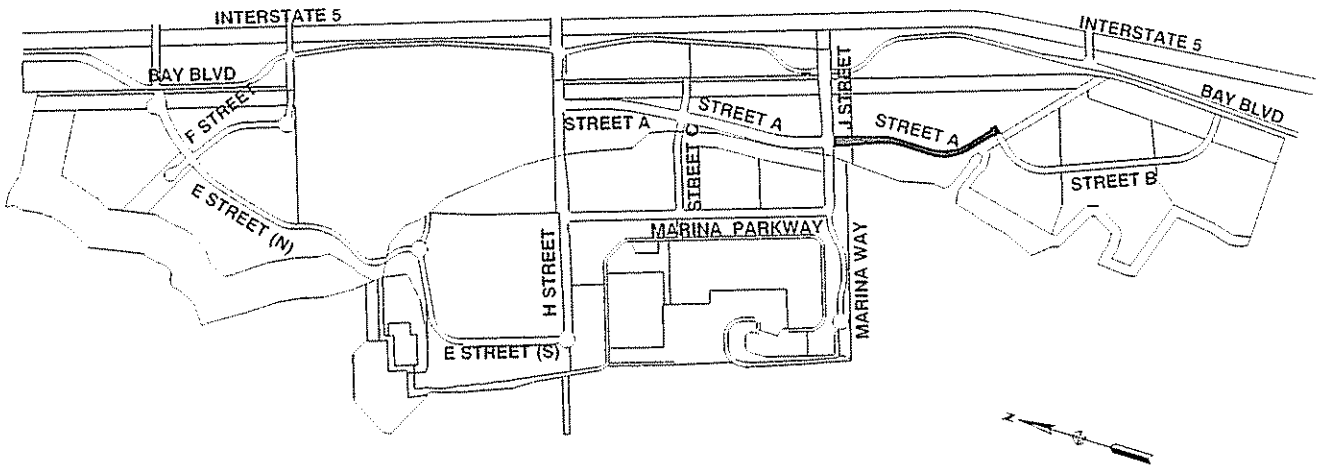
This project includes improvements to J Street by contructing a two-lane road from Marina Way West to J Street to allow for redevelopment of the area as part of the Chula Vista Bayfront Master Plan. Street Improvements will include streetscape enhancements such as street trees, lighting, furnishings, etc.

Length (LF) = 1,100 LF

ITEM	DESCRIPTION	TOTAL
1	Site Preparation	$ 18,335
2	Demolition	$ 70,808
3	Earthwork	$ 147,310
4	Irrigation	$ 2,218
5	Storm Drainage for Roadway	$ 88,467
6	Street Lighting	$ 95,214
7	Roadways	$ 450,370
8	Streetscape	$ 268,585
9	Hazmat Earthwork	$ 8,851
10	Hazmat Disposal Fee	$ 11,555
11	Water Quality	$ -
12	Dewatering	$ 2,350
	TOTAL HARD COSTS	**$ 1,164,065**
	SOFT COSTS	
	Soft Costs	$ 283,028.29
	City Project Administration (2% of total hard costs)	$ 23,281
	TOTAL SOFT COSTS	**$ 306,310**
	PROJECT COST	**$ 1,470,375**

Notes:
(1) The source of this estimate is Cumming Corp.
(2) Dewatering cost prorated based on length of storm drain. Sewer dewatering is not included.
(3) Storm drain cost does not include cost of site drainage. Only roadway drainage is included.
(4) Hard costs include General Contractor mark-ups.
(5) Cost does not include property acquisition.
(6) Costs are based on 2013 estimates. No escalation factor has been applied.

CHULA VISTA BFDIF FACILITY EXHIBIT
FACILITY NO. BAY-25



RICK ENGINEERING COMPANY
5620 FRIARS ROAD
SAN DIEGO, CA 92110
619.291.0707
(FAX)619.291.4165

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BAYFRONT DEVELOPMENT IMPACT FEE (BFDIF)

July 10, 2014

COST ESTIMATE

FACILITY ID: BAY - 25

STREET A

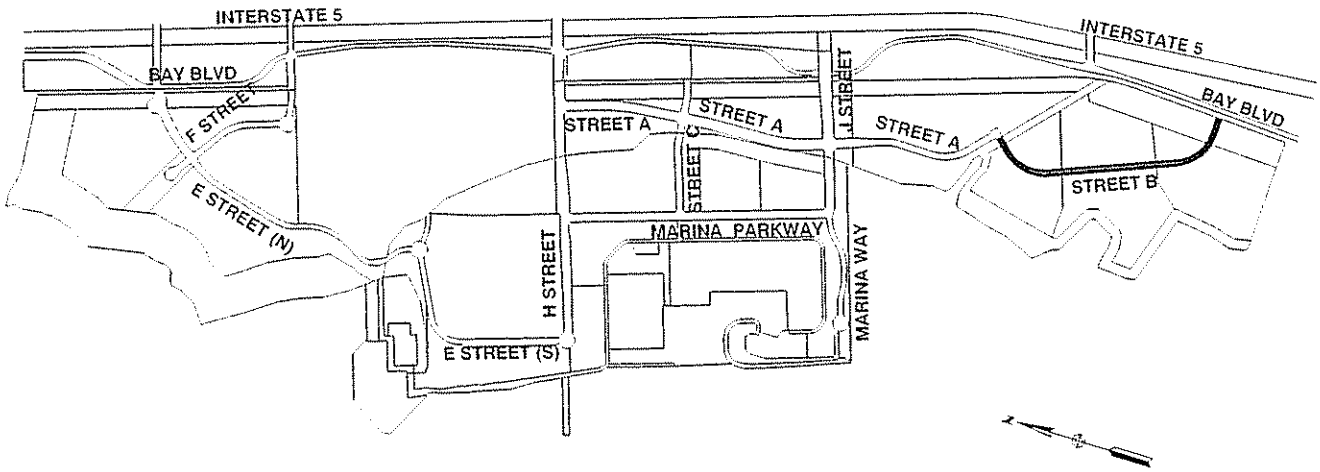
This project includes construction of a two-lane road from J Street to Street B (Otay District) to allow for redevelopment of the area as part of the Chula Vista Bayfront Master Plan. Street Improvements will include streetscape enhancements such as street trees, lighting, furnishings, etc. This project also includes a vehicular bridge

Length (LF) = 1,700 LF

ITEM	DESCRIPTION	TOTAL
1	Site Preparation	$ 41,633
2	Demolition	$ 173,471
3	Earthwork	$ 526,532
4	Irrigation	$ 26,021
5	Storm Drainage for Roadway	$ 187,221
6	Street Lighting	$ 147,149
7	Roadways	$ 510,446
8	Streetscape	$ 717,071
9	Hazmat Earthwork	$ 12,517
10	Hazmat Disposal Fee	$ 16,341
11	Water Quality	$ 146,731
12	Dewatering	$ 33,663
13	Vehicle Bridge	$ 3,548,955
	TOTAL HARD COSTS	**$ 6,087,752**
	SOFT COSTS	
	Soft Costs	$ 1,480,163.01
	City Project Administration (2% of total hard costs)	$ 121,755
	TOTAL SOFT COSTS	**$ 1,601,918**
	PROJECT COST	**$ 7,689,670**

Notes:
(1) The source of this estimate is Cumming Corp.
(2) Dewatering cost prorated based on length of storm drain. Sewer dewatering is not included.
(3) Storm drain cost does not include cost of site drainage. Only roadway drainage is included.
(4) Hard costs include General Contractor mark-ups.
(5) Cost does not include property acquisition.
(6) Costs are based on 2013 estimates. No escalation factor has been applied.

