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ATTACHMENT 1 to the

FINAL ENVIRONMENTAL IMPACT REPORT

ADDENDUM

to the

FINAL ENVIRONMENTAL IMPACT REPORT

for the

CHULA VISTA BAYFRONT MASTER PLAN AND PORT MASTER PLAN AMENDMENT

STATE CLEARINGHOUSE NUMBER 2005081077

UPD NUMBER 83356-EIR-658

SAN DIEGO UNIFIED PORT DISTRICT

3165 Pacific Highway

San Diego, California 92101

JULY 2013

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1.0 INTRODUCTION

1.1 PURPOSE AND BACKGROUND

This document constitutes an Addendum to the April 2010 Final Environmental Impact Report (FEIR) originally prepared for the Chula Vista Bayfront Master Plan and Port Master Plan Amendment (CVBMP), which was certified by the Board of Port Commissions on May 18, 2010, by Resolution No. 2010-78 (Clerk Document Number 56562). The FEIR for the CVBMP analyzed environmental impacts associated with the redevelopment of land and water along the Chula Vista Bayfront with a variety of public amenities, a resort conference center, hotel and retail commercial uses, and environmental enhancements. As part of the redevelopment, several existing streets were proposed to be extended and several new streets were proposed to be constructed. In order to accommodate full build-out of the CVBMP, H Street was proposed to be extended and constructed as a 4-lane major street as contemplated and analyzed in the FEIR.

The purpose of this Addendum is to evaluate whether revisions to the H Street extension component of the CVBMP (hereafter referred to as the original Project) would result in any new or substantially more adverse significant effects or require any new mitigation measures not identified in the FEIR. No other changes are proposed to the original Project.

Similar to the original Project, the revisions to the H Street extension component of the original Project would consist of the construction of roadway improvements that would provide for an east-west connection between the City of Chula Vista's urban core and the Chula Vista bayfront. H Street would continue to be extended westward from the existing H Street right-of-way terminus at the San Diego and Arizona Eastern (SD&AE) railroad crossing to Marina Parkway. The minor revisions to the H Street extension differ from the original Project in the following manner:

- The 16-foot-wide median will be removed, and a 10-foot-wide center turn lane will be added;
- The landscaped parkways on both sides of H Street will be widened to 9 feet wide;
- A 12-foot-wide Class I bicycle path will be provided along the south side of H Street; and
- Landscape plantings will be modified to provide a consistent street tree theme.

All other components of the original Project, including BMPs and LID strategies, would be included in the revisions to the original Project.

This Addendum, together with the FEIR, will be used by the San Diego Unified Port District (District) when considering approval of the minor revisions to the original Project.

1.2 CEQA FRAMEWORK FOR ADDENDUM

When a lead agency has already prepared an EIR, the California Environmental Quality Act (CEQA) mandates that "no subsequent or supplemental environmental impact report shall be required by the lead agency or any responsible agency, unless one or more of the following events occurs: (a) substantial changes are proposed in the project which will require major revisions of the environmental impact report; (b) substantial changes occur with respect to the circumstances under which the project is being undertaken which will require major revisions in the environmental impact report; (c) new information, which was not known and could not have been known at the time the environmental impact report was certified as complete, becomes available" (Cal. Pub. Res. Code, §21166). State CEQA Guidelines Section 15162 clarifies that a subsequent EIR or supplemental EIR is only required when "substantial changes" occur to a project or the circumstances surrounding a project, or "new information" about a project implicates "new significant environmental effects" or a "substantial increase in the severity of previously identified significant effects."

When only some changes or additions to a previously certified EIR are necessary and none of the conditions described in Public Resources Code Section 21166 or Section 15162 of the State CEQA Guidelines calling for the preparation of a subsequent or supplemental EIR are met, CEQA allows the lead agency to prepare and adopt an addendum. (State CEQA Guidelines, §15164(a).)

1.3 DETERMINATION

As verified in this Addendum, the analyses and the conclusions in the FEIR remain current and valid. The proposed revisions to the H Street extension component of the original Project would not cause new significant effects not identified in the FEIR nor increase the severity of environmental effect as analyzed in the FEIR, and, hence, no new mitigation measures would be necessary to reduce significant effects (see Section 3.0 Environmental Checklist). No change has occurred with respect to circumstances surrounding the revisions to the original Project that would cause new or substantially more severe significant environmental effects than were identified in the FEIR. In addition, no new information has become available that shows that the revisions to the original Project would cause new or substantially more severe significant environmental effects which have not already been analyzed in the FEIR.

Therefore, no further environmental review is required beyond this Addendum. This Addendum incorporates all of the applicable mitigation measures detailed in the FEIR. With this Addendum, the revisions to the original Project would still be within the framework of the evaluation for the original Project as documented in the FEIR.

2.0 PROJECT DESCRIPTION

2.1 LOCATION AND SETTING

The original Project is located along the northern boundary of the former Goodrich south campus in Chula Vista, California. The original Project site occupies approximately 4.25 acres. The revisions to the original Project would occur within the same footprint as the original Project.

2.2 PROJECT CHARACTERISTICS

The original Project included the construction of roadway improvements that would provide for an east-west connection between the City of Chula Vista's urban core and the Chula Vista bayfront. The original Project proposed to extend westward from the existing H Street right-of-way terminus at the San Diego and Arizona Eastern (SD&AE) railroad crossing to Marina Parkway. Proposed improvements associated with the H Street extension included roadway paving, median, sidewalks, landscaping, drainage and utilities. The original Project was implemented to fulfill the obligations established by the 1999 Goodrich Relocation Agreement (Relocation Agreement) and the 2010 Second Amendment to Relocation Agreement (Second Amendment), and was also found to be consistent with the build-out scenario contemplated under the approved CVBMP.

The original Project included the following design features for the H Street extension component:

- Divided roadway with a 24-foot-wide travel lane in each direction and a 16-foot-wide landscaped median;
- 5-foot-wide sidewalks on each side of the roadway, with 7-foot wide landscaping and swales between the curb and sidewalk;
- Minimum of 3 feet of landscape buffer between the sidewalk and Goodrich property;
- Appropriate roadway transitions at each terminus point to existing roadway improvements, including Marina Parkway between H Street and Sandpiper Way, striping, signal modification, and pedestrian crossing at west side of Bay Boulevard;
- Removal of existing railroad tracks and ties at non-operational crossing;
- Driveway access to adjacent Goodrich property;
- Storm drain systems to accommodate the ultimate build-out of the bayfront analyzed in the CVBMP (i.e., 72-inches or less in diameter capacity);
- Potable water and recycled water system with lines of 8- to 16-inches in diameter;
- Dry utilities, including gas, electric and communications;
- Street lighting;
- Landscape and irrigation system; and

- Post-construction storm water mitigation Best Management Practices (BMPs), including Low Impact Development (LID) strategies.

The revisions to the original Project, which are contemplated in this Addendum, include the following minor changes:

- The 16-foot-wide median will be removed, and a 10-foot-wide center turn lane will be added;
- The landscaped parkways on both sides of H Street will be widened to 9 feet wide;
- A 12-foot-wide Class I bicycle path will be provided along the south side of H Street; and
- Landscape plantings will be modified to provide a consistent street tree theme.

All other components of the original Project, including BMPs and LID strategies, will be included in the revisions to the original Project.

3.0 ENVIRONMENTAL CHECKLIST

I. Aesthetics	New Potentially Significant Impact	More Severe Impact	No Substantial Change from Previous Analysis
Would the project:			
a. Have a substantial adverse effect on a scenic vista?	☐	☐	☒
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings along a scenic highway?	☐	☐	☒
c. Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒
d. Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?	☐	☐	☒

a. – d. The revisions to the original Project would not include the 16-foot-wide landscaped median; thus, west-facing views along H Street, which is identified as a Vista Area and View Corridor in the certified Port Master Plan, would be improved due to the absence of tall trees and other vegetation. No scenic highway is located in the vicinity of the Project site, so the revisions to the original Project would have no effect on scenic highways. Furthermore, the original Project and revisions to the original Project would improve the overall visual quality of the Project area by redeveloping a visually degraded, highly underutilized site. Finally, the revisions to the original Project would not introduce new lighting aside from that previously identified in the original Project. The revisions to the original Project would continue to comply with all applicable aesthetics mitigation measures identified in the FEIR for the CVBMP. Therefore, the impacts originally identified in the FEIR for the CVBMP would remain unchanged with implementation of the revisions to the H Street extension component of the original Project.

II. Agricultural and Forestry Resources	New Potentially Significant Impact	More Severe Impact	No Substantial Change from Previous Analysis
In determining whether impacts on agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts on forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project, and forest carbon measurement methodology provided in the Forest Protocols adopted by the California Air Resources Board. Would the project:			
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☒
b. Conflict with existing zoning for agricultural use or conflict with a Williamson Act contract?	☐	☐	☒
c. Conflict with existing zoning for, or cause rezoning of forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	☐	☐	☒

d.	Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☒
e.	Involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☒

a. – e. The revisions to the original Project would have no effect on Farmland or forest land. The revisions to the original Project would be located within an existing developed area absent of Farmland or forest land. The impacts originally identified in the FEIR for the CVBMP would remain unchanged with implementation of the revisions to the H Street extension component of the original Project.

III. Air Quality	New Potentially Significant Impact	More Severe Impact	No Substantial Change from Previous Analysis
When available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:			
a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒
c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is a nonattainment area for an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	☐	☐	☒
d. Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒
e. Create objectionable odors affecting a substantial number of people?	☐	☐	☒

a. – e. The revisions to the original Project would not necessitate additional grading or earthwork as all of the improvements would be completed within the same footprint identified in the original Project as analyzed in the FEIR. No additional construction-related truck trips would be required as the scope of construction is substantially similar to the original Project. Also, the roadway extension would continue to be constructed and operate as a 4-lane major roadway. Because there is no change in roadway capacity, no change in air emissions from vehicular traffic would occur. Finally, the revisions to the original Project would not release additional pollutants or objectionable odors aside from those already identified in the FEIR. The revisions to the original Project would continue to comply with all applicable air quality mitigation measures identified in the FEIR. Therefore, the impacts originally identified in the FEIR for the CVBMP would remain unchanged with implementation of the revisions to the H Street extension component of the original Project.

IV. Biological Resources	New Potentially Significant Impact	More Severe Impact	No Substantial Change from Previous Analysis
Would the project:			
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☒
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☒
c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marshes, vernal pools, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☒
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒

f.	Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☒

a. – f. The revisions to the original Project would be completed within the same footprint identified in the original Project as analyzed in the FEIR, and, therefore, would not have any new substantial adverse effect on the following: a candidate, sensitive, or special-status species; any riparian habitat or other sensitive natural community; any federally protected wetlands; or the movement of any fish or wildlife species. The revisions to the original Project would continue to comply with all applicable biological resources mitigation measures identified in the FEIR. Therefore, the impacts originally identified in the FEIR for the CVBMP would remain unchanged with implementation of the revisions to the H Street extension component of the original Project.

V. Cultural Resources	New Potentially Significant Impact	More Severe Impact	No Substantial Change from Previous Analysis
Would the project:			
a. Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	☐	☐	☒
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☐	☒
c. Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒

a. – c. The revisions to the original Project would not necessitate additional grading or earthwork aside from that already identified for the original Project. In addition, no additional existing structures would be demolished for implementation of the revisions to the original Project. The revisions to the original Project would continue to comply with all applicable cultural resources mitigation measures identified in the FEIR. Therefore, the impacts originally identified in the FEIR for the CVBMP would remain unchanged with implementation of the revisions to the H Street extension component of the original Project.

VI. Geology and Soils	New Potentially Significant Impact	More Severe Impact	No Substantial Change from Previous Analysis
Would the project:			
a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:			
1. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒
2. Strong seismic ground shaking?	☐	☐	☒
3. Seismic-related ground failure, including liquefaction?	☐	☐	☒
4. Landslides?	☐	☐	☒
b. Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒
c. Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project and potentially result in an onsite or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☒
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☒
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems in areas where sewers are not available for the disposal of wastewater?	☐	☐	☒

f.	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒

a. – f. The revisions to the original Project would be constructed within the same footprint identified in the original Project. The revisions to the original Project do not include the construction of new buildings or other structures aside from those already contemplated in the original Project; thus, no new impacts related to fault rupture, groundshaking, ground failure, landslides, or unstable soils would occur. Additionally, the revisions to the original Project would continue to comply with all applicable geology and soils mitigation measures identified in the FEIR. Therefore, the impacts originally identified in the FEIR for the CVBMP would remain unchanged with implementation of the revisions to the H Street extension component of the original Project.

VII. Greenhouse Gas Emissions	New Potentially Significant Impact	More Severe Impact	No Substantial Change from Previous Analysis
Would the project:			
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒
b. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒

a. – b. The revisions to the original Project would not necessitate additional grading or earthwork as all of the improvements would be completed within the same footprint identified in the original Project as analyzed in the FEIR. No additional construction-related truck trips would be required as the scope of construction is substantially similar to the original Project. Also, the roadway extension would continue to be constructed and operate as a 4-lane major roadway and would not increase roadway capacity. Because there would be no change in roadway capacity, no change in greenhouse gas emissions from vehicular traffic would occur. Finally, the revisions to the original Project would provide a Class I bicycle path and sidewalks on either side of the extended H Street, which are intended to encourage non-automobile transportation; these components may have a beneficial effect on greenhouse gas emissions when compared to the original Project. The revisions to the original Project would continue to comply with all applicable greenhouse gas emissions mitigation measures identified in the FEIR. Therefore, the impacts originally identified in the FEIR for the CVBMP would remain unchanged with implementation of the revisions to the H Street extension component of the original Project.

VIII. Hazards and Hazardous Materials	New Potentially Significant Impact	More Severe Impact	No Substantial Change from Previous Analysis
Would the project:			
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒
c. Emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒
d. Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☒
e. Be located within an airport land use plan area or, where such a plan has not been adopted, be within two miles of a public airport or public use airport, and result in a safety hazard for people residing or working in the project area?	☐	☐	☒
f. Be located within the vicinity of a private airstrip and result in a safety hazard for people residing or working in the project area?	☐	☐	☒
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒

h. Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☒

a. – h. The revisions to the original Project would not transport or release additional hazardous materials aside from those already identified in the original Project. The truck haul route would also be identical to that identified in the original Project. The revisions to the original Project would be constructed within the same footprint as the original Project, so new impacts associated with hazardous materials sites, airports, airstrips, or wildland fires would not occur. Also, appropriate emergency access would continue to be included as part of the revisions to the original Project. Finally, the revisions to the original Project would continue to comply with all applicable hazards and hazardous materials mitigation measures identified in the FEIR. Therefore, the impacts originally identified in the FEIR for the CVBMP would remain unchanged with implementation of the revisions to the H Street extension component of the original Project.

IX. Hydrology and Water Quality	New Potentially Significant Impact	More Severe Impact	No Substantial Change from Previous Analysis
Would the project:			
a. Violate any water quality standards or waste discharge requirements?	☐	☐	☒
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge, resulting in a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation onsite or offsite?	☐	☐	☒
d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding onsite or offsite?	☐	☐	☒
e. Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒
f. Otherwise substantially degrade water quality?	☐	☐	☒

g.	Place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☒
h.	Place within a 100-year flood hazard area structures that would impede or redirect floodflows?	☐	☐	☒
i.	Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☒
j.	Contribute to inundation by seiche, tsunami, or mudflow?	☐	☐	☒

a. – j. The revisions to the original Project would be constructed within the same footprint as the original Project and would not necessitate additional grading or earthwork than identified by the original Project. Therefore, new impacts related to water quality and groundwater supplies would not occur. The revisions to the original Project would alter the site's existing drainage patterns; however, the revisions would continue to be appropriately designed with relation to stormwater drainages, which would ensure that erosion, siltation, and flooding do not occur. As previously identified, the revisions to the original Project would continue to implement appropriate BMPs and LID strategies, which would further control stormwater runoff. Finally, no new structures would be constructed aside from those identified in the original Project, so no new impacts related to flood hazards, levee or dam failure, or seiche, tsunami, or mudflow would not occur. The revisions to the original Project would continue to comply with all applicable hydrology and water quality mitigation measures identified in the FEIR. Therefore, the impacts originally identified in the FEIR for the CVBMP would remain unchanged with implementation of the revisions to the H Street extension component of the original Project.

X. Land Use and Planning	New Potentially Significant Impact	More Severe Impact	No Substantial Change from Previous Analysis
Would the project:			
a. Physically divide an established community?	☐	☐	☒
b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, a general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒
c. Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☒

a. – c. The revisions to the original Project would not divide an established community, conflict with an applicable land use plan, or conflict with an applicable habitat conservation plan. The revisions to the original Project would be constructed within the same footprint identified in the original Project, and no established community exists within the limits of the original Project. The revisions to the original Project are also consistent with the certified Port Master Plan. The revisions to the original Project would continue to comply with all applicable land use and planning mitigation measures identified in the FEIR. Therefore, the impacts originally identified in the FEIR for the CVBMP would remain unchanged with implementation of the revisions to the H Street extension component of the original Project.

XI. Mineral Resources	New Potentially Significant Impact	More Severe Impact	No Substantial Change from Previous Analysis
Would the project:			
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☒
b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☒

a. – b. The revisions to the original Project would not result in the loss of availability of a known mineral resource that would be of value to the region or state, or a locally important mineral resource recovery site delineated on a local plan. The revisions to the original Project would be constructed within the same footprint identified in the original Project, and no mineral resources are known to occur or have been discovered within the limits of the original Project site. Therefore, the impacts originally identified in the FEIR for the CVBMP would remain unchanged with implementation of the revisions to the H Street extension component of the original Project.

XII. Noise	New Potentially Significant Impact	More Severe Impact	No Substantial Change from Previous Analysis
Would the project:			
a. Expose persons to or generate noise levels in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies?	☐	☐	☒
b. Expose persons to or generate excessive groundborne vibration or groundborne noise levels?	☐	☐	☒
c. Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒
d. Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒
e. Be located within an airport land use plan area, or, where such a plan has not been adopted, within two miles of a public airport or public use airport and expose people residing or working in the project area to excessive noise levels?	☐	☐	☒
f. Be located in the vicinity of a private airstrip and expose people residing or working in the project area to excessive noise levels?	☐	☐	☒

a. – f. The revisions to the original Project would not require any additional construction aside from that identified for the original Project. In addition, it is anticipated that similar construction methods to those proposed as part of the original Project would be employed as part of the revisions to the original Project; thus, construction noise levels would be similar to those identified in the FEIR. Therefore, no additional noise or vibrations would be generated by the revisions to the original Project. Additionally, the revisions to the original Project would not introduce new land uses that were not already analyzed in the FEIR, so new permanent increase in ambient noise would occur.

Finally, the revisions to the original Project would be constructed within the same footprint as the original Project, so additional impacts associated with airport noise levels would not occur. The revisions to the original Project would continue to comply with all applicable noise mitigation measures identified in the FEIR. Therefore, the impacts originally identified in the FEIR for the CVBMP would remain unchanged with implementation of the revisions to the H Street extension component of the original Project.

XIII. Population and Housing	New Potentially Significant Impact	More Severe Impact	No Substantial Change from Previous Analysis
Would the project:			
a. Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	☐	☐	☒
b. Displace a substantial number of existing housing units, necessitating the construction of replacement housing elsewhere?	☐	☐	☒
c. Displace a substantial number of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☒

a. – c. The revisions to the original Project would not induce substantial population growth or displace existing housing or people. The revisions to the original Project do not involve the construction of homes or businesses, and no existing housing units or people occupy the original Project site. The revisions to the original Project would continue to comply with all applicable population and housing mitigation measures identified in the FEIR. Therefore, the impacts originally identified in the FEIR for the CVBMP would remain unchanged with implementation of the revisions to the H Street extension component of the original Project.

XIV. Public Services	New Potentially Significant Impact	More Severe Impact	No Substantial Change from Previous Analysis
Would the project:			
a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or a need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services:			
Fire protection?	☐	☐	☒
Police protection?	☐	☐	☒
Schools?	☐	☐	☒
Parks?	☐	☐	☒
Other public facilities?	☐	☐	☒

a. The revisions to the original Project would not result in additional demand for fire or police protection, schools, parks, or other public facilities. Because the revisions to the original Project would not alter the proposed roadway capacity, no additional park users would be accommodated that could cause the need for additional parks aside from those already identified in the FEIR. The revisions to the original Project would continue to comply with all applicable public services mitigation measures identified in the FEIR. Therefore, the impacts originally identified in the FEIR for the CVBMP would remain unchanged with implementation of the revisions to the revisions to the H Street extension component of the original Project.

XV. Recreation	New Potentially Significant Impact	More Severe Impact	No Substantial Change from Previous Analysis
Would the project:			
a. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☒
b. Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	☐	☐	☒

a. – b. The revisions to the original Project would not result in an increase in use of existing parks or other recreational facilities. Because the revisions to the original Project would not alter the proposed roadway capacity, no additional park users would be accommodated that could cause the physical deterioration of existing parks. The revisions to the original Project would include a Class I bicycle path; however, all improvements would occur within the same footprint identified for the original Project. Therefore, no additional physical effects on the environment would occur as a result of the revisions. In addition, the Class I bicycle path would provide additional recreational opportunities along the waterfront. The revisions to the original Project would continue to comply with all applicable recreation mitigation measures identified in the FEIR. Therefore, the impacts originally identified in the FEIR for the CVBMP would remain unchanged with implementation of the revisions to the H Street extension component of the original Project.

XVI. Transportation/Traffic	New Potentially Significant Impact	More Severe Impact	No Substantial Change from Previous Analysis
Would the project:			
a. Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation, including mass transit and non-motorized travel and relevant components of the circulation system, including, but not limited to, intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☒
b. Conflict with an applicable congestion management program, including, but not limited to, level-of-service standards and travel demand measures or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☒
c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☒
d. Substantially increase hazards because of a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒
e. Result in inadequate emergency access?	☐	☐	☒
f. Conflict with adopted policies, plans, or programs regarding public transit, bicycle or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☒

a.– f. The revisions to the original Project would not conflict with any plans, policies, or ordinances related to the effectiveness of the circulation system because the roadway

extension would continue to be constructed and operate as a 4-lane major roadway. A traffic memorandum entitled *Chula Vista Bayfront Master Plan Traffic Analysis Review, California* prepared by Rick Engineering in July 2013 (see Appendix A) identified that the revisions to the original Project would continue to service the CVBMP at acceptable level of service (LOS) ratios. The traffic memorandum identified that, since preparation of the FEIR, a few of the land uses within the CVBMP area have changed. However, the traffic memorandum concluded that the current roadway cross sections for H Street are consistent with the CVBMP conceptual plans and comply with all applicable mitigation measures identified in the FEIR; thus, no new significant effects on the roadway network would occur. Finally, the traffic memorandum concluded that the roadway geometry proposed for H Street and Bay Boulevard would operate at an acceptable LOS for peak hour conditions and would accommodate all queued vehicles without spilling onto the railroad tracks. Therefore, the revisions to the original Project would not conflict with an applicable congestion management program. Also, no changes to emergency access are proposed. Finally, no change in air traffic patterns would occur from the revisions to the original Project. Finally, the revisions to the original Project include a Class I bicycle path, which would augment existing bicycle facilities in the area. The revisions to the original Project would continue to comply with all applicable transportation/traffic mitigation measures identified in the FEIR. Therefore, the impacts originally identified in the FEIR for the CVBMP would remain unchanged with implementation of the revisions to the H Street extension component of the original Project.

XVII. Utilities and Service Systems	New Potentially Significant Impact	More Severe Impact	No Substantial Change from Previous Analysis
Would the project:			
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☒
b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒
c. Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or would new or expanded entitlements be needed?	☐	☐	☒
e. Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒
f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒
g. Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☒

a. – g. The revisions to the original Project would not result in additional demand for wastewater treatment, water supplies, or landfill capacity as the revision propose substantially the same features as the original Project. No sanitary sewer facilities would be included as part of the revisions to the original Project. Finally, no additional

landfill capacity would be required as the scope of grading and earthwork is substantially similar to the original Project. In addition, the reduction in landscaping from removal of the landscaped median would result in a small reduction in the overall demand for water. The revisions to the original Project would not include any new stormwater drainage facilities aside from those already identified in the original Project, so no new physical impacts would occur. As previously noted, the revisions would continue to be appropriately designed with relation to stormwater drainages and would continue to implement appropriate BMPs and LID strategies, which would further control stormwater runoff. The revisions to the original Project would continue to comply with all applicable utilities and service systems mitigation measures identified in the FEIR. Therefore, the impacts originally identified in the FEIR for the CVBMP would remain unchanged with implementation of the revisions to the H Street extension component of the original Project.

XVIII. Mandatory Findings of Significance	New Potentially Significant Impact	More Severe Impact	No Substantial Change from Previous Analysis
a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☒
b. Does the project have impacts that are individually limited but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	☐	☐	☒
c. Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒

a. – c. The revisions to the original Project would not have the potential to degrade the quality of the environment, reduce biological resources, or eliminate cultural resources because the revisions to the original Project are substantially similar to the original Project and would occur within the same footprint identified in the original Project. The revisions to the original Project would not result in new cumulatively considerable impacts or new environmental impacts on human being because the scope of the Project, including both construction and operation, would also be substantially similar to that identified in the original Project. The revisions to the original Project would continue to comply with all applicable mitigation measures identified in the FEIR. Therefore, the impacts originally identified in the FEIR for the CVBMP would remain unchanged with implementation of the revisions to the H Street extension component of the original Project.

Environmental Determination

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions to the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have an impact on the environment that is "potentially significant" or "potentially significant unless mitigated" but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards and (2) has been addressed by mitigation measures based on the earlier analysis, as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☒ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the project, nothing further is required.

Signature — Date: 8/14/13

LESLEY NISHIHIRA — For

Printed Name

4.0 CONCLUSION

On the basis of the evaluation presented in Section 3, the revisions to the original Project would not trigger any of the conditions listed in Section 1.2 of this Addendum, requiring preparation of a subsequent or supplemental EIR. Thus, this Addendum satisfies the requirements of CEQA Guidelines Sections 15162 and 15164. The revisions to the original Project do not introduce new significant environmental effects, substantially increase the severity of previously identified significant environmental effects, or show that mitigation measures or alternatives previously found not to be feasible would in fact be feasible.

Overall, the revisions to the Project would result in the substantially similar effects to those of the original Project with similar construction and operations as those originally proposed and would therefore generate substantially comparable effects. The revisions to the original Project would not result in new significant effects or effects that would be substantially more severe than those identified in the FEIR. All applicable mitigation measures from the FEIR would be included as part of the revisions to the original Project.

The analyses and conclusions in the FEIR remain current and valid. The revisions to the original Project would not cause new or substantially more severe significant effects than identified in the FEIR, and thus no new mitigation measures would be required. No change has occurred with respect to circumstances surrounding the revisions to the original Project that would cause new or substantially more severe significant environmental effects than identified in the FEIR, and no new information has become available that shows that the project would cause significant environmental effects not already analyzed in the FEIR.

Therefore, no further environmental review is required beyond this Addendum to the FEIR.

Appendix A

RICK™
ENGINEERING COMPANY
Transportation Division

July 18, 2013

Ms. Linda Scott
San Diego Unified Port District
3165 Pacific Highway
San Diego, California 92112

SUBJECT: CHULA VISTA BAYFRONT MASTER PLAN TRAFFIC ANALYSIS REVIEW (RICK ENGINEERING COMPANY JOB NUMBER 15939-K)

Dear Ms. Scott:

Rick Engineering Company performed a review of the traffic analyses performed to date for the Chula Vista Bayfront Master Plan (CVBMP). More specifically, the following traffic analysis were reviewed: *CVBMP Final Environmental Impact Report* (FEIR) (Dudek, April 2010), *CVBMP Traffic Impact Analysis* (Kimley-Horn, March 2008), *CVBMP Pacifica Development Traffic Analysis* (Kimley-Horn, October 2007), and *CVBMP Gaylord Traffic Analysis* (Kimley-Horn, October 2007). The review also compares the existing approved uses for the CVBMP development, with the current land use plan, and assesses the impact to the local roadways in the vicinity of the project. The following summarizes our findings.

TRAFFIC IMPACT ANALYSIS (KIMLEY-HORN) AND FEIR (DUDEK)

The traffic studies were reviewed to verify accuracy and to compare to the current land use plan. The following discrepancies were found with the review:

Phase I: Both traffic analyses reported the same number of total trips, however, the Dudek study showed a Fire Station (located on Parcel H-17) proposed for this phase (Table 4.2-10), and the Kimley-Horn study did not (Table 4-4). The Fire Station is shown to generate 400 daily trips.

Phase II: Both traffic analysis reported the same number of total trips, however, the Kimley-Horn study showed a 2-acre Industrial Business Park (located on Parcel H-17) proposed for this phase (Table 4-5), and the Dudek study did not (Table 4.2-11). The Industrial Business Park is shown to generate 400 daily trips.

Phase III: Both traffic analyses reported the same number of trips, and there are no discrepancies.

Phase IV: Both traffic analyses reported the same number of trips, and there are no discrepancies.

It should be noted that the discrepancy between Phase I and Phase II regarding the Fire Station and the Industrial Business Park (both located on Parcel H-17) is considered negligible, with no additional impact related to traffic, as both proposed developments are shown to be located on the same parcel and generate the same amount of traffic. Refer to **Attachment 1** for the trip generation tables from the Dudek and Kimley-Horn studies.

LAND USE

Since the preparation of the FEIR, a few of the land uses within the CVBMP land area have changed. The changes are as follows:

Phase I: S-1 (Sweetwater District) moved from Phase IV to Phase I, and the land use was revised from a 750 room Resort Hotel to a 237 stall RV Park.

H-3 (Harbor District) decreased from a 2,000 room Hotel to a 1,600 room Resort Conference Center. Access for this parcel was previously assumed to be primarily along H Street, with the main entrance and exit on H Street, west of Marina Parkway, and a truck driveway located along H Street, directly opposite Marina Parkway. A secondary driveway for the parcel was assumed on E Street, north of H Street.

Phase II: H-23 increased from a 500 room Hotel to a 1,250 room Resort Hotel; the 100,000 sf of Cultural use decreased to 25,000 sf; and the 100,000 sf of Retail increased to 175,000 sf. There has not been a focused analysis completed for this parcel, identifying access points.

Phase III: No change.

Phase IV: S-1 was removed and assumed to be constructed as a 237 stall RV Park in Phase I.

TRIP GENERATION

The trip generation for the revised land uses was calculated based on trip generation rates in SANDAG's *Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region*, April 2002 (which is the same methodology utilized in the Kimley-Horn and Dudek studies), and compared to the trip generation in the FEIR. The revised trip generation is summarized as follows:

	FEIR	Current Land Use Plan	Difference
Phase I:	30,842 veh/day	28,427 veh/day	2,415 fewer daily trips
Phase II:	25,190 veh/day	34,090 veh/day	8,900 more daily trips
Phase I&II			*6,485 more daily trips*
Phase III:	8,685 veh/day	8,685 veh/day	no change
Phase I, II, &III			*6,485 more daily trips*
Phase IV:	14,600 veh/day	8,600 veh/day	6,000 fewer daily trips
Phase I, II, III, & IV	*79,317 veh/day*	*78,317 veh/day*	*485 more daily trips*

Refer to **Attachment 2** for summary of the trip generation for each phase of the current land use plan.

POTENTIAL IMPACTS

The traffic generated by the current land use plan was distributed to the project vicinity for Phase II, Phase III, and Phase IV, and compared to City of Chula Vista General Plan roadway classification capacities, and the Mitigation Measures documented in FEIR Section 4.2.5. No further analysis was prepared for Phase I, as this phase is projected to generate less traffic with the current land use plan.

The total additional traffic generated by the current land use plan (485 daily trips) is not anticipated to have any significant impacts on the roadway network within the vicinity of the project, assuming that the roadway cross sections are constructed as follows:

Segment	Roadway Cross Section
H Street, Marina Parkway to Street A	4 Lane Major Street
H Street, Street A to I-5 Ramps	5 Lane Major Street
Street C, Marina Parkway to Street A	2 Lane Class II Collector
J Street, Marina Parkway to Street A	4 Lane Major Street
J Street, Street A to Bay Boulevard	6 Lane Major Street
J Street, Bay Boulevard to I-5 Ramps	6 Lane Major Street
Marina Parkway, H Street to Street C	3 Lane Class II Collector
Marina Parkway, Street C to J Street	3 Lane Class II Collector
Street A, H Street to Street C	4 Lane Class I Collector
Street A, Street C to J Street	4 Lane Class I Collector

The roadway cross sections identified above are consistent with the current Chula Vista Bayfront Master Plan, Sweetwater and Harbor Districts, Conceptual Plan – June 19, 2013, the plans for the H Street Extension Project – July 11, 2013, and the Mitigation Measures Section 4.2.5 of the FEIR.

Refer to **Attachment 3** for the Phase II, Phase III, and Phase IV mitigation requirements from the FEIR and the current land use plan.

H STREET AND BAY BOULEVARD INTERSECTION GEOMETRY

The intersection of H Street and Bay Boulevard was analyzed using the Synchro software to determine if the geometry proposed by the current land use plan is adequate for peak hour conditions. Based on the results of the capacity and queuing analysis, for all phases of development, the geometry as proposed is anticipated to operate at an acceptable LOS for peak hour conditions, and accommodate all queued vehicles without spilling across the railroad tracks. The geometry is proposed as follows:

Intersection of H Street and Bay Boulevard

- Eastbound: 3 through lanes, 1 right-turn lane
- Westbound: 2 through lanes with a shared right-turn lane
- Northbound: 1 left-turn lane, 1 shared through/right-turn lane
- Southbound: 1 left-turn lane, 1 shared through/right-turn lane

Refer to **Attachment 4** for the capacity analysis printouts.

CONCLUSION

The change in land use for the CVBMP is anticipated to result in a minor increase in traffic when compared to the trip generation in the FEIR (485 more daily trips) for full build conditions (all four phases of development). As a result of the net increase in trips, no additional impacts are anticipated to occur, as long as the roadway cross sections described in the Potential Impacts section of this letter are constructed. The roadway cross sections described above correspond with the following plan sets:

- Chula Vista Bayfront Master Plan, Sweetwater and Harbor Districts, Conceptual Plan – June 19, 2013.
- H Street Extension Project – July 11, 2013.

It is recommended that once driveway locations are determined for H-23 that a focused traffic analysis is prepared for this parcel, to determine if any additional impacts will occur at the adjacent intersections and roadways. Additionally, if any access points change for H-3, a revision to the traffic analysis prepared for this parcel should be performed, to determine any impacts to the adjacent intersections and roadways, and to verify that the currently planned cross sections are adequate.

Sincerely,

RICK ENGINEERING COMPANY

Brian R. Stephenson, P.E., T.E., P.T.O.E.
Principal Project Manager

Attachments

cc: Kevin Gibson, Rick Engineering Company

Attachment 1

Trip Generation from Dudek and Kimley-Horn Studies

TABLE 4.2-10
Summary of Phase I Trip Generation

									A.M. Peak Hour			P.M. Peak Hour		
Phase	Parcel	Land Use	Units[1]		Trip Rate[2]			Daily Trips	In	Out	Total	In	Out	Total
Sweetwater District														
I	S-2	Signature Park	18	Ac	50	/	ac	900	59	58	117	41	40	81
Subtotal								**900**	**59**	**58**	**117**	**41**	**40**	**81**
Harbor District														
I	H-3	Hotel	2,000	rm	10	/	rm	20,000	720	480	1,200	960	640	1,600
I	H-13, H-14	Residential	1,500	du	6	/	du	9,000	144	576	720	567	243	810
I	H-8, HP-1	Signature Park	18	ac	50	/	ac	900	59	58	117	41	40	81
I	H-17	Fire Station	2	ac	200	/	ac	400	38	10	48	10	38	48
I	HP-3	Shoreline Promenade	8.4	ac.	5	/	ac	42	1	1	2	2	2	3
Subtotal								**29,942**	**924**	**1,115**	**2,039**	**1,570**	**924**	**2,494**
Total								**30,842**	**983**	**1,173**	**2,156**	**1,611**	**964**	**2,575**

SOURCE: Kimley-Horn and Associates 2008.
rm = room; ac = acre; ksf = thousand square feet; du = dwelling unit
[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.

TABLE 4.2-11
Summary of Phase II Trip Generation

Phase	Parcel	Land Use	Units[1]		Trip Rate[2]			Daily Trips	A.M. Peak Hour			P.M. Peak Hour		
									In	Out	Total	In	Out	Total
Harbor District														
II	H-9	Retail/Commercial Recreation	50	ksf	40	/	ksf	2,000	36	24	60	90	90	180
II	H-15	Mixed Use Office	210	ksf	17	/	ksf	3,570	418	46	464	100	400	500
II	H-15	Visitor Hotel	250	rm	8	/	rm	2,000	60	40	100	56	84	140
II	H-15	Retail	120	ksf	40	/	ksf	4,800	86	58	144	216	216	432
II	H-15	General Office	90	ksf	20	/	ksf	1,800	227	25	252	47	187	234
II	H-23	Hotel	500	rm	10	/	rm	5,000	180	120	300	240	160	400
II	H-23	Cultural	100	ksf	16	/	ksf	1,600	22	10	32	80	80	160
II	H-23	Retail	100	ksf	40	/	ksf	4,000	72	48	120	180	180	360
II	HP-28	H Street Pier	0.4	ac	50	/	ac	20	1	2	3	1	1	2
Subtotal								**25,190**	**1,140**	**383**	**1,523**	**1,020**	**1,436**	**2,456**
Total								**25,190**	**1,140**	**383**	**1,523**	**1,020**	**1,436**	**2,456**

SOURCE: Kimley-Horn and Associates 2008.
ksf = thousand square feet; ac = acre; du = dwelling unit
[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.

TABLE 4.2-12
Summary of Phase III Trip Generation

Phase	Parcel	Land Use	Units[1]		Trip Rate[2]			Daily Trips	A.M. Peak Hour			P.M. Peak Hour		
									In	Out	Total	In	Out	Total
Harbor District														
III	H-21	Retail	150	ksf	40	/	ksf	6,000	108	72	180	270	270	540
III	HP-23A	Industrial Business Park	1.0	ac	50	/	ac	50	3	4	7	2	3	5
Subtotal								**6,050**	**111**	**76**	**187**	**272**	**273**	**545**
Otay District														
III	O-1/O-2	Industrial Business Park[3]						1,200	115	29	144	29	115	144
III	O-3	RV Park	236	du	5	/	du	1,180	28	66	94	78	52	130
III	OP-1/OP-3	South Park	51	ac	5	/	ac	255	5	5	10	10	10	20
Subtotal								**2,635**	**148**	**101**	**249**	**117**	**177**	**294**
Total								**8,685**	**259**	**176**	**435**	**389**	**450**	**s**

SOURCE: Kimley-Horn and Associates 2008.
ksf = thousand square feet
[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.
[3] The size of the industrial business park has not been determined, but trips for its use, which is consistent with the General Plan, have been assumed as shown.

TABLE 4.2-13
Summary of Phase IV Trip Generation

Phase	Parcel	Land Use	Units[1]		Trip Rate[2]			Daily Trips	A.M. Peak Hour			P.M. Peak Hour		
									In	Out	Total	In	Out	Total
Sweetwater District														
IV	S-3	Mixed Use Commercial	120	ksf	17	/	ksf	2,040	239	26	265	57	229	286
IV	S-4	Office	120	ksf	17	/	ksf	2,040	239	26	265	57	229	286
IV	S-1	Resort Hotel	750	rm	8	/	rm	6,000	180	120	300	168	252	420
Subtotal								**10,080**	**658**	**172**	**830**	**282**	**710**	**992**
Harbor District														
IV	H-12	Ferry Terminal/Restaurant	25	ksf	100	/	ksf	2,500	15	10	25	140	60	200
IV	H-18	Office	100	ksf	20	/	ksf	2,000	252	28	280	52	208	260
IV	HP-28	H Street Pier	0.40	ac	50	/	ac	20	1	2	3	1	1	2
Subtotal								**4,520**	**268**	**40**	**308**	**193**	**269**	**462**
Total								**14,600**	**926**	**212**	**1,138**	**475**	**979**	**1,454**

SOURCE: Kimley-Horn and Associates 2008.
ksf = thousand square feet
[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.

TABLE 4.2-14
Total Project Trip Generation Summary

Phase	Parcel	Land Use	Units[1]		Trip Rate[2]			Daily Trips	A.M. Peak Hour			P.M. Peak Hour		
									In	Out	Total	In	Out	Total
Sweetwater District														
IV	S-1	Resort Hotel	750	Rm	8	/	Rm	6,000	180	120	300	168	252	420
I	S-2	Signature Park	18.0	Ac	50	/	Ac	900	59	58	117	41	40	81
IV	S-3	Mixed Use Commercial	120	Ksf	17	/	Ksf	2,040	239	26	265	57	229	286
IV	S-4	Office	120	Ksf	17	/	Ksf	2,040	239	26	265	57	229	286
Subtotal								10,980	717	230	947	323	750	1,073
Harbor District														
I	H-3	Hotel	2,000	Rm	10	/	Rm	20,000	720	480	1,200	960	640	1,600
I	H-8/HP-1	Signature Park	18.0	Ac	50	/	Ac	900	59	58	117	41	40	81
II	H-9	Retail/Commercial Recreation	50	Ksf	40	/	Ksf	2,000	36	24	60	90	90	180
IV	H-12	Ferry Terminal/Restaurant	25	Ksf	100	/	Ksf	2,500	15	10	25	140	60	200
I	H-13/H-14	Residential	1,500	Du	6	/	Du	9,000	144	576	720	567	243	810
II	H-15	Mixed Use Office	210	Ksf	17	/	Ksf	3,570	418	46	464	100	400	500
II	H-15	Visitor Hotel	250	Rm	8	/	Rm	2,000	60	40	100	56	84	140
II	H-15	Retail	120	Ksf	40	/	Ksf	4,800	86	58	144	216	216	432
II	H-15	General Office	90	Ksf	20	/	Ksf	1,800	227	25	252	47	187	234
II	H-17	Fire Station	2.0	Ac	200	/	Ac	400	38	10	48	10	38	48
IV	H-18	Office	100	Ksf	20	/	Ksf	2,000	252	28	280	52	208	260
III	H-21	Retail	150	Ksf	40	/	Ksf	6,000	108	72	180	270	270	540
II	H-23	Hotel	500	Rm	10	/	Rm	5,000	180	120	300	240	160	400
II	H-23	Cultural	100	Ksf	16	/	Ksf	1,600	22	10	32	80	80	160
II	H-23	Retail	100	Ksf	40	/	Ksf	4,000	72	48	120	180	180	360
I	HP-3	Shoreline Promenade	8.4	Ac	5	/	Ac	42	1	1	2	2	2	3
III	HP-23A	Industrial Business Park	1.0	Ac	50	/	Ac	50	3	4	7	2	3	5
II	HP-28	H Street Pier	0.4	Ac	50	/	Ac	20	1	2	3	1	1	2
IV	HP-28	H Street Pier	0.4	Ac	50	/	Ac	20	1	2	3	1	1	2
Subtotal								65,706	2,443	1,613	4,055	3,055	2,902	5,957
Otay District														
III	O-1/O-4	Industrial Business Park						1,200	115	29	144	29	115	144
III	O-3A/O-3B	RV Park	236	du	5	/	du	1,180	28	66	94	78	52	130
III	OP-1A/B and OP-3	South Park	51.0	ac	5	/	ac	255	5	5	10	10	10	20
Subtotal								2,635	148	101	249	117	177	294
Total								79,317	3,308	1,943	5,251	3,495	3,829	7,324

TABLE 4-4
PROPOSED PROJECT
PHASE I TRIP GENERATION SUMMARY

Phase	Parcel	Land Use	Size	Trip Rate	Daily Trips	AM Peak Hour			PM Peak Hour		
						In	Out	Total	In	Out	Total
Sweetwater District											
I	S-2	Signature Park	18.0 ac	50 / ac	900	59	58	117	41	40	81
		Subtotal for: Sweetwater District			900	59	58	117	41	40	81
Harbor District											
I	H-3	Hotel	2,000 rm	10 / rm	20,000	720	480	1,200	960	640	1,600
I	H-8/HP-1	Signature Park	18 ac	50 / ac	900	59	58	117	41	40	81
I	H-13/H-14	Residential	1,500 du	6 / du	9,000	144	576	720	567	243	810
I	HP-03	50' Baywalk	8.4 ac	5 / ac	42	1	1	2	2	1	3
		Subtotal for: Harbor District			29,942	924	1,115	2,039	1,570	924	2,494
				Total:	30,842	983	1,173	2,156	1,611	964	2,575

NOTES:
(1) See Table 4-3 for the SANDAG trip generator category used for each land use description.
(2) The intensity of each land use was provided by the Port of San Diego
(3) Trip Generation rates are based on SANDAG's Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region, April 2002

K:\09545100\Traffic\EventOption 2\[SP Trip Gen.xlsm]PI Trip Generation

TABLE 4-5
PROPOSED PROJECT
PHASE II TRIP GENERATION SUMMARY

Phase	Parcel	Land Use	Size	Trip Rate	Daily Trips	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total
Harbor District											
II	H-9	Retail/Commercial Recreation	50 ksf	40 / ksf	2,000	36	24	60	90	90	180
II	H-15	Mixed Use Office	210 ksf	17 / ksf	3,570	418	46	464	100	400	500
II	H-15	Visitor Hotel	250 rm	8 / rm	2,000	60	40	100	56	84	140
II	H-15	Retail	120 ksf	40 / ksf	4,800	86	58	144	216	216	432
II	H-15	General Office	90 ksf	20 / ksf	1,800	227	25	252	47	187	234
II	H-17	Industrial Business Park	2 ac	200 / ac	400	38	10	48	10	38	48
II	H-23	Hotel	500 rm	10 / rm	5,000	180	120	300	240	160	400
II	H-23	Cultural	100 ksf	16 / ksf	1,600	22	10	32	80	80	160
II	H-23	Retail	100 ksf	40 / ksf	4,000	72	48	120	180	180	360
II	HP-28	H Street Pier	0.4 ac	50 / ac	20	1	2	3	1	1	2
		Subtotal for: Harbor District			25,190	1,140	383	1,523	1,020	1,436	2,456
				Total:	25,190	1,140	383	1,523	1,020	1,436	2,456

NOTES:
(1) See Table 4-3 for the SANDAG trip generator category used for each land use description.
(2) The intensity of each land use was provided by the Port of San Diego
(3) Trip Generation rates are based on SANDAG's Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region, April 2002

K:\09545100\Traffic\Excel\Option 2\SP Trip Gen\Rev\[PII Trip Generation

TABLE 4-6
PROPOSED PROJECT
PHASE III TRIP GENERATION SUMMARY

Phase	Land Use	Land Use	Units	Trip Rate	Daily Trips	AM Peak Hour			PM Peak Hour		
						In	Out	Total	In	Out	Total
Harbor District											
III	H-21	Retail	150 ksf	40 / ksf	6,000	108	72	180	270	270	540
III	HP-23A	Industrial Business Park	1.0 ac	50 / ac	50	3	4	7	2	3	5
		Subtotal for: Harbor District			6,050	111	76	187	272	273	545
Otay District											
III	O-1/O-2	Industrial Business Park [4]			1,200	115	29	144	29	115	144
III	O-3	RV Park	236 du	5 / du	1,180	28	66	94	78	52	130
III	OP-1/OP-3	South Park	51 ac	5 / ac	255	5	5	10	10	10	20
		Subtotal for: Otay District			2,635	148	101	249	117	177	294
				Total:	8,685	259	176	435	389	450	839

NOTES:
(1) See Table 4-3 for the SANDAG trip generator category used for each land use description.
(2) The intensity of each land use was provided by the Port of San Diego
(3) Trip Generation rates are based on SANDAG's Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region, April 2002
(4) The size of the industrial business park has not been determined, but trips for the use, which is consistent with the General Plan, have been assumed as shown.

