

DATE: October 9, 2013

TO: City Clerk

FROM: Representative Lily Limón

ADDRESS: 300 N. Campbell Street TELEPHONE (915) 541-4124

Please place the following item on the (Check one): CONSENT xxxx REGULAR \_\_\_\_\_

Agenda for the Council Meeting of October 15, 2013

Appointment of Othon Medina, Jr. to Zoning Board of Adjustment- Type R-by City

Item should read as follows: Representative Lily Limón, District 7

SPECIAL

INSTRUCTIONS:

**BOARD COMMITTEE/COMMISSION APPOINTMENT/REAPPOINTMENT FORM**

NAME OF BOARD/COMMITTEE/COMMISSION: Zoning Board of Adjustment

NOMINATED BY: Representative Lily Limón DISTRICT: Seven

NAME OF APPOINTEE Othon Medina, Jr.  
(Please verify correct spelling of name)

E-MAIL ADDRESS: \_\_\_\_\_

BUSINESS ADDRESS: \_\_\_\_\_

CITY: El Paso ST: TX ZIP: \_\_\_\_\_ PHONE: \_\_\_\_\_

HOME ADDRESS: \_\_\_\_\_

CITY: El Paso ST: TX ZIP: \_\_\_\_\_ PHONE: \_\_\_\_\_

DOES THE PROPOSED APPOINTEE HAVE A RELATIVE WORKING FOR THE CITY? YES: \_\_\_\_\_ NO x

IF SO, PLEASE PROVIDE HIS OR HER NAME, CITY POSITION AND RELATIONSHIP TO THE PROPOSED APPOINTEE:

WHO WAS THE LAST PERSON TO HAVE HELD THIS POSITION BEFORE IT BECAME VACANT?

NAME OF INCUMBENT: Jose Melendez

EXPIRATION DATE OF INCUMBENT: 09/30/2012

REASON PERSON IS NO LONGER IN OFFICE (CHECK ONE): TERM EXPIRED: x  
RESIGNED \_\_\_\_\_  
REMOVED \_\_\_\_\_

DATE OF APPOINTMENT: 10/15/2013

TERM BEGINS ON : 10/15/2013

EXPIRATION DATE OF NEW APPOINTEE: 10/15/2015

PLEASE CHECK ONE OF THE FOLLOWING: 1<sup>st</sup> TERM: x

2<sup>nd</sup> TERM: \_\_\_\_\_

UNEXPIRED TERM: \_\_\_\_\_

**Resume of Othon Medina, Jr., P.E.**  
**2/22/11**

**Profile**

- Mature engineer with (1) 30 years of progressive visionary experience in civil/structural engineering, mechanical engineering, operations research, and applied research and development of natural gas pipelines and gas plants; (2) 10 years experience in highway, highway bridge, and municipal infrastructure engineering and residential design and construction; (3) 10 years of progressive experience in civil/structural, power piping, and fire protection engineering design and construction quality control/quality assurance aspects of large electric generating power plants ;and (4) experienced in furnishing legal/ technical expert testimony involving litigation. Competent in facilitating, directing, managing, performing, and testifying about civil/structural, mechanical, and fire protection engineering design and construction quality control of large electric generating power plants, big-inch natural gas pipelines and compressor stations, highways, other civil engineering infrastructure projects, and residential structures, regardless of size and complexity. Willing to travel.
- Professional Engineering Registration: Texas No. 22079
- Education: Master of Science in Civil Engineering, University of Texas at Austin, 1961; Bachelor of Science in Civil Engineering, University of Texas at El Paso (formerly Texas Western College), 1956

**Experience**

**President, Medina International Corp., Medina ENCON Corp.**

**2009-Present**

**Major Projects**

**Expert Testimony**

Currently furnishing expert witness services in a case involving engineering malpractice.

Furnished expert witness services regarding the structural condition of a 100 year old historic building. Served clients prevailed in the case.

Furnished expert witness services regarding a private fire protection system. Served clients prevailed in this case.

Furnishing expert witness services to various clients.

**La Rosita Power Plant, Mexico (1000,000 Mega Watt Power Generating Plant)**

Currently designing a new fuel gas piping system for Power Plant .

Structurally evaluated two plant structures suspected of damage from the recent 7.2 magnitude earthquake at the plant site.

### ***Quezon Power Plant, Philippines***

Conducted Finite Element Analyses of the Power Plant Coal Silos. At the Power Plant, briefed several Intergen Board of Directors on the structural condition of the corrosion deteriorated Coal Silos. The briefings to board members and staff were instrumental in the multimillion dollar Silo replacement project.

Designed a coal yard fence to increase the coal storage capacity of the power plant. by 500 metric tons. The design incorporated the state-of- the-art slope stability analytical software and state- of- the- art drilled shaft design software.

Analyzed the structural integrity of five (5) coal silos using state-of-the-art finite element analyses.