CHULA VISTA BFDIF FACILITY EXHIBIT
FACILITY NO. BAY-26



RICK ENGINEERING COMPANY
5620 FRIARS ROAD
SAN DIEGO, CA 92110
619.291.0707
(FAX)619.291.4165

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7/11/14

BAYFRONT DEVELOPMENT IMPACT FEE (BFDIF)

July 10, 2014

COST ESTIMATE

FACILITY ID: BAY - 26

STREET B

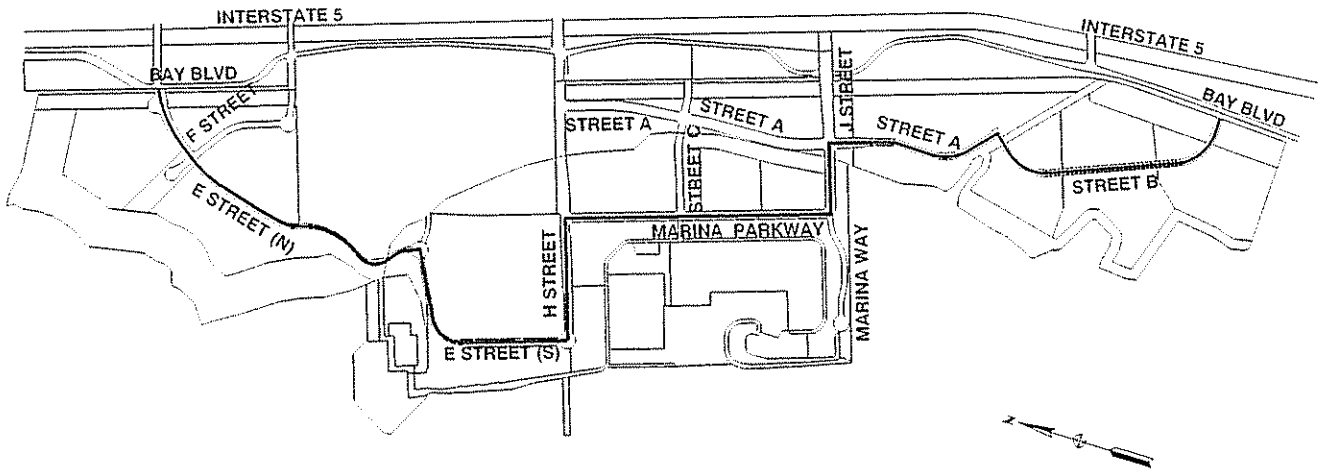
This project includes construction of a two-lane road from Street A to Bay Boulevard (Otay District) to allow for redevelopment of the area as part of the Chula Vista Bayfront Master Plan. Street Improvements will include streetscape enhancements such as street trees, lighting, furnishings, etc.

Length (LF) = 2,600 LF

ITEM	DESCRIPTION	TOTAL
1	Site Preparation	$ 66,175
2	Demolition	$ 275,731
3	Earthwork	$ 862,033
4	Irrigation	$ 41,360
5	Storm Drainage for Roadway	$ 352,718
6	Street Lighting	$ 225,052
7	Roadways	$ 832,193
8	Streetscape	$ 3,503,967
9	Hazmat Earthwork	$ 29,153
10	Hazmat Disposal Fee	$ 38,062
11	Water Quality	$ 249,887
12	Dewatering	$ 36,109
	TOTAL HARD COSTS	**$ 6,512,440**
	SOFT COSTS	
	Soft Costs	$ 1,583,420.92
	City Project Administration (2% of total hard costs)	$ 130,249
	TOTAL SOFT COSTS	**$ 1,713,670**
	PROJECT COST	**$ 8,226,110**

Notes:
(1) The source of this estimate is Cumming Corp.
(2) Dewatering cost prorated based on length of storm drain. Sewer dewatering is not included.
(3) Storm drain cost does not include cost of site drainage. Only roadway drainage is included.
(4) Hard costs include General Contractor mark-ups.
(5) Cost does not include property acquisition.
(6) Costs are based on 2013 estimates. No escalation factor has been applied.

CHULA VISTA BFDIF FACILITY EXHIBIT
FACILITY NO. BAY-27



RICK ENGINEERING COMPANY
5620 FRIARS ROAD
SAN DIEGO, CA 92110
619.291.0707
(FAX)619.291.4165

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BAYFRONT DEVELOPMENT IMPACT FEE (BFDIF)

July 10, 2014

COST ESTIMATE

FACILITY ID: BAY - 27

BAYSHORE BIKEWAY

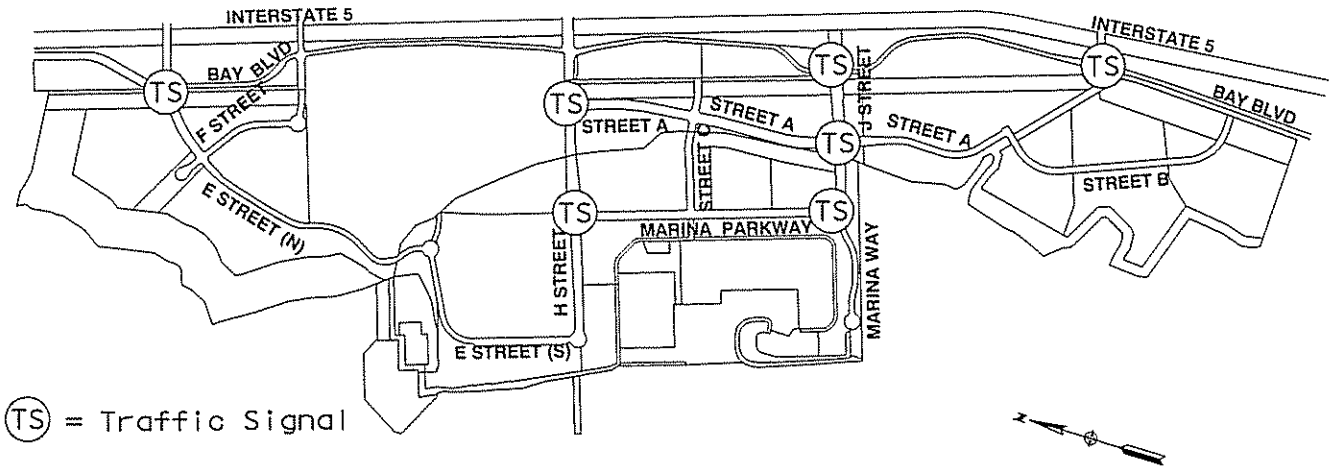
This project includes construction of new bikeway spur route from the North End of the Project Boundary at Bay Blvd. to the South End of the Project Boundary at Bay Blvd. to tie into the existing Bayshore Bikeway as part of the Chula Vista Bayfront Master Plan. The new Bayfront Loop includes bicycle trails and a pedestrian/bicycle bridge in Parcel HP 1(N).

Length (LF) = 14,400 LF

ITEM	DESCRIPTION	TOTAL
1	E Street (Bay Blvd to H Street)	$ 318,391
2	H Street (E Street to Marina Parkway)	$ 67,740
3	Marina Parkway (H Street to Street C)	$ 55,886
4	Marina Parkway (Street C to J Street)	$ 55,886
5	J Steet (Marina Parkway to Street A)	$ 7,173
6	Street A (Otay)	$ 80,652
7	Street B	$ 137,352
8	Pedestrian Bridge	$ 703,666
9	Earthwork	$ 167,588
10	Drainage	$ 125,691
	TOTAL HARD COSTS	$ **1,720,023**
	SOFT COSTS	
	Soft Costs	$ 418,202.71
	City Project Administration (2% of total hard costs)	$ 34,400
	TOTAL SOFT COSTS	$ **452,603**
	PROJECT COST	$ **2,172,626**

Notes:
(1) The source of this estimate is Cumming Corp.
(2) Dewatering cost prorated based on length of storm drain. Sewer dewatering is not included.
(3) Storm drain cost does not include cost of site drainage. Only roadway drainage is included.
(4) Hard costs include General Contractor mark-ups.
(5) Cost does not include property acquisition.
(6) Costs are based on 2013 estimates. No escalation factor has been applied.