K:\09545100\Traffic\Excel\Option 2\[SP Trip Gen.xlsm]Fill Trip Generation

TABLE 4-7
PROPOSED PROJECT
PHASE IV TRIP GENERATION SUMMARY

Phase	Parcel	Land Use	Units	Trip Rate	Daily Trips	AM Peak Hour			PM Peak Hour		
						In	Out	Total	In	Out	Total
Sweetwater District											
IV	S-1	Resort Hotel	750 rm	8 / rm	6,000	180	120	300	168	252	420
IV	S-3	Mixed Use Commercial	120 ksf	17 / ksf	2,040	239	26	265	57	229	286
IV	S-4	Office	120 ksf	17 / ksf	2,040	239	26	265	57	229	286
		Subtotal for: Sweetwater District			10,080	658	172	830	282	710	992
Harbor District											
IV	H-12	Ferry Terminal/ Restaurant	25 ksf	100 / ksf	2,500	15	10	25	140	60	200
IV	H-18	Office	100 ksf	20 / ksf	2,000	252	28	280	52	208	260
IV	HP-28	H Street Pier	0.40 ac	50 / ac	20	1	2	3	1	1	2
		Subtotal for: Harbor District			4,520	268	40	308	193	269	462
				Total:	14,600	926	212	1,138	475	979	1,454

NOTES:
(1) See Table 4-3 for the SANDAG trip generator category used for each land use description.
(2) The intensity of each land use was provided by the Port of San Diego
(3) Trip Generation rates are based on SANDAG's Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region, April 2002

K:\09545\1000\Traffic\Excel\Option 2\SP Trip Gen.xlsm]PIV Trip Generation

TABLE 4-8
PROPOSED PROJECT
TOTAL PROJECT TRIP GENERATION SUMMARY

						AM Peak Hour			PM Peak Hour		
Phase	Parcel	Land Use	Units	Trip Rate	Daily Trips	In	Out	Total	In	Out	Total
Sweetwater District											
IV	S-1	Resort Hotel	750 rm	8 / rm	6,000	180	120	300	168	252	420
I	S-2	Signature Park	18.0 ac	50 / ac	900	59	58	117	41	40	81
IV	S-3	Mixed Use Commercial	120 ksf	17 / ksf	2,040	239	26	265	57	229	286
IV	S-4	Office	120 ksf	17 / ksf	2,040	239	26	265	57	229	286
		Subtotal for: Sweetwater District			10,980	717	230	947	323	750	1,073
Harbor District											
I	H-3	Hotel	2,000 rm	10 / rm	20,000	720	480	1,200	960	640	1,600
I	H-8/HP-1	Signature Park	18.0 ac	50 / ac	900	59	58	117	41	40	81
II	H-9	Retail/Commercial Recreation	50 ksf	40 / ksf	2,000	36	24	60	90	90	180
IV	H-12	Ferry Terminal/ Restaurant	25 ksf	100 / ksf	2,500	15	10	25	140	60	200
I	H-13/H-14	Residential	1,500 du	6 / du	9,000	144	576	720	567	243	810
II	H-15	Mixed Use Office	210 ksf	17 / ksf	3,570	418	46	464	100	400	500
II	H-15	Visitor Hotel	250 rm	8 / rm	2,000	60	40	100	56	84	140
II	H-15	Retail	120 ksf	40 / ksf	4,800	86	58	144	216	216	432
II	H-15	General Office	90 ksf	20 / ksf	1,800	227	25	252	47	187	234
II	H-17	Industrial Business Park	2.0 ac	200 / ac	400	38	10	48	10	38	48
IV	H-18	Office	100 ksf	20 / ksf	2,000	252	28	280	52	208	260
III	H-21	Retail	150 ksf	40 / ksf	6,000	108	72	180	270	270	540
II	H-23	Hotel	500 rm	10 / rm	5,000	180	120	300	240	160	400
II	H-23	Cultural	100 ksf	16 / ksf	1,600	22	10	32	80	80	160
II	H-23	Retail	100 ksf	40 / ksf	4,000	72	48	120	180	180	360
I	HP-03	50' Baywalk	8.4 ac	5 / ac	42	1	1	2	2	1	3
III	HP-23A	Industrial Business Park	1.0 ac	50 / ac	50	3	4	7	2	3	5
II	HP-28	H Street Pier	0.4 ac	50 / ac	20	1	2	3	1	1	2
IV	HP-28	H Street Pier	0.4 ac	50 / ac	20	1	2	3	1	1	2
		Subtotal for: Harbor District			65,702	2,443	1,612	4,055	3,055	2,902	5,957
Otay District											
III	O-1/O-2	Industrial Business Park[4]			1,200	115	29	144	29	115	144
III	O-3	RV Park	236 du	5 / du	1,180	28	66	94	78	52	130
III	OP-1/OP-3	South Park	51.0 ac	5 / ac	255	5	5	10	10	10	20
		Subtotal for: Otay District			2,635	148	101	249	117	177	294
				Total:	79,317	3,308	1,943	5,251	3,495	3,829	7,324

NOTES:
(1) See Table 4-3 for the SANDAG trip generator category used for each land use description.
(2) The intensity of each land use was provided by the Port of San Diego
(3) Trip Generation rates are based on SANDAG's Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region, April 2002
(4) The size of the industrial business park has not been determined, but trips for the use, which is consistent with the General Plan, have been assumed as shown.

Attachment 2

Summary of Current Land Use Plan Trip Generation

Table 1
Trip Generation - Phase I

Phase	Parcel	Land Use	Units		Trip Rate		Daily Trips	AM Peak Hour			PM Peak Hour		
								In	Out	Total	In	Out	Total
Sweetwater District													
I	S-2	Signature Park	18	ac	50	ac	900	59	58	117	41	40	81
I	S-1	RV Park	237	stalls	5	stall	1,185	28	67	95	78	52	130
Subtotal							**2,085**	**87**	**125**	**212**	**119**	**92**	**211**
Harbor District													
I	H-3	Resort Conference Center	1,600	rm	10	rm	16,000	576	384	960	768	512	1,280
I	H-13, H-14	Residential	1,500	du	6	du	9,000	144	576	720	567	243	810
I	H-8, HP-1	Signature Park	18	ac	50	ac	900	59	58	117	41	40	81
I	H-17	Fire Station	2	ac	200	ac	400	38	10	48	10	38	48
I	HP-3	Shoreline Promenade	8	ac	5	ac	42	1	1	2	2	2	4
Subtotal							**26,342**	**818**	**1,029**	**1,847**	**1,388**	**835**	**2,223**
Total							**28,427**	**905**	**1,154**	**2,059**	**1,507**	**927**	**2,434**

Note: H-3 decreased from 2,000 rooms to 1,600 rooms. S-1 moved from Phase IV to Phase I, and land use revised to RV Park.

Table 2
Trip Generation - Phase II

Phase	Parcel	Land Use	Units		Trip Rate		Daily Trips	AM Peak Hour			PM Peak Hour		
Harbor District													
II	H-9	Retail/Commercial Recreation	50	ksf	40	ksf	2,000	36	24	60	90	90	180
II	H-15	Mixed Use Office	210	ksf	17	ksf	3,570	418	46	464	100	400	500
II	H-15	Visitor Hotel	250	rm	8	rm	2,000	60	40	100	56	84	140
II	H-15	Retail	120	ksf	40	ksf	4,800	86	58	144	216	216	432
II	H-15	General Office	90	ksf	20	ksf	1,800	227	25	252	47	187	234
II	H-23	Resort Hotel	1,250	rm	10	rm	12,500	450	300	750	600	400	1,000
II	H-23	Cultural	25	ksf	16	ksf	400	6	2	8	20	20	40
II	H-23	Retail	175	ksf	40	ksf	7,000	126	84	210	315	315	630
II	HP-28	H Street Pier	0.4	ac	50	ac	20	1	2	3	1	1	2
Subtotal							**34,090**	**1,410**	**581**	**1,991**	**1,445**	**1,713**	**3,158**
Total							**34,090**	**1,410**	**581**	**1,991**	**1,445**	**1,713**	**3,158**

Note: H-23 increased from 500 rooms to 1,250 rooms.

Table 3
Trip Generation - Phase III

Phase	Parcel	Land Use	Units		Trip Rate		Daily Trips	AM Peak Hour			PM Peak Hour		
Harbor District													
III	H-21	Retail	150	ksf	40	ksf	6,000	108	72	180	270	270	540
III	HP-23A	Industrial Business Park	1.0	ac	50	ac	50	3	4	7	2	3	5
Subtotal							**6,050**	**111**	**76**	**187**	**272**	**273**	**545**
Otay District													
III	O-1/O-2	Industrial Business Park					1,200	115	29	144	29	115	144
III	O-3	RV Park	236	du	5	du	1,180	28	66	94	78	52	130
III	OP-1/OP-3	South Park	51	ac	5	ac	255	5	5	10	10	10	20
Subtotal							**2,635**	**148**	**100**	**248**	**117**	**177**	**294**
Total							**8,685**	**259**	**176**	**435**	**389**	**450**	**839**

Table 4
Trip Generation - Phase IV

Phase	Parcel	Land Use	Units		Trip Rate		Daily Trips	AM Peak Hour			PM Peak Hour		
								In	Out	Total	In	Out	Total
Sweetwater District													
IV	S-3	Mixed Use Commercial	120	ksf	17	ksf	2,040	239	26	265	57	229	286
IV	S-4	Office	120	ksf	17	ksf	2,040	239	26	265	57	229	286
Subtotal							**4,080**	**478**	**52**	**530**	**114**	**458**	**572**
Harbor District													
IV	H-12	Ferry Terminal/Restaurant	25	ksf	100	ksf	2,500	15	10	25	140	60	200
IV	H-18	Office	100	ksf	20	ksf	2,000	252	28	280	52	208	260
IV	HP-28	H Street Pier	0.4	ac	50	ac	20	1	2	3	1	1	2
Subtotal							**4,520**	**268**	**40**	**308**	**193**	**269**	**462**
Total							**8,600**	**746**	**92**	**838**	**307**	**727**	**1,034**

Note: S-1 moved from Phase IV to Phase I, and land use revised to RV Park.

Table 5
Trip Generation - All Phases

Phase	Parcel	Land Use	Units		Trip Rate		Daily Trips	AM Peak Hour			PM Peak Hour		
								In	Out	Total	In	Out	Total
Sweetwater District													
I	S-2	Signature Park	18	ac	50	ac	900	59	58	117	41	40	81
I	S-1	RV Park	237	stalls	5	stall	1,185	28	67	95	78	52	130
IV	S-3	Mixed Use Commercial	120	ksf	17	ksf	2,040	239	26	265	57	229	286
IV	S-4	Office	120	ksf	17	ksf	2,040	239	26	265	57	229	286
Subtotal							**6,165**	**565**	**177**	**742**	**233**	**550**	**783**
Harbor District													
I	H-3	Resort Conference Center	1,600	rm	10	rm	16,000	576	384	960	768	512	1,280
I	H-13, H-14	Residential	1,500	du	6	du	9,000	144	576	720	567	243	810
I	H-8, HP-1	Signature Park	18	ac	50	ac	900	59	58	117	41	40	81
I	H-17	Fire Station	2	ac	200	ac	400	38	10	48	10	38	48
I	HP-3	Shoreline Promenade	8	ac	5	ac	42	1	1	2	2	2	4
II	H-9	Retail/Commercial Recreation	50	ksf	40	ksf	2,000	36	24	60	90	90	180
II	H-15	Mixed Use Office	210	ksf	17	ksf	3,570	418	46	464	100	400	500
II	H-15	Visitor Hotel	250	rm	8	rm	2,000	60	40	100	56	84	140
II	H-15	Retail	120	ksf	40	ksf	4,800	86	58	144	216	216	432
II	H-15	General Office	90	ksf	20	ksf	1,800	227	25	252	47	187	234
II	H-23	Resort Hotel	1,250	rm	10	rm	12,500	450	300	750	600	400	1,000
II	H-23	Cultural	25	ksf	16	ksf	400	6	2	8	20	20	40
II	H-23	Retail	175	ksf	40	ksf	7,000	126	84	210	315	315	630
II	HP-28	H Street Pier	0.4	ac	50	ac	20	1	2	3	1	1	2
III	H-21	Retail	150	ksf	40	ksf	6,000	108	72	180	270	270	540
III	HP-23A	Industrial Business Park	1.0	ac	50	ac	50	3	4	7	2	3	5
IV	H-12	Ferry Terminal/Restaurant	25	ksf	100	ksf	2,500	15	10	25	140	60	200
IV	H-18	Office	100	ksf	20	ksf	2,000	252	28	280	52	208	260
IV	HP-28	H Street Pier	0.4	ac	50	ac	20	1	2	3	1	1	2
Subtotal							**71,002**	**2,607**	**1,726**	**4,333**	**3,298**	**3,090**	**6,388**
Otay District													
III	O-1/O-2	Industrial Business Park					1,200	115	29	144	29	115	144
III	O-3	RV Park	236	du	5	du	1,180	28	66	94	78	52	130
III	OP-1/OP-3	South Park	51	ac	5	ac	255	5	5	10	10	10	20
Subtotal							**2,635**	**148**	**100**	**248**	**117**	**177**	**294**
Total							**79,802**	**3,320**	**2,003**	**5,323**	**3,648**	**3,817**	**7,465**

Table 6
Trip Generation Comparison

Phase	Daily Trips	AM Peak Hour			PM Peak Hour		
Trips from Revised DEIR, May 2008 (Dudek)		In	Out	Total	In	Out	Total
I	30,842	983	1,173	2,156	1,611	964	2,575
II	25,190	1,140	383	1,523	1,020	1,436	2,456
III	8,685	259	176	435	389	450	839
IV	14,600	926	212	1,138	475	979	1,454
Total	**79,317**	**3,308**	**1,944**	**5,252**	**3,495**	**3,829**	**7,324**
Trips based on Current Land Use Plan							
I	28,427	905	1,154	2,059	1,507	927	2,434
II	34,090	1,410	581	1,991	1,445	1,713	3,158
III	8,685	259	176	435	389	450	839
IV	8,600	746	92	838	307	727	1,034
Total	**79,802**	**3,320**	**2,003**	**5,323**	**3,648**	**3,817**	**7,465**
Difference in Trips between Revised DEIR and Current Land Use Plan							
I	(2,415)	(78)	(19)	(97)	(104)	(37)	(141)
II	8,900	270	198	468	425	277	702
III	0	0	0	0	0	0	0
IV	(6,000)	(180)	(120)	(300)	(168)	(252)	(420)
Total Difference in Trips	**485**	**12**	**59**	**71**	**153**	**(12)**	**141**

Attachment 3

Mitigation Requirements from DEIR

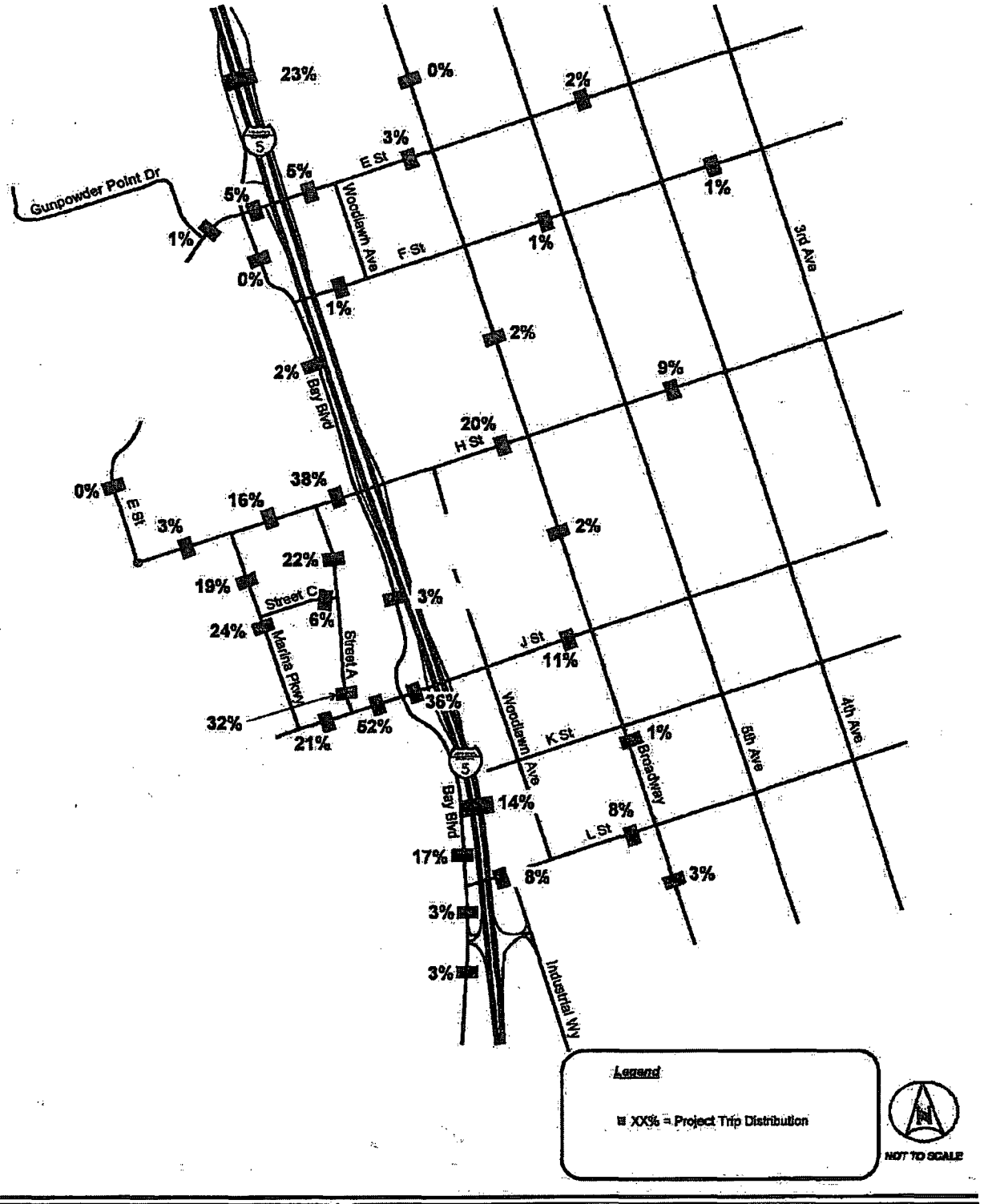

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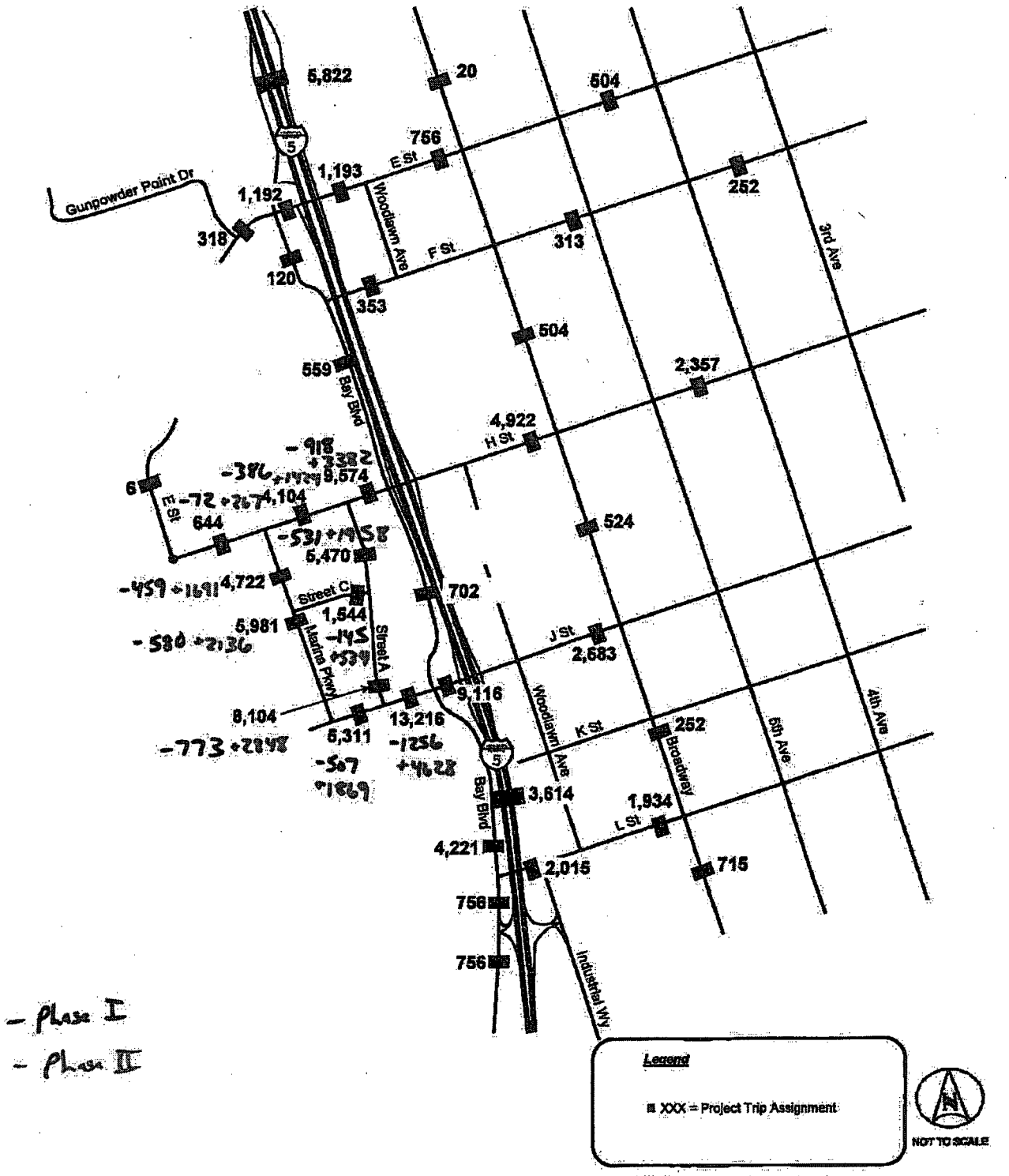
FIGURE 5-25

Proposed Project - Phase II Trip Distribution

K:\065451000\Traffic\Excel\Option 2\[02 RS.xlsm]ADT Fig NCIProposed Project - Phase II Trip Distribution

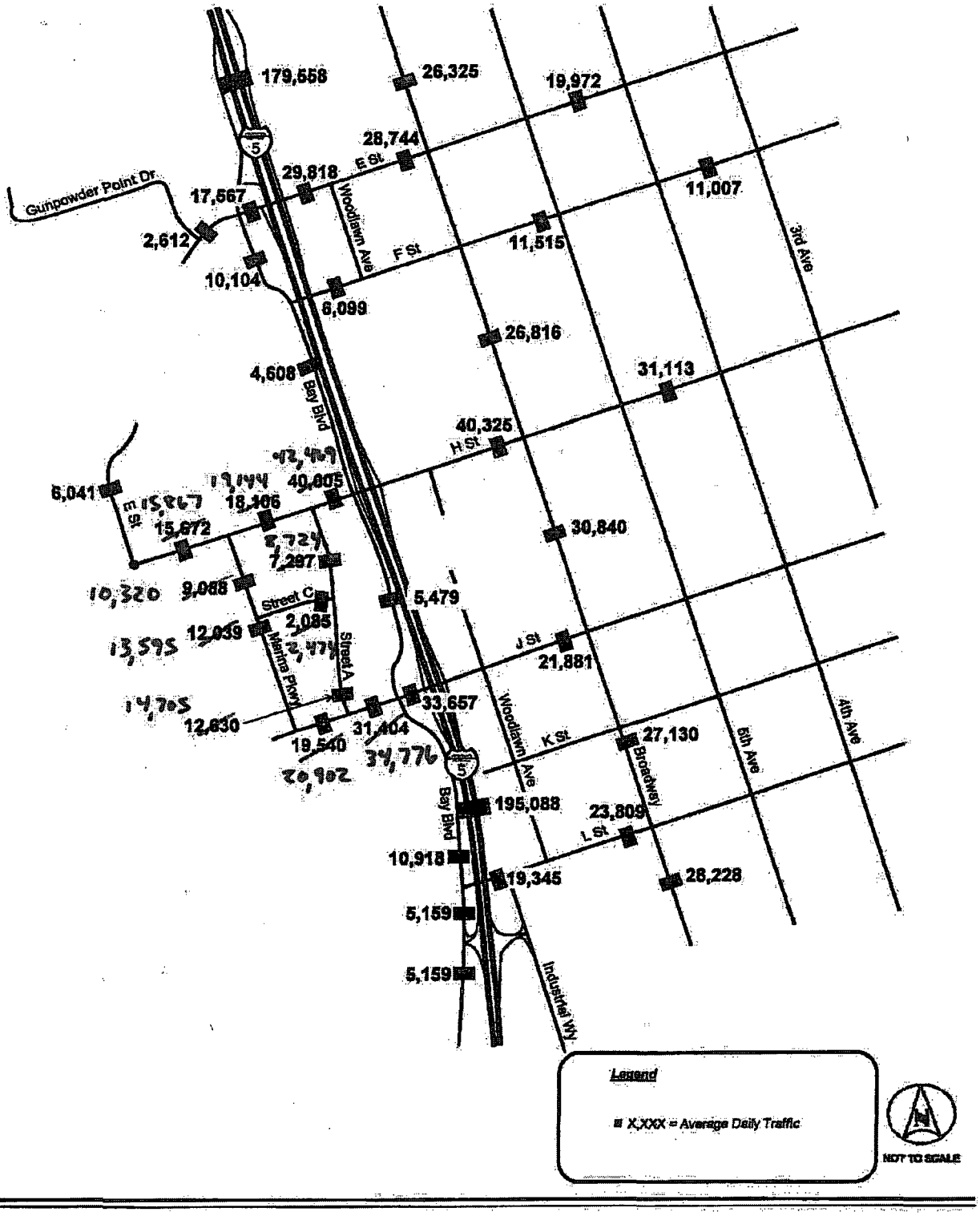


- Phase I
- Phase II

Kimley-Horn and Associates, Inc.

FIGURE 5-27
Proposed Project - Phase II Roadway Segment Trip Assignment

K:\09545100\Traffic\Excel\Option 2\02 RS.xlsm]ADT Fig NC\Proposed Project - Phase II Roadway Segment Trip Assignment



Kimley-Horn and Associates, Inc.

FIGURE 5-31
Proposed Project - Phase II Plus Project Conditions
ADT Volumes

K:\09549100\Traffic\Excel\Option 2\[02 RB.xlsm]ADT Fig NC\Proposed Project - Phase II Plus Project Conditions ADT Volumes

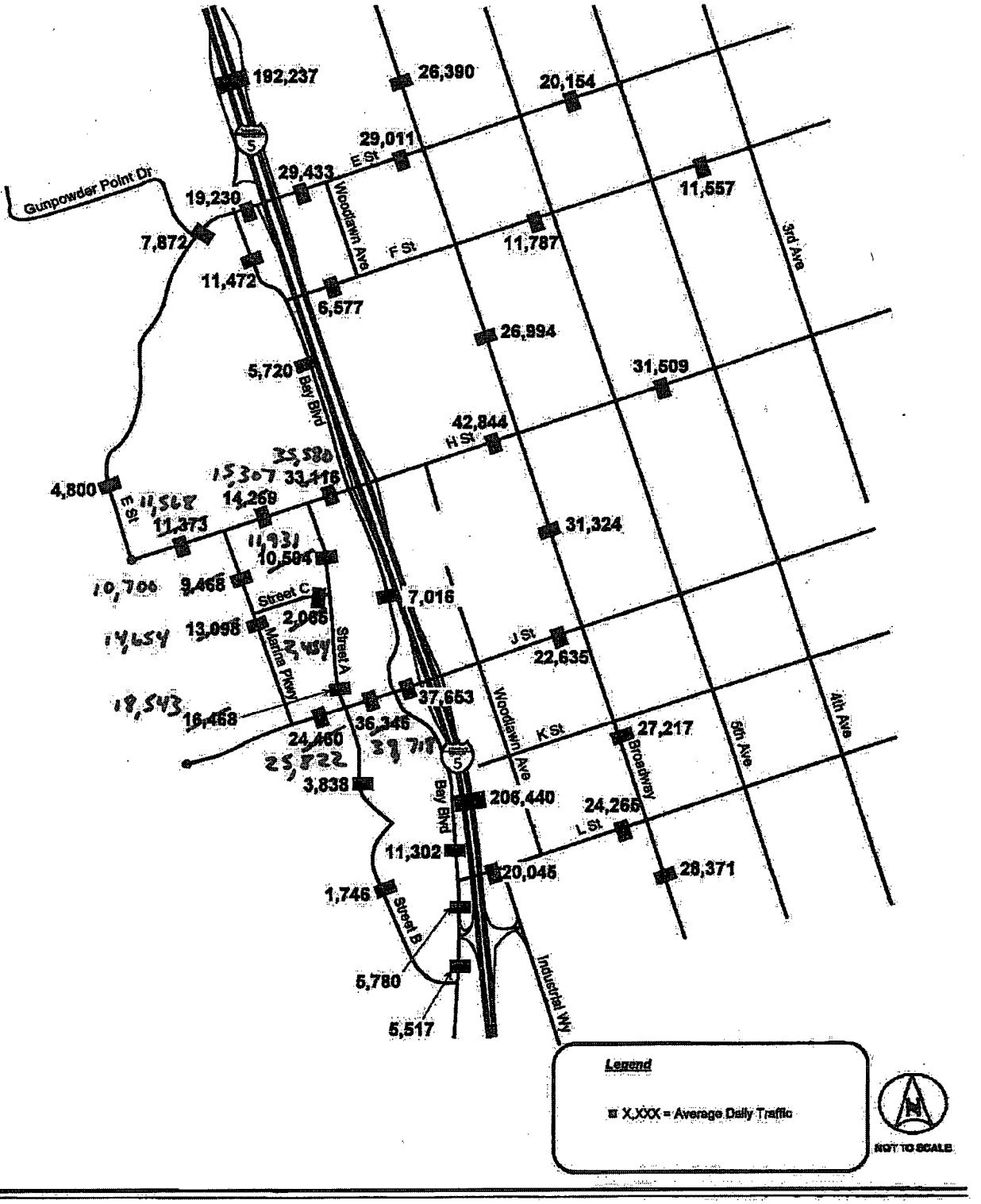


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FIGURE 5-51
Proposed Project - Phase III Conditions Redistributed ADT Traffic Volumes

K:\069451000\Traffic\Excel\Option 2\[O2 RS.xlsm]ADT Fig NE\Proposed Project - Phase III Conditions Redistributed ADT Traffic Volumes

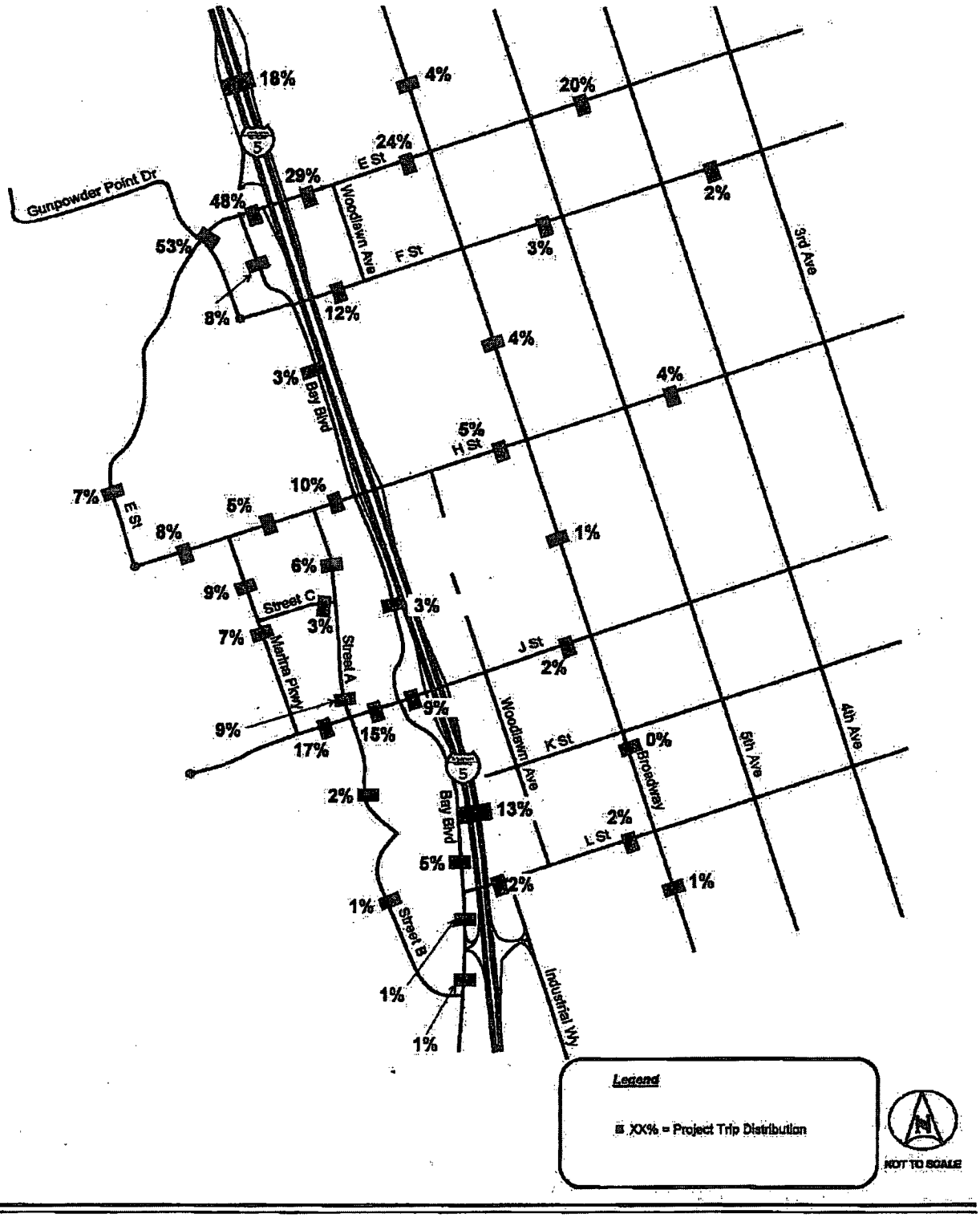

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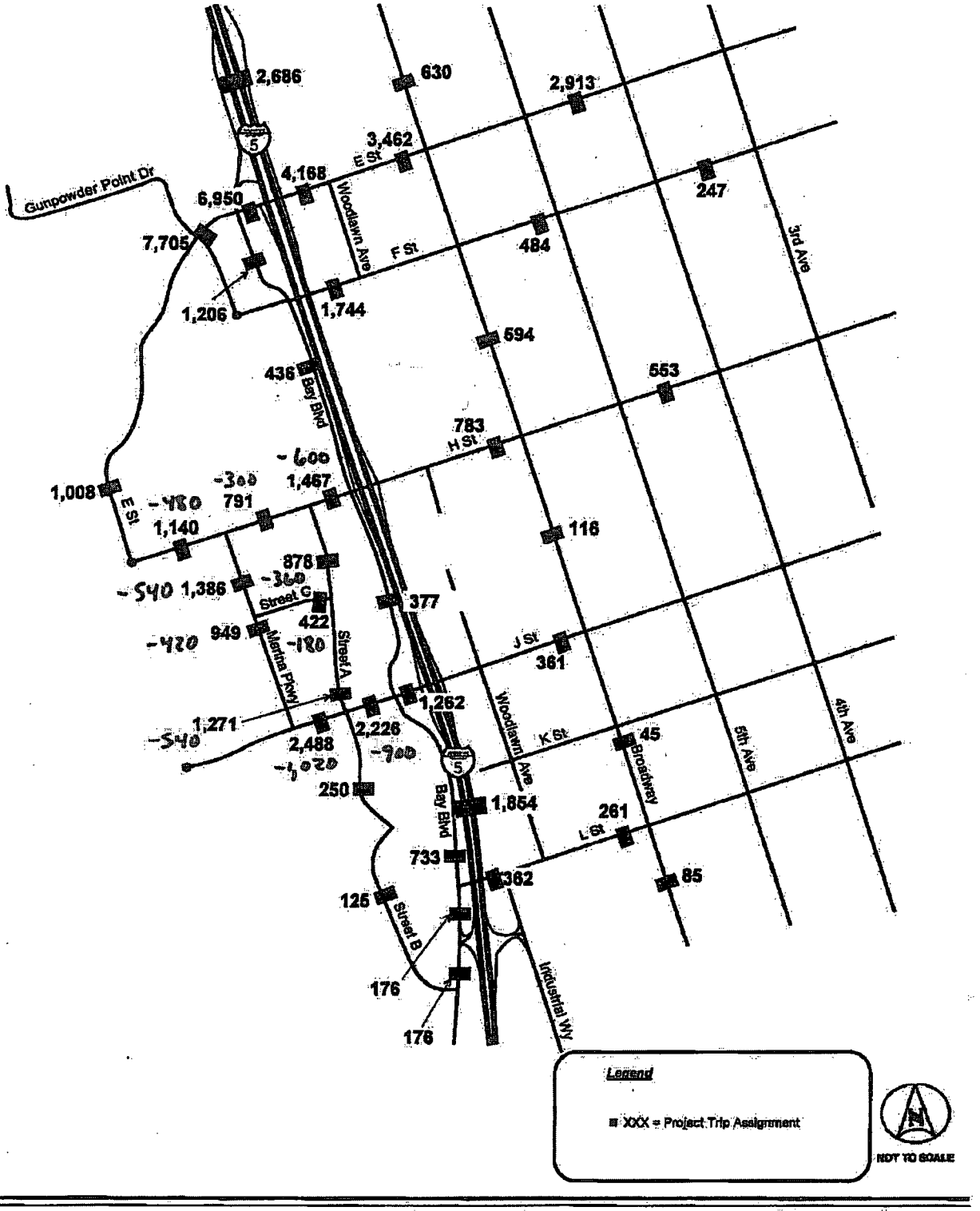
FIGURE 5-58

Proposed Project - Phase IV Trip Distribution

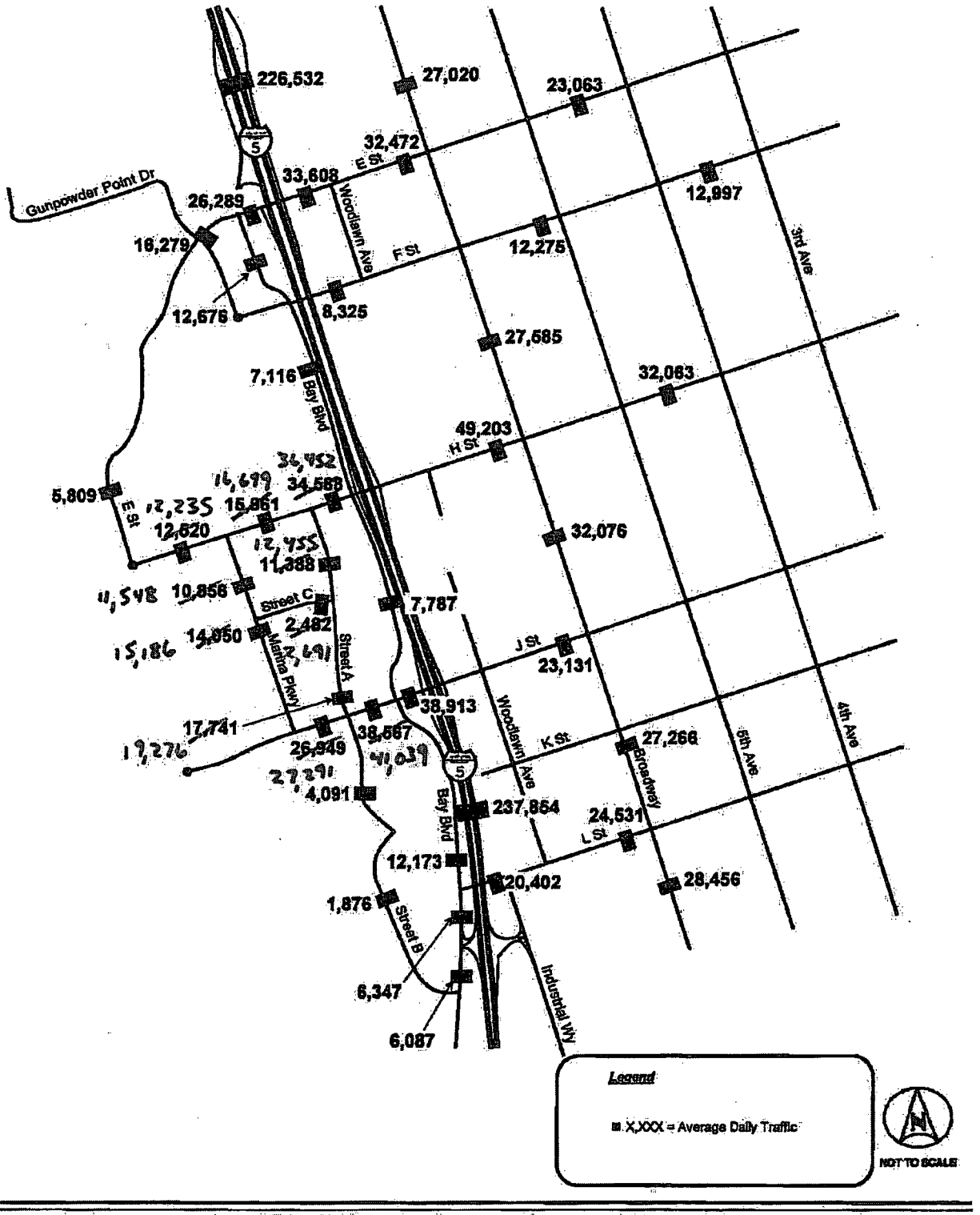
K:\09545\1000\Traffic\ExhibOption 2\(02 RS.dgn)ADT Fig NP\Proposed Project - Phase IV Trip Distribution



Kimley-Horn and Associates, Inc.

FIGURE 5-60
Proposed Project - Phase IV Roadway Segment Trip Assignment

K:\025451000\Traffic\Excel\Office 2\[02 RS.xlsm]ADT Fig IV\Proposed Project - Phase IV Roadway Segment Trip Assignment



Kimley-Horn and Associates, Inc.

FIGURE 5-64
Proposed Project - Phase IV Plus Project Conditions
ADT Volumes

K:\09645100\Traffic\Excel\Option 2\02 R8.xlsm]ADT Fig NF\Proposed Project - Phase IV Plus Project CondBase ADT Volumes

Capacity (v/c) ratios were calculated for each roadway segment. It should be noted that the capacity of a roadway is equal to the maximum LOS E pursuant to the Chula Vista General Plan (2005). *Table 4.2-1* summarizes the capacities and LOS for each Circulation Element and Urban Core Circulation Element roadway.

TABLE 4.2-1
Roadway Segment Capacity and Level of Service

Facility		Acceptable	Level of Service (LOS)				
Class[a]	Lanes	LOS	A (.6)	B (.7)	C (.8)	D (.9)	E (1.0)
Circulation Element Roadways							
Expressway	7/8	C	52,500	61,300	70,000	78,800	87,500
Prime	6	C	37,500	43,800	50,000	56,300	62,500
Major Street	6	C	30,000	35,000	40,000	45,000	50,000
	5	C	26,250	30,650	35,000	39,400	43,750
	4	C	22,500	26,300	30,000	33,800	37,500
Class I Collector	4	C	16,500	19,300	22,000	24,800	27,500
Class II Collector	2	C	9,000	10,500	12,000	13,500	15,000
Class III Collector	2	C	5,600	6,600	7,500	8,400	9,400
Urban Core Circulation Element Roadways							
Gateway Street	6	D	40,800	47,600	54,400	61,200	68,000
	4	D	28,800	33,600	38,400	43,200	48,000
Urban Arterial	4	D	25,200	29,400	33,600	37,800	42,000
Commercial Blvd.	4	D	22,500	26,250	30,000	33,750	37,500
Downtown Promenade	4	D	22,500	26,250	30,000	33,750	37,500
	2	D	9,600	11,200	12,800	14,400	16,000

Note: Shaded cells correspond to the acceptable traffic volumes for each roadway.
[a] The adopted Circulation Element roadways are considered to be Class I Collector Streets and above, and the Urban Core Circulation Element roadways are considered to be six-lane Gateway Streets and below.

Street classifications, discussed in more detail below and identified for specific roadway segments in the study area as shown in *Figure 4.2-2*, are based on standards provided in the 2005 Chula Vista General Plan.

To determine LOS, traffic counts were conducted during peak commute periods. Existing A.M. (7:00 A.M. to 9:00 A.M.) and P.M. (4:00 P.M. to 6:00 P.M.) peak-hour turning movement counts were conducted by Southland Car Counters, Turning Point Traffic Service, and Traffic Data Service Southwest. These intersection counts were taken during several different times of the day in 2004 and 2005. Traffic volumes along segments of F Street, J Street, and Bay Boulevard were collected by Field Data Services in 2006. The remaining roadway segment traffic volumes were provided by the City of Chula Vista and Traffic Data Services Southwest (which collected data on two segments of Broadway). In addition, Kimley-Horn and Associates, Inc. conducted supplemental roadway counts for older count locations. Existing freeway volumes (2004) were

TABLE 4.2-21
Phase II Conditions Roadway Segment Level of Service Summary

Roadway Segment	Roadway Classification	Acceptable Volume	Phase II Baseline		Phase II Baseline Plus Project		Project ADT	Project Trips (Percent)	IMPACT?
			ADT	LOS	ADT	LOS			
E Street									
H Street to Gaylord RCC Dwy	2 Lanes Class III Collector	7,500	6,034	B	6,041	B	6	0	NO
West of Bay Blvd	2 Lanes Class III Collector	7,500	2,294	A	2,612	A	318	12	NO
Bay Boulevard to I-5 Ramps	4 Lanes Major Street	30,000	15,834	A	17,567	A	1,192	7	NO
I-5 Ramps to Woodlawn Avenue	4 Lanes Gateway Street	43,200	28,355	A	29,818	B	1,193	4	NO
Woodlawn Avenue to Broadway	4 Lanes Gateway Street	43,200	27,988	A	28,744	A	756	3	NO
Broadway to 3rd Avenue	4 Lanes Urban Arterial	37,800	19,468	A	19,972	A	504	3	NO
Lagoon St/ F Street									
Bay Boulevard to Broadway	4 Lanes Downtown Promenade	33,750	5,746	A	6,099	A	353	6	NO
Broadway to 4th Avenue	2 Lanes Downtown Promenade	14,400	11,202	C	11,515	C	313	3	NO
4th Avenue to 3rd Avenue	4 Lanes Downtown Promenade	33,750	10,755	A	11,007	A	252	2	NO
H Street					15,867				
West of Marina Parkway	3 Lanes Class II Collector	17,000	15,028	C	~~15,672~~	C	644	4	NO
Marina Parkway to Street A	4 Lanes Major Street	30,000	14,263	A	~~18,186~~	A	4,104	23	NO
Street A to I-5 Ramps	4 Lanes Major Street	30,000	29,621	C	~~40,005~~	F	9,574	24	DIRECT
I-5 Ramps to Broadway	4 Lanes Gateway Street	43,200	35,402	C	40,325	D	4,922	12	NO
Broadway to 3rd Avenue	4 Lanes Urban Arterial	37,800	28,755	B	31,113	C	2,357	8	NO
J Street					20902				
Marina Parkway to Street A	4 Lanes Major Street	30,000	15,784	A	~~19,540~~	A	5,311	27	NO
Street A to Bay Boulevard	4 Lanes Major Street	30,000	18,998	A	~~31,404~~	E	13,216	42	DIRECT
Bay Boulevard to I-5 Ramps	4 Lanes Major Street	30,000	24,675	B	33,657	D	9,116	27	DIRECT
I-5 Ramps to Broadway	4 Lanes Major Street	30,000	19,198	A	21,881	A	2,683	12	NO
L Street									
Bay Boulevard to Industrial Way	4 Lanes Gateway Street	43,200	17,329	A	19,345	A	2,015	10	NO
Industrial Way to Broadway	4 Lanes Gateway Street	43,200	21,874	A	23,809	A	1,934	8	NO

Section 4.2.5 mitigation measures

5 Lane Major

6 Lane Major

6 Lane major

TABLE 4.2-21 (Cont.)

