Application Form

Notice of Public Record

Please be advised that all information contained in this application is part of the City of Reno's public record and is available for public review. These positions are limited, in most cases, to residents of the City of Reno. The City Council makes a conscientious effort to appoint persons who represent all of the various communities within the City of Reno. Please be advised that certain boards and commissions require filing of financial statements with the Secretary of State or have special requirements. Contact the City Clerk's office at 334-2030 with any questions.

Profile

Paul (First Name) | A (Middle Initial) | Ferrari (Last Name)

paul@pf-consulting.org
Email Address

2215 Pioneer Drive
Home Address

Suite or Apt

Reno
City

NV
State

89509
Postal Code

What ward do you live in? *

☑ Ward 2

Home: (775) 771-1720
Primary Phone

Business: (775) 771-1720
Alternate Phone

How long have you been a resident of the City of Reno?

74 years

Are you over 18 years of age?

◉ Yes ○ No

Are you currently registered to vote in the City of Reno? *

☑ Yes

P&F Consulting Engineers
Employer

partner
Job Title

Which Boards would you like to apply for?

Historical Resources Commission: Submitted

Have you ever been convicted of a felony or misdemeanor other than minor traffic violations?

○ Yes ◉ No

If yes, please list conviction dates and nature:

Interests & Experiences

Education or training relevant to the board or commission to which you are applying:

Currently on the Historic Resources Commission

Explain briefly why you would like to be appointed to this board or commission.

Currently on the Historic Resources Commission Structural/civil engineering for over 47 years, including the rehabilitation/stabilization of over 25 historic structures, including the Riverside Hotel, Washoe County Courthouse, Mackay School of Mines Library, and Morril Hall in Reno.

Scan_20191202_110822.pdf
Upload a Resume

Ethnicity

[redacted]

Gender

[redacted]

Sexual Orientation

[redacted]

Open Meeting Law Waiver

Paul A Ferrari

WAIVER OF NOTICE REQUIRED UNDER NRS 241.033(1) TO ALLOW CITY COUNCIL TO CONSIDER CHARACTER, MISCONDUCT, OR COMPETENCE OF PERSON TO BE APPOINTED TO A BOARD, COMMISSION, OR OTHER PUBLIC BODY FOR THE CITY OF RENO

The City Council for the City of Reno will be considering on a future posted agenda your appointment to a board, commission or other public body for the City of Reno. Pursuant to NRS 241.033(1), in order to consider the professional competence of an applicant, notice need be provided to that person of the time and place of the meeting in compliance with such statutory provisions. By agreeing below, it is confirmed that I have been provided notice of the meeting at which my appointment will be considered by City Council. Further, I knowingly and voluntarily am waiving my rights to all written notice requirements under NRS 241.033(1) pertaining to my qualifications, competence, and character to hold this appointment and consent to the evaluation of my character and competence by the Reno City Council in a public meeting. Further, the I acknowledge that I may at any time withdraw both this waiver and related application for appointment.

☑ I Agree

Acknowledgement

Please Agree with the Following Statement

I certify that, to the best of my knowledge, the information I provided in the application is true. If the information provided is false or incomplete, it shall be sufficient cause for disqualification or removal. If appointed, I agree to attend a board or commission orientation session, if applicable, within six months of my appointment. I understand that failure to comply with this requirement will results in automatic removal from the board or commission.

☑ I Agree

Paul A Ferrari

PF Consultants LLC
Consulting Engineers
520 Edison Reno, Nevada

775–856–5566; 775-771-1720 mobile

PAUL A. FERRARI, P.E.

EDUCATION:

BSCE, University of Nevada, Reno 1971

MSCE, University of Nevada, Reno 1974 (structures)

United States Army Engineer Officer School Ft. Belvior, VA 1973.

REGISTRATION:

Nevada - Civil Engineer 4245

PARTIAL HISTORIC/FORENSIC ENGINEERING EXPERIENCE:

Mr. Ferrari has extensive historic/forensic engineering investigation experience. Historic renovation engineering and forensic engineering investigation are very similar; both require considerable investigation of existing conditions before the renovation/strengthening engineering can begin. A representative sample of Mr. Ferrari's structural engineering experience in the structural strengthening of historic structures for adaptive reuse is listed below.

