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## **Additional Letters of Support of Assembly Bill 57**

Mark A. James, Commissioner, Clark County

Press S. Clewe, Emergency Management Program Manager, Washoe County

Phil Coggins, Building Official, City of North Las Vegas

Charles P. Watson, President/Chief Geologist, Seismo-Watch, Inc.

Larry J. Johnson, President, Patrick A. Pilling, Executive Vice President,

Robert D. Hunter, Vice President, Black Eagle Consulting, Inc.

Frank Siracusa, Chief, Division of Emergency Management

Ronald L. Lynn, Chairman, Nevada Earthquake Safety Council

John Anderson, Director, Nevada Seismological Laboratory

*F1 of 14*

ASSEMBLY GOVERNMENT AFFAIRS *F1-14*  
DATE: *2/19/03* ROOM: *3143* EXHIBIT *F*  
SUBMITTED BY: *Jonathan G. Price*



MARK A. JAMES  
Commissioner



*Board of County Commissioners*

CLARK COUNTY GOVERNMENT CENTER  
500 S GRAND CENTRAL PKY  
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LAS VEGAS NV 89155-1601  
(702) 455-3500 FAX: (702) 383-6041

February 13, 2003

Chairman Mark Manendo, and  
Members of the Assembly Government Affairs Committee

#### RECOMMENDATION FOR SUPPORT OF ASSEMBLY BILL 57

Dear Chairman Manendo and Members of the Committee:

As a State Senator, it was my privilege to serve with Assemblyman Anderson as a legislative member of the Nevada Earthquake Safety Council. I was surprised to learn through my attendance of these meetings over the years I was member, that Nevada is one of the most seismically active states in the country. The risk to our citizens and our economy of casualties and loss due to earthquakes throughout the state is significant. One of the missions of this important Council was to raise the public consciousness of this very real threat.

For the past years, members of the Earthquake Safety Council, which includes representatives from the Resort Association, homebuilders, academia, geologists, seismologists, architects, engineers, emergency response personnel and the Red Cross, worked on legislation to adopt seismic provisions of the International Building Code. That effort is represented by Assembly Bill 57, which is before you today. The provisions of this bill and its impacts were carefully considered by all of the varied groups before the Council's recommendation of support. Although I had left the Senate and the Safety Council prior to the conclusion of these meetings, I attended the final meeting for the purpose of adding my thoughts regarding this important legislation.

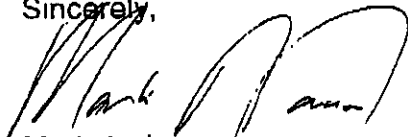
As I stated, the Federal Emergency Management Agency and its 2001 report indicate Nevada is the 3<sup>rd</sup> most seismically active state. The report estimated the annual loss for the State of Nevada to be \$55 million per year, of which \$28 million is in the Las Vegas metropolitan area. These figures represent only direct economic loss to the buildings themselves and do not include the loss to business, the impacts on our social structure or, more importantly, casualties.



The prescriptive and performance standards established in the International Building Code will contribute significantly to improving our resistance to potential disasters. These provisions have been nationally promulgated but contain significant local input. They represent state-of-the-art seismic and lateral provisions for the protection of our citizens, the visitors to our community, and our structures.

Thank you for taking the time to consider this timely proposal. I urge your support.

Sincerely,

A handwritten signature in black ink, appearing to read 'Mark A. James', is written over the printed name.

Mark A. James  
Clark County Commissioner  
District F



John G. Anderson  
Director

UNIVERSITY  
OF NEVADA  
RENO

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Mackay School of Mines  
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FAX: (775) 784-1833 or (775) 784-4165  
E-mail: [jga@seismo.unr.edu](mailto:jga@seismo.unr.edu)  
<http://www.seismo.unr.edu>

19 February 2003

The Honorable Mark Manendo, Chair  
Committee on Government Affairs

Subject: Assembly Bill No. 57:  
Nevada Earthquake Safety Act

Dear Sirs:

The Nevada Seismological Laboratory is a statewide research unit of the University of Nevada, organized as part of the Mackay School of Mines on the Reno campus. Our mission, as defined by the Board of Regents, includes the promotion of seismic safety throughout Nevada. As such, I feel that it is appropriate to provide an analysis of AB 57, the Nevada Earthquake Safety Act.

