LIHU‘E CIVIC CENTER
SITE IMPROVEMENTS
MASTER PLAN

FINAL ENVIRONMENTAL ASSESSMENT
Draft: September 2007

Prepared for:
County of Kaua‘i
Department of Public Works

Prepared by:
PBR Hawaii and Associates, Inc.

This environmental assessment and all ancillary documents were prepared under my direction or supervision and the information submitted, to the best of my knowledge, fully addresses document content requirements as set forth in Sections 11-200-17 and 11-200-18, Hawai‘i Administrative Rules, as appropriate.

Donald Fujimoto, P.E.  Date
County Engineer, Department of Public Works
County of Kaua‘i
TABLE OF CONTENTS

1.0 INTRODUCTION .......................................................................................................................... 1-1
  1.1 PROJECT SUMMARY ..................................................................................................................... 1-1
  1.2 LOCATION ...................................................................................................................................... 1-3
  1.3 LAND OWNERSHIP ....................................................................................................................... 1-3
  1.4 IDENTIFICATION OF APPLICANT ............................................................................................... 1-3
  1.5 IDENTIFICATION OF ENVIRONMENTAL CONSULTANT .......................................................... 1-3
  1.6 IDENTIFICATION OF ACCEPTING AGENCY .............................................................................. 1-7
  1.7 COMPLIANCE WITH STATE OF HAWAI’I AND COUNTY OF KAUA’I ENVIRONMENTAL LAWS ........................................................................................................ 1-7
  1.8 IDENTIFICATION OF AGENCIES AND COMMUNITY GROUPS CONSULTED .................. 1-7
  1.9 STUDIES CONTRIBUTING TO THIS ENVIRONMENTAL ASSESSMENT ..................................... 1-9

2.0 PROJECT DESCRIPTION ............................................................................................................. 2-1
  2.1 BACKGROUND INFORMATION ................................................................................................. 2-1
    2.1.1 Lihu’e Civic Center ................................................................................................................. 2-1
    2.1.2 Project Need .............................................................................................................................. 2-1
    2.1.3 Project Objectives .................................................................................................................... 2-2
    2.1.4 Planning Process ...................................................................................................................... 2-2
  2.2 EXISTING USES .......................................................................................................................... 2-3
  2.3 SURROUNDING USES ................................................................................................................... 2-7
  2.4 DESCRIPTION OF THE PROPOSED SITE IMPROVEMENTS .................................................... 2-8
    2.4.1 Proposed Master Plan .............................................................................................................. 2-8
    2.4.2 Key Project Components ........................................................................................................ 2-8
    2.4.3 Roadway Improvements ......................................................................................................... 2-15
    2.4.4 Overhead Utilities ................................................................................................................... 2-17
  2.5 PROPOSED DEVELOPMENT TIMETABLE AND PRELIMINARY COST ESTIMATES .......... 2-18

3.0 LAND USE CONFORMANCE ..................................................................................................... 3-1
  3.1 STATE OF HAWAI’I ....................................................................................................................... 3-1
    3.1.1 State Environmental Review Law (Chapter 343, Hawaii Revised Statutes) ....................... 3-1
    3.1.2 State Land Use Law (Chapter 205, Hawaii Revised Statutes) ............................................. 3-1
  3.2 COUNTY OF KAUA’I .................................................................................................................... 3-1
    3.2.1 The Kaua’i General Plan ........................................................................................................ 3-1
    3.2.2 Lihu’e Development Plan ..................................................................................................... 3-5
    3.2.3 County Zoning ....................................................................................................................... 3-6
    3.2.4 Special Management Area .................................................................................................... 3-9
  3.3 FEDERAL ...................................................................................................................................... 3-9
    3.3.1 Americans with Disabilities Act (ADA) .................................................................................. 3-9
  3.4 NATIONAL AND STATE REGISTERS OF HISTORIC PLACES .............................................. 3-9
  3.5 APPROVALS AND PERMITS ...................................................................................................... 3-11

4.0 DESCRIPTION OF THE AFFECTED NATURAL ENVIRONMENT, POTENTIAL IMPACTS AND MITIGATION MEASURES ............................................................................ 4-1
  4.1 CLIMATE ..................................................................................................................................... 4-1
    4.1.1 Existing Conditions ................................................................................................................... 4-1
    4.1.2 Potential Impacts and Mitigation ............................................................................................. 4-1
  4.2 GEOLOGY AND TOPOGRAPHY ................................................................................................. 4-1
4.2.2 Potential Impacts and Mitigation ................................................................. 4-2

4.3 SOILS .............................................................................................................. 4-2
4.3.1 Soil Conservation Service Soil Survey ......................................................... 4-6
4.3.2 Land Study Bureau Detailed Land Classification ....................................... 4-6
4.3.3 Agricultural Lands of Importance to the State of Hawai‘i ......................... 4-6
4.3.4 Potential Impacts and Mitigation ............................................................... 4-7

4.4 NATURAL HAZARDS ...................................................................................... 4-7
4.4.1 Existing Conditions .................................................................................. 4-7
4.4.2 Potential Impacts and Mitigation ............................................................... 4-10

4.5 FLORA ............................................................................................................. 4-10
4.5.1 Existing Conditions .................................................................................. 4-10
4.5.2 Potential Impacts and Mitigation ............................................................... 4-11

4.6 FAUNA ............................................................................................................. 4-11
4.6.1 Existing Conditions .................................................................................. 4-11
4.6.2 Potential Impacts and Mitigation ............................................................... 4-12

5.0 ASSESSMENT OF EXISTING HUMAN ENVIRONMENT, POTENTIAL IMPACTS, AND MITIGATION MEASURES ............................................................................................................... 5-1

5.1 ARCHAEOLOGICAL, CULTURAL AND HISTORIC RESOURCES .................... 5-1
5.1.1 Existing Conditions .................................................................................. 5-1
5.1.2 Potential Impacts and Mitigation ............................................................... 5-2

5.2 NOISE ............................................................................................................ 5-3
5.2.1 Existing Conditions .................................................................................. 5-3
5.2.2 Potential Impacts and Mitigation ............................................................... 5-3

5.3 AIR QUALITY .................................................................................................. 5-3
5.3.1 Existing Conditions .................................................................................. 5-3
5.3.2 Potential Impacts and Mitigation ............................................................... 5-4

5.4 VISUAL RESOURCES .................................................................................... 5-4
5.4.1 Existing Conditions .................................................................................. 5-4
5.4.2 Potential Impacts and Mitigation ............................................................... 5-5

5.5 SOCIO-ECONOMIC CHARACTERISTICS .................................................... 5-5
5.5.1 Community Character ............................................................................ 5-5
5.5.2 Population ................................................................................................ 5-6
5.5.3 Economy .................................................................................................. 5-7

5.6 INFRASTRUCTURE ......................................................................................... 5-7
5.6.1 Roadways and Traffic ............................................................................. 5-7
5.6.2 Water ........................................................................................................ 5-21
5.6.3 Wastewater ............................................................................................ 5-22
5.6.4 Drainage ................................................................................................. 5-22
5.6.5 Electrical and Communication Systems .................................................. 5-23
5.6.6 Solid Waste Disposal ............................................................................. 5-24

5.7 PUBLIC SERVICES ........................................................................................ 5-24
5.7.1 Police Protection ..................................................................................... 5-24
5.7.2 Fire Protection ........................................................................................ 5-25
5.7.3 Education ............................................................................................... 5-25
5.7.4 Health Care Services ............................................................................ 5-26
5.7.5 Recreational Facilities .......................................................................... 5-26

6.0 DESCRIPTION OF ALTERNATIVES ......................................................... 6-1

6.1 NO ACTION ALTERNATIVE ........................................................................... 6-1
6.2 DESIGN ALTERNATIVES ............................................................................. 6-1
6.2.1 Elaha Street Alternatives .......................................................................... 6-1
6.2.2 Location of the Parking Structures .................................................................................................. 6-2
6.3 PREFERRED ALTERNATIVE .............................................................................................................. 6-3

7.0 DETERMINATION, FINDINGS, & REASONS FOR SUPPORTING THE DETERMINATION .......................................................... 7-1
7.1 SIGNIFICANCE CRITERIA .................................................................................................................. 7-1
7.2 DETERMINATION ............................................................................................................................ 7-5

8.0 REFERENCES ................................................................................................................................. 8-1

9.0 COMMENT LETTERS ON THE DRAFT ENVIRONMENTAL ASSESSMENT AND RESPONSES .................................................................................. 9-1

LIST OF APPENDICES

APPENDIX A: TRAFFIC STUDY (M&E PACIFIC, INC.)
APPENDIX B: CONSTRUCTION COST ESTIMATES (RIDER HUNT LEVETT & BAILEY)
LIST OF FIGURES

FIGURE 1: LIHU‘E CIVIC CENTER SITE IMPROVEMENTS PROPOSED MASTER PLAN ............ vii
FIGURE 2: REGIONAL LOCATION MAP ................................................................. 1-4
FIGURE 3: AERIAL PHOTOGRAPH OF EXISTING PROJECT SITE .............................. 1-5
FIGURE 4: TAX MAP .......................................................................................... 1-6
FIGURE 5: EXISTING PROJECT SITE .................................................................... 2-6
FIGURE 6: PRELIMINARY PHASING PLAN .......................................................... 2-18
FIGURE 7: STATE LAND USE DISTRICTS ................................................................. 3-2
FIGURE 8: KAUA‘I GENERAL PLAN-LIHU‘E PLANNING DISTRICT LAND USE MAP .... 3-3
FIGURE 9: KAUA‘I GENERAL PLAN-LIHU‘E PLANNING DISTRICT HERITAGE RESOURCES 3-4
FIGURE 10: LIHU‘E DEVELOPMENT PLAN ............................................................. 3-7
FIGURE 11: COUNTY ZONING ............................................................................ 3-8
FIGURE 12: SPECIAL MANAGEMENT AREA ......................................................... 3-10
FIGURE 13: SOIL CONSERVATION SERVICE SOIL SURVEY MAP ...................... 4-3
FIGURE 14: LAND STUDY BUREAU ..................................................................... 4-4
FIGURE 15: AGRICULTURAL LANDS OF IMPORTANCE TO THE STATE OF HAWAI‘I .... 4-5
FIGURE 16: FLOOD INSURANCE RATE MAP ...................................................... 4-8
FIGURE 17: TSUNAMI EVACUATION ZONE AND HURRICANE ‘INIKI OVERWASH BOUNDARY ................................................................. 4-9

LIST OF TABLES

TABLE 1: PARKING SUMMARY ............................................................................ 2-11
TABLE 2: ORDER-OF-MAGNITUDE COST ESTIMATES BY PHASE ......................... 2-19
TABLE 3: OTHER POTENTIAL COSTS ................................................................. 2-19
TABLE 4: LIST OF ANTICIPATED PERMITS AND APPROVALS .............................. 3-11
TABLE 5: EXISTING TRAFFIC CONDITIONS ....................................................... 5-11
TABLE 6: DAILY TRAFFIC VOLUMES AT KŪHĪO HIGHWAY AND RICE STREET .......... 5-14
TABLE 7: PROJECTED TRAFFIC CONDITIONS WITHOUT THE PROPOSED IMPROVEMENTS (AMBIENT SCENARIO 1) ................................................................. 5-18
TABLE 8: PROJECTED TRAFFIC CONDITIONS WITH THE PROPOSED IMPROVEMENTS .... 5-20
PROJECT OVERVIEW

The Lihue Civic Center is an approximately 16-acre site in the heart of Lihue Town, Kauai. It is the government seat of the island, with both County and State offices, and is surrounded by a mix of public uses, commercial, retail and office buildings. It also is the site of civic gatherings, celebrations and parades. Several civic buildings and much of the eastern block of the Civic Center have been listed on both the State and National Registers of Historic Places. This includes the Historic County Building, the Annex and the old State Judiciary building.

In 1989, the County of Kauai purchased the old Lihue Shopping Center on Rice Street with the vision to expand the existing Civic Center. The 8.7-acre property they acquired comprises the western half of the project site. The vision for the expanded Civic Center is best described in the County’s 2000 General Plan Update:

> The heart of Lihue Town is the government and cultural center, surrounded by business and professional offices, shops and restaurants. Landscaping and well-marked pathways link the historic County Building, the Kauai Museum, the County Civic Center, and the State Office Building in a campus setting. Parking is primarily provided in a new County-State parking structure located behind the County Office Building, allowing other parts of the campus to be opened up for pedestrian enjoyment. (Kauai General Plan Update 2000, p. 6-17)

While the County has renovated many of the old shopping center buildings into offices and moved several agencies into the renovated buildings, there are remnants of its commercial past still remaining within the Civic Center. This includes the Hawaiian TelCom building, which sits on an outparcel that is not affected by the proposed improvements, a grocery store, and large parking lots surrounding the buildings on all sides. With nearly 50 percent of the site covered by parking (7.8 acres), the property at large still requires site improvements in order to fulfill its vision of a pedestrian-friendly and campus-like setting and to connect the various civic buildings to each other and surrounding uses such as the Kauai Museum.

In 2003, the County of Kauai’s Department of Public Works contracted PBR Hawaii to develop a master plan for these site improvements. The plan focuses mainly on improving the pedestrian walkways and the parking areas between and around the County buildings; it does not include architectural programming or significant renovations to the buildings themselves. The plan recommends the closure of Eiwa Street to connect the two halves of the Civic Center and unites them with expanded park areas and a pedestrian mall to encourage Civic Center users to walk rather than drive between the Historic County Building on the eastern block and the rest of the County offices on the western block. This is recommended as one of the last phases of the plan to allow improvements to the surrounding streets to precede it and improve existing traffic conditions.
After several community and agency meetings, workshops were held and public input received from 2003 to 2006, the preferred plan has been revised and is submitted as part of this Draft Environmental Assessment (EA) (Figure 1). Before finalizing the plan, the County decided to initiate the Chapter 343 process in order to obtain additional public input. The master plan described in this Draft EA may be refined and updated in the Final EA.
Figure 1: Līhu'e Civic Center Site Improvements Proposed Master Plan
**1.0 INTRODUCTION**

This Environmental Assessment (EA) has been prepared in compliance with Chapter 343, Hawai‘i Revised Statutes (HRS) for the proposed Lihue Civic Center Site Improvements Master Plan.

**1.1 PROJECT SUMMARY**

<table>
<thead>
<tr>
<th><strong>Project Name:</strong></th>
<th>Lihue Civic Center Site Improvements Master Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Location:</strong></td>
<td>Lihue, Kalapaki Ahupua’a, Kaua‘i, Hawaii’i</td>
</tr>
<tr>
<td><strong>Judicial District:</strong></td>
<td>Lihue</td>
</tr>
<tr>
<td><strong>Applicant:</strong></td>
<td>County of Kaua‘i, Department of Public Works, Building Division</td>
</tr>
<tr>
<td><strong>Landowner and Tax Map Keys:</strong></td>
<td>County of Kaua‘i (TMKs: 3-6-05:02, 03, 06, 27 and 28 and portions of Rice, Hardy, and ‘Umii Streets and ‘Eiwa Street) State of Hawaii (TMKs: 3-6-05:1, 11, and 30 and portions of Kuhio and Kaumualii Highways)</td>
</tr>
<tr>
<td><strong>Project Area:</strong></td>
<td>16 acres more or less</td>
</tr>
<tr>
<td><strong>Existing Uses:</strong></td>
<td>Lihue Civic Center, parking lots, park, roadways</td>
</tr>
<tr>
<td><strong>Proposed Uses:</strong></td>
<td>Site improvements to the Lihue Civic Center including new pedestrian paths, expanded park areas, and new parking, bicycle and bus facilities. Potential sites for public art, gateway features and landmarks are also identified in the master plan.</td>
</tr>
</tbody>
</table>
| **Land Use Designations:** | State Land Use: Urban  
County General Plan: Urban Center  
State Zoning: General Commercial (C-G) and  
Residential/Special Treatment District-Public Facilities (R-1/ST-P) |
| **Special Management Area (SMA):** | Not within the SMA |
Need for Assessment: Compliance with Chapter 343, Hawai‘i Revised Statutes
Use of County lands and funds, Use of State lands, and
Use within a Historic District as designated in the Hawai‘i and
National Registers of Historic Places

Permits/Approvals Required:
- Permission to perform work within State Highway Right-of-Way
- Historic Site Review
- National Pollutant Discharge Elimination System (NPDES)
- Street Closure Resolution
- County Zoning Permits

Accepting Agency: County of Kaua‘i, Department of Public Works

Anticipated Determination: Finding of No Significant Impact (FONSI)
1.2 LOCATION

The Lihu’e Civic Center is located within Lihu’e Town, Kalapaki Ahupua’a on the island of Kaua‘i and is bounded to the north by Hardy Street, to the south by Rice Street, to the west by Kūhiō Highway, and to the east by ʻUmi Street. Figure 2 shows a regional location map of the project site and Figure 3 is an aerial photograph of the area.

1.3 LAND OWNERSHIP

The County of Kaua‘i is the fee owner of the parcels identified as tax map keys: 3-6-05: 02, 03, and 06. It is also the owner of ʻEiwa Street and the portions of Rice, Hardy and ʻUmi Streets included in the master plan. The State of Hawai‘i is the fee owner of the parcels identified as tax map keys: 3-6-05:1, 11, and 30 and the portions of Kūhiō and Kaumuali‘i Highways included in the master plan. A tax map highlighting the project areas is provided in Figure 4.

1.4 IDENTIFICATION OF APPLICANT

The applicant is the County of Kaua‘i Department of Public Works (DPW).

Contact: Douglas Haigh, Building Division Chief
County of Kaua‘i Department of Public Works
4444 Rice Street, Suite 175
Lihu‘e, Hawai‘i 96766
Telephone: (808) 241-6655
Fax: (808) 241-6806

1.5 IDENTIFICATION OF ENVIRONMENTAL CONSULTANT

The County of Kaua‘i Department of Public Works’ consultant for the project is PBR HAWAII.

