Broadmoor Neighborhood Treat Walkway Improvement Plan









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Project Goals



Beautify Treat Path and improve safety at path road crossings.



Celebrate the Treat Path and Arroyo Chico crossings as neighborhood places.



Reinforce neighborhood identity.

Neighborhood Input Community Character

Broadway Village is the cornerstone of Broadmoor Neighborhood.

Neighborhood wants homage to Joesler style.

Broadmoor is a community with annual traditions and gatherings.

Walking is popular; all Broadmoor streets are routes.









Neighborhood Input Treat Pathway

Treat Avenue path is a favorite walking route.

Pedestrian safety is an issue at all path crossings.

Neighborhood wants to enhance pathway experience.

Gathering areas (nodes) seem to occur on both sides of bridge.

















Neighborhood Input Arroyo Chico

Bridge stairs are not accessible to strollers and wheelchairs.

Bridge is not attractive.

Vegetation in Arroyo Chico is predominately non-native.

There are occasional encounters with wildlife in the wash.

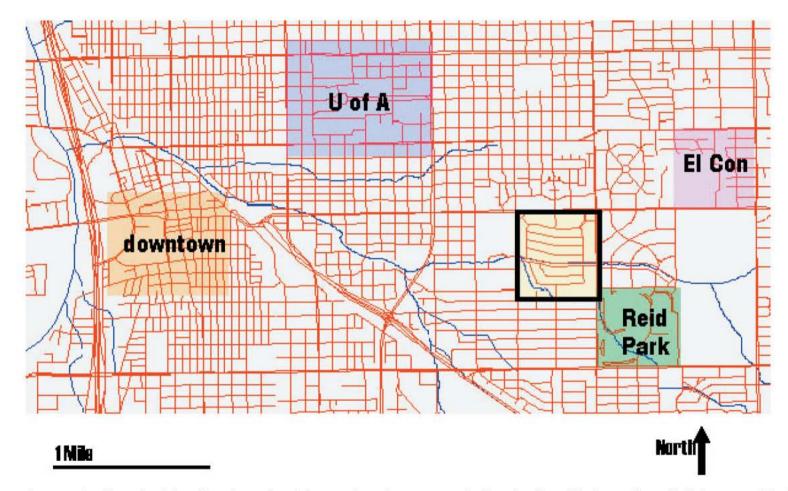
Neighbors frequently cross Country Club at the arroyo to walk in Colonia Solana and access Reid Park.





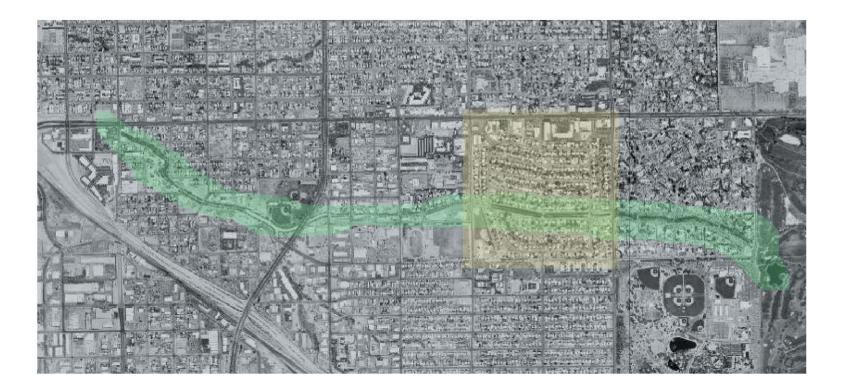


Analysis City Context



Broadmoor is located in the heart of town in close proximity to the University of Arizona, El Con, Reid Park and Downtown. It is surrounded by Colonia Solana on the East, El Encanto on the Northeast and Sam Hughes on the North, neighborhoods with some of the highest residential property values in the city.