Roadway Segment	Roadway Classification	Acceptable Volume	Phase II Baseline ADT	Phase II Baseline LOS	Phase II Baseline Plus Project ADT	Phase II Baseline Plus Project LOS	Project ADT	Project Trips (Percent)	IMPACT?
Marina Parkway					10,320				
H Street to Street C	3 Lanes Class III Collector	17,000	7,991	A	~~9,089~~	A	4,722	52	NO
Street C to J Street	3 Lane Class II Collector	17,000	9,991	A	~~12,039~~	AB	5,981	50	NO
Bay Boulevard					13,595				
E Street to F Street	2 Lanes Class II Collector	12,000	9,984	B	10,104	B	120	1	NO
F Street to H Street	2 Lanes Class III Collector	7,500	4,318	A	4,608	A	559	12	NO
H Street to J Street	2 Lanes Class III Collector	7,500	5,451	A	5,479	A	702	13	NO
J Street to L Street	2 Lanes Class II Collector	12,00	6,696	A	10,918	C	4,221	39	NO
L Street to I-5 Ramps[1]	2 Lanes Class II Collector	12,000	4,403	A	5,159	A	756	15	NO
South of I-5 Ramps	2 Lanes Class III Collector	7,500	4,403	A	5,159	A	756	15	NO
Broadway									
C Street to E Street	4 Lanes Commercial Boulevard	33,750	26,304	C	26,325	C	20	0	NO
E Street to H Street	4 Lanes Commercial Boulevard	33,750	26,312	C	26,816	C	504	2	NO
H Street to K Street	4 Lanes Commercial Boulevard	33,750	30,316	D	30,840	D	524	2	NO
K Street to L Street	4 Lanes Commercial Boulevard	33,750	26,878	C	27,130	C	252	1	NO
South of L Street	4 Lanes Major Street	30,000	27,512	C	28,228	C	715	3	NO
Street A					8,724				
H Street to Street C (a)	2 Lanes Class III Collector	7,500	-	-	~~2,297~~	DE	5,470	75	NO
Street C to J Street	2 Lanes Class III Collector	7,500	5,246	A	~~12,630~~	F	8,104	64	DIRECT
Street C					14,705				
Marina Parkway to Street A (a)	2 Lanes Class III Collector	7,500	-	-	~~2,085~~	A	1,544	74	NO

SOURCE: Kimley-Horn and Associates 2008.
ADT = Average Daily Trips; LOS = Level of Service
Bold values indicate roadway segments operating at LOS E or F. **Bold and shaded** values indicate project significant impact.
[a] Roads will be built to given classification with Phase I of the Proposed Project as required to provide site frontage.

2,474

Section 4.2.5 Mitigation Measures

4 Lane Class I Collector

2 Lane Class II Collector

TABLE 4.2-27
Phase III Conditions With Extension of E Street Roadway Segment Level of Service Summary

Roadway Segment	Roadway Classification	Acceptable Volume	Phase III Baseline		Phase III Plus Project Mitigated		Project ADT	Project Trips (Percent)	IMPACT?
			ADT	LOS	ADT	LOS			
E Street									
H Street to ~~Sanford~~ PDC Dwy	2 Lanes Class III Collector	7,500	6,050	B	4,800	A	0	0	NO
West of Bay Blvd	2 Lanes Class III Collector	7,500	2,970	A	7,872	D	2	0	CUMULATIVE
Bay Boulevard to I-5 Ramps	4 Lanes Major Street	30,000	17,570	A	19,230	A	182	1	NO
I-5 Ramps to Woodlawn Avenue	4 Lanes Gateway Street	43,200	29,820	B	29,433	B	261	1	NO
Woodlawn Avenue to Broadway	4 Lanes Gateway Street	43,200	28,750	A	29,011	B	261	1	NO
Broadway to 3rd Avenue	4 Lanes Urban Arterial	37,800	19,980	A	20,154	A	174	1	NO
Lagoon St/ F Street									
Bay Boulevard to Broadway	4 Lanes Downtown Promenade	33,750	6,100	A	6,577	A	387	6	NO
Broadway to 4th Avenue	2 Lanes Downtown Promenade	14,400	11,520	C	11,787	C	267	2	NO
4th Avenue to 3rd Avenue	4 Lanes Downtown Promenade	33,750	11,470	A	11,557	A	87	1	NO
H Street					11,568				
West of Marina Parkway	3 Lanes Class II Collector	17,000	16,120	C	~~11,373~~	A	458	4	NO
Marina Parkway to Street A	4 Lanes Major Street	30,000	18,450	A 15,307	~~14,269~~	A	14	0	NO
Street A to I-5 Ramps	5 Lanes Major Street	39,200	40,010	D 35,580	~~33,116~~	B C	772	2	NO
I-5 Ramps to Broadway	4 Lanes Gateway Street	43,200	42,470	D	42,844	D	752	2	NO
Broadway to 3rd Avenue	4 Lanes Urban Arterial	37,800	31,120	C	31,509	C	389	1	NO
J Street					25,822				
Marina Parkway to Street A	4 Lanes Major Street	30,000	19,540	A	~~24,460~~	B	5,635	23	NO
Street A to Bay Boulevard	6 Lanes Major Street	40,000	31,410	B 39,718	~~36,046~~	C	4,880	13	NO
Bay Boulevard to I-5 Ramps	6 Lanes Major Street	40,000	33,660	B	37,653	C	3,408	9	NO
I-5 Ramps to Broadway	4 Lanes Major Street	30,000	21,940	A	22,635	B	695	3	NO
L Street									
Bay Boulevard to Industrial Way	4 Lanes Gateway Street	43,200	19,350	A	20,0454	A	695	3	NO
Industrial Way to Broadway	4 Lanes Gateway Street	43,200	23,810	A	24,265	A	455	2	NO

Sec. 4.2.5 Mitigation measures

TABLE 4.2-27 (Cont.)

Roadway Segment	Roadway Classification	Acceptable Volume	Phase III Baseline ADT	Phase III Baseline LOS	Phase III Plus Project Mitigated ADT	Phase III Plus Project Mitigated LOS	Project ADT	Project Trips (Percent)	IMPACT?
Marina Parkway					10,700				
H Street to Street C	3 Lanes Class II Collector	17,000	9,090	A	~~9,468~~	A	652	7	NO
Street C to J Street	3 Lane Class II Collector	17,000	12,040	A	~~13,098~~	B	946	7	NO
Bay Boulevard					14,654				
E Street to F Street	2 Lanes Class II Collector	12,000	11,610	C	11,472	C	0	0	NO
F Street to H Street	2 Lanes Class III Collector	7,500	4,980	A	5,120	A	441	8	NO
H Street to J Street	2 Lanes Class III Collector	7,500	5,630	B	7,061	C	439	6	NO
J Street to L Street	2 Lanes Class II Collector	12,000	10,970	C	11,302	C	1,033	9	NO
L Street to I-5 Ramps[1]	2 Lanes Class II Collector	12,000	5,310	A	5,780	A	524	9	NO
South of I-5 Ramps	2 Lanes Class III Collector	7,500	5,310	A	5,571	A	261	5	NO
Broadway									
C Street to E Street	4 Lanes Commercial Boulevard	33,750	26,330	C	26,390	C	60	0	NO
E Street to H Street	4 Lanes Commercial Boulevard	33,750	26,820	C	26,994	C	174	1	NO
H Street to K Street	4 Lanes Commercial Boulevard	33,750	31,090	D	31,324	D	234	1	NO
K Street to L Street	4 Lanes Commercial Boulevard	33,750	27,130	C	27,217	C	87	0	NO
South of L Street	4 Lanes Major Street	30,000	28,230	C	28,371	C	141	0	NO
Street A					11,931				
H Street to Street C	2 Lanes Class III Collector	7,500	7,300	C	~~10,504~~	F	938	9	DIRECT
Street C to J Street	4 Lanes Class I Collector	22,000	12,630	A	~~15,543~~ 16,468	A B	1,690	10	NO
J Street to Street B (a)	2 Lanes Class III Collector	7,500	-	-	3,838	A	2,813	73	NO
Street B									
Street A to Bay Boulevard (a)	2 Lanes Class III Collector	7,500	-	-	1,746	A	722	41	NO
Street C									
Marina Parkway to Street A	2 Lanes Class III Collector	7,500	2,090	A	~~2,085~~ 2,454	A	3	0	NO

SOURCE: Kimley-Horn and Associates 2008.
ADT = Average Daily Trips; LOS = Level of Service
Bold values indicate roadway segments operating at LOS E or F. **Bold and shaded** values indicate project significant impact.
[a] Roads will be built to given classification with Phase I of the project as required to provide site frontage.

Section 4.2.5 mitigation measure

4 Lane Class I Collector

TABLE 4.2-30
Phase IV Conditions Roadway Segment Level of Service Summary

Roadway Segment	Roadway Classification	Acceptable Volume	Phase IV Baseline		Phase IV Baseline Plus Project		Project ADT	Project Trips (Percent)	IMPACT?
			ADT	LOS	ADT	LOS			
E Street									
H Street to ~~Gaylord~~ RCC Driveway	2 Lanes Class III Collector	7,500	4,810	A	5,809	B	1,008	17	NO
~~Gaylord~~ RCC Driveway to F Street	2 Lanes Class II Collector	12,000	6,700	A	9,089	B	2,136	24	NO
F Street to Bay Boulevard	2 Lanes Class II Collector	12,000	8,790	A	16,279	F	7,705	47	DIRECT
Bay Boulevard to I-5 Ramps	4 Lanes Major Street	30,000	19,230	A	26,289	B	6,950	26	NO
I-5 Ramps to Woodlawn Avenue	4 Lanes Gateway Street	43,200	29,440	B	33,608	C	4,168	12	NO
Woodlawn Avenue to Broadway	4 Lanes Gateway Street	43,200	29,010	B	32,472	B	3,462	11	NO
Broadway to 3rd Avenue	4 Lanes Urban Arterial	37,800	20,150	A	23,063	A	2,913	13	NO
Lagoon St/ F Street									
E Street to Bay Boulevard (a)	2 Lanes Class III Collector	7,500	-	-	2,630	A	2,413	92	NO
Bay Boulevard to Broadway	4 Lanes Downtown Promenade	33,750	6,580	A	8,325	A	1,744	21	NO
Broadway to 4th Avenue	2 Lanes Downtown Promenade	14,400	11,790	C	12,275	C	484	4	NO
4th Avenue to 3rd Avenue	4 Lanes Downtown Promenade	33,750	12,750	A	12,997	A	247	2	NO
H Street					12,235				
West of Marina Parkway	3 Lanes Class II Collector	17,000	11,380	A	~~12,520~~	A	1,140	9	NO
Marina Parkway to Street A	4 Lanes Major Street	30,000	15,170	A	~~15,861~~	A	791	5	NO
Street A to I-5 Ramps	5 Lanes Major Street	39,200	33,120	B	~~34,668~~	C	1,467	4	NO
I-5 Ramps to Broadway	4 Lanes Gateway Street	43,200	48,420	F	49,203	F	783	2	DIRECT
Broadway to 3rd Avenue	4 Lanes Urban Arterial	37,800	31,510	C	32,063	C	553	2	NO
J Street					27,291				
Marina Parkway to Street A	4 Lanes Major Street	30,000	24,460	B	~~26,049~~	C	2,488	9	NO
Street A to Bay Boulevard	6 Lanes Major Street	40,000	36,340	C	~~38,567~~	D	~~2,226~~ 1,326	8 3	~~NO~~ Cumulative
Bay Boulevard to I-5 Ramps	6 Lanes Major Street	40,000	37,650	C	38,913	C	1,262	3	NO
I-5 Ramps to Broadway	4 Lanes Major Street	30,000	22,770	B	23,131	B	361	2	NO
L Street									
Bay Boulevard to Industrial Way	4 Lanes Gateway Street	43,200	20,040	A	20,402	A	362	2	NO
Industrial Way to Broadway	4 Lanes Gateway Street	43,200	24,270	A	24,531	A	261	1	NO
Marina Parkway					11,548				
H Street to Street C	3 Lanes Class II Collector	17,000	9,470	A	~~10,856~~	A	1,386	13	NO

Section 4.2.5 mitigation measure

TABLE 4.2-30 (Cont.)

Roadway Segment	Roadway Classification	Acceptable Volume	Phase IV Baseline ADT	Phase IV Baseline LOS	Phase IV Baseline Plus Project ADT	Phase IV Baseline Plus Project LOS	Project ADT	Project Trips (Percent)	IMPACT?
Street C to J Street	3 Lane Class II Collector	17,000	13,100	B	~~14,050~~ 13,126	~~B~~ C	949	7	NO
Bay Boulevard									
E Street to F Street	2 Lanes Class II Collector	12,000	11,470	C	12,676	D	1,206	10	**DIRECT**
F Street to H Street	2 Lanes Class III Collector	7,500	6,680	C	7,116	C	436	6	NO
H Street to J Street	2 Lanes Class III Collector	7,500	7,410	A	7,787	D	377	5	**CUMULATIVE**
J Street to L Street	2 Lanes Class II Collector	12,000	11,440	C	12,173	D	733	6	**CUMULATIVE**
L Street to I-5 Ramps[1]	2 Lanes Class II Collector	12,000	6,170	A	6,347	A	176	3	NO
South of I-5 Ramps	2 Lanes Class III Collector	7,500	5,910	B	6,087	B	176	3	NO
Broadway									
C Street to E Street	4 Lanes Commercial Boulevard	33,750	26,390	C	27,020	C	630	2	NO
E Street to H Street	4 Lanes Commercial Boulevard	33,750	26,990	C	27,585	C	594	2	NO
H Street to K Street	4 Lanes Commercial Boulevard	33,750	31,960	D	32,076	D	116	0	NO
K Street to L Street	4 Lanes Commercial Boulevard	33,750	27,220	C	27,266	C	45	0	NO
South of L Street	4 Lanes Major Street	30,000	28,370	C	28,456	C	85	0	NO
Street A					12,955				
H Street to Street C	4 Lanes Class I Collector	22,000	10,510	A	~~11,888~~	A	878	8	NO
Street C to J Street	4 Lanes Class I Collector	22,000	16,470	A	19,276 17,741	B	1,271	7	NO
J Street to Street B	2 Lanes Class III Collector	7,500	3,840	A	4,091	A	250	6	NO
Street B									
Street A to Bay Boulevard	2 Lanes Class III Collector	7,500	1,750	A	1,876	A	125	7	NO
Street C									
Marina Parkway to Street A	2 Lanes Class III Collector	7,500	2,060	A	~~2,482~~ 2,691	A	422	17	NO

SOURCE: Kimley-Horn and Associates 2008.
ADT = Average Daily Trips; LOS = Level of Service
Bold values indicate roadway segments operating at LOS E or F. **Bold and shaded** values indicate project significant impact.

4.2.5 Mitigation Measures

Developers of any parcel located within the Chula Vista Bayfront Master Plan shall reimburse the Port, City, and/or other developers the pro-rata cost of the installation of public transportation improvements, as obligated and required by the Port and/or City based on the nexus established in the technical studies and this Draft EIR.

a. Phase I Mitigation Measures

The following mitigation measures shall be required to be implemented by the developer to reduce impacts to a level less than significant:

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 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 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 2-lane Class III Collector~~-~~, or secure such construction to the satisfaction of the City Engineer.

This mitigation would reduce **Significant Impact 4.2-1** to below a level of significance.

4.2-2 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 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 tenant, 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 Impacts 4.2-2, 4.2-4, 4.2-6, 4.2-7,** and **4.2-11** to below a level of significance.

4.2-3 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 widen H Street west of Marina Parkway from a two-lane Class III Collector to a three-lane Class II Collector. This mitigation would reduce **Significant Impact 4.2-3** to below a level of significance.

4.2-4 Prior to the issuance of certificates of occupancy for any development on H-3 and building permits for any development on H-13 or H-14 in Phase I, the Port, Port tenant, or applicant, as appropriate, shall widen Bay Boulevard between E Street and F Street from a two-lane Class III Collector to a two-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.

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 **Impacts 4.2-8** and **4.2-14** to below a level of significance.

4.2-6 Prior to the issuance of certificates of occupancy for any development on H-3 or building permits for any development on H-13 or H-14 in Phase I, the Port, Port tenant, or applicant, 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 Impacts 4.2-9** and **4.2-15** to below a level of significance.

4.2-7 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 in Phase I, the Port, Port tenant, or applicant, 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 Impacts 4.2-10** and **4.2-16** to below a level of significance.

4.2-8 The following mitigation measure would reduce, but not eliminate project impacts on Interstate 5, as identified in **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**.

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") (hereinafter, the "Plan"). Local funding sources identified in the Plan shall include fair share contributions related to private and/or public development based on the nexus established in this Draft EIR 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 all 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.

g) The Port shall seek adoption of thle 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 multi-jurisdictional 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 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 5 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 the 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 through lane along H Street/~~Gaylord~~ RCC 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.

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 assure 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.

b. Phase II Mitigation Measures

4.2-11 Prior to the issuance of any certificates of occupancy for any development on H-23 in Phase I, the Port or Port tenant, 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. → 2 lane Class III Collector per Table 4.2-21 Implementation of this mitigation measure would reduce Significant Impact 4.2-20 to below a level of significance.

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-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. → 4 lane major per Table 4.2-21

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-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. → 4 lane major per Table 4.2-7

4.2-14 Prior to the issuance of certificates of occupancy for any development in Phase II, the Port, Port tenant, or applicant, as appropriate, shall widen Street A between Street C and J Street to a four-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.

4.2-15 Prior to the issuance of certificates of occupancy for any development in Phase II, 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 ~~Gaylord~~ RCC 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.

4.2-16 Prior to the issuance of certificates of occupancy for any development in Phase II, 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.

4.2-17 Prior to the issuance of certificates of occupancy for any development in Phase II, 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.

4.2-18 Prior to the issuance of certificates of occupancy for any development in Phase II of the development, the developer shall construct a traffic signal at the intersection of J Street and Marina Parkway. 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.

4.2-19 Prior to the issuance of certificates of occupancy for any development in Phase II, 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.

d. Phase III Mitigation Measures

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.

4.2-21 Prior to the issuance of certificates of occupancy for any development in Phase III, the Port, Port tenants, or applicant, as appropriate, shall widen Street A between H Street and Street C to a four-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.

→ 2 lane Class III Collector per Table 4.2-27

4.2-22 Prior to the issuance of certificates of occupancy for any development in Phase III, 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.

4.2-23 Prior to the issuance of certificates of occupancy for any development in Phase III, the Port, Port tenants, or applicant, as appropriate, shall construct an exclusive westbound right-turn lane along J Street at the intersection of J Street and I-5 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.

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 ~~Gaylord~~ RCC 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.

e. Phase IV Mitigation Measures

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

4.2-26 Prior to the issuance of certificates of occupancy for any development in Phase IV, the Port, Port tenant, or applicant, as appropriate, shall widen E Street between F Street and Bay Boulevard to a four-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. This mitigation would reduce **Significant Impacts 4.2-40** and **4.2-41** to below a level of significance.

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.

4.2-28 Prior to the issuance of certificates of occupancy for any development in Phase IV, 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** to below a level of significance.

4.2-29 Prior to the issuance of certificates of occupancy for any development in Phase IV, 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 4.2-44** to below a level of significance.

4.2-30 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 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 4.2-45** to below a level of significance.

4.2.6 Significance of Impacts After Mitigation

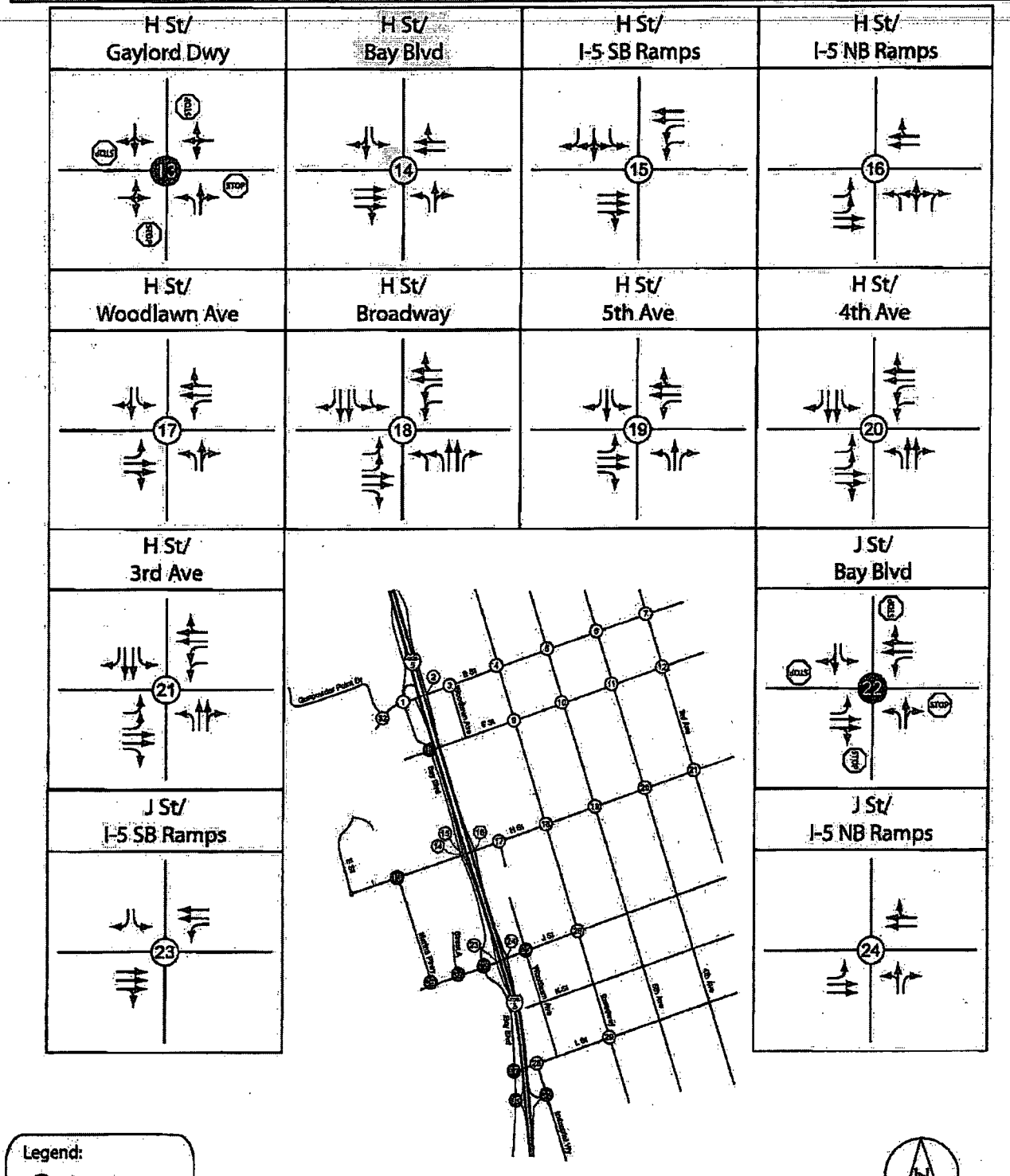
Implementation of Mitigation Measure 4.2-8 would not reduce **Significant Impacts 4.2-12, 4.2-17, 4.2-18, 4.2-29, 4.2-30, 4.2-35** through **4.2-37**, and **4.2-46** through **4.2-49,** concerning project related impacts along I-5, to below a level of significance because implementation of the physical improvements needed to reduce significant impacts 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 assure the necessary improvements will be constructed as needed. Accordingly, the Proposed Project's impacts to freeway segments are considered significant and unmitigated.

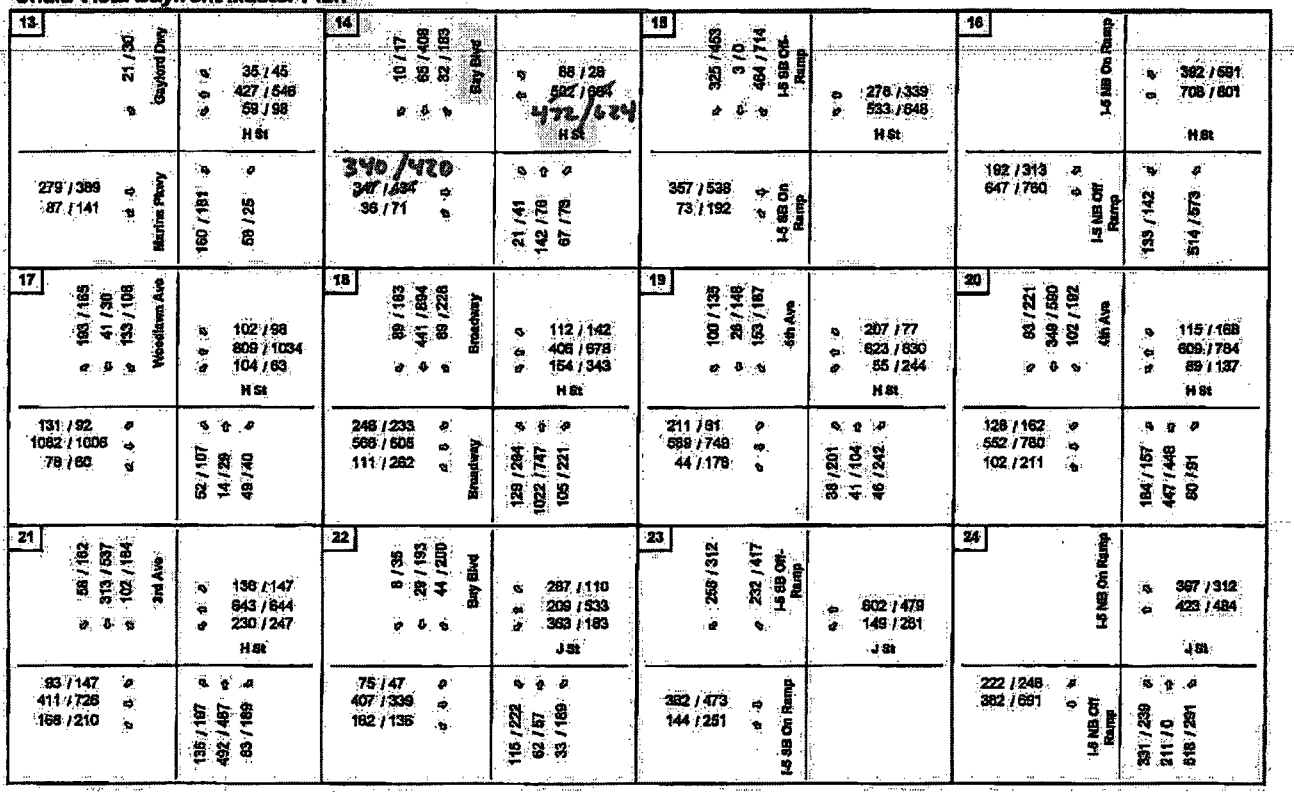
Implementation of Mitigation Measure 4.2-10 would not reduce **Significant Impact 4.2-19**, concerning project related impacts on H Street and E Street intersections due to trolley delay, to below a level of significance, because implementation of the physical improvements needed to reduce significant impacts are within the jurisdiction and control of other entities and not the Port or City. The Port and the City cannot assure the necessary improvements will be constructed as needed. Accordingly, the Proposed Project's impacts to E Street and H Street intersections affected by the trolley crossings are considered significant and unmitigated

The implementation of the Mitigation Measures 4.2-1 though 4.2-7, 4,2-9, and 4.2-11 through 30 would reduce the remaining direct project related impacts to below a level of significance.

Attachment 4

Capacity Analysis Printouts


H St/
Gaylord Dwy
H St/
Bay Blvd
H St/
I-5 SB Ramps
H St/
I-5 NB Ramps
H St/
Woodlawn Ave
H St/
Broadway
H St/
5th Ave
H St/
4th Ave
H St/
3rd Ave
J St/
Bay Blvd
J St/
I-5 SB Ramps
J St/
I-5 NB Ramps
Legend:
Signalized
Unsignalized
NOT TO SCALE



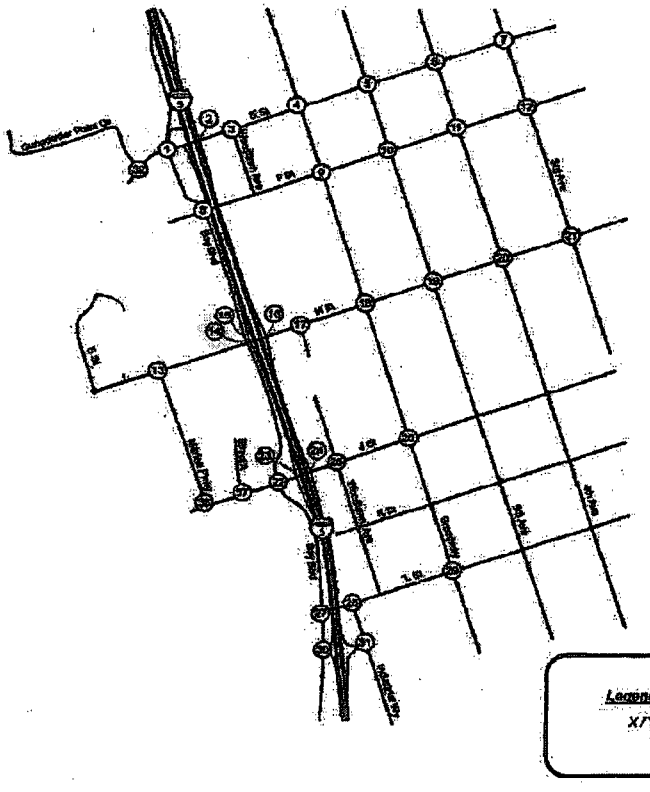


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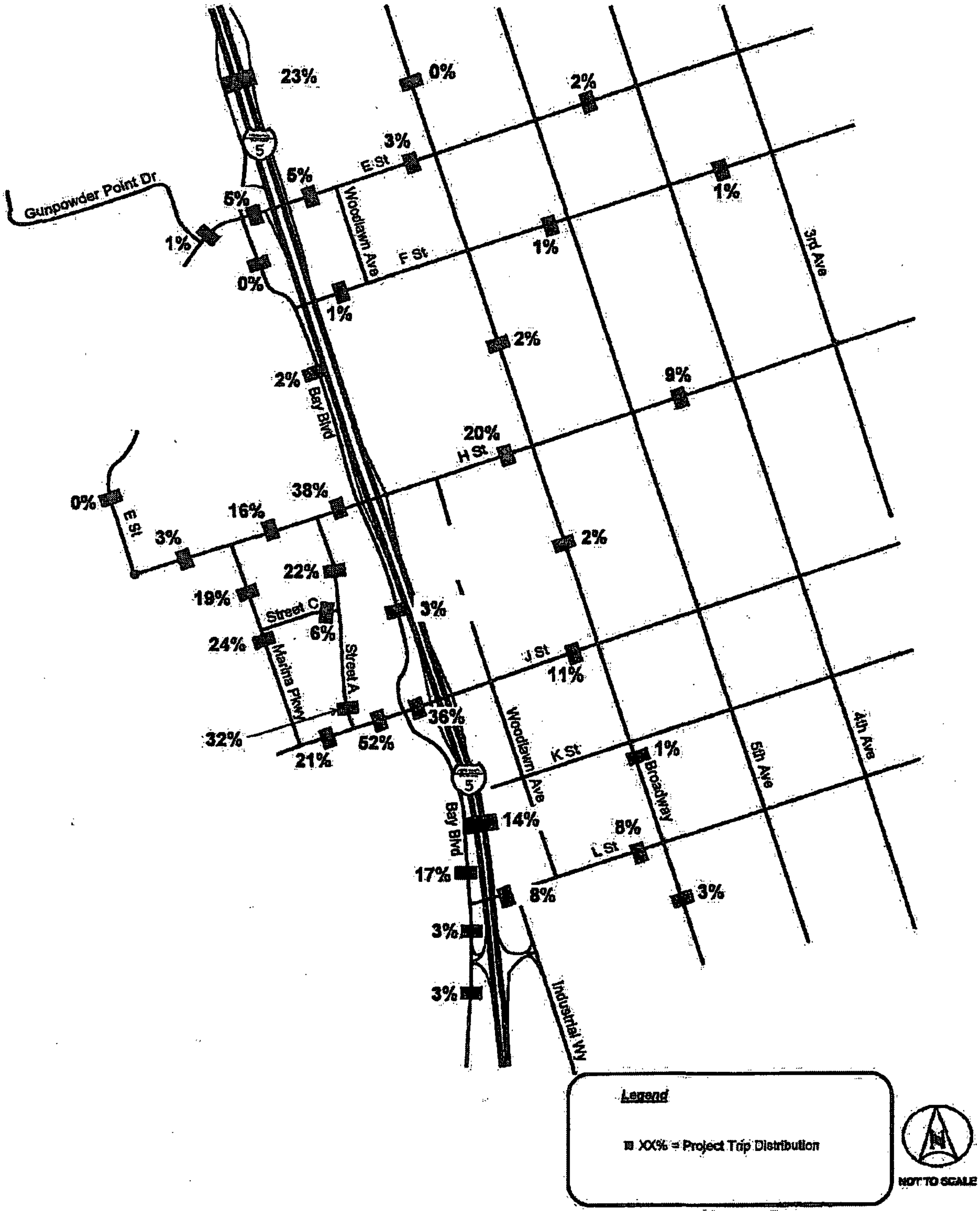
FIGURE 5-17.1
Proposed Project - Phase I Conditions Redistributed Peak-Hour Traffic Volumes(cont.)

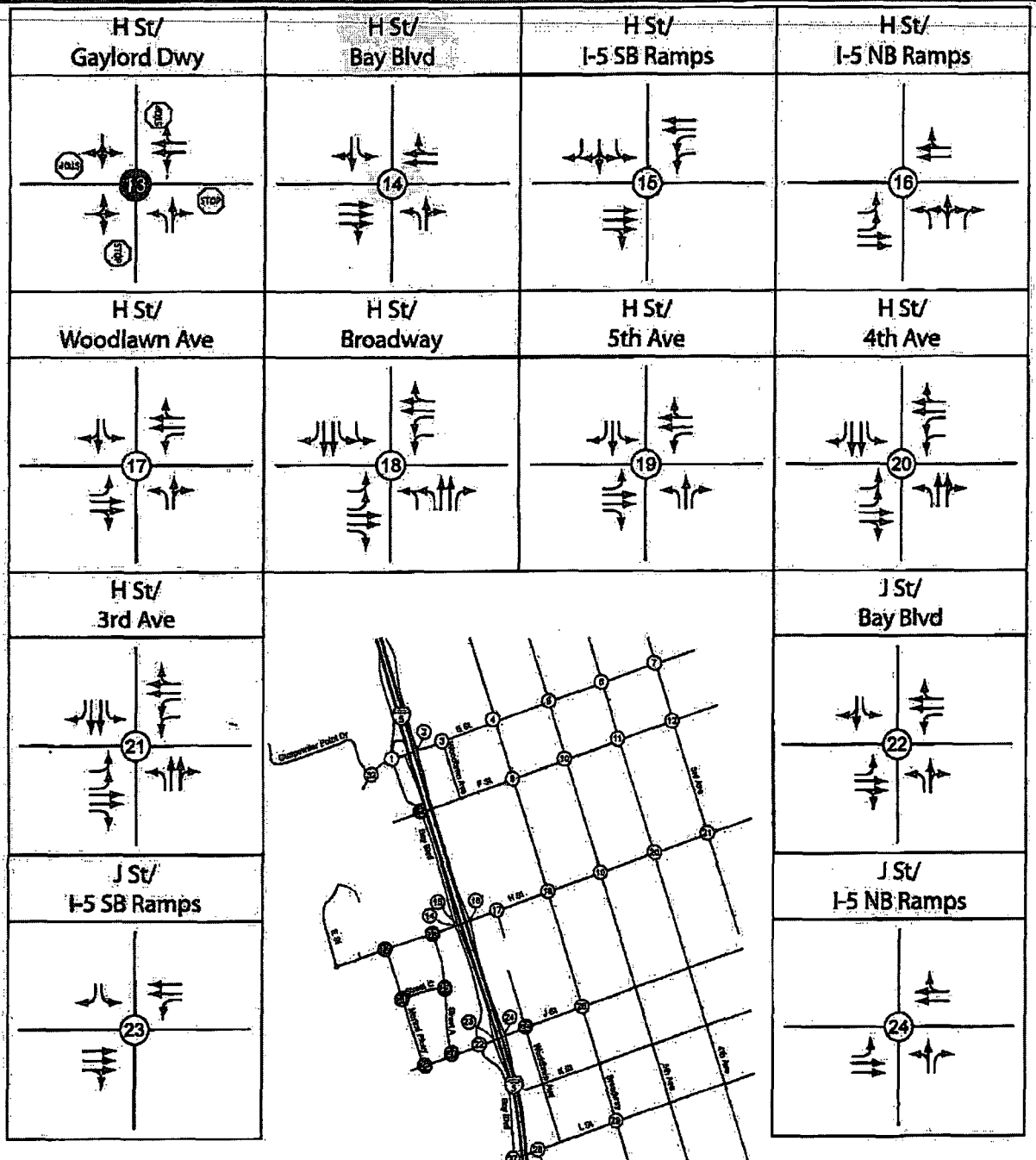


Kimley-Horn and Associates, Inc.

FIGURE 5-25

Proposed Project - Phase II Trip Distribution

K:\095451000\Traffic\Excel\Option 2(02 RS.xlsm)ADT Fig NC\Proposed Project - Phase II Trip Distribution


H St/
Gaylord Dwy
H St/
Bay Blvd
H St/
I-5 SB Ramps
H St/
I-5 NB Ramps
H St/
Woodlawn Ave
H St/
Broadway
H St/
5th Ave
H St/
4th Ave
H St/
3rd Ave
J St/
Bay Blvd
J St/
I-5 SB Ramps
J St/
I-5 NB Ramps
Legend:
Signalized
Unsignalized
NOT TO SCALE

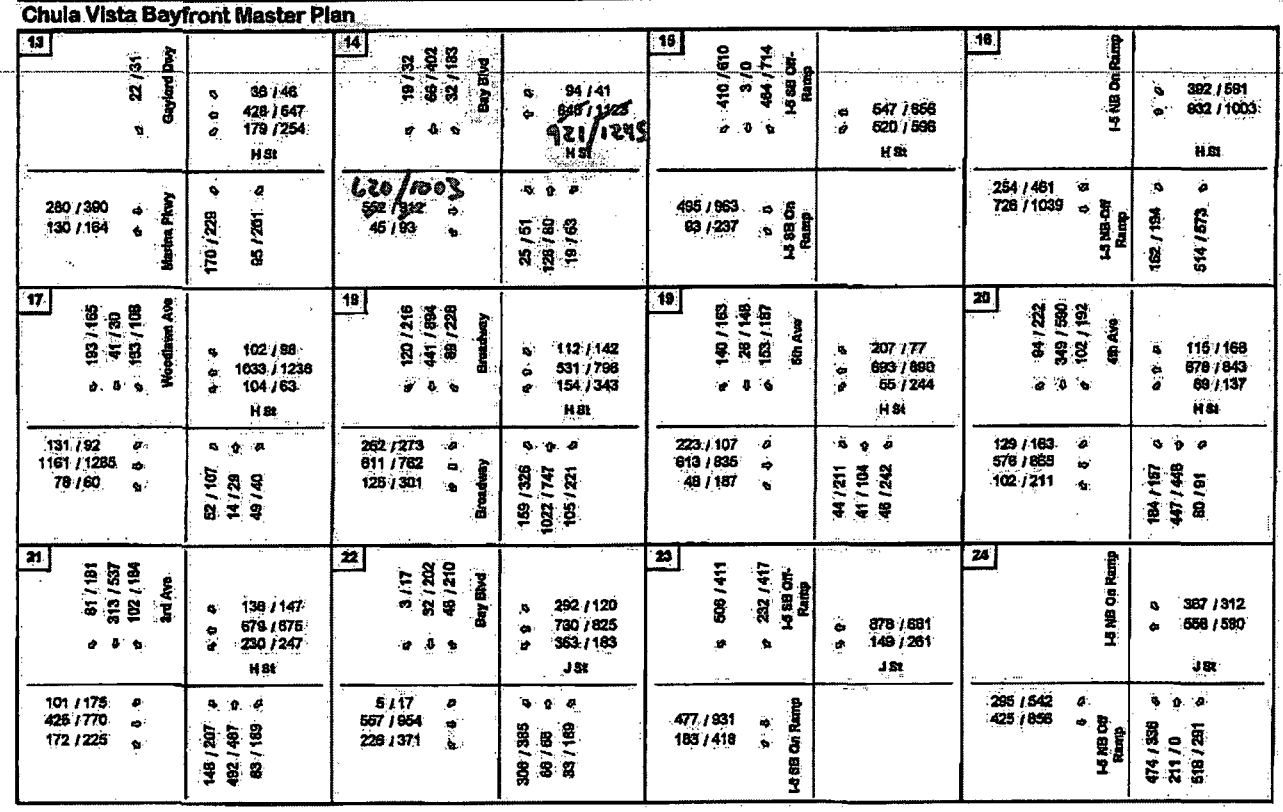


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FIGURE 5-30.1
Proposed Project - Phase II Plus Project Conditions Peak-Hour Traffic Volumes(cont.)

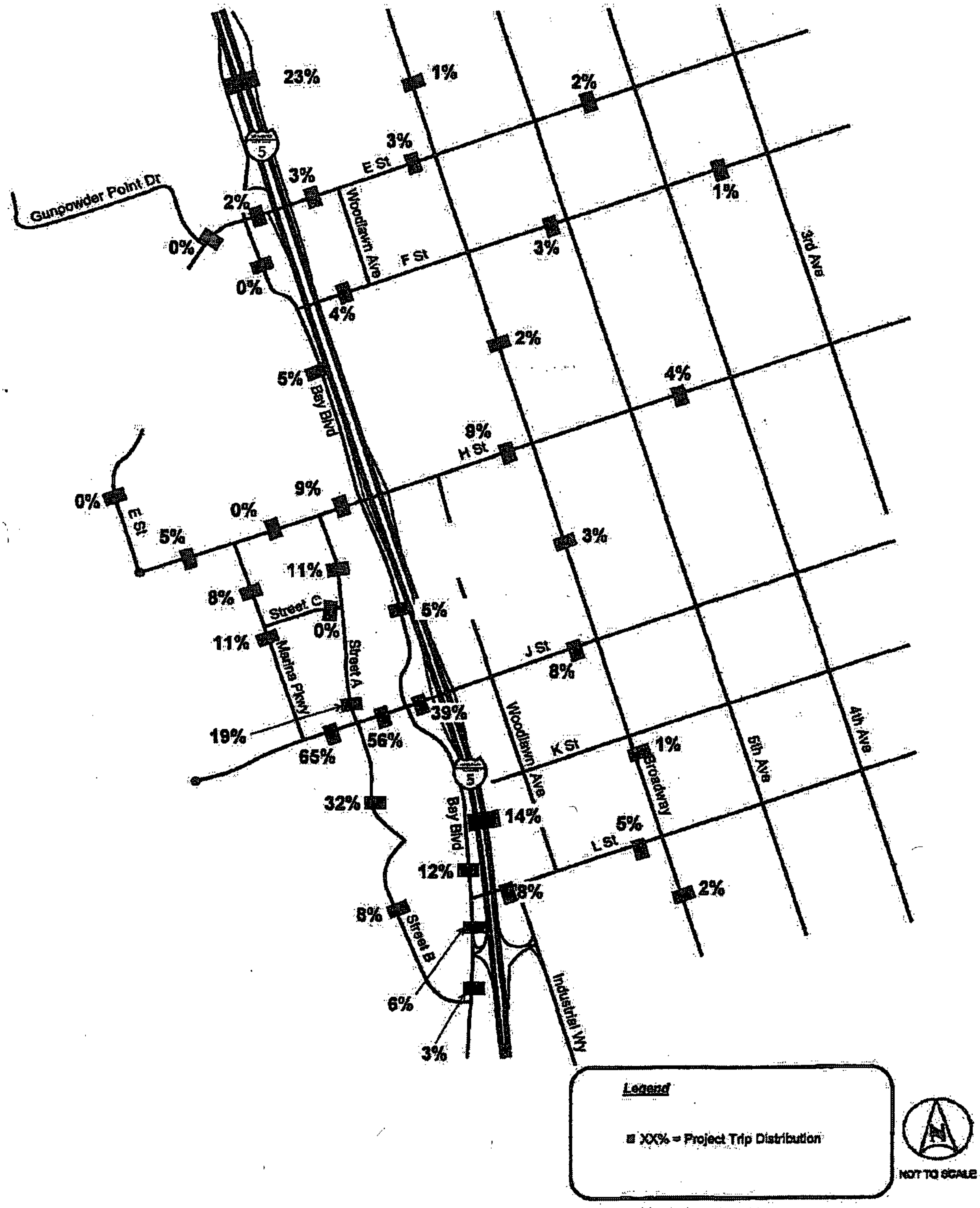
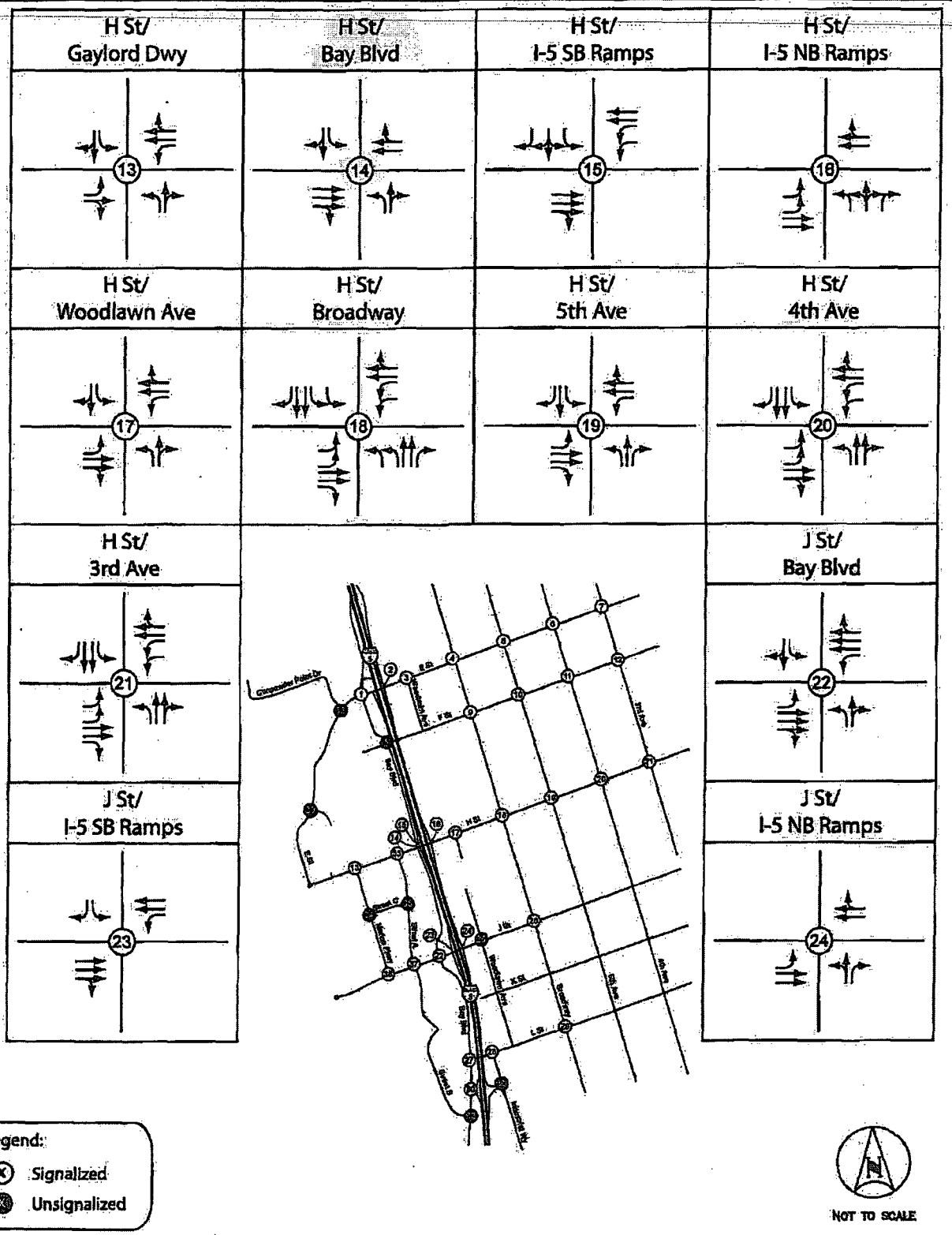
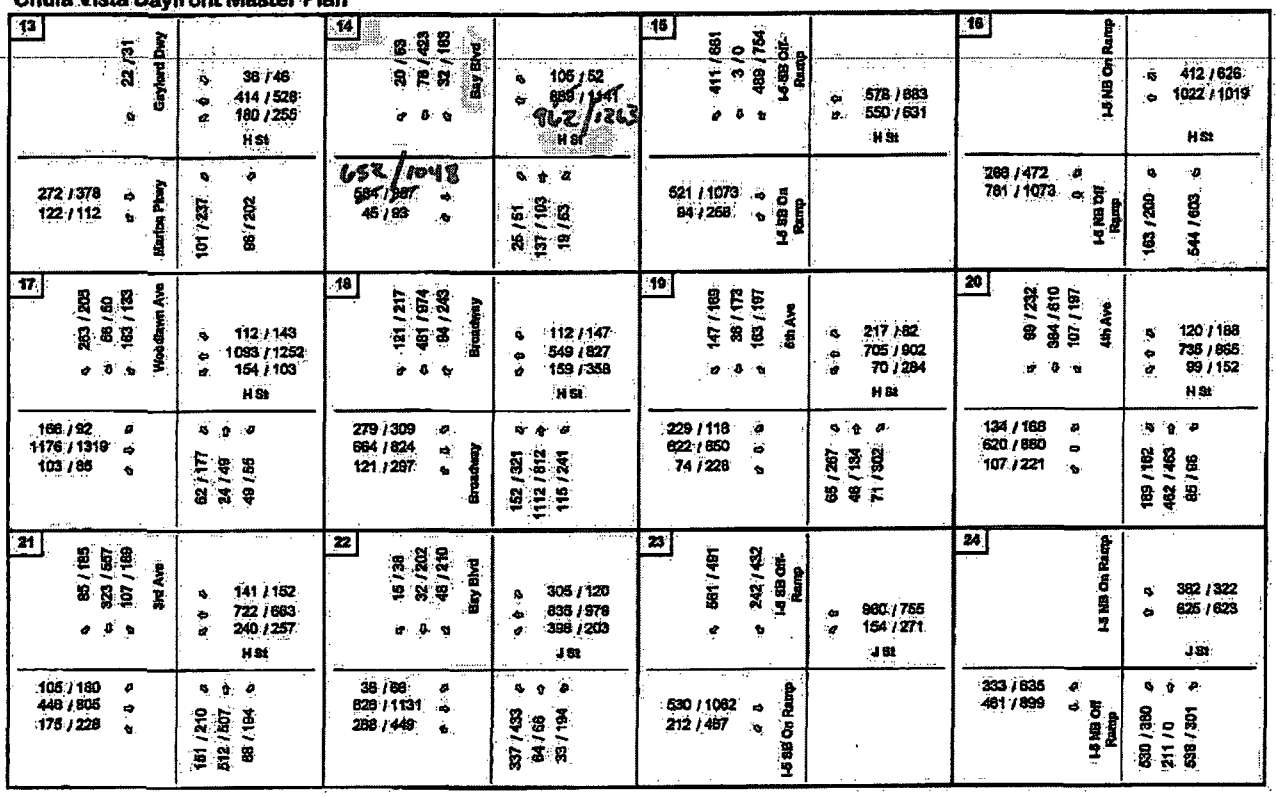