CHULA VISTA BFDIF FACILITY EXHIBIT
FACILITY NO. BAY-28 - 1 THROUGH 7



RICK ENGINEERING COMPANY
5620 FRIARS ROAD
SAN DIEGO, CA 92110
619.291.0707
(FAX)619.291.4165

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BAYFRONT DEVELOPMENT IMPACT FEE (BFDIF)

July 10, 2014

COST ESTIMATE

FACILITY ID: Bay 28 - 1 through 7

TRAFFIC SIGNALS

This project includes construction of new traffic signals to facilitate increased traffic that will be generated by the Chula Vista Bayfront Master Plan.

ITEM	DESCRIPTION	TOTAL
- 1	Traffic Signal at H Street and Resort Conference Center truck driveway	$ 177,803
- 2	Traffic Signal at H Street and Street A	$ 355,607
- 3	Traffic Signal at J Street (H15) and Street A	$ 355,607
- 4	Traffic Signal at J Street (H14) and Marina Parkway	$ 355,607
- 5	Traffic Signal at J Street (HP-12B) and Bay Blvd	$ 355,607
- 6	Traffic Signal at L St. & Bay Blvd	$ 355,607
- 7	Traffic Signal at I-5 SB Ramps & Bay Blvd	$ 355,607
	TOTAL HARD COSTS	$ **2,311,443**
	SOFT COSTS	
	Soft Costs	$ 562,000.12
	City Project Administration (2% of total hard costs)	$ 46,229
	TOTAL SOFT COSTS	$ **608,229**
	PROJECT COST	$ **2,919,672**

Notes:
(1) The source of this estimate is Cumming Corp.
(2) Dewatering cost prorated based on length of storm drain. Sewer dewatering is not included.
(3) Storm drain cost does not include cost of site drainage. Only roadway drainage is included.
(4) Hard costs include General Contractor mark-ups.
(5) Cost does not include property acquisition.
(6) Costs are based on 2013 estimates. No escalation factor has been applied.

Appendix C:

Traffic Impacts and Mitigation Measures

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
4.2: Traffic and Circulation		
Significant Impact 4.2-1: Development of the project components without adequate access and frontage would result in a significant impact related to roadway design.	**Mitigation Measure 4.2-1** Prior to the issuance of any certificates of occupancy for any development on H-3 in Phase I, the Port or Port tenant, as appropriate, shall: • Construct H Street west of Marina Parkway as a 2-lane Class III Collector • Construct E Street as a ~~two~~2-lane Class III Collector along Parcel H-3. This would provide a connection to Lagoon Drive via Marina Parkway. • Construct a traffic signal at H Street and ~~Gaylord~~ RCC Truck Driveway. Prior to the issuance of building permits for any development on H-13 or H-14 in Phase I, the applicant shall: • Rebuild that portion of Marina Parkway fronting H-13 and H-14 between ~~E Street~~Sandpiper Way and J Street as a ~~three~~3-lane Class II Collector with excess ROW used for pedestrian facilities, or secure such construction to the satisfaction to the City engineer. Frontage improvements for the remaining segments of Marina Parkway J Street and Sandpiper Way will be constructed in conjunction with the development of the adjacent parcels to these frontages in subsequent phases. • Construct Street A north of J Street would be constructed as a ~~two~~2-lane Class III Collector, or secure such construction to the satisfaction of the City Engineer.~~.~~	Less than significant
Significant Impact 4.2-2: The Phase I roadway segment of Lagoon Drive/F Street (Marina Parkway to Bay Boulevard) will experience congested LOS F conditions and will require mitigation.	**Mitigation Measure 4.2-2** Prior to the issuance of any certificates of occupancy for any development on H-3 in Phase I, Port or Port tenants, as appropriate, shall construct H Street from I-5 to Marina Parkway as a four-lane Major Street. This mitigation is provided in lieu of widening of F Street due to environmental constraints associated with the widening of F Street in the vicinity of the F&G Street Marsh. At the completion of the H Street extension, the Port or Port tenants, as appropriate, shall also restrict access along the segment of Lagoon Drive/F Street (between Parcel H-3 and the BF Goodrich access on F Street) to emergency vehicle access only. This mitigation would reduce Significant Impact 4.2-2, 4.2-4, 4.2-6, 4.2-7, and 4.2-11 to below a level of significance.	Less than significant

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
Significant Impact 4.2-3: The Phase I roadway segment of H Street (west of Marina Parkway) will experience congested LOS F conditions and will require mitigation.	**Mitigation Measure 4.2-3** Prior to the issuance of any certificates of occupancy for any development on H-3 in Phase I, Port or Port tenants, as appropriate, shall widen H Street west of Marina Parkway from a ~~2~~two-lane Class III Collector to a ~~3~~three-lane Class II Collector. This mitigation would reduce Significant Impact 4.2-3 to below a level of significance.	Less than significant
Significant Impact 4.2-4: The Phase I roadway segment of Marina Parkway (Lagoon Drive to G Street) will experience congested LOS F conditions and will require mitigation.	**See Mitigation Measure 4.2-2 above.**	Less than significant
Significant Impact 4.2-5: The Phase I roadway segment of Bay Boulevard (E Street to F Street) will experience congested LOS F conditions and will require mitigation.	**Mitigation Measure 4.2-4** Prior to the issuance of certificates of occupancy for development on H-3 and building permits for any development on H-13 or H-14 in Phase I, the Port, Port tenants, or applicant, as appropriate, shall widen Bay Boulevard between E Street and F Street from a two~~2~~-lane Class III Collector to a two~~2~~-lane Class II Collector, or secure such widening to the satisfaction of the City Engineer. The additional roadway capacity would facilitate the flow of project traffic. This mitigation would reduce Significant Impact 4.2-5 to below a level of significance.	Less than significant
Significant Impact 4.2-6: The intersection of E Street and I-5 Southbound off-ramps will be characterized by LOS F conditions during PM peak hours under Phase I Baseline Plus Project conditions, resulting in direct project impacts that would require mitigation.	**See Mitigation Measure 4.2-2 above.**	Less than significant
Significant Impact 4.2-7: The intersection of F Street and Bay Boulevard will be characterized by LOS F conditions during PM peak hours under Phase I Baseline Plus Project conditions, resulting in direct project impacts that would require mitigation.	**See Mitigation Measure 4.2-2 above.**	Less than significant