Contact: Kimi Yuen, Associate
PBR HAWAII
1001 Bishop Street
ASB Tower, Suite 650
Honolulu, Hawai‘i 96813
Telephone: (808) 521-5631
Fax: (808) 523-1402
Figure 2: Regional Location Map
Figure 3: Aerial Photograph of Existing Project Site
1.6 IDENTIFICATION OF ACCEPTING AGENCY

Because this is an agency action, the accepting agency is the County of Kaua’i Department of Public Works, the same as the applicant.

Contact: Donald Fujimoto, County Engineer
County of Kaua’i Department of Public Works
4444 Rice Street, Suite 275
Lihu’e, Hawai’i 96766
Telephone: (808) 241-6600
Fax: (808) 241-6604

1.7 COMPLIANCE WITH STATE OF HAWAI’I AND COUNTY OF KAUA’I ENVIRONMENTAL LAWS

This document has been prepared in accordance with the provisions of the State of Hawai’i’s Environmental Impact Statement Law, Chapter 343, HRS and Hawai’i Administrative Rules (HAR) Title 11, Department of Health, Chapter 200, Environmental Impact Rules. Section 343-5 HRS establishes nine (9) “triggers,” which require the environmental review process. Implementation of the Lihu’e Civic Center Site Improvements Master Plan will involve: 1) the use of County land and funds, 2) the use of State lands, and 3) use within a Historic District as designated in the Hawai’i and National Registers of Historic Places.

1.8 IDENTIFICATION OF AGENCIES AND COMMUNITY GROUPS CONSULTED

Throughout the planning process for this project, the County of Kaua’i and State of Hawai’i government agencies as well as community groups, organizations and individuals were consulted during small and large group meetings, public surveys, workshops, public hearings and community meetings. In addition, other agencies are being consulted for this EA process. The following is a list of the agencies and participants consulted for the project.

COUNTY OF KAUA’I

- Mayor Bryan Baptiste
- County Council
- Council Services
- Department of Public Works
- DPW-Engineering Division
- Planning Department
- Offices of Community Assistance
LIHUE CIVIC CENTER SITE IMPROVEMENTS
FINAL ENVIRONMENTAL ASSESSMENT

- Transportation Agency
- Office of Economic Development
- Civil Defense Agency
- Department of Finance
- Fire Department
- Liquor Control
- County Attorney
- Police Department
- Department of Water
- Prosecuting Attorney
- Personnel Services
- Kaua‘i Historic Preservation Review Commission

STATE AGENCIES
- Department of Accounting & General Services (DAGS)
  - DAGS-Kaua‘i Branch
- Department of Education (DOE)
- Department of Transportation (DOT)
  - DOT-Highways Division Kaua‘i District Office
  - Office of Environmental Quality Control (OEQC)
  - Department of Health Environmental Planning Office
- Department of Land and Natural Resources (DLNR)
  - DLNR-Division of Forestry and Wildlife, Kaua‘i
  - DLNR State Historic Preservation Division (SHPD)
  - DLNR-SHPD Kaua‘i Office
- Office of Planning, DBEDT
- Office of Hawaiian Affairs
- Disability and Communication Access Board
- Wilcox Elementary School

FEDERAL AGENCIES
- US Post Office, Lihu‘e Post Office Postmaster

COMMUNITY ORGANIZATIONS, BUSINESSES, AND INDIVIDUALS
- Lihu‘e Business Association
- Kaua‘i Chamber of Commerce
- Kaua‘i Historical Society
- County Building Restoration Committee (CBRC)
- Grove Farm Homestead Museum
- Kaua‘i Community Federal Credit Union
- First Hawaiian Bank
- Bank of Hawai‘i
• Lihu‘e Credit Union
• Big Save, Inc.
• Hawaiian Telcom (formerly Verizon Hawai‘i)
• Hale Pumehana, Inc.
• Lihu‘e Plantation Building
• Lihu‘e Hui
• Marc Ventura (architect for the Kaua‘i Museum expansion plans)
• Kaua‘i Island Utility Cooperative

1.9 STUDIES CONTRIBUTING TO THIS ENVIRONMENTAL ASSESSMENT

The information contained in this report has been gathered from agency and community consultations, document and historical research, surveys and questionnaires, site visits, and generally available information regarding the characteristics of the site and surrounding area, and a technical study, a Traffic Impact Assessment Report (TIAR). The TIAR is provided in its entirety as an appendix to this EA. Construction cost estimates were also prepared by Rider Hunt Levett & Bailey and are also attached as an appendix to this EA.
2.0 PROJECT DESCRIPTION

This section provides background information, identifies the project’s goals and objectives, describes the proposed improvements, delineates construction activities and provides approximate costs.

2.1 BACKGROUND INFORMATION

2.1.1 Līhuʻe Civic Center

The Līhuʻe Civic Center is an approximately 16-acre site in the heart of Līhuʻe Town, Kauaʻi. It is the government seat of the island, with both County and State offices, and is surrounded by a mix of public uses, commercial, retail and office buildings. It is also the site of civic gatherings, celebrations and parades. The project site is bounded by Rice Street, Hardy Street, ʻUmi Street, and Kūhiō Highway and bisected into two blocks by ʻEiwa Street. Several civic buildings and much of the eastern block of the Civic Center have been listed on both the State and National Registers of Historic Places. This includes the Historic County Building, the Annex and the old State Judiciary building. (See Figure 3 and Figure 5.)

2.1.2 Project Need

In 1989, the County of Kauaʻi purchased the old Līhuʻe Shopping Center, an 8.7-acre property directly west of the original Civic Center. Moved by community input, the Council purchased the site with the vision to expand the existing Civic Center and create a central location for the County’s headquarters. The vision for the new Civic Center is best described in the County’s 2000 General Plan Update:

The heart of Līhuʻe Town is the government and cultural center, surrounded by business and professional offices, shops and restaurants. Landscaping and well-marked pathways link the historic County Building, the Kauaʻi Museum, the County Civic Center, and the State Office Building in a campus setting. Parking is primarily provided in a new County-State parking structure located behind the County Office Building, allowing other parts of the campus to be opened up for pedestrian enjoyment. (Kauaʻi General Plan Update 2000, p. 6-17)

Since then, the County has renovated many of the old shopping center buildings into offices and moved several agencies into the renovated buildings. However, the County felt the Civic Center still required site improvements to bring the vision of the Civic Center to fruition. Currently, large parking lots surround the County buildings with nearly 50 percent of the site covered by asphalt (7.8 acres). There are no sidewalks connecting the two halves of the Civic Center and people often drive from one side to the other. The County of Kauaʻi Department of Public Works subsequently contracted PBR Hawaii to develop a master plan of site improvements.
for the Līhu‘e Civic Center. The proposed master plan for the Līhu‘e Civic Center is shown in Figure 1.

2.1.3 Project Objectives
The following project objectives were compiled from input gathered from community members, neighboring businesses, the Līhu‘e Business Association, County and State representatives and staff and the project team.

- Create a campus-like Civic Center by increasing public open spaces and landscaped areas. Beautify and expand the County Lawn. Provide more shade by planting more trees.
- Develop a sense of place, have pride in the area. Embody and exude the spirit of a Civic Center.
- Create a safe, convenient, and pleasant pedestrian environment with continuous, ADA-accessible walkways.
- Provide a balanced design solution that supports multi-modal transportation systems and provides accommodations for pedestrians, bicyclists and transit service – not just cars.
- Preserve and accentuate historic buildings.
- Simplify and organize parking.
- Improve safety around the area. Eliminate cut-through vehicle traffic.
- Bring the community back to the Civic Center. Create a place where people can gather, hold special events, eat lunch, where they enjoy spending time.

These objectives played an integral part in the development of the master plan.

2.1.4 Planning Process
In 2003, the County of Kaua‘i Department of Public Works contracted PBR Hawaii to develop a master plan for site improvements at the Civic Center to assist the County in identifying improvement projects at the Līhu‘e Civic Center and phasing its construction. It did not include significant improvements or changes to the buildings since the County had already initiated or completed most of the building renovations.

At the beginning of the project, kick-off meetings were held with the Līhu‘e Business Association and all County department heads. As part of these meetings, a survey was distributed to key stakeholders including all County employees working at the Civic Center and the Līhu‘e Business Association. Input was also sought from the State of Hawai‘i and the neighboring businesses and organizations such as the Kaua‘i Museum, Hawaiian TelCom (formerly Verizon Hawaii), Big Save, the Līhu‘e Post Office, Kaua‘i Historical Society, and the surrounding banks, businesses, and office building owners. Small focus group meetings were held where several early conceptual plans were presented to them and the participants commented and critiqued the various plans.
During the first year of the project, various alternatives were developed and input was gathered from all the County agencies, the State of Hawai‘i, neighboring businesses and facilities as well as the Lihu‘e Business Association and other interested community members. Multiple conceptual alternatives were developed, reviewed by the project team and interested community members, and refined into a draft master plan for the Lihu‘e Civic Center Site Improvements as submitted in July 2005 to the County Council. Input was gathered at various public meetings and posted on the County’s website for public input. Input was also received from the County Council on several occasions including meetings to review early alternative conceptual plans in 2004, a workshop in December 2005 and a regular Council meeting in August 2006.

2.2 EXISTING USES

The Lihu‘e Civic Center is comprised of County and State government office buildings, the County Lawn, parking lots, and a transit stop (see Figure 3 and Figure 5). There are two outparcels within the project bounds— the Kaua‘i Museum and Hawaiian Telcom. Although significant improvements were not considered for these outparcels, improvements to the surrounding streets were considered as part of this master plan.

**Historic County Building**

Most of the County of Kaua‘i offices are located in the Historic County Building on the eastern block of the Civic Center, and in the Mo‘ikeha, P‘i‘ikoi, and Kapule buildings on the western block. The County buildings on the western block were originally built around 1966 as part of the Lihu‘e Shopping Center. In 1989, the County purchased the property and has been renovating the interiors into office space in phases. The Mo‘ikeha and Kapule Buildings are fully renovated and occupied while there are portions of the P‘i‘ikoi Building that are currently vacant and available for future offices.

**Mo‘ikeha Building**

On the eastern block, several buildings are considered historic, including the
Historic County Building which was built in 1912, and the State Courthouse and County Annex buildings, both built in the 1930s. The Historic County Building currently houses the County Clerk’s office, Councilmember offices, Council Services, and the Elections Division. The building also houses the Kaua‘i Historical Society, which maintains a library of historic resources and provides guided history tours and educational programs. The County Annex Building was designed by Hart Wood, a local architectural icon. The building is currently vacant but the County is working on a plan to relocate the Elections Division of the Office of the County Clerk to the Annex.

County Lawn

The County Lawn in front of the Historic County Building is considered historic and is included in within the Līhuʻe Civic Center Historic District as described in both the State and National Registers of Historic Places. It includes the double row of royal palm trees that once lined a dirt road that lead to the steps of the Historic County Building. Some of the palms have been removed for safety due to age, illness, or damage sustained during the hurricanes. There are also several large monkey pod trees that edge the County Lawn and several memorial and commemorative sculptures on the east and west corners facing Rice Street. Some community members have voiced concern over filling the historic County Lawn with too many memorials.

Līhuʻe Courthouse

Three parcels at the northeast corner of the Civic Center are State-owned. They consist of the former Līhuʻe Courthouse lot, the State Office Building parcel, and a metered outdoor parking lot which connects to the adjacent County parking lot within a looped driveway. The historic Courthouse building is a two-story building with one level partially sunken below grade, pitched tiled roof and stucco exterior. In contrast, the State Office Building is a modern, four-story structure with below-grade parking.

State Office Building

There are two commercial uses within the Civic Center project bounds. One of them is
Hawaiian TelCom, the local telephone company. It is nestled between the County’s Mo’ikeha and Kapule buildings but it owns the parcel on which its building is located. The other commercial use is the Lihue’e Big Save Market, which is physically adjoined to the County’s Pi‘ikoi Building. Big Save currently leases the space from the County on a short-term, five-year lease, which has been renewed until 2010.

Four roadways form the boundaries of the project site. On the south, Rice Street is a four-lane collector road that runs east-west connecting Kūhiō Highway with Näwiliwili Harbor. Historically, it is one of Lihu’e’s main streets with several commercial uses lining both sides of the street. Many in the community voiced concern that the widening of the street to four lanes and relocation of crosswalks near the Civic Center have made it difficult to cross between the Civic Center and the Lihu’e Post Office and would like to see this area made more pedestrian friendly.

On the west, Kūhiō Highway is a major four-lane roadway which carries regional traffic to, from and through Lihu’e. Just north of the Civic Center it is flanked on both sides by commercial uses. However, right across from the Civic Center, the topography drops off into a large depression that is part of a drainageway that connects to Näwiliwili Gulch.

Hardy Street on the north side of the Civic Center connects Kūhiō Highway on the west to Rice Street on the east. It is a two-lane roadway with a 60-foot right-of-way. Adjacent to the Civic Center, there are sidewalks on the north side of the street but none on the south side along the Civic Center. The County’s bus stop is also located on the south side of Hardy Street.
Figure 5: Existing Project Site
‘Umi Street is a two-lane roadway that runs north-south along the east side of the Civic Center. It connects Rice Street to Ahukini Road and also has a 60-foot right-of-way. Similar to Hardy Street, there are no sidewalks on the Civic Center side of the street but there are sidewalks on the opposite side fronting the commercial and office buildings.

View of ‘Eiwa Street. No sidewalks on either side of the street.

Splitting the Civic Center in two, ‘Eiwa Street provides access to the adjacent parking lots of the Civic Center and is often used by drivers as a short cut through the area. There is on-street parallel parking on both sides of the street but no sidewalks. ‘Eiwa Street forms offset intersections with both ‘Akahi and ‘Elua Streets at Hardy Street on the north and Wa’a Street at Rice Street on the south. These offset intersections make turning movements difficult for drivers.

2.3 SURROUNDING USES

Surrounding the two-block area of the Civic Center is a variety of land uses including commercial and public uses, residential buildings, parks and open space. See Figure 5. South of the Civic Center across Rice Street are several busy commercial uses, including the Halekō Shops, Bank of Hawai‘i, First Hawaiian Bank, Līhu‘e Credit Union, Chevron gas station, and several office buildings. Also on Rice Street are the historic Līhu‘e Post Office, which is heavily used, and the Isenberg Memorial, a small park at the corner of Halekō Road.

North of the Civic Center, opposite Hardy Street, are several commercial, retail and office buildings. They include the Kaua‘i Community Federal Credit Union and its Annex, the Senda Building, Hale Pumehana, and the Līhu‘e Town Center Annex which has a mix of retail and office space. Northeast of the Civic Center at intersection of Hardy and ‘Umi Streets are two public uses— the Līhu‘e Public Library and St. Michaels and All Angels Episcopal Church.

East of the Civic Center, across ‘Umi Street, are more offices and commercial businesses. The Līhu‘e Plaza Building is a two-story building at the corner of Rice and ‘Umi Streets with a mix of retail and office spaces. Further north are several public uses including the State Health Center, Wilcox Elementary School, and the
former police station. Līhuʻe Park and the Kauaʻi War Memorial Convention Hall are further east on the interior of the neighboring block.

West of the project site, opposite Kūhiō Highway is a large drainageway on Kauaʻi County and Amfac/Līhuʻe Plantation property. The drainageway connects under the highway to the old Līhuʻe Mill site and to Nāwiliwili Stream.

2.4 DESCRIPTION OF THE PROPOSED SITE IMPROVEMENTS

2.4.1 Proposed Master Plan
The proposed master plan for the Līhuʻe Civic Center site improvements project is provided in Figure 1. It addresses the various goals and visions for the Civic Center, creating a pedestrian-friendly, campus-like environment by closing ʻEiwa Street to through traffic, unifying the two-block site, and opening the site to more park and open space. It recommends creating pedestrian promenades and pathways to connect the civic buildings to one another, and centralizing parking in parking structures to provide expanded park and open space within the Civic Center. Where appropriate, the master plan shows how bicycle and transit facilities can be accommodated within the Civic Center improvements. Opportunities for public art, gateway features and landmarks are also identified.

The focus of the master plan is the public realm between the buildings as well as the adjacent streetscapes. The proposed master plan does not include any architectural programming or major changes to the existing buildings but it does provide general recommendations for the exteriors or accesses where relevant.

In addition, the master plan does not include major changes to the two outparcels within the Civic Center project bounds—the Kauaʻi Museum and Hawaiian Telcom. Besides maintaining existing vehicle accesses and pedestrian connections to the surrounding Civic Center, no major site improvements are recommended since the properties are owned by private entities. However, special attention was paid to the alignment of pedestrian connections and views in and around the Kauaʻi Museum since the museum is undergoing expansion plans to add an entrance on the north side of the buildings. Input on the Civic Center master plan was specifically sought from the museum’s architect in order to coordinate the two projects.

2.4.2 Key Project Components
The following sections briefly highlight some of the important aspects of the master plan. To further illustrate the proposed improvements, simplified computer-generated three-dimensional models are presented below. They show both the existing Civic Center and the Civic Center with the proposed improvements in a series of before and after images. The landscaping in these renderings is meant to be conceptual and is subject to change.
2.4.2.1 Expanded County Lawn and Central Park

One of the main goals and visions for the Līhu‘e Civic Center Site Improvements project is to increase the green spaces within the Civic Center. With the proposed closure of ‘Eiwa Street, the County Lawn is expanded west to the Kaua‘i Museum and a central park is proposed east of Big Save. These improvements will open up the Civic Center’s façade along Rice Street with a continuous stretch of greenery and provide multiple locations within the Civic Center for public events.

The expanded County Lawn, which will be approximately 36,000 square feet larger, would be improved and landscaped through the replacement of the fallen palms in front of the Historic County Building, the creation of pedestrian walkways, and the installation of more trees and site amenities including benches, trash receptacles and lighting. Similarly, the Central Park will add 37,500 square feet of open space at the center of the Civic Center. A performance space, shade trees and park amenities are envisioned for this park. Depending on need, underground parking could be provided below this park (see Section 2.4.2.4 for more information).

