

APPENDIX A

LAND AND WATER USE STUDY

**LAND AND WATER USE STUDY
7TH STREET AND ARIZONA AVENUE WQARF SITE
REMEDIAL INVESTIGATION
TUCSON, ARIZONA**

March 21, 2014

Prepared for:

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY
SOUTHERN REGIONAL OFFICE
Superfund/Water Quality Assurance Revolving Fund (WQARF)
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Project Number 2012016.00-02.2

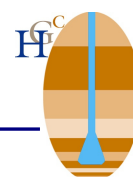


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1. INTRODUCTION

This Land and Water Use Study (Study) has been prepared to gather information regarding the current and reasonably foreseeable future uses of land and water that have been or could be impacted by the contaminant release at the 7th Street and Arizona Avenue Water Quality Assurance Revolving Fund (WQARF) site (Site) in Tucson, Arizona (Figure 1). The Study is required as part of the Remedial Investigation (RI) process, pursuant to Arizona Administrative Code (AAC) R18-16-406(D). It will be used to assess the potential for exposure to Site-related contaminants during completion of the Risk Assessment and is being conducted for Arizona Department of Environmental Quality (ADEQ) under ADEQ Task Assignment 12-011179.

1.1 Overview

This Study has been prepared to gather information regarding the current and reasonably foreseeable future uses of land and water that have been or could be impacted by the contaminant releases at the Site. Groundwater beneath the Site is found in a shallow perched unit and in the deeper regional aquifer. Hydrogeologic information at the Site indicates that the perched groundwater and regional aquifer are not hydraulically connected. Only the regional aquifer is used as a drinking water source, but no drinking water wells are within the Study area. Other than groundwater monitoring wells, no wells are located in the perched groundwater and there may be up to three existing unused wells in the regional aquifer. Contamination is found only in the soils and perched groundwater at the Site.

1.2 Land and Water Use

This Study includes information regarding current and reasonably foreseeable uses of land and water impacted or threatened to be impacted by the contaminant releases at the Site. General land use information includes the current type of use, density, character, and governmental jurisdictions. Water use information includes the types of groundwater uses and wells. There are no surface water uses. Future land and water use changes may be considered using population projections, growth, plans for future development and local land and water use plans. Current and reasonably foreseeable land use information has been collected, in part, through request-for-information letters and questionnaires sent to the City of Tucson (COT) and the current owner of the former Oliver's Cleaners property on December 3, 2012 (Appendix A.1). The questionnaire includes specific uses and ownership for properties impacted by the release. Water use information was obtained directly from the COT Water Department and from the owner of a property where a regional aquifer well drilled in 1925 is located. There are no private wells

completed in the perched groundwater within the Study area. The following are included in this Study:

- Figures showing the locations of the affected parcels and their COT zoning.
- Responses to questionnaires submitted to and collected from COT and the current owner of the former Oliver's Cleaners property regarding current and reasonably foreseeable uses of land.
- A copy and brief discussion of municipal land use plans and any future proposed land use plans for parcels.
- A summary of discussions with the COT Water Department on current and planned groundwater uses.

This Study will be used to help formulate Remedial Objectives (ROs). Data evaluation for the risk assessment will consider current land use zoning.

1.3 Site Background

The Site is located in the east-central portion of Section 12, Township 14 South, Range 13 East in downtown Tucson, Arizona (Figure 1). The perched groundwater and vadose zone beneath the site has been affected by volatile organic compounds (VOCs), primarily tetrachloroethene (PCE), trichloroethene (TCE) and cis-1,2-dichloroethene (cis-DCE). Concentrations in perched groundwater exceed Arizona Aquifer Water Quality Standards (AWQS) and concentrations in shallow soil vapor evaluated for potential vapor intrusion exceed U.S. EPA regional screening levels (RSLs) for ambient air. The Study area encompasses an area of approximately 195 acres (see Figure A.1).