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
Significant Impact 4.2-8: The intersection of J Street and Bay Boulevard will be characterized by LOS F conditions during both AM and PM peak hours under Phase I Baseline Plus Project conditions, resulting in direct project impacts that would require mitigation.	**Mitigation Measure 4.2-5** Prior to the issuance of building permits for any development on H-13 or H-14 in Phase I, the applicant shall construct a traffic signal at the intersection of J Street and Bay Boulevard, or secure such construction to the satisfaction of the City Engineer. The traffic signal shall be constructed and operate to the satisfaction of the City Engineer. This mitigation would reduce Significant Impact 4.2-8 and 4.2-14 to below a level of significance.	Less than significant
Significant Impact 4.2-9: The intersection of L Street and Bay Boulevard will be characterized by LOS F conditions during both AM and PM peak hours under Phase I Baseline Plus Project conditions, resulting in direct project impacts that would require mitigation.	**Mitigation Measure 4.2-6** Prior to the issuance of certificates of occupancy for development on H-3 or building permits for any development on H-13 or H-14 ~~for any development~~ in Phase I, the Port, Port tenants, or applicants, as appropriate, shall construct a traffic signal at the intersection of L Street and Bay Boulevard, or secure such construction to the satisfaction of the City Engineer. The traffic signal shall be constructed and operate to the satisfaction of the City Engineer. This mitigation would reduce Significant Impact 4.2-9 and 4.2-15 to below a level of significance.	Less than significant
Significant Impact 4.2-10: The intersection of I-5 southbound ramps and Bay Boulevard will be characterized by LOS F conditions during PM peak hours under Phase I Baseline Plus Project conditions, resulting in direct project impacts that would require mitigation.	**Mitigation Measure 4.2-7** Prior to the issuance of certificates of occupancy for development on H-3 or building permits on H-13 or H-14 ~~for any development~~ in Phase I, the Port, Port tenants, or applicants, as appropriate, shall construct a traffic signal at the intersection of I-5 southbound ramps and Bay Boulevard, or secure such construction to the satisfaction of the City Engineer. The traffic signal shall be constructed and operate to the satisfaction of the City Engineer. This mitigation would reduce Significant Impact 4.2-10 and 4.2-16 to below a level of significance.	Less than significant
Significant Impact 4.2-11: The intersection of J Street and Marina Parkway will be characterized by LOS E conditions during PM peak hours under Phase I Baseline Plus Project conditions, resulting in direct project impacts that would require mitigation.	**See Mitigation Measure 4.2-2 above.**	Less than significant
Significant Impact 4.2-12: The addition of Phase I traffic would result in a direct project impact to the freeway segment of I-5 between SR-54 and E Street, resulting in LOS F during both AM and PM peak hours and would require mitigation.	**Mitigation Measure 4.2-8** The following mitigation measure would reduce, but not eliminate, project impacts on Interstate 5, as identified in ~~(Implementation of Mitigation Measure 4.2-11 would mitigate~~ Significant Impacts 4.2-12, 4.2-17, 4.2-18, 4.2-29, 4.2-30, 4.2-35 through~~,~~ 4.2-37, and 4.2-46 through~~,~~ 4.2-50~~,~~ but not to below a level of significance.~~)~~	Significant and unmitigated

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
	The Port and the City shall participate in a multi-jurisdictional effort conducted by Caltrans and SANDAG to assist in developing a detailed I-5 corridor level study that will identify transportation improvements along with funding, including federal, state, regional, and local funding sources and phasing that would reduce congestion ~~management~~ with Caltrans standards on the I-5 South corridor from the SR-54 interchange to the Otay River (the "I-5 South Corridor") (hereafter referred to as the "Plan"). Local funding sources identified in the Plan shall include fair share contributions related to private and/or public development based on nexus as well as other mechanisms. The Plan required by this mitigation shall include the following: a) The responsible entities (the Entities) included in this effort will include, but may not be limited to, the City, other cities along I-5, the Port, SANDAG, and Caltrans. Other entities will be included upon the concurrence of the foregoing Entities. b) The Plan will identify physical and operational improvements to I-5 adjacent to the project area, relevant arterial roads and transit facilities (the Improvements), that are focused on regional impacts and specific transportation impacts from the project, and will also identify the fair share responsibilities of each Entity for the construction and financing for each Improvement. The Plan will include an implementation element that includes each Entity's responsibilities and commitment to mitigate the impacts created by Phases I, II, III and IVall phases of the Proposed Project. c) The Plan will set forth a timeline and other agreed upon relevant criteria for implementation of each Improvement. d) The Plan will identify the total estimated design and construction cost for each Improvement and the responsibility of each Entity for both implementation and funding of such costs. e) The Plan will include the parameters for any agreed upon fair-share funding to be implemented, that would require private and/or public developers to contribute to the costs, in a manner that will comply with applicable law. f) In developing the Plan, the Entities shall also consider ways in which the Improvements can be coordinated with existing local and regional transportation and facilities financing plans and programs, in order to avoid duplication of effort and expenditure; however, the existence of such other plans and programs shall not relieve the Entities of their collective obligation to develop and implement the Plan as set forth in this mitigation measure. Nothing in the Plan shall be construed as relieving any Entity (or any other entity) from its independent responsibility (if any) for the implementation of any transportation improvement.	

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
	g) The Port shall seek adoption of the Plan before the Port Board of Commissioners and the City shall seek adoption of the Plan before the City Council upon the completion of the multijurisdictional effort to develop the Plan. The Port and the City shall report, to their respective governing bodies regarding the progress made to develop the Plan within six 6 months of the first meeting of the entities. Thereafter, the Port and the City shall report at least annually regarding the progress of the Plan, for a period of not less than five years, which may be extended at the request of the City Council and/or Board of Commissioners. h) The Plan shall also expressly include each Entity's pledge that it will cooperate with each other in implementing the Plan. i) Prior to issuance of certificates of occupancy or building permits for any development of individual projects within the Chula Vista Bayfront Master Plan, the Port and the City shall require project applicants to make their fair share contribution toward mitigation of cumulative freeway impacts within the City's portion of the I-5 South Corridor by participating in the City's Western Traffic Development Impact Fee or equivalent funding program. The failure or refusal of any Entity other than the Port or the City to cooperate in the implementation of this mitigation measure shall not constitute failure of the Port or the City to implement this mitigation measure; however, the Port and the City shall each use its best efforts to obtain the cooperation of all responsible Entities to fully participate, in order to achieve the goals of mitigation measure. However, because implementation of the physical improvements needed to reduce significant impact to the affected freeway segments is within the jurisdiction and control of Caltrans and not the Port or the City, the Port and the City cannot ensure that the necessary improvements will be constructed as needed. Accordingly, the Proposed Project's impacts to freeway segments are considered significant and unmitigated.	
Significant Impact 4.2-13: The intersection of H Street and ~~Gaylord~~ RCC Driveway will be characterized by LOS E conditions during the PM peak hours as a result of Phase I conditions with closure of F Street, extension of H Street, and partial extension of E Street, and will require mitigation.	**Mitigation Measure 4.2-9** Prior to the issuance of certificates of occupancy for any development on H-3 in Phase I, the Port or Port tenant, as appropriate, shall construct a westbound lane along H Street/RCC~~Gaylord~~ Driveway, which would result in widening H Street west of Marina Parkway to a three-lane Class II Collector. This mitigation would reduce Significant Impact 4.2-13 to below a level of significance.	Less than significant

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
Significant Impact 4.2-14: The intersection of J Street and Bay Boulevard will be characterized by LOS F conditions during the PM peak hours as a result of Phase I conditions with closure of F Street, extension of H Street and partial extension of E Street, and will require mitigation.	**See Mitigation Measure 4.2-5 above.**	Less than significant
Significant Impact 4.2-15: The intersection of L Street and Bay Boulevard will be characterized by LOS F conditions during both the AM and PM peak hours as a result of Phase I conditions with closure of F Street, extension of H Street and partial extension of E Street, and will require mitigation.	**See Mitigation Measure 4.2-6 above.**	Less than significant
Significant Impact 4.2-16: The intersection of the I-5 southbound ramps and Bay Boulevard will be characterized by LOS F conditions during the PM peak hours as a result of Phase I conditions with closure of F Street, extension of H Street and partial extension of E Street, and will require mitigation.	**See Mitigation Measure 4.2-7 above.**	Less than significant
Significant Impact 4.2-17: The addition of Phase I traffic with the closure of F Street, extension of H Street, and partial extension of E Street would result in a direct project impact to the freeway segment of I-5 from SR-54 to E Street, resulting in LOS F during AM peak hours northbound with the project and PM peak hours southbound, with or without the project, and would require mitigation.	**See Mitigation Measure 4.2-8 above.**	Significant and unmitigated

