



## SUBSTATION EXPERIENCE

### YALE SUBSTATION

**Client:** Arizona Public Service

**Entellus' Role:** Lead Civil Engineer

The Yale Substation is a replacement substation for an existing substation that was removed to allow for the expansion of Phoenix Children's Hospital. The hospital assembled three contiguous parcels in the vicinity of the existing substation. Existing improvements were demolished and the three parcels replatted into one combined parcel. In addition to the replat, Entellus provided structural wall and security fence calculations, grading and drainage plan, horizontal control, and offsite water line designs.



### EVANS CHURCHILL SUBSTATION

**Client:** Arizona Public Service

**Entellus' Role:** Lead Civil Engineer

Architecture: Zamir Hasan & Associates

Landscape Architecture: Environmental Planning Group (EPG)

The Evans Churchill Substation is a new, architecturally enhanced, substation to provide additional electrical service capacity to the downtown Phoenix area. The site is an assemblage of six contiguous parcels requiring existing improvements to be demolished and replatted into one combined parcel. Entellus provided replat, grading and drainage plans, offsite water line, and offsite paving plans.



# DEVELOPMENT SERVICES OVERVIEW

## SUBSTATION STRUCTURAL ENGINEERING AND DESIGN SERVICES FOR HORSE-MESA DAM/ SUBSTATION BREAKER REPLACEMENT

**Client:** Salt River Project

**Role:** Structural Engineer

Entellus provided structural design, preparation of structural drawings and details, shop drawings, site visits, and preparation of as-built drawings for a structural modification of an electrical equipment area at Horse-Mesa Dam/Substation. The old electrical equipment was removed. The existing structural supports, which include 24-WF68 beams, remained in place and the existing metal decking, handrail, kick plate, and other ancillary structural components were removed. New breaker equipment structural supports, aluminum and steel grating to provide a new safety compliant deck surface, as well as new handrails, kick plates, and accessories were designed and constructed.

