

# COMPANY QUALIFICATIONS

Contact information:

# BOREAS arquitectos + LLC

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July 2016



## OUR SERVICES

#### ARCHITECTURAL DESIGN

#### SUSTAINABILITY CONSULTING:

- LEED Certifications for Commercial, Institutional and Government projects
- ENERGY STAR Certifications and HERS RATING for residential projects.
- Energy Modeling oriented to architectural decision making and Building Systems requirements.
- Natural Ventilation modeling using Computational Fluid Dynamics (CFD)

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## TEAM

# MARÍA PEÑA-CARRO PRINCIPAL ARCHITECT & PROJECT MANAGER



María Cristina Peña Carro is a passionate learner, Graduate from the School of Environmental Design at the University of Puerto Rico and with a Master of Architecture from Arizona State University in 2004.

Maria Cristina has led a practice guided by sustainable design and the forefront of design tools that improve service in architecture. LEED Accredited Professional since 2007 and Home Energy Rating System (HERS) Rater since 2014. Her skills in project management have achieved LEED certification of the first hotel in the Caribbean, the first school in PR and the first building a non-profit organization of PR.

She has collaborated on projects, seminars and articles in Puerto Rico and Peru to raise awareness to other professionals and citizens about sustainable practices.



#### OUR STAFF

LUIS IZQUIERDO MARTÍNEZ PROJECT MANAGER, AIT

CAMILA LAMELA PROJECT MANAGER, AIT

WING HOON LAI ARCHITECT INTERN

CONSULTANT LIST

FERNANDO DE JESÚS LÓPEZ ARCHITECTURE DESIGN

MIGUEL ZAPATA, ZAPATA & ZAPATA ASOCIADOS STRUCTURAL DESIGN

FERNANDO CORTÉS, PE STRUCTURAL DESIGN

OMAR DELGADO, ENERMECH PSC. MECHANICAL, PLUMBING & FIRE PROTECTION SYSTEM DESIGN

ENRIQUE FIGUEROA, J.E. FIGUEROA PSC. ELECTRICAL, TELECOMMUNICATIONS, PHOTOVOLTAIC SYSTEM DESIGN

ALFRED LONGHITANO LIFE SAFETY & CODE CONSULTANT

MIKE HESS, EXP Inc. ENERGY MODEL & DAYLIGHTING SIMULATIONS, SYSTEMS COMMISSIONING



2015 9-1-1 New Offices & Main PSAP, Rio Piedras, PR 60,000 SF - \$7M.

Design of offices interiors for 9-1-1 Agency and main Public Safety Answering Point in an existing Core and Shell Building. Applicant to a LEED Gold Certification. Strategies include:

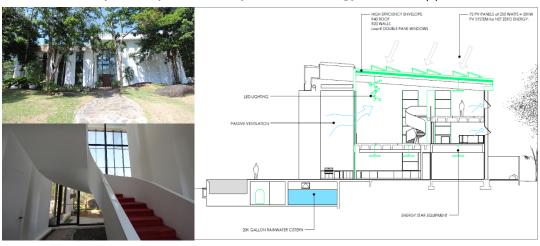
- Energy: High efficiency MEP Systems, LED lighting, energy sub-metering, daylight sensors and open space planning.
- Indoor environmental quality: Enhanced acoustics, daylight and exterior views, low emitting materials and furniture, and IAQ Plan.
- Water: Collection of AC condensate and indoor water use reduction.



2015 PRIVATE HOUSE, Dorado, PR 15,000 SF - \$2.5M

The proposed design was modeled and rated using Home Energy Rating System (HERS). HERS is the industry standard by which a home's energy efficiency is measured and the nationally recognized system to become an Energy Star Home. Strategies include:

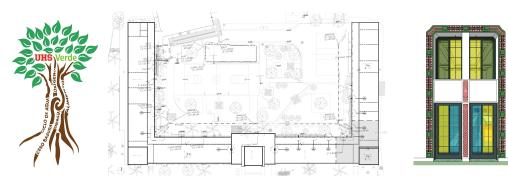
- Water: Rainwater collection and indoor water use reduction.
- Energy: High Efficiency envelope (walls, roof, doors and windows), high efficiency MEP Systems, PV System and energy efficient appliances.





2013 – UHS VERDE, University of Puerto Rico High School, Rio Piedras, PR.
40,000 SF - \$3M: Professional collaboration with volunteers and school community.
Project intends to renovate the 1930's Art Deco building to a state of the art school compliant with LEED. Strategies include preparation of Master Plan with Integrated energy conservation strategies such as:

- High Efficiency envelope (walls, roof, doors and windows)
- Daylighting
- New high efficiency MEP Systems
- PV System
- Green Roof



#### 2015 Prefab Home Prototype, Vieques, PR 2,000 SF - \$350K.

Prefabricated house using adapted shipping containers for ease of construction and cost reduction. Design strategies include: high Efficiency envelope (walls, roof, doors and windows), water consumption has been predicted and the design has achieved a net zero energy design with a HERS index of zero, much lower than the requirement for Energy Star for Homes.





2015 Mall of San Juan – The Fix Store, Rio Piedras, PR. 1,000 SF - \$130K



2015 Mall of San Juan –Bulgari Store, Rio Piedras, PR.
2,000 SF - \$2M: Collaboration with Materia Arquitectónica Architects: Code Review, MEP coordination and site inspection.





2015 Mall of San Juan – LV Store #208, Rio Piedras, PR.
5,000 SF - \$2M: Collaboration with Materia Arquitectónica Architects: Code Review, MEP coordination and site inspection.





## CONSULTING

#### LEED MANAGEMENT PROJECTS

- 2013 US Passort Offices, Minillas North Tower 9F LEED CI v3, San Juan, PR. 7,000 SF
- 2014 EL BLOK Boutique Hotel LEED NC v2.2, Vieques, PR. 25 rooms, 28,000 SF, \$6.5M
- 2012 LEED Feasibility Study for TOTTUS Supermarket, Lima, Perú.
- 2012-2014 New Visitor Center for the Luis Muñoz Marín Foundation. San Juan, PR 19,000 SF ,
- 2012-2014 Armed Forces Reserve Center LEED NC V2.2, Mayaguez, PR. 77,000 SF, \$28M.

LEED MANAGEMENT PROJECTS - CERTIFIED

- 2014 New Central Offices for Hogar Crea, Inc. LEED for NC v3 GOLD, Trujillo Alto, PR. 30,000 SF, \$8M.
- 2013 New Urban School of Ciales LEED for Schools v3 SILVER, Ciales, PR. 160,000 SF, \$19M
- 2013 Dr. Hiram Gonzalez School LEED for Schools v3 SILVER, Bayamón, PR. 72,000 SF, \$13M
- 2013 US Bankruptcy Court LEED CI v3 GOLD, Ponce, PR. 11,000 SF, \$1.5M.
- 2009 Hotel Sheraton and Casino, PRCC LEED NCv2.2 Basic, San Juan, PR. 550 rooms, 720,000 SF, \$208M