Analysis Arroyo Chico



Broadmoor is fortunate to have the Arroyo Chico Wash run through the center of the neighborhood. Not only does the lush greenery provide cool relief from the urban hardscape, as well as recreational opportunites, this amenity is also a **riparian corridor** that travels through much of the City, originating at Reid Park and extending into the downtown area. This is part of an ecological network that enables urban wildlife to circumnavigate the city and functions as a major drainageway during storms.

Analysis Arroyo Chico



Plant Species Present

Oleander (irrigated) - non native African Sumac (Rhus Iancia) - invasive non native Bush Iantana (Lantana sp.) – invasive non native Mexican Palo Verde (Parkinsonia mexicana) – invasive native



The Arroyo Chico is a riparian corridor and would better support native wildlife if more native plant species were present. Since it is not feasable to revegetate the arroyo, the neighborhood could favor native species in any new landscape improvements within the neighborhood. This would increase the likelihood of native species becoming established in the wash through seed vectors such as wind and wildlife.

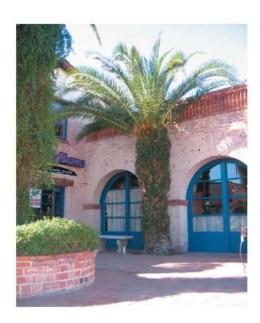
Analysis Historical Legacy

Broadway Village is located along the northwestern edge of Broadmoor Neighborhood, along Broadway Blvd. and Country Club Rd. Broadway Villiage was designed by Josias Joesler and built by the partnership of Joesler and John and Helen Murphy in 1939. Joesler borrowed from Territorial, California, and Spanish revival styles and created a characteristic Joesler style unique to Tucson. The style is rich in details and textures and required skilled craftsman to execute. Joesler architecture is significant to Tucson's architectural heritage and its cultural and geographic identity.

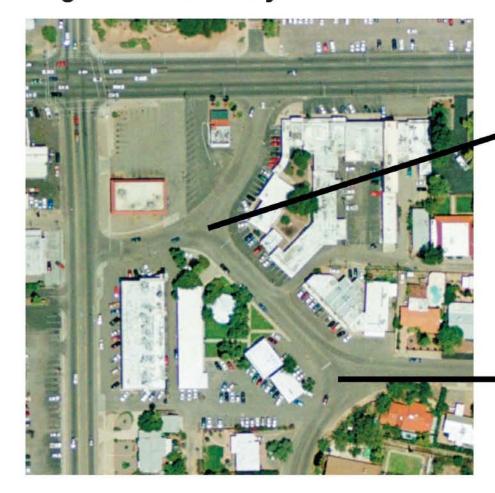








Analysis Neighborhood Entry - Northwest





Traffic circles at these two points would improve the visual appeal of the area and would also calm traffic into and out of the neighborhood.



Access into the neighborhood from the northwest passes office and commercial use utilizing on street parking, characterized by much asphalt and little vegetation. Because commercial parking enters into and backs out of the storefront parking directly onto the street there is not enough room in the street right-of-way for a center median. However, traffic circles at both ends of this area would improve area aesthectics and also serve to calm traffic.

Analysis Neighborhood Entry - North







The north-central entry into the neighborhood on Treat Avenue is bordered on both sides by commercial parking and is bereft of vegetation. The roadway becomes very wide where Treat joins Manchester. The home on the northeast corner of Treat and Manchester offers nice visual appeal, but landscape treatment in the right-of-way on the South and West of this intersection would improve the entry experience overall. There is also an opportunity for a landscaped center median at this intersection. The Treat Walkway begins here and could be celebrated by creating a "gateway" to the path.



Analysis Neighborhood Entry – Northeast

The entry experience at the Northeast is perhaps the nicest, past Broadway Village, an apartment complex, and a desert-scaped, vegetated median. The experience has an established, elegant feel to it.