A building was constructed at the Unit Laundry (a.k.a. Oliver's Cleaners) facility site as early as 1928, and dry cleaning may have been performed on the property as early as 1935, although land use for that time cannot be verified. A water supply well was drilled on the property in 1931. Unit Laundry was renamed Oliver's Laundry and Dry Cleaners Co. (Oliver's Cleaners) around 1956. Records indicate that dry cleaning was then performed continuously on the property from 1957 until the Oliver's Cleaners facility was destroyed by a fire in 1989. Seven underground storage tanks (USTs) were removed from the property in 1991. These USTs included one 10,000-gallon and four 1,000-gallon solvent tanks and two 500-gallon heating oil tanks. As part of the Park Euclid WQARF site investigations the water supply well was abandoned by the owner of the Oliver's Cleaners property in December 1996 due to concerns that it could be a potential conduit for contamination to the regional aquifer.

Environmental investigations at the former Oliver's Cleaners property were initiated by ADEQ pursuant to UST regulations. The Site was placed on the WQARF Registry in April 2000 with an eligibility and evaluation score of 40 out of a possible 120. The RI/FS Work Plan (HGC, 2013) summarizes groundwater, soil and soil vapor investigations and results from 1992 through 2013; Section 1.5 summarizes the most recent groundwater and soil vapor monitoring results.

1.4 Hydrogeology

There are two aquifers beneath the Site: perched groundwater encountered at around 85 feet (ft) below ground surface (bgs) and the regional aquifer beginning at about 170 ft bgs. A clay layer acts as an aquitard between the regional aquifer and perched groundwater. As described in the RI Report, perched groundwater flows in a northwesterly direction at an average gradient (January 2013) of 0.0028 foot/foot (ft/ft) in the southern portion of the Site and 0.0064 ft/ft in the northern portion of the Site. Groundwater in the regional aquifer generally flows in a north to northwest trending direction, and exits the Tucson basin at the Rillito narrows (Davidson, 1973).

The regional aquifer is a primary source of drinking water for Tucson and surrounding areas. Pumping of the regional aquifer within the upper Santa Cruz sub-basin has resulted in a decrease in groundwater levels of 80 to 100 feet in the vicinity of the Site since the 1920s; however, groundwater levels have been rising over the past decade or so within the Tucson basin due to decreased groundwater pumping.

1.5 Soil and Groundwater Impacts

Based upon data collected during the ERA, contamination occurs in soil vapor and groundwater within: 1) the vadose zone above perched groundwater and 2) the perched groundwater. Contamination is not evident within the regional aquifer.

Although perched groundwater is not considered a drinking water source for this Site, contaminant concentrations within perched groundwater will affect soil vapor concentrations and therefore must be considered. Furthermore, a large body of light non-aqueous phase liquid (LNAPL) consisting of petroleum hydrocarbons (diesel) floating on the perched groundwater table, associated with releases from the Union Pacific Railroad (UPRR) passenger depot located approximately 1,000 feet to the south of the Site, exists at the southern, upgradient fringe of the PCE solute plume. Chlorinated VOC contamination within this LNAPL is a continuing source to both the perched groundwater and soil vapor.

The parcels within the Study area potentially most affected by VOC contamination are positioned over the highest concentrations of VOCs in soil vapor. The highest concentrations of

VOCs in soil vapor are found beneath the former Oliver's Cleaners property. VOC contamination in the perched groundwater extends from just north of 8th Street, near the upgradient edge of the former Oliver's Cleaners property , approximately 4,500 ft northwest to near Speedway Boulevard.

2. LAND AND WATER USE EVALUATION

The following presents current and foreseeable land and water uses for the Study area. Reasonably foreseeable uses for land are those that are likely to occur. Reasonably foreseeable uses for water are those that are likely to occur within 100 years. COT provided projected future plans in its responses to the land use questionnaire (Appendix A.1). The COT Water Department and the owner of a property where an unused regional aquifer well exists provided information verbally on the current and foreseeable uses of groundwater.

2.1 Current Study Area Land Use

The Study area is presented in Figure A.1. The Study area was adjusted slightly from the area indicated in the request for land use information letters by including additional parcels along the western boundary based on integration of November soil vapor and groundwater sampling results to project the perched groundwater PCE plume. Land use within the Study area generally consists of a mix of commercial and residential properties.

