

## Rio Piedras Underground Heavy Rail Station, Tren Urbano, San Juan, Puerto Rico

Puerto Rico Highways & Transportation Authority (TUO Office)

110 Ponce De Leon, San Juan, PR 00925



**AVA's Role:** Anil Verma Associates (AVA), Inc. was the **Architect of Record, Urban Designer and Inspector of Record** to a Joint Venture Team of Kiewit, Kenny, Zachry (KKZ Construction Contractors) for the Design-build contract responsible for Underground Heavy Rail Stations. Our responsibilities included: Architecture, Urban Design, Engineering Coordination, and Construction Management.

**Description:** The Rio Piedras Contract consists of two subway stations and tunnels for the heavy-rail underground segment of the first Rapid Rail Transit Project in San Juan, Puerto Rico. This Design-build contract of a heavy-rail transit system is a Federal Transit Administration Demonstration Project.

**The Rio Piedras Station** is a stacked drift tunnel station with deep shafts and cut-and-cover entrances at each end. This station lies right across from the Rio Piedras Plaza in a congested part of the historic district of the city and this has several historic and urban design considerations. AVA was responsible for the architectural design of the entire facility in the context of the existing city. Our team completely redesigned the ancillary equipment spaces to cut (80') of cut-and-cover construction length from a proposed (916') station box. This had a major impact on reducing construction costs. AVA worked closely with the local community and State Historic Preservation Office to implement façade design in the station headhouse fronting this historic Plaza de Recreo. Other headhouses were designed to blend with the context of the mixed commercial and residential uses of the neighborhood. AVA had extensive involvement during the construction phase of this station in this congested neighborhood to ensure quality and durability.

**Station Cost:** \$95,000,000 **Total Rio Piedras Contract:** \$350,000,000 **Completion date:** 2005

**Anil Verma Associates, Inc.**



# University of Puerto Rico Underground Heavy Rail Station, Tren Urbano, San Juan, Puerto Rico

Puerto Rico Highways & Transportation Authority (TUO Office)  
110 Ponce De Leon, San Juan, PR 00925

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**AVA's Role:** Anil Verma Associates (AVA), Inc. was the **Architect of Record, Urban Designer & Inspector of Record** in a Joint Venture Team of Kiewit, Kenny, Zachry (KKZ-Construction Contractors) for this Design-build contract of the University of Puerto Rico Underground Station. Responsibilities included: Architecture, Urban Design, and Construction Management Services.

**Description:** The Rio Piedras contract consisted of two stations and tunnels for the underground segment of the first Rapid Transit Rail Project in San Juan, Puerto Rico. This Design-build contract within this heavy rail transit system is a Federal Transit Administration Demonstration Project.

**The University of Puerto Rico (UPR) Station** was a cut and cover station, with a center platform and entrances at both ends. One entrance provides access from the street level to a concourse (mezzanine with ticketing functions) and then access to the platform. This entrance is sensitively designed in the context of old historic walls and buildings. The second entrance has direct access from the street level headhouse (which has ticketing functions) to the platform. This entrance is a modern glass, steel and concrete structure which complements the newer university buildings. The ancillary equipment spaces are housed beyond the platform ends and at the mezzanine levels. The entire station configuration was changed to allow for a better ventilation system, and to consolidate the station cut and cover box size. The station lies in the historic section of the University of Puerto Rico campus and has several historic and urban design considerations.

**Station Cost:** \$70,000,000 **Total Rio Piedras Contract:** \$350,000,000 **Completion date:** 2005  
*Anil Verma Associates, Inc.*