The two expanded open spaces will provide opportunities for the County to host festivals, farmers markets, and other large community gatherings right in the heart of Līhu‘e Town. It will provide government workers and nearby residents and seniors with a pleasant place to meet and eat their lunches. It is an opportunity for the Civic Center to become a focal point for the community, a gathering space and a true amenity for those who live and work in Līhu‘e.
2.4.2.2 Pedestrian Network and Promenades

To encourage walking within the Civic Center, a pedestrian network with promenades and shaded walkways are proposed. A continuous walkway will connect the Moʻikeha Building to the Historic County Building and County Annex. The parking spaces in front of the Historic County Building will be replaced with a 30-foot wide promenade. Also, a new walkway connecting this promenade with the sidewalk on Rice Street as well as sidewalks on all sides of the Historic County Building will be installed reminiscent of the old road that used to lead to the Historic County Building and loop around it.

The covered walkway between the Moʻikeha, Kapule and Piʻikoi Buildings will be renovated and the walkway will connect directly to the intersection of Kūhiō Highway and Hardy Street.

A continuous sidewalk will also be installed on the northern side of the Piʻikoi Building and will connect to the proposed central park/parking structure to the east of Big Save. Pathways will also connect surrounding public streets and interior parking lots to all State and County Buildings within the Civic Center. Wherever possible, direct links are made from internal pathways to crosswalks in the surrounding streets.
The promenade between the Moʻikeha Building and Piʻikoi Building and on the north side of the Kauaʻi Museum will be landscaped with medium canopy shade trees. Since the area is adjacent to a loading area, the promenade will be buffered with a wall and/or thick landscaping to shield the sights and sounds of the trucks. Seating areas and trash receptacles will be provided along the promenade so that there are places for people to sit, relax, or have lunch outdoors. Seating areas could be designed as either benches or tree planters with seat walls.

2.4.2.3 Accessibility

Given the relatively flat topography of the Līhuʻe Civic Center, all walkways will meet accessibility standards as required by Title II of the Americans with Disability Act (1990). Also, the proposed facilities and pathways will comply with appropriate administrative rules of the State of Hawaiʻi Disability and Communication Access Board (HAR Title 11 §216-219). Accessible parking stalls and other amenities such as water fountains will be indicated throughout the area with appropriate signs and markers.

2.4.2.4 Parking Facilities

The parking lots within the Civic Center will be redesigned to be more efficient, organized, and landscaped. Canopy trees will be planted to provide shade and reduce the heat island effect within the Civic Center. Pedestrian paths will connect parking areas to the buildings within the Civic Center and provide accessible connections to the public streets.

There are a total of 721 parking stalls within the County and State parking lots. This includes 20 parallel parking stalls on ʻEiwa Street. At full build-out, the proposed master plan could have as much as 756 parking stalls, an increase of 35 stalls from existing conditions. No changes to the State parking facilities are proposed except for a minor change in the access to the State’s underground parking garage.

**Table 1: Parking Summary**

<table>
<thead>
<tr>
<th></th>
<th>Existing Number of Parking Stalls</th>
<th>Proposed Number of Parking Stalls</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>County Parking Lots</td>
<td>556</td>
<td>611*</td>
<td>+55</td>
</tr>
<tr>
<td>State Parking Lots</td>
<td>145</td>
<td>145</td>
<td>0</td>
</tr>
<tr>
<td>ʻEiwa Street</td>
<td>20</td>
<td>0</td>
<td>-20</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>721</strong></td>
<td><strong>756</strong></td>
<td><strong>+35</strong></td>
</tr>
</tbody>
</table>

*Note: This assumes two parking decks below grade at the Central Park and full build-out of the underground deck at the Hardy Street lot. See discussion in the following text.

Two locations for potential below-grade parking structures are identified in the master plan. The first is located at the corner of Hardy Street and Kūhiō Highway, as recommended in the County General Plan. It is envisioned as having two parking
levels— one at grade and the other below grade. The topography in this area lends itself well to a below-grade deck. Access to the lower level could be reached directly from Hardy Street (see “before” and “after” renderings below). Other ramps between the two parking decks will be located as appropriate. The estimated capacity of this parking lot could be as much as 260 stalls (125 stalls on the lower deck and 135 stalls at grade). For cost considerations, the lower deck could be half the size to save on grading costs but only about 200 stalls would be provided. Cost estimates for both are provided in Section 2.5.

The area fronting Hardy Street will also be redesigned with a wide sidewalk and shade trees leading to the County bus stop, improving pedestrian accessibility and comfort. The corner of Hardy Street and Kūhiō Highway could also feature a sculpture or other landmark to signal the gateway to the Civic Center.

A second parking structure is proposed to the east of the P'i'ikoi Building. It is envisioned primarily as a central park but with parking decks, as needed, below grade (see rendering below). The design of this area is purposefully left flexible in the master plan. During the development of the master plan, two opposing views regarding parking were voiced. Some felt that ample parking should be provided within the Civic Center and that the number...
of parking stalls in the master plan should equal or exceed the current amount. Others felt that the space within the Civic Center was too important to be used for parking and that either the parking should be located offsite or the number of parking stalls should be reduced in order to encourage people to walk or use public transit.

Because this area is one of the last phases of development, the actual design could be determined at a later time after the initial phases of improvements are completed and an updated estimate of parking requirements are studied. To provide some guidance, however, each deck of parking in this designated area is estimated to have 75 parking stalls. In order to match or exceed existing parking counts, two parking decks are required for a total of 150 stalls. This total is included in the parking summary provided in Table 1 and is also used for the cost estimates in Section 2.5. In the other extreme, no underground parking could be provided and the area could be developed into a park. The proposed solution provides flexibility in what is ultimately built and can be weighed against cost and need when appropriate.

The remaining parking areas will be at-grade surface lots and will include sidewalks and landscaping with canopy trees. By redesigning the parking facilities and locating much of the parking below-grade, the amount of landscaped, pervious area is increased by nearly 2.4 acres in the proposed master plan.

Alternate offsite parking areas were also identified in the proposed master plan to help reduce the need for parking within the two-block project site. These include the County’s War Memorial Convention Hall parking lot, which has over 240 stalls that could be used for employee parking during work hours, and partnering with neighboring landowners to build public parking near the Lihue Plantation Building across Rice Street and the Lihue Plaza Building across ‘Umi Street. These offsite parking facilities could be structured parking to increase capacity. For example, adding a second level to the War Memorial parking lot would double the capacity to over 400 stalls and could serve as employee parking and public parking for area businesses, park users and the War Memorial. To further support the use of the War Memorial parking lot or any other offsite parking lot for Civic Center users or employees, a frequent shuttle that runs between the Civic Center and the offsite parking lots should be provided.

**2.4.2.5 Public Art, Gateway Features, Monuments, & Landmarks**

Certain areas in and around the Civic Center have been identified as possible locations for public art and special civic features. They are shown as purple stars in the master plan in Figure 1.

The County Council requested that flagpoles be erected as one of the landmark features. An ideal site for new flagpoles would be at the prominent intersection of Kūhiō Highway and Rice Street fronting the Mo‘ikeha Building.
Another significant entry point for the Civic Center is a proposed roundabout at the ‘Umi Street and Hardy Street intersection. A large sculpture symbolic of Līhuʻe or the Civic Center could be commissioned for this spot. Another option would be to landscape the roundabout with natives or feature landscaping.

Other landmarks or civic features that will be installed include public art, sculptures, fountains, directional signage such as maps of the Civic Center and relocated monuments from the County Lawn. Concern about the growing number of monuments being added to the County Lawn was voiced during some of the community meetings. Some of these monuments could be relocated to the proposed sites which would enable greater public access to them as they would be better showcased along pedestrian paths. It will also clear the County Lawn, opening up the area for public events and festivals.

### 2.4.2.6 Bicycle and Transit Amenities

To support alternative modes of transportation to and from the Civic Center, bicycle and transit amenities will be provided throughout the Civic Center. Bicycle racks will be provided in at least three places within the Civic Center— at the southwest corner of the Piʻikoi Building, on the north side of the Piʻikoi Building, and at the southeast corner of the Historic County Building along the promenade. The County may also install bike racks along public streets, where there is adequate sidewalk widths to support neighboring businesses. Bicyclists would be able to walk their bicycles along any of the pedestrian paths or simply ride in through any of the driveways and parking lots. Bicycle lanes will also be striped in Hardy and ‘Umi Streets with shared routes along Kūhiō Highway and Rice Street which are too narrow to provide dedicated bicycle lanes without condemning private property. The bicycle amenities are shown in yellow in the master plan (Figure 1).

To support transit, there will be two bus stops within the Civic Center. The first is the existing stop on Hardy Street which would remain in its current location. The existing shelter would be renovated and a new curb cut provided so the buses can pull out of the traffic lane to make the stop. Sidewalks and landscaping along Hardy Street will also be installed to improve access and comfort for those using the stop. There will also be pedestrian paths connecting the bus stop directly to the Civic Center through the parking lot. The second bus stop would be added at the porte-cochere fronting the Piʻikoi Building on the Rice Street side of the building. These transit stops are both located off-street and conveniently located for current and future transit routes to and from the Civic Center including the possible Līhuʻe shuttle.

### 2.4.2.7 Landscaping

The landscaping for the Civic Center will include native plants and trees, particularly those symbolic of Kauaʻi or historically significant to Līhuʻe. The proposed master plan recommends replacing the fallen or missing royal palms and preserving all the large monkey pod trees in the County Lawn. Also, as noted earlier, canopy trees will
be planted along pedestrian promenades and in parking areas to provide shade and comfort. Street trees will be consistent along both sides of the roadway and trees planted in the medians will be more vertical and upright to open up distant views. Street trees along commercial areas will be trimmed so their lowest branches are roughly twelve to fifteen feet high to avoid blocking storefronts and signs.

### 2.4.2.8 Signage

A variety of signs will be installed at the Civic Center to help visitors navigate around the facilities as well as to inform them of the rich history that surrounds them. The directory and map located between the Piʻikoi and Moʻikeha Buildings will be updated and improved so they are legible. A duplicate directory will be installed on the north side of the buildings. Another directory will be located near the Historic County Building or Annex.

Signs and plaques that provide information about the historic buildings and other significant features around the Civic Center will be installed. They will have a consistent design and format to help unify them. They also could be numbered and made part of a walking tour for the Civic Center which could later be expanded to include all of Līhuʻe in conjunction with the County’s Urban Design Plan for the town core.

### 2.4.3 Roadway Improvements

A traffic study was prepared by M&E Pacific, Inc. and is attached in its entirety as Appendix A. The traffic study analyzed existing and projected traffic conditions, both with and without the proposed improvements. The study identifies opportunities to balance pedestrian safety and connectivity with vehicle mobility. It also considers community character in its recommendations. The master plan shown in Figure 1 shows proposed roadway improvements for the streets adjacent to the Civic Center based on community priorities and recommendations from the traffic study. The following are brief descriptions of the improvements proposed for the roadways surrounding the Civic Center. More detailed traffic analyses are provided in Section 5.6.1.

#### 2.4.3.1 Rice Street

Within the Civic Center, Rice Street is lined with historic buildings and is envisioned as the “main street” of Līhuʻe. However, the street was recently widened to four lanes and a popular crosswalk near Kele Street was removed. Many community members feel that although traffic flows have improved, Rice Street has become dangerous especially for pedestrians. One of the main improvements proposed in the master plan is to realign the existing County driveway with Kele Street and provide crosswalks in all four directions. The intersection will also be signalized to make crossing at this intersection safer.
In order to break up the roadway and provide a pedestrian refuge, the proposed site improvements include construction of a three-foot landscaped center median. Although the street section along Rice Street varies, wide sidewalks (minimum five feet) and street trees in either tree wells or landscape strips will be provided wherever possible. The recessed parallel parking stalls in front of the Post Office and First Hawaiian Bank will be maintained since the street section in this area is wide enough to accommodate them. Cyclists will continue to share the road, since there is not enough space to include striped bike lanes within the right-of-way.

The existing traffic signals at the intersection of Rice Street and Kūhiō Highway will be adjusted to accommodate forecasted traffic growth. Once Kaumuali‘i Highway is widened to four lanes south of Rice Street, two left turn lanes from Rice Street will be built.

2.4.3.2 Hardy Street

Hardy Street is proposed as a two-lane roadway with a landscaped center median and turn lanes. Bike lanes will be striped on both sides of the street. The intersection of Hardy Street and Kūhiō Highway will be signalized. Existing traffic levels already warrant signalization of this intersection which will improve left turn movements from both Hardy and Kūhiō. A new four-way intersection will be created at Hardy and ‘Akahi Streets and the relocated County driveway. Traffic signals will be installed when increases in traffic levels make turning movements difficult. Breaks in the median are provided at every driveway on Hardy Street and left-turn queuing lanes will be provided particularly at the new Hardy/‘Akahi/County driveway intersection, to allow through traffic to pass cars waiting to make left turns from Hardy Street.
At the intersection of Hardy and ‘Umi Streets, a roundabout is recommended due to the unusual geometry of the intersection and the difficulty of signalizing the intersection. A roundabout would not only be cheaper than traffic signals, but it provides an opportunity to create a landmark for the Civic Center and it would not require condemnation of adjacent properties. Crosswalks are setback from the vehicle entry and exit points to provide drivers with a clear view of pedestrians. Splitter islands near the roundabout will help shelter pedestrians crossing the street.

2.4.3.3 ‘Umi Street
Traffic forecasted for ‘Umi Street is expected to increase but remain low enough to maintain it as a two-lane roadway. On-street parallel parking is provided to supplement parking needs for the Civic Center. Bike lanes will also be provided.

2.4.3.4 ‘Eiwa Street
In order to achieve a more campus-like environment, ‘Eiwa Street will need to be closed. Although some citizens voiced their concern about losing it as a shortcut between Hardy and Rice Street, the proposed improvements to the other roadways should make turning movements at the remaining intersections easier and safer. The removal of ‘Eiwa Street also eliminates the offset intersections of ‘Akahi/Hardy/‘Eiwa Streets and Rice/Wa’a/‘Eiwa Streets. Access to Big Save’s loading area will be maintained via a service road which will be paved to look like a pedestrian path but designed to support the weight of the delivery trucks. Removable bollards should be provided along Rice Street so that the service road is not used by cut-through traffic. The service road will be designed to accommodate the wide turning movements of their delivery trucks, including a forty-foot container truck.

2.4.4 Overhead Utilities
All overhead utilities are recommended to be relocated underground within and on roads adjacent to the Civic Center. This will improve views from the Civic Center and reduce the danger of toppling during high wind events. It will also eliminate them from the sidewalks, clearing a wider area for pedestrians and street amenities.


2.5 PROPOSED DEVELOPMENT TIMETABLE AND PRELIMINARY COST ESTIMATES

The proposed phasing plan for the Lihu‘e Civic Center Site Improvements project is broken down into eight phases (Figure 6). Phases are not tied to any specific length of time and can be either combined or extended over time depending upon available funds. However, the design of the improvements to Hardy Street is expected to commence later this year.

![Figure 6: Preliminary Phasing Plan](image)

Rider Hunt Levett & Bailey prepared construction cost estimates for the proposed master plan. Table 2 summarizes the order-of-magnitude construction cost estimates for each phase. The detailed breakdown of these estimates is provided in Appendix B. The following estimates include a 35 percent contingency.

Other potential costs that may be incurred but are not determined at this time were described throughout Section 2.4. They include items such as offsite parking structures, additional traffic signals at ‘Akahi and Hardy Streets, new shuttle bus services and the relocation of overhead utilities underground. These estimated cost of these items are summarized in Table 3 and are subject to change since it is not determined at this time when or if some of these improvements would be implemented.
### Table 2: Order-of-Magnitude Cost Estimates by Phase

<table>
<thead>
<tr>
<th>PHASE AND BRIEF DESCRIPTION</th>
<th>WITH FULL BUILD-OUT OF UNDERGROUND PARKING</th>
<th>HALF OF THE UNDERGROUND PARKING</th>
<th>NO UNDERGROUND PARKING</th>
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<tbody>
<tr>
<td>Phase 1: Hardy Street Improvements†</td>
<td>$5,852,000</td>
<td>$5,852,000</td>
<td>$5,852,000</td>
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<tr>
<td>Phase 2: Rice Street Parking Lot with Rice/Kele Street crosswalks and signal</td>
<td>$1,230,000</td>
<td>$1,230,000</td>
<td>$1,230,000</td>
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<tr>
<td>Phase 3: County Lawn Improvements</td>
<td>$698,000</td>
<td>$698,000</td>
<td>$698,000</td>
</tr>
<tr>
<td>Phase 4: Hardy Street Parking Lot</td>
<td>$9,096,600**</td>
<td>$5,280,000</td>
<td>$1,475,000</td>
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<tr>
<td>Phase 5: County and State Parking Areas (off ‘Umi Street)</td>
<td>$832,000</td>
<td>$832,000</td>
<td>$832,000</td>
</tr>
<tr>
<td>Phase 6: Pedestrian Promenade, ‘Eiwa Street Closure, Parking</td>
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<tr>
<td>Phase 7: Central Park and Parking Structure</td>
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<td>$4,251,000**</td>
<td>$600,000</td>
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<tr>
<td>Phase 8: Kūhiō Hwy/Rice Street Landscaping</td>
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<td><strong>TOTAL</strong></td>
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<td><strong>$19,751,000</strong></td>
<td><strong>$12,295,000</strong></td>
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</table>

*Prepared by Rider Hunt Levett & Bailey (May 2005) unless otherwise noted. All estimates include 35 percent contingency.

**Extrapolated from Rider Hunt estimates.

†$3,300,000 of the cost estimate covers work estimated and escalated from the County Department of Public Works 3/22/05 cost estimate. Includes improvements to Hardy Street from Kūhiō Highway to Rice Street.