Property development at the Site adheres to COT zoning regulations. Figure A.1 also presents COT zoning for parcels within the Study Area, which covers approximately 195 acres. The following COT zoning categories are representative of the Study Area:

- R-2 – Medium density residential
- R-3 – High density residential
- HR-2 – Historic medium density residential
- HR-3 – Historic high density residential
- C-1 – Local commercial
- C-2 – General commercial
- C-3 – Intensive commercial
- HC-1 – Historic local commercial
- HC-3 – Historic intensive commercial
- HO-3 – Historic office
- P – Parking
- I-1 – Light industrial

At the current time, approximately 34.3% of the land within the Study area is zoned for commercial use; 29.8% is zoned for residential use; 1.4% is vacant; 34.5% is roadways/right-of-ways for COT.

COT regional zoning within the November 2012 projected perched groundwater PCE plume boundary (defined as 5 micrograms per liter ($\mu\text{g/L}$) PCE), covering approximately 100 acres, is shown in Figure A.2. Approximately 42.8% of the land within the WQARF area plume is zoned for commercial use; 37.4% is zoned for residential use; and the remaining 19.8% is roadways/right-of-ways for COT.

Figure A.3 identifies parcels owned by the COT, UPRR and State of Arizona. The current owner of the former Oliver's Cleaners property and COT were asked to provide information (Appendix A.1) regarding current and future land uses for the Study area, where land could be potentially impacted by contamination. The sections below summarize the information provided to ADEQ by the former Oliver's Cleaners property owner and by COT. In addition, Pima County and UPRR land use information is summarized below.

2.1.1 Former Oliver's Cleaners Property

The former Oliver's Cleaners property is a single parcel that is directly associated with the release of contaminants (see Section 1.3). The property, zoned as I-1, is a 40,000-square foot (ft^2) paved parking lot and is used for special events such as fairs, concerts, etc., in addition to everyday parking.

The surrounding parcels are predominantly commercial properties, with one mixed use property. Businesses in the immediate vicinity of the former Oliver's Cleaners property include:

- Downtown Auto Center and Towing, Inc., zoned commercial (I-1), and Instrument Development Corporation, zoned mixed use (commercial and residential), located directly to the south;
- Anjali Yoga and United Fire Equipment Company located directly across Herbert Avenue to the east;
- Ordinary Bicycle Shop and a currently unleased storefront located directly to the north;
- Twelve Tribes Reggae Shop (believed to be vacant) located directly to the west;
- Predominantly undeveloped land (formerly Yellow Cab) to the northwest;
- Commercial work spaces located to the northeast;
- Commercial storefronts located to the southeast; and

- The newly-constructed Tucson Modern Streetcar (Streetcar) maintenance facility to the southwest.

2.1.2 City of Tucson

In addition to all public roadways, COT owns seven parcels within the Study area. Current uses of COT municipal property include: traffic, washes, street railway, modern streetcar barn, storm drains, signs, ductwork, road construction storage and staging, fiber-optic cable and fencing. Washes include the Arroyo Chico, High School and West University Washes.

Study area residential properties are located within five neighborhoods (Figure A.4) within COT, all of which contain historic properties. The neighborhood associations that are partly within the Study area include: Pie Allen, Iron Horse, West University, Dunbar Spring and El Presidio. Current and pending historic districts are also designated on Figure A.4. Historic Districts within the Study area include: Iron Horse Expansion, Warehouse, West University and John Spring. Pending historic districts include 4th Avenue and Miracle Mile.

The Tucson Modern Streetcar (Streetcar) project is intended to connect the major activity centers of Downtown Tucson, the University of Arizona, 4th Avenue, and the Westside redevelopment district; create new jobs and promote economic development; and improve transit service in the area. Construction has been completed on Streetcar rail lines, which travel east-west on University Avenue and north-south on 4th Avenue through the Study area. A section of the Streetcar rail line loop runs west on 8th Street from 4th Avenue, then north and south on 5th Avenue in order to access the recently-built maintenance and storage facility on 8th Street. Appendix A.2 presents the Streetcar rail line and maintenance and storage facility locations.