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
Significant Impact 4.2-18: The addition of Phase I traffic with the closure of F Street, extension of H Street, and partial extension of E Street would result in a direct project impact to the freeway segment of I-5 from E Street to H Street, resulting in LOS F during both AM and PM peak hours in both directions, with or without the project. This impact would require mitigation.	**See Mitigation Measure 4.2-8 above.**	Significant and unmitigated
Significant Impact 4.2-19: The E Street and H Street intersections affected by an at-grade trolley crossing would experience additional delay along the arterial and at adjacent intersections from between 17 and 40 seconds per vehicle (depending on the direction and time of day), causing a deterioration in the LOS by at least one level.	**Mitigation Measure 4.2-10** The following mitigation measure would reduce, but not eliminate impacts at intersections of E Street and H Street associated with trolley delays, as identified in Significant Impact 4.2-19. Prior to issuance of certificates of occupancy for Parcel H-3 or building permits for any development within the City, the Port and the City shall require project applicants to make their fair share contribution toward mitigation of intersection impacts at H Street and E Street within the City's jurisdiction by participating in the City's Western Traffic Development Impact Fee or equivalent funding program. The failure or refusal of any Entity other than the Port or the City to cooperate in the implementation of this mitigation measure shall not constitute failure of the Port or the City to implement this mitigation measure; however, the Port and the City shall each use its best efforts to obtain the cooperation of all responsible Entities to fully participate, in order to achieve the goals of mitigation measure. However, because implementation of the physical improvements needed to reduce the significant impacts to the affected intersections will require funding from other sources in addition to the WTDIF, such as local, state and federal funds, and such funding is not certain or under the control of the Port or the City, the Port and the City cannot ensure that the necessary improvements will be constructed as needed or that they will be constructed within any known time schedule. Accordingly, the Proposed Project's impacts to the E Street and H Street intersections affected by an at-grade trolley crossing are considered significant and unmitigated.	Significant and unmitigated

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
Significant Impact 4.2-20: Development of Phase II components without adequate roadway access and frontage would result in a significant impact.	**Mitigation Measure 4.2-11** Prior to the issuance of certificates of occupancy for development on Parcel H-23 in Phase I, the Port, or Port tenant, ~~or applicant,~~ as appropriate, shall construct Street A between H Street to Street C as a two-lane Class III Collector, and shall construct Street C between Marina Parkway and Street A as a two-lane Class II Collector. Implementation of this mitigation measure would reduce Significant Impact 4.2-20 to below a level of significance.	Less than significant
Significant Impact 4.2-21: The Phase II roadway segment of H Street (Street A to I-5 ramps) will experience congested LOS F conditions and will require mitigation.	**Mitigation Measure 4.2-12** Prior to the issuance of certificates of occupancy for any development in Phase II, the Port, Port tenant, or applicant, as appropriate, shall widen H Street between Street A and I-5 Ramps to a five~~5~~-lane Major Street, or secure such construction to the satisfaction of the City Engineer The additional roadway capacity would facilitate the flow of project traffic. This mitigation would reduce Significant Impact 4.2-21 to below a level of significance.	Less than significant
Significant Impact 4.2-22: The Phase II roadway segment of J Street (Street A to Bay Boulevard to I-5 ramps) would experience congested LOS D conditions and would require mitigation.	**Mitigation Measure 4.2-13** Prior to the issuance of certificates of occupancy for any development in Phase II, the Port, Port tenant, or applicant, as appropriate, shall widen J Street between Street A to I-5 Ramps to a six~~6~~-lane Major Street, or secure such construction to the satisfaction of the City Engineer The additional roadway capacity would facilitate the flow of project traffic. This mitigation would reduce Significant Impact 4.2-22 to below a level of significance.	Less than significant
Significant Impact 4.2-23: The Phase II roadway segment of Street A (Street C to J Street) would experience congested LOS F conditions and would require mitigation.	**Mitigation Measure 4.2-14** Prior to the issuance of certificates of occupancy for any development in Phase II ~~of the development~~, the Port, Port tenant, or applicant, as appropriate, shall widen Street A between Street C and J Street to a four~~4~~-lane Class I Collector, or secure such construction to the satisfaction of the City Engineer. The additional roadway capacity would facilitate the flow of project traffic. This mitigation would reduce Significant Impact 4.2-23 to below a level of significance.	Less than significant

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
Significant Impact 4.2-24: As a result of Phase II conditions, the intersection of H Street and Gaylord Drive would be characterized by LOS E conditions during PM peak hours and would require mitigation.	**Mitigation Measure 4.2-15** Prior to the issuance of certificates of occupancy for any development in Phase II ~~of the development~~, the Port, Port tenant, or applicant, as appropriate, shall construct a traffic signal and add an exclusive left-turn lane at each approach at the intersection of H Street and RCC~~Gaylord~~ Driveway, or secure such construction to the satisfaction of the City Engineer. The traffic signal and left-turn lanes shall be built to the satisfaction of the City Engineer. This mitigation would reduce Significant Impact 4.2-24 to below a level of significance.	Less than significant
Significant Impact 4.2-25: As a result of Phase II conditions, the intersection of J Street and Bay Boulevard would be characterized by LOS E conditions during PM peak hours and would require mitigation.	**Mitigation Measure 4.2-16** Prior to the issuance of certificates of occupancy for any development in Phase II of the development, the Port, Port tenant, or applicant, as appropriate, shall construct a westbound and eastbound through lane along J Street at the intersection of J Street and Bay Boulevard, or secure such construction to the satisfaction of the City Engineer. The lanes shall be constructed to the satisfaction of the City Engineer. This mitigation would reduce Significant Impact 4.2-25 to below a level of significance.	Less than significant
Significant Impact 4.2-26: As a result of Phase II conditions, the intersection of H Street and Street A would be characterized by LOS F conditions during PM peak hours and would require mitigation.	**Mitigation Measure 4.2-17** Prior to the issuance of certificates of occupancy for any development in Phase II of the development, the Port, Port tenant, or applicant, as appropriate, shall construct a traffic signal at the intersection of H Street and Street A, or secure such construction to the satisfaction of the City Engineer. The traffic signal shall be constructed and operate to the satisfaction of the City Engineer. This mitigation would reduce Significant Impact 4.2-26 to below a level of significance.	Less than significant
Significant Impact 4.2-27: As a result of Phase II conditions, the intersection of J Street and Marina Parkway would be characterized by LOS F conditions during PM peak hours and would require mitigation.	**Mitigation Measure 4.2-18** Prior to the issuance of certificates of occupancy for any development in Phase II of the development, the Port, ~~Port tenant, or applicant, as appropriate,~~the developer shall construct a traffic signal at the intersection of J Street and Marina Parkway, or secure such construction to the satisfaction of the City Engineer. The traffic signal shall be constructed and operate to the satisfaction of the City Engineer. This mitigation would reduce Significant Impact 4.2-27 to below a level of significance.	Less than significant

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
Significant Impact 4.2-28: As a result of Phase II conditions, the intersection of J Street and Street A would be characterized by LOS F conditions during both AM and PM peak hours and would require mitigation.	**Mitigation Measure 4.2-19** Prior to the issuance of certificates of occupancy for any development in Phase II ~~of the development~~, the Port, Port tenant, or applicant, as appropriate, shall construct a traffic signal at the intersection of J Street and Street A and add an exclusive westbound right-turn lane along J Street and an exclusive southbound right-turn lane along Street A, or secure such construction to the satisfaction of the City Engineer. The traffic signal and turning lanes shall operate and be constructed to the satisfaction of the City Engineer. This mitigation would reduce Significant Impact 4.2-28 to below a level of significance.	Less than significant
Significant Impact 4.2-29: The addition of Phase II traffic would result in a direct project impact to the freeway segment of I-5 from SR-54 to E Street, resulting in LOS F during both AM and PM peak hours in both directions, with or without the project. This impact would require mitigation.	**See Mitigation Measure 4.2-8 above.**	Significant and unmitigated
Significant Impact 4.2-30: The addition of Phase II traffic would result in a direct project impact to the freeway segment of I-5 from E Street to F Street, resulting in LOS F during both AM and PM peak hours in both directions, with or without the project. This impact would require mitigation.	**See Mitigation Measure 4.2-8 above.**	Significant and unmitigated
Significant Impact 4.2-31: Development of Phase III components without adequate roadway access and frontage would result in a significant impact.	**Mitigation Measure 4.2-20** Prior to the issuance of certificates of occupancy for any development in Phase III, the Port, Port tenants, or applicant, as appropriate shall construct the segment of Street A that would continue south from J Street, connecting to the proposed Street B in the Otay District, as a two-lane Class III Collector. In addition, prior to the issuance of certificates of occupancy for any development in Phase III, the Port, Port tenants, as appropriate shall construct the segment of Street B that would connect to the proposed Street A, bridge over the Telegraph Canyon Creek Channel, and continue south to Bay Boulevard, as a 2-lane Class III Collector. This mitigation would reduce Significant Impact 4.2-31 to below a level of significance	