### Table 3: Other Potential Costs

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>ESTIMATED COST</th>
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<tbody>
<tr>
<td>Parking structure above grade at War Memorial</td>
<td>$35,000 per stall</td>
</tr>
<tr>
<td>Parking structure above grade at Lihu‘e Plantation Building</td>
<td>$40,000 per stall</td>
</tr>
<tr>
<td>Traffic signal at ‘Akahi and Hardy Streets</td>
<td>$250,000</td>
</tr>
<tr>
<td>Relocation of overhead utility lines underground</td>
<td>$350 per linear foot</td>
</tr>
<tr>
<td>Shuttle bus (estimate per service hour)</td>
<td>$550.59 per hour*</td>
</tr>
</tbody>
</table>

*Note: 2002 national average estimate includes all costs associated with operation (labor, fuel, maintenance, etc.) and was provided by Janine Rapeso, County Executive on Transportation (4/28/2005). All other costs prepared by Rider Hunt (May 2005).
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3.0 LAND USE CONFORMANCE

The processing of various permits and approvals are prerequisites to the implementation of the Lihu’e Civic Center Site Improvements. Relevant State of Hawai‘i and County of Kaua‘i land use plans, policies, and ordinances are described below.

3.1 STATE OF HAWAI‘I

3.1.1 State Environmental Review Law (Chapter 343, Hawai‘i Revised Statutes)
The State Environmental Review Law (Chapter 343, Hawai‘i Revised Statutes (HRS)) requires an environmental assessment for any action that proposed the use of State or County lands and funds. It also requires one for any improvements in a historic district. This environmental assessment has been prepared in compliance with Chapter 343, HRS as the proposed Lihu’e Civic Center site improvements requires both the use of County land and funds and a historic district.

3.1.2 State Land Use Law (Chapter 205, Hawai‘i Revised Statutes)
The State Land Use Law (Chapter 205, HRS), establishes the State Land Use Commission and authorizes this body to designate all lands in the State into one of four districts: Urban, Rural, Agricultural, or Conservation.

The proposed Civic Center site improvements are located within the State Urban District (Figure 7). The proposed improvements will be consistent with uses allowed within the Urban District.

3.2 COUNTY OF KAUA‘I

3.2.1 The Kaua‘i General Plan
The General Plan (GP) of the County of Kaua‘i is a long-range policy document that fulfills legal mandates of State Law and the Charter of the County of Kaua‘i. It is intended to help guide long-range development for the enhancement and improvement of life on Kaua‘i, advance the County’s vision for Kaua‘i and establish the strategies to help achieve that vision including recommended land uses. The GP was last updated in 2000.

According to the GP, the Lihu’e Planning District is considered the “heart” of Kaua‘i. On the GP Land Use Map (Figure 8), large portions of Lihu’e are designated as Urban Center, with the Civic Center located at the core.
Figure 7: State Land Use Districts
Figure 8: Kaua‘i General Plan-Lihu‘e Planning District Land Use Map
Figure 9: Kaua‘i General Plan-Lihu‘e Planning District Heritage Resources
The General Plan also describes the vision for the Civic Center:

The heart of Lihue Town is the government and cultural center, surrounded by business and professional offices, shops and restaurants. Landscaping and well-marked pathways link the historic County Building, the Kauai Museum, the County Civic Center, and the State Office Building in a campus setting. Parking is primarily provided in a new County-State parking structure located behind the County Office Building, allowing other parts of the campus to be opened up for pedestrian enjoyment. The County, the Kauai Visitors Bureau, and the Kauai Museum collaborate in staffing a visitor center, which provides orientation to Lihue and to visitor attractions around the island. (Kauai General Plan 2000, Sec. 6.3.2)

The General Plan also identifies issues and opportunities for renewing Central Lihue:

Renewal of Central Lihue. This has been a long-term goal, as reflected in the 25-year-old Lihue Development Plan report. The acquisition and renovation of old Lihue Shopping Center for modern County offices was a major step towards this goal. However, revitalization of the Central Lihue will require additional government investment and a careful plan to attract visitors and other sources of business – especially in light of the dispersal of new government offices to the Airport area. (Kauai General Plan 2000, Sec. 6.3.3)

The Heritage Resources map for the Lihue Planning District is shown in Figure 9. It highlights the area and notes the four historic buildings located within the project site. These are the Historic County Building, the County Annex, the Lihue Courthouse, and the Kauai Museum’s Wilcox Building. It also shows the Lihue Post Office across Rice Street and Lihue Park to the east.

Discussion: Many of the visions and goals from the 2000 General Plan are incorporated in the design of the Lihue Civic Center Site Improvements Master Plan as is the one of the bases for the proposed project. The proposed plan also respects the historic buildings in and around the area, providing better pedestrian access, landscaping, and signage. The proposed master plan is consistent with the County General Plan.

3.2.2 Lihue Development Plan

The Lihue Development Plan (DP) was last updated in 1976 by EDAW Inc. and Muroda & Associates and was created to coordinate the future development and growth of Lihue including the growth of government. The DP ranked the Civic Center as the number one priority in terms of importance and cited the following goals and objectives:

A. Develop a Civic Center plan showing the placement of buildings, design, landscaping
B. Provide area for Civic Center growth
C. Design of Civic Center should reflect the image of the Garden Island
D. Expand and maintain a cultural center

At the time the DP was written, the Civic Center occupied only the block bounded by ‘Eiwa, Hardy, Rice and ‘Umi Streets. It was assumed that the Lihue Shopping Center would remain in its location at the corner of Kūhiō Highway and Rice Street. It did not foresee the eventual conversion of the western block to civic use. Instead, the DP recommended that the County convert the land where Lihue Park is located (east of ‘Umi Street near the War Memorial) to County and State office space with a smaller, passive Central Park developed between it and the War Memorial. See Figure 10.

In summary, the DP states:

*This program to develop a larger and better civic center for Lihue is consistent with expressed community goals. It is important to note that the present location of the Civic Center is of tremendous significance to the identity of Lihue, the proper functioning of the various State and County agencies, and of the valuable interaction between government, private industry, and the public.*

**Discussion:** While the current location of the expanded Civic Center has shifted to the west rather than the east as proposed the 1976 DP, the general sentiment of a centralized, campus-like Civic Center is still consistent the GP and the proposed site improvements. The Civic Center is still centered around the Historic County Building and the existing configuration actually provides much more space for expansion without encroaching upon Lihue Park, which is an important community amenity with its large playfields.

### 3.2.3 County Zoning

Similar to the State Land Use Districts, the County of Kauai’s Comprehensive Zoning Ordinance (CZO) regulates the type of land uses permitted on the island and their locations. However, the CZO is much more specific and detailed than the State Land Use Districts in its regulation of permitted uses, design standards, and building requirements.

The zoning for the project site is split between General Commercial (C-G) and Residential/Special Treatment District – Public (R-1/ST-P). The C-G portion of the site lies between Kūhiō Highway and ‘Eiwa Street (the former shopping center site) and the R-1/ST-P portion lies east of ‘Eiwa Street and extends to ‘Umi Street (Figure 11). Both zones are compatible with Civic Center uses and the Special Treatment – Public Use District overlay recognizes its civic core. No change in zoning is recommended or required for the proposed site improvements master plan.
Figure 10: Līhuʻe Development Plan
Figure 11: County Zoning
3.2.4 Special Management Area
The Special Management Area (SMA) was established to protect coastal resources in areas extending inland of the shoreline. The subject property is not in the SMA (Figure 12) and therefore does not require any SMA permits.

3.3 FEDERAL

3.3.1 Americans with Disabilities Act (ADA)
The Americans with Disabilities Act (ADA) of 1990 sets forth guidelines for accessibility to buildings and facilities by individuals with physical disabilities. The proposed site improvements will comply with the guidelines, regulations and recommendations issued by state and federal agencies. Due to the relatively flat topography of the Civic Center, all proposed improvements will be designed to be fully accessible.

3.4 NATIONAL AND STATE REGISTERS OF HISTORIC PLACES

The Līhuʻe Civic Center Historic District was added to the State and National Registers of Historic Places in 1981 for its architectural and political significance (Site Number 30-11-9351). The Historic District encompasses the Historic County Building and the County Lawn fronting the structure. It also includes the County Annex and State Courthouse.

Also listed on both the State and National Registers but is not located within the project site is the Kauaʻi Museum’s Albert Spencer Wilcox Building (Site Number 30-11-9344), added in 1979. The Līhuʻe Post Office, located across Rice Street from the Civic Center, was included on the National Register in 1989 and is listed as Site Number 30-11-9342. The historic properties are identified in yellow in Figure 1 and Figure 5.

The proposed changes within the Līhuʻe Civic Center Historic District are minor and include mainly landscaping, parking and pathway improvements. No changes are proposed to any of the historic buildings.
Figure 12: Special Management Area
### 3.5 APPROVALS AND PERMITS

The permits and/or approvals required to implement the proposed site improvements are listed in Table 4.

**Table 4: List of Anticipated Permits and Approvals**

<table>
<thead>
<tr>
<th>PERMIT/APPROVAL</th>
<th>AUTHORITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compliance with Chapter 343 HRS</td>
<td>Office of Environmental Quality Control</td>
</tr>
<tr>
<td>Permission to perform work within a State Right-of-Way</td>
<td>State Department of Transportation, Highways Division, Right-of-Way Branch</td>
</tr>
<tr>
<td>Historic Site Review</td>
<td>State Historic Preservation Review Division</td>
</tr>
<tr>
<td>National Pollutant Discharge Elimination System (NPDES) - General Permit</td>
<td>State Department of Health, Clean Water Branch</td>
</tr>
<tr>
<td>Street Closure Resolution</td>
<td>Kaua‘i County Council</td>
</tr>
<tr>
<td>County Zoning Permits</td>
<td>Kaua‘i Planning Department</td>
</tr>
</tbody>
</table>
4.0 DESCRIPTION OF THE AFFECTED NATURAL ENVIRONMENT, POTENTIAL IMPACTS AND MITIGATION MEASURES

This section describes the existing conditions of the physical or natural environment, potential impacts of the proposed Lihue Civic Center Site Improvements on the environment, and mitigation measures to minimize any impacts.

4.1 CLIMATE

4.1.1 Existing Conditions
The average annual temperature recorded for Lihue ranges between a high of 81 degrees to a low of 70 degrees Fahrenheit. While January and February are generally the coolest months, August is the warmest. The average relative humidity recorded at Lihue Airport is 67 percent in the middle of the afternoon and 83 percent in the early morning hours.

Surface winds are generally around 13 to 24 miles per hour from the northeast. There are some seasonal changes in prevailing wind direction in winter with southerly Kona winds. Strong winds occur at times in connection with storm systems moving through the area. Wind velocities and directions are influenced by the mountainous terrain to the south and west. Daily variations include diurnal effects of winds from the southwest quadrant during the night and morning hours, shifting to the northeast during the day.

Trade wind showers are relatively common and although heavy rains can occur, most of the showers are light and of short duration. The average annual rainfall at Lihue Airport is 43 inches, three-fourths of which falls during the wet season from October through April. Normal precipitation in January, the wettest month, is nearly 6 inches, and in June, the driest month, averages 1.69 inches.

4.1.2 Potential Impacts and Mitigation
The proposed Lihue Civic Center site improvements are not expected to have an impact on climatic conditions and no mitigation measures are planned.

4.2 GEOLOGY AND TOPOGRAPHY

4.2.1 Existing Conditions
The proposed project area is located south of Kalepa Ridge, an erosional remnant of lava of the original volcanic dome on Kauai. It also forms with the Nonou Ridge, the eastern boundary of the Lihue Depression, a collapsed caldera.
The rocks of Kālepa Ridge are part of the Nāpali formation of the Waimea Canyon volcanic series of the Pliocene age. The Nāpali formation rocks are gently dipping, thin flows of olivine basalt. Dikes are present in the Nāpali formation of the Kālepa Ridge but their effect on ground water is unknown. In general, these rocks are highly permeable and form an excellent source of groundwater.

Overlying the Nāpali formation and separated by an erosional unconformity are the rocks of the Köloa volcanic series. These volcanic flows and ash deposits floor much of the Līhu’e Depression.

A topographic survey for the existing project site was performed by M&E Pacific, Inc. The topography of the Līhu’e Civic Center project site is relatively flat, ranging from 196 feet above mean sea level (msl) at the intersection of Rice Street and Kūhiō Highway, to 208 feet above msl at the intersection of Hardy Street and ‘Umi Street.

The greatest topographic change occurs along Kūhiō Highway where the topography rises from a low of 196 feet above msl at near Rice Street to a high of 206 feet above msl at Hardy Street (roughly five percent incline). Rice Street has a six percent slope between Kūhiō Highway and Halekō Road and then plateaus at 204 feet above msl from Halekō Road to ‘Umi Street. Hardy Street runs flat at 208 feet above msl from Kūhiō Highway to ‘Umi Street. Both ‘Eiwa Street and ‘Umi Street have a slight elevation change of four feet (204 to 208 feet above msl) as the streets go north from Rice Street to Hardy Street (less than one percent slope).

4.2.2 Potential Impacts and Mitigation

The site already has been extensively modified by urban improvements related to the Civic Center as well as the previous shopping center use. Construction will occur in previously disturbed areas and therefore no significant impacts are anticipated. The majority of the proposed Līhu’e Civic Center Site Improvements will require minor grading except for the construction of the underground parking structures which will require major excavation. Throughout construction, appropriate engineering, design and construction measures will be undertaken to minimize potential soil erosion. No significant grading will occur near any of the historic buildings. All ground-altering activity will be conducted in accordance with the Kaua‘i County Code. Adverse impacts to landforms and topography associated with grading are not anticipated.

4.3 SOILS

There are three studies prepared for Hawai‘i soils whose principal focus has been to describe the potential for agricultural production. They are: 1) the US Department of Agriculture (USDA) Soil Conservation Service (SCS) Soil Survey, 2) the University of Hawai‘i Land Study Bureau (LSB), and 3) the State Department of Agriculture (DOA) Agricultural Lands of Importance to the State of Hawai‘i (ALISH).
Figure 13: Soil Conservation Service Soil Survey Map
Figure 14: Land Study Bureau
Figure 15: Agricultural Lands of Importance to the State of Hawai‘i
4.3.1 Soil Conservation Service Soil Survey
The SCS Soil Survey shows that the soils beneath the Lihu'e Civic Center are soils from the Lihu‘e-Puhi Association, characterized by deep, nearly level to steep, well-drained soils that are found on uplands and have a fine-textured or moderately fine-textured subsoil. The soils specific to the project site are Lihu‘e Silty Clay, with zero to 8 percent slopes (LhB) (Figure 13). This soil typically has a dusky-red strongly acid silty clay surface layer that is about twelve inches thick with 48-inch thick slightly acid to neutral dark-red and dark reddish-brown compact silty clay subsoil with subangular blocky structure. The substratum consists of soft, weathered rock. The soil is primarily found on tops of broad interfluves in the uplands. This soil has moderately rapid permeability, slow runoff and no more than slight erosion hazard. The soil has an available water capacity that is about 1.5 inches per foot of soil. The soil is primarily used for cultivation of sugarcane, pineapple, truck crops or orchards, pasture, wildlife habitat and homesites. The capability classification is Ile, irrigated or non-irrigated. Class II soils have moderate limitations that reduce the choice of plants or require conservation. The subclass is “e,” meaning the soil is subject to moderate erosion if it is not cultivated or protected by ground cover.

Along Kūhiō Highway, the bluff is classified as Rough Broken Land (rRR). This soil type consists of very steep land broken by numerous intermittent drainage channels. It occurs in gulches, as in this instance, and erosion is active. The mapping of these areas included areas of colluviums and alluvium along gulch bottoms. This land type is used primarily for watershed and wildlife habitat.

4.3.2 Land Study Bureau Detailed Land Classification
The University of Hawai‘i Land Study Bureau (LSB) document titled Detailed Land Classification, Island of Kaua‘i, classifies non-urban land by a five-class productivity rating system, using the letters A, B, C, D and E, where “A” represents the highest class of productivity and “E” the lowest. Because the project site is located on urbanized lands, it is unclassified according to the LSB rating system (Figure 14).

4.3.3 Agricultural Lands of Importance to the State of Hawai‘i
The State of Hawai‘i Department of Agriculture’s Agricultural Lands of Importance to the State of Hawai‘i (ALISH) system rates agricultural land as “Prime,” “Unique” or “Other.” The remaining land is not classified.

“Prime” agricultural land is best suited for production of food, feed, forage and fiber crops. The land has the soil quality, growing season and moisture supply necessary to economically sustain high yields of crops when treated and managed including water management, according to modern farming methods.

“Unique” agricultural land can be used for specific high-value food crops. The land has a special combination of soil quality, growing season, temperature, humidity, sunlight, air drainage, elevations, aspect, moisture supply, or other conditions that
favor the production of a specific crop of high quality and/or high yield when the land is treated and managed according to modern farm methods.

“Other” agricultural land is vital to production of food, feed, fiber and forage crops, yet they exhibit properties that are not ideal, such as seasonal wetness, erosion, limited rooting zone, slope, flooding, or drought. The land can be farmed satisfactorily through greater fertilization and other soil amendment, drainage improvement, erosion control practices, and flood protection and can produce fair to good crop yields when properly managed.

According to the ALISH system, the proposed Lihue Civic Center Site Improvements area is not classified and therefore, not considered important agricultural land (Figure 15).

4.3.4 Potential Impacts and Mitigation
Implementation of the proposed Lihue Civic Center Site Improvements Master Plan is not expected to impact soils with agricultural significance since they are located in an existing urbanized area and do not contain soils of agricultural value.

Construction will involve land disturbance, including removal of existing asphaltic pavement, installation of landscaping, and grading. Excavation will be required where the proposed underground parking structures are located. Impacts to the soils of the proposed Lihue Civic Center Site Improvements include the removal of excavated material and the generation of dust during construction. Implementation of the proposed improvements will be conducted in full compliance with dust and erosion control and other requirements of the County of Kauai. Best management practices (BMP’s) to mitigate any dust and/or silt will be included in the construction plans. As typically required for projects on land greater than one acre in size, a National Pollutant Discharge Elimination System (NPDES) Notice of General Permit Coverage (NGPC) for Storm Water Associated with Construction Activity will be necessary. No improvements are recommended along Kuhio Highway where the bluff has potential erosion hazards. However, if the County decides to pursue the construction of a parking structure along this bluff, geological and engineering studies should be conducted to see if it would be feasible, safe, and cost-effective.

