



# MEMORANDUM

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DATE: February 21, 2018  
For March 8, 2018 Hearing

TO: Steven Shell  
Zoning Examiner

FROM: Scott Clark  
Planning & Development Services  
Director

SUBJECT: REZONING  
PLANNING & DEVELOPMENT SERVICES REPORT  
C9-18-03 Tucson Electric Power Company (TEP) – Irvington Road Campus  
I-1 and I-2 to Planned Area Development (PAD) (Ward 5)

**Issue** – This is a request by Robin Large of Lazaurus, Silvyn and Bangs, P.C., on behalf of the property owners, Unisource Energy Corporation/Tucson Electric Power Company, to rezone approximately 345 acres from I-1 and I-2 zones to Planned Area Development (PAD) zoning. The rezoning site is located at the Southeast corner of Alvernon Way and Irvington Road (see Case Location Map). The PAD document proposes uses and development standards for the long-term operation of the power generation plant.

**Planning & Development Services Recommendation** – The Planning & Development Services Department recommends approval of PAD zoning, subject to the attached PAD document.

## **Background Information**

Existing Land Use: Power Generation Plant

### Surrounding Zones and Land Uses:

North: Zoned City I-1 & I-2 and County CI-1 & CI-2; DMAFB, Industrial and Commercial Services Uses

South: Zoned CI-1; Union Pacific RR and I-10

East: Zoned City I-1 and County CI-1 and CI-2; Industrial Uses

West: Zoned County CI-1; Industrial and Commercial Services Uses

Previous Cases on the Property: There are no previous City rezoning cases on the property. There have been several Zoning Administrator actions to resolve zoning issues related development/redevelopment on the TEP Irvington Campus.

Related Cases: There are no cases related to this request.

TEP is a subsidiary of UNS Energy Corporation, and is the primary provider of electric service to the eastern Pima County region. TEP serves 420,000 customers in southern Arizona. The

rezoning site, the Irvington Campus (Campus), was developed in unincorporated Pima County in the 1950's and was annexed into the City of Tucson in 1995. Due to the nature of a nearly 70 year old power generation plant, where changes in technology and world events can impact the operations, flexibility in the zoning is required to position TEP to use its resources to respond to impacting events and technology, without having to sort through zoning issues.

Electricity was initially generated using oil and natural gas. The oil embargo and moratoriums of the early 1970's brought changes. In the late 1970's and early 1980's, the plant was modified to burn coal for power. Since then, resource economics and environmental considerations have shifted away from coal to a more balanced use of resources. Consequently, the last of the coal-powered operations was shut down at the end of 2016. Those generators are currently powered by natural gas, supplemented with methane from the Los Reales Landfill. TEP also uses a solar energy system that converts heated water into high-pressure steam.

Currently, TEP is focusing more on renewable resources such as solar power and biodiesels for power generation and is developing plans for additional wind and solar-powered facilities. Approximately 11% of delivered power comes from renewable resources. TEP has a goal of generating 30% of its power from renewable resources by 2030.

This information highlights the fact that while the power delivered to TEP's customers remains stable, the technology and resources used to produce that power have changed dramatically over the years. The need for land use regulations and development standards that meet the needs of a unique and evolving facility within Tucson, and simultaneously meet community goals, is the basis for the PAD.

**Applicant's Request** – Rezone to Planned Area Development (PAD) Zone to establish "... development standards and land use regulations that are appropriate for a regional 345-acre power generating project that must have the flexibility to adapt to innovative industry changes quickly."

**PAD Rationale** – The Unified Development Code (UDC) Section 11.3.11 Utilities Use Group defines a *Generating System* as "[a] facility that produces energy. Typical uses include electrical generating plants." However, Table 4.8-5 Permitted Uses – Industrial Zone, does not include the Generating System use as a permitted use in the I-2. The Generating System use is included under a "catch-all" foot note to Table 4.8-5, which states, "Any Land Use Class not permitted or a Special Exception Use in any other zone, or permitted in the I-2 zone, may be permitted in the I-2 zone and shall comply with the dimensional standards determined to be most similar to the proposed use."

The Campus features an intensive network of power generating equipment and overhead utility lines, as well as steam generators, water tanks and wells, warehouses, evaporation basins, cooling towers, substations, transmission and distribution structures, and other buildings and uses ancillary to the power generation operation. The scale of the site and its equipment, as well as the breadth of the uses is not envisioned by the UDC. Ultimately, there are no dimensional standards

that are similar enough to the Campus to allow TEP to undertake projects without seeking some sort of zoning relief.