Analysis Traffic & Pedestrian Conflicts





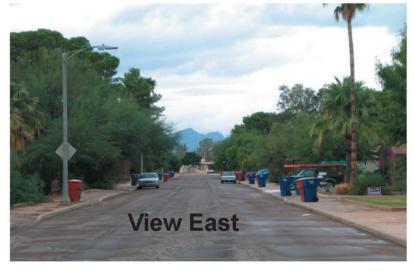
Residents of the Broadmoor neighborhood frequently walk into Colonia Solana neighborhood and access El Con Mall and Reid Park via this route. There is currently no marked crossing or any other form of crossing assistance at Arroyo Chico and Country Club. Through-traffic on Country Club could yield to pedestrians with a marked crosswalk and flashing street light. Since (north) Arroyo Chico is a bike route this would assist bicycle riders as well.

Analysis Visibility at Crossings

The photo at right shows the driver's view from South Arroyo Chico approaching the Treat Path bridge crossing from the west. There is definitely a **visibility problem** from this direction. There are several ways to mitigate this problem: slow traffic as it approaches the crossing, improve visibility of the crossing by modifying the existing vegetation, or, realign the bridge crossing so it is visible to oncoming traffic from both directions.







The veiws west and east from the path crossing at Exeter (a typical path crossing) show good visibility in both directions. The key here is that the crossings themselves be highly visible, i.e. better signed, and marked clearly and loudly on the street.

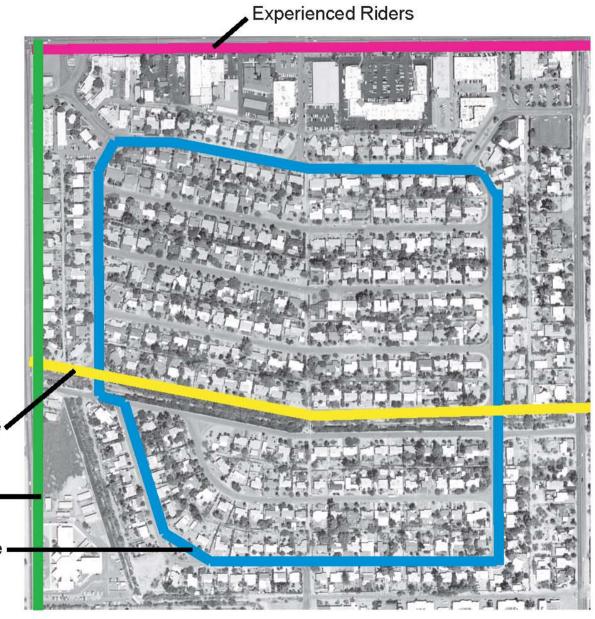
Analysis Bicycle Routes

The City of Tucson lists four bike routes in close proximity to Broadmoor Neighborhood. Care should be taken to preserve the continuity of these city-wide routes through and around the neighborhood.

Signed Bike Route

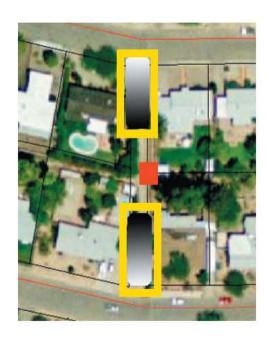
Signed Bike Route with Bike Lane

Residential Street Route



Analysis Lighting

Street lighting is provided by the **City of Tuc-son** at locations designated by yellow stars, at right. Tucson Electric Power provides additional lighting along the walkway, at the intersection of the path with each east/west alley. The diagram below analyzes dark areas along the path within each block, where no light shines. Motion sensitive photo-voltaic lights could be mounted on houses adjacent to the walkway to eliminate these dark spots.