The Downtown Links roadway and drainage project (Appendix A.3) will include a four-lane roadway north of the UPRR tracks that will connect Barraza-Aviation Parkway to 6th Street and to I-10, with additional bicycle and pedestrian connections. Drainage construction has been largely completed, and directly affected the Site by requiring the abandonment of four perched groundwater monitoring wells (MW-PD-2, MW-PD-14, MW-PD-17 and MW-PD-32), one regional aquifer monitoring well (MW-PD-19) and one nested vapor probe well (7AZP-8) at the end of 2011. The Downtown Links project is intended to improve access for vehicles, bicyclists and pedestrians and eliminate the hazardous at-grade railroad crossing located at 6th Street. Benefits of the project include: avoiding demolition of key historic buildings in the several historic districts, correcting Tucson Arroyo-related flooding and drainage problems, constructing an underpass for 6th Street at the railroad crossing and establishing a RR "no-whistle zone".

2.1.3 Union Pacific Railroad

Six UPRR parcels are located along the southern boundary of the Study area. UPRR land use includes an Amtrak Passenger Terminal, and passenger train and commercial cargo transportation along the UPRR tracks.

2.1.4 Pima County

Pima County does not own parcels within the Study area.

2.2 Future Study Area Land Use

Future land use within the Study area is anticipated to remain the same as it is currently, i.e., a mix of commercial and residential properties, with an increase in residential densities and commercial intensity.

2.2.1 Former Oliver's Cleaners Property

The current property owner intends to develop the former Oliver's Cleaners property as a multiple-story development with both commercial and residential use (see Appendix A.1). COT zoning for this parcel is currently commercial.

Commercial properties in the immediate vicinity of the former Oliver's Cleaners property are expected to remain commercial, but a change in zoning to mixed use residential/commercial, as occurred with one of the businesses to the south of the former Oliver's Cleaners property, is possible.

2.2.2 City of Tucson

COT's population was 525,796 in July 2011, per the U.S. Census Bureau. Tucson's population is expected to grow by more than 50 percent by the year 2050. Both residential and commercial densities are expected to increase in intensity.

Construction of the Streetcar project (Appendix A.2) has been completed. The Streetcar project is not expected to change land use, however it is anticipated to have a positive impact on local businesses and economic activity within the Study area.

The Downtown Links roadway and drainage project (Appendix A.3) is still under construction. Construction of the 6th Street segment of the project, including at-grade and below-grade sections

of roadway and a temporary railroad shoofly, was initiated in Fall 2013. Future Downtown Links work is not expected to change land use.

As of January 2, 2013, COT's development-related standards are contained in the Unified Development Code (UDC) and its supporting documents. The provisions of the UDC were established to protect and promote the general health, safety and welfare of all present and future residents of Tucson. In the near future, the UDC documents will replace the Land Use Code, Development Standards, and the development review procedures specified in Chapter 23A of the Tucson Code. The UDC can be found at:

http://cms3.tucsonaz.gov/files/planning/UDC_ADOPTED_100912.pdf.

Appendix A.4 includes a 1989 University Area Plan (UAP), a 2007 COT Downtown Infrastructure Plan (DIP) and a 2011 West University Neighborhood Plan (WUNP). The UAP and WUNP (Map 5) detail criteria for future development and land use for a portion of the Study area, mainly for maintaining historic character of the areas, encouraging residential in-fill development and discouraging changes in zoning that would alter existing residential land use. The DIP discusses future infrastructure improvements, as well as future land use for downtown Tucson; possible future downtown developments that affect the Study area presented in the DIP include the Streetcar and Downtown Links projects, mentioned previously, and associated infrastructure improvements and private development in the Warehouse District north of the Union Pacific rail line.

2.2.3 Union Pacific Railroad

A request for information was not made of UPRR for this Study; however, both passenger and commercial transportation are expected to continue in the future at the southern border of the Study area. Future changes in use of the UPRR parcels are not expected to significantly impact the Study area. Any future efforts by UPRR to remediate the LNAPL diesel body affecting the southern portion of the Study area could affect the Study area.

2.2.4 Pima County

A request for information was not made of PC for this Study. As there are no PC-owned parcels within the Study area, there are no future use changes.

2.3 Current Study Area Water Use

There are no current surface water uses in the Study area. As previously mentioned, there are several washes in the area, but they are ephemeral. They provide storm water runoff and have some value for wildlife habitat.