The PAD proposes a table of permitted uses (p.51), development standards (p.52), and PAD administration rules (p.64) to guide the on-going development of the Campus. The document was developed within the context of a Power Generation System plant, and therefore provides a stable and flexible regulatory environment for TEP, and a more systematic review process for the City.

While the PAD is proposed to govern the land use and development projects at the Campus, it should also be noted that various facets of the TEP operation and construction are also reviewed and monitored by: Arizona Corporation Commission, Federal Aviation Administration, Environmental protection Agency, Arizona Department of Environmental Quality, Pima County Department of Environmental Quality, U.S. Fish & Wildlife Service, U.S. Army Corps of Engineers, Davis-Monthan AFB, Arizona State Historic Preservation Office and the Arizona Department of Transportation

**Planning Considerations** – Land use policy direction for this area is provided by the *Rincon Southeast Subregional Plan* and *Plan Tucson*. The rezoning site is located within an Existing Neighborhoods Growth Scenario Building Block as identified on the Future Growth Scenario Map of *Plan Tucson*, which does not specifically identify the Campus.

The *Rincon Southeast Subregional Plan (RSSP)* identifies the site in the *RSSP* Swan/Irvington Map Detail #3, created when the area was annexed in to City of Tucson. The Map Detail describes the area as a combination of developed and vacant industrially-zoned properties. The Campus is specifically identified as “...the most significant industrial use...” in the area.

Due to the location of the Campus, at the intersection of two arterial roadways, surrounded by heavy industrial zoning and uses, bounded by the railroad on two sides and the interstate to the south, the Campus meets the broad *PT* guidelines for the locations of industrial areas: “Industrial areas are strategically located for efficient handling of intermodal freight movements. These areas support national and international freight movement through Tucson by connecting existing major regional commercial transportation routes, including railway, major highways, and the airports.”

The operational goals for power generation as well as corporate programs within the community support numerous *Plan Tucson* goals which are summarized below:

Energy and Climate Readiness (EC Policies) call for increasing the use of low carbon and renewable energy sources, including solar and other renewable energy sources. Environmental Quality (EQ) Policies broadly support striving for a “zero waste” model and improving environmental performance through process, technological and behavioral changes. As stated above, TEP is seeking to increase the amount of delivered power from renewable resources the current 11% to 30% by 2030. This is double the State of Arizona goal for renewable power generation. TEP also uses waste methane gas from the Los Reales Landfill as a power source.

Typically, the methane is collected and burned off. Through a program developed with Civano Nursery, green waste, collected by TEP maintenance crews is chipped and recycled, reducing the flow to local landfills by about 30,000 cubic yards, annually.

Public Infrastructure, Facilities & Cost of Development (IP) Policies support expanding the state-of-the-art, cost-effective technologies and services for public infrastructure and facilities, coordinating with utility companies and other public service providers for the planning of infrastructure, facilities, and services, and ensuring infrastructure and facility construction is sensitive in design and location to environmental and historic resources. The specific purpose of this PAD is to coordinate with the City to ensure an efficient process to develop state-of-the art and cost-effective, as well as more environmentally sound technologies for providing electrical service to eastern Pima County.

Jobs and Workforce Development (JW) Policies support recruiting, retaining, and expanding businesses and industries within Tucson's key economic sectors, including but not limited to aerospace and defense, biosciences, renewable energy, astronomy, and optics to increase high-quality, high-paying job opportunities. JW Policies also call for collaboration with local institutions, including but not limited to the University of Arizona, Pima Community College, Pima County and public and private training and technical organizations to support a well-educated, well-trained workforce with skills matched to local job opportunities and employer needs. The PAD document cites TEP's extensive efforts in renewable energy. TEP is also involved in two workforce training programs in the community. Collaboration with Pima Community College created the Building for Success program to develop local talent through training programs and career resources. A partnership with DMAFB developed the Career Skills Program to help military service members transition to the civilian workforce.

The Campus is bounded on the north by Irvington Road (future ROW 150'), Swan Road (future ROW 150') on the east, the Union Pacific Railroad ROW and Interstate 10 ROW on the south (combined ROW varies 500' to 700'), and the Union Pacific ROW and the I-10 westbound exit ramp and Alvernon Way (future ROW 150') on the west.