This act would require new structures to be built in accordance with the seismic provisions of the International Building Code adopted by the International Code Council. These provisions are generally considered to be the state-of-the-art for building code provisions in the United States. The required strength of earthquake resistance required by this model code is based on the National Seismic Hazard maps developed by the United States Geological Survey. These maps have been developed with extensive consultation of scientists in the Nevada Seismological Laboratory, the Nevada Bureau of Mines and Geology, and the opportunity for input from nearly every other active scientist inside and outside of Nevada who has studied issues related to Nevada's seismic hazard. It is my belief that the hazard as represented in this model code is scientifically defensible. A strong advantage to the approach used by the International Building Code is that the design recommendations are set in the fairest possible manner to be proportional to the actual hazard everywhere in the US. It is thus an improvement over the older Uniform Building Code, and of course a major improvement over not having any code at all.

AB57 would also require the Division of Emergency Management to adopt guidelines for investigation of fault hazards and liquefaction hazard from earthquakes. I have seen firsthand, in geological environments similar to Nevada, the devastation of neighborhoods due to rupture of a fault directly beneath structures. I have also seen, in geological environments similar to Nevada, the devastation of neighborhoods due to liquefaction, which is the scientific term for the soils losing all their strength due to

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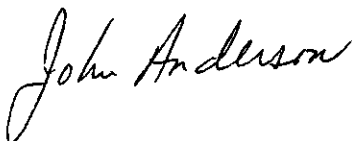


earthquake shaking and essentially turning into a liquid. The State of California has long required attention to these geological hazards for the benefit of the public safety. These guidelines, I understand, would be adopted through an appropriate public process. A reasonable starting point for development of these standards would be documents prepared by the Nevada Earthquake Safety Council, in its role as advisor to the Division of Emergency Management. The Seismological Laboratory will be ready to provide its expertise to the formal review and adoption process, to assure that the final standards are consistent with the state-of-the-art and at the same time appropriate for Nevada's circumstances (which are different from California).

Finally, I would like to comment on the magnitude of the seismic hazard in Nevada. Every place in Nevada is exposed to hazards from earthquakes. With sound reasons, the Government of Nevada has raised appropriate concerns about the seismic hazard affecting Yucca Mountain. The hazard is not uniform. It is enhanced approaching the border with California. Las Vegas is probably more likely to experience strong shaking from large earthquakes in Death Valley, about 60 miles to the west, than from closer faults. While this distance gives some protection, it is not uncommon for cities to be damaged by earthquakes even farther away. For instance in 1985, vulnerable structures in Mexico City were severely damaged by an earthquake over 200 miles away. The Reno-Carson City urban corridor is located in the heart of the most active zone. We are fortunate that Nevada has not had to deal with a true earthquake disaster anytime in its history. For the past two years, we have experienced nearly record quiet earthquake activity in the state, so there have been few small earthquakes to remind us of the hazard. Our most recent earthquake of magnitude over 7.0 occurred in 1954. In spite of this, based on extensive seismological, geodetic and geological data, we believe that earthquakes of magnitude 7.0 or greater are expected to occur someplace in or very near the state with an average rate of about three or four times per century.

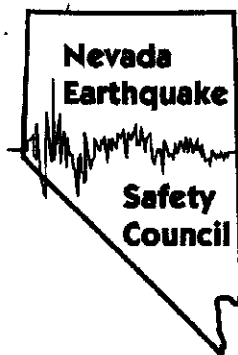
I regret that, due to a prior commitment, I am not able to appear in person to testify in support of this bill. Both I and the rest of the staff of the Nevada Seismological Laboratory are ready and eager to provide any background information or other support to your committee as you deliberate the merits of this important legislation.

Sincerely yours,

A handwritten signature in cursive script that reads "John Anderson".

John Anderson  
Director





## **Nevada Earthquake Safety Council**

c/o Nevada Bureau of Mines and Geology  
University of Nevada, Reno  
Mail Stop 178  
Reno, NV 89557-0088

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jprice@unr.edu  
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Ronald L. Lynn, Chair  
Jon Price, Secretary  
Terri Garside, NBMG Executive Assistant  
Robert Berry, Division of Emergency Management Representative

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February 13, 2003

**TO:** Chairman Mark Menendo and Members,  
Assembly Government Affairs Committee

**RE:** ASSEMBLY BILL 57

The seismic provisions of the International Building Code were developed under the auspices of the National Earthquake Hazard Reduction Program (NEHRP). NEHRP is the earthquake arm of the Federal Emergency Management Agency. The recommended technical provisions will assist in assuring occupant safety and structural integrity of buildings when subjected to not only an earthquake, but virtually any type of lateral loading condition. These national standards have received the consensus of experts in the fields of engineering, architecture and academia. The refinement of these codes took many years. In addition to support of the federal government, they are supported by the Nevada Earthquake Safety Council, Association of Engineering Geologists, State Seismologist Dr. John Anderson, State Geologist Jonathan Price, and the Western States Seismic Policy Council (WSSPC). WSSPC consists of the 13 western states, U.S. territories and western Canada.