There are also no groundwater uses in the Study area. The regional aquifer is considered a drinking water source, although there are no municipal wells within the Study area. There are two, and possibly as many as three, unused regional aquifer wells, several abandoned regional aquifer wells, and four groundwater monitoring wells in the regional aquifer that are used only to monitor possible Site-related contaminants and groundwater elevations. The perched groundwater is not considered a drinking water source and there are no municipal or private domestic wells completed in the perched groundwater within the Study area. There are thirty monitoring wells currently used to monitor Site water quality and groundwater elevations within the perched groundwater. There are also a number of perched groundwater wells used by UPRR to monitor perched groundwater impacted by LNAPL (diesel fuel).

According to ADWR records, the Unit Laundry well (ADWR No. 55-700415) was drilled to a depth of 603 feet bgs in 1931; it was located slightly west of Arizona Avenue and just south of 7th Street (Figure A.5). Despite some discrepancies in the reported depths and casing diameters, it is believed that the old Unit Laundry well (No. 55-700415) was the same well as the former Oliver's Cleaners well (No. 55-613786). This well was abandoned in 1996 under the ADWR number 55-613786.

According to ADWR records, well No. 55-700412 was drilled to a depth of 670 feet bgs at Tucson Steam Laundry in 1936 (approximate location on 6th Street between Stone and 7th Avenues – Figure A.5). During the Park Euclid WQARF site investigations, the Steam Laundry well was abandoned in December of 1996 due to concerns that it could act as a potential conduit well for contamination into the regional aquifer (the well had been re-recorded under the ADWR number 55-801604 by that time).

ADWR records indicate the Mackey well was drilled to 151 feet bgs in 1915 in the approximate location indicated on Figure A.5. Ownership records indicate that the well was located somewhere on the property fronting 6th Street, however investigations of this property have not been successful in locating the well. A well was also recently discovered inside the warehouse adjoining the south side of Benjamin Plumbing Supply at the southeast corner of 6th Street and 7th Avenue (Figure A.5). The owner of Benjamin Plumbing Supply stated that they had tried to measure the depth of this well and it was only about 60 feet deep. Because of the ambiguity of the ADWR records for this well, it is very possible that the “Mackey” well is actually the well in

the Benjamin Plumbing Supply warehouse. Regardless of the actual location of this well, no abandonment records have been found, and it has no current water use.

The Home Ice and Fuel well (No. 55-700413) was drilled in 1925 to 660 feet bgs, according to ADWR records. This well is still in existence but is currently not in use. The wellhead is still apparent and located in the far northwest corner of a parking lot on 6th Street east of Stone Avenue (Figure A.5). This property is owned by the owner of Benjamin Plumbing Supply, although the owner did not know of the well's existence until it was pointed out by ADEQ staff. A large concrete dais, potentially previously used as a tank base, is also still visible. This well could potentially become a conduit for contamination in the perched groundwater to contaminate the regional aquifer and should be further investigated and properly abandoned, if necessary.

2.4 Future Study Area Water Use

Surface water uses within the Study area are not expected for the foreseeable future. There are no expected uses of the perched groundwater or regional aquifer because no new non-irrigation wells can legally be drilled into the perched or regional groundwater. Arizona Revised Statutes § 45-454(C) states that on or after January 1, 2006, drilling of a private well on land within 100 feet of the operating water distribution system of a municipal water provider within the boundaries of an Active Management Area (AMA) is prohibited. In addition, the COT Water Department has no plans to install municipal water supply wells in the Study area.

3. SUMMARY

The current and future land and water uses are summarized below for the former Oliver's Cleaners property and for COT. UPRR land use does not significantly affect the Study area. No Pima County parcels exist within the study area.

Current land use of the former Oliver's Cleaners property is as a parking lot. The current owner anticipates developing the property as a multiple-story residential/commercial building, likely with commercially-leased spaces or a parking lot at ground level and residential apartments for University of Arizona student housing above.

