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# **Audit Report of the Convention Center Authority: First Report- Design and Construction of the Convention Center**

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A Report to the  
Governor  
and the  
Legislature of  
the State of  
Hawaii

Report No. 98-16  
September 1998



**THE AUDITOR**  
STATE OF HAWAII

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## The Office of the Auditor

The missions of the Office of the Auditor are assigned by the Hawaii State Constitution (Article VII, Section 10). The primary mission is to conduct post audits of the transactions, accounts, programs, and performance of public agencies. A supplemental mission is to conduct such other investigations and prepare such additional reports as may be directed by the Legislature.

Under its assigned missions, the office conducts the following types of examinations:

1. *Financial audits* attest to the fairness of the financial statements of agencies. They examine the adequacy of the financial records and accounting and internal controls, and they determine the legality and propriety of expenditures.
2. *Management audits*, which are also referred to as *performance audits*, examine the effectiveness of programs or the efficiency of agencies or both. These audits are also called *program audits*, when they focus on whether programs are attaining the objectives and results expected of them, and *operations audits*, when they examine how well agencies are organized and managed and how efficiently they acquire and utilize resources.
3. *Sunset evaluations* evaluate new professional and occupational licensing programs to determine whether the programs should be terminated, continued, or modified. These evaluations are conducted in accordance with criteria established by statute.
4. *Sunrise analyses* are similar to sunset evaluations, but they apply to proposed rather than existing regulatory programs. Before a new professional and occupational licensing program can be enacted, the statutes require that the measure be analyzed by the Office of the Auditor as to its probable effects.
5. *Health insurance analyses* examine bills that propose to mandate certain health insurance benefits. Such bills cannot be enacted unless they are referred to the Office of the Auditor for an assessment of the social and financial impact of the proposed measure.
6. *Analyses of proposed special funds* and existing *trust and revolving funds* determine if proposals to establish these funds and existing funds meet legislative criteria.
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9. *Special studies* respond to requests from both houses of the Legislature. The studies usually address specific problems for which the Legislature is seeking solutions.

Hawaii's laws provide the Auditor with broad powers to examine all books, records, files, papers, and documents and all financial affairs of every agency. The Auditor also has the authority to summon persons to produce records and to question persons under oath. However, the Office of the Auditor exercises no control function, and its authority is limited to reviewing, evaluating, and reporting on its findings and recommendations to the Legislature and the Governor.



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# OVERVIEW

## *Audit Report of the Convention Center Authority: First Report-Design and Construction of the Convention Center*

Report No. 98-16, September 1998

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### Summary

This is the first of two reports of an audit being conducted by the Office of the Auditor pursuant to Section 12(a) of Act 156, SLH 1998, which directed the State Auditor to audit and monitor the progress made by the Convention Center Authority in resolving various outstanding issues and problems on or before the termination date of the authority. The interim report is to be submitted by September 30, 1998, with the final report to be issued by February 28, 1999.

The Convention Center Authority (authority) is charged by the Legislature with the responsibility of overseeing the development, management, operations, and maintenance of a convention center in Hawaii. The authority recently officially opened the \$350 million Hawai'i Convention Center amidst fanfare and controversy. The convention center, constructed on the "Aloha Motors" site in Waikiki, is praised for its excellent design and for being built within budget and ahead of schedule. Yet it is criticized for insensitivity to its residential neighbors and claims of faulty construction. This first report focuses on design and construction issues relating to the convention center. Issues relating to the authority's oversight and the management and marketing of the convention center will be addressed in the final report.

Thus far, the Convention Center Authority has generally assured that the newly constructed Hawai'i Convention Center meets or will meet contract and government requirements. The authority has generally assured that specific legislative design and construction requirements for the convention center have been met. In addition, the authority has monitored Nordic/PCL, the design/build contractor, to ensure substantial compliance with the design and construction requirements specified in the accepted environmental impact statement. However, there are defects and problems that the authority has been identifying and is working with the contractor to resolve. Some of these problems are potentially costly, and the authority must continue to exercise diligence to protect the interests of the State and public to ensure that the problems are effectively addressed in a timely manner. However, we also note that although the initial one year warranty period for design flaws will expire shortly, there are alternative legal remedies available to ensure resolution of these and other problems that the authority may identify.

The responsibility for two important and potentially costly problems is disputed by Nordic/PCL. The first problem is excessively warm temperatures in the convention center ground floor lobby and the foyer area fronting the rooftop ballroom. The second problem concerns the potential to generate excessive noise from events held on the rooftop terrace. The authority is actively seeking to resolve these issues. However, we found that confusion over noise standards hinders resolution of the noise problem. The authority currently claims that commonly used noise standards are not applicable to the rooftop terrace. However, evidence supports the

conclusion that the center was designed with the intent that such noise standards apply. The situation is further complicated by preliminary results of current noise testing that indicates the commonly used noise standard of 60 dBA may not be relevant because the background noise in the area already exceeds this standard.

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## Recommendations and Response

We recommended that the Convention Center Authority continue to identify problems that may be the fault of the design/builder and aggressively pursue resolution of those problems. We also recommended that the authority accept the Department of Health community noise guidelines as the current noise limits for rooftop terrace events. Finally, we recommend that if a new noise standard needs to be established it should be either through direct legislative action or by an objective party empowered by the Legislature.

The Convention Center Authority responded that it found the report comments helpful and would incorporate them in actions taken by the authority. In addition, the authority provided additional comments as points of clarification. The authority is continuing to use 60 dBA as the design and construction noise standard in its discussions with the design/builder, Nordic/PCL. The authority believes that the Department of Health should promulgate and administer rules pertaining to noise generated by convention center events and unsuccessfully supported legislation to this effect before the 1998 Legislature. The authority recognizes that it may have no choice but to establish its own rules with recommendations from a community committee under the leadership from the Department of Health. However, the authority also believes that it would be premature to establish a noise standard for the convention center until ongoing noise testing is completed and the results and recommendations have been made.

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Submitted by

**THE AUDITOR**  
STATE OF HAWAII

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## Foreword

This is the first of two reports of an audit of the Convention Center Authority. The audit was conducted pursuant to Section 12(a), Act 156, Session Laws of Hawaii 1998, which directed the Auditor to audit and monitor the progress made by the Convention Center Authority in resolving various outstanding issues and problems on or before the termination date of the authority. The Legislature requested that the final report be issued by February 28, 1999, with an interim report on the progress of the Convention Center Authority to be submitted by September 30, 1998.

We wish to express our appreciation for the cooperation and assistance extended by officials and staff of the Convention Center Authority and SMG, the convention center management, during the course of this audit.

Marion M. Higa  
State Auditor



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# Chapter 1

## Introduction

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Section 12(a), Act 156, Session Laws of Hawaii (SLH) 1998, asks the State Auditor to audit and monitor progress made by the Convention Center Authority (authority) in resolving various outstanding issues to assure the Legislature that these issues will have been addressed on or before the termination date of the authority. The authority's termination date was extended by one year to June 30, 1999 in Section 8 of Act 156. The issues to be examined by the Auditor include the authority's effectiveness in resolving traffic, noise, and other outstanding claims as well as any financial issues that the Auditor deems appropriate.

Recently, the \$350 million Hawai'i Convention Center officially opened for business amidst fanfare and controversy. Advocates see the convention center as a key ingredient for the state's economic security; others see the center as a waste of public moneys. The center is praised for its excellent design, and for being constructed within budget and ahead of schedule. Yet, it is criticized for insensitivity to its residential neighbors and claims of faulty construction. Promotional materials tout the center's landscaped rooftop terrace as one of its most attractive features; however, official reports suggest that it cannot be used for some events. In this report—the first of two required by the Legislature—we examine the relationship between the center's authority and its contracted design/builder as well as the status of any outstanding issues related to the design and construction of the convention center.

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## Background

The Legislature asked for both an interim report, to be issued by September 30, 1998, on the progress being made by the authority, and a final management audit report by February 28, 1999. To meet the interim report deadline requirement, the scope of this report is limited to the general area of design/build issues relating to the convention center. Exhibit 1.1 shows both reports' respective scopes of review that involves both the authority and its contracted design/builder, Nordic/PCL.

It is important to note that, when compared with all the convention center issues, the issues in this report are considerably narrow in scope. A number of significant issues remain for our final report due next year. These issues include: the authority and its contracted facility operator's effectiveness in addressing community concerns, the state's continuing oversight of this project upon the authority's termination, and the effectiveness of marketing mechanisms for the convention center.