FIGURE 5-38

Proposed Project - Phase III Trip Distribution


H St/
Gaylord Dwy
H St/
Bay Blvd
H St/
I-5 SB Ramps
H St/
I-5 NB Ramps
H St/
Woodlawn Ave
H St/
Broadway
H St/
5th Ave
H St/
4th Ave
H St/
3rd Ave
J St/
Bay Blvd
J St/
I-5 SB Ramps
J St/
I-5 NB Ramps
Legend:
Signalized
Unsignalized
NOT TO SCALE



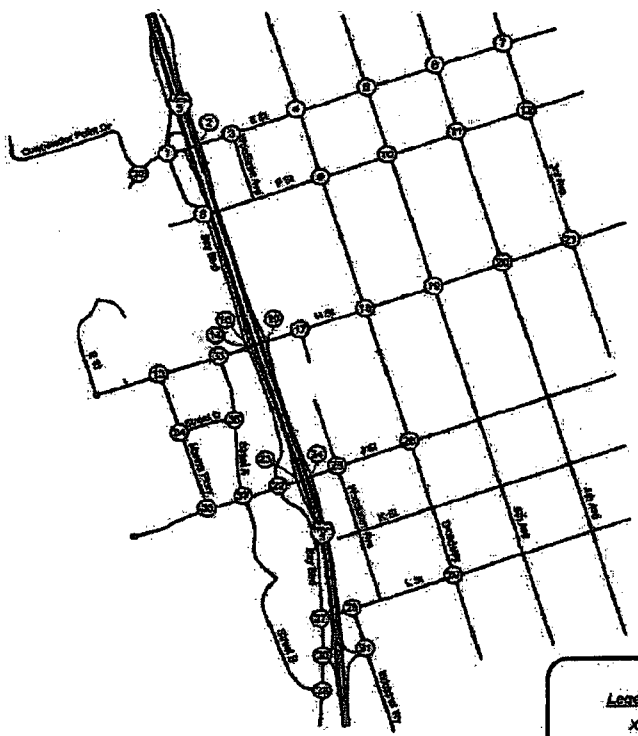


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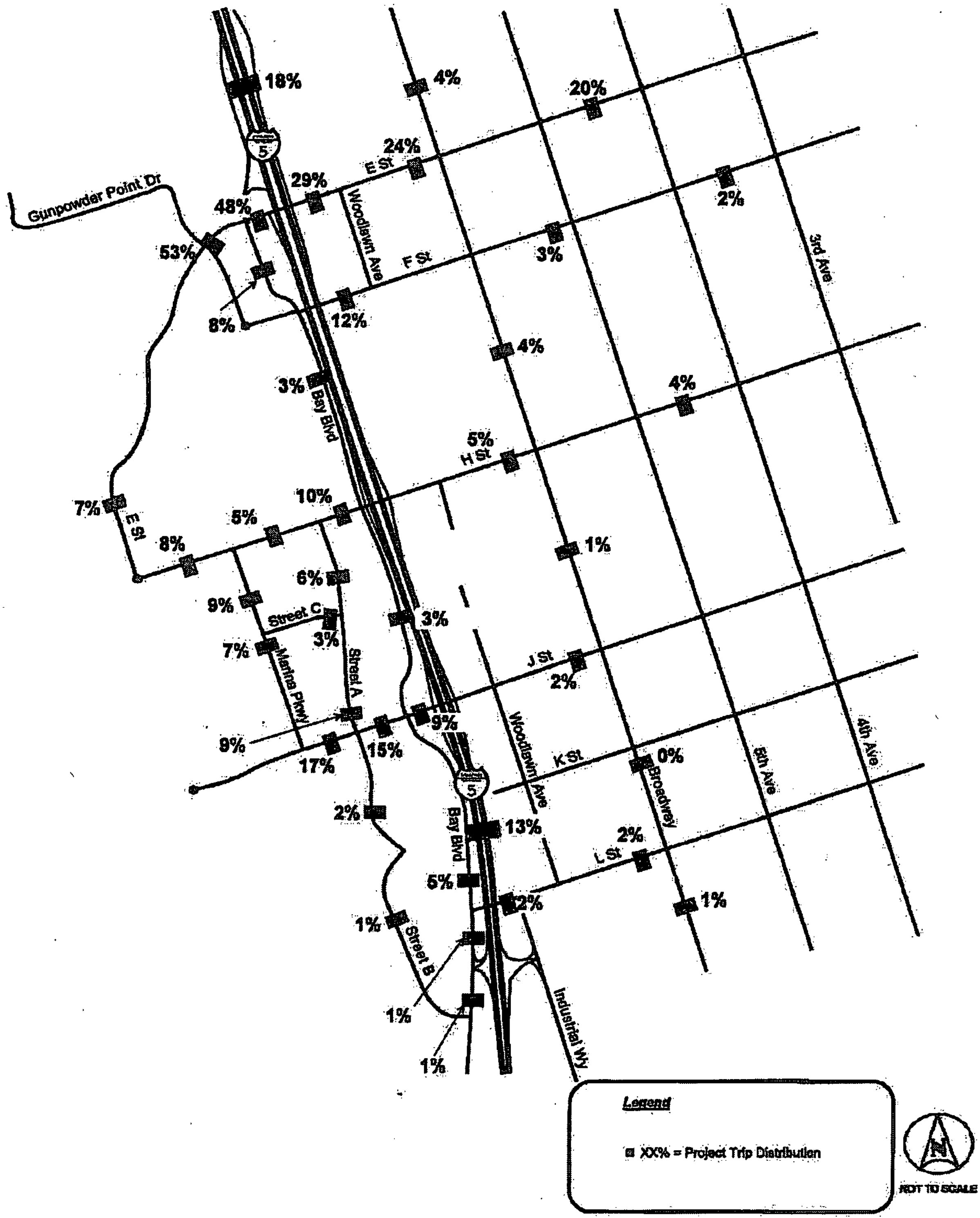
FIGURE 5-43.1
Proposed Project - Phase III Plus Project Conditions Peak-Hour Traffic Volumes(cont.)


18%
4%
20%
24%
E St
29%
2%
Gunpowder Point Dr
48%
53%
Woodlawn Ave
F St
3%
3rd Ave
8%
12%
4%
3%
Bay Blvd
4%
5%
H St
7%
10%
E St
5%
8%
1%
6%
9%
Street C
3%
3%
7%
Marina Pkwy
Street A
J St
2%
9%
9%
17%
15%
Woodlawn Ave
K St
0%
Broadway
5th Ave
4th Ave
2%
Bay Blvd
13%
2%
L St
5%
2%
1%
1%
Street B
1%
1%
Industrial Wy
Legend
XX% = Project Trip Distribution
N
NOT TO SCALE

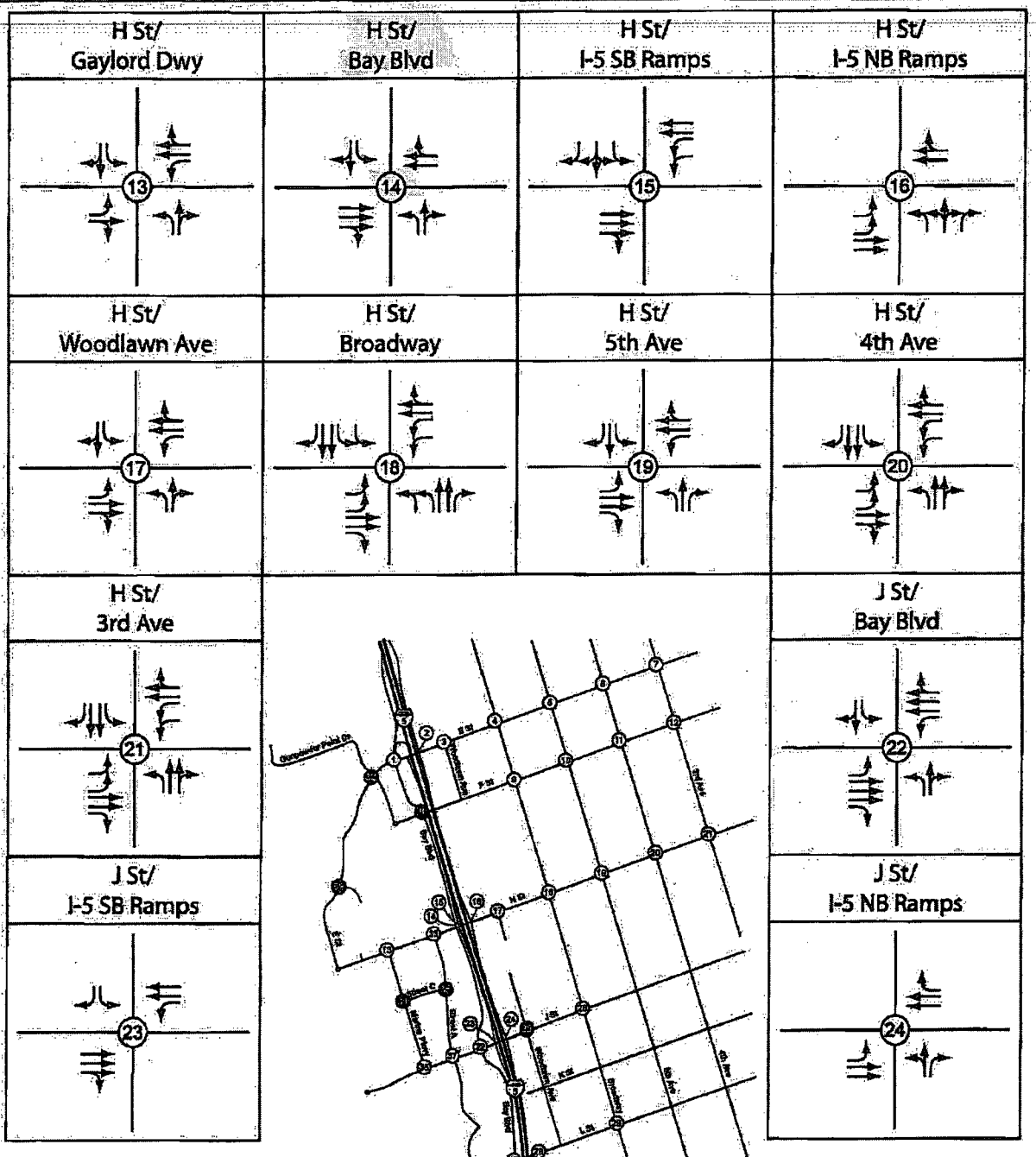
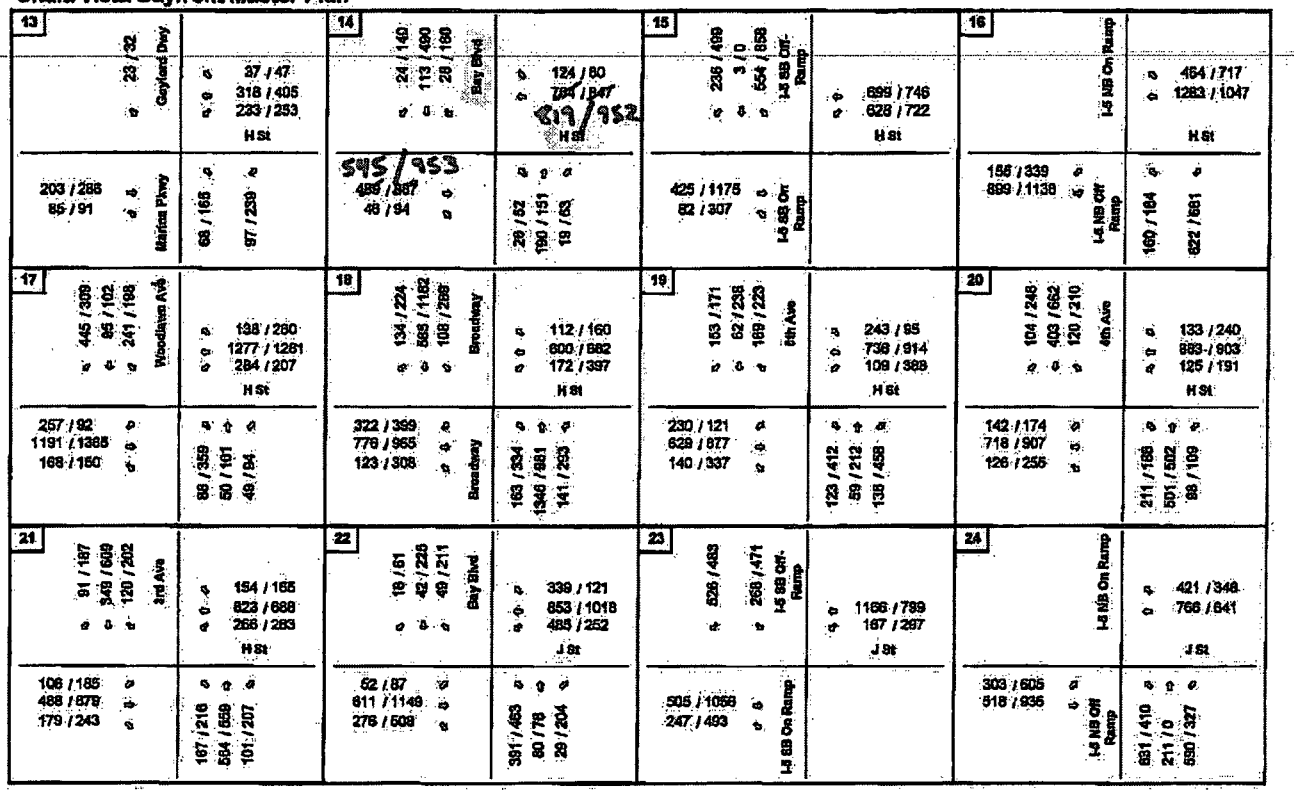


FIGURE 5-56.1

Proposed Project - Phase IV Plus Project Intersection Geometrics

Kimley-Horn and Associates, Inc.

K:\TPTO\085451000\Traffic\Figures\Option 2\Geometry\P4WP geo (13-24).ai



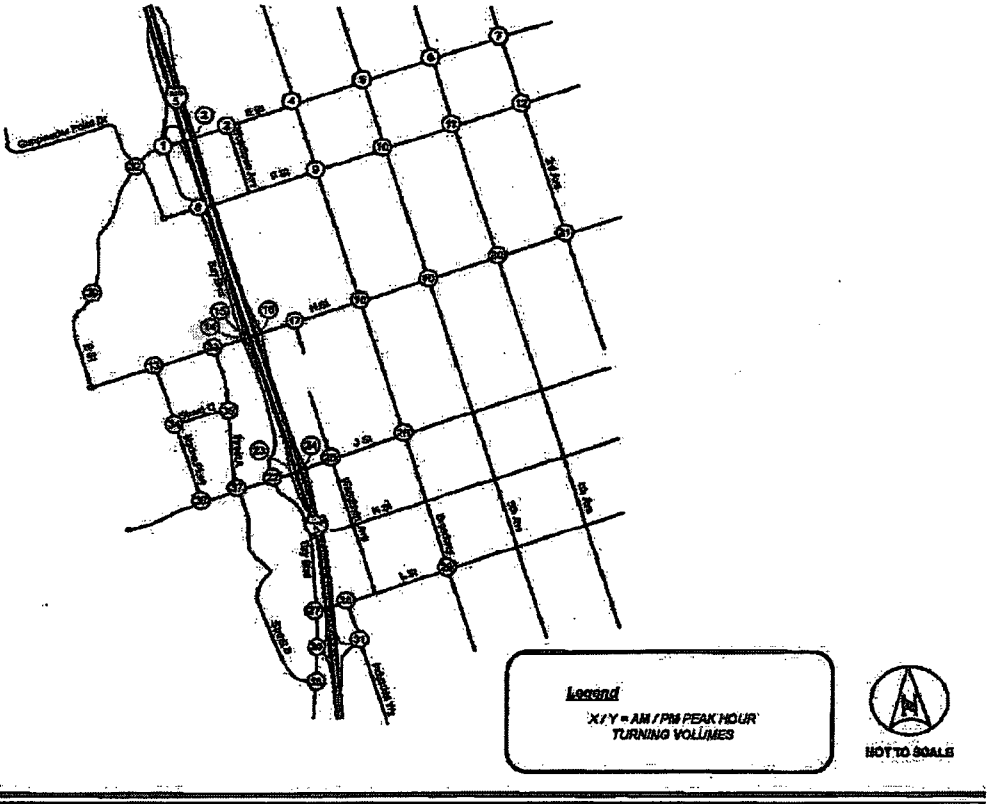


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FIGURE 5-63.1
Proposed Project - Phase IV Plus Project Conditions Peak-Hour Traffic Volumes(cont.)

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↱		↑↑↱		↰	↑↱		↰	↑↱	
Volume (vph)	0	340	36	0	472	88	21	142	67	32	65	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		0.91	1.00		0.95		1.00	1.00		1.00	1.00	
Frt		1.00	0.85		0.98		1.00	0.95		1.00	0.98	
Flt Protected		1.00	1.00		1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		5085	1583		3456		1770	1773		1770	1825	
Flt Permitted		1.00	1.00		1.00		0.70	1.00		0.62	1.00	
Satd. Flow (perm)		5085	1583		3456		1311	1773		1149	1825	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	370	39	0	513	96	23	154	73	35	71	11
RTOR Reduction (vph)	0	0	23	0	38	0	0	43	0	0	7	0
Lane Group Flow (vph)	0	370	16	0	571	0	23	184	0	35	75	0
Turn Type			Perm				Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases			4				2			6		
Actuated Green, G (s)		16.0	16.0		16.0		16.0	16.0		16.0	16.0	
Effective Green, g (s)		16.0	16.0		16.0		16.0	16.0		16.0	16.0	
Actuated g/C Ratio		0.40	0.40		0.40		0.40	0.40		0.40	0.40	
Clearance Time (s)		4.0	4.0		4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)		2034	633		1382		524	709		460	730	
v/s Ratio Prot		0.07			c0.17			c0.10			0.04	
v/s Ratio Perm			0.01				0.02			0.03		
v/c Ratio		0.18	0.02		0.41		0.04	0.26		0.08	0.10	
Uniform Delay, d1		7.8	7.3		8.6		7.3	8.0		7.4	7.5	
Progression Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.2	0.1		0.9		0.2	0.9		0.3	0.3	
Delay (s)		8.0	7.3		9.5		7.5	8.9		7.7	7.8	
Level of Service		A	A		A		A	A		A	A	
Approach Delay (s)		7.9			9.5			8.8			7.8	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	8.8	HCM Level of Service	A
HCM Volume to Capacity ratio	0.34		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	40.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

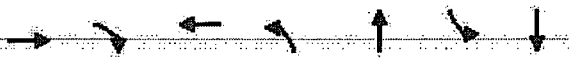
Lane Group	EBT	EBR	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	370	39	609	23	227	35	82
v/c Ratio	0.18	0.06	0.43	0.04	0.30	0.08	0.11
Control Delay	8.1	3.6	8.9	7.7	7.0	8.0	7.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	8.1	3.6	8.9	7.7	7.0	8.0	7.3
Queue Length 50th (ft)	18	0	42	3	21	5	9
Queue Length 95th (ft)	31	11	72	12	54	16	27
Internal Link Dist (ft)	420		420		420		420
Turn Bay Length (ft)		165					
Base Capacity (vph)	2034	657	1420	524	752	460	737
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.18	0.06	0.43	0.04	0.30	0.08	0.11

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↱		↑↑↱		↰	↑↱		↰	↑↱	
Volume (vph)	0	420	71	0	624	28	41	76	73	183	408	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		0.91	1.00		0.95		1.00	1.00		1.00	1.00	
Frt		1.00	0.85		0.99		1.00	0.93		1.00	0.99	
Flt Protected		1.00	1.00		1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		5085	1583		3517		1770	1726		1770	1852	
Flt Permitted		1.00	1.00		1.00		0.37	1.00		0.65	1.00	
Satd. Flow (perm)		5085	1583		3517		680	1726		1219	1852	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	457	77	0	678	30	45	83	79	199	443	18
RTOR Reduction (vph)	0	0	46	0	8	0	0	47	0	0	4	0
Lane Group Flow (vph)	0	457	31	0	700	0	45	115	0	199	457	0
Turn Type			Perm				Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases			4				2			6		
Actuated Green, G (s)		16.0	16.0		16.0		16.0	16.0		16.0	16.0	
Effective Green, g (s)		16.0	16.0		16.0		16.0	16.0		16.0	16.0	
Actuated g/C Ratio		0.40	0.40		0.40		0.40	0.40		0.40	0.40	
Clearance Time (s)		4.0	4.0		4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)		2034	633		1407		272	690		488	741	
v/s Ratio Prot		0.09			c0.20			0.07			c0.25	
v/s Ratio Perm			0.02				0.07			0.16		
v/c Ratio		0.22	0.05		0.50		0.17	0.17		0.41	0.62	
Uniform Delay, d1		7.9	7.3		9.0		7.7	7.7		8.6	9.6	
Progression Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.3	0.1		1.3		1.3	0.5		2.5	3.8	
Delay (s)		8.2	7.5		10.2		9.0	8.2		11.1	13.4	
Level of Service		A	A		B		A	A		B	B	
Approach Delay (s)		8.1			10.2			8.4			12.7	
Approach LOS		A			B			A			B	

Intersection Summary			
HCM Average Control Delay	10.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	54.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Lane Group	EBT	EBR	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	457	77	708	45	162	199	461
v/c Ratio	0.22	0.11	0.50	0.17	0.22	0.41	0.62
Control Delay	8.3	3.1	10.4	9.7	5.5	11.8	13.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	8.3	3.1	10.4	9.7	5.5	11.8	13.9
Queue Length 50th (ft)	23	0	56	6	11	30	75
Queue Length 95th (ft)	38	16	91	21	36	68	144
Internal Link Dist (ft)	420		420		420		420
Turn Bay Length (ft)		165					
Base Capacity (vph)	2034	679	1415	272	738	487	744
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.22	0.11	0.50	0.17	0.22	0.41	0.62

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↱		↑↑		↰	↑		↰	↑	
Volume (vph)	0	620	45	0	921	94	25	128	19	32	66	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		0.91	1.00		0.95		1.00	1.00		1.00	1.00	
Frt		1.00	0.85		0.99		1.00	0.98		1.00	0.97	
Flt Protected		1.00	1.00		1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		5085	1583		3490		1770	1826		1770	1800	
Flt Permitted		1.00	1.00		1.00		0.70	1.00		0.66	1.00	
Satd. Flow (perm)		5085	1583		3490		1298	1826		1221	1800	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	674	49	0	1001	102	27	139	21	35	72	21
RTOR Reduction (vph)	0	0	29	0	19	0	0	13	0	0	13	0
Lane Group Flow (vph)	0	674	20	0	1084	0	27	147	0	35	80	0
Turn Type			Perm				Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases			4				2			6		
Actuated Green, G (s)		16.0	16.0		16.0		16.0	16.0		16.0	16.0	
Effective Green, g (s)		16.0	16.0		16.0		16.0	16.0		16.0	16.0	
Actuated g/C Ratio		0.40	0.40		0.40		0.40	0.40		0.40	0.40	
Clearance Time (s)		4.0	4.0		4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)		2034	633		1396		519	730		488	720	
v/s Ratio Prot		0.13			c0.31			c0.08			0.04	
v/s Ratio Perm			0.01				0.02			0.03		
v/c Ratio		0.33	0.03		0.78		0.05	0.20		0.07	0.11	
Uniform Delay, d1		8.3	7.3		10.4		7.4	7.8		7.4	7.5	
Progression Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.4	0.1		4.3		0.2	0.6		0.3	0.3	
Delay (s)		8.7	7.4		14.7		7.5	8.5		7.7	7.9	
Level of Service		A	A		B		A	A		A	A	
Approach Delay (s)		8.6			14.7			8.3			7.8	
Approach LOS		A			B			A			A	

Intersection Summary			
HCM Average Control Delay	11.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	49.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	EBR	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	674	49	1103	27	160	35	93
v/c Ratio	0.33	0.07	0.78	0.05	0.22	0.07	0.13
Control Delay	8.9	3.4	15.5	7.8	7.9	8.0	6.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	8.9	3.4	15.5	7.8	7.9	8.0	6.8
Queue Length 50th (ft)	35	0	102	3	19	5	9
Queue Length 95th (ft)	54	12	#172	13	45	16	28
Internal Link Dist (ft)	420		420		420		420
Turn Bay Length (ft)		165					
Base Capacity (vph)	2034	663	1415	519	743	489	732
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.33	0.07	0.78	0.05	0.22	0.07	0.13

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↱		↑↑↱		↰	↱		↰	↱	
Volume (vph)	0	1003	93	0	1245	41	51	80	63	183	402	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		0.91	1.00		0.95		1.00	1.00		1.00	1.00	
Frt		1.00	0.85		1.00		1.00	0.93		1.00	0.99	
Flt Protected		1.00	1.00		1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		5085	1583		3522		1770	1740		1770	1842	
Flt Permitted		1.00	1.00		1.00		0.31	1.00		0.66	1.00	
Satd. Flow (perm)		5085	1583		3522		579	1740		1227	1842	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1090	101	0	1353	45	55	87	68	199	437	35
RTOR Reduction (vph)	0	0	55	0	5	0	0	28	0	0	6	0
Lane Group Flow (vph)	0	1090	46	0	1393	0	55	127	0	199	466	0
Turn Type			Perm				Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases			4				2			6		
Actuated Green, G (s)		23.0	23.0		23.0		19.0	19.0		19.0	19.0	
Effective Green, g (s)		23.0	23.0		23.0		19.0	19.0		19.0	19.0	
Actuated g/C Ratio		0.46	0.46		0.46		0.38	0.38		0.38	0.38	
Clearance Time (s)		4.0	4.0		4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)		2339	728		1620		220	661		466	700	
v/s Ratio Prot		0.21			c0.40			0.07			c0.25	
v/s Ratio Perm			0.03				0.10			0.16		
v/c Ratio		0.47	0.06		0.86		0.25	0.19		0.43	0.67	
Uniform Delay, d1		9.3	7.5		12.1		10.6	10.4		11.5	12.9	
Progression Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.7	0.2		6.2		2.7	0.6		2.8	5.0	
Delay (s)		9.9	7.7		18.3		13.3	11.0		14.3	17.8	
Level of Service		A	A		B		B	B		B	B	
Approach Delay (s)		9.8			18.3			11.6			16.8	
Approach LOS		A			B			B			B	

Intersection Summary			
HCM Average Control Delay	14.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	50.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	72.2%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	EBR	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	1090	101	1398	55	155	199	472
v/c Ratio	0.47	0.13	0.86	0.25	0.22	0.43	0.67
Control Delay	10.1	2.7	19.5	14.4	8.7	15.0	18.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	10.1	2.7	19.5	14.4	8.7	15.0	18.3
Queue Length 50th (ft)	74	0	176	11	20	41	108
Queue Length 95th (ft)	103	18	#308	33	51	87	192
Internal Link Dist (ft)	420		420		420		420
Turn Bay Length (ft)		165					
Base Capacity (vph)	2339	783	1625	220	689	467	706
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.47	0.13	0.86	0.25	0.22	0.43	0.67

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↱		↑↑↱		↰	↱		↰	↱	
Volume (vph)	0	652	45	0	962	105	25	137	19	32	76	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		0.91	1.00		0.95		1.00	1.00		1.00	1.00	
Frt		1.00	0.85		0.99		1.00	0.98		1.00	0.97	
Flt Protected		1.00	1.00		1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		5085	1583		3487		1770	1828		1770	1804	
Flt Permitted		1.00	1.00		1.00		0.69	1.00		0.65	1.00	
Satd. Flow (perm)		5085	1583		3487		1284	1828		1210	1804	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	709	49	0	1046	114	27	149	21	35	83	22
RTOR Reduction (vph)	0	0	29	0	20	0	0	13	0	0	13	0
Lane Group Flow (vph)	0	709	20	0	1140	0	27	157	0	35	92	0
Turn Type			Perm				Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases			4				2			6		
Actuated Green, G (s)		16.0	16.0		16.0		16.0	16.0		16.0	16.0	
Effective Green, g (s)		16.0	16.0		16.0		16.0	16.0		16.0	16.0	
Actuated g/C Ratio		0.40	0.40		0.40		0.40	0.40		0.40	0.40	
Clearance Time (s)		4.0	4.0		4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)		2034	633		1395		514	731		484	722	
v/s Ratio Prot		0.14			c0.33			c0.09			0.05	
v/s Ratio Perm			0.01				0.02			0.03		
v/c Ratio		0.35	0.03		0.82		0.05	0.22		0.07	0.13	
Uniform Delay, d1		8.4	7.3		10.7		7.4	7.9		7.4	7.6	
Progression Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.5	0.1		5.4		0.2	0.7		0.3	0.4	
Delay (s)		8.8	7.4		16.1		7.5	8.6		7.7	7.9	
Level of Service		A	A		B		A	A		A	A	
Approach Delay (s)		8.7			16.1			8.4			7.9	
Approach LOS		A			B			A			A	

Intersection Summary			
HCM Average Control Delay	12.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	51.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	EBR	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	709	49	1160	27	170	35	105
v/c Ratio	0.35	0.07	0.82	0.05	0.23	0.07	0.14
Control Delay	9.0	3.4	17.3	7.8	8.0	8.0	7.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	9.0	3.4	17.3	7.8	8.0	8.0	7.0
Queue Length 50th (ft)	37	0	110	3	20	5	11
Queue Length 95th (ft)	57	12	#213	13	48	16	31
Internal Link Dist (ft)	420		420		420		420
Turn Bay Length (ft)		165					
Base Capacity (vph)	2034	663	1415	513	743	484	735
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.35	0.07	0.82	0.05	0.23	0.07	0.14

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↱		↑↑↱		↰	↑		↰	↑	
Volume (vph)	0	1048	93	0	1263	52	51	103	63	183	423	63
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		0.91	1.00		0.95		1.00	1.00		1.00	1.00	
Frt		1.00	0.85		0.99		1.00	0.94		1.00	0.98	
Flt Protected		1.00	1.00		1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		5085	1583		3518		1770	1757		1770	1827	
Flt Permitted		1.00	1.00		1.00		0.25	1.00		0.64	1.00	
Satd. Flow (perm)		5085	1583		3518		465	1757		1199	1827	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1139	101	0	1373	57	55	112	68	199	460	68
RTOR Reduction (vph)	0	0	55	0	6	0	0	24	0	0	11	0
Lane Group Flow (vph)	0	1139	46	0	1424	0	55	156	0	199	517	0
Turn Type			Perm				Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases			4				2			6		
Actuated Green, G (s)		23.0	23.0		23.0		19.0	19.0		19.0	19.0	
Effective Green, g (s)		23.0	23.0		23.0		19.0	19.0		19.0	19.0	
Actuated g/C Ratio		0.46	0.46		0.46		0.38	0.38		0.38	0.38	
Clearance Time (s)		4.0	4.0		4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)		2339	728		1618		177	668		456	694	
v/s Ratio Prot		0.22			c0.40			0.09			c0.28	
v/s Ratio Perm			0.03				0.12			0.17		
v/c Ratio		0.49	0.06		0.88		0.31	0.23		0.44	0.75	
Uniform Delay, d1		9.4	7.5		12.2		10.9	10.5		11.5	13.4	
Progression Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.7	0.2		7.2		4.5	0.8		3.0	7.2	
Delay (s)		10.1	7.7		19.5		15.4	11.4		14.5	20.6	
Level of Service		B	A		B		B	B		B	C	
Approach Delay (s)		9.9			19.5			12.3			18.9	
Approach LOS		A			B			B			B	

Intersection Summary			
HCM Average Control Delay	15.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	50.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	76.0%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	EBR	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	1139	101	1430	55	180	199	528
v/c Ratio	0.49	0.13	0.88	0.31	0.26	0.44	0.75
Control Delay	10.3	2.7	20.9	16.8	9.6	15.3	21.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	10.3	2.7	20.9	16.8	9.6	15.3	21.8
Queue Length 50th (ft)	78	0	183	11	27	41	124
Queue Length 95th (ft)	108	18	#320	36	61	88	#261
Internal Link Dist (ft)	420		420		420		420
Turn Bay Length (ft)		165					
Base Capacity (vph)	2339	783	1624	177	692	456	705
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.49	0.13	0.88	0.31	0.26	0.44	0.75

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

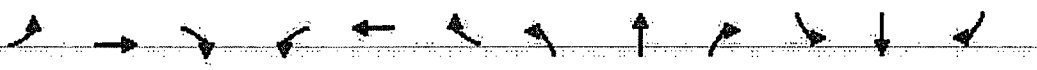
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↱		↑↑↱		↰	↑		↰	↑	
Volume (vph)	0	545	46	0	819	124	26	190	19	28	113	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		0.91	1.00		0.95		1.00	1.00		1.00	1.00	
Frt		1.00	0.85		0.98		1.00	0.99		1.00	0.97	
Flt Protected		1.00	1.00		1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		5085	1583		3469		1770	1837		1770	1814	
Flt Permitted		1.00	1.00		1.00		0.66	1.00		0.62	1.00	
Satd. Flow (perm)		5085	1583		3469		1234	1837		1148	1814	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	592	50	0	890	135	28	207	21	30	123	26
RTOR Reduction (vph)	0	0	30	0	30	0	0	9	0	0	16	0
Lane Group Flow (vph)	0	592	20	0	995	0	28	219	0	30	133	0
Turn Type			Perm				Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases			4				2			6		
Actuated Green, G (s)		16.0	16.0		16.0		16.0	16.0		16.0	16.0	
Effective Green, g (s)		16.0	16.0		16.0		16.0	16.0		16.0	16.0	
Actuated g/C Ratio		0.40	0.40		0.40		0.40	0.40		0.40	0.40	
Clearance Time (s)		4.0	4.0		4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)		2034	633		1388		494	735		459	726	
v/s Ratio Prot		0.12			c0.29			c0.12			0.07	
v/s Ratio Perm			0.01				0.02			0.03		
v/c Ratio		0.29	0.03		0.72		0.06	0.30		0.07	0.18	
Uniform Delay, d1		8.1	7.3		10.1		7.4	8.2		7.4	7.8	
Progression Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.4	0.1		3.2		0.2	1.0		0.3	0.6	
Delay (s)		8.5	7.4		13.3		7.6	9.2		7.7	8.3	
Level of Service		A	A		B		A	A		A	A	
Approach Delay (s)		8.4			13.3			9.0			8.2	
Approach LOS		A			B			A			A	

Intersection Summary			
HCM Average Control Delay	10.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	51.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	EBR	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	592	50	1025	28	228	30	149
v/c Ratio	0.29	0.08	0.72	0.06	0.31	0.07	0.20
Control Delay	8.6	3.4	13.2	7.8	9.1	8.0	7.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	8.6	3.4	13.2	7.8	9.1	8.0	7.6
Queue Length 50th (ft)	30	0	89	4	30	4	17
Queue Length 95th (ft)	48	13	142	14	65	14	41
Internal Link Dist (ft)	420		420		420		420
Turn Bay Length (ft)		165					
Base Capacity (vph)	2034	663	1417	493	744	459	741
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.29	0.08	0.72	0.06	0.31	0.07	0.20

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	953	94	0	952	80	52	151	63	180	490	140
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		0.91	1.00		0.95		1.00	1.00		1.00	1.00	
Frt		1.00	0.85		0.99		1.00	0.96		1.00	0.97	
Flt Protected		1.00	1.00		1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		5085	1583		3498		1770	1781		1770	1801	
Flt Permitted		1.00	1.00		1.00		0.20	1.00		0.61	1.00	
Satd. Flow (perm)		5085	1583		3498		373	1781		1144	1801	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1036	102	0	1035	87	57	164	68	196	533	152
RTOR Reduction (vph)	0	0	63	0	14	0	0	15	0	0	15	0
Lane Group Flow (vph)	0	1036	39	0	1108	0	57	217	0	196	670	0
Turn Type			Perm				Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases			4				2			6		
Actuated Green, G (s)		17.0	17.0		17.0		20.0	20.0		20.0	20.0	
Effective Green, g (s)		17.0	17.0		17.0		20.0	20.0		20.0	20.0	
Actuated g/C Ratio		0.38	0.38		0.38		0.44	0.44		0.44	0.44	
Clearance Time (s)		4.0	4.0		4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)		1921	598		1321		166	792		508	800	
v/s Ratio Prot		0.20			c0.32			0.12			c0.37	
v/s Ratio Perm			0.02				0.15			0.17		
v/c Ratio		0.54	0.06		0.84		0.34	0.27		0.39	0.84	
Uniform Delay, d1		10.9	8.9		12.8		8.2	7.9		8.4	11.1	
Progression Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		1.1	0.2		6.5		5.6	0.9		2.2	10.2	
Delay (s)		12.0	9.1		19.3		13.8	8.8		10.6	21.2	
Level of Service		B	A		B		B	A		B	C	
Approach Delay (s)		11.8			19.3			9.7			18.9	
Approach LOS		B			B			A			B	

Intersection Summary			
HCM Average Control Delay	15.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	45.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	76.5%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	EBR	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	1036	102	1122	57	232	196	685
v/c Ratio	0.54	0.15	0.84	0.34	0.29	0.39	0.84
Control Delay	12.2	3.4	20.6	15.4	8.2	11.3	23.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	12.2	3.4	20.6	15.4	8.2	11.3	23.4
Queue Length 50th (ft)	72	0	129	9	31	31	138
Queue Length 95th (ft)	104	21	#235	34	64	70	#316
Internal Link Dist (ft)	420		420		420		420
Turn Bay Length (ft)		165					
Base Capacity (vph)	1921	661	1335	166	807	508	815
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.54	0.15	0.84	0.34	0.29	0.39	0.84

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

RESOLUTION 2013-138

RESOLUTION TO ADOPT AN ADDENDUM TO THE FINAL ENVIRONMENTAL IMPACT REPORT FOR THE CHULA VISTA BAYFRONT MASTER PLAN AND PORT MASTER PLAN AMENDMENT FOR THE H STREET EXTENSION PROJECT

WHEREAS, the San Diego Unified Port District (District) is a public corporation created by the Legislature in 1962 pursuant to Harbors and Navigation Code Appendix I (Port Act); and

WHEREAS, the District has proposed the H Street Extension Project (Proposed Project) as part of the Chula Vista Bayfront Master Plan and Port Master Plan Amendment (CVBMP); and

WHEREAS, the Proposed Project proposes the construction of roadway improvements, including paving, sidewalks, a bicycle lane, landscaping, drainage and utilities, that would provide an east-west connection between the City of Chula Vista's urban core and the bayfront by extending the existing H Street westward to Marina Parkway from the existing terminus at the San Diego and Arizona Eastern railroad crossing; and

WHEREAS, the Proposed Project site is located in Planning District 7 (Chula Vista Bayfront) of the District's Port Master Plan and consists of approximately 4.25 acres of land along the northern boundary of the former Goodrich south campus in the City of Chula Vista, California; and

WHEREAS, pursuant to the California Environmental Quality Act (CEQA), Public Resources Code Section 21000, et seq., and its implementing regulations, 14 California Code of Regulations Section 15000, et seq. (CEQA Guidelines), the Board of Port Commissioners (Board) certified a Final Environmental Impact Report for the Chula Vista Bayfront Master Plan and Port Master Plan Amendment SCH # 2005081077/UPD # 83356-EIR-658 (Final EIR) for the CVBMP, including the Proposed Project, on May 18, 2010, which is on file with the Office of the District Clerk as Document No. 56562; and

WHEREAS, the District has proposed changes and alterations to the original design of the Proposed Project that will substitute a 10-foot-wide center turn lane in place of a 16-foot-wide median, widen the landscaped parkways on both sides of H Street to 9 feet, provide a 12-foot-wide Class I bicycle path along the south side of H Street, modify landscape plantings to provide a consistent street theme, and will maintain all other components and the same footprint as the original design of the Proposed Project; and

WHEREAS, the District has analyzed said changes and alterations as required by CEQA and, pursuant to CEQA Guidelines section 15164, has prepared an Addendum to the Final Environmental Impact Report for the Chula Vista Bayfront Master Plan and Port Master Plan Amendment, SCH # 2005081077/UPD # 83356-EIR-658 (Addendum to the Final EIR) because some changes or additions are necessary and none of the conditions described in CEQA Guidelines section 15162 calling for preparation of a subsequent EIR or a supplemental EIR have occurred; and

WHEREAS, all materials with regard to the Proposed Project were made available to the Board for its review and consideration of the Proposed Project including, but not limited to, the following:

1. The Final EIR, dated May 2010;

2. The Addendum to the Final EIR, dated July 2013;

3. The Staff Report and Agenda Sheet, dated August 13, 2013;

4. All documents and records filed in this proceeding by the District and all interested parties; and

WHEREAS, having reviewed and considered all the materials made available to the Board, including, but not limited to, the Addendum to the Final EIR, the Final EIR, the staff reports and all the evidence in the record of the proceedings with respect to the Proposed Project, the Board took the actions hereinafter set forth.

NOW THEREFORE, BE IT RESOLVED by the Board of Port Commissioners of the San Diego Unified Port District, as follows:

1. The Board finds the facts recited above are true and further finds that this Board has jurisdiction to consider, approve and adopt the subject of this Resolution.

2. The Board finds and determines that the applicable provisions of CEQA, the CEQA Guidelines and the District Guidelines have been duly observed in conjunction with said hearing and the considerations of this matter and all of the previous proceedings related thereto.

3. The Board finds and determines, on the basis of the whole record before the Board, that:

a. Some minor changes or additions to the Final EIR are necessary, but there is no substantial evidence that a new significant environmental effects or a substantial increase in the severity of a previously identified effect have occurred because of substantial changes to the Proposed Project or with respect to the circumstances under which the Proposed Project is undertaken;

b. There is no substantial evidence that new information exists that shows that: (i) the Proposed Project will have one or more significant effects that were not discussed in the Final EIR; (ii) significant effects previously analyzed will be substantially more severe; (iii) mitigation measures or alternatives previously found infeasible are now feasible and would substantially reduce one or more significant effect of the Proposed Project, but the applicant declines to adopt the mitigation measures or alternatives; or (iv) mitigation measures or alternatives which are considerably different from those analyzed in the Final EIR would substantially lessen one or more significant effects, but the applicant declines to adopt the mitigation measures or alternatives;

c. The Addendum to the Final EIR is complete and adequate in scope and has been completed in compliance with CEQA and the CEQA Guidelines and the District Guidelines for implementation thereof;

d. Mitigation Measures identified in the Addendum, Final EIR, and MMRP are applicable and no additional mitigation measures or alternatives are required;

e. The Addendum to the Final EIR was presented to the Board and the Board has fully reviewed and considered the information in Addendum to the Final EIR and the Final EIR prior to approving a resolution Authorizing Issuance of an appealable Coastal Development Permit for the Proposed Project; and

f. The Addendum to the Final EIR and the Final EIR reflect the District's independent judgment and analysis.

5. Pursuant to Public Resources Code Section 21152 and CEQA Guidelines Section 15094, the Clerk of the Board shall cause a Notice of Determination to be filed with the Clerk of the County of San Diego and the State Office of Planning and Research. Unless the Proposed Project is declared exempt herein and a Certificate of Filing Fee Exemption is on file, the Proposed

Project is not operative, vested or final until the filing fees required pursuant to Fish and Game Code Section 711.4 are paid to the Clerk of the County of San Diego.

6. Pursuant to Public Resources Code Section 21081.6(a)(2) and CEQA Guidelines Section 15091(e), the location and custodian of the documents and other materials which constitute the record of proceedings on which this Resolution is based is the Clerk, San Diego Unified Port District, 3165 Pacific Highway, San Diego, California 92101.

APPROVED AS TO FORM AND LEGALITY:

PORT ATTORNEY

PASSED AND ADOPTED by the Board of Port Commissioners of the San Diego Unified Port District, this 13th day of August, 2013, by the following vote:

AYES: Castellanos, Merrifield, Moore, Nelson, Smith, Valderrama
NAYS: None.
EXCUSED: Malcolm.
ABSENT: None.
ABSTAIN: None.

A Y Moore

Ann Y. Moore, Chair
Board of Port Commissioners

ATTEST:

Timothy A. Deuel
District Clerk

(Seal)

SAN DIEGO UNIFIED PORT DISTRICT

Reference Copy
60864

DATE: August 13, 2013

SUBJECT: H STREET EXTENSION PROJECT
A) RESOLUTION ADOPTING AN ADDENDUM TO THE FINAL ENVIRONMENTAL IMPACT REPORT FOR THE CHULA VISTA BAYFRONT MASTER PLAN AND PORT MASTER PLAN AMENDMENT

EXECUTIVE SUMMARY:

The extension of H Street to the Chula Vista Bayfront (Bayfront) is a critical element to the successful implementation of the Chula Vista Bayfront Master Plan (CVBMP). The H Street Extension Project (Project) will provide a long-awaited east-west connection between the City of Chula Vista's (City) urban core and the Bayfront. The Project will also serve as a central access and focal point to the Bayfront and will be the first project to help establish the vision for the CVBMP.

Dating back to the 1999 Goodrich Relocation Agreement (Relocation Agreement),[1] the extension of H Street through areas previously blocked by Goodrich operations has been a top priority of the District and the City. The Project has been included in the District's Capital Improvement Program since 2006 and was originally funded out of the South Bay Cities Memorandum of Understanding. Completion of the Project fulfills a District contractual obligation that was established by the Relocation Agreement and the 2010 Second Amendment to Relocation Agreement (Second Amendment)[2], and is also central to the public infrastructure of the approved CVBMP.