The entire site is within the DMAFB Airport Hazard Zone, within the Airport Environs Zone (AEZ) Overlay. It also falls within the Noise Control District (NCD)-A (65-70 Ldn). The AEZ Height Zone 2 also impacts the site and limits structure height to 140 feet. TEP coordinates with DMAFB to ensure structures and activities on the Campus are compatible with DMAFB operations. DMAFB reviews all above-ground construction to ensure proposals do not pose visibility or safety hazards. DMAFB has supported and continues to support construction of TEP structures that exceed the height limitations of AHD, provided they do not pose a risk to Base operations. DMAFB has already signed off on an upcoming project at the Campus. That letter is included in the Zoning Examiner's packet.

No billboards are located on the rezoning site.

### **Design Considerations**

Land Use Compatibility – Due to the intense industrial nature of electrical generation use, design considerations are limited. The Campus employs tight security whereby all employees and visitors must enter through security checkpoints. Therefore, many of the design features associated with public spaces are not appropriate at this location.

The Campus is located in an industrial area, surrounded by industrial and heavy commercial uses. There are currently numerous structures related to the power generation activities. Future projects will be designed according to the engineering, safety, technology and needs demand for producing electricity.

All utilities are currently available at the site.

Drainage/Grading/Vegetation – The site is relatively flat and slopes from the southeast to the northwest. The average cross-slope for the site is 4.4%.

The Campus is well-developed and has a system of storm water management. The PAD proposal states that TEP operational requirements will determine the location of detention basins. Development standards for retention/detention are specified in the PAD. The long-term detention plan will reduce existing discharge from the campus by 15% (one- hour, 100-year storm), using existing discharge points.

There are no flood hazard areas on the site. The southern and western edges of the Campus are within the 500-year flood zone, mostly due to the impacts of the railroad tracks in those areas. There are no regulated washes on the site.

Vegetation has been significantly disturbed on the site. It mainly consists of shrubs and scattered grasses. The vegetation does not provide habitat that would support foraging, sheltering or nesting areas. While studies show that seven (7) threatened and endangered species (TES) may exist in the general area, there is no proposed or designated critical habitat for the TES on or in the vicinity of the Campus. The PAD does include recommendations regarding activities to promote the conservation of native vegetation and other wildlife in the area.

Certain cultural resources have been identified on the site, however, due to activities and determinations regarding the preservation of these resources, they are no longer under consideration. TEP and its contractors will abide by ARS 41-865 should human remains be discovered during construction activities.

Road Improvements/Vehicular Access/Circulation – TEP has already established a vehicle and pedestrian circulation system within the Campus. Parking will be provided at a ratio one space for each employee. Access to the Campus is limited to four security-controlled gates, three of which are accessed from Irvington Road, and one accessed from Swan Road.

TEP will coordinate with the Tucson Department of Transportation (TDOT) to install a minimum five-foot wide landscape border along the Campus boundary, in the Irvington Road and Swan Road right-of-way, where feasible so as not to interfere with utility or drainage infrastructure, and in those areas where no vegetation currently exists.

An *Existing Transportation Conditions Study*, submitted as an appendix to the PAD document, found most off-site intersections and roadways operate at level of service (LOS) D or better. LOS D is the generally accepted operating condition for roadways and intersections by the jurisdictions that own and manage the surrounding roadway system.

No appreciable increase in traffic is anticipated at the site.

**Conclusion** – The TEP Irvington Campus is a unique land use. While the product of the Campus, electricity, does not change, the resources and means used to produce electricity have changed substantially over the years and will continue to evolve into the future. The proposed PAD will provide the land use regulations and development standards to accommodate that evolution to a cleaner, more sustainable power supply. Subject to compliance with the attached PAD document, rezoning to the Planned Area Development Zone is appropriate.

C9-18-03 TEP Irvington Campus – Irvington Road, I-1 & I-2 to Planned Area Development (PAD) Zone

Planned Area Development rezoning cases do not have a separate Facilities report because all staff reviews and comments are incorporated into the PAD document submitted for the rezoning case.