**Exhibit 1.1**  
**Scope of Review for Interim Report and Final Report on The Convention Center Authority**

	Interim Report (this report)	Final Report (due February 1999)		
<b>General Topic</b>	Design/build issues	Authority oversight	Management	Marketing
<b>Audited Entity</b>	Authority	Authority	Authority and SMG	Authority and SMG
<b>Other involved entity</b>	Nordic/PCL	State	Neighboring residents	HVCB
<b>Specific issues examined</b>	<ul style="list-style-type: none"> <li>• Design/build RFP</li> <li>• Design features</li> <li>• Design/build contract</li> <li>• EIS</li> <li>• Warranty issues</li> <li>• Contract issues</li> </ul>	<ul style="list-style-type: none"> <li>• Authority function and role</li> <li>• Use of public funds</li> <li>• Procurement practices</li> <li>• Public purpose of the convention center</li> </ul>	<ul style="list-style-type: none"> <li>• Management of traffic issues</li> <li>• Management of noise issues</li> <li>• HCCJAC</li> <li>• Public relations</li> </ul>	<ul style="list-style-type: none"> <li>• Marketing process</li> <li>• Marketing effectiveness</li> </ul>

Abbreviations:

Authority	Convention Center Authority
SMG	Contracted operator of the Hawai'i Convention Center
RFP	Request for proposals
EIS	Environmental impact statement
HVCB	Hawaii Visitors and Conventions Bureau
HCCJAC	Hawai'i Convention Center Joint Advisory Council

***The Convention Center Authority***

The Waikiki Convention Center Authority was established in 1988 under Act 96, SLH 1988. This seven member authority was to develop a convention center originally at the International Market Place. However, when the selected private developer withdrew its plan to build a convention center in 1992, it became apparent that the authority would not accomplish its mission before its scheduled sunset in 1992. Act 159, SLH 1992, changed the name of the Waikiki Convention Center Authority to the Convention Center Authority and extended its duration with instructions to do a statewide convention center site-selection survey. Under Chapter 206X, Hawaii Revised Statutes (HRS), the authority is responsible for overseeing the development, management, operations, and maintenance of a convention center. The Legislature designated the authority to be owner and operator of the facility. The authority was also given considerable independence and powers to accomplish its objectives. The authority is administratively placed under the Department of Business, Economic Development, and Tourism. Currently, there is no plan or provision for state oversight of the convention center after the authority expires in June 1999.

## ***Design and construction of the Hawai'i Convention Center***

The Hawai'i Convention Center was conceived as a way to expand Hawaii's visitor market by attracting more conventioners. The Legislature had concluded that expansion of Hawaii's market to include more convention-going visitors was essential to ensure the continued vitality of the state's tourism market. The Legislature also concluded that existing convention facilities in the state were insufficient to attract the quantity and quality of conventions that could provide greater year-round stability to the economy. Therefore, in Act 7, SLH Special Session 1993, the Legislature appropriated \$350 million as the total budget for the development of a world class facility. The Legislature predicted that the economic stimulation from a convention center would increase the state's and counties' tax revenues by \$335 million per year.

With the demise of plans for a convention center at the International Market Place, the authority recommended six alternative sites to the Legislature in 1992. The Legislature officially selected the present location in 1993, commonly known as the Aloha Motors site. The Aloha Motors site is bordered by Kahakai Drive, Atkinson Drive, Kapiolani Boulevard, Kalakaua Avenue, and the Ala Wai Canal. The State purchased this site for \$126 million and two neighboring parcels of land for \$10 million, for a total site acquisition cost exceeding \$130 million.

In 1994, the authority issued a request for proposals (RFP) to design and build the convention center as a "design/build" project. The RFP specified the general design criteria, budget parameters, and time schedule. After evaluating the proposals, the authority awarded a \$200 million contract to Nordic/PCL, a joint venture, as the design/build.

Nordic/PCL was to develop and submit an environmental impact statement (EIS), design and build the center within budget and on time, and repair defects found in the first year. Nordic/PCL submitted the required EIS in 1995. After public meetings and the opportunity to review and comment on the EIS by other interested parties, the governor accepted the environmental impact statement subject to Nordic/PCL and the authority performing certain mitigation activities. Nordic/PCL was to incorporate design features to reduce traffic congestion and noise during center operations and reduce disturbances to the neighborhood during construction. The governor's acceptance of the EIS also required the authority to manage traffic and noise problems to reduce the impact on the neighborhood.

Nordic/PCL designed and constructed the facility within the \$350 million budget (see Exhibit 1.2) on October 13, 1997, earlier than scheduled.

The facility was accepted on the project completion date, October 13, 1997, but was not in perfect condition. The authority made full payment with the condition that Nordic/PCL repair defects as noted by the authority during its final inspection. Additional defects discovered prior

to October 13, 1998 could be remedied under the design/builder's general one-year warranty for labor and materials as the contract requires. Approximately 35 building items have manufacturers' warranties that extend beyond the general one-year warranty period. Other items found deficient after one year that fall outside the general contract warranty may be remedied through civil court action.

Items discovered before the October 13, 1997 acceptance of the facility are referred to as "punch list" items. Punch list items include outstanding repairs or incomplete items. The construction industry's standard operating procedure permits the transfer of a building to the owner prior to 100 percent completion of every item. The punch list for the convention center had approximately 250 items that needed repair or completion by Nordic/PCL. Only a few items on the punch list remain outstanding as of this report.

**EXHIBIT 1.2**  
**Costs of Developing the Convention Center (as of April 30, 1998)**

	Plans	Land	Design	Construction	Equipment	TOTAL
<b>Appropriations</b>						
1993	\$1,470,000	\$136,400,000	\$10,000,000	\$202,130,000		
1996			163,000	752,000	\$8,545,000	
Less lapsed funds	(473,563)	(4,895,149)	(2,129,402)	(4,028,914)		
<b>Total</b>	<b>\$996,437</b>	<b>\$131,504,851</b>	<b>\$8,033,598</b>	<b>\$198,853,086</b>	<b>\$8,545,000</b>	<b>\$347,932,972</b>
<b>Expenditures</b>						
1993-1994	\$475,410	\$131,468,225				
1994-1995	491,027	31,322	\$7,186,704	\$13,730,600		
1995-1996	30,000	5,304	543,318	63,176,018		
1996-1997			238,182	107,845,728	\$88,563	
1997-1998			33,323	13,049,896	3,347,726	
<b>Encumbrances</b>			32,071	936,355	958,780	
<b>Total</b>	<b>\$996,437</b>	<b>\$131,504,851</b>	<b>\$8,033,598</b>	<b>\$198,738,597</b>	<b>\$4,395,069</b>	<b>\$343,668,552</b>
<b>Balance</b>						<b>\$4,264,420</b>

Source: Convention Center Authority

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## Objectives of the Audit

1. Evaluate the Convention Center Authority's efforts to pursue available remedies for any defects in the design and construction of the Hawai'i Convention Center.
2. Make recommendations as appropriate.

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## Scope and Methodology

Our audit reviews the time period from 1994 to the present. This time frame allowed for a review of the authority's oversight during the design and construction of the convention center. The time frame also allowed for a progress report on the authority's efforts to resolve conflicts prior to the October 13, 1998 expiration of the general warranty.

We obtained information and data for this report from an extensive review of documents including statutes, laws, regulations, correspondence, professional studies of convention center environmental impacts, organizational materials such as meeting minutes and convention center policies, contracts and contract related documents, and design documents. We also interviewed staff and members of the authority, Hawai'i Convention Center management, Nordic/PCL, the authority's engineering consultants, legislators, community leaders and state and city officials. Further information was gathered while attending authority meetings, conducting inspections of the convention center facility, and observing center activities from neighboring condominiums during daytime and evening convention events.

Our work was performed from June 1998 to August 1998 in accordance with generally accepted government auditing standards.



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# Chapter 2

## Important Design and Construction Issues Must Still Be Resolved

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As the Hawai‘i Convention Center welcomes visitors to its facility, some believe that the design and construction phases are complete. Even the most frustrated neighbors have resigned themselves to the inevitable truth—the convention center is not going to move. Yet, the State’s relationship with the convention center’s design/builder is not complete. Now that the facility is hosting conventioners, its flaws are being revealed. Some of these are minor and correctable, but others may be more costly. The Convention Center Authority and its contracted facility managers must continue to identify, monitor, and resolve problems related to design or construction.

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### Summary of Findings

1. Thus far, the Convention Center Authority has generally assured that the newly constructed Hawai‘i Convention Center meets or will meet contract and government requirements. However, the Convention Center Authority will need to resolve potentially costly problems.
2. Confusion over noise limits for events on the rooftop terrace hinders the identification and resolution of a possible flaw in the rooftop design.

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### The Convention Center Authority Will Need to Resolve Potentially Costly Problems

The Convention Center Authority’s design and construction responsibilities are enumerated in state law. The authority’s contract oversight with Nordic/PCL included the contractor’s design and construction responsibilities outlined in the environmental impact statement (EIS) and in its contract with the authority. While statutory and EIS requirements have been met, questions about contract requirements are still being resolved.