The mapping that is used for determination of fault identification and alignment was conducted by the United States Geological Survey, the preeminent mapping organization in the United States.

The promulgation of the International Building Code allows for ongoing input from design professionals and building officials. This encourages an evolutionary process for code development as well as accountability to local jurisdictions.

In summary, I recommend adoption of Assembly Bill 57, as it would contribute to the structural integrity of our buildings and to the safety of Nevada citizens.

Sincerely,

*Terri Garside for Ronald L. Lynn*

Ronald L. Lynn  
Chairman, NESC



KENNY C. GUINN  
Governor

STATE OF NEVADA



RICHARD KIRKLAND  
Director

FRANK S. SIRACUSA  
Chief

DEPARTMENT OF PUBLIC SAFETY  
DIVISION OF EMERGENCY MANAGEMENT  
2525 S. Carson Street  
Carson City, Nevada 89711  
(775) 687-4240 • Fax (775) 687-6788

February 18, 2003

Assemblyman Mark Mancuso, Chair  
Committee on Government Affairs  
401 So. Carson St.  
Carson City, NV 89701

Dear Mr. Chairman and Members of the Committee:

I am writing to you with regards to AB57. The Division of Emergency Management is in full support of the intent behind this bill. If passed, it is my opinion that its intent in seeking an inspection of land identified for future development, as it would relate to potential seismological hazards, is an excellent pre-disaster mitigation initiative. If possible, I believe that it would also be an excellent resource of data to many entities if this information were required to be recorded at appropriate public agencies.

For the Committee's consideration, I would like to suggest however that perhaps the requirement for this Division to develop regulations as stated in Sec. 3 of this bill would be better served by an agency such as the State Public Works Board, as they clearly have far more expertise in the area of building codes at the state and local levels.

Thank you for the opportunity to comment on this issue. If I can be of any further help in this matter, please feel free to give me a call at 687-4240.

Cordially,

A handwritten signature in dark ink, appearing to read "Frank Siracusa", with a long, sweeping horizontal line extending to the right.

Frank Siracusa  
Chief



**Black Eagle Consulting, Inc.**  
Geotechnical & Construction Services1345 Capitol Boulevard, Suite A  
Reno, Nevada 89502Telephone: 775/359-6600  
Facsimile: 775/359-7766

Email: mail@blackeagleconsulting.com



Mr. Mark Manendo, Chairman  
Assembly Government Affairs Committee  
Nevada Legislature  
Legislative Building, Capitol Complex  
Carson city, Nevada 89701-4747

February 18, 2003

RE: AB 57

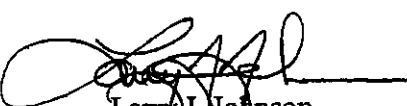
Dear Chairman Manendo:

Black Eagle Consulting, Inc. wishes to express our strong support for AB 57. Black Eagle Consulting, Inc. provides geotechnical consulting services for a wide a variety of freeway, bridge, dam, hotel-casino, power plant, commercial, industrial, and residential projects. Our professionals have decades of experience on some of the largest projects in the state of Nevada.

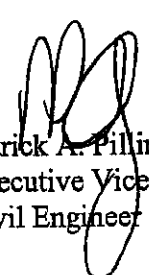
Our president, Mr. Larry J. Johnson, served on the subcommittee that authored the recommended guidelines for analysis of fault hazards and surface ruptures as well as liquefaction potential. These standards are long overdue in Nevada, the third most seismically active state in the nation. We feel it imperative to follow the lead of the adjacent states of California and Utah in adopting these guidelines to protect the public from these significant geologic hazards. Since Black Eagle and the major geotechnical consultants have been following similar guidelines for the past 20 years, we can see no impacts on costs involved in project development.

Thank you for your consideration.

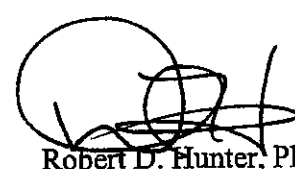
Sincerely,  
Black Eagle Consulting, Inc.