On May 18, 2010, the Board of Port Commissioners (Board) certified the Final Environmental Impact Report (Final EIR) for the CVBMP and Port Mater Plan Amendment.[3] The Final EIR analyzed environmental impacts associated with the redevelopment of land and water along the Chula Vista Bayfront (Bayfront) with a variety of public amenities, a resort conference center, hotel and retail commercial uses, and environmental enhancements. As part of the redevelopment, several existing streets were proposed to be extended and several new streets were proposed to be constructed. In order to accommodate full build-out of the CVBMP, H Street was proposed to be extended and constructed as a 4-lane major street as contemplated and analyzed in the Final EIR. The location of the Project is shown on Attachment A.

[1] Relocation Agreement by and among City of Chula Vista, Redevelopment Agency of the City of Chula Vista, San Diego Unified Port District, and Rohr, Inc., operating as BFGoodrich Aerospace Aerostructures Group, on file in the Office of the District Clerk as Document Number 39466.

[2] Second Amendment to Relocation Agreement, on file in the Office of the District Clerk as Document Number 56072.

[3] Final Environmental Impact Report for the Chula Vista Bayfront Master Plan and Port Master Plan Amendment (UPD #83356-EIR-658), on file in the Office of the District Clerk as Document Number 56562.

ACTION TAKEN: 08-13-2013 - Resolution 2013-138

Refinements to the Project have occurred since certification of the Final EIR in 2010 that have prompted the need for updated environmental analysis in accordance with the California Environmental Quality Act (CEQA). An Addendum to the Final EIR (Attachment B) has been prepared to analyze changes to the Project and to document that none of the conditions in CEQA Guidelines Section 15162, triggering preparation of a Subsequent EIR, have occurred. The Addendum is appropriate under CEQA Guidelines Section 15164 and incorporates the updated and refined project into the Final EIR for the Board to consider and adopt.

RECOMMENDATION:

H Street Extension Project
A) Adopt a resolution adopting an Addendum to the Final EIR for the Chula Vista Bayfront Master Plan and Port Master Plan Amendment.

FISCAL IMPACT:

The Board's adoption of a resolution adopting the Addendum to the CVBMP Final EIR for the Project will have no fiscal impact to the District.

Implementation of the Project analyzed in the Addendum is included in the amended FY 09/13 Capital Improvement Program (Project P0212-1). The total approved Capital Improvement Program (CIP) Budget for this project is $7.8 million.

COMPASS STRATEGIC GOALS:

Adopting the addendum will allow issuance of a Coastal Development Permit that will permit the District to complete the Project. Completion of this Project will enhance and encourage public access to the waterfront, benefiting existing and future businesses. Completion of the Project will serve as an attraction for future developers and businesses, which will ultimately result in increased revenues that will strengthen the District's performance.

This agenda item supports the following Strategic Goals.

☒ A vibrant waterfront destination where residents and visitors converge.
☒ A Port that is a safe place to visit, work and play.
☒ A financially sustainable Port that drives job creation and regional economic vitality.

DISCUSSION:

Background
Pursuant to the Relocation Agreement and the Second Amendment among the City of Chula Vista, the District, and Goodrich, the District is responsible for the construction of the Project. This Project will improve the roadway, sidewalk, landscape, and

associated utilities from Bay Boulevard to Marina Parkway in Chula Vista. The Project will connect the Bayfront to the street grid system in western Chula Vista and will facilitate increased public access to the Bayfront, its parks, and its primary development parcels.

This Project was contemplated and analyzed in the Final EIR prepared for the CVBMP, which was certified by the Board on May 18, 2010. As previously noted, recent refinements to the Project have prompted the need for updated environmental analysis in accordance with CEQA.

Descriptions of the Projects analyzed it the 2010 Final FEIR and the 2013 Addendum to the Final EIR are provided below.

H Street Extension Project – 2010 Final EIR

The Project analyzed in the 2010 Final EIR (2010 Project) included the construction of roadway improvements that would provide for an east-west connection between the City of Chula Vista's (City's) urban core and the Bayfront. The 2010 Project proposed to extend westward from the existing H Street right-of-way terminus at the San Diego and Arizona Eastern (SD&AE) railroad crossing to Marina Parkway. Proposed improvements included roadway paving, median, sidewalks, landscaping, drainage and utilities. The 2010 Project was implemented to fulfill the obligations established by the Relocation Agreement and the Second Amendment, and was also found to be consistent with the build-out scenario contemplated under the approved CVBMP.

The 2010 Project included the following design components:

- Divided roadway with a 24-foot-wide travel lane in each direction and a 16-foot-wide landscaped median;
- 5-foot-wide sidewalks on each side of the roadway, with 7-foot-wide landscaping and swales between the curb and sidewalk;
- Minimum of 3 feet of landscape buffer between the sidewalk and Goodrich property;
- Appropriate roadway transitions at each terminus point to existing roadway improvements, including Marina Parkway between H Street and Sandpiper Way, striping, signal modification, and pedestrian crossing at west side of Bay Boulevard;
- Removal of existing railroad tracks and ties at non-operational crossing;
- Driveway access to adjacent Goodrich property;
- Storm drain systems to accommodate the ultimate build-out of the bayfront pursuant to the CVBMP (i.e., 72-inches or less in diameter capacity);
- Potable water and recycled water system with lines of 8- to 16-inches in diameter;
- Dry utilities, including gas, electric and communications;
- Street lighting;
- Landscape and irrigation system; and

- Post-construction storm water mitigation Best Management Practices (BMPs), including Low Impact Development (LID) strategies.

Pursuant to CEQA, a Final EIR was prepared for the CVBMP and certified by the Board on May 18, 2010 (UPD No. 83356-EIR-658; SCH No. 2005081077). As a subsequent action, on November 9, 2010, the Board authorized the issuance of an appealable CDP for the portion of the Project located west of the mean high tide line.

Revised H Street Extension Project – 2013 Addendum to Final EIR

The 2010 Project was based on preliminary concepts studied in the CVBMP EIR. For FY 2013, the Board authorized the expenditure of $500,000 from the CIP budget to advance the pre-design of the Bayfront infrastructure. As part of that effort, the Board authorized the selection of CCI Partners, along with design firm HKS as a sub-consultant, at the February 12, 2013, meeting. The primary task of HKS, led by Randy Morton, is to prepare design and development guidelines that will serve as the foundation for establishing a vision for the Bayfront. Initial work conducted under this task identified the opportunity to modify the H Street design to better accommodate pedestrians and bicyclists along the corridor, as well as create a landscape theme that will fit the future vision for the area. As the central access and focal point to the Bayfront, it is important for H Street to appropriately establish and be consistent with the ultimate vision for the CVBMP. The 2010 Project has been redesigned to accomplish this vision.

Similar to the 2010 Project, the Project analyzed in the 2013 Addendum to the Final EIR (2013 Project), coupled with the Final EIR, consists of the construction of roadway improvements that would provide for an east-west connection between the City's urban core and the Bayfront. H Street will continue to be extended westward from the existing H Street right-of-way terminus at the SD&AE railroad crossing to Marina Parkway. The 2013 Project differs from the original Project in the following manner:

- The 16-foot-wide median will be removed, and a 10-foot-wide center turn lane will be added;
- The landscaped parkways on both sides of H Street will be widened to 9 feet wide;
- A 12-foot-wide Class I bicycle path will be provided along the south side of H Street; and
- Landscape plantings will be modified to provide a consistent street tree theme.

All other components of the 2010 Project, including BMPs and LID strategies, will be included in the 2013 Project.

Addendum to the Final EIR

As further described below under the Environmental Review section of this agenda sheet, an Addendum to the 2010 Final EIR was prepared to document and analyze

changes to the Project. The Addendum incorporates the updated and refined Project into the Final EIR for the Board to consider and adopt.

As proposed, the 2013 Project is substantially similar to the Project that was analyzed in the Final EIR and would be constructed within the same footprint at the 2010 Project. The scope of the 2013 Project, including both construction and operation, is substantially similar to that identified in the 2010 Project; therefore, the 2013 Project will have substantially similar environmental impacts to the 2010 Project.

If the Board adopts the Addendum to the Final EIR, the Board can consider a new appealable Coastal Development Permit for the 2013 Project.

Conclusion
Staff recommends that the Board conduct a public hearing and adopt a resolution adopting the Addendum to the CVBMP Final EIR for the H Street Extension Project.

Port Attorney's Comments:

The Port Attorney's Office has been involved in this project from the outset and has provided input throughout the preparation of the Addendum to the Final EIR and all accompanying documents. The Port Attorney's Office has also reviewed the issues set forthi in this agenda sheet and the Addendum to the Final EIR for form and legality, and there are no legal concerns present. The Board may analyze the issues presented and take appropriate action.

Environmental Review:

In accordance with the CEQA statutes and guidelines, the 2010 Project was analyzed in the Final EIR for the CVBMP (UPD No. 83356-EIR-658; SCH No. 2005081077) (Attachment C). On May 18, 2010, the Board adopted Resolution 2010-78 certifying the Final EIR, adopting the Findings of Fact and Statement of Overriding Considerations (Findings and SOC), and adopting the Mitigation Monitoring and Reporting Program (MMRP).

The Addendum to the Final EIR has been prepared to analyze changes from the initial 2010 Project to the 2013 Project and to document that none of the conditions in CEQA Guidelines Section 15162, triggering preparation of a Subsequent EIR, have occurred. As detailed in Attachment B, the Addendum is appropriate under CEQA Guidelines Section 15164. The Addendum incorporates the updated and refined project into the Final EIR for the Board to consider and adopt. As further detailed in Attachment B, based on the provisions of State CEQA Guidelines Sections 15162 and 15164, none of the conditions requiring the preparation of a Subsequent EIR pursuant to CEQA Guidelines Section 15162(a) have occurred. Staff has reviewed the revised Project and has determined (1) the Project as revised is within the scope of the Final EIR and (2) there will not be any new or more severe significant impacts or required mitigation

measures not previously identified in the EIR, Findings and SOC, or MMRP previously certified and adopted by the Board.

The analysis included in the Addendum to the Final EIR concludes that the 2013 Project would result in substantially similar effects to those of the 2010 Project because the scope of the 2013 Project, including both construction and operation, is substantially similar to that identified in the 2010 Project. The Addendum to the Final EIR also concludes that analyses and conclusions in the Final EIR remain current and valid; that the 2013 Project would not cause new or substantially more severe significant effects than those identified in the Final EIR, and no new mitigation measures would be required; that no change has occurred with respect to circumstances surrounding the 2013 Project that would cause new or substantially more severe significant environmental effects than identified in the FEIR; and that no new information has become available that shows that the project would cause significant environmental effects not already analyzed in the Final EIR. As such, pursuant to CEQA Guidelines Section 15164, and based on the information provided in the Addendum to the Final EIR, the analysis for the revised Project has been appropriately addressed in the Final EIR. No further environmental review is required.

If the Board approves any discretionary action to carry out the Project, District staff will file a Notice of Determination pursuant to CEQA Guidelines Section 15075.

Equal Opportunity Program:

Not applicable.

PREPARED BY: Lesley Nishihira
Manager, Environmental & Land Use Management

Attachment(s):
Attachment A: Project Location Map
Attachment B: Addendum to the Final EIR for the CVBMP
Attachment C: Final EIR for the CVBMP

Attachment A to Agenda Sheet No. 21A

Google Maps - ©2013 Google

Project Location Map

Attachment B to Agenda Sheet No. 21A

ATTACHMENT 1 to the
FINAL ENVIRONMENTAL IMPACT REPORT

ADDENDUM

to the

FINAL ENVIRONMENTAL IMPACT REPORT

for the

CHULA VISTA BAYFRONT MASTER PLAN AND
PORT MASTER PLAN AMENDMENT

STATE CLEARINGHOUSE NUMBER 2005081077

UPD NUMBER 83356-EIR-658

SAN DIEGO UNIFIED PORT DISTRICT

3165 Pacific Highway

San Diego, California 92101

JULY 2013

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1.0 INTRODUCTION

1.1 PURPOSE AND BACKGROUND

This document constitutes an Addendum to the April 2010 Final Environmental Impact Report (FEIR) originally prepared for the Chula Vista Bayfront Master Plan and Port Master Plan Amendment (CVBMP), which was certified by the Board of Port Commissions on May 18, 2010, by Resolution No. 2010-78 (Clerk Document Number 56562). The FEIR for the CVBMP analyzed environmental impacts associated with the redevelopment of land and water along the Chula Vista Bayfront with a variety of public amenities, a resort conference center, hotel and retail commercial uses, and environmental enhancements. As part of the redevelopment, several existing streets were proposed to be extended and several new streets were proposed to be constructed. In order to accommodate full build-out of the CVBMP, H Street was proposed to be extended and constructed as a 4-lane major street as contemplated and analyzed in the FEIR.

The purpose of this Addendum is to evaluate whether revisions to the H Street extension component of the CVBMP (hereafter referred to as the original Project) would result in any new or substantially more adverse significant effects or require any new mitigation measures not identified in the FEIR. No other changes are proposed to the original Project.

Similar to the original Project, the revisions to the H Street extension component of the original Project would consist of the construction of roadway improvements that would provide for an east-west connection between the City of Chula Vista's urban core and the Chula Vista bayfront. H Street would continue to be extended westward from the existing H Street right-of-way terminus at the San Diego and Arizona Eastern (SD&AE) railroad crossing to Marina Parkway. The minor revisions to the H Street extension differ from the original Project in the following manner:

- The 16-foot-wide median will be removed, and a 10-foot-wide center turn lane will be added;
- The landscaped parkways on both sides of H Street will be widened to 9 feet wide;
- A 12-foot-wide Class I bicycle path will be provided along the south side of H Street; and
- Landscape plantings will be modified to provide a consistent street tree theme.

All other components of the original Project, including BMPs and LID strategies, would be included in the revisions to the original Project.

This Addendum, together with the FEIR, will be used by the San Diego Unified Port District (District) when considering approval of the minor revisions to the original Project.

1.2 CEQA FRAMEWORK FOR ADDENDUM

When a lead agency has already prepared an EIR, the California Environmental Quality Act (CEQA) mandates that "no subsequent or supplemental environmental impact report shall be required by the lead agency or any responsible agency, unless one or more of the following events occurs: (a) substantial changes are proposed in the project which will require major revisions of the environmental impact report; (b) substantial changes occur with respect to the circumstances under which the project is being undertaken which will require major revisions in the environmental impact report; (c) new information, which was not known and could not have been known at the time the environmental impact report was certified as complete, becomes available" (Cal. Pub. Res. Code, §21166). State CEQA Guidelines Section 15162 clarifies that a subsequent EIR or supplemental EIR is only required when "substantial changes" occur to a project or the circumstances surrounding a project, or "new information" about a project implicates "new significant environmental effects" or a "substantial increase in the severity of previously identified significant effects."

When only some changes or additions to a previously certified EIR are necessary and none of the conditions described in Public Resources Code Section 21166 or Section 15162 of the State CEQA Guidelines calling for the preparation of a subsequent or supplemental EIR are met, CEQA allows the lead agency to prepare and adopt an addendum. (State CEQA Guidelines, §15164(a).)

1.3 DETERMINATION

As verified in this Addendum, the analyses and the conclusions in the FEIR remain current and valid. The proposed revisions to the H Street extension component of the original Project would not cause new significant effects not identified in the FEIR nor increase the severity of environmental effect as analyzed in the FEIR, and, hence, no new mitigation measures would be necessary to reduce significant effects (see Section 3.0 Environmental Checklist). No change has occurred with respect to circumstances surrounding the revisions to the original Project that would cause new or substantially more severe significant environmental effects than were identified in the FEIR. In addition, no new information has become available that shows that the revisions to the original Project would cause new or substantially more severe significant environmental effects which have not already been analyzed in the FEIR.

Therefore, no further environmental review is required beyond this Addendum. This Addendum incorporates all of the applicable mitigation measures detailed in the FEIR. With this Addendum, the revisions to the original Project would still be within the framework of the evaluation for the original Project as documented in the FEIR.

2.0 PROJECT DESCRIPTION

2.1 LOCATION AND SETTING

The original Project is located along the northern boundary of the former Goodrich south campus in Chula Vista, California. The original Project site occupies approximately 4.25 acres. The revisions to the original Project would occur within the same footprint as the original Project.

2.2 PROJECT CHARACTERISTICS

The original Project included the construction of roadway improvements that would provide for an east-west connection between the City of Chula Vista's urban core and the Chula Vista bayfront. The original Project proposed to extend westward from the existing H Street right-of-way terminus at the San Diego and Arizona Eastern (SD&AE) railroad crossing to Marina Parkway. Proposed improvements associated with the H Street extension included roadway paving, median, sidewalks, landscaping, drainage and utilities. The original Project was implemented to fulfill the obligations established by the 1999 Goodrich Relocation Agreement (Relocation Agreement) and the 2010 Second Amendment to Relocation Agreement (Second Amendment), and was also found to be consistent with the build-out scenario contemplated under the approved CVBMP.

The original Project included the following design features for the H Street extension component:

- Divided roadway with a 24-foot-wide travel lane in each direction and a 16-foot-wide landscaped median;
- 5-foot-wide sidewalks on each side of the roadway, with 7-foot wide landscaping and swales between the curb and sidewalk;
- Minimum of 3 feet of landscape buffer between the sidewalk and Goodrich property;
- Appropriate roadway transitions at each terminus point to existing roadway improvements, including Marina Parkway between H Street and Sandpiper Way, striping, signal modification, and pedestrian crossing at west side of Bay Boulevard;
- Removal of existing railroad tracks and ties at non-operational crossing;
- Driveway access to adjacent Goodrich property;
- Storm drain systems to accommodate the ultimate build-out of the bayfront analyzed in the CVBMP (i.e., 72-inches or less in diameter capacity);
- Potable water and recycled water system with lines of 8- to 16-inches in diameter;
- Dry utilities, including gas, electric and communications;
- Street lighting;
- Landscape and irrigation system; and

- Post-construction storm water mitigation Best Management Practices (BMPs), including Low Impact Development (LID) strategies.

The revisions to the original Project, which are contemplated in this Addendum, include the following minor changes:

- The 16-foot-wide median will be removed, and a 10-foot-wide center turn lane will be added;
- The landscaped parkways on both sides of H Street will be widened to 9 feet wide;
- A 12-foot-wide Class I bicycle path will be provided along the south side of H Street; and
- Landscape plantings will be modified to provide a consistent street tree theme.

All other components of the original Project, including BMPs and LID strategies, will be included in the revisions to the original Project.

3.0 ENVIRONMENTAL CHECKLIST

I. Aesthetics	New Potentially Significant Impact	More Severe Impact	No Substantial Change from Previous Analysis
Would the project:			
a. Have a substantial adverse effect on a scenic vista?	☐	☐	☒
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings along a scenic highway?	☐	☐	☒
c. Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒
d. Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?	☐	☐	☒

a. – d. The revisions to the original Project would not include the 16-foot-wide landscaped median; thus, west-facing views along H Street, which is identified as a Vista Area and View Corridor in the certified Port Master Plan, would be improved due to the absence of tall trees and other vegetation. No scenic highway is located in the vicinity of the Project site, so the revisions to the original Project would have no effect on scenic highways. Furthermore, the original Project and revisions to the original Project would improve the overall visual quality of the Project area by redeveloping a visually degraded, highly underutilized site. Finally, the revisions to the original Project would not introduce new lighting aside from that previously identified in the original Project. The revisions to the original Project would continue to comply with all applicable aesthetics mitigation measures identified in the FEIR for the CVBMP. Therefore, the impacts originally identified in the FEIR for the CVBMP would remain unchanged with implementation of the revisions to the H Street extension component of the original Project.

II. Agricultural and Forestry Resources	New Potentially Significant Impact	More Severe Impact	No Substantial Change from Previous Analysis
In determining whether impacts on agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts on forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project, and forest carbon measurement methodology provided in the Forest Protocols adopted by the California Air Resources Board. Would the project:			
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☒
b. Conflict with existing zoning for agricultural use or conflict with a Williamson Act contract?	☐	☐	☒
c. Conflict with existing zoning for, or cause rezoning of forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	☐	☐	☒

d.	Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☒
e.	Involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☒

a. – e. The revisions to the original Project would have no effect on Farmland or forest land. The revisions to the original Project would be located within an existing developed area absent of Farmland or forest land. The impacts originally identified in the FEIR for the CVBMP would remain unchanged with implementation of the revisions to the H Street extension component of the original Project.

III. Air Quality	New Potentially Significant Impact	More Severe Impact	No Substantial Change from Previous Analysis
When available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:			
a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒
c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is a nonattainment area for an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	☐	☐	☒
d. Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒
e. Create objectionable odors affecting a substantial number of people?	☐	☐	☒

a. – e. The revisions to the original Project would not necessitate additional grading or earthwork as all of the improvements would be completed within the same footprint identified in the original Project as analyzed in the FEIR. No additional construction-related truck trips would be required as the scope of construction is substantially similar to the original Project. Also, the roadway extension would continue to be constructed and operate as a 4-lane major roadway. Because there is no change in roadway capacity, no change in air emissions from vehicular traffic would occur. Finally, the revisions to the original Project would not release additional pollutants or objectionable odors aside from those already identified in the FEIR. The revisions to the original Project would continue to comply with all applicable air quality mitigation measures identified in the FEIR. Therefore, the impacts originally identified in the FEIR for the CVBMP would remain unchanged with implementation of the revisions to the H Street extension component of the original Project.

IV. Biological Resources	New Potentially Significant Impact	More Severe Impact	No Substantial Change from Previous Analysis
Would the project:			
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☒
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☒
c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marshes, vernal pools, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☒
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒

f.	Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☒

a. – f. The revisions to the original Project would be completed within the same footprint identified in the original Project as analyzed in the FEIR, and, therefore, would not have any new substantial adverse effect on the following: a candidate, sensitive, or special-status species; any riparian habitat or other sensitive natural community; any federally protected wetlands; or the movement of any fish or wildlife species. The revisions to the original Project would continue to comply with all applicable biological resources mitigation measures identified in the FEIR. Therefore, the impacts originally identified in the FEIR for the CVBMP would remain unchanged with implementation of the revisions to the H Street extension component of the original Project.

V. Cultural Resources	New Potentially Significant Impact	More Severe Impact	No Substantial Change from Previous Analysis
Would the project:			
a. Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	☐	☐	☒
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☐	☒
c. Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒

a. – c. The revisions to the original Project would not necessitate additional grading or earthwork aside from that already identified for the original Project. In addition, no additional existing structures would be demolished for implementation of the revisions to the original Project. The revisions to the original Project would continue to comply with all applicable cultural resources mitigation measures identified in the FEIR. Therefore, the impacts originally identified in the FEIR for the CVBMP would remain unchanged with implementation of the revisions to the H Street extension component of the original Project.

VI. Geology and Soils	New Potentially Significant Impact	More Severe Impact	No Substantial Change from Previous Analysis
Would the project:			
a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:			
1. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒
2. Strong seismic ground shaking?	☐	☐	☒
3. Seismic-related ground failure, including liquefaction?	☐	☐	☒
4. Landslides?	☐	☐	☒
b. Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒
c. Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project and potentially result in an onsite or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☒
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☒
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems in areas where sewers are not available for the disposal of wastewater?	☐	☐	☒

f.	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒

a. – f. The revisions to the original Project would be constructed within the same footprint identified in the original Project. The revisions to the original Project do not include the construction of new buildings or other structures aside from those already contemplated in the original Project; thus**,** no new impacts related to fault rupture, groundshaking, ground failure, landslides, or unstable soils would occur. Additionally, the revisions to the original Project would continue to comply with all applicable geology and soils mitigation measures identified in the FEIR. Therefore, the impacts originally identified in the FEIR for the CVBMP would remain unchanged with implementation of the revisions to the H Street extension component of the original Project.

VII. Greenhouse Gas Emissions	New Potentially Significant Impact	More Severe Impact	No Substantial Change from Previous Analysis
Would the project:			
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒
b. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒

a. – b. The revisions to the original Project would not necessitate additional grading or earthwork as all of the improvements would be completed within the same footprint identified in the original Project as analyzed in the FEIR. No additional construction-related truck trips would be required as the scope of construction is substantially similar to the original Project. Also, the roadway extension would continue to be constructed and operate as a 4-lane major roadway and would not increase roadway capacity. Because there would be no change in roadway capacity, no change in greenhouse gas emissions from vehicular traffic would occur. Finally, the revisions to the original Project would provide a Class I bicycle path and sidewalks on either side of the extended H Street, which are intended to encourage non-automobile transportation; these components may have a beneficial effect on greenhouse gas emissions when compared to the original Project. The revisions to the original Project would continue to comply with all applicable greenhouse gas emissions mitigation measures identified in the FEIR. Therefore, the impacts originally identified in the FEIR for the CVBMP would remain unchanged with implementation of the revisions to the H Street extension component of the original Project.

VIII. Hazards and Hazardous Materials	New Potentially Significant Impact	More Severe Impact	No Substantial Change from Previous Analysis
Would the project:			
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒
c. Emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒
d. Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☒
e. Be located within an airport land use plan area or, where such a plan has not been adopted, be within two miles of a public airport or public use airport, and result in a safety hazard for people residing or working in the project area?	☐	☐	☒
f. Be located within the vicinity of a private airstrip and result in a safety hazard for people residing or working in the project area?	☐	☐	☒
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒

h.	Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☒

a. – h. The revisions to the original Project would not transport or release additional hazardous materials aside from those already identified in the original Project. The truck haul route would also be identical to that identified in the original Project. The revisions to the original Project would be constructed within the same footprint as the original Project, so new impacts associated with hazardous materials sites, airports, airstrips, or wildland fires would not occur. Also, appropriate emergency access would continue to be included as part of the revisions to the original Project. Finally, the revisions to the original Project would continue to comply with all applicable hazards and hazardous materials mitigation measures identified in the FEIR. Therefore, the impacts originally identified in the FEIR for the CVBMP would remain unchanged with implementation of the revisions to the H Street extension component of the original Project.

IX. Hydrology and Water Quality	New Potentially Significant Impact	More Severe Impact	No Substantial Change from Previous Analysis
Would the project:			
a. Violate any water quality standards or waste discharge requirements?	☐	☐	☒
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge, resulting in a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation onsite or offsite?	☐	☐	☒
d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding onsite or offsite?	☐	☐	☒
e. Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒
f. Otherwise substantially degrade water quality?	☐	☐	☒

g.	Place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☒
h.	Place within a 100-year flood hazard area structures that would impede or redirect floodflows?	☐	☐	☒
i.	Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☒
j.	Contribute to inundation by seiche, tsunami, or mudflow?	☐	☐	☒

a. – j. The revisions to the original Project would be constructed within the same footprint as the original Project and would not necessitate additional grading or earthwork than identified by the original Project. Therefore, new impacts related to water quality and groundwater supplies would not occur. The revisions to the original Project would alter the site's existing drainage patterns; however, the revisions would continue to be appropriately designed with relation to stormwater drainages, which would ensure that erosion, siltation, and flooding do not occur. As previously identified, the revisions to the original Project would continue to implement appropriate BMPs and LID strategies, which would further control stormwater runoff. Finally, no new structures would be constructed aside from those identified in the original Project, so no new impacts related to flood hazards, levee or dam failure, or seiche, tsunami, or mudflow would not occur. The revisions to the original Project would continue to comply with all applicable hydrology and water quality mitigation measures identified in the FEIR. Therefore, the impacts originally identified in the FEIR for the CVBMP would remain unchanged with implementation of the revisions to the H Street extension component of the original Project.

X. Land Use and Planning	New Potentially Significant Impact	More Severe Impact	No Substantial Change from Previous Analysis
Would the project:			
a. Physically divide an established community?	☐	☐	☒
b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, a general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒
c. Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☒

a. – c. The revisions to the original Project would not divide an established community, conflict with an applicable land use plan, or conflict with an applicable habitat conservation plan. The revisions to the original Project would be constructed within the same footprint identified in the original Project, and no established community exists within the limits of the original Project. The revisions to the original Project are also consistent with the certified Port Master Plan. The revisions to the original Project would continue to comply with all applicable land use and planning mitigation measures identified in the FEIR. Therefore, the impacts originally identified in the FEIR for the CVBMP would remain unchanged with implementation of the revisions to the H Street extension component of the original Project.

XI. Mineral Resources	New Potentially Significant Impact	More Severe Impact	No Substantial Change from Previous Analysis
Would the project:			
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☒
b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☒

a. – b. The revisions to the original Project would not result in the loss of availability of a known mineral resource that would be of value to the region or state, or a locally important mineral resource recovery site delineated on a local plan. The revisions to the original Project would be constructed within the same footprint identified in the original Project, and no mineral resources are known to occur or have been discovered within the limits of the original Project site. Therefore, the impacts originally identified in the FEIR for the CVBMP would remain unchanged with implementation of the revisions to the H Street extension component of the original Project.

XII. Noise	New Potentially Significant Impact	More Severe Impact	No Substantial Change from Previous Analysis
Would the project:			
a. Expose persons to or generate noise levels in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies?	☐	☐	☒
b. Expose persons to or generate excessive groundborne vibration or groundborne noise levels?	☐	☐	☒
c. Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒
d. Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒
e. Be located within an airport land use plan area, or, where such a plan has not been adopted, within two miles of a public airport or public use airport and expose people residing or working in the project area to excessive noise levels?	☐	☐	☒
f. Be located in the vicinity of a private airstrip and expose people residing or working in the project area to excessive noise levels?	☐	☐	☒

a. – f. The revisions to the original Project would not require any additional construction aside from that identified for the original Project. In addition, it is anticipated that similar construction methods to those proposed as part of the original Project would be employed as part of the revisions to the original Project; thus, construction noise levels would be similar to those identified in the FEIR. Therefore, no additional noise or vibrations would be generated by the revisions to the original Project. Additionally, the revisions to the original Project would not introduce new land uses that were not already analyzed in the FEIR, so new permanent increase in ambient noise would occur.

Finally, the revisions to the original Project would be constructed within the same footprint as the original Project, so additional impacts associated with airport noise levels would not occur. The revisions to the original Project would continue to comply with all applicable noise mitigation measures identified in the FEIR. Therefore, the impacts originally identified in the FEIR for the CVBMP would remain unchanged with implementation of the revisions to the H Street extension component of the original Project.

XIII. Population and Housing	New Potentially Significant Impact	More Severe Impact	No Substantial Change from Previous Analysis
Would the project:			
a. Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	☐	☐	☒
b. Displace a substantial number of existing housing units, necessitating the construction of replacement housing elsewhere?	☐	☐	☒
c. Displace a substantial number of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☒

a. – c. The revisions to the original Project would not induce substantial population growth or displace existing housing or people. The revisions to the original Project do not involve the construction of homes or businesses, and no existing housing units or people occupy the original Project site. The revisions to the original Project would continue to comply with all applicable population and housing mitigation measures identified in the FEIR. Therefore, the impacts originally identified in the FEIR for the CVBMP would remain unchanged with implementation of the revisions to the H Street extension component of the original Project.

XIV. Public Services	New Potentially Significant Impact	More Severe Impact	No Substantial Change from Previous Analysis
Would the project:			
a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or a need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services:			
Fire protection?	☐	☐	☒
Police protection?	☐	☐	☒
Schools?	☐	☐	☒
Parks?	☐	☐	☒
Other public facilities?	☐	☐	☒

a. The revisions to the original Project would not result in additional demand for fire or police protection, schools, parks, or other public facilities. Because the revisions to the original Project would not alter the proposed roadway capacity, no additional park users would be accommodated that could cause the need for additional parks aside from those already identified in the FEIR. The revisions to the original Project would continue to comply with all applicable public services mitigation measures identified in the FEIR. Therefore, the impacts originally identified in the FEIR for the CVBMP would remain unchanged with implementation of the revisions to the revisions to the H Street extension component of the original Project.

XV. Recreation	New Potentially Significant Impact	More Severe Impact	No Substantial Change from Previous Analysis
Would the project:			
a. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☒
b. Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	☐	☐	☒

a. – b. The revisions to the original Project would not result in an increase in use of existing parks or other recreational facilities. Because the revisions to the original Project would not alter the proposed roadway capacity, no additional park users would be accommodated that could cause the physical deterioration of existing parks. The revisions to the original Project would include a Class I bicycle path; however, all improvements would occur within the same footprint identified for the original Project. Therefore, no additional physical effects on the environment would occur as a result of the revisions. In addition, the Class I bicycle path would provide additional recreational opportunities along the waterfront. The revisions to the original Project would continue to comply with all applicable recreation mitigation measures identified in the FEIR. Therefore, the impacts originally identified in the FEIR for the CVBMP would remain unchanged with implementation of the revisions to the H Street extension component of the original Project.

XVI. Transportation/Traffic	New Potentially Significant Impact	More Severe Impact	No Substantial Change from Previous Analysis
Would the project:			
a. Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation, including mass transit and non-motorized travel and relevant components of the circulation system, including, but not limited to, intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☒
b. Conflict with an applicable congestion management program, including, but not limited to, level-of-service standards and travel demand measures or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☒
c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☒
d. Substantially increase hazards because of a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒
e. Result in inadequate emergency access?	☐	☐	☒
f. Conflict with adopted policies, plans, or programs regarding public transit, bicycle or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☒

a.– f. The revisions to the original Project would not conflict with any plans, policies, or ordinances related to the effectiveness of the circulation system because the roadway

extension would continue to be constructed and operate as a 4-lane major roadway. A traffic memorandum entitled *Chula Vista Bayfront Master Plan Traffic Analysis Review, California* prepared by Rick Engineering in July 2013 (see Appendix A) identified that the revisions to the original Project would continue to service the CVBMP at acceptable level of service (LOS) ratios. The traffic memorandum identified that, since preparation of the FEIR, a few of the land uses within the CVBMP area have changed. However, the traffic memorandum concluded that the current roadway cross sections for H Street are consistent with the CVBMP conceptual plans and comply with all applicable mitigation measures identified in the FEIR; thus, no new significant effects on the roadway network would occur. Finally, the traffic memorandum concluded that the roadway geometry proposed for H Street and Bay Boulevard would operate at an acceptable LOS for peak hour conditions and would accommodate all queued vehicles without spilling onto the railroad tracks. Therefore, the revisions to the original Project would not conflict with an applicable congestion management program. Also, no changes to emergency access are proposed. Finally, no change in air traffic patterns would occur from the revisions to the original Project. Finally, the revisions to the original Project include a Class I bicycle path, which would augment existing bicycle facilities in the area. The revisions to the original Project would continue to comply with all applicable transportation/traffic mitigation measures identified in the FEIR. Therefore, the impacts originally identified in the FEIR for the CVBMP would remain unchanged with implementation of the revisions to the H Street extension component of the original Project.

XVII. Utilities and Service Systems	New Potentially Significant Impact	More Severe Impact	No Substantial Change from Previous Analysis
Would the project:			
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☒
b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒
c. Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or would new or expanded entitlements be needed?	☐	☐	☒
e. Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒
f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒
g. Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☒

a. – g. The revisions to the original Project would not result in additional demand for wastewater treatment, water supplies, or landfill capacity as the revision propose substantially the same features as the original Project. No sanitary sewer facilities would be included as part of the revisions to the original Project. Finally, no additional

landfill capacity would be required as the scope of grading and earthwork is substantially similar to the original Project. In addition, the reduction in landscaping from removal of the landscaped median would result in a small reduction in the overall demand for water. The revisions to the original Project would not include any new stormwater drainage facilities aside from those already identified in the original Project, so no new physical impacts would occur. As previously noted, the revisions would continue to be appropriately designed with relation to stormwater drainages and would continue to implement appropriate BMPs and LID strategies, which would further control stormwater runoff. The revisions to the original Project would continue to comply with all applicable utilities and service systems mitigation measures identified in the FEIR. Therefore, the impacts originally identified in the FEIR for the CVBMP would remain unchanged with implementation of the revisions to the H Street extension component of the original Project.

XVIII. Mandatory Findings of Significance	New Potentially Significant Impact	More Severe Impact	No Substantial Change from Previous Analysis
a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☒
b. Does the project have impacts that are individually limited but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	☐	☐	☒
c. Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒

a. – c. The revisions to the original Project would not have the potential to degrade the quality of the environment, reduce biological resources, or eliminate cultural resources because the revisions to the original Project are substantially similar to the original Project and would occur within the same footprint identified in the original Project. The revisions to the original Project would not result in new cumulatively considerable impacts or new environmental impacts on human being because the scope of the Project, including both construction and operation, would also be substantially similar to that identified in the original Project. The revisions to the original Project would continue to comply with all applicable mitigation measures identified in the FEIR. Therefore, the impacts originally identified in the FEIR for the CVBMP would remain unchanged with implementation of the revisions to the H Street extension component of the original Project.

Environmental Determination

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions to the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have an impact on the environment that is "potentially significant" or "potentially significant unless mitigated" but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards and (2) has been addressed by mitigation measures based on the earlier analysis, as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☒ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the project, nothing further is required.

Signature	Date
Printed Name	For

4.0 CONCLUSION

On the basis of the evaluation presented in Section 3, the revisions to the original Project would not trigger any of the conditions listed in Section 1.2 of this Addendum, requiring preparation of a subsequent or supplemental EIR. Thus, this Addendum satisfies the requirements of CEQA Guidelines Sections 15162 and 15164. The revisions to the original Project do not introduce new significant environmental effects, substantially increase the severity of previously identified significant environmental effects, or show that mitigation measures or alternatives previously found not to be feasible would in fact be feasible.

Overall, the revisions to the Project would result in the substantially similar effects to those of the original Project with similar construction and operations as those originally proposed and would therefore generate substantially comparable effects. The revisions to the original Project would not result in new significant effects or effects that would be substantially more severe than those identified in the FEIR. All applicable mitigation measures from the FEIR would be included as part of the revisions to the original Project.

The analyses and conclusions in the FEIR remain current and valid. The revisions to the original Project would not cause new or substantially more severe significant effects than identified in the FEIR, and thus no new mitigation measures would be required. No change has occurred with respect to circumstances surrounding the revisions to the original Project that would cause new or substantially more severe significant environmental effects than identified in the FEIR, and no new information has become available that shows that the project would cause significant environmental effects not already analyzed in the FEIR.

Therefore, no further environmental review is required beyond this Addendum to the FEIR.

Appendix A

RICK™
ENGINEERING COMPANY
Transportation Division

July 18, 2013

Ms. Linda Scott
San Diego Unified Port District
3165 Pacific Highway
San Diego, California 92112

SUBJECT: CHULA VISTA BAYFRONT MASTER PLAN TRAFFIC ANALYSIS REVIEW (RICK ENGINEERING COMPANY JOB NUMBER 15939-K)

Dear Ms. Scott:

Rick Engineering Company performed a review of the traffic analyses performed to date for the Chula Vista Bayfront Master Plan (CVBMP). More specifically, the following traffic analysis were reviewed: *CVBMP Final Environmental Impact Report* (FEIR) (Dudek, April 2010), *CVBMP Traffic Impact Analysis* (Kimley-Horn, March 2008), *CVBMP Pacifica Development Traffic Analysis* (Kimley-Horn, October 2007), and *CVBMP Gaylord Traffic Analysis* (Kimley-Horn, October 2007). The review also compares the existing approved uses for the CVBMP development, with the current land use plan, and assesses the impact to the local roadways in the vicinity of the project. The following summarizes our findings.

TRAFFIC IMPACT ANALYSIS (KIMLEY-HORN) AND FEIR (DUDEK)

The traffic studies were reviewed to verify accuracy and to compare to the current land use plan. The following discrepancies were found with the review:

Phase I: Both traffic analyses reported the same number of total trips, however, the Dudek study showed a Fire Station (located on Parcel H-17) proposed for this phase (Table 4.2-10), and the Kimley-Horn study did not (Table 4-4). The Fire Station is shown to generate 400 daily trips.

Phase II: Both traffic analysis reported the same number of total trips, however, the Kimley-Horn study showed a 2-acre Industrial Business Park (located on Parcel H-17) proposed for this phase (Table 4-5), and the Dudek study did not (Table 4.2-11). The Industrial Business Park is shown to generate 400 daily trips.

Phase III: Both traffic analyses reported the same number of trips, and there are no discrepancies.

Phase IV: Both traffic analyses reported the same number of trips, and there are no discrepancies.

It should be noted that the discrepancy between Phase I and Phase II regarding the Fire Station and the Industrial Business Park (both located on Parcel H-17) is considered negligible, with no additional impact related to traffic, as both proposed developments are shown to be located on the same parcel and generate the same amount of traffic. Refer to **Attachment 1** for the trip generation tables from the Dudek and Kimley-Horn studies.

LAND USE

Since the preparation of the FEIR, a few of the land uses within the CVBMP land area have changed. The changes are as follows:

Phase I: S-1 (Sweetwater District) moved from Phase IV to Phase I, and the land use was revised from a 750 room Resort Hotel to a 237 stall RV Park.

H-3 (Harbor District) decreased from a 2,000 room Hotel to a 1,600 room Resort Conference Center. Access for this parcel was previously assumed to be primarily along H Street, with the main entrance and exit on H Street, west of Marina Parkway, and a truck driveway located along H Street, directly opposite Marina Parkway. A secondary driveway for the parcel was assumed on E Street, north of H Street.

Phase II: H-23 increased from a 500 room Hotel to a 1,250 room Resort Hotel; the 100,000 sf of Cultural use decreased to 25,000 sf; and the 100,000 sf of Retail increased to 175,000 sf. There has not been a focused analysis completed for this parcel, identifying access points.

Phase III: No change.

Phase IV: S-1 was removed and assumed to be constructed as a 237 stall RV Park in Phase I.

TRIP GENERATION

The trip generation for the revised land uses was calculated based on trip generation rates in SANDAG's *Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region*, April 2002 (which is the same methodology utilized in the Kimley-Horn and Dudek studies), and compared to the trip generation in the FEIR. The revised trip generation is summarized as follows:

	FEIR	Current Land Use Plan	Difference
Phase I:	30,842 veh/day	28,427 veh/day	2,415 fewer daily trips
Phase II:	25,190 veh/day	34,090 veh/day	8,900 more daily trips
Phase I&II			*6,485 more daily trips*
Phase III:	8,685 veh/day	8,685 veh/day	no change
Phase I, II, &III			*6,485 more daily trips*
Phase IV:	14,600 veh/day	8,600 veh/day	6,000 fewer daily trips
Phase I, II, III, & IV	*79,317 veh/day*	*78,317 veh/day*	*485 more daily trips*

Refer to **Attachment 2** for summary of the trip generation for each phase of the current land use plan.

POTENTIAL IMPACTS

The traffic generated by the current land use plan was distributed to the project vicinity for Phase II, Phase III, and Phase IV, and compared to City of Chula Vista General Plan roadway classification capacities, and the Mitigation Measures documented in FEIR Section 4.2.5. No further analysis was prepared for Phase I, as this phase is projected to generate less traffic with the current land use plan.

The total additional traffic generated by the current land use plan (485 daily trips) is not anticipated to have any significant impacts on the roadway network within the vicinity of the project, assuming that the roadway cross sections are constructed as follows:

Segment	Roadway Cross Section
H Street, Marina Parkway to Street A	4 Lane Major Street
H Street, Street A to I-5 Ramps	5 Lane Major Street
Street C, Marina Parkway to Street A	2 Lane Class II Collector
J Street, Marina Parkway to Street A	4 Lane Major Street
J Street, Street A to Bay Boulevard	6 Lane Major Street
J Street, Bay Boulevard to I-5 Ramps	6 Lane Major Street
Marina Parkway, H Street to Street C	3 Lane Class II Collector
Marina Parkway, Street C to J Street	3 Lane Class II Collector
Street A, H Street to Street C	4 Lane Class I Collector
Street A, Street C to J Street	4 Lane Class I Collector

The roadway cross sections identified above are consistent with the current Chula Vista Bayfront Master Plan, Sweetwater and Harbor Districts, Conceptual Plan – June 19, 2013, the plans for the H Street Extension Project – July 11, 2013, and the Mitigation Measures Section 4.2.5 of the FEIR.

Refer to **Attachment 3** for the Phase II, Phase III, and Phase IV mitigation requirements from the FEIR and the current land use plan.

H STREET AND BAY BOULEVARD INTERSECTION GEOMETRY

The intersection of H Street and Bay Boulevard was analyzed using the Synchro software to determine if the geometry proposed by the current land use plan is adequate for peak hour conditions. Based on the results of the capacity and queuing analysis, for all phases of development, the geometry as proposed is anticipated to operate at an acceptable LOS for peak hour conditions, and accommodate all queued vehicles without spilling across the railroad tracks. The geometry is proposed as follows:

Intersection of H Street and Bay Boulevard

- Eastbound: 3 through lanes, 1 right-turn lane
- Westbound: 2 through lanes with a shared right-turn lane
- Northbound: 1 left-turn lane, 1 shared through/right-turn lane
- Southbound: 1 left-turn lane, 1 shared through/right-turn lane

Refer to **Attachment 4** for the capacity analysis printouts.

CONCLUSION

The change in land use for the CVBMP is anticipated to result in a minor increase in traffic when compared to the trip generation in the FEIR (485 more daily trips) for full build conditions (all four phases of development). As a result of the net increase in trips, no additional impacts are anticipated to occur, as long as the roadway cross sections described in the Potential Impacts section of this letter are constructed. The roadway cross sections described above correspond with the following plan sets:

- Chula Vista Bayfront Master Plan, Sweetwater and Harbor Districts, Conceptual Plan – June 19, 2013.
- H Street Extension Project – July 11, 2013.

It is recommended that once driveway locations are determined for H-23 that a focused traffic analysis is prepared for this parcel, to determine if any additional impacts will occur at the adjacent intersections and roadways. Additionally, if any access points change for H-3, a revision to the traffic analysis prepared for this parcel should be performed, to determine any impacts to the adjacent intersections and roadways, and to verify that the currently planned cross sections are adequate.

Sincerely,

RICK ENGINEERING COMPANY

Brian R. Stephenson, P.E., T.E., P.T.O.E.
Principal Project Manager

Attachments

cc: Kevin Gibson, Rick Engineering Company

Attachment 1

Trip Generation from Dudek and Kimley-Horn Studies

TABLE 4.2-10
Summary of Phase I Trip Generation

									A.M. Peak Hour			P.M. Peak Hour		
Phase	Parcel	Land Use	Units[1]		Trip Rate[2]			Daily Trips	In	Out	Total	In	Out	Total
Sweetwater District														
I	S-2	Signature Park	18	Ac	50	/	ac	900	59	58	117	41	40	81
Subtotal								**900**	**59**	**58**	**117**	**41**	**40**	**81**
Harbor District														
I	H-3	Hotel	2,000	rm	10	/	rm	20,000	720	480	1,200	960	640	1,600
I	H-13, H-14	Residential	1,500	du	6	/	du	9,000	144	576	720	567	243	810
I	H-8, HP-1	Signature Park	18	ac	50	/	ac	900	59	58	117	41	40	81
I	H-17	Fire Station	2	ac	200	/	ac	400	38	10	48	10	38	48
I	HP-3	Shoreline Promenade	8.4	ac	5	/	ac	42	1	1	2	2	2	3
Subtotal								**29,942**	**924**	**1,115**	**2,039**	**1,570**	**924**	**2,494**
Total								**30,842**	**983**	**1,173**	**2,156**	**1,611**	**964**	**2,575**

SOURCE: Kimley-Horn and Associates 2008.
rm = room; ac = acre; ksf = thousand square feet; du = dwelling unit
[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.

TABLE 4.2-11
Summary of Phase II Trip Generation

Phase	Parcel	Land Use	Units[1]		Trip Rate[2]			Daily Trips	A.M. Peak Hour			P.M. Peak Hour		
									In	Out	Total	In	Out	Total
Harbor District														
II	H-9	Retail/Commercial Recreation	50	ksf	40	/	ksf	2,000	36	24	60	90	90	180
II	H-15	Mixed Use Office	210	ksf	17	/	ksf	3,570	418	46	464	100	400	500
II	H-15	Visitor Hotel	250	rm	8	/	rm	2,000	60	40	100	56	84	140
II	H-15	Retail	120	ksf	40	/	ksf	4,800	86	58	144	216	216	432
II	H-15	General Office	90	ksf	20	/	ksf	1,800	227	25	252	47	187	234
II	H-23	Hotel	500	rm	10	/	rm	5,000	180	120	300	240	160	400
II	H-23	Cultural	100	ksf	16	/	ksf	1,600	22	10	32	80	80	160
II	H-23	Retail	100	ksf	40	/	ksf	4,000	72	48	120	180	180	360
II	HP-28	H Street Pier	0.4	ac	50	/	ac	20	1	2	3	1	1	2
Subtotal								**25,190**	**1,140**	**383**	**1,523**	**1,020**	**1,436**	**2,456**
Total								**25,190**	**1,140**	**383**	**1,523**	**1,020**	**1,436**	**2,456**

SOURCE: Kimley-Horn and Associates 2008.
ksf = thousand square feet; ac = acre; du = dwelling unit
[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.