The authority has generally assured the resolution of contract performance issues by closely monitoring the facility and informing Nordic/PCL of any problems. After the one-year warranty lapses, the authority and the State will still have legal recourse for problems which can be shown to be Nordic/PCL’s responsibility. However, the authority must remain vigilant in monitoring the facility because new and potentially costly problems may arise for which Nordic/PCL may deny responsibility.

***Convention center must conform to government and contractual requirements***

As overseer of the project, the authority should ensure that the convention center is properly designed and constructed. The criteria and specifications that constitute “proper” design and construction are contained in three sets of requirements: the legislative mandate to the authority, the governor’s acceptance of the final environmental impact statement for the project, and Nordic/PCL’s contract and contract documents. Thus far, the authority has assured us that two of the three requirements have been met.

**Design criteria have been met**

In Section 2 of Act 7, Session Laws of Hawaii (SLH), Special Session 1993, the Legislature added a section to Chapter 206X, Hawaii Revised Statutes (HRS), to define the general criteria for the convention center. Section 206X-4.5, HRS, states, “The following criteria shall apply to any convention center facility built or developed in any convention center district:

- (1) The convention center facility shall be a stand alone facility, without additional private development on site;
- (2) The convention center facility shall be owned and operated by the authority;
- (3) The flexible meeting rooms, ballrooms, and support space shall consist of a minimum of 675,000 gross square feet, of which a minimum of 200,000 gross square feet shall be exhibit space; provided that the exhibit space and related support space shall be on a single level with direct vehicle access to the exhibit floor;
- (4) The convention center facility shall be designed and developed to accommodate future expansion; and
- (5) The convention center facility shall reflect a “Hawaiian sense of place.”

As the entity responsible to implement Chapter 206X, HRS, the authority should ensure the facility meets these requirements.

The authority has ensured that the convention center meets the first four criteria. We note the inherently subjective nature of the fifth requirement that the convention center reflect a “Hawaiian sense of place.” However, the authority did make an effort to define a Hawaiian sense of place and to use the concept as a design-selection criteria. Taken together, we found that the authority has ensured that the convention center generally conforms with the criteria in Section 206X-4.5, HRS.

### **Environmental impact statement has mitigation requirements**

In accordance with Chapter 343, HRS, the convention center project required an environmental impact statement. On August 8, 1995, the governor accepted the final EIS as satisfactorily fulfilling state requirements with conditions. The governor added that the authority and/or its agents should perform all proposed mitigation measures, or alternative and at least equally effective measures, to minimize various negative impacts on traffic, noise, water quality, air quality, and other factors.

Several measures were required of Nordic/PCL. These included sound treating and appropriately insulating the housing of mechanical equipment to comply with Department of Health noise limits, installing non-slick roadway surfaces to decrease parking garage noise levels, and installing a traffic signal at the intersection of Atkinson Drive and Kahakai Drive for better traffic control. See Appendix A for the full text of the governor's letter describing additional conditions.

Nordic/PCL was also required to incorporate 17 items into the design and take 24 mitigation steps during construction. The operator of the center was required to incorporate 25 policies and procedures into the operations to mitigate the environmental impact. We found that Nordic/PCL has substantially complied with the requirements assigned by the governor. Nordic/PCL and the authority have accounted for each of the stated mitigation measures and either performed those actions or addressed those measures through other actions.

It should be noted that in this report we make no determination as to whether the authority and its contracted facility operator have taken the steps assigned to them. These management related actions will be examined in the final report.

### **Nordic/PCL made contractual promises**

When Nordic/PCL and the authority signed a contract on September 27, 1994, it was agreed that Nordic/PCL would fulfill all the obligations contained in the contract and contract documents, in exchange for \$200 million.

Among the contract documents are a two volume RFP of specifications and requirements and six addenda that further clarify and/or amend portions of the RFP. The total RFP contains many requirements. For example, the design/builder is responsible for any damage claims arising from construction activities and for conforming with all applicable codes, ordinances, laws, rules, and regulations.

The attachments or exhibits to the design/builder's proposal are also contract documents. These include the proposal books (four volumes of specifications, drawings, and detailed descriptions of the project), concept drawings, the scale model, and the press information kit that was presented by Nordic/PCL.

The contractor committed itself to the representations and requirements contained in hundreds of pages of documented materials in its contract with the authority. These requirements are complex and specific. Ensuring compliance has been an ongoing process. In the following section, we describe the authority's efforts to ensure Nordic/PCL's compliance.

***Thus far, the  
Convention Center  
Authority has identified  
problems and notified  
Nordic/PCL***

We found that the authority has been identifying areas where Nordic/PCL's performance has not conformed with its contractual promises. The authority has been notifying Nordic/PCL of these problems and is working with the contractor toward their resolution. To assist in these efforts, the authority has employed an engineering consultant to inspect and monitor the facility and Nordic/PCL's progress toward remedying the problems. Prior to acceptance of the construction work, the authority and its consultants inspected the facility for defects. Identified defects were noted on the punch list. Acceptance of the project was made on the condition that all items on the punch list would be corrected. Nordic/PCL has accepted responsibility and correction of these items seems underway. Some of the identified problems include leaking planters and water features, dying trees, and faulty escalator handrails. A potentially costly problem is water seepage into the convention center's concrete rooftop. This problem manifested itself in water percolating through cracks in the concrete slab.

While we found that the authority and its consultants are ensuring that the convention center meets contractual criteria, we also note that the convention center has hosted a relatively small number of events to date. Convention center staff acknowledge that many design or construction problems are often not detected until the facility is used in a certain way. For example, during a convention dance event, the strong beat of the music and the rhythmic dancing of the crowd caused the floor and glass to substantially vibrate. The authority and facility operators informed Nordic/PCL of the situation and Nordic/PCL is having a structural engineer analyze the problem. While the facility is considered safe, that condition was discovered during a particular function. These latent conditions make it imperative that the authority remain vigilant for other defects that may be the responsibility of the design/builder.

***State will have a remedy for design flaws even after warranty lapses***

The contract between the authority and Nordic/PCL states, “except as otherwise specified, all work shall be guaranteed by the Design/Builder against defects resulting from the use of defective or inferior design, engineering, materials, equipment or workmanship for one (1) year from the Project Acceptance Date.”

As the end of the one-year period approaches, legislators and taxpayers should be concerned about responsibilities for remedying any defects found after October 13, 1998. There are concerns whether a sufficient number of events have been held to discover any defects in design or construction. Another concern is whether the authority has carefully watched for any defects. While these concerns are legitimate, fear about the approaching warranty deadline may be allayed for two reasons.

First, 35 parts and items of the facility are guaranteed beyond one year. For example, electrical cables have a 15 year warranty, wheelchair lifts have a five year extended warranty, ceramic tile labor and materials are guaranteed for five years, and sheet metal roofing has a 20 year manufacturer’s warranty.

Secondly, even if warranties expire, the authority can seek remedies for defects if it can prove a breach of contract. For example, if the authority proves that the design/builder failed to perform something that it legally promised to do in its design proposals, the design/builder would be responsible for the defect. Assuming the authority could prove its case, the statute of limitations would apply. Section 657-8(a), HRS, pertains to recovering for damages arising out of deficiency or neglect in planning, design, construction, supervision and administering of construction, and observation of construction relating to an improvement to real property. Legal action cannot be commenced more than two years after finding the defect and not more than ten years after the date of completion of the project.

The authority has additional time to seek legal remedies from Nordic/PCL. Section 657-1.5, HRS, provides that the statute of limitations does not apply to actions brought by the State or any of its agencies. We believe there should be no need to invoke this section of the statute if the authority is diligent in monitoring design and construction issues.

***Nordic/PCL disputes responsibility for two important problems***

It is important that remedies exist beyond the warranty period because there are some issues that could develop into legal disputes.

On issues that Nordic/PCL admits that its work does not conform with its contractual promises, the authority’s responsibility is straightforward—the authority needs to make Nordic/PCL aware of the problems and monitor Nordic/PCL’s progress in correcting them. On issues for which Nordic/PCL disputes responsibility, the authority and State run the risk of

having to correct and pay for the problem's remedy. In these cases, the authority must build a case against Nordic/PCL and be prepared to prove it in court. If the authority is unable to build a case or is unsuccessful, it must be accountable to the public to explain the problem and to justify the amount spent to correct it.

Two such problems loom over the authority: 1) uncomfortable air temperature in certain areas of the convention center, and 2) potentially excessive noise emanating from use of the convention center's rooftop terrace. Both problems are significant due to the potentially high cost to remedy.