1996-2009

### ***Major Projects***

#### ***Texas Residential Construction Commission***

Conducted residential structural inspections in El Paso and in Flour Mound, Texas

#### ***Quezon Power Plant, The Philippines***

*For Covanta Operating Company:* 1) on-site and off-site studies to determine the root cause of the settlement and redesign of the foundation system for 200 meters of railroad track used by a 500 ton coal stacker/reclaimer, 2) evaluation of structural designs, 3) assist with civil/structural bidding documents for on-going projects, 4) evaluation of plant domestic water supply and distribution system, 5) design of major additions structures for the coal storage yard, 6) design of major addition structures for the Electrostatic Precipitator, etc.

#### ***Samalayuca II Power Plant***

*For the Samalayuca II Management Company:* Oversight of the design and construction quality control/quality assurance sector of the civil/structural, power piping, and fire protection of the Samalayuca 700 Megawatt Combined Cycle Power Plant in Chihuahua, Mexico for the Samalayuca II Management Company;

#### ***Diversified Projects***

Design and construction oversight of industrial structural foundations for Energy Structures, Inc., Houston Texas; analyses of the structural effects of explosive detonations on buried in-service high pressure big-inch gas pipelines .

1987 - 1995

### ***Consulting Engineer - El Paso Natural Gas Co., El Paso, Texas***

*Duties:* Responsible for Company wide natural gas pipeline and plant civil/structural engineering functions, including: management of the civil/structural engineering staff, design, analysis, studies, construction oversight, applied research and development, technical support, and external research support.

*Experience: Management* Responsible for the civil/structural engineering staff, engineering contracts, and capital improvements and research budgets.

*Design and Construction Oversight* Civil/structural design and construction oversight of 27 new and/or replacement major gas compressor stations totaling over 290,000 horsepower, including the 600 million cubic foot per day Chaco

Cryogenic Plant. Restoration of all major concrete supports of the Wingate Hydrocarbon Product Recovery Plant. Design of the Blanco "C" Plant ground stabilization project featuring of helical screw anchors for temporary support of structures, ground saturation ponds, and water injection wells to saturate, collapse and stabilize the collapsible site soils. Multiple high elevation exhaust stacks of the Navajo and Window Rock Compressor Stations. Replacement of alkali-silica reaction damaged foundations of the Belen Cable Suspension Pipeline Bridge while in service. Design of fiberglass floors for 800 San Juan gas gathering field metering stations to facilitate the recovery of mercury spills associated with gas metering operations. Screw anchor supported - telescoping temporary support system for supporting the carrier pipe of the Pecos River Cable Suspension Pipeline Bridge during hydrostatic testing. Application of helical screw anchors to the Florida Compressor Station to minimize the use of concrete in subfreezing weather. Design oversight of the Belen Compressor Station Regenerator Replacement which used helical screw anchor piles to reduce plant downtime. Underpinning of the settlement prone South Carlsbad Compressor Station with helical screw anchors. Use of helical screw anchors to shore excavated congested areas of the Window Rock Station Earth Remediation Project. Design of the conversion of the Bill Williams River Cable Suspension Pipeline Bridge from single to dual pipeline service. Design of portable timber pipeline vehicular road crossings for use and reuse on approximately 80 crossings on the Navajo-Bergen 115KV Power Line Project. Pipeline water way crossings including the Kutz and Gallegos Wash.

Analysis Over 100 analyses Company-wide to determine the structural response of buried in-service high pressure gas pipelines subjected to surface loads exerted by vehicular and railway traffic. Analyses to determine the structural response of buried in-service high pressure gas pipelines subjected to near-field underground explosive detonations. Finite-element analyses to determine the capacity of the three-hinge arch bridge across the Colorado River near Topock, Arizona.

Studies Coordination and oversight of over 36 gas plant and several major pipeline geotechnical studies including the Samalayuca Pipeline and the Havasu North-South Transfer Line. Cross country gas transmission pipelines route selection studies of the Mojave Pipeline at the Colorado River Crossing and the Imperial Valley Pipeline. Pipeline hydrological studies of the Havasu North-South Transfer Line and the San Juan Cross Over Line. Feasibility studies to underpin the collapsible soils supported Blanco "B" Plant.

Applied Research and Development Research and evaluation of techniques for collapsing and stabilizing the collapsible subsurface soils of the Blanco "C" Plant. Research and evaluation of ground helical screw anchors for use as deep foundation piles. Research and evaluation of grouted steel pipe piles for deep foundations. Research of state-of-art ground dynamic foundation analyses for application to the Kutz, Angel Peak, Ballard and Largo reciprocating compressor mats supported on dynamically sensitive soils. Research and experimentation with silica-fume laced structural concrete for application to various concrete repair projects, including the Belen Cable Suspension Bridge Foundation Replacement Project. Research of concrete hydro-demolition capabilities for application to the Belen Cable Suspension Bridge Foundation Replacement Project. Investigation of the use of fiberglass for floors for application to the San Juan Gathering Field meter station floors. Day-to-day observations of a large directional drilling project near Paso Robles, California, for applying the technology to submerge gas transmission pipeline waterway crossings. Development of finite-element software for the analysis of cable structures for subsequent analysis of cable suspension bridges under balanced and unbalanced loads as experienced during carrier pipe removal, replacements, or additions. Development of finite-element prototype compressor floor mat

foundations which require 33% less reinforced concrete, 66% less excavation and backfill, and 33% less time to construct than current industry practice, for subsequent use on major gas compressor station designs. Development of computer software to determine the structural effects of buried pipelines subjected to vehicular, railroad and other surface loads. Development of computer software to determine the structural effects on buried pipelines subjected to near field underground explosive detonations. Development of a concrete specification for use on industrial projects subjected to physical and chemical hostile environments and establishing its acceptance Company-wide.