- **St. Mary in the Mountains Catholic Church Seismic Retrofit, Virginia City, Nevada.** St. Mary of the Mountains is the first Catholic Church established in the State of Nevada. The church, built in 1875, is constructed of unreinforced brick masonry walls that are 30' high. A historic preservation plan was prepared for the United States Park Services, in compliance with a grant for the project. The seismic retrofit will strengthen the superstructure of the building by inserting concrete reinforced columns into the thickness of the existing brick walls, reinforcing the roof structure, and reconstructing the original choir loft which was removed in the 1950's. The seismic strengthening will insert a competent lateral load system into the building, with little disruption to the historic fabric, and no disruption to the exterior historic fabric of the building. The completed project returned the building to its historic architecture while providing an integral structural seismic capability to the structure. The project was recognized with a Historic Building Seismic Safety award.

- **Piper's Opera House Front Façade Restoration/Strengthening, Virginia City, Nevada.** The front façade of the Pipers Opera House consists of unreinforced brick masonry – the original 1863 front wall, and the 1877 arched façade addition. This composite front wall has deteriorated to the point where it was in danger of a catastrophic collapse. The fact that the main entry/exit for the productions presents an immediate life/safety threat. The hodgepodge geometry of the front wall section

added to the complexity of the project. Mr. Ferrari engineered a reinforced concrete frame that would be installed behind the historic fabric of the 1877 façade, by removing brick from the 1863 wall and replacing it with competent structure. In order to accomplish this structural retrofit, Mr. Ferrari engineered a unique forming system for the reinforced concrete frame that also served as temporary shoring for the weight of the brick façade as well as portions of the roof. This restoration was completed without compromising the historic fabric of the building, and provides the building with a code-conforming vertical and lateral load system.

- **Piper's Opera House roof truss/balcony retrofit, repair and strengthening, Virginia City, Nevada.** Engineering analysis and repair of framing for the roof, interior balcony, and wall column framing. The retrofit returned a structural load path to the existing building.

- **Piper's Opera House general seismic upgrade, Virginia City, Nevada.** Engineering analysis design of a retrofitted lateral load (wind and seismic) system into the historic fabric of the existing building. The retrofit was performed without impacting any historic structural fabric. The retrofit provided a lateral load system for the existing building.

- **Piper's Opera House main floor strengthening and basement retrofit, Virginia City, Nevada.** The existing main floor of the building was supported and reinforced to reverse structural degradation. Also, new engineering was performed to extend the existing basement further into the existing building footprint.

- **Fourth Ward School seismic retrofit and basement wall stabilization, Virginia City, Nevada.** The structural engineering scope of work for this series of projects involved the stabilization, underpinning and strengthening of the basement walls and foundation of the building, especially the southeast corner of the building which was in danger of collapsing. The seismic retrofit involved the installation of lateral shearwall system into the existing wall framing of the four-story wood superstructure.

- **Riverside Hotel restoration, Reno, Nevada.** A retrofit of a six-story unreinforced masonry building with concrete floors. This project presented a significant challenge with regard to seismic stability of a tall historic structure. The challenge was met by integrating a reinforced concrete shotcrete surface at the interior face of the unreinforced brick masonry walls. This concrete "splint" at the interior of the building not only provided a competent lateral load resisting system, but reinforced the walls for loads perpendicular to the wall. The structural shotcrete surface at the interior of the building was finished to provide an architectural finished surface. Original estimates for the structural reinforcing of the building ranged to $2,000,000. Throughout structural ingenuity, Mr. Ferrari was able to structurally retrofit the building for less than $600,000.

- **Structural Strengthening of the 1870 Washoe County Courthouse, Reno, Nevada.** This interesting project involved the emergency seismic strengthening of an unreinforced brick building constructed in 1870. The walls were deteriorating to the

point where a small seismic event could cause a "pancaking" of the roof, ceiling, and second floor of the building. If the building collapsed, it would block the main east/west and north/south exit ways for the entire courthouse complex. The project was made more difficult by the fact that the building had a large amount of asbestos in its crawlspace, and had to remain open to the public. The asbestos in the crawlspace eliminated the traditional post-and-beam approach to strengthen the floor system. In response to these criteria, Mr. Ferrari developed an innovative "suspension system" whereby a large structural steel truss was installed over the roof of the 1870 building, and supported on very large existing concrete columns that were intended for an expansion that will never occur. The 20' deep 80' span truss was hidden behind the structure and facade of the existing courthouse complex, and is unseen from street level. Tie rods were then dropped down into the structure of the 1870 building, where they tied into a new concrete beam cast into the brick walls. The roof, ceiling, and floor structures were tied into this beam. When completed, the suspension system provided vertical support to the wood roof, ceiling, and second floor framing of the existing 1870 building. Even if the walls of the 1870 building were completely destroyed, the suspension system would prevent the pancaking failure of the building, allowing exiting from the structure. The retrofit was installed for only $600,000, (versus an original estimate of $1,500,000 for the original post and beam concept) and was installed during the weekends and nights, so that the normal functioning of the courthouse complex was not adversely affected.