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
Significant Impact 4.2-32: As a result of Phase III conditions, the Street A roadway segment from H Street to Street C would experience congested LOS D conditions and would require mitigation.	**Mitigation Measure 4.2-21** Prior to the issuance of certificates of occupancy for any development in Phase III ~~of the~~ development, the Port, Port tenants, or applicant, as appropriate, shall widen Street A between H Street and Street C to a four4-lane Class I Collector, or secure such construction to the satisfaction of the City Engineer. The additional roadway capacity would facilitate the flow of project traffic. This mitigation would reduce Significant Impact 4.2-32 to below a level of significance.	Less than significant
Significant Impact 4.2-33: As a result of Phase III conditions, the intersection of J Street and Bay Boulevard would be characterized by LOS E conditions during PM peak hours and would require mitigation.	**Mitigation Measure 4.2-22** Prior to the issuance of certificates of occupancy for any development in Phase III ~~of the~~ development, the Port, Port tenants, or applicant, as appropriate, shall construct an exclusive eastbound right-turn lane along J Street at the intersection of J Street and Bay Boulevard, or secure such construction to the satisfaction of the City Engineer. The turning lane shall be built to the satisfaction of the City Engineer. This mitigation would reduce Significant Impact 4.2-33 to below a level of significance.	Less than significant
Significant Impact 4.2-34: As a result of Phase III conditions, the intersection of J Street and I-5 northbound ramps would be characterized by LOS E conditions during PM peak hours and would require mitigation.	**Mitigation Measure 4.2-23** Prior to the issuance of certificates of occupancy for any development in Phase III of the development, the Port, Port tenant, or applicant, as appropriate, shall construct an exclusive westbound right-turn lane along J Street at the intersection of J Street and I-5 ~~northbound~~ NB ramps, or secure such construction to the satisfaction of the City Engineer. The turning lane shall be built to the satisfaction of the City Engineer. This mitigation would reduce Significant Impact 4.2-34 to below a level of significance.	Less than significant
Significant Impact 4.2-35: The addition of Phase III traffic would result in a direct project impact to the freeway segment of I-5 from SR-54 to E Street, resulting in LOS F in both directions, with or without the project. This impact would require mitigation.	**See Mitigation Measure 4.2-8 above.**	Significant and unmitigated
Significant Impact 4.2-36: The addition of Phase III traffic would result in a direct project impact to the freeway segment of I-5 from E Street to H Street, resulting in LOS F in both directions, with or without the project. This impact would require mitigation.	**See Mitigation Measure 4.2-8 above.**	Significant and unmitigated

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
Significant Impact 4.2-37: The addition of Phase III traffic would result in a direct project impact to the freeway segment of I-5 from H Street to J Street, resulting in LOS F in both directions, with or without the project. This impact would require mitigation.	**See Mitigation Measure 4.2-8 above.**	Significant and unmitigated
Significant Impact 4.2-38: Without additional improvements to H Street, conditions on H Street from Street A to I-5 would degrade to LOS F.	**Mitigation Measure 4.2-24** Prior to the issuance of certificates of occupancy for any development in Phase III, the Port, Port tenants, or applicant, as appropriate, shall construct E Street from the RCC~~Gaylord~~ Driveway to Bay Boulevard as a two-lane Class III Collector. This mitigation would reduce Significant Impact 4.2-38 to below a level of significance	Less than significant
Significant Impact 4.2-39: Development of Phase IV components without adequate roadway access and frontage would result in a significant impact.	**Mitigation Measure 4.2-25** Prior to the issuance of certificates of occupancy for any development in Phase IV, the Port, Port tenant, or applicant, as appropriate, shall construct a new F Street segment between the proposed terminus of the existing F Street and the proposed E Street extension, ending at the SP-3 Chula Vista Nature Center parking lot, as a two-lane Class III collector street, which shall also contain a Class II bike lane on both sides of the street. This mitigation would reduce Significant Impact 4.2-39 to below a level of significance.	Less than significant
Significant Impact 4.2-40: As a result of Phase IV conditions, the E Street roadway segment from F Street to Bay Boulevard would experience congested LOS F conditions and would require mitigation.	**Mitigation Measure 4.2-26** (Implementation of Mitigation Measure 4.2-~~30~~26 would reduce Significant Impacts 4.2-40 and 4.2-41 to below a level of significance.) Prior to the issuance of certificates of occupancy for any development in Phase IV of the development, the Port, Port tenant, or applicant, as appropriate, shall widen E Street between F Street and Bay Boulevard to a 4four-lane Class I Collector, or secure such construction to the satisfaction of the City Engineer. The additional roadway capacity would facilitate the flow of project traffic. Also, the widening of this segment of E Street would facilitate the flow of project traffic on Bay Boulevard between E Street to F Street.	Less than significant
Significant Impact 4.2-41: As a result of Phase IV conditions, the Bay Boulevard roadway segment from E Street to F Street would experience congested LOS D conditions and would require mitigation.	**See Mitigation Measure 4.2-26 above.**	Less than Significant

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
Significant Impact 4.2-42: As a result of Phase IV conditions, the H Street segment from I-5 to Broadway will experience congested LOS F conditions and would require mitigation.	**Mitigation Measure 4.2-27** Prior to the issuance of certificates of occupancy for any development in Phase IV, the Port, Port tenant, or applicant, as appropriate, shall widen H Street between I-5 Ramps and Broadway to a 6-lane Gateway Street. The additional roadway capacity would facilitate the flow of project traffic. This mitigation would reduce Significant Impact 4.2-42 to below a level of significance. The off-site traffic improvements described in this mitigation measure for direct traffic impacts would create secondary traffic impacts. Improvements associated with these secondary impacts would be required as a result of cumulative and growth-related traffic overall, of which the Proposed Project would be a component. The Western Chula Vista TDIF identifies these improvements in a cumulative context and attributes fair share contributions according to the impact. Therefore, the Proposed Project would be responsible for a fair share contribution and would not be solely responsible for implementation of necessary secondary impact improvements	Less than significant
Significant Impact 4.2-43: Under Phase IV Plus Project conditions, the intersection of E Street and Bay Boulevard would be characterized by LOS F conditions during PM peak hours and would require mitigation.	**Mitigation Measure 4.2-28** Prior to the issuance of certificates of occupancy for any development in Phase IV ~~of the development~~, the Port, Port tenant, or applicant, as appropriate, shall construct an eastbound through lane and an exclusive eastbound right-turn lane along E Street at the intersection of E Street and Bay Boulevard, or secure such construction to the satisfaction of the City Engineer. The lanes shall be constructed to the satisfaction of the City Engineer. This mitigation would reduce Significant Impact 4.2-43~~39~~ to below a level of significance.	Less than significant
Significant Impact 4.2-44: Under Phase IV Plus Project conditions, the intersection of J Street and Bay Boulevard would be characterized by LOS E conditions during PM peak hours and would require mitigation.	**Mitigation Measure 4.2-29** Prior to the issuance of certificates of occupancy for any development in Phase IV ~~of the development~~, the Port, Port tenant, or applicant, as appropriate, shall construct an exclusive southbound right-turn lane along Bay Boulevard at the intersection of J Street and Bay Boulevard, or secure such construction to the satisfaction of the City Engineer. The lane shall be constructed to the satisfaction of the City Engineer. This mitigation would reduce Significant Impact 4.2-40~~4~~ to below a level of significance.	Less than significant
Significant Impact 4.2-45: Under Phase IV Plus Project conditions, the intersection of J Street and Street A would be characterized by LOS F conditions during PM peak hours and would require mitigation.	**Mitigation Measure 4.2-30** Prior to the issuance of certificates of occupancy for any development in Phase IV ~~of the development~~, the Port, Port tenant, or applicant, as appropriate, shall construct a dual southbound left-turn lane along Street A, or secure such construction to the satisfaction of the City Engineer. The lane shall be constructed to the satisfaction of the City Engineer. This mitigation would reduce Significant Impact 4.2-41~~5~~ to below a level of significance.	Less than significant

TABLE 1-9 (Cont.)