4.4 NATURAL HAZARDS

4.4.1 Existing Conditions
Natural hazards impacting the Hawaiian Islands include flooding, tsunami inundation, hurricanes, volcanic eruptions, and earthquakes. According to the Flood Insurance Rate Map (FIRM) prepared by the Federal Emergency Management Agency (FEMA), National Flood Insurance Program, the project area is located in Zone X and is outside of the 500-year flood plain. This is an area with a minimal chance of flooding (less than 0.2% annual chance) (Figure 16).
Figure 16: Flood Insurance Rate Map
Figure 17: Tsunami Evacuation Zone and Hurricane ‘Iniki Overwash Boundary
The tsunami evacuation zone is located far to the east and makai of the proposed Līhuʻe Civic Center Site Improvements area. There was no hurricane overwash recorded in the area after Hurricane ʻIniki since Līhuʻe is located on a plateau above coastal areas. (See Figure 17.) Much of the damage due to the hurricane overwash was recorded in low-lying coastal areas in Wailua and Kapaʻa and along the southern coast of the island.

Since 1980, two hurricanes have had a devastating effect on Kauaʻi. They were Hurricane Iwa in 1982 and Hurricane ʻIniki in 1992. While it is difficult to predict such natural occurrences, it is reasonable to assume that future incidents are likely, given historical event. However, the threat of such hazard is no greater for the proposed project site than any other location on Kauaʻi.

Volcanic hazard is considered minimal due to the extinct status of the volcanoes comprising Kauaʻi.

In Hawaiʻi, most earthquakes are linked to volcanic activity, unlike other areas where a shift in tectonic plates is the cause of an earthquake. Each year, thousands of earthquakes occur in Hawaiʻi, the vast majority of which are so small they are detectable only with highly sensitive instruments. The threat of an earthquake to the Līhuʻe Civic Center Site Improvements area is no greater than any other location on Kauaʻi.

4.4.2 Potential Impacts and Mitigation
The proposed Līhuʻe Civic Center Site Improvements will not exacerbate any natural hazard conditions. The project site is located outside the 500-year floodplain and outside of the tsunami evacuation zone. The hurricane overwash boundary recorded after ʻIniki did not encroach upon Līhuʻe. Flooding tends to have less of an impact on the Līhuʻe Civic Center area since it is located on the top of a plateau. Should there be a hurricane, the potential impact of destructive winds and torrential rainfall will be mitigated through compliance with the Uniform Building Code. All structures will be constructed in consideration of the possibility of earthquake occurrence, in compliance with County building codes and design standards.

4.5 FLORA

4.5.1 Existing Conditions
In front of the Historic County Building at the County Lawn are the historic double rows of royal palms. The palms are estimated to have been there since the 1930s when they once lined the dirt road leading up to the Historic County Building. However, several palms have been removed over the years due to wind damage and age. Around the edge of the County Lawn are several large monkey pod trees. The rest of the eastern block has a mix of trees such as plumeria, autograph, mango, Poinciana, monkey pod, kukui, banyan, coconut, and a variety of palms including
Chinese fan palm, manila and areca. There are also small shrubs and hedges including a hibiscus hedge near the State Office Building and several grassy areas around the buildings and parking lots.

On the western block where the Mo’ikeha and Pi’ikoi Buildings are located, the majority of the existing site is covered with impermeable surfaces—buildings and asphalt. There is very little vegetation. There are two small Japanese gardens fronting the County buildings and bougainvillea plants dot the parking lots facing Hardy and ‘Eiwa Streets. There is a single paperbark tree in the parking lot facing Hardy Street. Mock orange hedges front Hardy and ‘Eiwa Streets with wedelia in planter beds. At the intersection of Rice Street and Kūhiō Highway, the slope below the Mo’ikeha Building has been landscaped with loulu, areca and Alexander palms, red ginger, bougainvillea, and wedelia. Kou trees have been planted along a narrow planting strip on Rice Street and the pedestrian path between the Pi’ikoi and Kapule Buildings but are struggling. There are also plumeria trees at the entrance of the Mo’ikeha Building with a mix of shrubs in the buildings atrium including raphis palms. Along Kūhiō Highway, parrot beak heliconia, wedelia and jatropha line the sidewalk.

**4.5.2 Potential Impacts and Mitigation**

Overall, the flora at the Civic Center is a mix of alien and introduced species with a few natives like the loulu, kou, and kukui recently planted. Besides the County Lawn, there is no coordinated landscaping design or theme. The Līhu‘e Civic Center Site Improvements Master Plan recommends preserving the large specimen trees like the monkey pods at the County Lawn and others within the historic district. The existing canopy trees that will be preserved are shown as lighter yellow-green trees in the master plan (Figure 1).

The master plan also recommends replacing the missing royal palm trees at the County Lawn and checking the health of the remaining trees to see if replacement of any of the remaining trees is also necessary. While the master plan will be removing some of the existing vegetation, it proposes adding more parks and open space with canopy trees shading pedestrian paths, parking areas and outdoor spaces. It recommends using native plants and plants significant to Līhu‘e and Kaua‘i. With the added open spaces, over 2.4 acres of impermeable surfaces will be replaced with green, open spaces, reducing the heat island effect and reducing stormwater runoff. The landscape will become more coordinated and welcoming, encouraging workers, residents and visitors to enjoy the outdoor areas of the Civic Center.

**4.6 FAUNA**

**4.6.1 Existing Conditions**

Although no formal study of mammalian and avian species has been conducted for this highly urbanized area, it is expected that the species found in the vicinity of the
subject property and surrounding areas are typical of species found in urban Lihue. Feral mammals typically include cats, rats, and mice. Common bird species include doves, mynas, sparrows, cattle egrets, Japanese white-eyes, and chickens. The migratory Pacific Golden-Plover or Kōlea (*Pluvialis fulva*) are also known to frequent the area. Newell shearwaters, a threatened species, are also known to fly over Lihue between nesting areas in the mountains and foraging areas at sea, and can sometimes become disoriented by urban lights at night. The native Hawaiian Hoary Bat or Opa‘epe‘e (*Lasiurus cinereus semotus*), which is endangered on all islands except Kaua‘i, may also be found in the area due to the project’s proximity to ‘Alekoko (the Menehune Fish Pond) and Hule‘ia National Wildlife Refuge. They are known to frequent open wet areas near forests on Kaua‘i and forage near towns and agricultural fields.

### 4.6.2 Potential Impacts and Mitigation Measures

Because the existing site is already highly urbanized, no significant impact to fauna resources are expected since the proposed uses will be the same. The increase in open space and landscaping may improve conditions for some avian species such as the Kōlea which is attracted to open grassy areas and lawns.

Because Newell’s shearwaters are known to fly over the area and can be distracted by outdoor lighting, the proposed improvements will minimize potential impacts to these birds by requiring that all new outdoor lighting fixtures be shielded and pointed downwards. Lighting fixtures approved by the International Dark-Sky Association (IDA) are recommended and can be found at their website: www.darksky.org/lighting.

The following guidelines will be followed in selecting and designing any outdoor lighting:

- All outdoor lights including parking lot lights, landscaping, security, path and deck lights should be fully shielded, full cutoff luminaries.
- Complete avoidance of all outdoor up-lighting for any purpose.
- Avoidance of tree-mounted lights unless they are fully shielded and pointing down towards the ground or shining into dense foliage. Ensure compliance over time.
- Complete avoidance of up-lighting and unshielded lighting in water features such as fountains and ponds.

No special mitigation measures are recommended for the Hawaiian Hoary Bat since none of the proposed improvements are expected to impact them. They are already found in the existing environment and none of the proposed changes are expected to significantly affect their use of the area.
5.0 ASSESSMENT OF EXISTING HUMAN ENVIRONMENT, POTENTIAL IMPACTS, AND MITIGATION MEASURES

This section describes the existing conditions of the human environment, potential impacts of the proposed Lihu‘e Civic Center Site Improvements and mitigation measures proposed to minimize any impacts.

5.1 ARCHAEOLOGICAL, CULTURAL AND HISTORIC RESOURCES

5.1.1 Existing Conditions

Lihu‘e is located on the southeastern side of Kaua‘i in the ahupua‘a of Kalapaki. It was established in 1825 by Governor Kaikio‘ewa, who was the first governor of Kaua‘i under Kamehameha. According to Wichman (1998), he named this area, Lihu‘e, in memory of his earlier home on O‘ahu. The name, Lihu‘e, was unknown on the island before then. The ancient name for this area was Kala‘imagea, “calm reddish brown place.”

The governor found the area’s soils and rainfall suitable for growing sugarcane, and eventually much of Lihu‘e was planted with sugarcane fields. By the early 1900s, Lihu‘e Plantation and Grove Farm Plantation had established Lihu‘e as a profitable sugarcane production area. The Lihu‘e Mill was one of the longest sugar mills in service in the state. It started operations in 1849 and finally shut its doors in 2000. Nāwiliwili Harbor became the main port for shipping on the island and the Historic County Building was built in 1912, literally cementing Lihu‘e as the civic seat of the island. It remains the longest operational county building in the State of Hawai‘i.

Since then, the surroundings have changed dramatically, undergoing a series of transformations as a community and civic center have developed around it.

Despite the changes over time, there are still several historic buildings and a historic district within and near the Lihu‘e Civic Center. Within the project site, the Lihu‘e Civic Center Historic District is listed on the State and National Registers of Historic Places (Site Number 30-11-9351). It comprises all but the State Office Building on the eastern block of the project site. The Historic County Building, built in 1912, and the County Annex Building, built in the 1930s, are included within this Historic District. The Historic District also encompasses the County Lawn and its double row of royal palms as well as the State Courthouse.

Also listed on the State and National Registers but is not located within the project site is the Kaua‘i Museum’s Albert Spencer Wilcox Building (Site Number 30-11-9344). It was added to the two lists in 1979. The Lihu‘e Post Office, located across Rice Street from the Civic Center, was included on the National Register in 1989 and
is listed as Site Number 30-11-9342. The historic properties are identified in yellow in Figure 1 and Figure 5.

No archaeological surveys were performed on the site as the project area is located in an existing urbanized area. The entire site has been previously disturbed during historic and modern ground-altering activity. This includes agricultural activity that once occurred on the site as well as the construction of previous residential structures, and more modern retail and office buildings including the existing Civic Center.

5.1.2 Potential Impacts and Mitigation Measures

Major site work including grading and excavation will be necessary to construct the underground parking lots. However, the rest of the proposed improvements will require minor grading only. Although the project is located in an existing urbanized area, it is possible that historic remains may be found during groundwork. Should any historic remains, such as artifacts, burials, concentrations of shell or charcoal be encountered during construction, all work in the immediate vicinity of the find will cease and the find will be protected from additional disturbance. The State Historic Preservation Division, Kaua‘i Section will also be contacted immediately for appropriate action and mitigation in accordance with Chapter 6E, Hawai‘i Revised Statutes, as necessary. Furthermore, the County will comply with all federal, state, and county laws regarding stormwater runoff and erosion control during the grading and excavation phases of the project and minimize any potential impact to historic resources by using best management practices such as erecting protective barriers and diverting any runoff away from these resources. The County will also design and construct the underground parking structures so as not to impact the foundations of the historic buildings.

The proposed changes within the Līhu‘e Civic Center Historic District are minor and are not expected to negatively impact the historic or cultural resources. No changes are proposed for any of the historic buildings. The improvements involve mainly landscaping, parking and pathway improvements. The proposed site improvements are intended to enhance the historic resources in and around the area by restoring historic elements and providing better pedestrian access, landscaping, and signage. For example, one of the proposed master plan recommendations is to replace the missing royal palms in front of the Historic County Building.

The proposed Līhu‘e Civic Center Site Improvements are not expected to adversely impact to cultural resources. The improvements will not affect Native Hawaiian gathering rights or traditional practices. The improvements are intended to preserve and accentuate the historic buildings, enhance cultural awareness of Līhu‘e’s history and provide the community with the opportunity to engage in the Civic Center area.
5.2 NOISE

5.2.1 Existing Conditions
The predominant sources of noise in the vicinity of the property stem from traffic traveling along the surrounding streets and the neighboring commercial uses to the south and north of the project site. Other sources of noise include aircraft flyovers due to the site’s proximity to the Lihu’e Airport and natural sources, such as wind and rain.

5.2.2 Potential Impacts and Mitigation Measures
As the Lihu’e Civic Center Site Improvements Master Plan does not change its current use, no long-term noise impacts are expected due to the proposed improvements. The plan does include the closure of ‘Eiwa Street which would actually reduce traffic noise within the center of the Civic Center. The proposed increase in vegetation and open space in and around the Civic Center would also help buffer traffic noise heard within the Civic Center.

During project construction phases, there will likely be noise impacts associated with the operation of construction machinery, excavation and grading equipment and material transport vehicles. However, the impact will be temporary. Noise levels from typical construction equipment range between 70 and 95 decibels (dBA). To mitigate construction noise levels, the County of Kaua‘i will work with the contractor to ensure adherence with State Department of Health (DOH) regulations, use of proper equipment and regular vehicle maintenance. Equipment mufflers or other noise attenuating equipment may also be employed as required. All construction activities will be limited to daylight work hours. In the event that construction noise levels are expected to exceed permissible levels, a permit would be obtained from the DOH. Time restrictions on when noise levels are allowed to exceed permissible levels are typically included in the permit. It is expected that after the proposed construction is complete, ongoing generating activities will be similar to existing conditions.

5.3 AIR QUALITY

5.3.1 Existing Conditions
Regional and local climate, together with the amount and type of activity generally determine the air quality of a given location. At the project site, winds are predominantly trade winds. During winter, storms may bring Kona winds for brief periods. When the trade winds or Kona winds are weak or absent, landbreeze-seabreeze circulations may develop.

Generally, air quality in the project vicinity is good and meets state and federal air quality standards. There are no point sources of airborne emission within proximity of the project site. Pollutants that exist may be attributable to a variety of sources,
including traffic traversing neighboring roadways. Emissions from such sources are intermittent and minimal and are quickly dispersed by prevailing trade winds.

5.3.2 Potential Impacts and Mitigation Measures
Emission derived from operation of construction equipment and other vehicles involved in construction activities may temporarily affect the ambient air quality in the immediate vicinity. However, these effects will be minimized through proper maintenance of construction equipment and vehicles. In addition, there may be a temporary adverse impact on air quality attributable to dust generated during project construction, particularly earthmoving activity, including excavating, trenching and filling.

It is anticipated that no State or Federal air quality standards will be violated during or after the creation of the proposed improvements. A dust control plan will be implemented during all phases of development. All construction activities will comply with the provisions of Chapter 11-60.1-33, Hawai‘i Administrative Rules on fugitive dust. Measures to control dust during various phases of construction will include:

- Planning phases of construction to minimize the amount of dust-generating materials and activities, centralizing onsite vehicular traffic routes, and locating potential dust-generating equipment in areas of least impact;
- Providing an adequate water source at the site prior to start-up construction activities;
- Landscaping and rapid covering of bare areas, including slopes, starting from the initial grading phase;
- Minimizing dust from unpaved areas or roads during grading activities;
- Providing adequate dust control measures during weekends, after hours and before daily start-up of construction activities; and
- Controlling dust from debris by adequately covering it when hauled away from the project site.

After construction, the proposed site improvements are not expected to negatively impact air quality. In fact, the increase in landscaping and plant material would probably improve air quality by increasing absorption of carbon dioxide and filtering particles generated by the traffic on the surrounding roadways.

5.4 VISUAL RESOURCES

5.4.1 Existing Conditions
The existing site and surrounding areas are heavily urbanized. They are comprised of commercial businesses, public and civic uses, and residential communities. Distant views of the Hä‘upu Range to the south and Wai‘ale‘ale to the west can be seen from the Civic Center.
According to the Kaua‘i General Plan Heritage Resource Map, there are scenic roadway corridors along Kaumuali‘i and Kapule Highways (Figure 9). However, neither is visible from the project site and will not be affected by the proposed site improvements.

5.4.2 Potential Impacts and Mitigation Measures
The proposed Līhuʻe Civic Center Site Improvements will be compatible with the existing visual environment and are intended to enhance the scenic qualities of the area. The proposed improvements do not involve construction of any building or vertical above grade structures that will obstruct view planes or visual resources. If the parking structures are pursued, they will be located underground. All other parking lots will be at grade. The surrounding commercial businesses, public, civic and residential uses, as well as distant mountain views will still be visible from the project site. Proposed street trees along commercial areas will be trimmed so their lowest branches are roughly twelve to fifteen feet high to avoid blocking storefronts and signs.

5.5 SOCIO-ECONOMIC CHARACTERISTICS

5.5.1 Community Character

5.5.1.1 Existing Conditions
Although Līhuʻe is the seat of government, the center of transportation, and home to most of the commercial business establishments on Kauaʻi, it has retained a small town feel. There are several residential communities in and around the Civic Center with schools and parks nearby. Most buildings are still one to two stories and distant views of the surrounding mountains are prevalent.

The project site itself feels unfinished. Parking lots dominate the view of the western block and ‘Eiwa Street splits the Civic Center into two separate pieces. There are no clear pedestrian walkways and many people rather drive than walk within the Civic Center. Besides the County Lawn, landscaping is minimal and the area is uncomfortable due to the heat reflecting off the asphalt.

5.5.1.2 Potential Impacts and Mitigation Measures
The proposed site improvements will enhance the character of the Civic Center through landscape and pedestrian improvements at the town’s core. Much of the parking will be located in underground parking structures so that more open space can be provided for public enjoyment. Cars will no longer dominate the Civic Center as they do now. The improvements are intended to revitalize the Civic Center and create a landscaped campus-like gathering place for the community.
5.5.2 Population

5.5.2.1 Existing Conditions

According to the 2000 United States Census, the population of Kaua‘i County was 58,463 persons. For the Līhu‘e Census Designated Place (Līhu‘e CDP, highlighted to the left), the population was 5,674, or roughly ten percent of the resident population of the island.