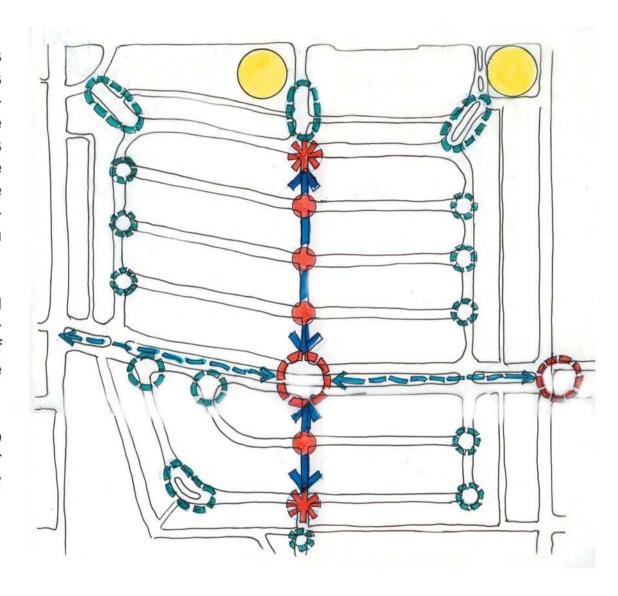


Master Plan

The master plan recognizes all entries into the neighborhood as opportunities for expression of Broadmoor Neighborhood character and identity. The northwest and north-central entries could be improved by mimicing the successful gateway experience at the northeast neighborhood entrance, accomplished through a large median with desert planting.

Similarly, the beginning and ending points of the walkway offer an opportunity to express the unique qualities of the neighborhood and to celebrate the path.

Path crossings are opportunities to enhance the pedestrian and vehiclular experience, as well as improve safety at the crossings.



Path Gateways

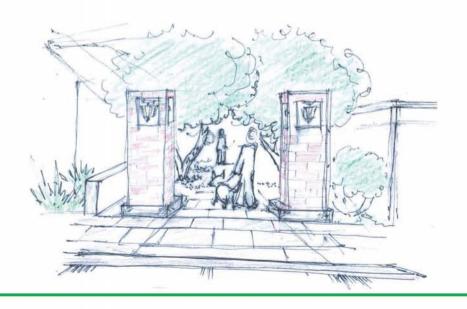


Path gateways announce arrival, call-out beginning and end points of the path, augment neighborhood identity, create neighborhood pride, and provide visual enhancement. Design elements from Broadway Village can be picked up in the gateway features to emphasize Broadmoor's distinct character.



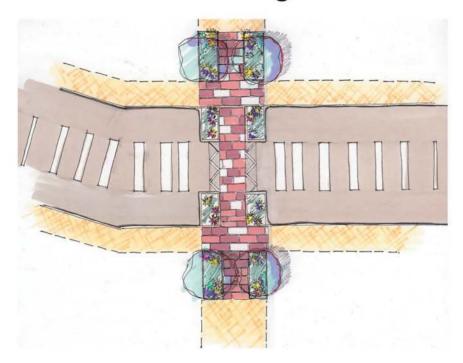








Path Crossings Yield-Flow Crossing





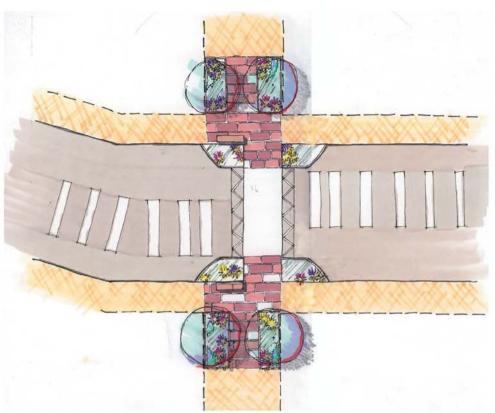
A yield-flow crossing reduces traffic to a single lane while passing over the crosswalk. This effectively reduces traffic speed and defers the right-of-way to the pedestrian. The example shown here includes a speed table (see Simple Crossing for description of speed table).



Path Crossings Off-Set Crossing

An off-set crossing defers to the automobile. The pedestrian's straight shot across the intersection is interupted by a jog in the path on both sides of the crossing. The obstacle that creates the jog is often formed by a planter or seat.