Impact	Mitigation	Significance After Mitigation
Significant Impact 4.2-46: The addition of Phase IV traffic would result in a direct project impact to the freeway segment of I-5 from SR-54 to E Street, resulting in LOS F in both directions during both AM and PM peak hours, with or without the project. This impact would require mitigation.	**See Mitigation Measure 4.2-8 above.**	Significant and unmitigated
Significant Impact 4.2-47: The addition of Phase IV traffic would result in a direct project impact to the freeway segment of I-5 from E Street to H Street, resulting in LOS F in both directions during both AM and PM peak hours, with or without the project. This impact would require mitigation.	**See Mitigation Measure 4.2-8 above.**	Significant and unmitigated
Significant Impact 4.2-48: The addition of Phase IV traffic would result in a direct project impact to the freeway segment of I-5 from H Street to J Street, resulting in LOS F in both directions during both AM and PM peak hours, with or without the project. This impact would require mitigation.	**See Mitigation Measure 4.2-8 above.**	Significant and unmitigated
Significant Impact 4.2-49: The addition of Phase IV traffic would result in a direct project impact to the freeway segment of I-5 from J Street to L Street, resulting in LOS F in both directions during both AM and PM peak hours, with or without the project. This impact would require mitigation.	**See Mitigation Measure 4.2-8 above.**	Significant and unmitigated
Significant Impact 4.2-50: The addition of Phase IV traffic would result in a direct project impact to the freeway segment of I-5 from L Street to Palomar Street, resulting in LOS F in both directions during both AM and PM peak hours, with or without the project. This impact would require mitigation.	**See Mitigation Measure 4.2-8 above.**	Significant and unmitigated

Appendix
D

Cost Estimates From the 2008 WTDIF Nexus Study

COST ESTIMATE

FACILITY I-5-1

I-5/E Street NB Ramp restriping to add lane

ITEM	DESCRIPTION	UNITS	QTY.	UNIT COST	TOTAL	ITEM TOTAL
1	I-5/E Street NB Ramp restriping to add lane				$ 10,308.00	
	Admin (2% hard costs)				$ 206.16	
				TOTAL HARD COSTS	**$ 10,514.16**	

SOFT COSTS

Contingencies and soft costs	$ 2,319.30
TOTAL SOFT COSTS & CONTINGENCIES	**$ 2,319.30**
PROJECT COST	**$ 12,833.46**
ENR Index Increase to 2014: 1.21	
TOTAL PROJECT COST	**$ 15,528.49**

COST ESTIMATE

FACILITY I-5-2

I-5/E Street/Bay Blvd SB off-ramp restriping add lane

ITEM	DESCRIPTION	UNITS	QTY.	UNIT COST	TOTAL	ITEM TOTAL
1	I-5/E Street/Bay Blvd SB off-ramp restriping add lane				$ 10,308.00	
	Admin (2% hard costs)				$ 206.16	
				TOTAL HARD COSTS	**$ 10,514.16**	

SOFT COSTS

Contingencies and soft costs	$	2,319.30
TOTAL SOFT COSTS & CONTINGENCIES	**$**	**2,319.30**
PROJECT COST	**$**	**12,833.46**
ENR Index Increase to 2014: 1.21		
TOTAL PROJECT COST	**$**	**15,528.49**

COST ESTIMATE

FACILITY I-5-4

E Street bridge widening over I-5 (250' X 20')

ITEM	DESCRIPTION	UNITS	QTY.	UNIT COST	TOTAL	ITEM TOTAL
1	E Street bridge widening over I-5 (250' X 20')				$ 1,750,000.00	
	Admin (2% hard costs)				$ 35,000.00	
				TOTAL HARD COSTS	**$ 1,785,000.00**	

SOFT COSTS

Contingencies and soft costs	$	393,750.00
TOTAL SOFT COSTS & CONTINGENCIES	**$**	**393,750.00**
PROJECT COST	**$**	**2,178,750.00**
ENR Index Increase to 2014: 1.21		
TOTAL PROJECT COST	**$**	**2,636,287.50**

COST ESTIMATE

FACILITY I-5-5

F Street bridge widening over I-5 (250' X 20')

ITEM	DESCRIPTION	UNITS	QTY.	UNIT COST	TOTAL	ITEM TOTAL
1	F Street bridge widening over I-5 (250' X 20')				$ 1,750,000.00	
	Admin (2% hard costs)				$ 35,000.00	
				TOTAL HARD COSTS	**$ 1,785,000.00**	

SOFT COSTS

Contingencies and soft costs	$	393,750.00
TOTAL SOFT COSTS & CONTINGENCIES	**$**	**393,750.00**
PROJECT COST	**$**	**2,178,750.00**
ENR Index Increase to 2014: 1.21		
TOTAL PROJECT COST	**$**	**2,636,287.50**

COST ESTIMATE

FACILITY I-5-6

I-5/H Street NB off-ramp restriping add lane:

ITEM	DESCRIPTION	UNITS	QTY.	UNIT COST	TOTAL	ITEM TOTAL
1	I-5/H Street NB off-ramp restriping add lane:				$ 10,308.00	
	Admin (2% hard costs)				$ 206.16	
				TOTAL HARD COSTS	**$ 10,514.16**	
	SOFT COSTS					
	Contingencies and soft costs				$ 2,319.30	
	TOTAL SOFT COSTS & CONTINGENCIES				**$ 2,319.30**	
	PROJECT COST				**$ 12,833.46**	
	ENR Index Increase to 2014: 1.21					
	TOTAL PROJECT COST				**$ 15,528.49**	

COST ESTIMATE

FACILITY I-5-7

I-5/H Street SB off-ramp restriping add lane:

ITEM	DESCRIPTION	UNITS	QTY.	UNIT COST	TOTAL	ITEM TOTAL
1	I-5/H Street SB off-ramp restriping add lane:				$ 10,308.00	
	Admin (2% hard costs)				$ 206.16	
				TOTAL HARD COSTS	**$ 10,514.16**	

SOFT COSTS

Contingencies and soft costs	$	2,319.30
TOTAL SOFT COSTS & CONTINGENCIES	**$**	**2,319.30**
PROJECT COST	**$**	**12,833.46**
ENR Index Increase to 2014: 1.21		
TOTAL PROJECT COST	**$**	**15,528.49**

COST ESTIMATE

FACILITY I-5-8

H Street bridge widening over I-5 (200'X40'):

ITEM	DESCRIPTION	UNITS	QTY.	UNIT COST	TOTAL	ITEM TOTAL
1	H Street bridge widening over I-5 (200'X40'):				$ 2,800,000.00	
	Admin (2% hard costs)				$ 56,000.00	
				TOTAL HARD COSTS	**$ 2,856,000.00**	
	SOFT COSTS					
	Contingencies and soft costs				$ 630,000.00	
	TOTAL SOFT COSTS & CONTINGENCIES				**$ 630,000.00**	
	PROJECT COST				**$ 3,486,000.00**	
	ENR Index Increase to 2014: 1.21					
	TOTAL PROJECT COST				**$ 4,218,060.00**	