The median age of Līhu‘e residents in 2000 was 44 while Kaua‘i’s as a whole was 38. Within the immediate area bounded by Rice Street, Kūhiō Highway, Ahukini Road and Kapule Highway (the town core), it was even higher at 47 years of age. Nearly a quarter of the Līhu‘e CDP’s population was over 65 (22.4 percent) and nearly another quarter is 17 years of age or younger (22.8 percent).

Of the 2,178 households within the Līhu‘e CDP, 30.4 percent (663 households) had children under the age of 18 years and nearly 40 percent (863 households) had individuals 65 years or older. 16.1 percent of households consisted of individuals living alone who were over the age of 65 (350 households). Within the Līhu‘e town core, the percentage of individuals over the age of 65 living alone is even higher at 17.4 percent (69 households). In comparison, only 7.7 percent of Kaua‘i County households consisted of individuals over the age of 65 living alone and 27.7 percent of households had individuals over the age of 65. This indicates that there are proportionally more Līhu‘e households with elderly persons than Kaua‘i as a whole. There are also quite a few Līhu‘e households with children, however, proportionally less than the Kaua‘i average for households.

Government workers represented 18.3 percent of all civilian employed residents in the Līhu‘e CDP and they comprised an even higher proportion within the town core at 24.2 percent. This indicates that a relatively high number of government workers lived near the Civic Center in 2000.

5.5.2.2 Potential Impacts and Mitigation Measures

The proposed Līhu‘e Civic Center site improvements will not have an impact on resident population growth since the land uses within the project site will remain the same. The proposed improvements will, however, improve pedestrian accessibility and safety and encourage people to use the outdoor areas of the Civic Center. This could have a positive impact on those who cannot drive such as seniors and children. Seniors over the age of 65 and children under 18 comprise nearly half the resident population in the Līhu‘e CDP and will benefit from the proposed improvements since walking in and around the Civic Center will be easier and safer. The proposed site improvements will also benefit government workers and visitors to the Civic
Center by providing comfortable outdoor places to sit and gather for lunch and increase the opportunities to meet informally as they walk between buildings. Improved sidewalks and transit and bicycle facilities may also encourage people to use different modes of transportation to access the Civic Center and get more exercise. The proposed site improvements could improve the quality of life for those who use the Civic Center.

5.5.3 Economy

5.5.3.1 Existing Conditions
Līhuʻe is the second largest town in Kauaʻi and is the government, business and transportation hub of the island. There are roughly 800 government employees working in Līhuʻe and about half of Kauaʻi’s businesses have a Līhuʻe zip code (96766). The nearby port at Nawiliwili Harbor and the Līhuʻe Airport indicate that most goods and people coming to or leaving Kauaʻi must pass through Līhuʻe. However, in certain portions of Līhuʻe, such as along Rice Street, there are intermittent vacant commercial spaces and small businesses frequently turn over.

Although Hurricane ‘Iniki brought soaring unemployment to Kauaʻi during the 1990s, the unemployment rate has steadily declined and has caught up and surpassed the State’s current low rate of 2.4 percent. Kauaʻi’s unemployment rate was 2.2 percent in April 2007.

5.5.3.2 Potential Impacts and Mitigation Measures
The proposed Līhuʻe Civic Center site improvements will become an integral part of the Līhuʻe and indirectly provide economic benefits through the potential draw of people to the area and the encouragement of reinvestment in the surrounding areas. The improvements will not have a significant direct impact on the economy; however, they will benefit the economy through creation of construction and landscaping related job opportunities and construction expenditures. Installation of the improvements will generate additional tax revenue to the State through general excise taxes on development expenses. However, the proposed site improvements will not generate significant direct tax revenues for the County of Kauaʻi since County revenues are primarily limited to tax revenues on privately-owned property and improvements.

5.6 INFRASTRUCTURE

5.6.1 Roadways and Traffic

5.6.1.1 Existing Conditions
Roadway access to the Līhuʻe Civic Center is by Kūhiō and Kaumualii Highways from the north and west, respectively. Access from the southeast is by Rice Street, which also serves as the main road through Līhuʻe Town. Kūhiō and Kaumualii
Highways meet at the signalized intersection with Rice Street. Kaumuali‘i technically terminates at the Rice Street and Halekō Road intersection. These roadways, together with Hardy Street on the north and ‘Umi Street on the east, form the borders of the project area. ‘Eiwa Street bisects the Civic Center into an east block that includes the Historic County Building and State buildings, and a west block with the renovated County buildings, Hawaiian Telcom, and Big Save.

Kūhiō Highway is a four-lane highway north of Rice Street. Kaumuali‘i Highway is a two-lane highway south of the intersection with Rice Street. The two highways provide regional north-south access to, from and through Līhu‘e from the rest of the island. There is no on-street parking permitted on either highway within the project area. At the time of this report, the State Department of Transportation (DOT) was in the design stage to widen Kaumuali‘i Highway to four lanes between Līhu‘e and Puhi. Construction is estimated to commence in 2008. Kūhiō Highway has a narrow sidewalk on the west side of the highway that terminates at the intersection of Rice Hardy Street. On the east side, the sidewalk is narrow, but the existing landscaping provides some buffer for pedestrian from the passing cars.

Rice Street was recently widened to a four-lane roadway providing east-west access on the southern boundary of the Civic Center. Between Halekō Road and ‘Umi Street, there are a total of nine parallel parking stalls in the eastbound direction. Six of them are inset from the curb and do not block traffic flow. However, the three parallel stalls between ‘Eiwa Street and ‘Umi Street do block one lane of traffic when parking is allowed. In the westbound direction, there are six on-street parallel parking stalls west of ‘Eiwa Street. Street parking is permitted during off-peak traffic periods effectively limiting Rice Street to two lanes, one lane in each direction. Peak parking bans are in effect from 7:00 to 9:00 A.M. and from 3:00 to 5:00 P.M. During the parking bans, traffic flows in all four lanes- two lanes of travel in each direction.

The popular crosswalk in front of the Līhu‘e Post Office was removed several years ago and replacement crosswalks were added by ‘Eiwa Street and Halekō Road. Neither of these added crosswalks are easy to cross. The topography at Halekō Road limits driver and pedestrian sight distances and the ‘Eiwa Street intersection has complicated vehicle turning movements due to the offset intersections and multiple driveways. Although unsafe, many people are known to jaywalk where the original crosswalk was located near Kele Street in front of the post office.

Elderly pedestrian jaywalking across Rice Street near Kele Street and the Līhu‘e Post Office

Plastic traffic delineators were placed on the center line of Rice Street between ‘Eiwa Street
and Halekō Street in early October 2003. The delineators block left turns from Rice Street into the County driveway and Kele Street. On the portion of Rice Street between Kūhiō Highway and ‘Eiwa Street, the sidewalks on the north side of the street are very narrow and the kou trees located in the planting strip between the parking lot and roadway crowd pedestrians toward the travel lanes. The sidewalks on the south side of Rice Street vary in width. There are no sidewalks or curbs along portions of the Halekō Shops and a narrow sidewalk in front of the Isenberg Memorial and Bank of Hawai‘i. Further east, the sidewalk opens up in front of the Post Office and remains relatively wide (over ten feet) up to and beyond ‘Umi Street. However, portions of the sidewalks cross-sections are uneven and sloping.

Hardy Street is a two-lane roadway that provides east-west access on the north side of the Civic Center. On-street parking is permitted on both sides of the street. There is also a bus stop shelter on the Civic Center side of Hardy Street. Hardy Street has sidewalks on the north side but none on the Civic Center side of the street. Drainage is poor on the south side of Hardy Street since there are no curbs or gutters. The area often puddles when it rains, particularly near the bus stop.

‘Umi Street is a two-lane road that provides local north-south access between Rice Street and Hardy Street. Parallel parking is permitted on both sides of ‘Umi Street but there are no sidewalks on the Civic Center side of ‘Umi Street. There are sidewalks only on the eastern side of the road. Due to the bend in Hardy Street, the intersection of ‘Umi Street and Hardy Street has wide distances between curbs. Pedestrian crossing is not recommended except on the north leg of ‘Umi Street.

‘Eiwa Street is a two-lane road that cuts through the center of the Civic Center. It has a 60 foot right-of-way and the entire width of the roadway is paved with asphalt. There are no sidewalks; only a painted pedestrian route with plastic delineators on the eastern side of the street. This was installed as ADA improvements in 2001 but is not a comfortable pedestrian environment. On the western side of the street, parallel parking runs almost the entire length. There are no curbs on the western side. On the eastern side there are curbs around the planting areas but no sidewalks. The street narrows to 40 feet near the intersection of Rice Street and forms an offset intersection with Wa’a Street. On the north end, ‘Eiwa does not line up with ‘Akahi or ‘Elua Streets forming another set of offset intersections. These offset intersections
complicate turning movements for drivers since oncoming cars are entering the area from multiple directions.

5.6.1.2 Existing Traffic Conditions

M&E Pacific, Inc. prepared a traffic study for the proposed site improvements and it is attached entirely as Appendix A. Existing traffic conditions were included in their analysis. Traffic counts were taken at all major and most minor intersections and driveways around the project site in late September to mid-October 2003. The study analyzed existing traffic as well as ten-year projections to the year 2015. It projected traffic counts both with and without the proposed master plan improvements and provided recommendations to accommodate vehicular traffic while balancing pedestrian safety and community concerns.

According to the traffic study, the morning peak hour of Civic Center traffic occurs between 7:15 and 8:15 AM and the afternoon peak hour occurs between 4:00 and 5:00 PM. The highest volumes occurred between 7:30-7:45 AM and 4:30-4:45 PM, which coincide with the County’s official workday start and finish times.

There are other portions of the day when traffic volumes are relatively high within the Civic Center. The following graphic shows the hourly traffic counts throughout the day as measured by the State of Hawai‘i Department of Transportation (DOT) in 2001 and summarized by M&E Pacific.

Hourly Traffic on Kāhiō/Kaumuali‘i Highway and Rice Street (M&E Pacific, State DOT)

Traffic tends to increase around 10:00 AM and remains relatively steady through the afternoon peak hour. However, the peak hours are used in the traffic study as the basis of analysis since they represent the worst case scenarios.

As an aside, because traffic is relatively steady during the day from about 10:00 AM till 5:00 PM on Rice Street, the County should consider revising the hours of the parking ban on Rice Street. This decision should be weighed against the impact of losing those stalls to nearby businesses that may need them for customer parking. They should consider the businesses’ hours of operation and apply the parking ban only to those stalls that block traffic lanes. The six stalls in front of the Post Office and First Hawaiian Bank that do not block any travel lanes should not be included in the parking ban.
Level of Service (LOS)
The Transportation Research Board (TRB) has developed procedures to quantify the quality of traffic flow on roadways based on a comparison of the roadway’s capacity to traffic volume. This measure is called level of service (LOS) and is graded on a scale from A to F. LOS A is the best traffic conditions with average delays less than 10 seconds for unsignalized intersections and 20 seconds for signalized intersections. F is the worst with average delays longer than 50 seconds for unsignalized intersections and 80 seconds for signalized intersections. LOS can be assigned to any movement through a signalized or unsignalized intersection, including turning movements. However, an overall intersection LOS is only given to signalized intersections.

The existing LOS at the intersections around the project site and key movements through the intersections are summarized in the table below. The movements with relatively long delays during the peak hours of traffic (LOS E or F) are italicized.

<table>
<thead>
<tr>
<th>Table 5: Existing Traffic Conditions</th>
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<tbody>
<tr>
<td><strong>APPROACH</strong></td>
</tr>
<tr>
<td>SIGNALIZED INTERSECTION ANALYSES</td>
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<tr>
<td>Rice Street/Kūhiō Highway</td>
</tr>
<tr>
<td>Rice St WB</td>
</tr>
<tr>
<td>Kūhiō Highway SB</td>
</tr>
<tr>
<td>Kaumualiʻi Hwy NB</td>
</tr>
<tr>
<td>Rice Street/Umi Street</td>
</tr>
<tr>
<td>Rice St EB</td>
</tr>
<tr>
<td>Rice St WB</td>
</tr>
<tr>
<td>‘Umi St NB</td>
</tr>
<tr>
<td>‘Umi St SB</td>
</tr>
<tr>
<td>UNSIGNALIZED INTERSECTION ANALYSES</td>
</tr>
<tr>
<td>Rice Street/Halekō Road</td>
</tr>
<tr>
<td>Halekō Rd NB right</td>
</tr>
<tr>
<td>Rice St WB left</td>
</tr>
<tr>
<td>Rice Street/Eiwa Street</td>
</tr>
<tr>
<td>‘Eiwa St SB</td>
</tr>
<tr>
<td>‘Eiwa St SB right</td>
</tr>
<tr>
<td>‘Eiwa St SB left</td>
</tr>
<tr>
<td>Rice St EB left</td>
</tr>
<tr>
<td>Rice Street/Kele Street</td>
</tr>
<tr>
<td>Kele St NB</td>
</tr>
<tr>
<td>Rice St WB left</td>
</tr>
</tbody>
</table>
Several existing left turn movements have LOS F indicating long delays and the possible need for mitigation. These movements include southbound ‘Eiwa Street onto Rice Street, westbound Hardy Street onto Kūhiō Highway, and northbound ‘Umi Street onto Hardy Street. The left turn from Hardy Street onto Kūhiō Highway is particularly difficult to make and is characterized by delays of over 100 seconds (1.7 minutes). The left turns from ‘Umi Street onto Hardy Street are made into congested local traffic. Drivers on Hardy Street often let ‘Umi Street drivers make the left turn so their wait time may not be as long as the calculations indicate.
A LOS F not only means long delays but could also indicate a hazardous traffic situation as drivers become impatient, take chances and make turns through smaller than acceptable gaps in the oncoming traffic stream. This is the case with the left turn from Hardy Street onto Kūhiō Highway. To avoid this difficult left, drivers may be taking alternate routes such as ‘Eiwa Street in order to get to a signalized intersection such as Rice Street where left turns could be more safely made.

The Halekō Road right turn movement onto Rice Street shows LOS E for both peak periods. This would indicate current minimally acceptable conditions that could require mitigation in the future as traffic on Rice Street increases.

LOS alone is not sufficient to evaluate the efficiency of left turn movements from major streets, especially when the movement is made from a shared traffic lane. As an example, traffic backups often occur on Rice Street due to vehicles making left turns into ‘Eiwa Street and various businesses’ driveways. The LOS for the left turn movement from Rice Street into Halekō Road were B and C, which would normally be considered acceptable but does not indicate the traffic queuing that was taking place.

**Other Traffic Trends**

In addition to the traffic study, the State DOT-Highways takes biannual traffic counts at the Kūhiō Highway and Rice Street intersection. M&E Pacific, Inc. also tabulated this information and found that between 1991 and 2003 a proportionate amount of traffic seemed to be shifting from Rice Street to Kūhiō Highway indicating that traffic may be taking alternate east-west routes from Kūhiō/Kaumuali‘i Highways such as Ahukini Road or Nāwiliwili Road rather than Rice Street (see Table 6). According to the State DOT-Highways Division Kaua‘i District Office, the reductions in traffic volumes on Rice Street between 1993 and 1999 were probably due to the after effects of Hurricane ‘Iniki while the drop in volume between 1999 and 2001 is probably due to the reconfigured intersection of Kaumuali‘i Highway, Kūhiō Highway, and Rice Street. This may be a result of the DOT’s improvements at Kūhiō Highway and Rice Street that reoriented traffic flow at this three-way intersection. Prior to 1999, the traffic flow moved directly between Kaumuali‘i Highway and Rice Street with Kūhiō Highway intersecting the roads at a T-intersection. Then in 1999, the DOT changed the traffic flow so that Rice Street T’s into Kaumuali‘i/Kūhiō Highways.

The DOT currently has plans to do similar improvements to the intersection of Rice Street and Kapule Highway further east of the project site. It is projected that this may have a similar effect of further reducing daily traffic on Rice Street. At the time of this report, the DOT was in the design phase for this project. The DOT also has plans to widen Kaumuali‘i Highway south of Rice Street to four lanes. They are also in the design phase for this project.
Table 6: Daily Traffic Volumes at Kūhiō Highway and Rice Street

<table>
<thead>
<tr>
<th>YEAR</th>
<th>KŪHIŌ HIGHWAY</th>
<th>RICE STREET</th>
<th>KŪHIŌ HIGHWAY</th>
<th>RICE STREET</th>
</tr>
</thead>
<tbody>
<tr>
<td>OCT 91</td>
<td>19833</td>
<td>15146</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>OCT 93</td>
<td>20726</td>
<td>15135</td>
<td>2.3</td>
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<tr>
<td>JUNE 95</td>
<td>22084</td>
<td>13087</td>
<td>2.8</td>
<td>-3.4</td>
</tr>
<tr>
<td>JULY 97</td>
<td>21324</td>
<td>13185</td>
<td>1.3</td>
<td>-2.2</td>
</tr>
<tr>
<td>AUG 99</td>
<td>21956</td>
<td>12871</td>
<td>1.3</td>
<td>-1.9</td>
</tr>
<tr>
<td>OCT 01</td>
<td>24512</td>
<td>10763</td>
<td>2.4</td>
<td>-2.9</td>
</tr>
<tr>
<td>AUG 03</td>
<td>24919</td>
<td>11613</td>
<td>2.0</td>
<td>-2.3</td>
</tr>
</tbody>
</table>

Source: M&E Pacific, Inc., State DOT-Highways

5.6.1.3 Potential Impacts and Mitigation Measures

The proposed improvements are not expected to generate additional traffic since the uses will remain the same. However, the proposed improvements will shift traffic patterns due to the relocation of two County driveways, new internal circulation patterns, the location of the proposed parking structures, and the elimination of ‘Eiwa Street.