TABLE 4.2-12
Summary of Phase III Trip Generation

Phase	Parcel	Land Use	Units[1]		Trip Rate[2]			Daily Trips	A.M. Peak Hour			P.M. Peak Hour		
									In	Out	Total	In	Out	Total
Harbor District														
III	H-21	Retail	150	ksf	40	/	ksf	6,000	108	72	180	270	270	540
III	HP-23A	Industrial Business Park	1.0	ac	50	/	ac	50	3	4	7	2	3	5
Subtotal								**6,050**	**111**	**76**	**187**	**272**	**273**	**545**
Otay District														
III	O-1/O-2	Industrial Business Park[3]						1,200	115	29	144	29	115	144
III	O-3	RV Park	236	du	5	/	du	1,180	28	66	94	78	52	130
III	OP-1/OP-3	South Park	51	ac	5	/	ac	255	5	5	10	10	10	20
Subtotal								**2,635**	**148**	**101**	**249**	**117**	**177**	**294**
Total								**8,685**	**259**	**176**	**435**	**389**	**450**	**s**

SOURCE: Kimley-Horn and Associates 2008.
ksf = thousand square feet
[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.
[3] The size of the industrial business park has not been determined, but trips for its use, which is consistent with the General Plan, have been assumed as shown.

TABLE 4.2-13
Summary of Phase IV Trip Generation

Phase	Parcel	Land Use	Units[1]		Trip Rate[2]			Daily Trips	A.M. Peak Hour			P.M. Peak Hour		
									In	Out	Total	In	Out	Total
Sweetwater District														
IV	S-3	Mixed Use Commercial	120	ksf	17	/	ksf	2,040	239	26	265	57	229	286
IV	S-4	Office	120	ksf	17	/	ksf	2,040	239	26	265	57	229	286
IV	S-1	Resort Hotel	750	rm	8	/	rm	6,000	180	120	300	168	252	420
Subtotal								**10,080**	**658**	**172**	**830**	**282**	**710**	**992**
Harbor District														
IV	H-12	Ferry Terminal/Restaurant	25	ksf	100	/	ksf	2,500	15	10	25	140	60	200
IV	H-18	Office	100	ksf	20	/	ksf	2,000	252	28	280	52	208	260
IV	HP-28	H Street Pier	0.40	ac	50	/	ac	20	1	2	3	1	1	2
Subtotal								**4,520**	**268**	**40**	**308**	**193**	**269**	**462**
Total								**14,600**	**926**	**212**	**1,138**	**475**	**979**	**1,454**

SOURCE: Kimley-Horn and Associates 2008.

ksf = thousand square feet

[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.

TABLE 4.2-14
Total Project Trip Generation Summary

Phase	Parcel	Land Use	Units[1]		Trip Rate[2]			Daily Trips	A.M. Peak Hour			P.M. Peak Hour		
									In	Out	Total	In	Out	Total
Sweetwater District														
IV	S-1	Resort Hotel	750	Rm	8	/	Rm	6,000	180	120	300	168	252	420
I	S-2	Signature Park	18.0	Ac	50	/	Ac	900	59	58	117	41	40	81
IV	S-3	Mixed Use Commercial	120	Ksf	17	/	Ksf	2,040	239	26	265	57	229	288
IV	S-4	Office	120	Ksf	17	/	Ksf	2,040	239	26	265	57	229	286
Subtotal								**10,980**	**717**	**230**	**947**	**323**	**750**	**1,073**
Harbor District														
I	H-3	Hotel	2,000	Rm	10	/	Rm	20,000	720	480	1,200	960	640	1,600
I	H-8/HP-1	Signature Park	18.0	Ac	50	/	Ac	900	59	58	117	41	40	81
II	H-9	Retail/Commercial Recreation	50	Ksf	40	/	Ksf	2,000	36	24	60	90	90	180
IV	H-12	Ferry Terminal/Restaurant	25	Ksf	100	/	Ksf	2,500	15	10	25	140	60	200
I	H-13/H-14	Residential	1,500	Du	6	/	Du	9,000	144	576	720	567	243	810
II	H-15	Mixed Use Office	210	Ksf	17	/	Ksf	3,570	418	46	464	100	400	500
II	H-15	Visitor Hotel	250	Rm	8	/	Rm	2,000	60	40	100	56	84	140
II	H-15	Retail	120	Ksf	40	/	Ksf	4,800	86	58	144	216	216	432
II	H-15	General Office	90	Ksf	20	/	Ksf	1,800	227	25	252	47	187	234
II	H-17	Fire Station	2.0	Ac	200	/	Ac	400	38	10	48	10	38	48
IV	H-18	Office	100	Ksf	20	/	Ksf	2,000	252	28	280	52	208	260
III	H-21	Retail	150	Ksf	40	/	Ksf	6,000	108	72	180	270	270	540
II	H-23	Hotel	500	Rm	10	/	Rm	5,000	180	120	300	240	160	400
II	H-23	Cultural	100	Ksf	16	/	Ksf	1,600	22	10	32	80	80	160
II	H-23	Retail	100	Ksf	40	/	Ksf	4,000	72	48	120	180	180	360
I	HP-3	Shoreline Promenade	8.4	Ac	5	/	Ac	42	1	1	2	2	2	3
III	HP-23A	Industrial Business Park	1.0	Ac	50	/	Ac	50	3	4	7	2	3	5
II	HP-28	H Street Pier	0.4	Ac	50	/	Ac	20	1	2	3	1	1	2
IV	HP-28	H Street Pier	0.4	Ac	50	/	Ac	20	1	2	3	1	1	2
Subtotal								**65,706**	**2,443**	**1,613**	**4,055**	**3,055**	**2,902**	**5,957**
Otay District														
III	O-1/O-4	Industrial Business Park						1,200	115	29	144	29	115	144
III	O-3A/O-3B	RV Park	236	du	5	/	du	1,180	28	66	94	78	52	130
III	OP-1A/B and OP-3	South Park	51.0	ac	5	/	ac	255	5	5	10	10	10	20
Subtotal								**2,635**	**148**	**101**	**249**	**117**	**177**	**294**
Total								**79,317**	**3,308**	**1,943**	**5,251**	**3,495**	**3,829**	**7,324**

TABLE 4-4
PROPOSED PROJECT
PHASE I TRIP GENERATION SUMMARY

Phase	Parcel	Land Use	Units	Trip Rate (3)	Daily Trips	AM Peak Hour			PM Peak Hour		
						In	Out	Total	In	Out	Total
Sweetwater District											
I	S-2	Signature Park	18.0 ac	50 / ac	900	59	58	117	41	40	81
		Subtotal for: Sweetwater District			900	59	58	117	41	40	81
Harbor District											
I	H-3	Hotel	2,000 rm	10 / rm	20,000	720	480	1,200	960	640	1,600
I	H-8/HP-1	Signature Park	18 ac	50 / ac	900	59	58	117	41	40	81
I	H-13/H-14	Residential	1,500 du	6 / du	9,000	144	576	720	567	243	810
I	HP-03	50' Baywalk	8.4 ac	5 / ac	42	1	1	2	2	1	3
		Subtotal for: Harbor District			29,942	924	1,115	2,039	1,570	924	2,494
				Total:	30,842	983	1,173	2,156	1,611	964	2,575

NOTES:
(1) See Table 4-3 for the SANDAG trip generator category used for each land use description.
(2) The intensity of each land use was provided by the Port of San Diego
(3) Trip Generation rates are based on SANDAG's Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region, April 2002

K:\09545100\Traffic\Excel\Option 2\[SP Trip Gen.xlsm]P1 Trip Generation

TABLE 4-5
PROPOSED PROJECT
PHASE II TRIP GENERATION SUMMARY

Phase	Parcel	Land Use	Units	Trip Rate	Daily Trips	AM Peak Hour			PM Peak Hour		
						In	Out	Total	In	Out	Total
Harbor District											
II	H-9	Retail/Commercial Recreation	50 ksf	40 / ksf	2,000	36	24	60	90	90	180
II	H-15	Mixed Use Office	210 ksf	17 / ksf	3,570	418	46	464	100	400	500
II	H-15	Visitor Hotel	250 rm	8 / rm	2,000	60	40	100	56	84	140
II	H-15	Retail	120 ksf	40 / ksf	4,800	86	58	144	216	216	432
II	H-15	General Office	90 ksf	20 / ksf	1,800	227	25	252	47	187	234
II	H-17	Industrial Business Park	2 ac	200 / ac	400	38	10	48	10	38	48
II	H-23	Hotel	500 rm	10 / rm	5,000	180	120	300	240	160	400
II	H-23	Cultural	100 ksf	16 / ksf	1,600	22	10	32	80	80	160
II	H-23	Retail	100 ksf	40 / ksf	4,000	72	48	120	180	180	360
II	HP-28	H Street Pier	0.4 ac	50 / ac	20	1	2	3	1	1	2
		Subtotal for: Harbor District			25,190	1,140	383	1,523	1,020	1,436	2,456
				Total:	25,190	1,140	383	1,523	1,020	1,436	2,456

NOTES:
(1) See Table 4-3 for the SANDAG trip generator category used for each land use description.
(2) The intensity of each land use was provided by the Port of San Diego
(3) Trip Generation rates are based on SANDAG's Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region, April 2002

K:\09545100\Traffic\Excel\Option 2\[SP Trip Gen.xlsm]PII Trip Generation

TABLE 4-6
PROPOSED PROJECT
PHASE III TRIP GENERATION SUMMARY

Phase	Parcel	Land Use	Intensity	Trip Rate	Daily Trips	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total
Harbor District											
III	H-21	Retail	150 ksf	40 / ksf	6,000	108	72	180	270	270	540
III	HP-23A	Industrial Business Park	1.0 ac	50 / ac	50	3	4	7	2	3	5
		Subtotal for: Harbor District			6,050	111	76	187	272	273	545
Otay District											
III	O-1/O-2	Industrial Business Park [4]			1,200	115	29	144	29	115	144
III	O-3	RV Park	236 du	5 / du	1,180	28	66	94	78	52	130
III	OP-1/OP-3	South Park	51 ac	5 / ac	255	5	5	10	10	10	20
		Subtotal for: Otay District			2,635	148	101	249	117	177	294
				Total:	8,685	259	176	435	389	450	839

NOTES:
(1) See Table 4-3 for the SANDAG trip generator category used for each land use description.
(2) The intensity of each land use was provided by the Port of San Diego
(3) Trip Generation rates are based on SANDAG's Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region, April 2002
(4) The size of the industrial business park has not been determined, but trips for the use, which is consistent with the General Plan, have been assumed as shown.

K:\09545\1000\Traffic\Excel\Option 2\[SP Trip Gen.xlsm]PIII Trip Generation

TABLE 4-7
PROPOSED PROJECT
PHASE IV TRIP GENERATION SUMMARY

Phase	Parcel	Land Use	Units	Trip Rate	Daily Trips	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total
Sweetwater District											
IV	S-1	Resort Hotel	750 rm	8 / rm	6,000	180	120	300	168	252	420
IV	S-3	Mixed Use Commercial	120 ksf	17 / ksf	2,040	239	26	265	57	229	286
IV	S-4	Office	120 ksf	17 / ksf	2,040	239	26	265	57	229	286
		Subtotal for: Sweetwater District			10,080	658	172	830	282	710	992
Harbor District											
IV	H-12	Ferry Terminal/ Restaurant	25 ksf	100 / ksf	2,500	15	10	25	140	60	200
IV	H-18	Office	100 ksf	20 / ksf	2,000	252	28	280	52	208	260
IV	HP-28	H Street Pier	0.40 ac	50 / ac	20	1	2	3	1	1	2
		Subtotal for: Harbor District			4,520	268	40	308	193	269	462
				Total:	14,600	926	212	1,138	475	979	1,454

NOTES:
(1) See Table 4-3 for the SANDAG trip generator category used for each land use description.
(2) The intensity of each land use was provided by the Port of San Diego
(3) Trip Generation rates are based on SANDAG's Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region, April 2002

K:\09545100\Traffic\Excel\Option 2\[SP Trip Gen.xlsm]PIV Trip Generation

TABLE 4-8
PROPOSED PROJECT
TOTAL PROJECT TRIP GENERATION SUMMARY

Phase	Parcel	Land Use	Units	Trip Rate	Daily Trips	A.M. Peak Hour			P.M. Peak Hour		
						In	Out	Total	In	Out	Total
Sweetwater District											
IV	S-1	Resort Hotel	750 rm	8 / rm	6,000	180	120	300	168	252	420
I	S-2	Signature Park	18.0 ac	50 / ac	900	59	58	117	41	40	81
IV	S-3	Mixed Use Commercial	120 ksf	17 / ksf	2,040	239	26	265	57	229	286
IV	S-4	Office	120 ksf	17 / ksf	2,040	239	26	265	57	229	286
		Subtotal for: Sweetwater District			10,980	717	230	947	323	750	1,073
Harbor District											
I	H-3	Hotel	2,000 rm	10 / rm	20,000	720	480	1,200	960	640	1,600
I	H-8/HP-1	Signature Park	18.0 ac	50 / ac	900	59	58	117	41	40	81
II	H-9	Retail/Commercial Recreation	50 ksf	40 / ksf	2,000	36	24	60	90	90	180
IV	H-12	Ferry Terminal/ Restaurant	25 ksf	100 / ksf	2,500	15	10	25	140	60	200
I	H-13/H-14	Residential	1,500 du	6 / du	9,000	144	576	720	567	243	810
II	H-15	Mixed Use Office	210 ksf	17 / ksf	3,570	418	46	464	100	400	500
II	H-15	Visitor Hotel	250 rm	8 / rm	2,000	60	40	100	56	84	140
II	H-15	Retail	120 ksf	40 / ksf	4,800	86	58	144	216	216	432
II	H-15	General Office	90 ksf	20 / ksf	1,800	227	25	252	47	187	234
II	H-17	Industrial Business Park	2.0 ac	200 / ac	400	38	10	48	10	38	48
IV	H-18	Office	100 ksf	20 / ksf	2,000	252	28	280	52	208	260
III	H-21	Retail	150 ksf	40 / ksf	6,000	108	72	180	270	270	540
II	H-23	Hotel	500 rm	10 / rm	5,000	180	120	300	240	160	400
II	H-23	Cultural	100 ksf	16 / ksf	1,600	22	10	32	80	80	160
II	H-23	Retail	100 ksf	40 / ksf	4,000	72	48	120	180	180	360
I	HP-03	50' Baywalk	8.4 ac	5 / ac	42	1	1	2	2	1	3
III	HP-23A	Industrial Business Park	1.0 ac	50 / ac	50	3	4	7	2	3	5
II	HP-28	H Street Pier	0.4 ac	50 / ac	20	1	2	3	1	1	2
IV	HP-28	H Street Pier	0.4 ac	50 / ac	20	1	2	3	1	1	2
		Subtotal for: Harbor District			65,702	2,443	1,612	4,055	3,055	2,902	5,957
Otay District											
III	O-1/O-2	Industrial Business Park[4]			1,200	115	29	144	29	115	144
III	O-3	RV Park	236 du	5 / du	1,180	28	66	94	78	52	130
III	OP-1/OP-3	South Park	51.0 ac	5 / ac	255	5	5	10	10	10	20
		Subtotal for: Otay District			2,635	148	101	249	117	177	294
					Total:	79,317	3,308	1,943	5,251	3,495	3,829	7,324

NOTES:
(1) See Table 4-3 for the SANDAG trip generator category used for each land use description.
(2) The intensity of each land use was provided by the Port of San Diego
(3) Trip Generation rates are based on SANDAG's Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region, April 2002
(4) The size of the industrial business park has not been determined, but trips for the use, which is consistent with the General Plan, have been assumed as shown.

K:\09345100\Traffic\Excel\Option 2\[SP Trip Gen.xlsm]Trip Generation

Attachment 2

Summary of Current Land Use Plan Trip Generation

Table 1
Trip Generation - Phase I

Phase	Parcel	Land Use	Units		Trip Rate		Daily Trips	AM Peak Hour			PM Peak Hour		
								In	Out	Total	In	Out	Total
Sweetwater District													
I	S-2	Signature Park	18	ac	50	ac	900	59	58	117	41	40	81
I	S-1	RV Park	237	stalls	5	stall	1,185	28	67	95	78	52	130
Subtotal							**2,085**	**87**	**125**	**212**	**119**	**92**	**211**
Harbor District													
I	H-3	Resort Conference Center	1,600	rm	10	rm	16,000	576	384	960	768	512	1,280
I	H-13, H-14	Residential	1,500	du	6	du	9,000	144	576	720	567	243	810
I	H-8, HP-1	Signature Park	18	ac	50	ac	900	59	58	117	41	40	81
I	H-17	Fire Station	2	ac	200	ac	400	38	10	48	10	38	48
I	HP-3	Shoreline Promenade	8	ac	5	ac	42	1	1	2	2	2	4
Subtotal							**26,342**	**818**	**1,029**	**1,847**	**1,388**	**835**	**2,223**
Total							**28,427**	**905**	**1,154**	**2,059**	**1,507**	**927**	**2,434**

Note: H-3 decreased from 2,000 rooms to 1,600 rooms. S-1 moved from Phase IV to Phase I, and land use revised to RV Park.

Table 2
Trip Generation - Phase II

Phase	Parcel	Land Use	Units		Trip Rate		Daily Trips	AM Peak Hour			PM Peak Hour		
Harbor District													
II	H-9	Retail/Commercial Recreation	50	ksf	40	ksf	2,000	36	24	60	90	90	180
II	H-15	Mixed Use Office	210	ksf	17	ksf	3,570	418	46	464	100	400	500
II	H-15	Visitor Hotel	250	rm	8	rm	2,000	60	40	100	56	84	140
II	H-15	Retail	120	ksf	40	ksf	4,800	86	58	144	216	216	432
II	H-15	General Office	90	ksf	20	ksf	1,800	227	25	252	47	187	234
II	H-23	Resort Hotel	1,250	rm	10	rm	12,500	450	300	750	600	400	1,000
II	H-23	Cultural	25	ksf	16	ksf	400	6	2	8	20	20	40
II	H-23	Retail	175	ksf	40	ksf	7,000	126	84	210	315	315	630
II	HP-28	H Street Pier	0.4	ac	50	ac	20	1	2	3	1	1	2
Subtotal							**34,090**	**1,410**	**581**	**1,991**	**1,445**	**1,713**	**3,158**
Total							**34,090**	**1,410**	**581**	**1,991**	**1,445**	**1,713**	**3,158**

Note: H-23 increased from 500 rooms to 1,250 rooms.

Table 3
Trip Generation - Phase III

Phase	Parcel	Land Use	Units		Trip Rate		Daily Trips	AM Peak Hour			PM Peak Hour		
Harbor District													
III	H-21	Retail	150	ksf	40	ksf	6,000	108	72	180	270	270	540
III	HP-23A	Industrial Business Park	1.0	ac	50	ac	50	3	4	7	2	3	5
Subtotal							**6,050**	**111**	**76**	**187**	**272**	**273**	**545**
Otay District													
III	O-1/O-2	Industrial Business Park					1,200	115	29	144	29	115	144
III	O-3	RV Park	236	du	5	du	1,180	28	66	94	78	52	130
III	OP-1/OP-3	South Park	51	ac	5	ac	255	5	5	10	10	10	20
Subtotal							**2,635**	**148**	**100**	**248**	**117**	**177**	**294**
Total							**8,685**	**259**	**176**	**435**	**389**	**450**	**839**

Table 4
Trip Generation - Phase IV

Phase	Parcel	Land Use	Units		Trip Rate		Daily Trips	AM Peak Hour			PM Peak Hour		
								In	Out	Total	In	Out	Total
Sweetwater District													
IV	S-3	Mixed Use Commercial	120	ksf	17	ksf	2,040	239	26	265	57	229	286
IV	S-4	Office	120	ksf	17	ksf	2,040	239	26	265	57	229	286
Subtotal							**4,080**	**478**	**52**	**530**	**114**	**458**	**572**
Harbor District													
IV	H-12	Ferry Terminal/Restaurant	25	ksf	100	ksf	2,500	15	10	25	140	60	200
IV	H-18	Office	100	ksf	20	ksf	2,000	252	28	280	52	208	260
IV	HP-28	H Street Pier	0.4	ac	50	ac	20	1	2	3	1	1	2
Subtotal							**4,520**	**268**	**40**	**308**	**193**	**269**	**462**
Total							**8,600**	**746**	**92**	**838**	**307**	**727**	**1,034**

Note: S-1 moved from Phase IV to Phase I, and land use revised to RV Park.

Table 5
Trip Generation - All Phases

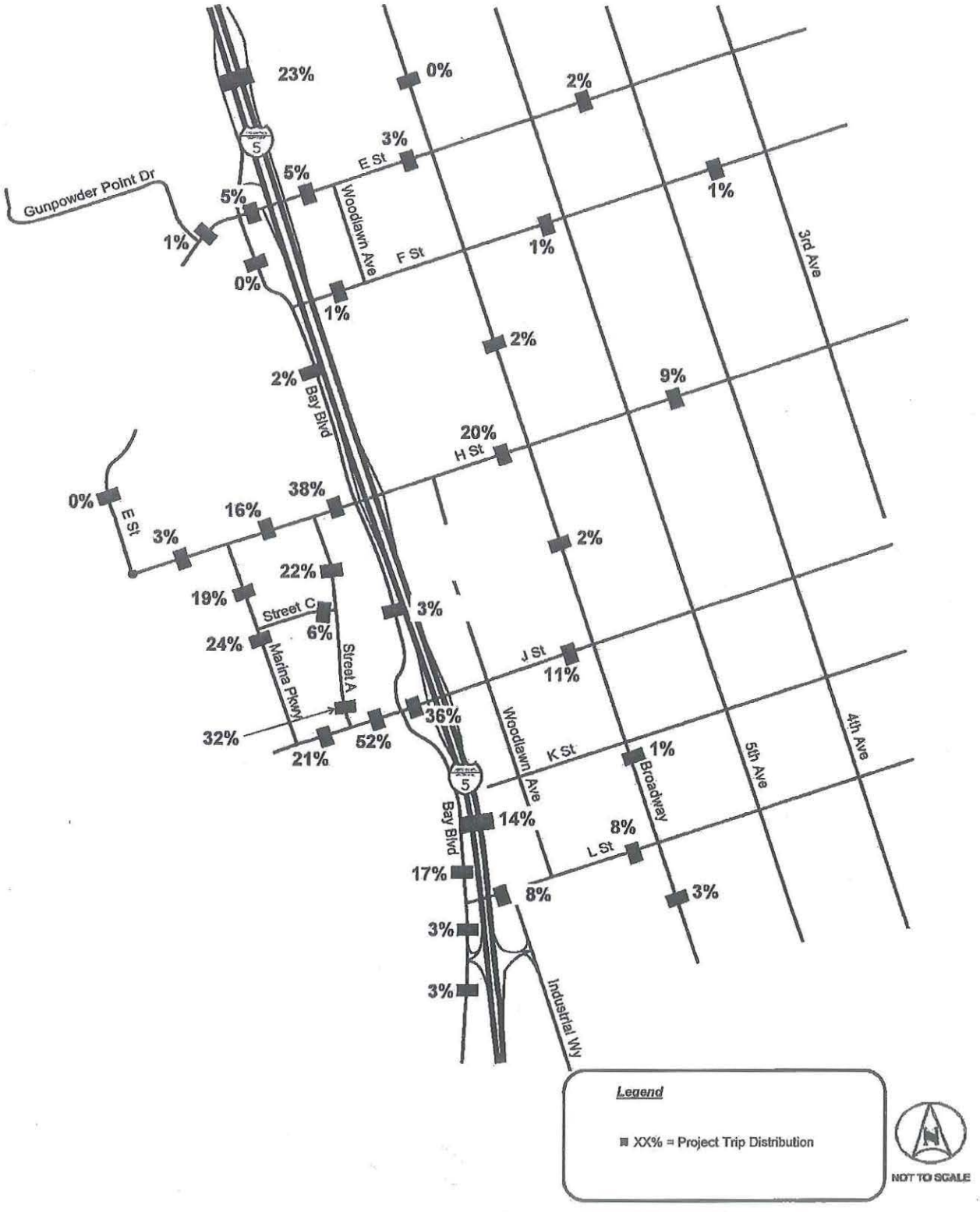
Phase	Parcel	Land Use	Units		Trip Rate		Daily Trips	AM Peak Hour			PM Peak Hour		
								In	Out	Total	In	Out	Total
Sweetwater District													
I	S-2	Signature Park	18	ac	50	ac	900	59	58	117	41	40	81
I	S-1	RV Park	237	stalls	5	stall	1,185	28	67	95	78	52	130
IV	S-3	Mixed Use Commercial	120	ksf	17	ksf	2,040	239	26	265	57	229	286
IV	S-4	Office	120	ksf	17	ksf	2,040	239	26	265	57	229	286
Subtotal							**6,165**	**565**	**177**	**742**	**233**	**550**	**783**
Harbor District													
I	H-3	Resort Conference Center	1,600	rm	10	rm	16,000	576	384	960	768	512	1,280
I	H-13, H-14	Residential	1,500	du	6	du	9,000	144	576	720	567	243	810
I	H-8, HP-1	Signature Park	18	ac	50	ac	900	59	58	117	41	40	81
I	H-17	Fire Station	2	ac	200	ac	400	38	10	48	10	38	48
I	HP-3	Shoreline Promenade	8	ac	5	ac	42	1	1	2	2	2	4
II	H-9	Retail/Commercial Recreation	50	ksf	40	ksf	2,000	36	24	60	90	90	180
II	H-15	Mixed Use Office	210	ksf	17	ksf	3,570	418	46	464	100	400	500
II	H-15	Visitor Hotel	250	rm	8	rm	2,000	60	40	100	56	84	140
II	H-15	Retail	120	ksf	40	ksf	4,800	86	58	144	216	216	432
II	H-15	General Office	90	ksf	20	ksf	1,800	227	25	252	47	187	234
II	H-23	Resort Hotel	1,250	rm	10	rm	12,500	450	300	750	600	400	1,000
II	H-23	Cultural	25	ksf	16	ksf	400	6	2	8	20	20	40
II	H-23	Retail	175	ksf	40	ksf	7,000	126	84	210	315	315	630
II	HP-28	H Street Pier	0.4	ac	50	ac	20	1	2	3	1	1	2
III	H-21	Retail	150	ksf	40	ksf	6,000	108	72	180	270	270	540
III	HP-23A	Industrial Business Park	1.0	ac	50	ac	50	3	4	7	2	3	5
IV	H-12	Ferry Terminal/Restaurant	25	ksf	100	ksf	2,500	15	10	25	140	60	200
IV	H-18	Office	100	ksf	20	ksf	2,000	252	28	280	52	208	260
IV	HP-28	H Street Pier	0.4	ac	50	ac	20	1	2	3	1	1	2
Subtotal							**71,002**	**2,607**	**1,726**	**4,333**	**3,298**	**3,090**	**6,388**
Otay District													
III	O-1/O-2	Industrial Business Park					1,200	115	29	144	29	115	144
III	O-3	RV Park	236	du	5	du	1,180	28	66	94	78	52	130
III	OP-1/OP-3	South Park	51	ac	5	ac	255	5	5	10	10	10	20
Subtotal							**2,635**	**148**	**100**	**248**	**117**	**177**	**294**
Total							**79,802**	**3,320**	**2,003**	**5,323**	**3,648**	**3,817**	**7,465**

Table 6
Trip Generation Comparison

Phase	Daily Trips	AM Peak Hour			PM Peak Hour		
Trips from Revised DEIR, May 2008 (Dudek)		In	Out	Total	In	Out	Total
I	30,842	983	1,173	2,156	1,611	964	2,575
II	25,190	1,140	383	1,523	1,020	1,436	2,456
III	8,685	259	176	435	389	450	839
IV	14,600	926	212	1,138	475	979	1,454
Total	**79,317**	**3,308**	**1,944**	**5,252**	**3,495**	**3,829**	**7,324**
Trips based on Current Land Use Plan							
I	28,427	905	1,154	2,059	1,507	927	2,434
II	34,090	1,410	581	1,991	1,445	1,713	3,158
III	8,685	259	176	435	389	450	839
IV	8,600	746	92	838	307	727	1,034
Total	**79,802**	**3,320**	**2,003**	**5,323**	**3,648**	**3,817**	**7,465**
Difference in Trips between Revised DEIR and Current Land Use Plan							
I	(2,415)	(78)	(19)	(97)	(104)	(37)	(141)
II	8,900	270	198	468	425	277	702
III	0	0	0	0	0	0	0
IV	(6,000)	(180)	(120)	(300)	(168)	(252)	(420)
Total Difference in Trips	**485**	**12**	**59**	**71**	**153**	**(12)**	**141**

Attachment 3

Mitigation Requirements from DEIR

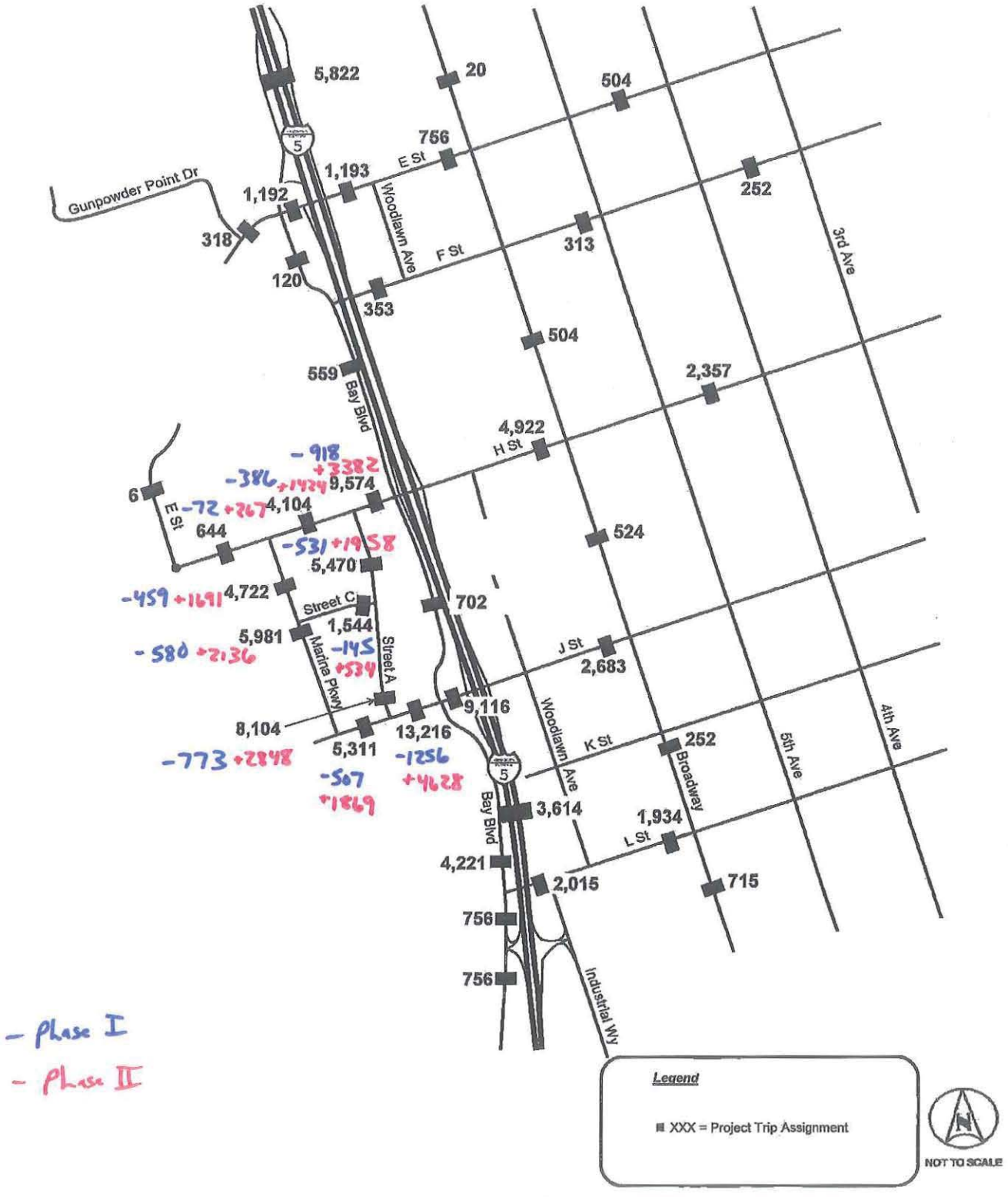


Kimley-Horn and Associates, Inc.

FIGURE 5-25

Proposed Project - Phase II Trip Distribution

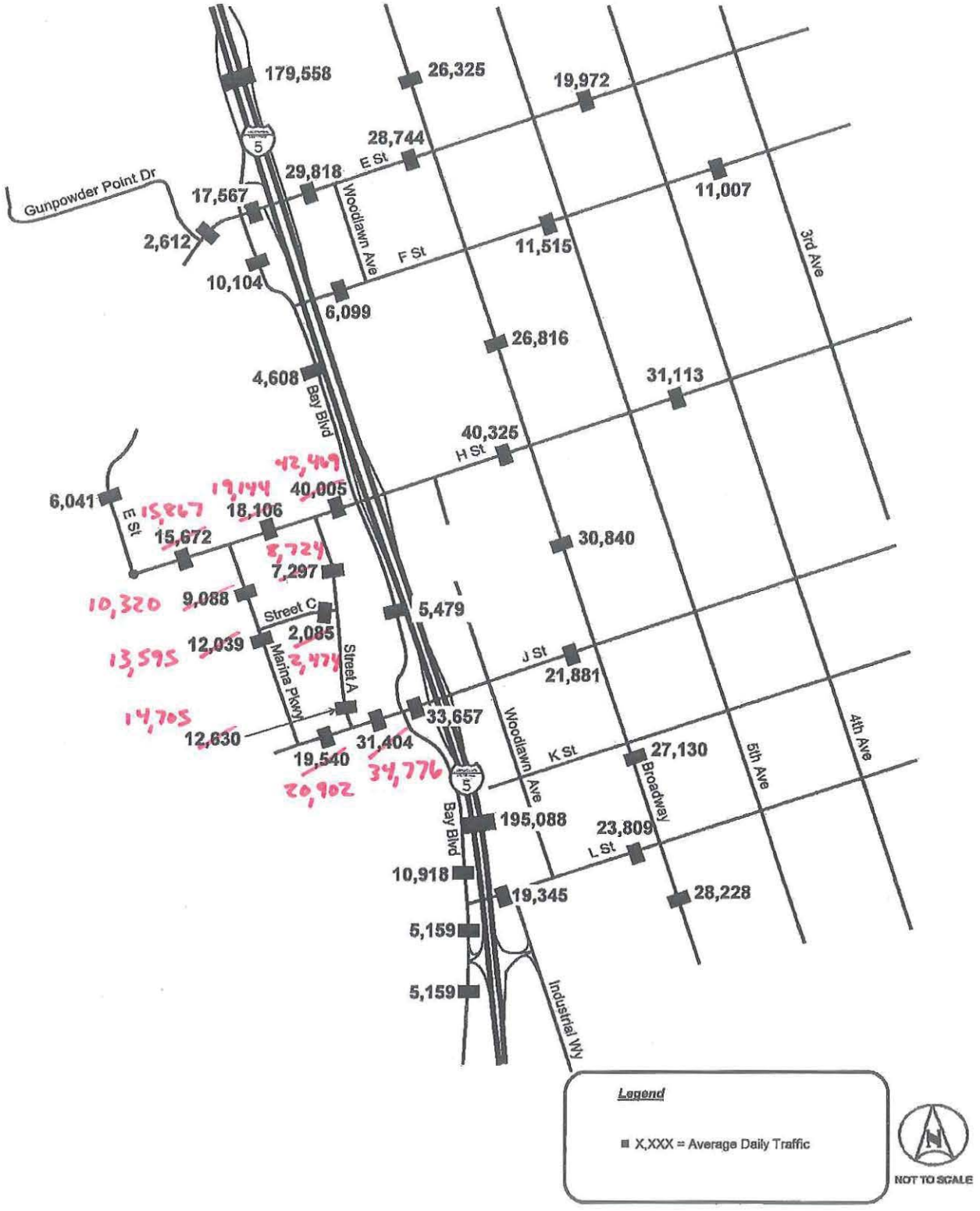
K:\095451000\Traffic\Excel\Option 2\[O2 RS.xlsm]ADT Fig NC\Proposed Project - Phase II Trip Distribution

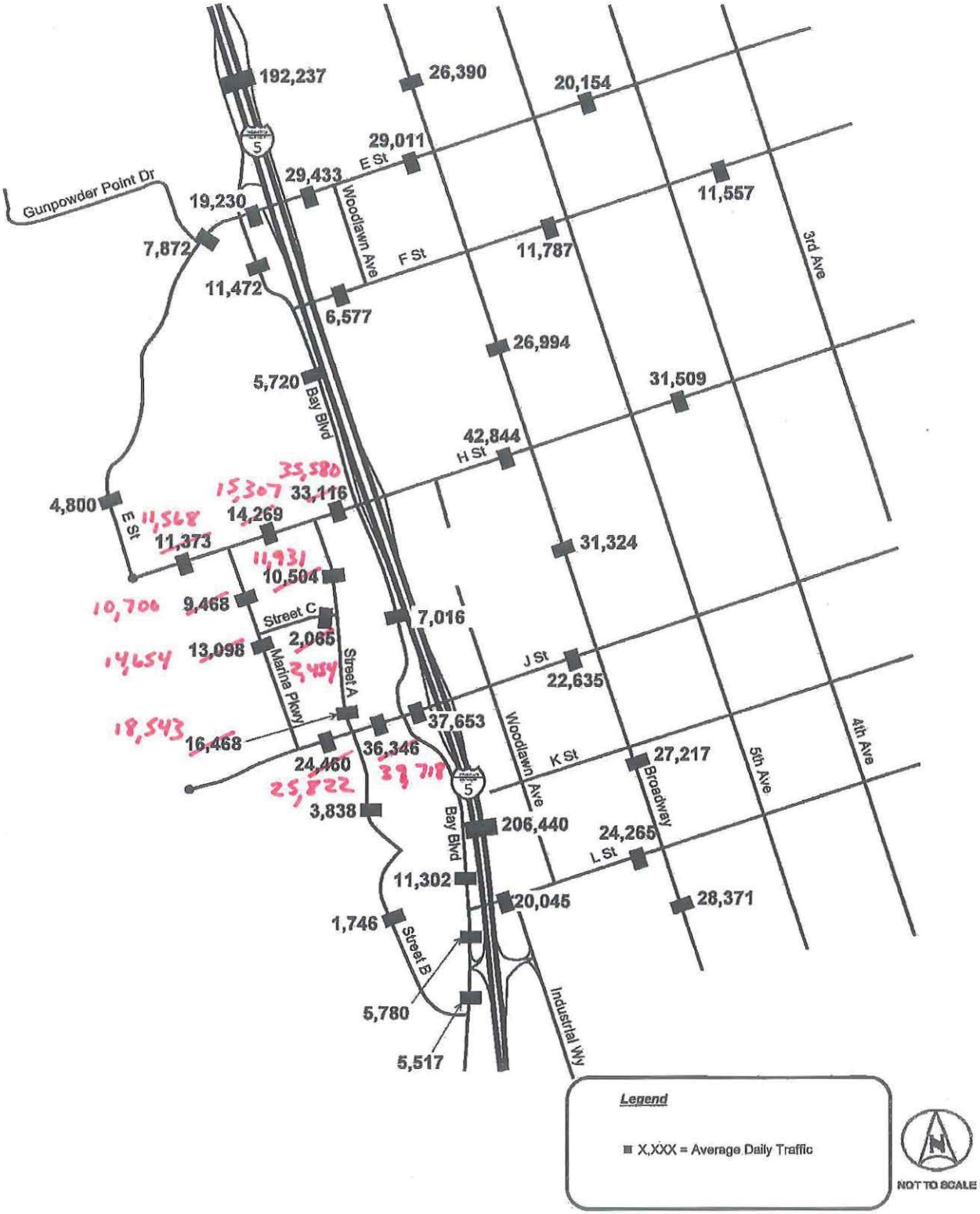


Kimley-Horn and Associates, Inc.

FIGURE 5-27
Proposed Project - Phase II Roadway Segment Trip Assignment

K:\095451000\Traffic\Excel\Option 2\[O2 RS.xlsm]ADT Fig NC\Proposed Project - Phase II Roadway Segment Trip Assignment

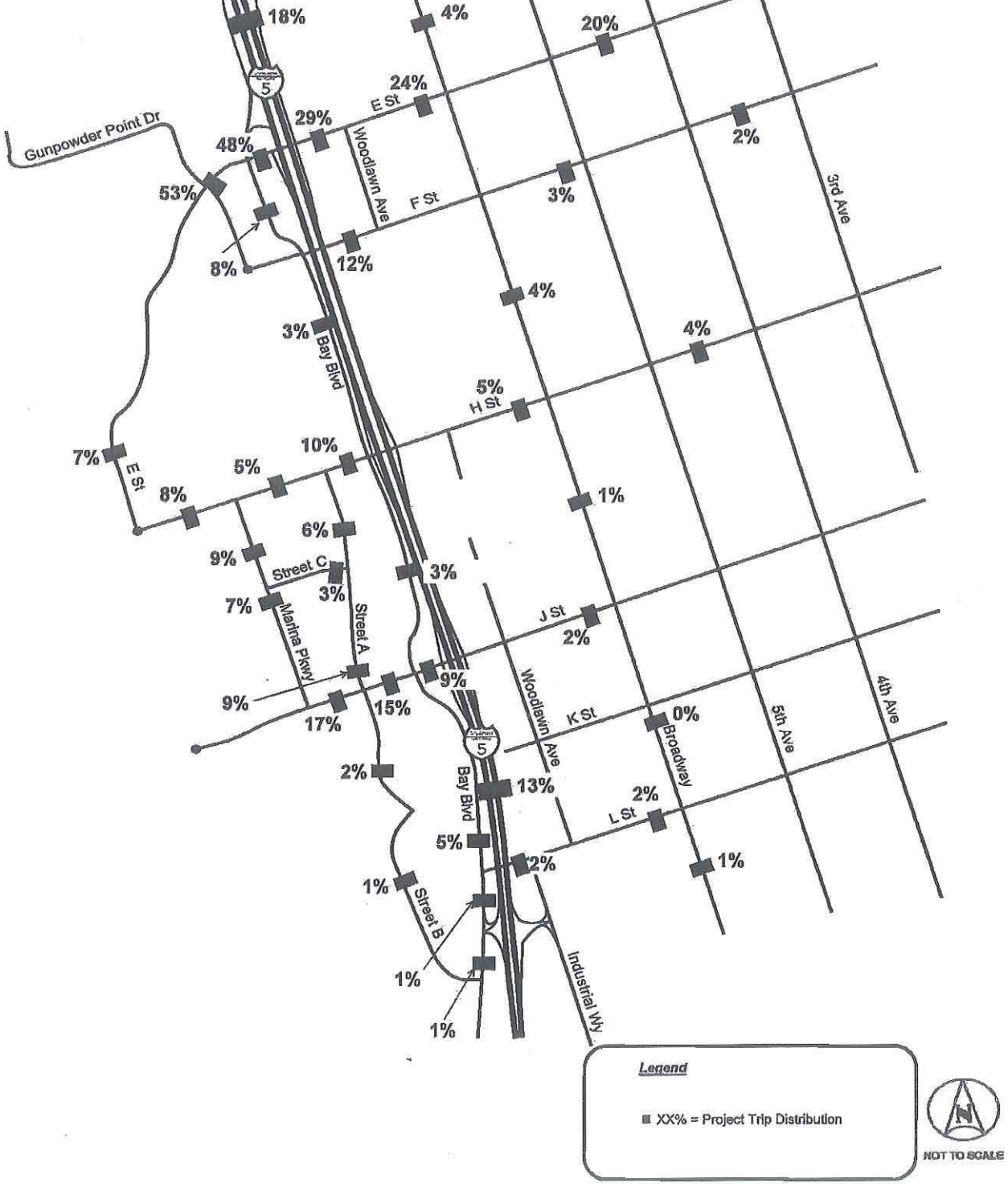

179,558
26,325
19,972
28,744
E St
29,818
Gunpowder Point Dr
17,567
Woodlawn Ave
11,007
2,612
F St
11,515
3rd Ave
10,104
6,099
26,816
4,608
Bay Blvd
31,113
40,325
H St
42,469
19,144
40,005
6,041
15,867
18,106
15,672
30,840
8,724
7,297
10,320
9,088
Street C
5,479
2,085
13,595
12,039
Marina Pkwy
3,477
Street A
J St
21,881
14,705
33,657
12,630
31,404
Woodlawn Ave
K St
27,130
19,540
34,776
20,902
Broadway
5th Ave
4th Ave
195,088
Bay Blvd
23,809
L St
10,918
19,345
28,228
5,159
5,159
Industrial Wy
Legend
X,XXX = Average Daily Traffic
NOT TO SCALE



Kimley-Horn and Associates, Inc.

FIGURE 5-51
Proposed Project - Phase III Conditions Redistributed ADT Traffic Volumes

K:\095451000\Traffic\Excel\Option 2\[O2 RS.xlsm]ADT Fig NE\Proposed Project - Phase III Conditions Redistributed ADT Traffic Volumes

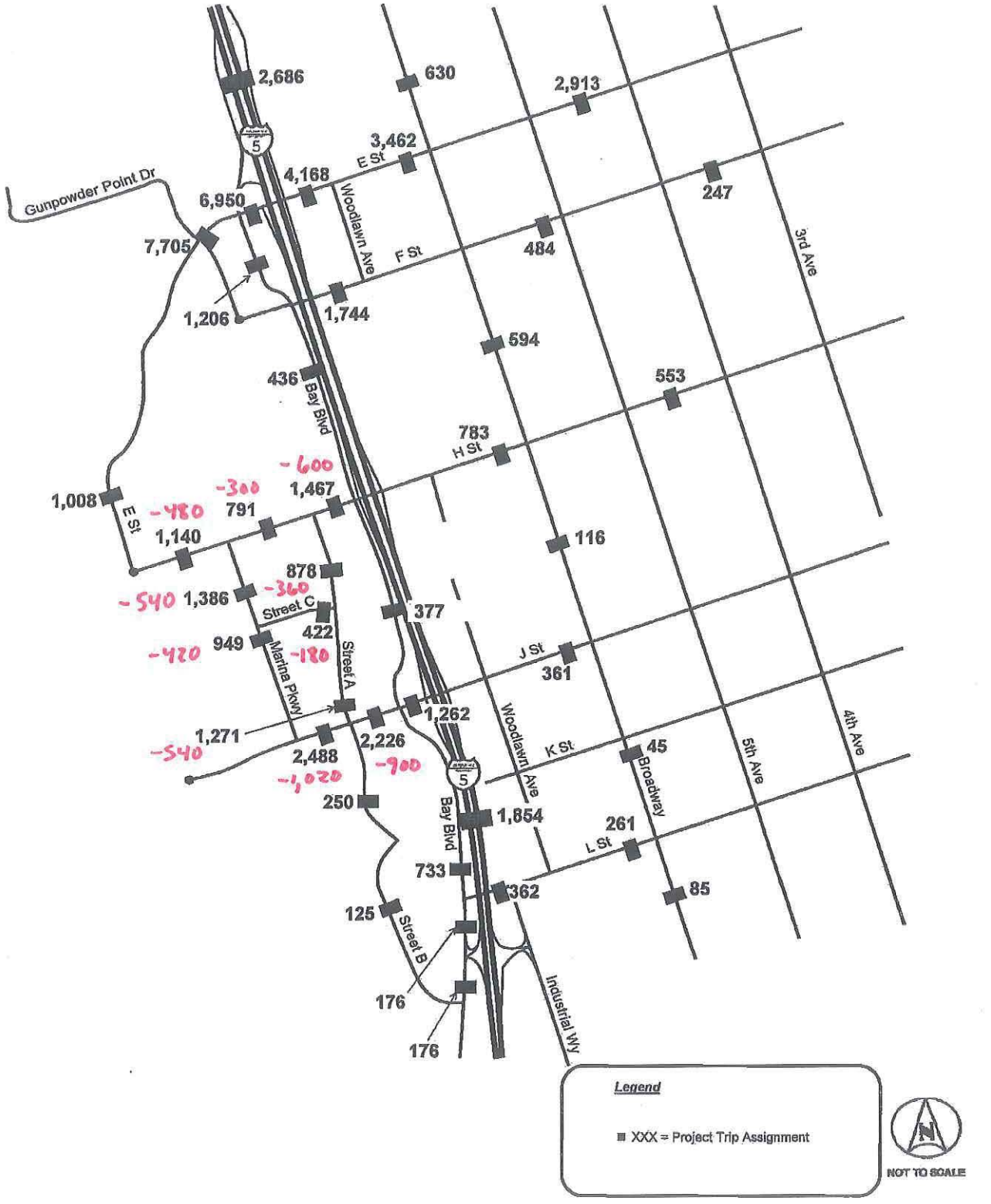


Kimley-Horn and Associates, Inc.