### **Air temperature problem is disputed**

Some of the people attending the opening ceremonies of the convention center discovered that certain areas were uncomfortably hot. Since then, others have confirmed this situation. Two areas with apparently poor air circulation are of particular concern because of heavy usage. These areas are the ground floor lobby in front of the exhibit hall, and the rooftop foyer in front of the ballroom. Neither space is air conditioned, but large crowds have used these areas in recent events.

If nothing is done to correct the temperature problem associated with these spaces, there may be revenue losses from lost future bookings. Dissatisfied conventioners may not book future conventions in Hawaii or may publicize the uncomfortable, inadequate facilities to other potential conventioners. In fact, the management has reported one convention group stating that it would not return to the convention center for any future use until the lobby registration area is adequately air conditioned.

Correcting this problem may be costly. Adding air conditioning units and other facility changes are being considered by the authority. Nordic/PCL contends that these areas are exterior spaces not normally air conditioned. Furthermore, it states that the lobby and ballroom foyer are not assembly areas but walkway areas where people do not congregate. However, we observed that conventioners do congregate in these areas. The authority and its consultants believe that Nordic/PCL represented these areas to be more comfortable than they are. The authority has put Nordic/PCL on notice of this problem, but the dispute remains unresolved.

We did not attempt to determine the effects of an adverse outcome. However, we recognize that resolving this issue is important to the future success of the convention center. The authority must work diligently to defend the state's interests and to resolve this issue as soon as possible.

### **Excessive noise problem is disputed**

The second area of dispute concerns the open rooftop terrace where different convention events can be held. Some think that events held on the rooftop terrace will generate excessive noise in the surrounding community. If so, use of the rooftop would be severely limited. The authority believes that the failure to incorporate noise considerations into the rooftop design may be a planning and design defect that should be corrected by Nordic/PCL. Nordic/PCL disputes that it is responsible. Surrounding residents continue to voice concerns over the potential for excessive noise generated from use of the rooftop facility.

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### **Confusion Over Noise Standards Hinders Resolution of the Rooftop Noise Issue**

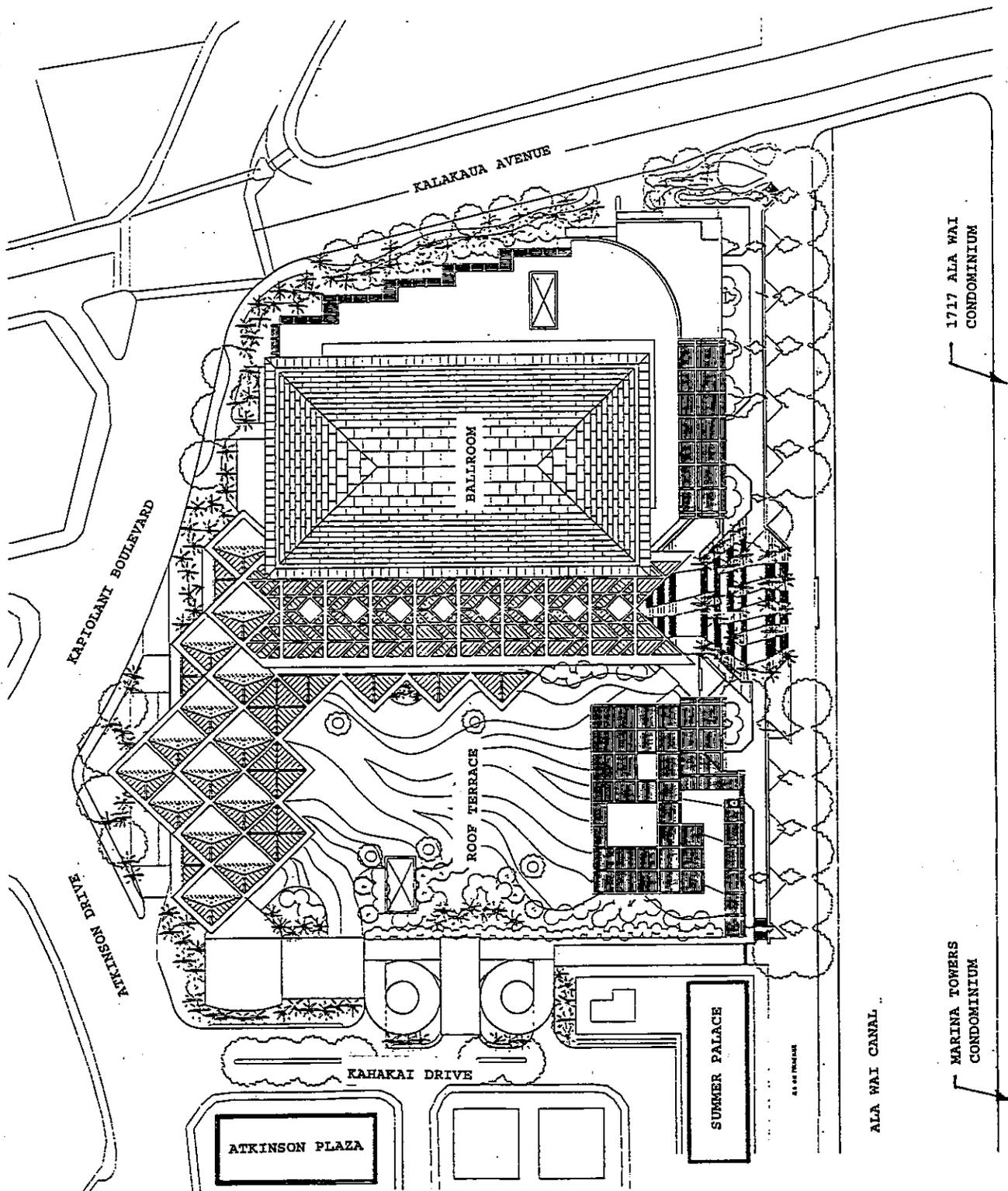
It is too early to say whether events on the convention center rooftop will generate excessive noise for neighboring residents. However, it is not too early to define the amount of noise considered as excessive. Currently, the authority claims that commonly used noise standards for the rooftop are not applicable even though state and city and county agencies adhere to them. Yet, throughout the design and construction process, the authority and others created an expectation that the noise standards did apply for rooftop events. The authority can clarify this issue by acknowledging its past statements. The statements will contribute toward defining and resolving a potential dispute with Nordic/PCL, establishing credibility with community leaders, and forming a more enforceable and reasonable noise standard if one is needed.

### ***There is concern that rooftop noise will be excessive***

The rooftop terrace is a 105,000 square foot open-air area on the uppermost level of the convention center on the side fronting Kahakai Drive. Two residential apartment buildings overlook the rooftop terrace and are situated very close to the convention center. Atkinson Plaza is separated from the convention center by Kahakai Drive and the Summer Palace is adjacent to the convention center. Both apartment buildings lack central air conditioning and residents must leave their windows open for fresh air. The location of the rooftop terrace relative to the condominiums is shown in Exhibit 2.1.

Based on these conditions, rooftop events at the convention center were obvious concerns to neighboring residents. These concerns were substantiated in a study prepared for the environmental impact statement. The 1995 study by Y. Ebisu and Associates found that "adverse noise impacts on neighboring properties are possible if large assemblies are held in the Roof Terrace area, and particularly so if sound reinforcement or paging systems are used." The suggested solution was to use portable enclosures for events of 10,000 or more people where amplified voice or music levels could reach levels of 80 or 90 decibels (dB). The authority did not employ portable enclosures because there were no plans to accommodate rooftop events of this magnitude.

Exhibit 2.1  
Location of Rooftop Terrace Relative to Residential Apartments



Concerns continued to grow after a noise impact assessment done at the request of the convention center stated that noise from rooftop events would likely be excessive. The 1998 report by Darby and Associates suggested five mitigating steps to reduce the chance of excessive noise: 1) conclude rooftop activities by 10:00 P.M., 2) install a sound monitoring system, 3) obtain a custom sound system, 4) require groups to use the custom sound equipment, and 5) consider installing tent-like structures to contain noise. The authority and its facility managers accomplished the first four steps through actions and established policies. The authority says that it will wait for noise test results of six events before deciding whether to use enclosures.

***If a noise problem exists, it may be due to a design flaw***

It is not yet known whether noise on the rooftop will be excessive because there have not been enough events held to adequately test noise conditions. The first step would be to identify whether a noise problem exists. If one does exist, the authority believes that responsibility for correcting this problem may fall on Nordic/PCL because of its representations in the RFP and subsequent presentations.

#### **Authority is gathering evidence**

In order to determine whether a problem exists, the authority and the convention center operator have instituted a rooftop noise monitoring plan. With the help of Darby and Associates, the convention center has installed monitoring equipment that will determine the noise levels of the first six rooftop events. In addition, Environmental Health Services Division personnel of the Department of Health and city and county Liquor Commission representatives are conducting sound measurements of rooftop activities and will issue a report in the near future. Some have questioned the authority's handling of the noise issue from a community perspective. This issue will be addressed in the final report.