To view the PAD document:

(1) Go to <https://www.tucsonaz.gov/PRO/pdsd>

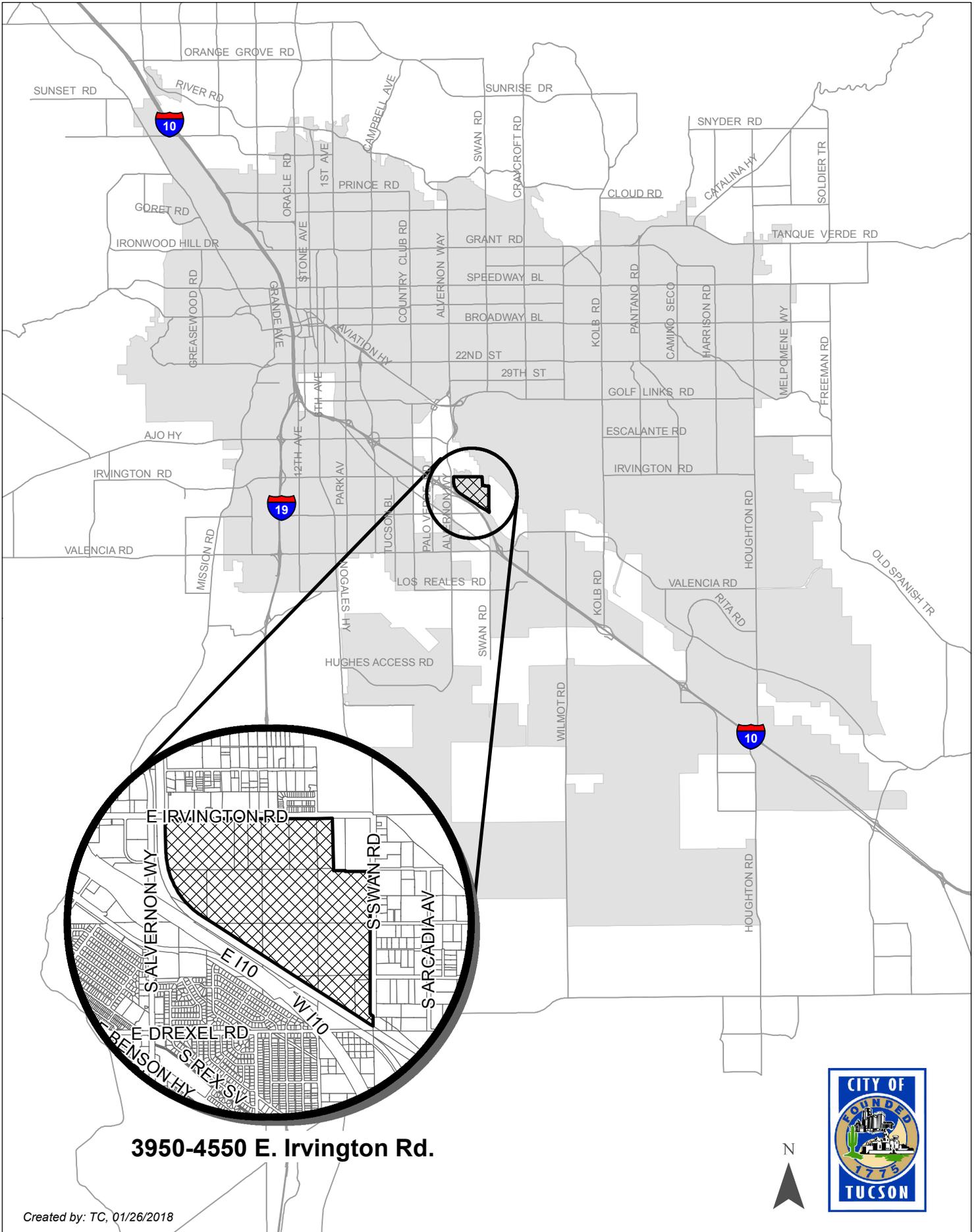
(2) Click “Activity Search” in upper left corner.

