



Town Advisory Board (TAB)/ Citizens Advisory Council (CAC) Application

Name of the TAB/CAC Applying for: Red Rock CAC

TABs and CACs were created to assist the Board of County Commissioners in an advisory capacity with the decision-making process in the governance of the unincorporated towns and areas of Clark County. There are 8 TABs and 6 CACs that are appointed by the County Commission and 5 TABs that are elected. Each TAB or CAC consists of area residents that serve without compensation for two-year terms and attend regularly scheduled public meetings throughout the year.

Full Name: Barbara Luke

Phone Number: [REDACTED]

Email Address: [REDACTED]

Home Address: 16 Bojangles Way, Blue Diamond

Mailing Address: PO Box 91, Blue Diamond NV 89004

Employer: UNLV, part time

Occupation: Retired professor of civil engineering

Note: This document and accompanying materials become public record once received by Clark County.

- To be eligible to serve, you must be both a qualified elector (eligible to vote) and a resident of the unincorporated town or area encompassed by the TAB or CAC. Before you continue, please indicate if you meet the eligibility requirements: Yes ☒ No ☐

- Meeting days, times, and frequency vary from one TAB/CAC to another. The schedules are listed here: https://www.clarkcountynv.gov/government/departments/administrative_services/town_liaison_services/tab_cac_information.php

If appointed, will you be able to attend meetings on a regular basis? Yes ☒ No ☒

- Have you attended a Planning Commission or County Commission meeting? Yes ☒ No ☐

- Have you attached the REQUIRED resume or letter of interest? Yes ☒ No ☐

For the following questions, please feel free to attach additional pages as necessary.

Have you attended a TAB or CAC meeting in Clark County? Yes ☒ No ☐

If so, which one and what was your experience? Have served non-continuously on RRCAC for about a decade.

Please list any boards or committees that you currently serve on: RRCAC

Why are you interested in becoming a member of your TAB or CAC? To serve the community and to attempt to influence the County to make sustainable choices.

Note about attendance: I would be likely to miss a few meetings over the course of a year.

I verify by my signature below that all statements made on this application, as well as attached information, are true and complete to the best of my knowledge. I understand that an electronic signature has the same weight and effect as a handwritten signature. I understand that an incomplete application or any modifications to this application will not be accepted or considered.

Signature

Date

You can submit your application and resume/letter of interest by fax to 702-455-3558, by email to AdministrativeServices@ClarkCountyNV.gov or by mail to: Clark County Administrative Services

Attn: Agenda Coordinator
500 S. Grand Central Pkwy, 6th Floor
Las Vegas, NV 89155

Barbara Luke, Ph.D., P.E.

Professor Emerita, Department of Civil and Environmental Engineering and Construction, University of Nevada, Las Vegas
4505 Maryland Parkway, Box 454015, Las Vegas, Nevada 89154-4015

Professional preparation

Ph.D., Civil (Geotechnical) Engineering, 1994, University of Texas at Austin. Emphasis in soil dynamics.
M.S., (Geotechnical) Engineering, 1987, University of California, Berkeley. Emphasis in rock mechanics.
B.S., Civil Engineering, December, 1985, University of Texas at Austin, with highest honors.

Selected appointments

1995 - present. Assistant Professor/Associate Professor/Professor (2008-2017)/Professor Emerita of Civil Engineering, UNLV. Focus in geotechnical engineering; engineering geophysics especially seismic site characterization; earthquake site response; sustainability of the built environment. Currently (2020-present) teaching Sustainable Construction as a part-time instructor.
1985 - 1990. Member of Technical Staff, Sandia National Laboratories, Albuquerque, New Mexico. In situ geomechanical characterization of rock masses for deep geologic disposal of nuclear waste.
1979 - 1985. US Army, enlisted. 2 years active duty, 3 years active reserves. Honorably discharged.