The following sections describe recommendations from the traffic study and the proposed designs incorporated into the master plan. It includes the rationale the traffic engineers used for the proposed improvements which attempt to balance vehicle, pedestrian and community concerns.

Rice Street

The traffic volumes forecasted for the street do not allow Rice Street to be narrowed back to a two-lane road with center turn lane. The four-lane design will be sufficient for projected traffic, but permitting of on-street parking during the day would need to be more closely examined.

The master plan proposes to relocate the County driveway westward to align it directly across Kele Street. Traffic signals are barely warranted with the forecast traffic volumes but pedestrian crossings would become safer with traffic signals.

The left eastbound lane of Rice Street at ‘Umi Street should be converted into an exclusive left turn lane through restriping. A three-phase signal with a leading left turn and through phase for eastbound traffic should be created. It may require installation of new traffic signals to provide the mastarms required for leading turn phases. It would also eliminate the onstreet parking in the right eastbound lane near this intersection.
The Rice Street/Eiwa Street intersection should be eliminated because if left unchanged, the only way to mitigate projected traffic problems at this intersection would be to install traffic signals. A new signal would cause a major change in the traffic patterns and would be very close to the signals at Kele and ʻUmi Streets which may not desirable.

**Halekō Road**
Projected traffic would require widening Halekō Road to four lanes. However, due to the historic importance of Halekō Road, community members have voiced opposition to widening it four lanes. The need to widen Halekō Road is also minimized by the State DOT’s plans to widen Kaumualiʻi Highway to four lanes in this area. If Halekō Road is not widened as proposed in the master plan, the traffic engineer recommends that the Rice Street intersection should be left unsignalized and restricted to right turn in, right turn out only to minimize the traffic volumes on Halekō Road. Eastbound traffic would be diverted to Kaumualiʻi Highway. The left turn from Rice Street onto Kaumualiʻi Highway would have to be made into two lanes to accommodate the additional traffic. This widening should be coordinated with the planned widening of Kaumualiʻi Highway to four lanes. However, the State DOT Highways Division Kauaʻi District Office would prefer to allow left turns from Rice Street on to Halekō Road as it is a much-used route for traffic traveling between Rice Street and the Kukui Grove area. If left turns are permitted, traffic may back up on Rice Street and a signal may eventually be warranted. However, whether the signal is needed or the left turn should be eliminated can be evaluated at a future date by the State DOT-Kauaʻi District Office and the County when traffic at this intersection becomes problematic.

**Rice Street/Kūhiō Highway/Kaumualiʻi Highway Intersection**
The traffic signal timing at this intersection should be adjusted as growth occurs. If Halekō Road is not widened to four lanes, a second left-turn lane from Rice Street should be added. This should be coordinated with the State DOT and their plans to widen Kaumualiʻi Highway west of Rice Street.

**Hardy Street**
Hardy Street should be able to operate as a two-lane roadway with the projected traffic growth, although it could operate at LOS D or worse during some time periods.

**Kūhiō Highway/Hardy Street Intersection**
The Kūhiō Highway/Hardy Street intersection should be signalized. Even without the closure of ʻEiwa Street, traffic signals are warranted to meet the existing latent demand at this intersection. Existing conditions for the left turn movement from Hardy Street westbound onto Kūhiō Highway are already operating at LOS F in both peak periods. Based on the pattern of traffic volumes, it is believed many drivers are using ʻEiwa Street as a shortcut to make a right turn onto Rice Street and make a left turn onto Kaumualiʻi Highway rather than make the left at Hardy Street. The traffic
study recommends signalizing the intersection with a leading phase for the Kūhiō Highway southbound left turn movement. The intersection is forecast to operate at LOS B in the morning peak and C in the afternoon peak with signalization.

**Hardy Street/Akahi Street/County Driveway Intersection**

The proposed Hardy Street/Akahi Street/County Driveway intersection shifts the existing access at ‘Eiwa Street so that lines up directly with ‘Akahi Street. The second County driveway closer to Kūhiō Highway will be maintained so the total number of access points on Hardy Street remains the same. The new Hardy Street/Akahi Street/County Driveway intersection should be signalized when warranted in the future. Traffic signals are minimally warranted with the forecast traffic volumes but signals will make left turns and pedestrian crossings easier. The current two-lane roadway design of Hardy Street would be sufficient. However, the addition of left-turn queue lanes on the Hardy Street approaches would allow traffic to safely pass cars queuing to turn left.

As a side note, if ‘Eiwa Street were to remain in this area, the only way to mitigate forecasted traffic conditions would be to signalize the intersection at Hardy Street. With the proposed closure, the “zigzag” movement currently required to cross Hardy Street from ‘Akahi and ‘Elua Streets will be eliminated.

**Hardy Street/Umi Street Intersection**

The northbound approach of ‘Umi Street is currently operating at level of service F in the A.M. peak and E in the P.M. peak. The master plan proposes a traffic roundabout as one means to mitigate the problem. Traffic roundabouts were thought to be a better solution than traffic signals due to the unique geometry of this intersection. As an alternative, if traffic signals were installed to mitigate projected traffic, it would probably require split phasing which would reduce the green time for Hardy Street traffic and potentially back traffic up on Hardy Street during the green time allocated to ‘Umi Street cross traffic. There is also sufficient land to install a traffic roundabout. Additionally, a traffic roundabout would be less expensive to install and easier to maintain than a traffic signal. A four-way stop would not be feasible due to the much higher traffic volumes on the east approach.

The analysis for traffic roundabouts does not calculate a level of service value due to the limited US experience with roundabouts. The Highway Capacity Software (HCS) methodology for traffic roundabouts calculates only a volume to capacity (v/c) ratio.\(^1\) The roundabout’s eastbound approach on Hardy Street is forecast to have the highest v/c ratio of the four approaches, ranging from 0.61 in the morning peak to 0.70 in the afternoon.

\(^1\) When v/c ratios exceed 1.0, this means the volume of traffic is exceeding the capacity of the design. If v/c ratios are less than 1.0, then the proposed design is able to accommodate projected traffic.
Large traffic increases are not forecast for ‘Umi Street. Therefore, major traffic improvements are not required. The current two-lane roadway design is sufficient. Assuming there are no major land use changes for the State properties on ‘Umi Street, including the vacant Police Building, the current roadway design is sufficient. Major changes by the State would require re-examination of street design.

Table 7 summarizes the projected traffic conditions without the proposed master plan improvements. This provides a baseline for 2015 traffic, showing what future traffic conditions would be like if no improvements are constructed. Table 8 summarizes the projected traffic conditions with the proposed master plan improvements.

**Other Factors**

Improved sidewalks, transit and bicycle facilities may also encourage people to use different modes of transportation to access the Civic Center. This would reduce the number of driving trips, particularly the short trips within the Civic Center as well as the need for vehicle parking space.
### Table 7: Projected Traffic Conditions without the Proposed Improvements (Ambient Scenario 1)

<table>
<thead>
<tr>
<th>APPROACH*</th>
<th>AM PEAK</th>
<th>PM PEAK</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LOS</td>
<td>Delay</td>
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<tr>
<td><strong>SIGNALIZED INTERSECTION ANALYSES</strong></td>
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<td></td>
</tr>
<tr>
<td>Rice Street/Kūhiō Highway</td>
<td>B</td>
<td>17.7</td>
</tr>
<tr>
<td>Rice St WB</td>
<td>D</td>
<td>42.7</td>
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*Abbreviations: NB = Northbound; SB = Southbound; WB = Westbound; EB = Eastbound
Table 8: Projected Traffic Conditions with the Proposed Improvements

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*Abbreviations: NB = Northbound; SB = Southbound; WB = Westbound; EB = Eastbound
5.6.2 Water

5.6.2.1 Existing Conditions
The subject property is currently served by the County of Kaua‘i Department of Water (DOW). The Puhi-Lihu‘e-Hanamā‘ulu System transmits water via four major main lines. They are the Kokolau Tunnel Main, Puhi Wells Main, Kilohana Wells Main and the Ma‘alu Road Main. Water is transmitted through 8-, 12- or 16-inch pipes along Kaumuali‘i Highway, Rice Street, Kūhiō Highway, Ahukini Road, Kapule Highway and Nawiliwili Road. The existing main lines are adequate to handle peak hour demand for the next 20 years; however, there is inadequate capacity for fire flow in the commercial, school and older residential areas of Lihu‘e (Water Plan 2020, 2001).

5.6.2.2 Potential Impacts and Mitigation Measures
There will be no adverse impact on transmission and distribution systems. Water consumption at the Civic Center is expected to increase due to the irrigation required for an estimated four acres of proposed landscaping and park improvements. However, the County is investigating the possibility of using non-potable or non-drinking water for irrigation. There are two possible alternatives: installation of a rainwater catchment system or connection to nearby non-potable water resources. For the catchment system, rainwater could be collected through gutters on the County buildings and runoff from parking surfaces could be filtered and collected in a storage cistern. The collected water would then be pumped from the cistern to serve the irrigation system. For the non-potable water resources, the County could purchase non-potable water from Grove Farm. Grove Farm currently supplies non-potable water to the State DOT’s irrigation system along Ahukini Road and Kapule Highway. If the County is able to use non-potable water for irrigation, then the use of potable water for irrigation could be reduced or potentially avoided if there is enough non-potable supply. If the catchment system is used, other sources of water, either potable or non-potable, may still be needed to supplement the system when there is insufficient rainfall. However, these potential non-potable alternatives would minimize or eliminate the impact on potable water sources. The County will continue to investigate these alternatives during the engineering and detailed design stages of the project.

Automatic irrigation systems with moisture sensors should also be installed to control the amount of water used for irrigation. The sensors can detect when there is enough moisture in the soil such as after a heavy rainfall and will shut off the irrigation system to avoid overwatering and wasting water. They are able to control the irrigation system with minimal operational intervention.

During construction of the proposed Lihu‘e Civic Center Site Improvements, potable water will be required for control of fugitive dust and to establish project
landscaping. This water use will be temporary, however, and is not expected to have a significant impact on water usage.

There are also County of Kaua’i Department of Water (DOW) water mains along ‘Eiwa Street, Hardy Street, Rice Street, and ‘Umi Street as well as Kūhiō Highway. During the detailed design of the improvements, care will be taken to minimize impact to the DOW system wherever possible. However, where mains or other connections such as water meter service, fire hydrants, etc. are impacted, DPW will coordinate early in the design phase with DOW to appropriately relocate these facilities in order to maintain service and provide fire protection. DPW will submit construction drawings to the DOW Engineering Division for review and approval for any roadway improvements prior to construction. Furthermore, should DOW service be required for any of the improvements, DPW will submit to DOW detailed water demand calculations along with the proposed meter size required for the improvements.

5.6.3 Wastewater

5.6.3.1 Existing Conditions
As a highly urbanized area, Civic Center area proposed for Site Improvements consists of an extensive network of wastewater facilities.

5.6.3.2 Potential Impacts and Mitigation Measures
The proposed site improvements will not require connection to existing wastewater (sewer) facilities. Thus, there should be no increase in demand or impact on wastewater capacity or facilities.

There are wastewater mains along Hardy Street, Rice Street, and ‘Umi Street. During the detailed design of the Civic Center improvements, care will be taken to minimize impacts to the wastewater system wherever possible. However, where mains or other connections are impacted by the proposed improvements, DPW will relocate these facilities appropriately.

5.6.4 Drainage

5.6.4.1 Existing Conditions
As an existing urbanized area, the Civic Center area contains an extensive storm water drainage system. Within the project area there is a combination of curb and gutter with catch basins drainage systems and swales with drain inlets. Generally, surface runoff sheet flows towards from north to south and east to west over most of the property and drains into inlets throughout the project site. There are curbs,

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2 If any mains need to be relocated, DPW should coordinate these improvements with any upgrades that may be required for the wastewater system in this area based on the findings of the Līhu’e Facility Plan being prepared by M&E Pacific, Inc. for the County DPW Wastewater Management Division.
gutters, and catch basins along Rice Street, Kūhiō Highway, and the very southern ends of ‘Umī and ‘Eiwa Streets near their respective Rice Street intersections. Along a short stretch of Hardy Street on the north side between Kūhiō Highway and ‘Akahi Street, there are curbs and inlets draining into a 30- to 36-inch corrugated metal pipe. Along the south side of Hardy Street, there are asphalt swales with a few drainage inlets. It often puddles along this side of the street when it rains. On ‘Eiwa Street, there is an asphalt swale on the western side of the street, which drains into the 18-inch lines in Rice Street. Besides the inlets and catch basins at the corners of Rice and Hardy Streets, there are no drainage facilities along the length of ‘Umī Street and ponding sometimes occurs when it rains.

5.6.4.2 Potential Impacts and Mitigation Measures
The proposed plan increases the amount of open space and the amount of pervious surfaces by nearly 2.4 acres. This will decrease the amount of stormwater runoff generated at the site and should therefore reduce the impact to existing drainage systems. If rooftop and parking lot catchment systems are installed, this will further reduce the amount of runoff generated at the site. If runoff from parking areas is not collected as part of the irrigation system, the parking areas could also be designed to drain towards landscaped areas with breaks provided in any curbs to help reduce the amount of runoff. These landscaped areas could act as mini detention areas which capture runoff and aid irrigation.

Sidewalks, curbs and gutters are recommended along both sides of Hardy Street and ‘Umī Streets to help reduce the ponding that currently occurs when it rains and to improve pedestrian access. All onsite improvements will be designed to comply with all federal, state, and county laws regarding drainage, erosion control, and non-point source pollution. During construction phases, any possible impact to water quality will be minimized and mitigated by the implementation of appropriate erosion control measures and best management practices (BMPs). Examples include blocking drain and gutter inlets with filtering materials and erecting silt fences.

5.6.5 Electrical and Communication Systems

5.6.5.1 Existing Conditions
The Kaua‘i Island Utility Cooperative (KIUC) generates electricity for Kaua‘i. Hawaiian TelCom, formerly Verizon Hawai‘i, provides telephone and other communications services to Kaua‘i. Oceanic Time Warner Cable provides the cable television and internet service for Kaua‘i.

5.6.5.2 Potential Impacts and Mitigation Measures
The proposed site improvements require minimal additional electrical service. It would mainly be required for lighting and the automatic irrigation system. No telephone or cable television service will be required for any of the proposed improvements. However, coordination with the various utility companies will be
undertaken to ensure that any existing conduits are appropriately relocated during the design and construction of the various site improvements.

The master plan also proposes to relocate existing overhead utility lines underground. Most are located along area roadways and down the center of the Civic Center along ‘Eiwa Street. This will clear a wider area on sidewalks for pedestrian uses and street amenities and reduce the danger of toppling during high winds. It will also improve views from and within the Civic Center.

5.6.6 Solid Waste Disposal

5.6.6.1 Existing Conditions
Currently, the County of Kaua‘i provides residential and limited commercial solid waste collection service for the island. Collection crews transport the refuse to transfer stations in Hanalei, Kapaa, Hanapepe and Lihu‘e. The waste is loaded on trailers and delivered to the Kekaha Phase II Landfill. The County also operates a Greenwaste Diversion Program through which residential and commercial green waste is diverted from the landfill and accepts them at four locations on Kaua‘i. Green waste is chipped, mulched and reused in landscape applications.

5.6.6.2 Potential Impacts and Mitigation Measures
No long-term increase in solid waste generation is anticipated from the proposed site improvements. During construction, all green waste will be collected for the County’s Greenwaste Diversion Program or chipped into mulch for use onsite. Recyclable construction wastes such as asphalt and concrete will also be reprocessed and reused for repaving parking lots or crushed for fill. All remaining construction waste will be disposed of in compliance with all State and County laws and ordinances.

After construction is completed, the proposed site improvements will generate very little additional solid waste. Green wastes will be the main type of waste generated and these are easily salvaged for mulch.

5.7 PUBLIC SERVICES

5.7.1 Police Protection

5.7.1.1 Existing Conditions
The Kaua‘i Police Department has three stations located approximately 25 miles apart. The main station and administrative headquarters are located in Lihu‘e at the new County facility off Ka‘ana Street near Kapule Highway. Satellite stations are located at Waimea, Hanalei and co-located with fire stations.
5.7.1.2 Potential Impacts and Mitigation Measures
The proposed site improvements are intended to draw residents and visitors to the Civic Center. An anticipated increase of activity and visitors will potentially result in unavoidable demand for police protection services. However, it is anticipated that these needs will be intermittent and not significantly different from existing requirements. Existing police service is anticipated to be sufficient to protect the area. The close proximity of the police headquarters should mitigate any demands on police services and allow for short response times.

5.7.2 Fire Protection

5.7.2.1 Existing Conditions
The Kaua‘i Fire Department has a station and administrative headquarters in Līhu‘e. There are six additional fire stations around the island.

5.7.2.2 Potential Impacts and Mitigation Measures
All the proposed site improvements will be designed to meet appropriate building codes and safety requirements. Because the proposed site improvements are intended to draw residents and visitors to the Civic Center, the anticipated increase of activity and visitors will potentially result in unavoidable demand for fire protection services. However, it is anticipated that these needs will be intermittent and not significantly different from existing requirements. Existing fire service will be sufficient to protect the area. The close proximity of the Līhu‘e Fire Station should provide quick response times to any incidents reported at the project site.

5.7.3 Education

5.7.3.1 Existing Conditions
The project site is located within the State Department of Education (DOE) Līhu‘e School District. Within the District, there is one high school, Kaua‘i High School (Grades 9-12), one middle school, Kamakahelei Middle School (Grades 6-8), and two elementary schools, Wilcox Elementary School (Pre-Kindergarten to Grade 5) and Kaumuali‘i Elementary School (Pre-Kindergarten to Grade 5). There is also one private school, Island School which serves Pre-Kindergarten to Grade 12. The school within the closest proximity to the proposed site improvements is Wilcox Elementary School. It is located one block to the east, across ‘Umi Street.

5.7.3.2 Potential Impacts and Mitigation Measures
The proposed site improvements will not increase resident population in the area. Thus, there should be no impact on existing educational services.