FIGURE 5-58

Proposed Project - Phase IV Trip Distribution

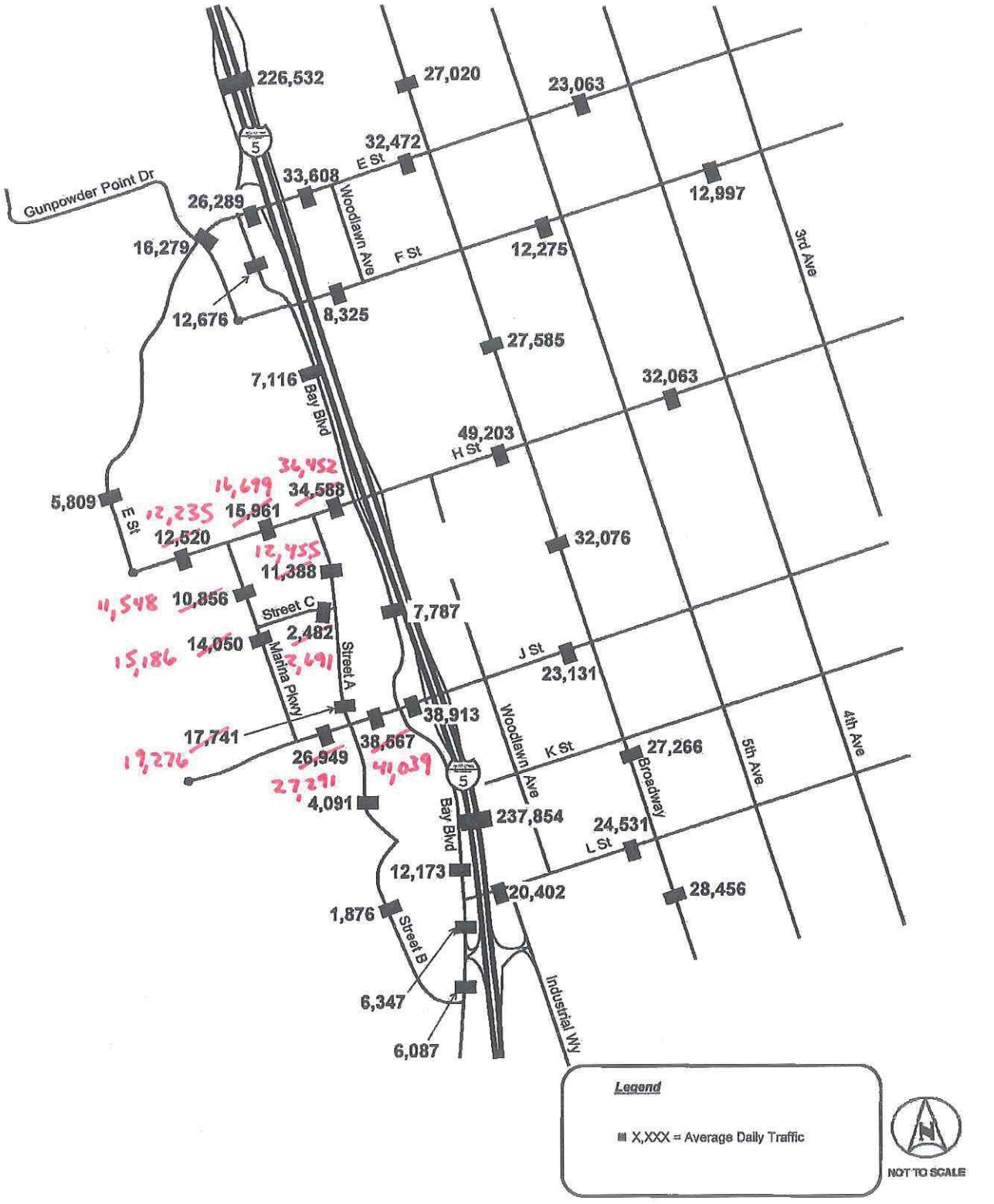
K:\095451000\Traffic\Excel\Option 2\[O2 RS.xlsm]ADT Fig NF\Proposed Project - Phase IV Trip Distribution



Kimley-Horn and Associates, Inc.

FIGURE 5-60
Proposed Project - Phase IV Roadway Segment Trip Assignment

K:\095451000\Traffic\Excel\Option 2\[O2 RS.xlsm]ADT Fig IV\Proposed Project - Phase IV Roadway Segment Trip Assignment



Kimley-Horn and Associates, Inc.

FIGURE 5-64
Proposed Project - Phase IV Plus Project Conditions
ADT Volumes

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Capacity (v/c) ratios were calculated for each roadway segment. It should be noted that the capacity of a roadway is equal to the maximum LOS E pursuant to the Chula Vista General Plan (2005). *Table 4.2-1* summarizes the capacities and LOS for each Circulation Element and Urban Core Circulation Element roadway.

TABLE 4.2-1
Roadway Segment Capacity and Level of Service

Facility		Acceptable LOS	Level of Service (LOS)				
Class[a]	Lanes		A (.6)	B (.7)	C (.8)	D (.9)	E (1.0)
Circulation Element Roadways							
Expressway	7/8	C	52,500	61,300	70,000	78,800	87,500
Prime	6	C	37,500	43,800	50,000	56,300	62,500
Major Street	6	C	30,000	35,000	40,000	45,000	50,000
	5	C	26,250	30,650	35,000	39,400	43,750
	4	C	22,500	26,300	30,000	33,800	37,500
Class I Collector	4	C	16,500	19,300	22,000	24,800	27,500
Class II Collector	2	C	9,000	10,500	12,000	13,500	15,000
Class III Collector	2	C	5,600	6,600	7,500	8,400	9,400
Urban Core Circulation Element Roadways							
Gateway Street	6	D	40,800	47,600	54,400	61,200	68,000
	4	D	28,800	33,600	38,400	43,200	48,000
Urban Arterial	4	D	25,200	29,400	33,600	37,800	42,000
Commercial Blvd.	4	D	22,500	26,250	30,000	33,750	37,500
Downtown Promenade	4	D	22,500	26,250	30,000	33,750	37,500
	2	D	9,600	11,200	12,800	14,400	16,000

Note: Shaded cells correspond to the acceptable traffic volumes for each roadway.

[a] The adopted Circulation Element roadways are considered to be Class I Collector Streets and above, and the Urban Core Circulation Element roadways are considered to be six-lane Gateway Streets and below.

Street classifications, discussed in more detail below and identified for specific roadway segments in the study area as shown in *Figure 4.2-2*, are based on standards provided in the 2005 Chula Vista General Plan.

To determine LOS, traffic counts were conducted during peak commute periods. Existing A.M. (7:00 A.M. to 9:00 A.M.) and P.M. (4:00 P.M. to 6:00 P.M.) peak-hour turning movement counts were conducted by Southland Car Counters, Turning Point Traffic Service, and Traffic Data Service Southwest. These intersection counts were taken during several different times of the day in 2004 and 2005. Traffic volumes along segments of F Street, J Street, and Bay Boulevard were collected by Field Data Services in 2006. The remaining roadway segment traffic volumes were provided by the City of Chula Vista and Traffic Data Services Southwest (which collected data on two segments of Broadway). In addition, Kimley-Horn and Associates, Inc. conducted supplemental roadway counts for older count locations. Existing freeway volumes (2004) were

TABLE 4.2-21
Phase II Conditions Roadway Segment Level of Service Summary

Roadway Segment	Roadway Classification	Acceptable Volume	Phase II Baseline		Phase II Baseline Plus Project		Project ADT	Project Trips (Percent)	IMPACT?
			ADT	LOS	ADT	LOS			
E Street									
H Street to Gaylord RCC Dwy	2 Lanes Class III Collector	7,500	6,034	B	6,041	B	6	0	NO
West of Bay Blvd	2 Lanes Class III Collector	7,500	2,294	A	2,612	A	318	12	NO
Bay Boulevard to I-5 Ramps	4 Lanes Major Street	30,000	15,834	A	17,567	A	1,192	7	NO
I-5 Ramps to Woodlawn Avenue	4 Lanes Gateway Street	43,200	28,355	A	29,818	B	1,193	4	NO
Woodlawn Avenue to Broadway	4 Lanes Gateway Street	43,200	27,988	A	28,744	A	756	3	NO
Broadway to 3rd Avenue	4 Lanes Urban Arterial	37,800	19,468	A	19,972	A	504	3	NO
Lagoon St/ F Street									
Bay Boulevard to Broadway	4 Lanes Downtown Promenade	33,750	5,746	A	6,099	A	353	6	NO
Broadway to 4th Avenue	2 Lanes Downtown Promenade	14,400	11,202	C	11,515	C	313	3	NO
4th Avenue to 3rd Avenue	4 Lanes Downtown Promenade	33,750	10,755	A	11,007	A	252	2	NO
H Street					15,867				
West of Marina Parkway	3 Lanes Class II Collector	17,000	15,028	C	~~15,672~~	C	644	4	NO
Marina Parkway to Street A	4 Lanes Major Street	30,000	14,263	A	~~18,106~~	A	4,104	23	NO
Street A to I-5 Ramps	4 Lanes Major Street	30,000	29,621	C	~~40,005~~	F	9,574	24	DIRECT
I-5 Ramps to Broadway	4 Lanes Gateway Street	43,200	35,402	C	40,325	D	4,922	12	NO
Broadway to 3rd Avenue	4 Lanes Urban Arterial	37,800	28,755	B	31,113	C	2,357	8	NO
J Street					20902				
Marina Parkway to Street A	4 Lanes Major Street	30,000	15,784	A	~~19,540~~	A	5,311	27	NO
Street A to Bay Boulevard	4 Lanes Major Street	30,000	18,998	A	~~31,404~~	D	13,216	42	DIRECT
Bay Boulevard to I-5 Ramps	4 Lanes Major Street	30,000	24,675	B	33,657	D	9,116	27	DIRECT
I-5 Ramps to Broadway	4 Lanes Major Street	30,000	19,198	A	21,881	A	2,683	12	NO
L Street									
Bay Boulevard to Industrial Way	4 Lanes Gateway Street	43,200	17,329	A	19,345	A	2,015	10	NO
Industrial Way to Broadway	4 Lanes Gateway Street	43,200	21,874	A	23,809	A	1,934	8	NO

Section 4.2.5 mitigation measures

5 Lane Major

6 Lane Major

6 Lane Major

TABLE 4.2-21 (Cont.)

Roadway Segment	Roadway Classification	Acceptable Volume	Phase II Baseline ADT	Phase II Baseline LOS	Phase II Baseline Plus Project ADT	Phase II Baseline Plus Project LOS	Project ADT	Project Trips (Percent)	IMPACT?
Marina Parkway					10,320				
H Street to Street C	3 Lanes Class III Collector	17,000	7,991	A	9,089	A	4,722	52	NO
Street C to J Street	3 Lane Class II Collector	17,000	9,991	A	12,039	A/B	5,981	50	NO
Bay Boulevard					13,595				
E Street to F Street	2 Lanes Class II Collector	12,000	9,984	B	10,104	B	120	1	NO
F Street to H Street	2 Lanes Class III Collector	7,500	4,318	A	4,608	A	559	12	NO
H Street to J Street	2 Lanes Class III Collector	7,500	5,451	A	5,479	A	702	13	NO
J Street to L Street	2 Lanes Class II Collector	12,00	6,696	A	10,918	C	4,221	39	NO
L Street to I-5 Ramps[1]	2 Lanes Class II Collector	12,000	4,403	A	5,159	A	756	15	NO
South of I-5 Ramps	2 Lanes Class III Collector	7,500	4,403	A	5,159	A	756	15	NO
Broadway									
C Street to E Street	4 Lanes Commercial Boulevard	33,750	26,304	C	26,325	C	20	0	NO
E Street to H Street	4 Lanes Commercial Boulevard	33,750	26,312	C	26,816	C	504	2	NO
H Street to K Street	4 Lanes Commercial Boulevard	33,750	30,316	D	30,840	D	524	2	NO
K Street to L Street	4 Lanes Commercial Boulevard	33,750	26,878	C	27,130	C	252	1	NO
South of L Street	4 Lanes Major Street	30,000	27,512	C	28,228	C	715	3	NO
Street A					8,724				
H Street to Street C (a)	2 Lanes Class III Collector	7,500	-	-	7,297	C/E	5,470	75	NO
Street C to J Street	2 Lanes Class III Collector	7,500	5,246	A	12,630	F	8,104	64	**DIRECT**
Street C					14,705				
Marina Parkway to Street A (a)	2 Lanes Class III Collector	7,500	-	-	2,085	A	1,544	74	NO
					2,474				

SOURCE: Kimley-Horn and Associates 2008.
ADT = Average Daily Trips; LOS = Level of Service
Bold values indicate roadway segments operating at LOS E or F. **Bold and shaded** values indicate project significant impact.
[a] Roads will be built to given classification with Phase I of the Proposed Project as required to provide site frontage.

Section 4.2.5 Mitigation Measures

4 Lane Class I Collector

2 Lane Class II Collector

TABLE 4.2-27
Phase III Conditions With Extension of E Street Roadway Segment Level of Service Summary

Roadway Segment	Roadway Classification	Acceptable Volume	Phase III Baseline		Phase III Plus Project Mitigated		Project ADT	Project Trips (Percent)	IMPACT?
			ADT	LOS	ADT	LOS			
E Street									
H Street to Gaylord RCC Dwy	2 Lanes Class III Collector	7,500	6,050	B	4,800	A	0	0	NO
West of Bay Blvd	2 Lanes Class III Collector	7,500	2,970	A	7,872	D	2	0	CUMULATIVE
Bay Boulevard to I-5 Ramps	4 Lanes Major Street	30,000	17,570	A	19,230	A	182	1	NO
I-5 Ramps to Woodlawn Avenue	4 Lanes Gateway Street	43,200	29,820	B	29,433	B	261	1	NO
Woodlawn Avenue to Broadway	4 Lanes Gateway Street	43,200	28,750	A	29,011	B	261	1	NO
Broadway to 3rd Avenue	4 Lanes Urban Arterial	37,800	19,980	A	20,154	A	174	1	NO
Lagoon St/ F Street									
Bay Boulevard to Broadway	4 Lanes Downtown Promenade	33,750	6,100	A	6,577	A	387	6	NO
Broadway to 4th Avenue	2 Lanes Downtown Promenade	14,400	11,520	C	11,787	C	267	2	NO
4th Avenue to 3rd Avenue	4 Lanes Downtown Promenade	33,750	11,470	A	11,557	A	87	1	NO
H Street									
West of Marina Parkway	3 Lanes Class II Collector	17,000	16,120	C	11,373	A	458	4	NO
Marina Parkway to Street A	4 Lanes Major Street	30,000	18,450	A	14,269	A	14	0	NO
Street A to I-5 Ramps	5 Lanes Major Street	39,200	40,010	D	33,116	B	772	2	NO
I-5 Ramps to Broadway	4 Lanes Gateway Street	43,200	42,470	D	42,844	D	752	2	NO
Broadway to 3rd Avenue	4 Lanes Urban Arterial	37,800	31,120	C	31,509	C	389	1	NO
J Street									
Marina Parkway to Street A	4 Lanes Major Street	30,000	19,540	A	24,460	B	5,635	23	NO
Street A to Bay Boulevard	6 Lanes Major Street	40,000	31,410	B	36,346	C	4,880	13	NO
Bay Boulevard to I-5 Ramps	6 Lanes Major Street	40,000	33,660	B	37,653	C	3,408	9	NO
I-5 Ramps to Broadway	4 Lanes Major Street	30,000	21,940	A	22,635	B	695	3	NO
L Street									
Bay Boulevard to Industrial Way	4 Lanes Gateway Street	43,200	19,350	A	20,0454	A	695	3	NO
Industrial Way to Broadway	4 Lanes Gateway Street	43,200	23,810	A	24,265	A	455	2	NO

TABLE 4.2-27 (Cont.)

Roadway Segment	Roadway Classification	Acceptable Volume	Phase III Baseline ADT	Phase III Baseline LOS	Phase III Plus Project Mitigated ADT	Phase III Plus Project Mitigated LOS	Project ADT	Project Trips (Percent)	IMPACT?
Marina Parkway					10,700				
H Street to Street C	3 Lanes Class II Collector	17,000	9,090	A	~~9,468~~	A	652	7	NO
Street C to J Street	3 Lane Class II Collector	17,000	12,040	A	~~13,098~~ 14,654	B	946	7	NO
Bay Boulevard									
E Street to F Street	2 Lanes Class II Collector	12,000	11,610	C	11,472	C	0	0	NO
F Street to H Street	2 Lanes Class III Collector	7,500	4,980	A	5,120	A	441	8	NO
H Street to J Street	2 Lanes Class III Collector	7,500	5,630	B	7,061	C	439	6	NO
J Street to L Street	2 Lanes Class II Collector	12,000	10,970	C	11,302	C	1,033	9	NO
L Street to I-5 Ramps[1]	2 Lanes Class II Collector	12,000	5,310	A	5,780	A	524	9	NO
South of I-5 Ramps	2 Lanes Class III Collector	7,500	5,310	A	5,571	A	261	5	NO
Broadway									
C Street to E Street	4 Lanes Commercial Boulevard	33,750	26,330	C	26,390	C	60	0	NO
E Street to H Street	4 Lanes Commercial Boulevard	33,750	26,820	C	26,994	C	174	1	NO
H Street to K Street	4 Lanes Commercial Boulevard	33,750	31,090	D	31,324	D	234	1	NO
K Street to L Street	4 Lanes Commercial Boulevard	33,750	27,130	C	27,217	C	87	0	NO
South of L Street	4 Lanes Major Street	30,000	28,230	C	28,371	C	141	0	NO
Street A					11,931				
H Street to Street C	2 Lanes Class III Collector	7,500	7,300	C	~~10,504~~	F	938	9	DIRECT
Street C to J Street	4 Lanes Class I Collector	22,000	12,630	A	18,543 ~~18,468~~	A	1,690	10	NO
J Street to Street B (a)	2 Lanes Class III Collector	7,500	-	-	3,838	A	2,813	73	NO
Street B									
Street A to Bay Boulevard (a)	2 Lanes Class III Collector	7,500	-	-	1,746	A	722	41	NO
Street C									
Marina Parkway to Street A	2 Lanes Class III Collector	7,500	2,090	A	~~2,065~~ 2,454	A	3	0	NO

SOURCE: Kimley-Horn and Associates 2008.
ADT = Average Daily Trips; LOS = Level of Service
Bold values indicate roadway segments operating at LOS E or F. **Bold and shaded** values indicate project significant impact.
[a] Roads will be built to given classification with Phase I of the project as required to provide site frontage.

Section 4.2.5 mitigation measure

4 Lane Class I Collector

TABLE 4.2-30
Phase IV Conditions Roadway Segment Level of Service Summary

Roadway Segment	Roadway Classification	Acceptable Volume	Phase IV Baseline		Phase IV Baseline Plus Project		Project ADT	Project Trips (Percent)	IMPACT?
			ADT	LOS	ADT	LOS			
E Street									
H Street to Gaylord RCC Driveway	2 Lanes Class III Collector	7,500	4,810	A	5,809	B	1,008	17	NO
Gaylord RCC Driveway to F Street	2 Lanes Class II Collector	12,000	6,700	A	9,089	B	2,136	24	NO
F Street to Bay Boulevard	2 Lanes Class II Collector	12,000	8,790	A	16,279	F	7,705	47	DIRECT
Bay Boulevard to I-5 Ramps	4 Lanes Major Street	30,000	19,230	A	26,289	B	6,950	26	NO
I-5 Ramps to Woodlawn Avenue	4 Lanes Gateway Street	43,200	29,440	B	33,608	C	4,168	12	NO
Woodlawn Avenue to Broadway	4 Lanes Gateway Street	43,200	29,010	B	32,472	B	3,462	11	NO
Broadway to 3rd Avenue	4 Lanes Urban Arterial	37,800	20,150	A	23,063	A	2,913	13	NO
Lagoon St/ F Street									
E Street to Bay Boulevard (a)	2 Lanes Class III Collector	7,500	-	-	2,630	A	2,413	92	NO
Bay Boulevard to Broadway	4 Lanes Downtown Promenade	33,750	6,580	A	8,325	A	1,744	21	NO
Broadway to 4th Avenue	2 Lanes Downtown Promenade	14,400	11,790	C	12,275	C	484	4	NO
4th Avenue to 3rd Avenue	4 Lanes Downtown Promenade	33,750	12,750	A	12,997	A	247	2	NO
H Street					12,235				
West of Marina Parkway	3 Lanes Class II Collector	17,000	11,380	A	12,520	A	1,140	9	NO
Marina Parkway to Street A	4 Lanes Major Street	30,000	15,170	A	15,961	A	791	5	NO
Street A to I-5 Ramps	5 Lanes Major Street	39,200	33,120	B	34,588	C	1,467	4	NO
I-5 Ramps to Broadway	4 Lanes Gateway Street	43,200	48,420	F	49,203	F	783	2	DIRECT
Broadway to 3rd Avenue	4 Lanes Urban Arterial	37,800	31,510	C	32,063	C	553	2	NO
J Street					27,291				
Marina Parkway to Street A	4 Lanes Major Street	30,000	24,460	B	26,949	C	2,488	9	NO
Street A to Bay Boulevard	6 Lanes Major Street	40,000	36,340	C	38,567	D	2,226	8	NO
Bay Boulevard to I-5 Ramps	6 Lanes Major Street	40,000	37,650	C	38,913	C	1,262	3	NO
I-5 Ramps to Broadway	4 Lanes Major Street	30,000	22,770	B	23,131	B	361	2	NO
L Street									
Bay Boulevard to Industrial Way	4 Lanes Gateway Street	43,200	20,040	A	20,402	A	362	2	NO
Industrial Way to Broadway	4 Lanes Gateway Street	43,200	24,270	A	24,531	A	261	1	NO
Marina Parkway					11,548				
H Street to Street C	3 Lanes Class II Collector	17,000	9,470	A	10,856	A	1,386	13	NO

TABLE 4.2-30 (Cont.)

Roadway Segment	Roadway Classification	Acceptable Volume	Phase IV Baseline		Phase IV Baseline Plus Project		Project ADT	Project Trips (Percent)	IMPACT?
			ADT	LOS	ADT	LOS			
Street C to J Street	3 Lane Class II Collector	17,000	13,100	B	~~14,050~~ 13,186	~~B~~ C	949	7	NO
Bay Boulevard									
E Street to F Street	2 Lanes Class II Collector	12,000	11,470	C	12,676	D	1,206	10	**DIRECT**
F Street to H Street	2 Lanes Class III Collector	7,500	6,680	C	7,116	C	436	6	NO
H Street to J Street	2 Lanes Class III Collector	7,500	7,410	A	7,787	D	377	5	**CUMULATIVE**
J Street to L Street	2 Lanes Class II Collector	12,000	11,440	C	12,173	D	733	6	**CUMULATIVE**
L Street to I-5 Ramps[1]	2 Lanes Class II Collector	12,000	6,170	A	6,347	A	176	3	NO
South of I-5 Ramps	2 Lanes Class III Collector	7,500	5,910	B	6,087	B	176	3	NO
Broadway									
C Street to E Street	4 Lanes Commercial Boulevard	33,750	26,390	C	27,020	C	630	2	NO
E Street to H Street	4 Lanes Commercial Boulevard	33,750	26,990	C	27,585	C	594	2	NO
H Street to K Street	4 Lanes Commercial Boulevard	33,750	31,960	D	32,076	D	116	0	NO
K Street to L Street	4 Lanes Commercial Boulevard	33,750	27,220	C	27,266	C	45	0	NO
South of L Street	4 Lanes Major Street	30,000	28,370	C	28,456	C	85	0	NO
Street A									
H Street to Street C	4 Lanes Class I Collector	22,000	10,510	A	~~11,388~~ 12,455	A	878	8	NO
Street C to J Street	4 Lanes Class I Collector	22,000	16,470	A	~~17,741~~ 19,276	B	1,271	7	NO
J Street to Street B	2 Lanes Class III Collector	7,500	3,840	A	4,091	A	250	6	NO
Street B									
Street A to Bay Boulevard	2 Lanes Class III Collector	7,500	1,750	A	1,876	A	125	7	NO
Street C									
Marina Parkway to Street A	2 Lanes Class III Collector	7,500	2,060	A	~~2,482~~ 2,691	A	422	17	NO

SOURCE: Kimley-Horn and Associates 2008.
ADT = Average Daily Trips; LOS = Level of Service
Bold values indicate roadway segments operating at LOS E or F. **Bold and shaded** values indicate project significant impact.

4.2.5 Mitigation Measures

Developers of any parcel located within the Chula Vista Bayfront Master Plan shall reimburse the Port, City, and/or other developers the pro-rata cost of the installation of public transportation improvements, as obligated and required by the Port and/or City based on the nexus established in the technical studies and this Draft EIR.

a. Phase I Mitigation Measures

The following mitigation measures shall be required to be implemented by the developer to reduce impacts to a level less than significant:

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 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 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 2-lane Class III Collector~~.~~, or secure such construction to the satisfaction of the City Engineer.

This mitigation would reduce **Significant Impact 4.2-1** to below a level of significance.

4.2-2 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 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 tenant, 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 Impacts 4.2-2, 4.2-4, 4.2-6, 4.2-7,** and **4.2-11** to below a level of significance.

4.2-3 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 widen H Street west of Marina Parkway from a two-lane Class III Collector to a three-lane Class II Collector. This mitigation would reduce **Significant Impact 4.2-3** to below a level of significance.

4.2-4 Prior to the issuance of certificates of occupancy for any development on H-3 and building permits for any development on H-13 or H-14 in Phase I, the Port, Port tenant, or applicant, as appropriate, shall widen Bay Boulevard between E Street and F Street from a two-lane Class III Collector to a two-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.

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 **Impacts 4.2-8** and **4.2-14** to below a level of significance.

4.2-6 Prior to the issuance of certificates of occupancy for any development on H-3 or building permits for any development on H-13 or H-14 in Phase I, the Port, Port tenant, or applicant, 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 Impacts 4.2-9** and **4.2-15** to below a level of significance.

4.2-7 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 in Phase I, the Port, Port tenant, or applicant, 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 Impacts 4.2-10** and **4.2-16** to below a level of significance.

4.2-8 The following mitigation measure would reduce, but not eliminate project impacts on Interstate 5, as identified in **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**.

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") (hereinafter, the "Plan"). Local funding sources identified in the Plan shall include fair share contributions related to private and/or public development based on the nexus established in this Draft EIR 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 all 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.

g) The Port shall seek adoption of th~~l~~e 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 multi-jurisdictional 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 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 5 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 the 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 through lane along H Street/~~Gaylord~~ RCC 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.

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 assure 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.

b. Phase II Mitigation Measures

4.2-11 Prior to the issuance of any certificates of occupancy for any development on H-23 in Phase I, the Port or Port tenant, 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. → 2 lane Class III Collector per Table 4.2-21 Implementation of this mitigation measure would reduce Significant Impact 4.2-20 to below a level of significance.

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-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. → 4 lane major per Table 4.2-21

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-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. → 4 lane major per Table 4.2-21

4.2-14 Prior to the issuance of certificates of occupancy for any development in Phase II, the Port, Port tenant, or applicant, as appropriate, shall widen Street A between Street C and J Street to a four-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.

→ 2 lane Class III Collector per Table 4.2-21

4.2-15 Prior to the issuance of certificates of occupancy for any development in Phase II, 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 ~~Gaylord~~ RCC 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.

4.2-16 Prior to the issuance of certificates of occupancy for any development in Phase II, 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.

4.2-17 Prior to the issuance of certificates of occupancy for any development in Phase II, 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.

4.2-18 Prior to the issuance of certificates of occupancy for any development in Phase II of the development, the developer shall construct a traffic signal at the intersection of J Street and Marina Parkway. 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.

4.2-19 Prior to the issuance of certificates of occupancy for any development in Phase II, 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.

d. Phase III Mitigation Measures

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.

4.2-21 Prior to the issuance of certificates of occupancy for any development in Phase III, the Port, Port tenants, or applicant, as appropriate, shall widen Street A between H Street and Street C to a four-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.

→ 2 lane Class III Collector per Table 4.2-27

4.2-22 Prior to the issuance of certificates of occupancy for any development in Phase III, 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.

4.2-23 Prior to the issuance of certificates of occupancy for any development in Phase III, the Port, Port tenants, or applicant, as appropriate, shall construct an exclusive westbound right-turn lane along J Street at the intersection of J Street and I-5 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.

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 ~~Gaylord~~ RCC 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.

e. Phase IV Mitigation Measures

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

4.2-26 Prior to the issuance of certificates of occupancy for any development in Phase IV, the Port, Port tenant, or applicant, as appropriate, shall widen E Street between F Street and Bay Boulevard to a four-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. This mitigation would reduce **Significant Impacts 4.2-40** and **4.2-41** to below a level of significance.

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.

4.2-28 Prior to the issuance of certificates of occupancy for any development in Phase IV, 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** to below a level of significance.

4.2-29 Prior to the issuance of certificates of occupancy for any development in Phase IV, 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 4.2-44** to below a level of significance.

4.2-30 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 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 4.2-45** to below a level of significance.

4.2.6 Significance of Impacts After Mitigation

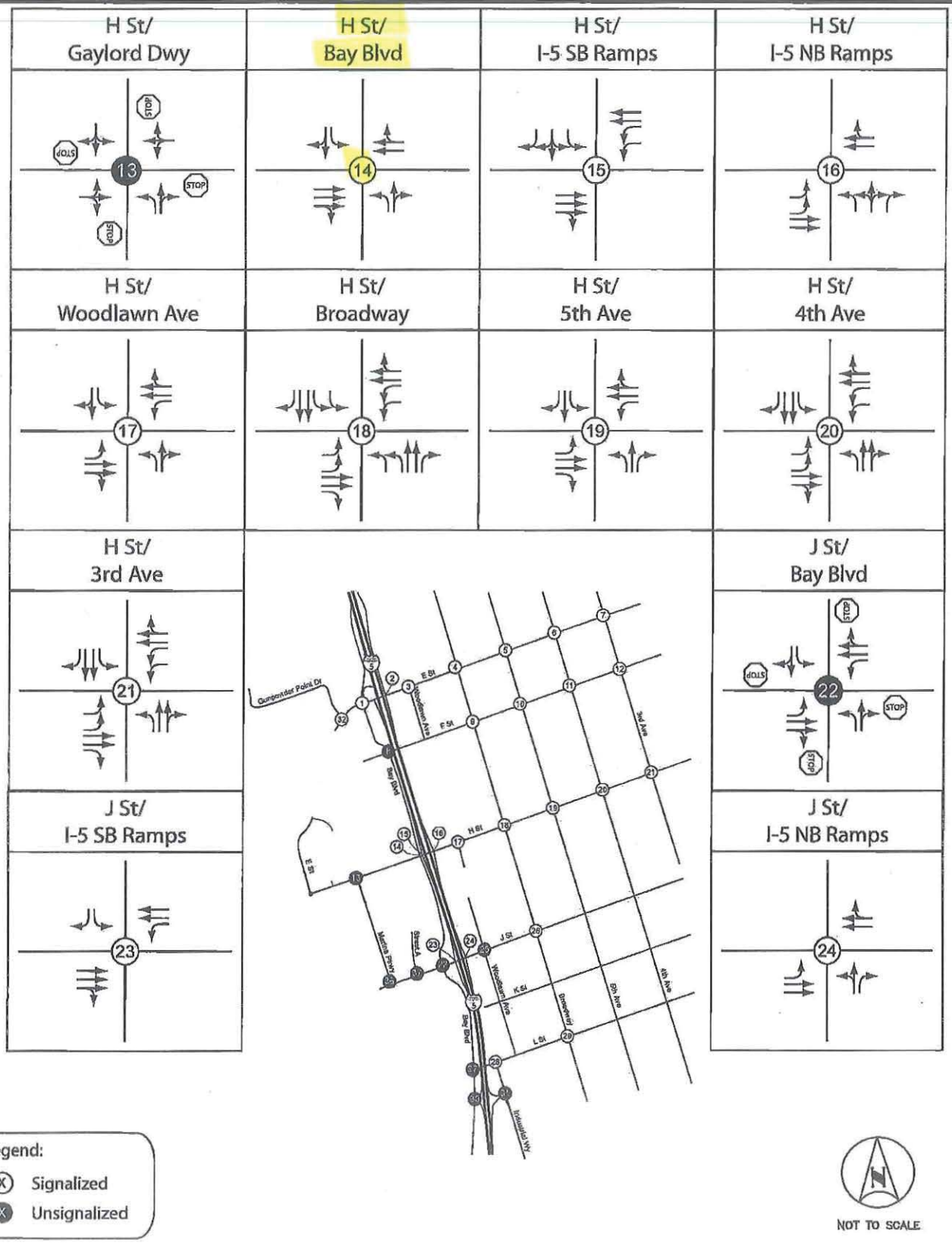
Implementation of Mitigation Measure 4.2-8 would not reduce **Significant Impacts 4.2-12, 4.2-17, 4.2-18, 4.2-29, 4.2-30, 4.2-35** through **4.2-37**, and **4.2-46** through **4.2-49,** concerning project related impacts along I-5, to below a level of significance because implementation of the physical improvements needed to reduce significant impacts 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 assure the necessary improvements will be constructed as needed. Accordingly, the Proposed Project's impacts to freeway segments are considered significant and unmitigated.

Implementation of Mitigation Measure 4.2-10 would not reduce **Significant Impact 4.2-19**, concerning project related impacts on H Street and E Street intersections due to trolley delay, to below a level of significance, because implementation of the physical improvements needed to reduce significant impacts are within the jurisdiction and control of other entities and not the Port or City. The Port and the City cannot assure the necessary improvements will be constructed as needed. Accordingly, the Proposed Project's impacts to E Street and H Street intersections affected by the trolley crossings are considered significant and unmitigated

The implementation of the Mitigation Measures 4.2-1 though 4.2-7, 4,2-9, and 4.2-11 through 30 would reduce the remaining direct project related impacts to below a level of significance.

Attachment 4

Capacity Analysis Printouts


H St/
Gaylord Dwy
H St/
Bay Blvd
H St/
I-5 SB Ramps
H St/
I-5 NB Ramps
H St/
Woodlawn Ave
H St/
Broadway
H St/
5th Ave
H St/
4th Ave
H St/
3rd Ave
J St/
Bay Blvd
J St/
I-5 SB Ramps
J St/
I-5 NB Ramps
STOP
Gunpowder Point Dr
E St
Woodlawn Ave
3rd Ave
Bay Blvd
H St
I St
Marina Pkwy
Street A
J St
K St
Broadway
5th Ave
4th Ave
L St
Interstate 5
Legend:
Signalized
Unsignalized
N
NOT TO SCALE

Chula Vista Bayfront Master Plan

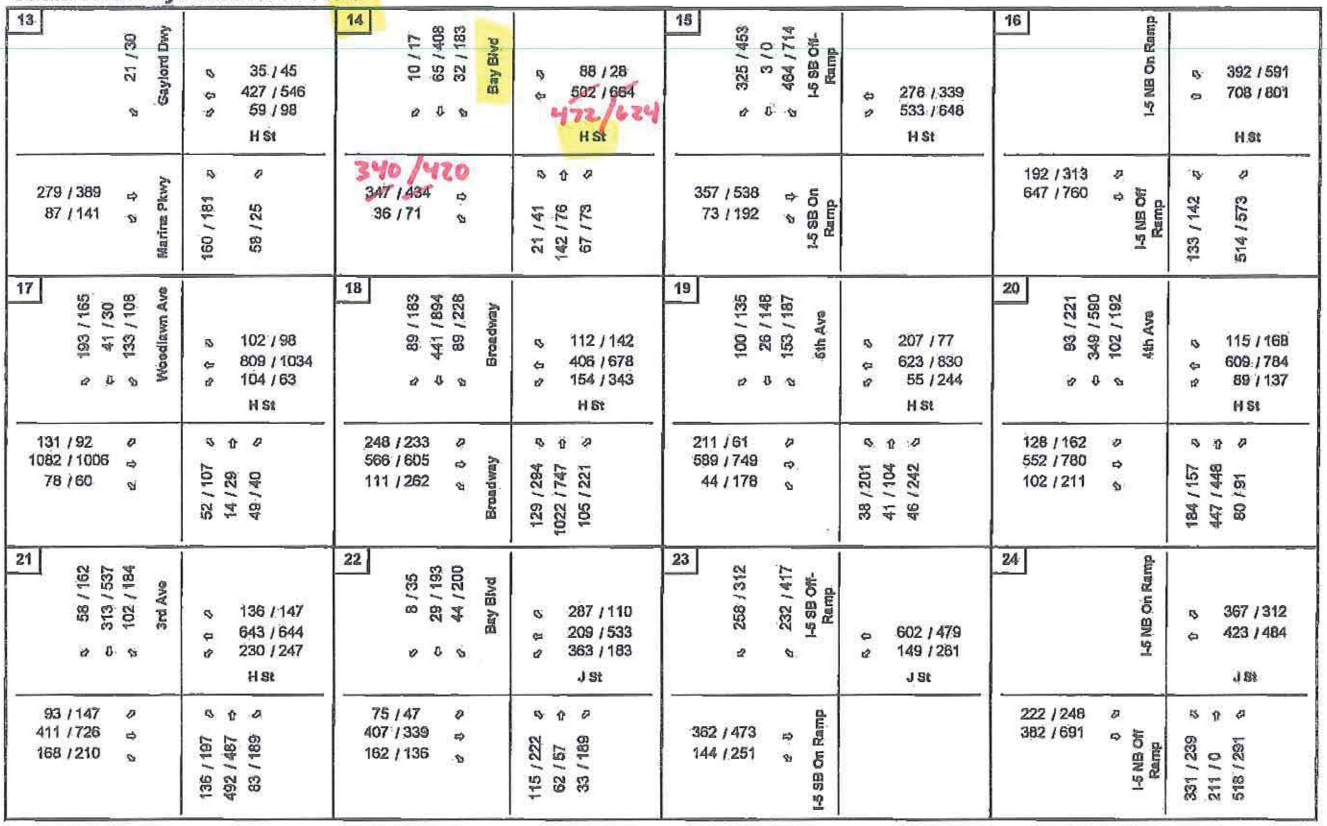

13
21 / 30
Gaylord Dwy
35 / 45
427 / 546
59 / 98
H St
279 / 389
87 / 141
Marina Pkwy
160 / 181
58 / 25
14
10 / 17
65 / 408
32 / 183
Bay Blvd
88 / 28
502 / 664
440/624
H St
340/420
347 / 434
36 / 71
21 / 41
142 / 76
67 / 73
15
325 / 453
3 / 0
464 / 714
I-5 SB Off-Ramp
276 / 339
533 / 648
H St
357 / 538
73 / 192
I-5 SB On Ramp
16
I-5 NB On Ramp
392 / 591
708 / 801
H St
192 / 313
647 / 760
I-5 NB Off Ramp
133 / 142
514 / 573
17
193 / 165
41 / 30
133 / 108
Woodlawn Ave
102 / 98
809 / 1034
104 / 63
H St
131 / 92
1082 / 1006
78 / 60
52 / 107
14 / 29
49 / 40
18
89 / 183
441 / 894
89 / 228
Broadway
112 / 142
406 / 678
154 / 343
H St
248 / 233
566 / 605
111 / 262
Broadway
129 / 284
1022 / 747
105 / 221
19
100 / 135
26 / 148
153 / 187
5th Ave
207 / 77
623 / 830
55 / 244
H St
211 / 61
599 / 749
44 / 178
38 / 201
41 / 104
46 / 242
20
93 / 221
349 / 590
102 / 192
4th Ave
115 / 168
609 / 784
89 / 137
H St
128 / 162
552 / 780
102 / 211
184 / 157
447 / 448
80 / 91
21
58 / 162
313 / 537
102 / 184
3rd Ave
136 / 147
643 / 644
230 / 247
H St
93 / 147
411 / 726
168 / 210
136 / 197
492 / 487
83 / 189
22
8 / 35
29 / 193
44 / 200
Bay Blvd
287 / 110
209 / 533
363 / 183
J St
75 / 47
407 / 339
162 / 136
115 / 222
62 / 57
33 / 189
23
258 / 312
232 / 417
I-5 SB Off-Ramp
602 / 479
149 / 261
J St
362 / 473
144 / 251
I-5 SB On Ramp
24
I-5 NB On Ramp
367 / 312
423 / 484
J St
222 / 248
382 / 691
I-5 NB Off Ramp
331 / 239
211 / 0
518 / 291

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FIGURE 5-17.1
Proposed Project - Phase I Conditions Redistributed Peak-Hour Traffic Volumes(cont.)

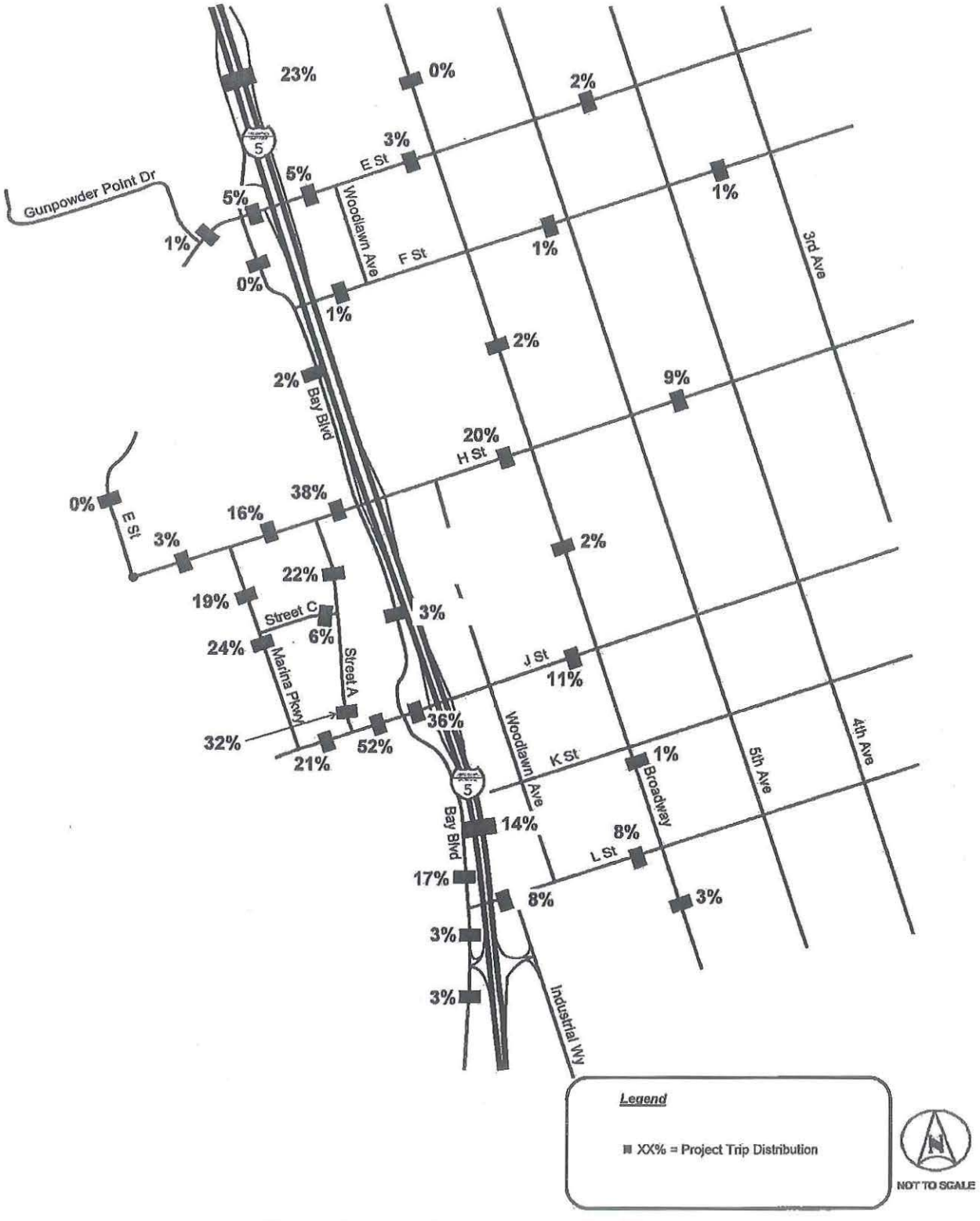

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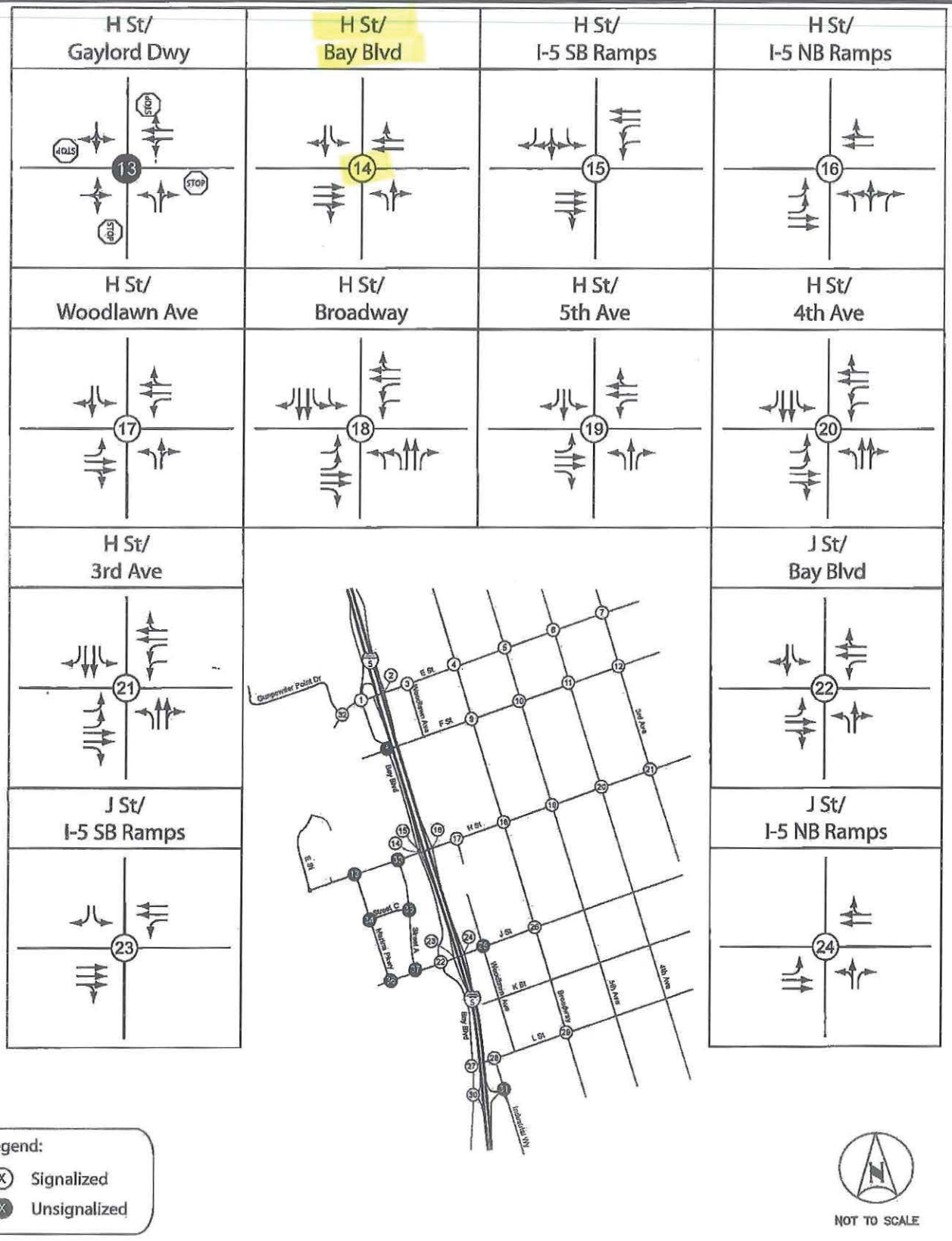
FIGURE 5-25

Proposed Project - Phase II Trip Distribution

K:\095451000\Traffic\Excel\Option 2\[O2 RS.xlsm]ADT Fig NC\Proposed Project - Phase II Trip Distribution


H St/
Gaylord Dwy
H St/
Bay Blvd
H St/
I-5 SB Ramps
H St/
I-5 NB Ramps
H St/
Woodlawn Ave
H St/
Broadway
H St/
5th Ave
H St/
4th Ave
H St/
3rd Ave
J St/
Bay Blvd
J St/
I-5 SB Ramps
J St/
I-5 NB Ramps
STOP
Gunpowder Point Dr
E St
F St
H St
J St
K St
L St
Bay Blvd
Woodlawn Ave
Broadway
5th Ave
4th Ave
Legend:
Signalized
Unsignalized
NOT TO SCALE

13				14				15				16			
	22 / 31	Gaylord Dwy			19 / 32	Bay Blvd	94 / 41		410 / 610	I-5 SB Off-Ramp			I-5 NB On Ramp	392 / 591
			36 / 46				848 / 1123		3 / 0		547 / 656			932 / 1003
			428 / 547		65 / 402		921/1295		464 / 714		520 / 596			
			179 / 254		32 / 183		H St				H St			H St
			H St											
280 / 390		Marina Pkwy		552 / 912			25 / 51	495 / 963		I-5 SB On Ramp		254 / 461	I-5 NB Off Ramp	162 / 194
130 / 164			170 / 229	45 / 93			128 / 80	93 / 237				726 / 1039		514 / 573
			95 / 201				19 / 63							

17				18				19				20			
	193 / 165	Woodlawn Ave			120 / 216	Broadway	112 / 142		140 / 163	5th Ave	207 / 77		94 / 222	4th Ave	115 / 168
	41 / 30		102 / 98		441 / 894		531 / 796		26 / 148		693 / 890		349 / 590		678 / 843
	133 / 108		1033 / 1236		89 / 228		154 / 343		153 / 187		55 / 244		102 / 192		89 / 137
			104 / 63				H St				H St				H St
131 / 92				262 / 273		Broadway	159 / 326	223 / 107			44 / 211	129 / 163		184 / 157	
1161 / 1285			52 / 107	611 / 762			1022 / 747	613 / 835			41 / 104	576 / 865		447 / 448	
78 / 60			14 / 29	125 / 301			105 / 221	48 / 187			46 / 242	102 / 211		80 / 91	
			49 / 40												

21				22				23				24			
	81 / 181	3rd Ave			3 / 17	Bay Blvd	292 / 120		508 / 411	I-5 SB Off-Ramp			I-5 NB On Ramp	367 / 312
	313 / 537		136 / 147		32 / 202		730 / 825				878 / 681			558 / 590
	102 / 184		679 / 675		48 / 210		363 / 183		232 / 417		149 / 261			
			230 / 247				J St				J St			J St
101 / 175				5 / 17			306 / 385	477 / 931		I-5 SB On Ramp		295 / 542	I-5 NB Off Ramp	474 / 336	
425 / 770			148 / 207	557 / 954			66 / 66	183 / 418				425 / 856		211 / 0	
172 / 225			492 / 487	226 / 371			33 / 189							518 / 291	
			83 / 189												

Legend

X / Y = AM / PM PEAK HOUR TURNING VOLUMES

NOT TO SCALE

Kimley-Horn and Associates, Inc.