- **Seismic retrofit/renovation of the Centennial Fine Arts Center/Children's Museum (Civic Auditorium), Carson City, Nevada.** This project included the structural strengthening of the exterior unreinforced brick masonry walls that support the roof structure. This historic retrofit was accomplished within the historic fabric of the existing construction. The retrofit strengthened the walls from out-of-plane seismic forces, and tied the roof diaphragm into the walls so that they were properly supported and could continue to provide vertical support for the clear-span roof.

- **Yerington Elementary School, Yerington, Nevada.** This large, three-story brick building was constructed in 1912. Eventually the building was abandoned as a school use. The City Council obtained funding to transform the building into a municipal auditorium. Not only was the building to be seismically stabilized, but a portion of the second floor was to be removed for auditorium seating. Mr. Ferrari developed a structural steel framing system that was integrated into the inside surface of the brick walls. The framing system provided vertical and lateral load capabilities, as well as out-of-plane strengthening for the unreinforced brick walls.

- **Historic renovation/flood control for the Virginia Street Bridge, Reno, Nevada.** This on-going project includes the structural renovation of the oldest reinforced concrete arched bridge (1905) between Denver and San Francisco. The renovation study also included the need to remodel the bridge (without altering its historic character) so that it can safely pass the 100 year Truckee River flood flow through the Downtown Reno corridor. A structures report was prepared for the United States Army Corp of Engineers.

- **Bently Corporation Headquarters Building, Seismic Retrofit/Restoration/Strengthening, Minden, Nevada.** The new Bently headquarters building was a complete seismic retrofit, and mezzanine, roof penthouse and photovoltaic array addition to an existing 1912 two story historic brick building. Significant structural strengthening of the existing floor and roof framing was required, including integrating difficult existing construction conditions into the final structural system. An extensive amount of structural shoring was required to accomplish the new architectural configuration of the interior of the building. This project required a tremendous amount on-site "boots-on-the-ground" field destructive investigation, existing condition review, and immediate response to unknown field conditions.

- **Northern Nevada Railroad coach shed, Ely Nevada.** This large, long wood frame structure was built in the early 1900's as part of the Nevada Northern Railroad. The walls are composed of a large amount of glazing. Over the years, the structure fell into disuse, and began leaning, in response to a lack of a transverse structural system to resist wind loads. The building eventually leaned 26 degrees from vertical, and was close to collapsing. Mr. Ferrari designed emergency shoring to stabilize the building, and then devised a method of straightening and strengthening the building. New transverse structural steel tube frames were integrated into the walls, and tied into the roof trusses to provide a complete lateral load system.

- **Northern Nevada Railroad Engine House, Ely Nevada.** This unreinforced masonry and stone structure was built in the early 1900's as part of the Nevada Northern Railroad. The walls are in excellent condition. Mr. Ferrari has performed a structural engineering review of the building to stabilize the building for anticipated earthquake lateral load forces. The main consideration is to attach the existing roof diaphragm to the masonry bearing walls to prevent the walls from "pulling away" during a seismic event; loss of wall support could cause the roof to collapse.

- **Northern Nevada Railroad, Ely Nevada, general structural engineering review.** The purpose of this report is to provide an inventory and "roadmap" for the various structures of the Railroad. The scope of the report included the coach shed, the engine house, and the coaling tower. The report classified the structural condition of the structures and listed a structural "triage" of the buildings in most need of structural renovation.

- **St. Paul's Episcopal Church, Virginia City, Nevada.** Built in 1858, this wood structure was one of the first churches on the Comstock. A seismic/lateral load emergency retrofit was undertaken to stabilize the wood truss arches supporting the building. A further lateral strengthening of the building is planned.

- **Delta Saloon Virginia City, Nevada.** Reconstruction, repair, and stabilization of an 1879 two story brick building on C Street in Virginia City from the effects of a large propane explosion. The structural engineering included re-attachment of the roof joists, construction of new bearing walls, and stabilization of the brick walls.

The preceding examples of Mr. Ferrari's historic restoration experience are just a portion of the over thirty historic projects that he has engineered. This experience in a historic structural renovation integrates a competent structural retrofit into the parameters of the historic fabric of the building. The result is a structurally sound building that reflects the historic architecture of the building, not the structural retrofit.