The design of the proposed roundabout and splitter islands at the ‘Umi and Hardy Street intersection will accommodate Wilcox Elementary School’s existing driveways and crosswalks. During peak drop-off and pick-up times, Wilcox Elementary School
officials say that the queue of cars entering their parking lots back up on ‘Umi Street which may affect operation of the roundabout. This problem did not occur when parents were allowed to use the War Memorial parking lot as a student drop-off/pick-up area. However, due to a conflict in liability issues, the State did not want to continue this arrangement and the County now bans student pick up and drop off in this parking lot. After discussions with both County and Wilcox Elementary School officials, both sides are willing to work together to revisit this option. School officials thought the roundabout was a good idea and liked the design but want to make sure that their operations do not affect the traffic in this area. Further discussions should be held between the County and State to see if reinstating this arrangement would be feasible. It would eliminate the back up of cars queuing along ‘Umi Street and provide a safe place for students to be picked up and dropped off.

5.7.4 Health Care Services

5.7.4.1 Existing Conditions
There are three major hospitals on Kaua‘i. They are the Kaua‘i Veterans Memorial Hospital in Waimea, the Samuel Mahelona Hospital in Kapa‘a and the Wilcox Memorial Hospital in Lihu‘e. Wilcox Hospital, the closest hospital to the project site, is located less than a half-mile north of the Civic Center. It is a 71-bed facility that provides acute care and emergency services. Within the second and third floors of the hospital is the 110-bed Garden Island Health Care, which provides long-term care. Together, the three hospitals operate four advanced life support ambulances.

5.7.4.2 Potential Impacts and Mitigation Measures
There will be an unavoidable and occasional need for emergency health care services. However, the proposed site improvements are located in close proximity to Wilcox Hospital. Since the proposed uses are essentially the same, no significant increase on existing emergency or health care services are anticipated.

5.7.5 Recreational Facilities

5.7.5.1 Existing Conditions
Within the Lihu‘e District, the County has over 95 acres of parks. In the immediate vicinity of the Civic Center, there are several recreational facilities. They include:

- Lihu‘e Park (little league and pony fields, practice soccer field)
- Lihu‘e County Park (tennis courts)
- Kalena Park (basketball court, playground equipment)
- Isenberg Park (softball, practice football field, playground equipment)
- Molokoa Park (no facilities)
- Vidinha Stadium (Athletic Complex, Baseball Field, Lighted Football Field, Track, 10 Acre Parcel Adjacent to Vidinha Stadium Converted to Soccer Fields)
5.7.5.2 Potential Impacts and Mitigation Measures
The proposed site improvements at the Civic Center are not expected to negatively impact existing recreational facilities. Once completed, it will enhance existing recreational opportunities for residents, workers and visitors in Līhuʻe since it provides a different kind of open space from existing facilities. Most of the existing facilities are for active recreation consisting of playfields and play equipment. In contrast, the proposed master plan creates a campus-like environment within the heart of the Civic Center. It will be an urban recreational facility with formal pedestrian pathways, benches, and shady canopy trees. It will provide a place for more passive activities such as meeting with friends and coworkers for lunch as well as provide event spaces for community festivals and celebrations. The proposed site improvements will have a positive impact by increasing the number and adding variety to Līhuʻe’s recreational amenities.
6.0 DESCRIPTION OF ALTERNATIVES

In compliance with the provisions of Title 11, Department of Health, Chapter 200, Environmental Impact Statement Rules, Section 11-200-17(f), the “known feasible” alternatives to the proposed project are limited to those that would allow the objectives of the project to be met, while minimizing potential adverse environmental impacts. As such, the Lihue Civic Center Site Improvements have been evaluated in terms of the following alternatives.

6.1 NO ACTION ALTERNATIVE

Although the Civic Center is the government seat of Kaua‘i, it lacks a sense of place and does not currently embody the spirit of a Civic Center. Although it has several civic and historic buildings onsite, it lacks the physical clarity and aesthetic quality of a Civic Center. There are no clear pedestrian paths connecting the buildings, vegetation is sparse and inconsistent, and nearly half of the site is covered with asphalt.

The “no action” alternative is not viable as the Civic Center will continue to be unsafe and uninviting to pedestrians. Parking lots will remain unorganized and dominate the view of the Civic Center. Multi-modal transportation systems are not supported. Traffic will continue to worsen, creating unsafe situations on the surrounding roadways and down the center of the Civic Center on ‘Eiwa Street. As stated in Section 5.6.1, the only way to mitigate future traffic conditions at either end of ‘Eiwa Street is to signalize the two intersections. The Civic Center would continue to lack a sense of place. The “no-action” alternative does not meet any of the project objectives or the vision for the Civic Center described in the General Plan.

6.2 DESIGN ALTERNATIVES

Several design alternatives were studied throughout the development of the master plan. The main differences between the alternatives involved ‘Eiwa Street and the parking structures. This section reviews these design alternatives and discusses the rationale behind the pros and cons of each. It will also consider how well each alternative meets project objectives.

6.2.1 ‘Eiwa Street Alternatives

There are five basic design alternatives for ‘Eiwa Street: 1) leave as is, the “no action” alternative described above, 2) realign ‘Eiwa Street to intersect directly with ‘Akahi and Wa’a Streets, 3) narrow ‘Eiwa Street and provide curbs, sidewalks and street trees, 4) close a portion of ‘Eiwa Street, and 5) close ‘Eiwa Street entirely as recommended in the preferred alternative. Since the first and last alternatives are
described in Sections 6.1 and 6.3, respectively, the remaining alternatives will be discussed in this section.

**6.2.1.1 Realigned ‘Eiwa Street**

Realining ‘Eiwa Street would have the benefit of simplifying intersections along Rice and Hardy Streets by creating four-way intersections with Wa’a and ‘Akahi, respectively. This alternative was actually recommended in the 1976 Līhu’e Development Plan (see Figure 10). However, in order to have ‘Eiwa Street match with Wa’a road, several large monkey pod trees at the County Lawn would have to be removed. It would also negatively impact the County Lawn which is in the Historic District by making it smaller. The realigned road would also create angled spaces on both sides of the road since ‘Akahi and Wa’a do not line up with each other. This leads to less efficient design such as triangular shaped parking lots and unusable remnant spaces. This alternative leaves the Civic Center bisected in two halves and continues to allow cut-through vehicle traffic through the center of the Civic Center.

**6.2.1.2 Narrowed Traffic Lanes, Sidewalks, and Landscaping on ‘Eiwa Street**

This alternative would make ‘Eiwa Street safer and more pleasant for pedestrians by providing curbs, sidewalks, and street trees within the right-of-way. It would also narrow the traffic lanes which shortens the distance pedestrians must cross across the street. However, it does not improve the future traffic conditions at its intersections with Rice and Hardy Streets and mitigation at those intersections will eventually become necessary. Cut through traffic would still be allowed through the center of the Civic Center although the narrowed travel lanes may encourage drivers to slow down.

**6.2.1.3 Partial Closure of ‘Eiwa Street**

There are three areas in which ‘Eiwa Street could be partially closed: 1) on the Hardy Street side, 2) on the Rice Street side, or 3) in the center of the road. While there are a variety of benefits to this alternative, the same issue of the unaligned intersections at either one or two places would exist. Cut through traffic would be eliminated. However, multiple accesses and offset intersections along Rice and Hardy Streets unnecessarily complicate traffic movements. These conditions require drivers to monitor many situations which can lead to accidents or long delays. Safety in these areas would not be improved.

**6.2.2 Location of the Parking Structures**

Besides the two preferred locations for the parking structures, several onsite and offsite locations were considered.

**6.2.2.1 Onsite Locations**

Two other locations for the parking structures were considered onsite. The first is the Rice Street parking lot. This alternative was quickly eliminated since the depth of
that parking lot is too narrow to fit two double-loaded parking aisles required for the parking structure. Typically, a minimum of two driving aisles is recommended for parking structures so cars can circulate around the structure. Also, since parking structures are expensive to build, maximizing the number of stalls accessed by each aisle is encouraged. Therefore, two double-loaded parking aisles with a total depth of about 125 feet is the minimum depth needed for a parking structure.

The other alternative location considered was between the State Office Building and the Historic County Building. While there is sufficient space for a parking structure, this alternative was eliminated since it cuts through the Līhuʻe Civic Center Historic District.

6.2.2.2 Offsite Locations
Offsite locations for parking structures and parking areas are still viable alternatives. Several of them are described in Section 2.4.2.4 and should be considered during the design process. These alternatives could either supplement or supplant the proposed parking structures within the Civic Center.

6.3 PREFERRED ALTERNATIVE

The preferred alternative is shown in Figure 1 and described in Section 2.0. It is the preferred alternative because it best implements the goals and objectives of the Civic Center, and balances the input from the County and the numerous recommendations gathered from the community. The proposed master plan closes ʻEiwa Street which unifies the project site into a pedestrian-friendly campus-like environment. Pedestrians can walk uninterrupted by traffic through the middle of the Civic Center from the Historic County Building to the Moʻikeha Building. Traffic and parking areas are organized and simplified. The Civic Center gains 2.4 acres of landscaped public open space and improves its sense of place. The proposed master plan provides flexibility in its design while best meeting the project’s objectives.
7.0 DETERMINATION, FINDINGS, & REASONS FOR SUPPORTING THE DETERMINATION

To determine whether the proposed action may have a significant impact on the environment, including all phases of the project, expected consequences, both primary and secondary, cumulative as well as short- and long-term effects have been evaluated. Based on the research performed and studies evaluated, the Accepting Agency, the County of Kaua‘i Department of Public Works, is anticipating a Finding of No Significant Impact (FONSI) as detailed in this section.

7.1 SIGNIFICANCE CRITERIA

According to the Department of Health Environmental Assessment Rules Section 11-200-12 HAR, an applicant or agency must determine whether an action may have a significant impact on the environment, including all phases of the project, its expected consequences both primary and secondary, its cumulative impact with other projects and its short and long-term effects. In making the determination, the rules establish “significance criteria” to be used as a basis for identifying whether significant environmental impact will occur. According to the Rules, an action shall be determined to have a significant impact on the environment if it meets any one of the following criteria:

1. Involves an irrevocable commitment to loss or destruction of any natural or cultural resources;

The area proposed for site improvements has been extensively modified from its natural state. It is heavily urbanized with existing buildings and parking lots. Even the County Lawn is a modified environment with its manicured lawn and formal rows of royal palms. The proposed improvements primarily consist of landscaping, pedestrian paths, roadway and parking improvements and therefore do not involve an irrevocable commitment to loss or destruction of any natural resources.

The proposed improvements will not impact the historic buildings listed on the National and Hawai‘i Registers of Historic Places. No changes are recommended for the historic buildings. In fact, most of the existing buildings, historic or not, are not affected by the proposed improvements.

Should any archaeologically significant artifacts, bones or other cultural or archaeological resources be discovered during construction, excavation or grading, work will stop immediately within the area of the find and the State Historic Preservation Division will be contacted for appropriate action and mitigation if necessary.
(2) Curtails the range of beneficial uses of the environment;

Most of the improvements involve the enhancement of the existing facilities and will not alter the existing uses. Proposed site improvements include adding pedestrian paths and walkways between existing buildings, reorganizing existing parking areas, expanding open spaces and installing landscaping. Thus, the proposed master plan will enhance, rather than curtail, the beneficial uses of the environment.

(3) Conflicts with the State’s long-term environmental policies or goals and guidelines as expressed in Chapter 344, HRS; and any revisions thereof and amendments thereto, court decisions, or executive orders;

The proposed site improvements are consistent with the Environmental Policies established in Chapter 344, HRS as follows:

- Encourage management practices which conserve and protect ... open space areas (HRS 344-4 (2) (D)).
- Foster the planting of native as well as other trees, shrubs, and flowering plants compatible to the enhancement of our environment (HRS 344-4 (3) (B)).
- Establish, preserve and maintain scenic, historic, cultural, park and recreation areas, including the shorelines, for public recreational, educational, and scientific uses (HRS 344-4 (4) (A)).
- Promote open space in view of its natural beauty not only as a natural resource but as an ennobling, living environment for its people (HRS 344-4 (4) (C)).

The proposed master plan increases the amount of open space made available for public enjoyment within the civic heart of Līhuʻe. Native plants are recommended for the landscaping within the project area. Historic buildings and scenic views are preserved by the proposed improvements. The proposed master plan fits well within the State's environmental policies as established in Chapter 344 HRS.

(4) Substantially affects the economic or social welfare and cultural practices of the community or State;

The proposed site improvements are expected to positively affect the social and economic welfare of the Līhuʻe community. By creating more comfortable, convenient and safe pedestrian environments, the proposed master plan provides opportunities for the community to gather and enjoy the outdoor areas of the Civic Center. Cultural practices of the community are enhanced by the installation of interpretive signage for historic resources, educating the public about their significance. Construction activities will provide temporary employment benefits while the revitalization of the Civic Center could encourage economic redevelopment in Līhuʻe Town.
(5) **Substantially affects public health;**

Impacts to public health may be temporarily affected by air, noise, and water quality impacts during construction. However, these will be short in duration and minimal when weighted against the social benefits associated with the proposed improvements.

(6) **Involves substantial secondary impacts, such as population changes or effects on public facilities;**

The proposed site improvements are not expected to have substantial secondary impacts such as population changes since the use remains the same. The Civic Center itself is a public facility and therefore serves rather than affects public facilities such as schools, fire, and police protection requirements. The proposed improvements will have a positive impact on public facilities in that the Civic Center itself will be revitalized.

(7) **Involves a substantial degradation of environmental quality;**

The project site is located in an existing urbanized area and will not involve a substantial degradation of environmental quality. The area has been extensively modified by development and urbanization over the past 180 years. The Master Plan seeks to improve the environmental quality of the area through the expansion of open space and permeable surfaces and through the use of Native landscaping. Stormwater runoff will be further reduced if rooftop catchment systems are installed for irrigation.

(8) **Is individually limited but cumulatively has considerable effect on the environment, or involves a commitment for larger actions;**

The proposed site improvements will not have a cumulative negative effect on the existing urban environment nor will it involve a commitment for larger actions since all the proposed improvements are focused on revitalizing the Civic Center. The improvements could be undertaken in many ways that fit the priorities and fiscal capabilities of the County at any moment in time. In addition, various alternatives and their estimated costs are presented in the plan in order to provide options to County decision makers. Construction-related impacts would be short term and would occur over several years as the facilities are built.

(9) **Substantially affects a rare, threatened or endangered species or its habitat;**

The Civic Center area has been significantly modified from its natural state by urbanization. No rare, threatened or endangered species are known to exist within the area. However, shielded, downward-facing outdoor lights will be used to minimize the impact to the threatened Newell shearwater should they fly over the
site. Also, the expanded open spaces and increased landscaping could provide habitat for other species in the vicinity.

(10) Detrimentally affects air or water quality or ambient noise levels;

During construction, short-term potential impacts on air quality, noise, and water quality may occur. However, these impacts are temporary and will not negatively affect long-term air or water quality or noise levels. The additional landscaping and will help clean the air by absorbing carbon and producing oxygen. Street trees will help trap air pollution particles. Stormwater runoff should be reduced with the increase in pervious surfaces. In addition, the trees and landscaping will help buffer noise from surrounding roads and other uses.

(11) Affects or is likely to suffer damage by being located in an environmentally sensitive area, such as a flood plain, tsunami zone, beach, erosion-prone area, geologically hazardous land, estuary, freshwater, or coastal waters.

The Civic Center is not located within an area of flood concern. It is located inland, away from the shoreline and beaches and is outside of the tsunami evacuation area. It is located outside of the 500-year floodplain. The proposed site improvements are not located in erosion-prone areas or geologically hazardous land. There are no estuaries, freshwater or coastal waters within the project site. See Sections 4.2, 4.3 and 4.4 for more details.

(12) Substantially affects scenic vistas and view planes identified in County or State plans or studies;

There are no scenic views or vistas related to the Civic Center in the County’s Heritage Resource Map from the General Plan. However, the Civic Center is located on a plateau with distant views of Ha'upu and Waialae'ale. The proposed master plan preserves those views by recommending that parking structures be built below grade and overhead utilities be relocated underground. Additional landscaping including large canopy trees will be installed. However, the landscaping will ultimately beautify the area. No other proposed improvements are anticipated to affect scenic views.

(13) Requires substantial energy consumption.

Construction of the proposed project will not require substantial energy consumption relative to other similar projects. Once implemented, the improvements will not require significant amounts of additional energy consumption. The main improvements that will require energy are the lighting and irrigation system. The additional trees and increase in landscaped areas may help to reduce energy consumption of the Civic Center buildings by reducing the heat island effect, common in urbanized areas, reducing the need for cooling. The proposed site
improvements may also reduce the number of motorized trips and gasoline consumption by creating a pedestrian-friendly environment that encourages people to walk rather than drive their cars in and around the Civic Center.

7.2 **ANTICIPATED DETERMINATION**

On the basis of the above criteria, the discussion of impacts and mitigation measures as well as public comments received and contained in this document, it is anticipated that the Accepting Agency, the Department of Public Works will find that the Līhu'e Civic Center Site Improvements Master Plan will not have a significant effect on the environment. Pursuant to Chapter 343, Hawai‘i Revised Statutes, the Accepting Agency is anticipated to issue a Finding of No Significant Impact (FONSI) for the proposed project.
8.0 REFERENCES


State of Hawai‘i, Department of Business, Economic Development, and Tourism. GIS Data Files. Website: http://www.hawaii.gov/dbedt/gis/


State of Hawai‘i. 2001 Revised Hawai‘i Statues. Chapters 343 and 344.


University of Hawai‘i, Hawai‘i Biodiversity and Mapping Program (2007). Website: http://hbmp.hawaii.edu

9.0 COMMENT LETTERS ON THE DRAFT ENVIRONMENTAL ASSESSMENT AND RESPONSES

The following is a list of agencies, organizations, and individuals to whom the Draft EA was mailed for comment and the date of their comment letters. Copies of the comment letters and the responses are attached in their entirety on the following pages.

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