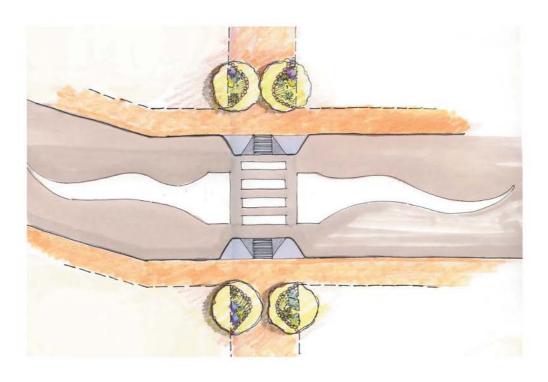




Path Crossings Simple Crossing



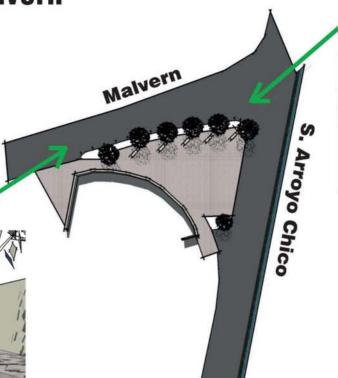




The simple crossing is a painted surface treatment on the pavement. The crossing here is shown in combination with curb bump-outs. This scenario would slow traffic but not necessarily stop it. Though not shown here, a speed table could be added. A speed table is less severe than a speed bump or hump. The level of the pavement at the crossing raises 4-6 inches to the level of the sidewalk, giving deference to the pedestrian. The table is usually poured concrete and can be texturized, stamped, colored or painted.

Neighborhood Plaza Arroyo Chico and Malvern

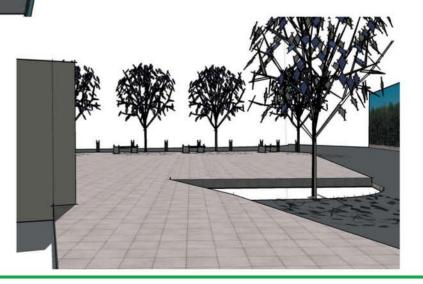
The pavement area at the intersection of Malvern and Arroyo Chico (south of the Arroyo) is huge (and hot) for a residential area. A portion of the area could be made into a neighborhood gathering area, or plaza, as modeled here.



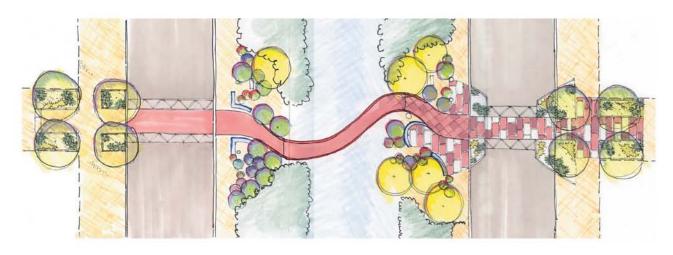


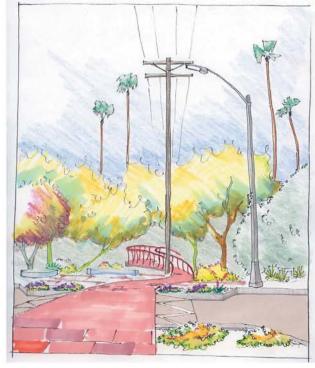
The planting areas would be sunken below the smooth mortared edge of the pavement, allowing surface run-off from the streets to be retained and utilized by the vegetation. The plaza itself could be hardscaped as shown here, or could be of a pourous material such as hollow brick or block.