Selected publications (well over 100 total)

Luke, B., Hunt, S., Bailey, J. 2022. Lake Mead Intake No. 3 and Low Lake Level Pumping Station, Nevada: Association of Environmental and Engineering Geologists Outstanding Environmental & Engineering Geologic Project Award. *AEG News* 65(4):37-46.
Luke, B. (lead editor). 2021. *ICSI 2021 Abstracts*. American Society of Civil Engineers International Conference on Sustainable Infrastructure. 217 pp. <https://www.icsiconference.org/>
Šebela, S., Baker, G., Luke, B. 2019. Cave Temperature and Management Implications in Lehman Caves, Great Basin National Park, USA. *Geoheritage* 11:1163–1175. <https://doi.org/10.1007/s12371-019-00367-0>
Kelly, W., Luke, B., Wright, R. (eds and coauthors). 2017. *Engineering for Sustainable Communities*. American Society of Civil Engineers. 490 pp. ISBN: 9780784480755
Tran, K.T., Luke, B. 2017. Full waveform tomography to resolve desert alluvium. *Soil Dynamics and Earthquake Engineering* 99(2017):1-8. <http://dx.doi.org/10.1016/j.soildyn.2017.04.018>
Lamichhane, S., Luke, B. 2016. Input ground motions for earthquake site response analyses: deep sediment column with cementation. *International Journal of Geotechnical Engineering* 10(2):190-204.
Luke, B., Laefer, D. 2016. Resilient design strategies in geotechnical engineering. *Proc.*, ASCE Geotechnical and Structural Engineering Congress. Abstract 1428.
Samuel, R., Badrzadeh, Y., Luke, B., Lawrence, A.J., Siddharthan, R., Bafghi, A. 2015. Seismic site characterization in support of drilled shaft design in Southern Nevada. *Proc.*, IFCEE, ed. M. Iskander, M. T. Suleiman, J. B. Anderson, D.F. Laefer. ASCE, doi: 10.1061/9780784479087, pp. 939-950.
Keaton, J.R., Luke, B. 2015. Civil engineering renaissance: American Society of Civil Engineers' strategic initiative on sustainability needs geology. *Geological Society of America Abstracts with Programs* 47(7) 694.
Lamichhane, S., Luke, B., Taylor, W. 2014. An alternative analysis of the probabilistic seismic hazard for Las Vegas Valley, Nevada. *Bulletin of the Seismological Society of America* 104:741-768.
Murvosh, H., Luke, B. and Calderón-Macías, C. 2013. Shallow-to-deep shear wave velocity profiling by surface waves in complex ground for enhanced seismic microzonation of Las Vegas, Nevada. *Soil Dynamics and Earthquake Engineering* 44(2013):168–182.

Selected credentials and activities

Registered Civil Engineer in Nevada, license 015507
Board-Certified Diplomate in Geotechnical Engineering since 2011, now Retired status
Fellow of the American Society of Civil Engineers (ASCE)
Envision Sustainability Professional (ENV SP), re-credentialed in 2020
Leadership in Energy & Environmental Design (LEED) Green Associate since 2020
Director or co-director of UNLV's Applied Geophysics Center, 2002 – 2020
ASCE: (1) Various assignments addressing sustainability; Chair of the Program Committee for the 2021 Int'l. Conference on Sustainable Infrastructure. (2) Board member of the Geo-Institute, 2009-2014.
Environmental & Engineering Geophysical Society: Board member incl. President, 1999-2010 except 2003 & 2008.
Red Rock Citizens' Advisory Council (advisory to Nevada's Clark County Commission): member including terms as chair and vice chair, 2009-present except 2013-2014.

☰ 16 BOJANGLES WAY 🔍

📄 Property Information ⓘ

Parcel: 17507709019

🖨️ Print

Owner Name(s): LUKE

BARBARA AILEEN

Site Address: 16 BOJANGLES WAY

Jurisdiction: CC Redrock - 89004

Sale Date: 12/1999

Sale Price: \$128,000

Estimated Lot Size: 0.67

Construction Year: 2005

Recorded Doc Number: 19991202

00001382

Aerial Flight Date: 2022-09-23

📏 Zoning and Planned Land Use

📖 Legal Description

👤 Ownership

💧 Flood Zone

👥 Elected Officials

Commissioner: F - Justin Jones (D)

U.S. Senate: Jacky Rosen, Catherine
Cortez-Masto

U.S. Congress: 3 - Susie Lee (D)

State Senate: 19 - Pete Goicoechea