At this time, three monitored events have taken place. The first, the Miss Universe coronation ball, had very few people on the rooftop. Many have called it a "non-event" and a poor test of the potential impact of rooftop events. The second and third tests were of much larger events. One was a sit-down luau including entertainment for about 400 conventioners from the Pacific Medical Technology Symposium. The other event used the ballroom, ballroom foyer, and rooftop terrace for about 6,000 delegates of the American Federation of State, County and Municipal Employees annual convention.

Events are monitored using sound measurement equipment installed by Darby and Associates with advice from the Department of Health's environmental administration. Amplified sound for rooftop events utilizes a specially designed sound system consisting of six wireless, omni-directional speakers. These speakers, which look like lamp posts, can be

placed anywhere on the roof terrace and project sound downward onto the audience. Early results indicate a problem of a different sort. It seems that background noise levels at nearby apartments from preexisting traffic and other noise sources excluding the noise generated from the event itself already exceeds 60 dBA, the general standard used by the Department of Health and Liquor Commission for community noise. This issue will be addressed further in our discussion of a special noise standard for the rooftop.

Since testing is not complete, neither we nor the authority can say whether noise will be a problem or not. However, we do believe that, in preparing for a potential dispute with Nordic/PCL, the authority is properly gathering evidence to support its position.

### **Nordic/PCL denies responsibility**

Nordic/PCL does not feel that it is responsible if the rooftop is deemed a noise nuisance for neighboring residents. But the authority could base its claim on representations made by Nordic/PCL in various contract documents. For example, in design documents, Nordic/PCL says that the roof garden “will offer a uniquely Hawaiian marketing tool, providing a beautiful outdoor landscape setting for a sidewalk cafe, special shows, luaus, and light exhibits during the day or under the stars at night.”

The RFP states the design/builder bears responsibility for mitigating adverse environmental impacts. However, in an addendum to the RFP, some mitigation measures may be made the responsibility of the convention center operator. As such, the final EIS stated that if the rooftop area is used for large assemblies and music or voice levels of 80 to 90 decibels are anticipated, then the convention center operator must install portable enclosures or other measures to keep sound levels to acceptable levels.

In other words, at some point, responsibility for rooftop noise shifted from the design/builder to the convention center operator. Again, we make no attempt to determine responsibility for event-related noise problems on the rooftop. More importantly, it must be determined whether a noise problem exists at all.

***Authority says there is no applicable noise standard for rooftop events, but past actions are inconsistent***

If rooftop noise is a problem, ultimate resolution of the issue may be delayed because the authority is claiming that no standard for rooftop noise exists to determine whether noise is in fact excessive. While noise regulation in Hawaii is complex, as it pertains to the authority’s potential dispute with Nordic/PCL, we found that the authority is unnecessarily clouding this issue.

The standard to which the rooftop was supposed to be designed and constructed is 60 dBA measured at the neighboring property lines between 7:00 A.M. and 10:00 P.M. This is consistent with the general guidelines of the Department of Health and the Liquor Commission.

### **Community noise regulation is challenged**

The authority claims that there are no noise limits on rooftop events because this kind of noise is generally not regulated in Hawaii. The noise control branch of the Department of Health regulates noise pollution in Hawaii. Until September 23, 1996, the Honolulu Police Department was responsible for the control and abatement of unreasonable noise—including the type of noise that would emanate from the convention center rooftop under the health department's administrative rules, Chapter 43. This noise was not to exceed 60 dBA measured at the neighboring property lines between 7:00 A.M. and 10:00 P.M. We note that Chapter 43 was in effect when the RFP was issued, when the authority and Nordic/PCL entered into their contract, and when the final EIS was accepted by the governor.

On September 23, 1996, the department's Chapter 43 administrative rules were replaced by Chapter 46. Chapter 46 has a larger statewide scope, but regulates fewer categories of noise. According to health department officials, it is too difficult and time consuming to patrol all the community noise violations that occur in the State. This process requires health department staff to visit the site in question, record and analyze sound measurements, and use these measurements as a basis for determining whether the community noise standard has been violated. Instead, the department regulates noise at stationary sources which include fixed machinery and construction sites. The health department agrees with the authority that there is no longer any active regulation of rooftop event noise under Chapter 46.

The Liquor Commission also monitors noise generation as one criterion for issuing, retaining, or revoking liquor licenses. Currently, the commission uses the same community noise standards set in Chapter 43. Similar to the health department, the commission's staff monitor and measure events for community noise standard violations which are reported to the commission for action. However, its jurisdiction is limited to events where a liquor license or a liquor permit has been issued. The authority does not consider the Liquor Commission's jurisdiction applicable to non-alcoholic events at the center's rooftop terrace.

### **Authority argues that regulations do not apply to convention center**

The authority also claims that state and county regulations do not apply to the convention center. It cites Section 206X-6, HRS, which states, "The

authority shall establish rules for the development within the convention center district under chapter 91 on health, safety, building, planning, zoning, land use, land development, and flood plain management, including mitigation and permitting, which, upon final approval by the authority of a convention center development plan, shall supersede all other inconsistent ordinances and rules relating to health, safety, building, planning, zoning, land use, land development, and flood plain management, including mitigation and permitting.”

This gives the authority the power to pass rules which supersede existing rules, however, we do not see how this provision exempts the authority when it has not yet passed rules inconsistent with those in existence. Indeed, if the authority’s interpretation were true, it would be unnecessary to appear before the Liquor Commission for permits. We believe that if the Department of Health has a rule regulating community noise, the convention center would have to comply with that rule until the authority adopted its own noise rules.

#### **Department of Health guideline has been used throughout**

Despite claims that a noise standard for the rooftop does not exist and would not apply, there is ample evidence that 60 dBA was assumed by both Nordic/PCL and the authority to be the standard.

The authority stated in the RFP that “the design/builder is responsible for conforming to *all* applicable codes, ordinances, laws, rules, and regulations (original emphasis).” The RFP goes on to list Department of Health, Chapter 43 Community Noise Control for Oahu, as one applicable set of rules by which the design/builder should abide. As stated earlier, Chapter 43 uses the 60 dBA standard.

Nordic/PCL subcontractors also referenced the 60 dBA noise standard in relevant noise studies for the convention center. Y. Ebisu and Associates prepared a noise impact study stating that “the possibility of adverse noise impacts from activities at the Roof Terrace were evaluated. Predicted sound levels from these on-site activities along the south and west property lines of the project were compared with the noise limits of the state Department of Health (DOH) noise regulation.” In other words, the Ebisu study looked at rooftop activities using the 60 dBA standard.

The final EIS submitted by Nordic/PCL stated that, “the Rooftop Garden area may not be used for large assemblies in excess of 10,000 persons where amplified voice or music levels of 80 to 90 dB could be generated since this would exceed State DOH noise limits of 60 (daytime) or 50 (nighttime) dB.”

In the most recent noise assessment done by Darby and Associates for convention center management, it was noted that the Department of

Health regulations were not directly applicable to noise emanating from the rooftop terrace. The assessment also noted that the city and county's land use ordinance maximum sound pressure level used as one criterion by the county's Department of Land Utilization in approving land use permits does not apply to the noise from the rooftop terrace. However, the study established 60 dBA during daytime hours as the limit, noting that this is based on noise levels promulgated by various local and federal noise standards, regulations, and criteria such as those of the Department of Health and the U.S. Environmental Protection Agency.

In addition to RFP statements, the authority has explicitly stated that the noise standard for the rooftop is 60 dBA. In responding to concerns raised by the Department of Health during the EIS comment period, the authority conceded that certain large events would "probably exceed the State DOH daytime limit of 60 dB," and that the use of enclosures for those types of events should "limit noise emissions to levels below the applicable State DOH noise limits." In a 1996 community meeting, the authority assured community members that the law limits noise to 60 dBA measured at the neighboring property line.

With this history, we find it difficult to believe that 60 dBA was not the intended noise limit for the rooftop terrace. While the standard is not currently enforced by any government agency outside the Liquor Commission, it seems that the authority, Nordic/PCL, and convention center operators have contributed to the expectation that, absent a newly established standard, efforts would be made to ensure that noise from the rooftop terrace would not exceed 60 dBA between 7:00 A.M. and 10:00 P.M.

***If a noise problem exists, resolution could take many forms***

The evidence collection process to determine if a noise problem exists is not yet complete so a proper determination cannot be made. However, if future tests show excessive noise, there are a number of possible outcomes.