(3) Enter C9-18-03 in Activity Number Box and click “Search”

(4) Select “1-31-18 revised formal submittal TEP PAD-STAMPED.pdf (Click blue eye to far right of screen)

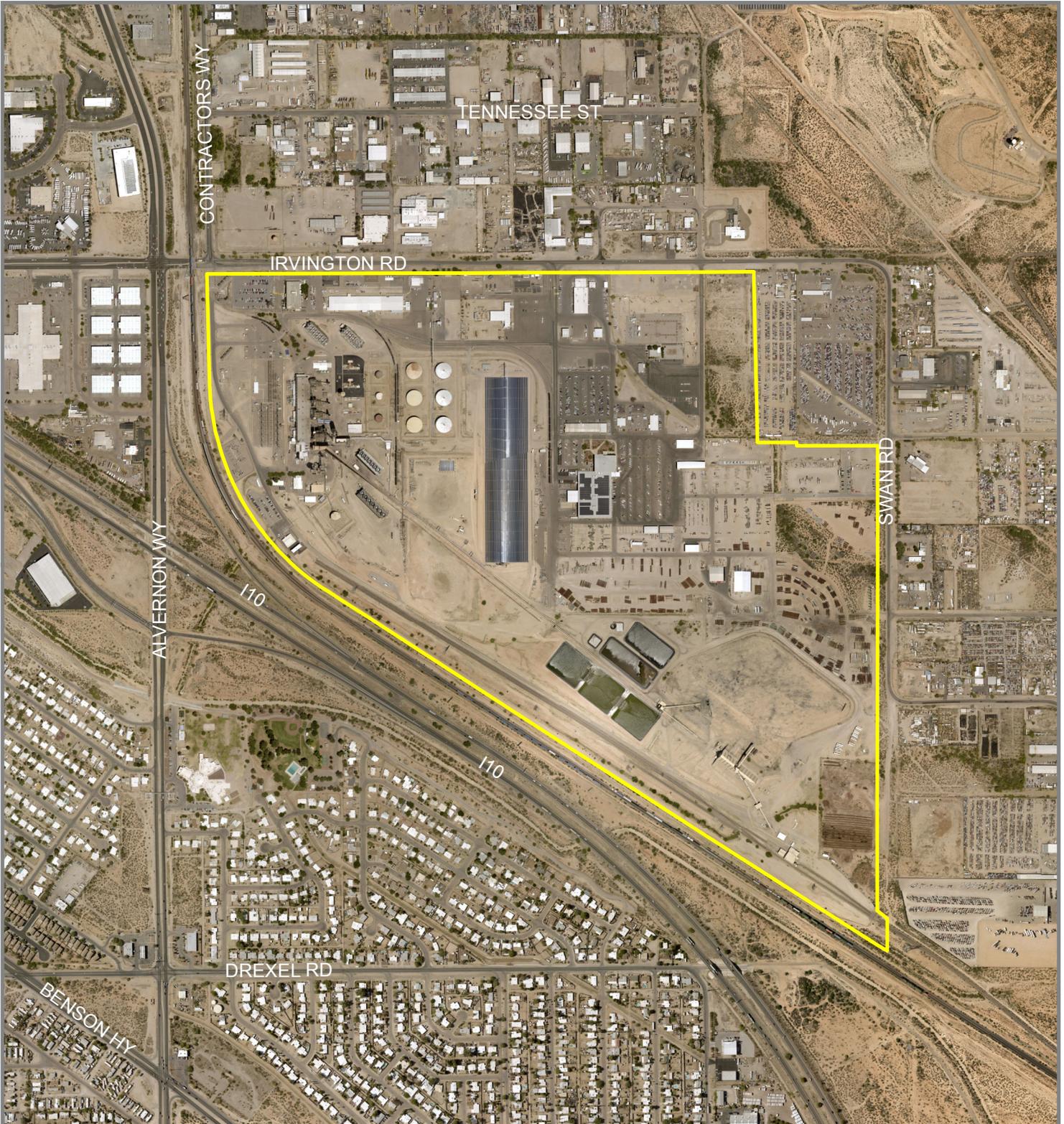
# C9-18-03 - TEP-Irvington Campus

## Rezoning Request: From I-1 and I-2 to PAD-34



# C9-18-03 - TEP-Irvington Campus

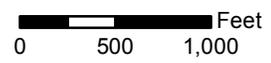
## Rezoning Request: From I-1 and I-2 to PAD-34



 Area of Rezoning Request



Address: 3950-4550 E. Irvington Rd.  
Base Maps: Twp.15S Range14E Sec. 03  
Ward: 5