Technical Support Technical training of engineers and operating personnel in design, analysis, construction inspection, and technical writing.

External Research Support Represented Company on: Structural Integrity Committee of the American Gas Association Pipeline Research Committee which dealt with research in the areas of line pipe rupture, hydrostatic testing, external loads, corrosion, and stress corrosion cracking. On the Offshore/Onshore Committee of the AGA PRC which dealt with research in the design of pipelines and peripheral structures, and the Gas Research Institute Advisory Committee on Highway and Railroad Pipeline Crossing Research. Represented the AGA PRC as site coordinator for the blasting research project at the Algonquin Pipeline Company facilities near Patterson, New Jersey.

1981 - 1987

**Civil Systems Engineer - El Paso Natural Gas Co., El Paso, Texas**

*Duties:* Responsible for the maintenance and development of safe, reliable, and economical Company facilities through the applications of advance and special civil/structural engineering expertise.

1975 - 1980

**Senior Civil Engineer, El Paso Natural Gas Co., El Paso, Texas**

*Duties:* Responsible for civil/structural engineering assignments required to produce reliable, economical, and safe gas plants and pipelines.

1972 - 1975

**Senior Systems Engineer, El Paso Natural Gas Co., El Paso, Texas**

*Duties:* Responsible for conducting operations research and engineering feasibility studies.

1971 - 1972

**Systems Engineer, El Paso Natural Gas Co., El Paso, Texas**

*Duties:* Responsible for the acquisition of computer software development skills and the application of those skills in developing computer software solutions to Company engineering and operations problems.

1967 - 1971

**Mechanical Engineer, El Paso Natural Gas Co., El Paso, Texas**

*Duties:* Responsible for becoming proficient in mechanical engineering design of natural gas plants and assumption of duties in design.

1965 - 1966

**Chief Structural Engineer, The Zia Corporation, Facilities Maintenance Contractor, White Sands Test Facilities, New Mexico**

1964 - 1967

**Self Employed Consulting Engineering, El Paso, Texas**

1961 - 1964 *Chief Engineer, Perez & Associates, El Paso, Texas*

1958 - 1961 *Highway and Highway Bridge Engineer, Texas Highway Department, El Paso and Austin, Texas*

1956 - 1958 *Battery Commander, United States Army Air Defense Center, Ft. Bliss, Texas*

1955 - 1956 *Junior Engineer, City of El Paso, El Paso, Texas*

#### ***Military Service***

1956 - 1960 *United States Army Reserve Captain (Retired)*

***Personal*** *Born May 25, 1935; Five Sons*

#### ***Special Achievements and Honors***

- American Society of Civil Engineers Student Chapter Academic Excellence Award - University of Texas at El Paso (UTEP) 1956
- Men of Mines Honorary Society - UTEP 1956
- Four Year Rifle Team Letterman - UTEP 1952 - 1956
- League of Unite Latin American Councils Man of the Year in Education Honors 1957
- Instrumental in the allocation of \$58 MM by the Texas Water Development Board to the El Paso County Lower Valley Water District for major water infrastructure development (1994)

#### ***Industry Committees Participation***

- American Gas Association Pipeline Research Committee - Pipeline Structural Integrity Committee, Offshore/Onshore Committee, and Blasting Research Committee
- Gas Research Institute Advisory Committee on Pipeline Highway and Railway Crossings

#### ***Special Technical Activity***

- *Served as expert witness in products liability cases over several years.*

#### ***Technical Organization Memberships***

- Southern Building Code Congress International
- American Welding Society
- American Concrete Institute
- American Society for Testing and Materials
- American Society of Civil Engineers
- American Society of Mechanical Engineers
- American Society of Military Engineers
- Engineering Guidance Council
- National Society of Professional Engineers

- Texas Society of Professional Engineers
- International Code Council\*

***Elected Positions***

- Ysleta Independent School District Board Trustee and Secretary
- Precinct Chair-Precinct 101

***Appointments***

- City of El Paso International Airport Board Member and Secretary
- City of El Paso Civil Defense Advisory Board
- El Paso County Planning Commission
- Texas Water Development Board
- West Texas Council of Governments Board of Directors and Second Vice President

***Civic Club Memberships***

- Kiwanis Coronado International
- Northeast El Paso 20-30 Club
- Boy Scouts of America

***Educational Organization Memberships***

- Texas School Board Association
- National School Board Association
- Ysleta Independent School District Bond Oversight Committee Member\*

***Business Affiliation***

- Vice Chair, Intercultural Development Research Association Board of Directors\*
- Real Estate Investments\*
- Medina International Corporation, President\*
- Medina ENCON Corporation, President\*
- Texas Residential Commission Third Party Inspector\*
- Member International Code Council\*

*(\*Indicates current active participation)*