COST ESTIMATE

FACILITY I-5-9

I-5/J Street NB off-ramp restriping add lane:

ITEM	DESCRIPTION	UNITS	QTY.	UNIT COST	TOTAL	ITEM TOTAL
1	I-5/J Street NB off-ramp restriping add lane:				$ 10,308.00	
	Admin (2% hard costs)				$ 206.16	
				TOTAL HARD COSTS	**$ 10,514.16**	

SOFT COSTS

Contingencies and soft costs	$	2,319.30
TOTAL SOFT COSTS & CONTINGENCIES	**$**	**2,319.30**
PROJECT COST	**$**	**12,833.46**
ENR Index Increase to 2014: 1.21		
TOTAL PROJECT COST	**$**	**15,528.49**

COST ESTIMATE

FACILITY I-5-11

L Street bridge widening over I-5 (S/W for peds 300' X 12')(38%)(58%):

ITEM	DESCRIPTION	UNITS	QTY.	UNIT COST	TOTAL	ITEM TOTAL
1	L Street bridge widening over I-5 (S/W for peds 300' X 12')(38%)(58%):				$ 1,260,000.00	
	Admin (2% hard costs)				$ 25,200.00	
				TOTAL HARD COSTS	**$ 1,285,200.00**	

SOFT COSTS

Contingencies and soft costs	$	283,500.00
TOTAL SOFT COSTS & CONTINGENCIES	**$**	**283,500.00**
PROJECT COST	**$**	**1,568,700.00**
ENR Index Increase to 2014: 1.21		
TOTAL PROJECT COST	**$**	**1,898,127.00**

COST ESTIMATE

FACILITY I-5-12

I-5/Bay Blvd (south of L St.) SB on/off ramps traffic signal:

ITEM	DESCRIPTION	UNITS	QTY.	UNIT COST	TOTAL	ITEM TOTAL
1	I-5/Bay Blvd (south of L St.) SB on/off ramps traffic signal:				$ 210,367.35	
	Admin (2% hard costs)				$ 4,207.35	
	TOTAL HARD COSTS				**$ 214,574.70**	

SOFT COSTS

Contingencies and soft costs	$	47,332.65
TOTAL SOFT COSTS & CONTINGENCIES	**$**	**47,332.65**
PROJECT COST	**$**	**261,907.35**
ENR Index Increase to 2014: 1.21		
TOTAL PROJECT COST	**$**	**316,907.89**

COST ESTIMATE

FACILITY I-5-13

I-5/Industrial Blvd NB on/off ramps traffic signal:

ITEM	DESCRIPTION	UNITS	QTY.	UNIT COST	TOTAL	ITEM TOTAL
1	I-5/Industrial Blvd NB on/off ramps traffic signal:				$ 210,367.35	
	Admin (2% hard costs)				$ 4,207.35	
				TOTAL HARD COSTS	**$ 214,574.70**	

SOFT COSTS

Contingencies and soft costs	$	47,332.65
TOTAL SOFT COSTS & CONTINGENCIES	**$**	**47,332.65**
PROJECT COST	**$**	**261,907.35**
ENR Index Increase to 2014: 1.21		
TOTAL PROJECT COST	**$**	**316,907.89**

COST ESTIMATE

FACILITY I-5-14

I-5/Palomar Street bridge widening (275lf X 50lf):

ITEM	DESCRIPTION	UNITS	QTY.	UNIT COST	TOTAL	ITEM TOTAL
1	I-5/Palomar Street bridge widening (275lf X 50lf):				$ 4,812,500.00	
	Admin (2% hard costs)				$ 96,250.00	
				TOTAL HARD COSTS	**$ 4,908,750.00**	

SOFT COSTS

Contingencies and soft costs	$ 1,082,812.50
TOTAL SOFT COSTS & CONTINGENCIES	**$ 1,082,812.50**
PROJECT COST	**$ 5,991,562.50**
ENR Index Increase to 2014: 1.21	
TOTAL PROJECT COST	**$ 7,249,790.63**

COST ESTIMATE

FACILITY I-5-16

I-5/Main Street bridge widening (275lf X 20lf):

ITEM	DESCRIPTION	UNITS	QTY.	UNIT COST	TOTAL	ITEM TOTAL
1	I-5/Main Street bridge widening (275lf X 20lf):				$ 1,571,428.57	
	Admin (2% hard costs)				$ 31,428.57	
				TOTAL HARD COSTS	**$ 1,602,857.14**	

SOFT COSTS

Contingencies and soft costs	$	353,571.43
TOTAL SOFT COSTS & CONTINGENCIES	**$**	**353,571.43**
PROJECT COST	**$**	**1,956,428.57**
ENR Index Increase to 2014: 1.21		
TOTAL PROJECT COST	**$**	**2,367,278.57**

COST ESTIMATE

FACILITY I-5-17

I-5 HOV & Managed Lanes from SR905 to SR54 (63.4% in CV)**

ITEM	DESCRIPTION	UNITS	QTY.	UNIT COST	TOTAL	ITEM TOTAL
1	I-5 HOV & Managed Lanes from SR905 to SR54 (63.4% in CV)**				$ 176,826,882.02	
	Admin (2% hard costs)				$ 3,536,537.64	
				TOTAL HARD COSTS	**$ 180,363,419.66**	

SOFT COSTS

Contingencies and soft costs	$	39,786,048.46
TOTAL SOFT COSTS & CONTINGENCIES	**$**	**39,786,048.46**
PROJECT COST	**$**	**220,149,468.12**
ENR Index Increase to 2014: 1.21		
TOTAL PROJECT COST	**$**	**266,380,856.43**

COST ESTIMATE

FACILITY RAS-5

E Street LRT grade separation (underpass LRT option)****:

ITEM	DESCRIPTION	UNITS	QTY.	UNIT COST	TOTAL	ITEM TOTAL
1	E Street LRT grade separation (underpass LRT option)****:					
	Admin (2% hard costs)				$ -	
	TOTAL HARD COSTS				$ -	
	SOFT COSTS					
	Contingencies and soft costs				$ 950,000.00	
	TOTAL SOFT COSTS & CONTINGENCIES				$ 950,000.00	
	PROJECT COST				$ 950,000.00	
	TOTAL PROJECT COST				$ 950,000.00	

**** Environmental and PE Costs only

COST ESTIMATE

FACILITY RAS-6

H Street LRT grade separation (underpass LRT option)****:

ITEM	DESCRIPTION	UNITS	QTY.	UNIT COST	TOTAL	ITEM TOTAL
1	H Street LRT grade separation (underpass LRT option)****:					
	Admin (2% hard costs)				$ -	
	TOTAL HARD COSTS				$ -	
	SOFT COSTS					
	Contingencies and soft costs				$ 950,000.00	
	TOTAL SOFT COSTS & CONTINGENCIES				$ 950,000.00	
	PROJECT COST				$ 950,000.00	
	TOTAL PROJECT COST				$ 950,000.00	

**** Environmental and PE Costs only

COST ESTIMATE

FACILITY RAS-9

H Street widening to 6-lanes from Interstate-5 to Broadway:

ITEM	DESCRIPTION	UNITS	QTY.	UNIT COST	TOTAL	ITEM TOTAL
1	H Street widening to 6-lanes from Interstate-5 to Broadway:				$ 9,326,678.40	
	Admin (2% hard costs)				$ 186,533.57	
		TOTAL HARD COSTS			**$ 9,513,211.97**	
	SOFT COSTS					
	Contingencies and soft costs				$ 2,098,502.64	
	TOTAL SOFT COSTS & CONTINGENCIES				**$ 2,098,502.64**	
	PROJECT COST				**$ 11,611,714.61**	
	ENR Index Increase to 2014: 1.21					
	TOTAL PROJECT COST				**$ 14,050,174.68**	