Larry J. Johnson  
President  
Engineering Geologist



Patrick A. Pilling, Ph.D., P.E.  
Executive Vice President  
Civil Engineer

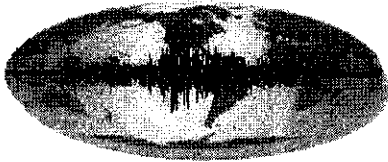


Robert D. Hunter, Ph.D., P.E.  
Vice President  
Geological Engineer

LJJ:mek

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## Seismo-Watch, Inc.

*Earthquake News and Information Services*

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February 18, 2003

Chairman Mark Manendo and Members,  
Assembly Government Affairs Committee  
Nevada Legislature  
401 S. Carson Street  
Carson City, NV 89701-4747

Dear Sir:

Nevada is a beautiful state filled with rugged mountains, scenic valleys and extraordinary people. Immense geologic processes that are ongoing today have built our landscape. One of these processes is earthquakes and has inherent risks that threaten our safety and livelihoods.

An opportunity exists to provide increased margin of safety to residents of the Nevada in the form of Assembly Bill No. 57. It provides for the adoption of certain seismic requirements by the State Public Works Board and certain governing bodies. This is an important step in acknowledging the earthquake risks that face our state on a daily basis and I urge your support in passage of this bill.

While the early history of this great state of Nevada was filled with several large and damaging earthquakes, recent times have been ominously quiet, perhaps giving both the old and new residents a false sense of security. However, recent studies have shown that these devastating events have repeatedly struck the region and it is only a matter of time before they strike again.

In presenting weekly earthquake information in Nevada newspapers for the past ten years, I have developed a keen sense that most of our residents now know we live in earthquake country. But awareness is only part of the solution. Assembly Bill No. 57 will provide good seismic safety requirements that will increase our resiliency to withstand these devastating natural events. It will add an extra margin of safety for our families, our businesses and our communities that may make the difference.

Assembly Bill No. 57 is a good bill and I urge your support in its passage. If you have any questions or if I can be of further assistance, please feel free to contact me at your convenience.

Sincerely,

Charles P. Watson  
President / Chief Geologist



Terri Garside, Executive Assistant  
Nevada Bureau of Mines and Geology  
February 13, 2003  
Page 2

cc: Donna Kristaponis, Director-Development Svcs. Dept.  
Jeanette Janssen, Legislative Assistant  
Pat Lofft, Emergency Management Coordinator  
Robert Harary, Asst. Director-Public Works



Mayor  
Michael L. Montandon

Council Members  
William E. Robinson  
Stephanie S. Smith  
Shari Buck  
Robert Ellason



City Manager  
Kurt Fritsch

Assistant City Manager  
Gregory E. Rose  
Dan Tarwater

Development Services Department  
Building Safety  
2266 Civic Center Drive • North Las Vegas, Nevada 89030-6307  
Telephone: (702) 633-1581 • Fax: (702) 642-8064  
[www.cityofnorthlasvegas.com](http://www.cityofnorthlasvegas.com)

February 13, 2003

Terri Garside  
Executive Assistant  
Nevada Bureau of Mines and Geology  
University of Nevada, Mailstop 178  
Reno, Nevada 89557-0088

**SUBJECT :** Support of AB-57

Dear Ms. Garside:

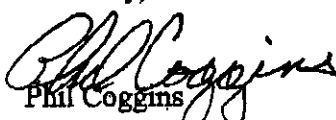
The City of North Las Vegas Development Services and Public Works Department staff strongly supports AB-57 providing for adoption of certain seismic requirements by the State Public Works Board and certain governing bodies.

City staff supports the Federal Emergency Management Agency in its attempt to encourage strengthening code that should allow a structure to be occupiable after a catastrophic event of nature or other forces and help restrict the economic impact to rehabilitate structures.

The International Building Code has been revised to strengthen seismic design and will be adopted by the State Fire Marshall and all local jurisdictions in the near future. AB-57 will upgrade the current provisions of seismic design of structures under the jurisdiction of the State Public Works Board to be equal to the seismic design required on privately owned structure.

We support the efforts of the Nevada Earthquake Safety Council and Building Officials in their efforts to protect lives and property with the introduction of this bill.