#### **Nordic/PCL could be found liable for a design flaw**

As stated earlier, the authority is not precluded from remedies once the warranty for the design and construction expires as long as it can prove a breach of contract. The authority could claim that, even after taking reasonable steps of its own, events cannot take place as represented by Nordic/PCL. In this case, some settlement between the parties or legal determination of the contract promises will need to take place to resolve these issues.

If the issue rises to a legal dispute between the authority and Nordic/PCL, it seems that the authority does itself no service by claiming that no noise standard applies to the rooftop. In fact, the authority should acknowledge

that its expectation based on noise studies and early assumptions is that the rooftop should be designed to accommodate a sidewalk cafe, special shows, luaus, and light exhibits without creating noise levels above 60 dBA at neighboring properties. Acceptance of the 60 dBA standard would help set the parameters for any potential dispute with Nordic/PCL.

### **Nordic/PCL could be found not liable and authority would be responsible for mitigating noise**

Alternatively, Nordic/PCL could be found not responsible for any rooftop defect and that noise mitigation is strictly in the hands of the authority and its contracted facility operators. Like the air temperature problem in the lobby and ballroom foyer, this problem could be costly for the State in two ways.

First, mitigating noise on the rooftop terrace could mean the installation of a portable enclosure for the rooftop. Another alternative might be aimed at improvements to neighboring residences so that windows can remain closed during events. Any means used will result in an unanticipated cost to the State.

If these measures are too costly, it may be determined that it is better not to use the rooftop for event purposes. This may result in lost revenues because some claim that the rooftop terrace is one of the most marketable features of the convention center.

### **Special noise standards could be created to accommodate convention center rooftop events**

The issue could be resolved by establishing enforceable standards that apply specifically to events on the rooftop terrace. This solution appears logical particularly in light of recent tests which seem to show that the 60 dBA limit is already exceeded by background noise in the area. It may be that the 60 dBA level is not a relevant or enforceable standard for this part of Honolulu because noise cannot be directly attributed to rooftop events. An enforceable noise standard would help assure neighbors that convention center officials will remain sensitive to community noise.

At this time, we believe Nordic/PCL designed the convention center with knowledge that 60 dBA was the community noise standard. A special noise standard may have the effect of dissolving any potential dispute with Nordic/PCL by setting parameters within which the rooftop would be usable.

Section 206X-6, HRS, gives the authority the power to pass its own rules regarding health and safety. Noise standards likely fall within this category. However, because community noise regulation would require monitoring and enforcement, it seems unwise for the authority to regulate

itself. Indeed, the authority says that it does not want to adopt rules that are self-enforcing. Obviously, any self-regulation for noise violations would be futile.

Even if the authority could logically create its own rules, doing so may only exacerbate conflict with the neighboring community. Many in the community appear to have a deep-rooted distrust of the authority. The authority's retreat from original statements of a 60 dBA limit has only added to this distrust. In discussions with community leaders, it is clear that noise regulations passed by the authority would not be taken seriously.

Thus, if a special noise standard is established for the convention center rooftop, the standard must be set by an entity other than the authority to be effective. The authority and the Department of Health are currently working to create such a standard which the Department of Health would voluntarily monitor. An advisory board on noise comprised of community members, government agencies, and private sector stakeholders would be formed and facilitated by the deputy director of health. While this effort to resolve the issue is commendable, it is not likely to be a long term solution for two reasons. First, the executive director of the authority selects individuals for the advisory committee and affected community members may not give credence to this selection process. Second, the Department of Health is not empowered to enforce convention center rules or penalties for noise violations.

The Department of Health and the authority seem to recognize what we suggest—in order for any special noise regulation for the convention center rooftop to be enforceable, the Legislature needs to either establish the standard or empower an appropriate agency other than the authority to establish that standard.

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## Conclusion

In this interim report on our audit of the Convention Center Authority, we specifically examined issues surrounding the design and construction of the convention center. These issues were examined first because most of the relationship with the designer/builder, Nordic/PCL, is past. However, we found concerns still alive in the present. The authority and Nordic/PCL have worked together to produce what some have called a magnificent structure. Now the two parties must finish the job to ensure that the facility is in optimal condition to accommodate visitors. The authority must manage these issues diligently to ensure that problems are identified in a timely fashion. It must also continue to defend the interests of the State and citizens when resolving these issues.

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## Recommendations

1. Because new design and construction-related problems and disputes may arise, the Convention Center Authority should continue to:
  - identify problems that may be the fault of the design/builder;
  - ensure that the burden of rectifying any new problems attributable to the design/builder falls on the design/builder; and
  - monitor the design/builder's progress in rectifying design and construction flaws.
2. At this time, the Convention Center Authority should accept Department of Health community noise guidelines as the noise limits for events on the rooftop terrace.
3. If a different noise standard is to be set for the convention center's rooftop terrace, this standard should be established by the Legislature or by an objective party empowered by the Legislature.



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OFC. OF ENVIRONMENTAL QUALITY CONTROL

BENJAMIN J. CAYETANO  
GOVERNOR

August 8, 1995

Mr. Alan S. Hayashi, Executive Director  
Convention Center Authority  
841 Bishop Street, Room 222  
Honolulu, Hawaii 96813

Dear Mr. Hayashi:

With this letter, I accept the Final Environmental Impact Statement for the Hawaii Convention Center, Honolulu, Oahu as satisfactory fulfillment of the requirements of Chapter 343, Hawaii Revised Statutes. The economic, social and environmental impacts which will likely occur should this project be built, are adequately described in the statement. The analysis, together with the comments made by reviewers, provides useful information to policy makers and the public.

My acceptance of the statement is an affirmation of the adequacy of that statement under the applicable laws.

I find that the mitigation measures proposed in the environmental impact statement will minimize the negative impacts of the project. Therefore, the Convention Center Authority and/or its agents should perform these, or alternative and at least equally effective, mitigation measures at the discretion of the permitting agencies. The mitigation measures identified in the environmental impact statement are listed in the attached document.

With warmest personal regards,

Very truly yours,

BENJAMIN J. CAYETANO

Attachment

cc: Office of Environmental Quality Control

ATTACHMENT TO THE ACCEPTANCE LETTER OF THE GOVERNOR  
TO THE EXECUTIVE DIRECTOR, CONVENTION CENTER AUTHORITY  
REGARDING MITIGATION MEASURES IN THE HAWAII CONVENTION CENTER  
FINAL ENVIRONMENTAL IMPACT STATEMENT

The following list of mitigation measures identified in the final environmental impact statement will minimize the negative impacts of the project. The Convention Center Authority (CCA), Design/Builder and/or Convention Center Operator are directed to comply with these or alternative and at least equally effective mitigation measures at the discretion of the permitting agencies when implementing the Hawaii Convention Center project.

CONSTRUCTION PHASE MITIGATION MEASURES

Water Quality

The Design/Builder must comply with Best Management Practices as approved through the National Pollution Discharge Elimination System (NPDES) Permit Process for controlling storm runoff during construction, including any requirement for detention basins.

Hazardous Materials/Waste

The Design/Builder must prepare a contingency plan for approval by the Office of Hazard Evaluation and Emergency Response (HEER) of the State Department of Health (DOH) to include provisions for:

- \* cessation of work in the immediate area of encountered or suspected contamination;
- \* notification to the State Department of Health (DOH) and the CCA;
- \* approval of planned remediation actions by the DOH; and
- \* approval of clean-up work by the DOH.

Botanical Resources

The Design/Builder must coordinate with the City Parks Department the relocation of street trees removed as a result of road widening and replace all removed or relocated street trees with specimens of comparable or larger size.

The Design/Builder must comply with requirements of the City's Exceptional Tree Committee for excavation on the project site that will remove a portion of the root systems and pruning of Banyan trees in the Ala Wai Promenade which are adjacent to the convention center boundary.

The Design/Builder must install an 8-foot high fence along the boundary between the convention center and the Promenade to keep construction activities on the convention property out of the Promenade.

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### Archaeological

The Design/Builder must submit the final archaeological inventory survey to the State Historic Preservation Division of the State Department of Land and Natural Resources (SHPD) for review and approval pursuant to Chapter 6E, HRS. In addition, should there be any inadvertent discoveries of archaeological resources during construction work, work that would affect the archaeological resources must stop immediately and the SHPD must be notified.

### Air Quality

The Design/Builder must install a temporary gravel working surface over the entire construction site.

The Design/Builder must frequently water exposed dry soil areas and roadways.

The Design/Builder must cover trucks hauling dusty material on or off the project site.

If necessary, to comply with DOH rules, the Design/Builder must erect dust screens to protect nearby low-level properties.

The Design/Builder must install landscaping in completed open areas as soon as feasible.

### Noise/Vibration

The Design/Builder must obtain a noise permit limiting hours of construction for activities expected to exceed allowable noise levels.

The Design/Builder must erect construction noise barriers up to 16 feet high along Kahakai Drive.