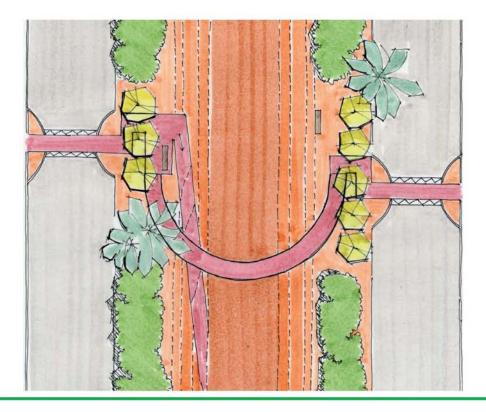




Bridge Crossing at Arroyo Chico







Two bridge design concepts are offered on this page. The top example meanders across the arroyo but ends in a straight alignment to the adjacent street crossings.

The lower example has a large arc and an offset jog as it meets the street, forcing the bridge user to consciously cross into the roadway. This helps mitigate the blind spot that cars approaching from the west experience (on south side of the arroyo). There is also a ramped access down into the arroyo. (Of course actual bridge design would need to be engineered by a professional.)

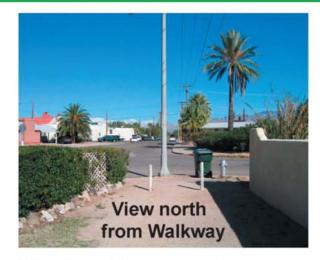
Treat Avenue Entry Landscape Improvements

Below are three scenarios for landscape improvements that would improve the visual appeal of the central entry into the Neighborhood at Treat Avenue and Manchester.

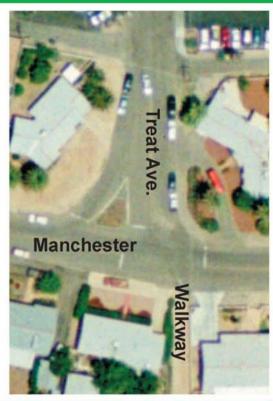
All scenarios suggest connecting the Walkway north across Manchester.

The first option provides minimal landscape improvements where the path connects on each side of Manchester.

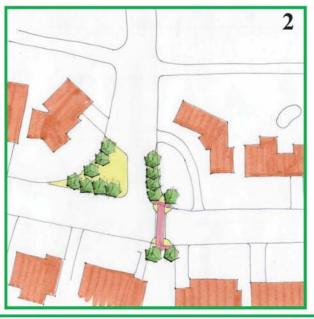
The second example reclaims a portion of the widest section of roadway as Treat meets Manchester.



The last idea suggests closing Treat Avenue at the alley-way to buffer the neighborhood from Broadway and the adjacent commercial areas. The closed area could become a pocket-park.









Sunken Median at Stratford & S. Arroyo Chico



To reduce the vast expanse of heat-holding asphalt at the corner of Stratford and (south) Arroyo Chico, a sunken median could be installed as illustrated by this rough sketch. The edges of the asphalt would have a smooth mortared edge. In place of the asphalt would be a sunken planter containing arid, heat-loving plants. This design would harvest street flow during rain storms. Most landscape enhancements we have suggested require supplemental water during a one to two year establishment period, and occasionally thereafter during severe drought and heat.



Plant Suggestions



Senna artemisiodes Desert Senna



Chilopsis linearis **Desert Willow**



Cercidium floridum Blue Palo Verde



Pink Fairy Duster



Justicia spicigera Mex. Honeysuckle



Mex. primrose



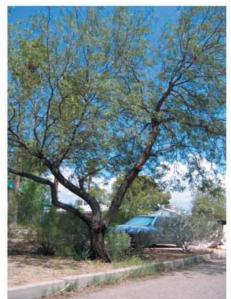
Tacoma Stans



Salvia greggii Autumn sage



Leucopyllum sp.



Prosopis Velutina, velvet mesquite



Chrysactinia mexicana

Design ExamplesPaths & Walkways

































Design Examples

Street Crossings

















Design Examples

Bridges