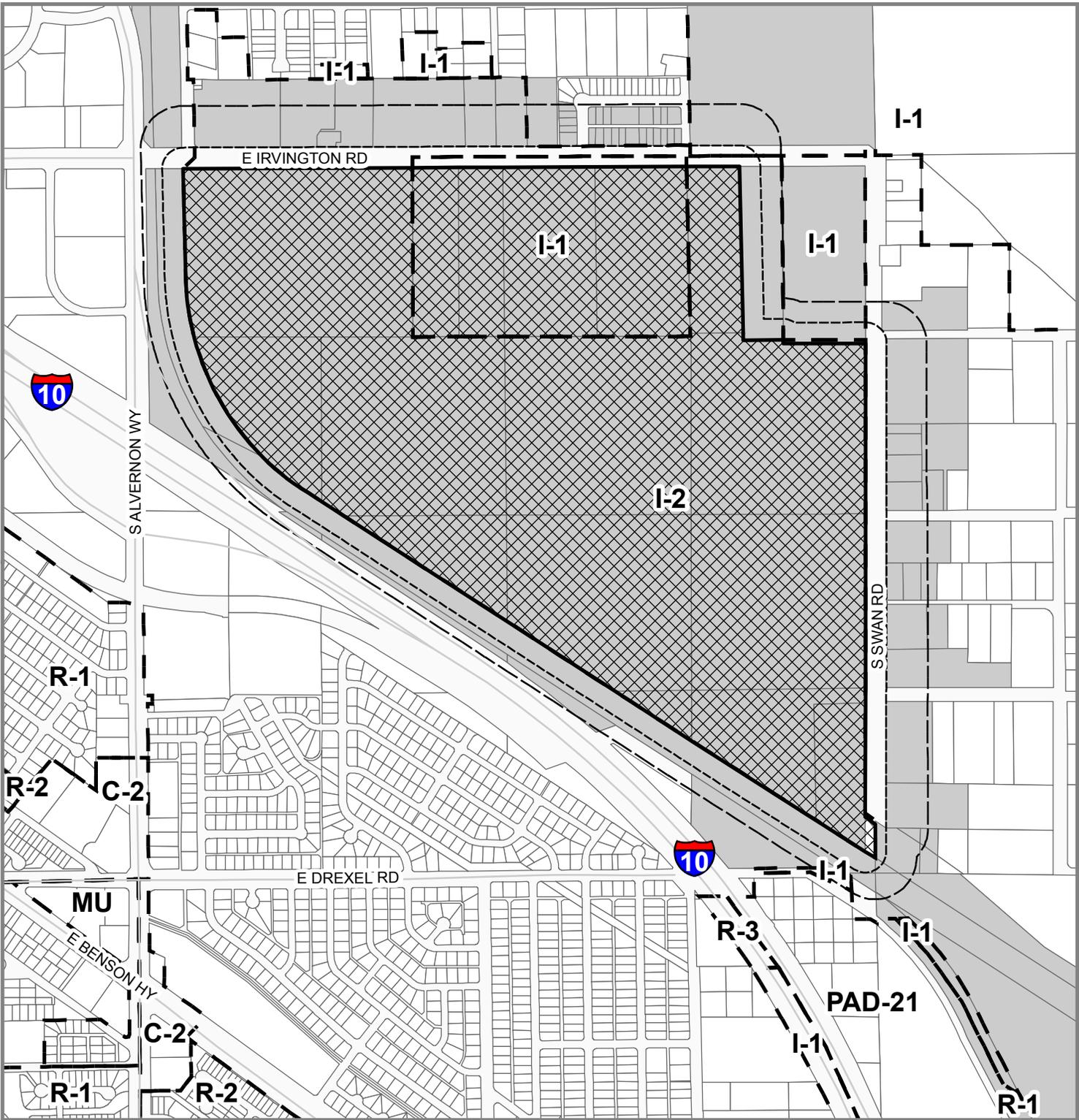
 Feet  
0 500 1,000

1 inch = 1,000 feet



# C9-18-03 - TEP-Irvington Campus

## Rezoning Request: From I-1 and I-2 to PAD-34



- Area of Proposed Rezoning
- Notification Area (300-foot Radius)
- Protest Area (150-foot Radius)
- Properties Notified
- Zone Boundaries

Address: 3950-4550 E. Irvington Rd.  
 Base Maps: Twp. 15S Range 14E Sec. 03  
 Ward: 5