To reduce the number of blows required during pile-driving, the Design/Builder must pre-drill through the upper coral layer piles which must be driven down to the lower layer.

The Design/Builder must stage noisier equipment such as generators in locations at least 400 to 500 feet away from the residences, when possible.

The Design/Builder must record existing damage to adjacent property as a basis for monitoring and repairing any new damage potentially caused by ground vibration.

The Design/Builder must utilize instruments to precisely record present positions of buildings and periodically monitor for any minute building movements that may be caused by ground vibration.

### Social Impacts

The Design/Builder must establish a program for keeping nearby residents and businesses apprised of construction activities and potential adverse noise, traffic or other impacts that may be anticipated during the various phases of construction.

The Design/Builder must establish a hot line to respond to concerns which may arise during the convention center's construction phase.

### Traffic and Transportation Systems

The Design/Builder must ensure that flagmen or off-duty policemen will direct traffic during significant phases of construction to minimize traffic congestion.

The Design/Builder must ensure that contractors provide off-site parking for construction employees during the duration of the construction.

The Design/Builder must ensure that movement of construction vehicles to and from the project site will be restricted during the morning and afternoon peak traffic periods.

Due to temporary closure of sidewalks along project frontages, the Design/Builder must ensure that temporary informational and directional signs will be installed in the immediate project vicinity to direct pedestrians to use the adjacent sidewalks.

The Design/Builder must ensure that work on the new sewer line to be installed beneath Atkinson Drive leading from the project site toward Ala Moana Boulevard to the existing sewer main at Ala Moana Park will be restricted during the morning and afternoon peak traffic periods in accordance with the construction permit.

## OPERATIONAL PHASE MITIGATION MEASURES

### Flooding

In conformance with the City's Land Use Ordinance Requirements, the Design/Builder must ensure that the lowest occupied floor (the Exhibition Hall) will be elevated 7 feet above mean sea level.

### Water Quality

The Design/Builder must provide screens on all drain inlets to filter debris and organic materials.

### Historical

The Design/Builder must ensure that any construction of walkways, lighting, landscaping and street furniture in the Promenade will meet the State Historic Preservation Division's determination that it will have "no effect" on the historic character of the Ala Wai Promenade.

The Design/Builder must mitigate the visual impact of the Loading Dock exterior walls on either side of the stairway to meet the State Historic Preservation Division's determination that it will have "no effect" on the historic character of the Ala Wai Promenade.

### Noise

The Convention Center Operator must work with bus and trucking companies to formulate operation procedures within the Center. Such procedures may include complying with State DOH vehicular noise limits and curfews, minimizing high speed idling, using lower engine RPM during acceleration, and avoiding maneuvers requiring backing up.

The Design/Builder must sound-treat and appropriately insulate housing of mechanical equipment to comply with the DOH noise limits and minimize risks of noise impacts on neighboring properties.

If the rooftop area is used and music or voice levels of 80 to 90 dB are anticipated, the Convention Center Operator must install portable enclosures or other measures to keep sound levels to acceptable levels.

Within the parking garage, the Design/Builder must install non-slick roadway surfaces and acoustic fire-proofing on the ceiling and structural members to attenuate parking garage noise levels.

The Design/Builder must build a solid wall along a portion of the Kahakai Drive side of the second level parking garage between the entrance ramp and the corner adjacent to the Summer Palace to shield noise from the parking garage.

### Wastewater System

The Design/Builder must construct a new sewer line from the convention center beneath Atkinson Drive to a sewer main near Ala Moana Park.

### Solid Waste

The Design/Builder and the Convention Center Operator must ensure that the Convention Center will have space allocated for solid waste recycling operations.

### Police Protection

The Convention Center Operator must provide 24-hour security for the Convention Center premise and events.

The Convention Center Operator must provide a space within the convention center for the police department, if needed.

### Traffic and Transportation

The Design/Builder must widen eastbound Kapiolani Boulevard by 10 feet along the project frontage to provide an additional right-turn only lane at Kalakaua Avenue. The existing eastbound curb lane on Kapiolani Boulevard will be converted to an optional through-right-turn lane.

The Design/Builder must: widen Kalakaua Avenue by 12 feet along the project frontage, from Kapiolani Boulevard to Kalakaua Bridge, to provide an additional 10-foot wide makaibound lane for use as a bus stop and a right-turn lane into the Kalakaua parking garage; restripe the maukabound lanes on Kalakaua Avenue at Kapiolani Boulevard to provide two double left-turn lanes, one through lane, and a shared through/right-turn lane; and increase the left-turn lane widths on maukabound Kalakaua Avenue to 10 feet.

The Design/Builder must widen the makaibound lanes on Kalakaua Avenue at Kapiolani Boulevard from 10 feet to 11 feet by reducing or eliminating the existing striped median on the Kalakaua Avenue approach.

The Design/Builder must widen Kahakai Drive along the project frontage to add two traffic lanes. Kahakai Drive will be improved to provide two 10-foot wide inbound lanes, two 10-foot wide outbound lanes, and a 10-foot wide landscaped median.

The Design/Builder must install traffic signals at the intersection of Atkinson Drive and Kahakai Drive/Kona Street, which will also include signaling the left-turn movement from maukabound Atkinson Drive to Kona Street and provision of a signal crossing for pedestrians, and relocate the existing pedestrian crossing on Atkinson Drive near Kona Street to the mauka side of Kona Street.

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The Design/Builder must provide an exclusive left-turn lane on makaibound Atkinson Drive at Kahakai Drive, extending back to Kapiolani Boulevard.

The Design/Builder must widen the project frontage of Atkinson Drive by 10 feet between Kahakai Drive and Kapiolani Boulevard to provide additional curb-side shuttle bus loading/unloading space along Atkinson Drive as needed for larger events.

The CCA must relocate the utility poles at each end of the Kalakaua Bridge to improve pedestrian conditions.

The Design/Builder or the CCA must expand the sidewalk area on the southeast corner of the intersection of Atkinson Drive and Kahakai Drive to accommodate pedestrian access.

The Convention Center Operator must designate a transportation coordinator who will be responsible for transportation-related operations of the convention center. The coordinator's primary function would be the development of a series of transportation management plans for each event at the convention center, as deemed necessary, and the coordinator will also be responsible in overseeing the transportation operations which occur during the event.

The Convention Center Operator must encourage the use of special convention shuttle services for mid-size and large conventions. Convention literature should promote the use of such systems.

The Convention Center Operator must schedule freight trucks to limit the number arriving and departing the convention center site during the morning and afternoon peak traffic periods.

The Convention Center Operator must prepare a transportation management plan prior to each convention event, as deemed necessary, to satisfy the specific transportation-related needs of the event. The plan would be coordinated with the City Department of Transportation Services and the State Department of Transportation, as appropriate.

The Convention Center Operator must monitor the effect of the arrival and departures of the smaller service and delivery vehicles on traffic conditions in the immediate area. Should traffic conditions be adversely affected, the transportation coordinator should restrict the arrival and departure of these vehicles from the convention center during the peak traffic hours.

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The Convention Center Operator must cone the median left-turn lane on mauka-bound Atkinson Drive during the AM peak period to provide an additional makai-bound lane from Kahakai Drive to Mahukona Street, if deemed necessary by the transportation management plan.

The Convention Center Operator must implement the westbound contra-flow coning operation on Kapiolani Boulevard (4 westbound lanes and 2 eastbound lanes) between the Makiki Drainage Canal crossing and Kaheka Street during a Friday evening post-commuter peak period event at the convention center, if deemed necessary by the transportation management plan.

The Convention Center Operator must restrict on-street parking on the east side of Atkinson Drive (about 9 stalls) prior to a large Friday evening post-commuter event to provide a dedicated lane on Atkinson Drive for convention center traffic, if deemed necessary by the transportation management plan.

The Convention Center Operator must restrict parking on the makai side of Kahakai Drive (about 5 stalls) between Atkinson Drive and the internal loop street during large convention events to provide a through lane on Kahakai Drive for residential traffic, if deemed necessary by the transportation management plan.

The Convention Center Operator must restrict the existing curb lane of westbound Ala Moana Boulevard to a right-turn only lane at Atkinson Drive during a Friday evening post-commuter event, if deemed necessary by the transportation management plan.

The Convention Center Operator must station traffic control personnel at key access points/intersections in and around the convention center site during large events to facilitate traffic flow and safe pedestrian crossing.

The Convention Center Operator, in coordination with the City Department of Transportation Services, must develop special traffic signal timing and coordination on major roadways in the vicinity of the convention center to disperse traffic at the end of a large event.

The Convention Center Operator must arrange for the use of the loading dock area to accommodate the staging of shuttle buses during pick-up/drop-off operations.