FIGURE 5-30.1
Proposed Project - Phase II Plus Project Conditions Peak-Hour Traffic Volumes(cont.)

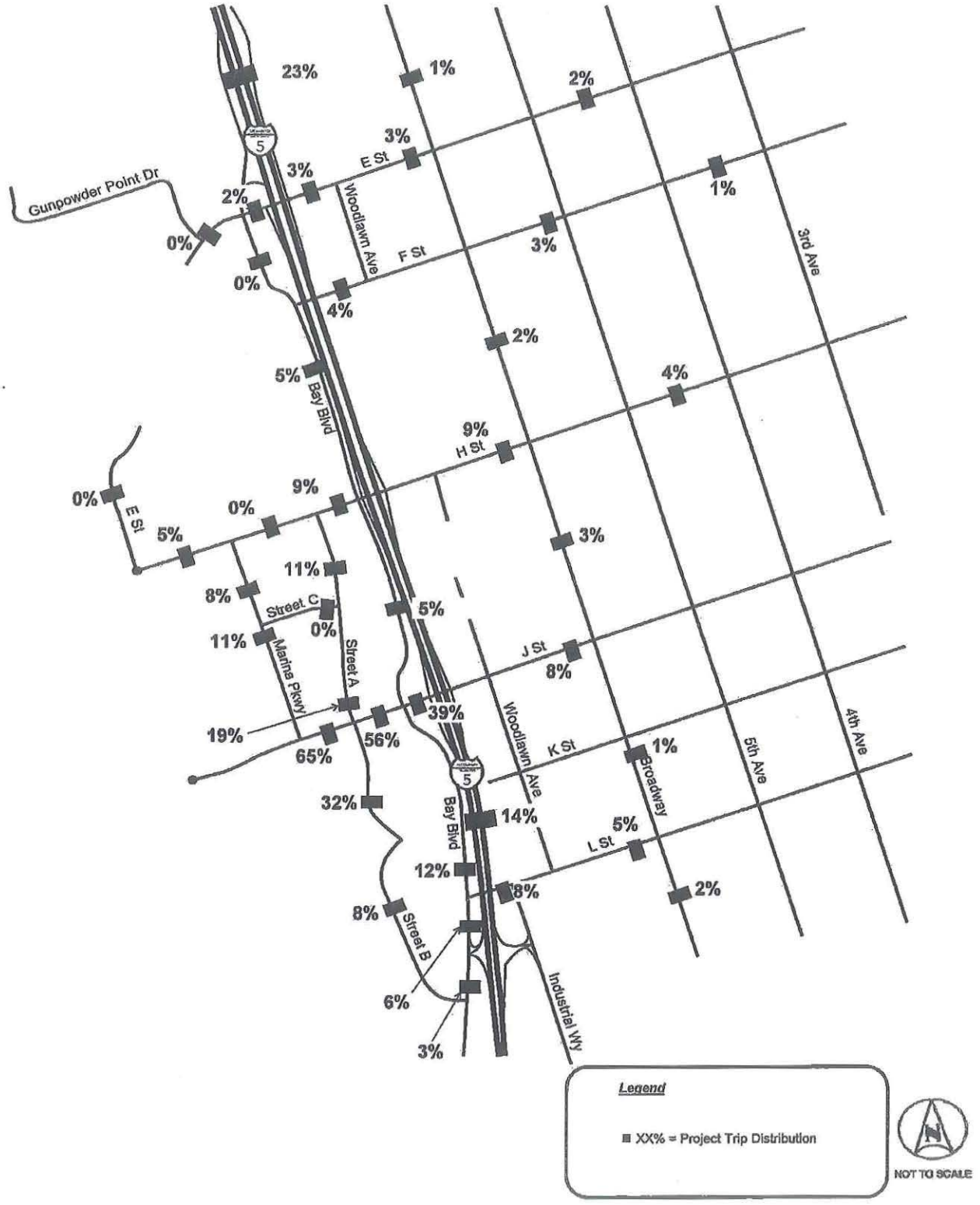


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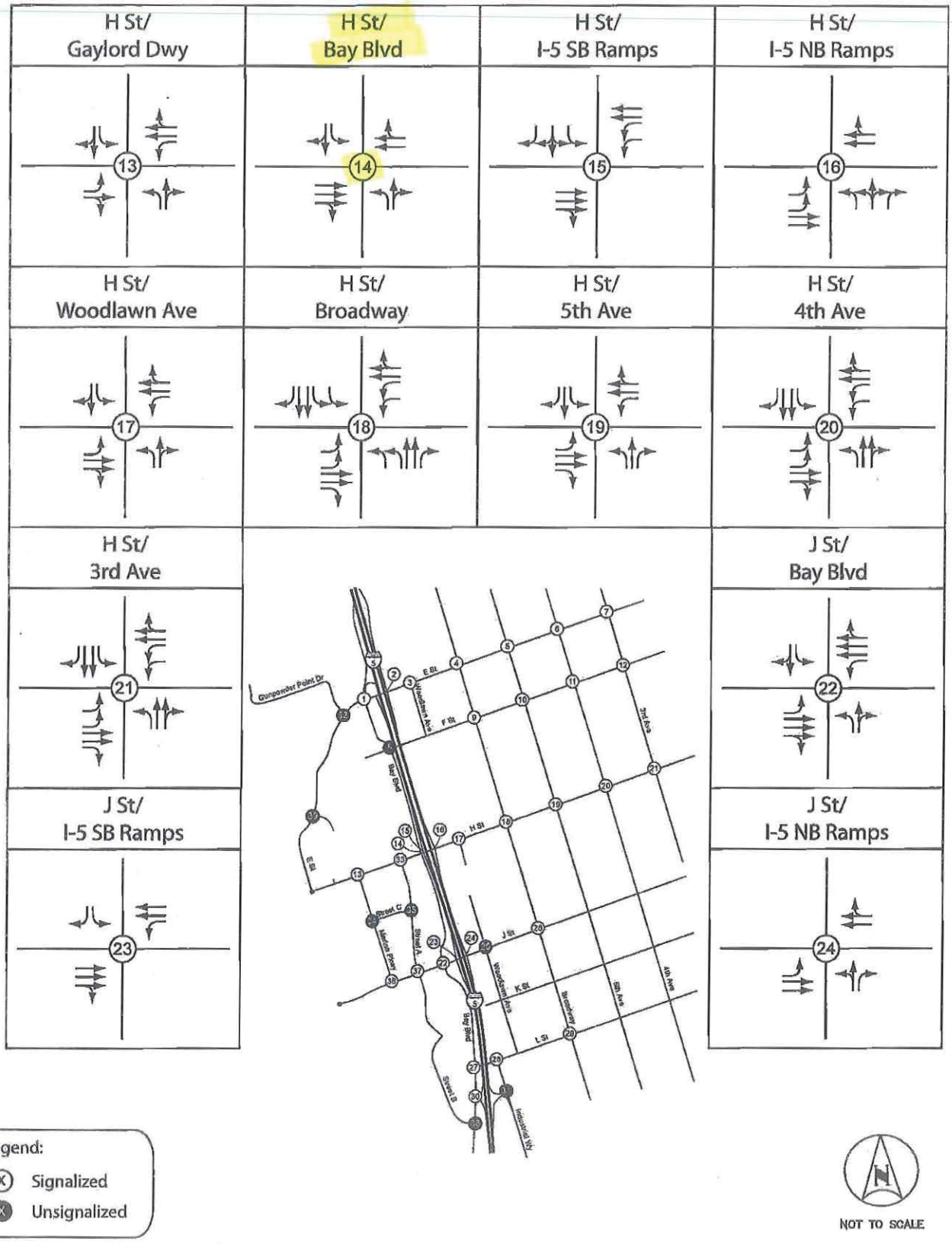
FIGURE 5-38

Proposed Project - Phase III Trip Distribution

K:\096451000\Traffic\Excel\Option 2\[O2 RS.xlsm]ADT Fig ND\Proposed Project - Phase III Trip Distribution



Kimley-Horn and Associates, Inc.

FIGURE 5-48.1

Proposed Project - Phase III Mitigated Intersection Geometrics

K:\TPTO\09545100\Traffic\Figures\Option 2\Geometry\P3WP mit geo (13-24).ai

13				14				15				16			
	22 / 31	Gaylord Dwy			20 / 63	Bay Blvd			411 / 661	I-5 SB Off-Ramp			I-5 NB On Ramp		
			36 / 46		78 / 423		105 / 52		3 / 0		578 / 683			412 / 626	
			414 / 528		32 / 183		869 / 1141		489 / 754		550 / 631			1022 / 1019	
			180 / 255				962/1263								
			H St				H St				H St			H St	
272 / 378				652/1048								266 / 472			
122 / 112		Marina Pkwy		584 / 957				521 / 1073		I-5 SB On Ramp		781 / 1073		I-5 NB Off Ramp	
	101 / 237		96 / 202	45 / 93			25 / 51 / 137 / 103 / 19 / 63	94 / 258					163 / 200		544 / 603

17				18				19				20			
	263 / 205	Woodlawn Ave			121 / 217	Broadway			147 / 169	5th Ave			99 / 232	4th Ave	
	56 / 50		112 / 143		481 / 974		112 / 147		36 / 173		217 / 82		384 / 610		120 / 188
	163 / 133		1093 / 1252		94 / 243		549 / 827		163 / 197		705 / 902		107 / 197		735 / 865
			154 / 103				159 / 358				70 / 284				99 / 152
			H St				H St				H St				H St
166 / 92				279 / 309				229 / 116				134 / 168			
1176 / 1319			62 / 177	664 / 824		Broadway	152 / 321	622 / 850			65 / 267	620 / 880			189 / 162
103 / 85			24 / 49	121 / 297			1112 / 812	74 / 228			46 / 134	107 / 221			462 / 463
			49 / 55				115 / 241				71 / 302				85 / 96

21				22				23				24			
	85 / 185	3rd Ave			15 / 38	Bay Blvd			561 / 491	I-5 SB Off-Ramp			I-5 NB On Ramp		
	323 / 557		141 / 152		32 / 202		305 / 120		242 / 432		980 / 755			382 / 322	
	107 / 189		722 / 683		46 / 210		835 / 979				154 / 271			625 / 623	
			240 / 257				398 / 203								
			H St				J St				J St			J St	
105 / 180				36 / 66				530 / 1062				333 / 635			
446 / 805			151 / 210	626 / 1131			337 / 433	212 / 467		I-5 SB On Ramp		461 / 899		I-5 NB Off Ramp	530 / 380
175 / 228			512 / 507	268 / 449			84 / 66								211 / 0
			88 / 194				33 / 194								538 / 301

Legend

X / Y = AM / PM PEAK HOUR TURNING VOLUMES

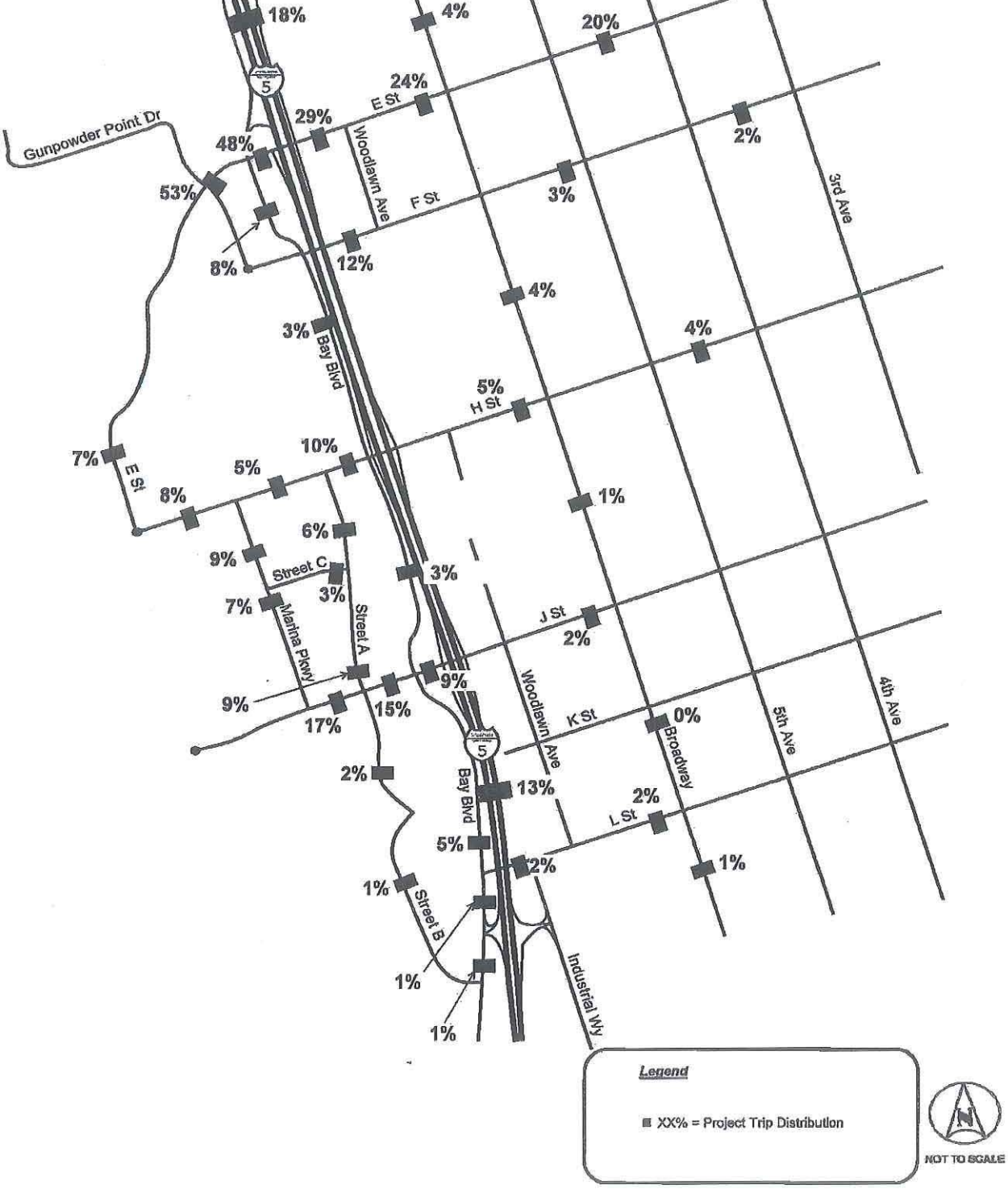
NOT TO SCALE

Kimley-Horn and Associates, Inc.

FIGURE 5-43.1

Proposed Project - Phase III Plus Project Conditions Peak-Hour Traffic Volumes(cont.)

K:\069451000\Traffic\Excel\Option 2\[02-TA Files.xls]PP P3 Figure 13-24

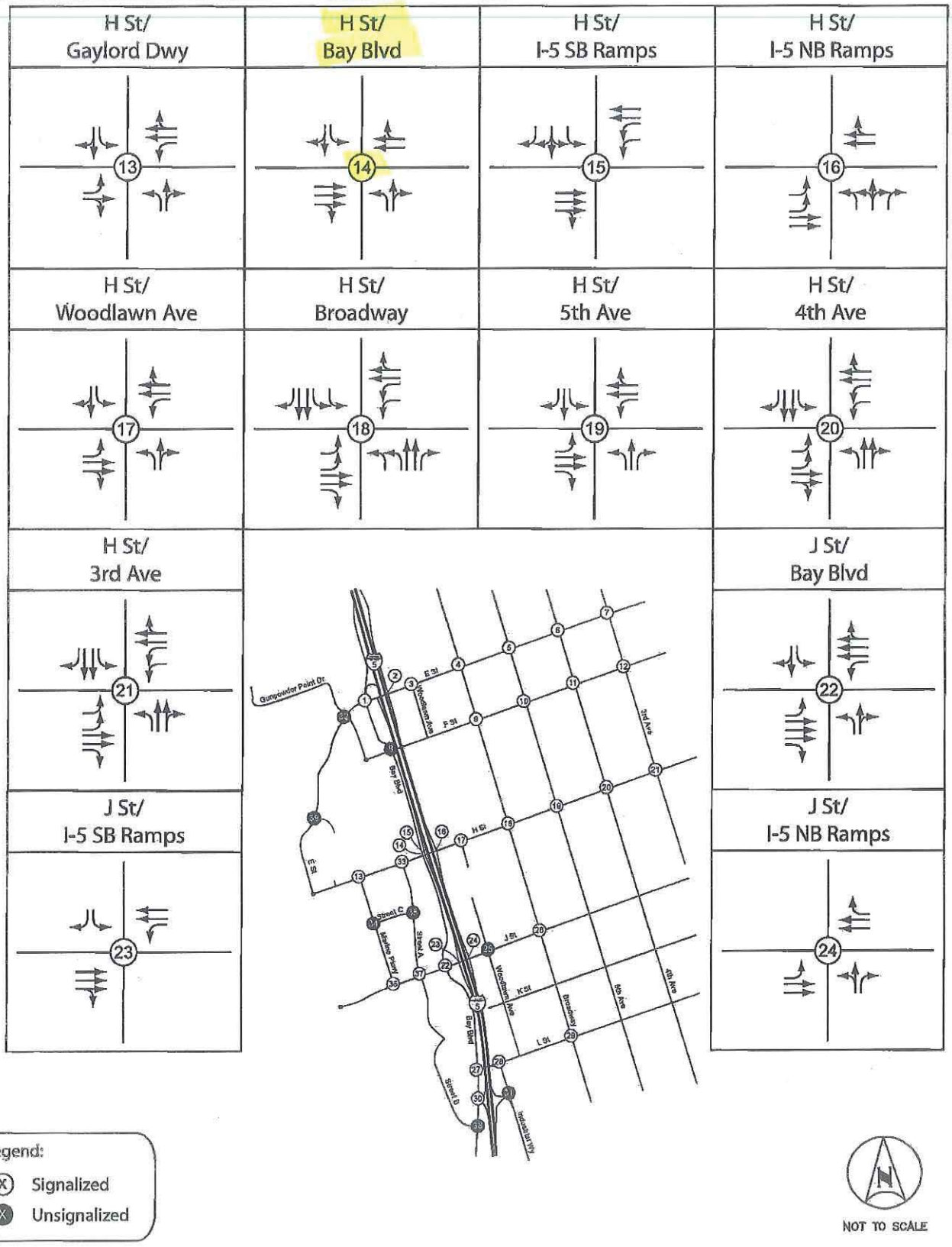


Kimley-Horn and Associates, Inc.

FIGURE 5-58

Proposed Project - Phase IV Trip Distribution

K:\009451000\Traffic\Excel\Option 2\[O2 RS.xlsm]ADT Fig NF\Proposed Project - Phase IV Trip Distribution


H St/
Gaylord Dwy
H St/
Bay Blvd
H St/
I-5 SB Ramps
H St/
I-5 NB Ramps
13
14
15
16
H St/
Woodlawn Ave
H St/
Broadway
H St/
5th Ave
H St/
4th Ave
17
18
19
20
H St/
3rd Ave
J St/
Bay Blvd
21
22
J St/
I-5 SB Ramps
J St/
I-5 NB Ramps
23
24
Gunpowder Point Dr
E St
Woodlawn Ave
F St
Bay Blvd
H St
3rd Ave
4th Ave
Broadway
J St
K St
L St
Street C
Street A
Street B
Industrial Way
Legend:
Signalized
Unsignalized
NOT TO SCALE

13 23 / 32 ⇦ Gaylord Dwy 37 / 47 ⇦ 318 / 405 ⇧ 233 / 253 ⇨ H St 203 / 286 85 / 91 ⇦ Marina Pkwy 68 / 165 ⇦ 97 / 239 ⇨	**14** 24 / 140 ⇦ 113 / 490 ⇧ 28 / 180 ⇨ Bay Blvd 124 / 80 ⇦ 764 / 847 ⇧ 819/952 H St 545/953 489 / 887 ⇧ 46 / 94 ⇩ 26 / 52 ⇦ 190 / 151 ⇧ 19 / 63 ⇨	**15** 236 / 499 ⇦ 3 / 0 ⇧ 554 / 858 ⇨ I-5 SB Off-Ramp 699 / 746 ⇧ 628 / 722 ⇨ H St 425 / 1175 82 / 307 ⇦ I-5 SB On Ramp	**16** I-5 NB On Ramp ⇧ 464 / 717 ⇦ 1283 / 1047 ⇨ H St 155 / 339 ⇦ 899 / 1138 ⇩ I-5 NB Off Ramp 160 / 184 ⇦ 622 / 681 ⇨
17 445 / 309 ⇦ 95 / 102 ⇧ 241 / 198 ⇨ Woodlawn Ave 138 / 260 ⇦ 1277 / 1281 ⇧ 284 / 207 ⇨ H St 257 / 92 ⇦ 1191 / 1385 ⇩ 168 / 150 ⇨ 88 / 359 ⇦ 50 / 101 ⇧ 49 / 94 ⇨	**18** 134 / 224 ⇦ 585 / 1182 ⇧ 108 / 269 ⇨ Broadway 112 / 160 ⇦ 600 / 882 ⇧ 172 / 397 ⇨ H St 322 / 399 ⇦ 776 / 965 ⇩ 123 / 308 ⇨ Broadway 163 / 334 ⇦ 1346 / 981 ⇧ 141 / 293 ⇨	**19** 153 / 171 ⇦ 62 / 238 ⇧ 189 / 223 ⇨ 5th Ave 243 / 95 ⇦ 736 / 914 ⇧ 109 / 388 ⇨ H St 230 / 121 ⇦ 629 / 877 ⇩ 140 / 337 ⇨ 123 / 412 ⇦ 59 / 212 ⇧ 138 / 458 ⇨	**20** 104 / 248 ⇦ 403 / 662 ⇧ 120 / 210 ⇨ 4th Ave 133 / 240 ⇧ 883 / 903 ⇨ 125 / 191 ⇨ H St 142 / 174 ⇦ 718 / 907 ⇩ 126 / 255 ⇨ 211 / 186 ⇦ 501 / 502 ⇧ 98 / 109 ⇨
21 91 / 187 ⇦ 349 / 609 ⇧ 120 / 202 ⇨ 3rd Ave 154 / 165 ⇦ 823 / 688 ⇧ 266 / 283 ⇨ H St 106 / 185 ⇦ 488 / 879 ⇩ 179 / 243 ⇨ 167 / 216 ⇦ 564 / 559 ⇧ 101 / 207 ⇨	**22** 18 / 61 ⇦ 42 / 225 ⇧ 49 / 211 ⇨ Bay Blvd 339 / 121 ⇦ 853 / 1018 ⇧ 485 / 252 ⇨ J St 52 / 87 ⇦ 611 / 1149 ⇩ 276 / 508 ⇨ 391 / 463 ⇦ 80 / 78 ⇧ 29 / 204 ⇨	**23** 526 / 483 ⇦ 266 / 471 ⇨ I-5 SB Off-Ramp 1166 / 799 ⇧ 167 / 297 ⇨ J St 505 / 1056 247 / 493 ⇦ I-5 SB On Ramp	**24** I-5 NB On Ramp ⇧ 421 / 348 ⇦ 766 / 641 ⇨ J St 303 / 605 ⇦ 518 / 935 ⇩ I-5 NB Off Ramp 631 / 410 ⇦ 211 / 0 ⇧ 590 / 327 ⇨

Legend

X / Y = AM / PM PEAK HOUR TURNING VOLUMES

NOT TO SCALE

Kimley-Horn and Associates, Inc.

FIGURE 5-63.1
Proposed Project - Phase IV Plus Project Conditions Peak-Hour Traffic Volumes(cont.)

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↱		↑↑↱		↰	↱		↰	↱	
Volume (vph)	0	340	36	0	472	88	21	142	67	32	65	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		0.91	1.00		0.95		1.00	1.00		1.00	1.00	
Frt		1.00	0.85		0.98		1.00	0.95		1.00	0.98	
Flt Protected		1.00	1.00		1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		5085	1583		3456		1770	1773		1770	1825	
Flt Permitted		1.00	1.00		1.00		0.70	1.00		0.62	1.00	
Satd. Flow (perm)		5085	1583		3456		1311	1773		1149	1825	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	370	39	0	513	96	23	154	73	35	71	11
RTOR Reduction (vph)	0	0	23	0	38	0	0	43	0	0	7	0
Lane Group Flow (vph)	0	370	16	0	571	0	23	184	0	35	75	0
Turn Type			Perm				Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases			4				2			6		
Actuated Green, G (s)		16.0	16.0		16.0		16.0	16.0		16.0	16.0	
Effective Green, g (s)		16.0	16.0		16.0		16.0	16.0		16.0	16.0	
Actuated g/C Ratio		0.40	0.40		0.40		0.40	0.40		0.40	0.40	
Clearance Time (s)		4.0	4.0		4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)		2034	633		1382		524	709		460	730	
v/s Ratio Prot		0.07			c0.17			c0.10			0.04	
v/s Ratio Perm			0.01				0.02			0.03		
v/c Ratio		0.18	0.02		0.41		0.04	0.26		0.08	0.10	
Uniform Delay, d1		7.8	7.3		8.6		7.3	8.0		7.4	7.5	
Progression Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.2	0.1		0.9		0.2	0.9		0.3	0.3	
Delay (s)		8.0	7.3		9.5		7.5	8.9		7.7	7.8	
Level of Service		A	A		A		A	A		A	A	
Approach Delay (s)		7.9			9.5			8.8			7.8	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	8.8	HCM Level of Service	A
HCM Volume to Capacity ratio	0.34		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	40.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	EBR	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	370	39	609	23	227	35	82
v/c Ratio	0.18	0.06	0.43	0.04	0.30	0.08	0.11
Control Delay	8.1	3.6	8.9	7.7	7.0	8.0	7.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	8.1	3.6	8.9	7.7	7.0	8.0	7.3
Queue Length 50th (ft)	18	0	42	3	21	5	9
Queue Length 95th (ft)	31	11	72	12	54	16	27
Internal Link Dist (ft)	420		420		420		420
Turn Bay Length (ft)		165					
Base Capacity (vph)	2034	657	1420	524	752	460	737
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.18	0.06	0.43	0.04	0.30	0.08	0.11

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	420	71	0	624	28	41	76	73	183	408	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		0.91	1.00		0.95		1.00	1.00		1.00	1.00	
Frt		1.00	0.85		0.99		1.00	0.93		1.00	0.99	
Flt Protected		1.00	1.00		1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		5085	1583		3517		1770	1726		1770	1852	
Flt Permitted		1.00	1.00		1.00		0.37	1.00		0.65	1.00	
Satd. Flow (perm)		5085	1583		3517		680	1726		1219	1852	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	457	77	0	678	30	45	83	79	199	443	18
RTOR Reduction (vph)	0	0	46	0	8	0	0	47	0	0	4	0
Lane Group Flow (vph)	0	457	31	0	700	0	45	115	0	199	457	0
Turn Type			Perm				Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases			4				2			6		
Actuated Green, G (s)		16.0	16.0		16.0		16.0	16.0		16.0	16.0	
Effective Green, g (s)		16.0	16.0		16.0		16.0	16.0		16.0	16.0	
Actuated g/C Ratio		0.40	0.40		0.40		0.40	0.40		0.40	0.40	
Clearance Time (s)		4.0	4.0		4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)		2034	633		1407		272	690		488	741	
v/s Ratio Prot		0.09			c0.20			0.07			c0.25	
v/s Ratio Perm			0.02				0.07			0.16		
v/c Ratio		0.22	0.05		0.50		0.17	0.17		0.41	0.62	
Uniform Delay, d1		7.9	7.3		9.0		7.7	7.7		8.6	9.6	
Progression Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.3	0.1		1.3		1.3	0.5		2.5	3.8	
Delay (s)		8.2	7.5		10.2		9.0	8.2		11.1	13.4	
Level of Service		A	A		B		A	A		B	B	
Approach Delay (s)		8.1			10.2			8.4			12.7	
Approach LOS		A			B			A			B	

Intersection Summary			
HCM Average Control Delay	10.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	54.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	EBR	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	457	77	708	45	162	199	461
v/c Ratio	0.22	0.11	0.50	0.17	0.22	0.41	0.62
Control Delay	8.3	3.1	10.4	9.7	5.5	11.8	13.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	8.3	3.1	10.4	9.7	5.5	11.8	13.9
Queue Length 50th (ft)	23	0	56	6	11	30	75
Queue Length 95th (ft)	38	16	91	21	36	68	144
Internal Link Dist (ft)	420		420		420		420
Turn Bay Length (ft)		165					
Base Capacity (vph)	2034	679	1415	272	738	487	744
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.22	0.11	0.50	0.17	0.22	0.41	0.62

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	620	45	0	921	94	25	128	19	32	66	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		0.91	1.00		0.95		1.00	1.00		1.00	1.00	
Frt		1.00	0.85		0.99		1.00	0.98		1.00	0.97	
Flt Protected		1.00	1.00		1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		5085	1583		3490		1770	1826		1770	1800	
Flt Permitted		1.00	1.00		1.00		0.70	1.00		0.66	1.00	
Satd. Flow (perm)		5085	1583		3490		1298	1826		1221	1800	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	674	49	0	1001	102	27	139	21	35	72	21
RTOR Reduction (vph)	0	0	29	0	19	0	0	13	0	0	13	0
Lane Group Flow (vph)	0	674	20	0	1084	0	27	147	0	35	80	0
Turn Type			Perm				Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases			4				2			6		
Actuated Green, G (s)		16.0	16.0		16.0		16.0	16.0		16.0	16.0	
Effective Green, g (s)		16.0	16.0		16.0		16.0	16.0		16.0	16.0	
Actuated g/C Ratio		0.40	0.40		0.40		0.40	0.40		0.40	0.40	
Clearance Time (s)		4.0	4.0		4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)		2034	633		1396		519	730		488	720	
v/s Ratio Prot		0.13			c0.31			c0.08			0.04	
v/s Ratio Perm			0.01				0.02			0.03		
v/c Ratio		0.33	0.03		0.78		0.05	0.20		0.07	0.11	
Uniform Delay, d1		8.3	7.3		10.4		7.4	7.8		7.4	7.5	
Progression Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.4	0.1		4.3		0.2	0.6		0.3	0.3	
Delay (s)		8.7	7.4		14.7		7.5	8.5		7.7	7.9	
Level of Service		A	A		B		A	A		A	A	
Approach Delay (s)		8.6			14.7			8.3			7.8	
Approach LOS		A			B			A			A	

Intersection Summary

HCM Average Control Delay	11.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	49.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	EBR	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	674	49	1103	27	160	35	93
v/c Ratio	0.33	0.07	0.78	0.05	0.22	0.07	0.13
Control Delay	8.9	3.4	15.5	7.8	7.9	8.0	6.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	8.9	3.4	15.5	7.8	7.9	8.0	6.8
Queue Length 50th (ft)	35	0	102	3	19	5	9
Queue Length 95th (ft)	54	12	#172	13	45	16	28
Internal Link Dist (ft)	420		420		420		420
Turn Bay Length (ft)		165					
Base Capacity (vph)	2034	663	1415	519	743	489	732
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.33	0.07	0.78	0.05	0.22	0.07	0.13

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1003	93	0	1245	41	51	80	63	183	402	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		0.91	1.00		0.95		1.00	1.00		1.00	1.00	
Frt		1.00	0.85		1.00		1.00	0.93		1.00	0.99	
Flt Protected		1.00	1.00		1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		5085	1583		3522		1770	1740		1770	1842	
Flt Permitted		1.00	1.00		1.00		0.31	1.00		0.66	1.00	
Satd. Flow (perm)		5085	1583		3522		579	1740		1227	1842	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1090	101	0	1353	45	55	87	68	199	437	35
RTOR Reduction (vph)	0	0	55	0	5	0	0	28	0	0	6	0
Lane Group Flow (vph)	0	1090	46	0	1393	0	55	127	0	199	466	0
Turn Type			Perm				Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases			4				2			6		
Actuated Green, G (s)		23.0	23.0		23.0		19.0	19.0		19.0	19.0	
Effective Green, g (s)		23.0	23.0		23.0		19.0	19.0		19.0	19.0	
Actuated g/C Ratio		0.46	0.46		0.46		0.38	0.38		0.38	0.38	
Clearance Time (s)		4.0	4.0		4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)		2339	728		1620		220	661		466	700	
v/s Ratio Prot		0.21			c0.40			0.07			c0.25	
v/s Ratio Perm			0.03				0.10			0.16		
v/c Ratio		0.47	0.06		0.86		0.25	0.19		0.43	0.67	
Uniform Delay, d1		9.3	7.5		12.1		10.6	10.4		11.5	12.9	
Progression Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.7	0.2		6.2		2.7	0.6		2.8	5.0	
Delay (s)		9.9	7.7		18.3		13.3	11.0		14.3	17.8	
Level of Service		A	A		B		B	B		B	B	
Approach Delay (s)		9.8			18.3			11.6			16.8	
Approach LOS		A			B			B			B	

Intersection Summary

HCM Average Control Delay	14.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	50.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	72.2%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	EBR	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	1090	101	1398	55	155	199	472
v/c Ratio	0.47	0.13	0.86	0.25	0.22	0.43	0.67
Control Delay	10.1	2.7	19.5	14.4	8.7	15.0	18.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	10.1	2.7	19.5	14.4	8.7	15.0	18.3
Queue Length 50th (ft)	74	0	176	11	20	41	108
Queue Length 95th (ft)	103	18	#308	33	51	87	192
Internal Link Dist (ft)	420		420		420		420
Turn Bay Length (ft)		165					
Base Capacity (vph)	2339	783	1625	220	689	467	706
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.47	0.13	0.86	0.25	0.22	0.43	0.67

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	652	45	0	962	105	25	137	19	32	76	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		0.91	1.00		0.95		1.00	1.00		1.00	1.00	
Frt		1.00	0.85		0.99		1.00	0.98		1.00	0.97	
Flt Protected		1.00	1.00		1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		5085	1583		3487		1770	1828		1770	1804	
Flt Permitted		1.00	1.00		1.00		0.69	1.00		0.65	1.00	
Satd. Flow (perm)		5085	1583		3487		1284	1828		1210	1804	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	709	49	0	1046	114	27	149	21	35	83	22
RTOR Reduction (vph)	0	0	29	0	20	0	0	13	0	0	13	0
Lane Group Flow (vph)	0	709	20	0	1140	0	27	157	0	35	92	0
Turn Type			Perm				Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases			4				2			6		
Actuated Green, G (s)		16.0	16.0		16.0		16.0	16.0		16.0	16.0	
Effective Green, g (s)		16.0	16.0		16.0		16.0	16.0		16.0	16.0	
Actuated g/C Ratio		0.40	0.40		0.40		0.40	0.40		0.40	0.40	
Clearance Time (s)		4.0	4.0		4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)		2034	633		1395		514	731		484	722	
v/s Ratio Prot		0.14			c0.33			c0.09			0.05	
v/s Ratio Perm			0.01				0.02			0.03		
v/c Ratio		0.35	0.03		0.82		0.05	0.22		0.07	0.13	
Uniform Delay, d1		8.4	7.3		10.7		7.4	7.9		7.4	7.6	
Progression Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.5	0.1		5.4		0.2	0.7		0.3	0.4	
Delay (s)		8.8	7.4		16.1		7.5	8.6		7.7	7.9	
Level of Service		A	A		B		A	A		A	A	
Approach Delay (s)		8.7			16.1			8.4			7.9	
Approach LOS		A			B			A			A	

Intersection Summary			
HCM Average Control Delay	12.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	51.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	EBR	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	709	49	1160	27	170	35	105
v/c Ratio	0.35	0.07	0.82	0.05	0.23	0.07	0.14
Control Delay	9.0	3.4	17.3	7.8	8.0	8.0	7.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	9.0	3.4	17.3	7.8	8.0	8.0	7.0
Queue Length 50th (ft)	37	0	110	3	20	5	11
Queue Length 95th (ft)	57	12	#213	13	48	16	31
Internal Link Dist (ft)	420		420		420		420
Turn Bay Length (ft)		165					
Base Capacity (vph)	2034	663	1415	513	743	484	735
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.35	0.07	0.82	0.05	0.23	0.07	0.14

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↱		↑↑↱		↰	↱		↰	↱	
Volume (vph)	0	1048	93	0	1263	52	51	103	63	183	423	63
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		0.91	1.00		0.95		1.00	1.00		1.00	1.00	
Frt		1.00	0.85		0.99		1.00	0.94		1.00	0.98	
Flt Protected		1.00	1.00		1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		5085	1583		3518		1770	1757		1770	1827	
Flt Permitted		1.00	1.00		1.00		0.25	1.00		0.64	1.00	
Satd. Flow (perm)		5085	1583		3518		465	1757		1199	1827	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1139	101	0	1373	57	55	112	68	199	460	68
RTOR Reduction (vph)	0	0	55	0	6	0	0	24	0	0	11	0
Lane Group Flow (vph)	0	1139	46	0	1424	0	55	156	0	199	517	0
Turn Type			Perm				Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases			4				2			6		
Actuated Green, G (s)		23.0	23.0		23.0		19.0	19.0		19.0	19.0	
Effective Green, g (s)		23.0	23.0		23.0		19.0	19.0		19.0	19.0	
Actuated g/C Ratio		0.46	0.46		0.46		0.38	0.38		0.38	0.38	
Clearance Time (s)		4.0	4.0		4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)		2339	728		1618		177	668		456	694	
v/s Ratio Prot		0.22			c0.40			0.09			c0.28	
v/s Ratio Perm			0.03				0.12			0.17		
v/c Ratio		0.49	0.06		0.88		0.31	0.23		0.44	0.75	
Uniform Delay, d1		9.4	7.5		12.2		10.9	10.5		11.5	13.4	
Progression Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.7	0.2		7.2		4.5	0.8		3.0	7.2	
Delay (s)		10.1	7.7		19.5		15.4	11.4		14.5	20.6	
Level of Service		B	A		B		B	B		B	C	
Approach Delay (s)		9.9			19.5			12.3			18.9	
Approach LOS		A			B			B			B	

Intersection Summary			
HCM Average Control Delay	15.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	50.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	76.0%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	EBR	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	1139	101	1430	55	180	199	528
v/c Ratio	0.49	0.13	0.88	0.31	0.26	0.44	0.75
Control Delay	10.3	2.7	20.9	16.8	9.6	15.3	21.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	10.3	2.7	20.9	16.8	9.6	15.3	21.8
Queue Length 50th (ft)	78	0	183	11	27	41	124
Queue Length 95th (ft)	108	18	#320	36	61	88	#261
Internal Link Dist (ft)	420		420		420		420
Turn Bay Length (ft)		165					
Base Capacity (vph)	2339	783	1624	177	692	456	705
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.49	0.13	0.88	0.31	0.26	0.44	0.75

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↱		↑↑↱		↰	↱		↰	↱	
Volume (vph)	0	545	46	0	819	124	26	190	19	28	113	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		0.91	1.00		0.95		1.00	1.00		1.00	1.00	
Frt		1.00	0.85		0.98		1.00	0.99		1.00	0.97	
Flt Protected		1.00	1.00		1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		5085	1583		3469		1770	1837		1770	1814	
Flt Permitted		1.00	1.00		1.00		0.66	1.00		0.62	1.00	
Satd. Flow (perm)		5085	1583		3469		1234	1837		1148	1814	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	592	50	0	890	135	28	207	21	30	123	26
RTOR Reduction (vph)	0	0	30	0	30	0	0	9	0	0	16	0
Lane Group Flow (vph)	0	592	20	0	995	0	28	219	0	30	133	0
Turn Type			Perm				Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases			4				2			6		
Actuated Green, G (s)		16.0	16.0		16.0		16.0	16.0		16.0	16.0	
Effective Green, g (s)		16.0	16.0		16.0		16.0	16.0		16.0	16.0	
Actuated g/C Ratio		0.40	0.40		0.40		0.40	0.40		0.40	0.40	
Clearance Time (s)		4.0	4.0		4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)		2034	633		1388		494	735		459	726	
v/s Ratio Prot		0.12			c0.29			c0.12			0.07	
v/s Ratio Perm			0.01				0.02			0.03		
v/c Ratio		0.29	0.03		0.72		0.06	0.30		0.07	0.18	
Uniform Delay, d1		8.1	7.3		10.1		7.4	8.2		7.4	7.8	
Progression Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.4	0.1		3.2		0.2	1.0		0.3	0.6	
Delay (s)		8.5	7.4		13.3		7.6	9.2		7.7	8.3	
Level of Service		A	A		B		A	A		A	A	
Approach Delay (s)		8.4			13.3			9.0			8.2	
Approach LOS		A			B			A			A	

Intersection Summary			
HCM Average Control Delay	10.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	51.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	EBR	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	592	50	1025	28	228	30	149
v/c Ratio	0.29	0.08	0.72	0.06	0.31	0.07	0.20
Control Delay	8.6	3.4	13.2	7.8	9.1	8.0	7.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	8.6	3.4	13.2	7.8	9.1	8.0	7.6
Queue Length 50th (ft)	30	0	89	4	30	4	17
Queue Length 95th (ft)	48	13	142	14	65	14	41
Internal Link Dist (ft)	420		420		420		420
Turn Bay Length (ft)		165					
Base Capacity (vph)	2034	663	1417	493	744	459	741
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.29	0.08	0.72	0.06	0.31	0.07	0.20

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↱		↑↑↱		↰	↱		↰	↱	
Volume (vph)	0	953	94	0	952	80	52	151	63	180	490	140
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		0.91	1.00		0.95		1.00	1.00		1.00	1.00	
Frt		1.00	0.85		0.99		1.00	0.96		1.00	0.97	
Flt Protected		1.00	1.00		1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		5085	1583		3498		1770	1781		1770	1801	
Flt Permitted		1.00	1.00		1.00		0.20	1.00		0.61	1.00	
Satd. Flow (perm)		5085	1583		3498		373	1781		1144	1801	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1036	102	0	1035	87	57	164	68	196	533	152
RTOR Reduction (vph)	0	0	63	0	14	0	0	15	0	0	15	0
Lane Group Flow (vph)	0	1036	39	0	1108	0	57	217	0	196	670	0
Turn Type			Perm				Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases			4				2			6		
Actuated Green, G (s)		17.0	17.0		17.0		20.0	20.0		20.0	20.0	
Effective Green, g (s)		17.0	17.0		17.0		20.0	20.0		20.0	20.0	
Actuated g/C Ratio		0.38	0.38		0.38		0.44	0.44		0.44	0.44	
Clearance Time (s)		4.0	4.0		4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)		1921	598		1321		166	792		508	800	
v/s Ratio Prot		0.20			c0.32			0.12			c0.37	
v/s Ratio Perm			0.02				0.15			0.17		
v/c Ratio		0.54	0.06		0.84		0.34	0.27		0.39	0.84	
Uniform Delay, d1		10.9	8.9		12.8		8.2	7.9		8.4	11.1	
Progression Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		1.1	0.2		6.5		5.6	0.9		2.2	10.2	
Delay (s)		12.0	9.1		19.3		13.8	8.8		10.6	21.2	
Level of Service		B	A		B		B	A		B	C	
Approach Delay (s)		11.8			19.3			9.7			18.9	
Approach LOS		B			B			A			B	

Intersection Summary			
HCM Average Control Delay	15.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	45.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	76.5%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	EBR	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	1036	102	1122	57	232	196	685
v/c Ratio	0.54	0.15	0.84	0.34	0.29	0.39	0.84
Control Delay	12.2	3.4	20.6	15.4	8.2	11.3	23.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	12.2	3.4	20.6	15.4	8.2	11.3	23.4
Queue Length 50th (ft)	72	0	129	9	31	31	138
Queue Length 95th (ft)	104	21	#235	34	64	70	#316
Internal Link Dist (ft)	420		420		420		420
Turn Bay Length (ft)		165					
Base Capacity (vph)	1921	661	1335	166	807	508	815
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.54	0.15	0.84	0.34	0.29	0.39	0.84

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Attachment C to Agenda Sheet No. 21A

CD of Final EIR for the Chula Vista Bayfront Master Plan and Port Master Plan Amendment (UPD # 83356-EIR-658; SCH# 2005081077)

Note: The Final EIR is also available online at http://www.portofsandiego.org/chula-vista-bayfront-master-plan/environmental-impact-report/cat_view/225-real-estate-projects/227-chula-vista-bayfront-master-plan/519-environmental-impact-reports/504-final-environmental-impact-report-eir.html