Sincerely,

  
Phil Coggins  
Building Official





# WASHOE COUNTY

*"Dedicated To Excellence in Public Service"*



Office of the County Manager

1001 EAST NINTH STREET  
POST OFFICE BOX 11130  
RENO, NEVADA 89520-0027  
PHONE: (775) 328-2095  
FAX: (775) 328-6130

February 12, 2003

Nevada Assembly, Committee on Government Affairs  
The Honorable Mark Manendo, Chair

Subject: Narrative Testimony in Support of Assembly Bill No. 57

Dear Assemblyman Manendo,

My name is Press Clewe and I am the Emergency Management Program Manager of Washoe County. Thank you for the opportunity to address the Committee regarding support of Assembly Bill No. 57.

Nevada is well known as the third most seismically active state in the nation behind Alaska and California in terms of the frequency of major, magnitude 7 or greater earthquakes. Nevada is ranked fifth in annualized earthquake loss. An earthquake in the order of magnitude 7 will cause significant loss of life and a tremendous level of property damage.

Building Codes similar to the Uniform Building Codes used by Washoe County provide for the level of construction protection to prevent and reduce severe loss of life. Unfortunately, the codes do not assure the building can be used after a significant earthquake. To assure a level of post earthquake building safety and use would be more expensive than current codes require.

The Nevada Earthquake Safety Council, made up of representative from businesses, industry, community organizations, state and local government officials, the University of Nevada, Reno, Bureau of Mines and Geology and building officials, formulated the legislation before this Committee to enhance earthquake safety statewide. The Council has adopted guidelines for evaluating potential surface ruptures and land subsidence hazards in 1998. These guidelines would be adopted by the Chief of the Division of Emergency Management in Section 3 of the bill if passed. Those provisions may be found on the Council's web site ([www.nbmng.unr.edu/nesc](http://www.nbmng.unr.edu/nesc)).

Emergency Management supports the provision of AB 57 to assure additional safety may be provided in future construction to residents, businesses and visitors of our state.

Respectfully submitted,

*Press S. Clewe*





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Las Vegas Office:  
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Las Vegas, Nevada 89104  
(702) 486-5115 • Fax (702) 486-5094

PUBLIC WORKS BOARD

February 18, 2003

Assemblyman Mark Manendo, Chairman  
Assembly Committee on Government Affairs  
Nevada State Legislature  
Capitol Complex, Carson City, Nevada

Dear Mr. Chairman and Members of the Committee:

I am writing you in regards to AB57. The State Public Works Board (SPWB) is in support of the intent of this bill, but is requesting a few minor amendments.

The SPWB adopts the codes utilized by the state for its projects located on state property. That adoption process is done by the Board adopting regulations through the public hearing process as defined by the state. That process allows for public comment on the proposed regulations and allows for amendments if determined necessary. Over the last two years, the SPWB has reviewed the 2000 International Building Code (IBC), as well as the other International Building Council model codes and is intending to recommend the Board's adoption of the 2003 IBC, as well as the other model codes, after a full review of their provisions.

Therefore, the following amendment to AB57 is proposed to allow the Board to utilize its regulation process to adopt the IBC by the proper year, have the necessary public input and possible amendments.

**Section 1.** Chapter 341 of NRS is hereby amended by adding thereto a new section to read as follows:

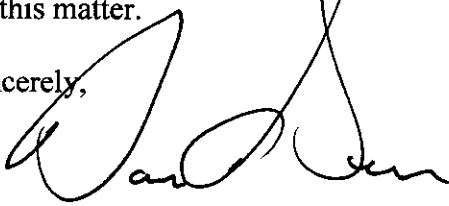
***For the purposes of the design, construction or repair of buildings or other projects of this state, the Board shall adopt by regulation:***

- 1. The seismic provisions of the International Building Code as published [adopted] by the International Code Council, and any amendments determined necessary through the regulation process; and***
- 2. Shall require use of the [The] guidelines [adopted] developed by the Nevada Earthquake Safety Council for [by] the Division of Emergency Management of the Department of Public Safety [pursuant to section 3 of this act.] for the investigation of hazards relating to seismic activity, including without limitation:***
  - 1. Potential surface ruptures; and***
  - 2. Liquefaction.***



I apologize for not being in attendance at the hearing as I will be in Las Vegas, but Gus Nunez, Deputy Manager for Professional Services, will be presenting this letter on my behalf and I am sure can answer any questions that you might have. Thank you for the opportunity to comment on this matter.

Sincerely,

A handwritten signature in black ink, appearing to read "Daniel K. O'Brien", with a large, stylized initial "D".

Daniel K. O'Brien, P.E.  
Manager

Cc: Perry Comeaux, Director, Department of Administration  
Governor's Office  
SPWB Board Members  
Gus Nunez, Deputy Manager  
Bob Bryant, Senior Deputy Attorney General