The Convention Center Operator must ensure that shuttle bus operators coordinate the shuttle bus schedules with the host hotels and the convention center transportation coordinator to minimize congestion at the hotels, on the public streets, and at the convention center.

The Convention Center Operator must ensure that shuttle bus operators station personnel at the convention center lobby entrance driveway to direct shuttle buses into and out of the bus loading/unloading area, as well as the reserve shuttle bus berths on Atkinson Drive, to maintain efficient flow of operations.

For events requiring parking for more than 800 cars, the Convention Center Operator must arrange to use existing outlying parking facilities that may be available and/or provide parking at host hotels for local attendees who would be transported by shuttle bus to/from the convention center.

For large events, the Convention Center Operator must make its best efforts to arrange for additional employee parking with nearby hotels, commercial offices, and possibly residential condominiums that may have available parking, thereby freeing up employee stalls for attendees.

The Convention Center Operator must give preferential on-site parking for employees and local attendees who car-pool to an event at the convention center.

For large events, the Convention Center Operator must issue parking passes to pre-registered conventioners and notify other attendees that no on-site parking will be provided without a pass.

The Convention Center Operator must provide market rate fees (no free parking) to encourage attendees and employees to use public transit and ridesharing.

For large events, the Convention Center Operator must issue temporary public bus passes to convention center employees.

The Convention Center Operator must utilize the truck loading dock as valet service tandem parking when truck activities are not occurring.

The Convention Center Operator, in the year 2005, for a 14,000 person event must undertake the following traffic management measures as deemed necessary:

- \* Arrange for use of an existing off-site parking facility or lot for convention center employees, and local resident attendees and transport them to the Center by shuttle buses; and,
- \* Increase vehicle occupancies for convention center shuttle buses, and encourage a larger percentage of visitor attendees to walk to the Center from Waikiki hotels.

The Convention Center Operator, in the year 2005, for inclement weather conditions, must undertake the following measures:

- \* Arrange for additional shuttle bus loading/unloading area. The convention center's transportation coordinator must coordinate with the shuttle bus operator for use of the Center's loading dock area for bus staging so as to eliminate the potential of buses queuing on the streets; and,
- \* Designate additional taxi loading/unloading areas for passengers. The convention center's transportation coordinator must designate an area within the Center's parking garage for this purpose. The placement of directional signage would be required to route taxis to the designated loading/unloading areas, and to direct passengers to the Center's lobby from the drop-off area.

CONVENTION CENTER DISTRICT JOINT ADVISORY COUNCIL

The CCA should work towards the establishment of an advisory network of appropriate State and City officials who can work together on an ongoing basis, within existing budgetary constraints, to help maintain the well-being of the community surrounding the Convention Center and to help assure the success of the Convention Center.

The network would be called the Convention Center District Joint Advisory Council. The CCA should ask the Council to investigate, discuss and explore possible measures to attempt to address the issues listed in the final environmental impact statement. These issues, along with possible mitigation measures which may be pursued from time to time as prudent and feasible, are listed at pages 4-31 to 4-33 of Volume I of the Environmental Impact Statement.

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## Response of the Affected Agency

### Comments on Agency Response

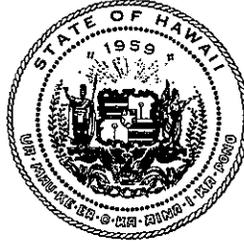
We transmitted a draft of this report to the Convention Center Authority on September 23, 1998. A copy of the transmittal letter to the authority is included as Attachment 1. The authority's response is included as Attachment 2.

The Convention Center Authority responded that it found the report comments helpful and would incorporate them into the actions taken by the authority. In addition, the authority provided several comments as points of clarification to the report. First, the authority noted that it is continuing to use the 60 dBA noise standard as the design and construction requirement in its dealings with Nordic/PCL, the design/builder.

Second, the authority believes that the Department of Health should promulgate and administer rules pertaining to noise generated by the convention center. The authority unsuccessfully supported legislation to this effect during the 1998 legislative session. The authority notes that it may have no choice but to adopt its own rules and regulations with recommendations from a community committee under leadership from the Department of Health.

Finally, the authority notes that a noise standard unique to the convention center may be warranted given the specific conditions and concerns of its environment. However, the authority believes that it would be premature to establish such a standard until ongoing noise testing is completed and the results and recommendations based on those the tests have been made.

ATTACHMENT 1  
STATE OF HAWAII  
OFFICE OF THE AUDITOR  
465 S. King Street, Room 500  
Honolulu, Hawaii 96813-2917



MARION M. HIGA  
State Auditor  
(808) 587-0800  
FAX: (808) 587-0830

September 23, 1998

*COPY*

Mr. Alton K. Kuioka, Chair  
Convention Center Authority  
1833 Kalakaua Avenue, Suite 800  
Honolulu, Hawaii 96815

Dear Mr. Kuioka:

Enclosed for your information is copy number 6 of our draft report, *Audit Report of the Convention Center Authority: First Report-Design and Construction of the Convention Center*. We ask that you telephone us by Thursday, September 24, 1998, on whether or not you intend to comment on our recommendations. If you wish your comments to be included in the report, please submit them no later than Monday, September 28, 1998.

The Governor and presiding officers of the two houses of the Legislature have also been provided copies of this draft report.

Since this report is not in final form and changes may be made to it, access to the report should be restricted to those assisting you in preparing your response. Public release of the report will be made solely by our office and only after the report is published in its final form.

Sincerely,

A handwritten signature in cursive script, appearing to read 'marion m. higa'.

Marion M. Higa  
State Auditor

Enclosure



# Convention Center Authority

1833 KALAKAUA AVENUE, SUITE 800 HONOLULU, HAWAII 96815  
TELEPHONE: (808) 973-9790 FAX: (808) 973-9794

September 28, 1998.

Office of the Auditor  
State of Hawaii  
465 S. King Street, Room 500  
Honolulu, Hawaii 96813-2917

Attention: Ms. Marion Higa  
Mr. Von Lee

Dear Ms. Higa and Mr. Lee:

Subject: Audit Report of the Convention Center Authority: First Report-Design  
and Construction of the Convention Center (September 1998)

Thank you for the opportunity to comment on the "Audit Report of the Convention Center Authority: First Report-Design and Construction of the Convention Center." The First Audit Report has, as objectives:

1. Evaluate the Convention Center Authority's efforts to pursue available remedies for any defects in the design and construction of the Hawai'i Convention Center.
2. Make recommendations, as appropriate.

Because of the short response period, the CCA, rather than comment on the specifics of explaining or defending its actions in pursuing completion of the punchlist and warranty items, we would like to state that it intends to continue to aggressively pursue the timely completion of the outstanding items in the best interest of the State of Hawaii. Your comments are helpful and will be incorporated in the actions taken by the CCA.

We do have, however, the following comments to clarify the CCA's position, regarding the rooftop noise issue:

1. The CCA is still pursuing a 60db design and construction requirement by Nordic/PCL. All CCA correspondence with Nordic/PCL has maintained this requirement.
2. The CCA is informed by the Department of Health that no noise standard currently exists for excessive noise at the Convention Center site. We understand that Chapter 11-43 of the Hawaii Administrative Rules was repealed by the Department of Health by Chapter 11-46. The CCA believes that the HCC operational noise should be

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OFFICE OF THE AUDITOR  
STATE OF HAWAII

administered by rules to be promulgated by the Department of Health or by legislation enacted by the Legislature. The CCA attempted to have legislation passed by the 1998 Legislature that would have provided for the Department of Health to regulate noise at the HCC. Although Senate Bill No. 2970 was also supported by the Department of Health, the bill did not survive conference committee scrutiny. Unless such a measure is adopted, the CCA may be required to adopt its own rules with recommendations from a community committee under leadership from the Department of Health.

3. Because preliminary sound tests have indicated that existing ambient noise levels already exceed the 60db level, the CCA is unable to specify a standard at this time. Further, there is precedent set at the Waikiki Shell, where the excessive noise level is established at 68db at the domicile. The CCA is very much concerned about protecting the quiet enjoyment of our neighbors surrounding the facility. However, we must also allow the HCC to operate as a convention center. Accordingly, we are determining whether to establish a noise standard that will account for existing ambient noise.

Any operating noise standard established to regulate excessive noise should take the ambient conditions into consideration. When the six noise test events are completed and ambient conditions have been determined, the CCA, with the assistance of the Department of Health, will be ready to propose a noise standard for operations. Prior to that time, we feel it would be premature to establish such a standard.

Thank you for your recommendations and your comments. The CCA will continue to cooperate with your office to better the process by which we administer our responsibility to the public.

Sincerely,



Alton Kuioka  
Chair



Alan S. Hayashi  
Executive Director

AK/ASH:eu.3588auditcom