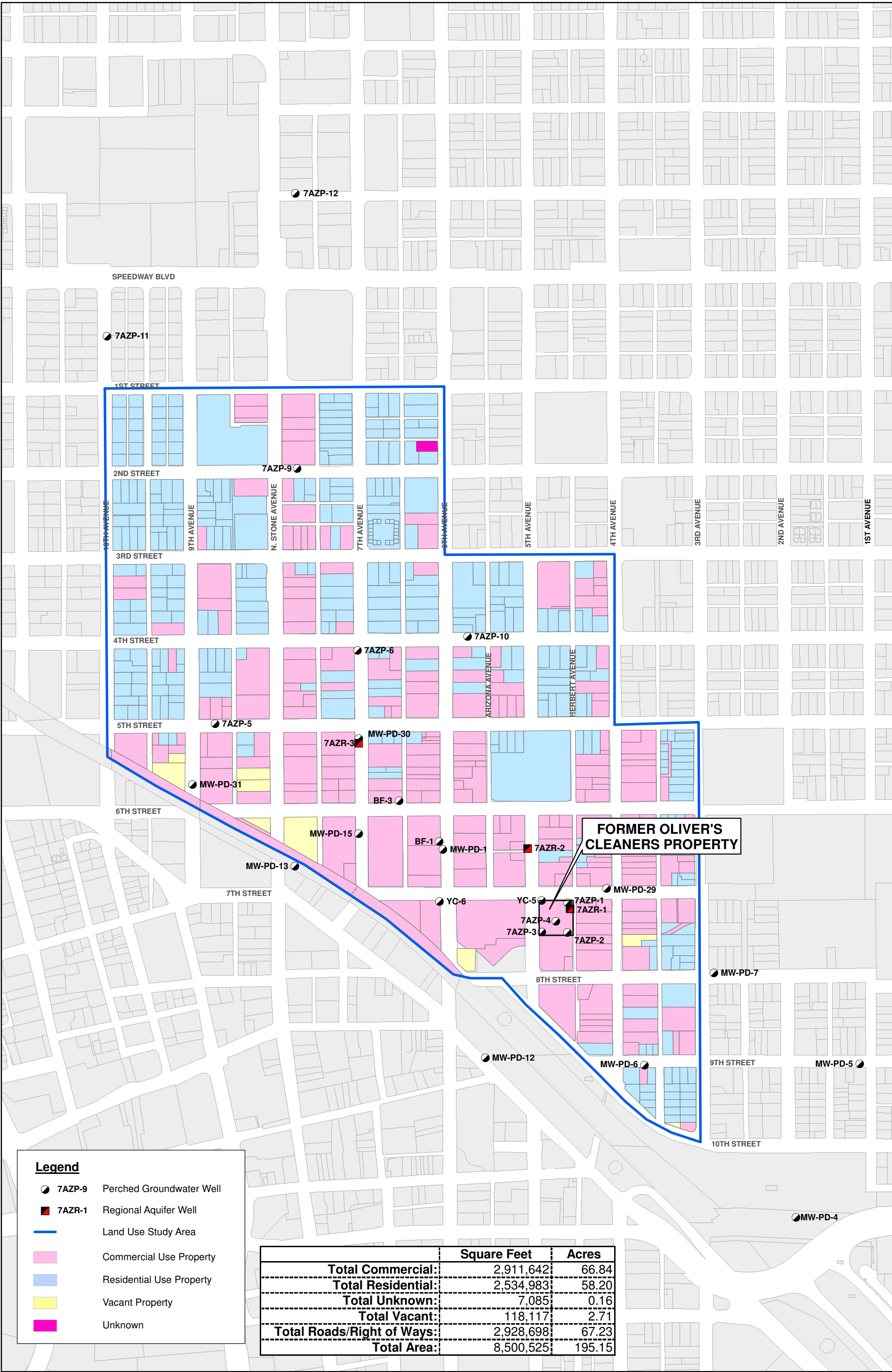
Businesses in the vicinity of the former Oliver's Cleaners property are predominantly commercial, with one mixed-use property to the south of the former Oliver's Cleaners property. Future use of these properties is expected to remain the same, with additional mixed-use possible. Construction of the Streetcar and Downtown Links project are not expected to have an impact on the Study area. Increased density of development and change of zoning from commercial to residential or mixed-use is likely.

There are no current uses for surface water or groundwater within the Study area. Drilling of domestic wells is prohibited, and COT has no current or future plans to develop groundwater within the Study area. Evaluation of the condition of the Home Ice and Fuel well (No. 55-700413) is recommended, as is abandonment of the well, if necessary, to prevent the possibility of providing a conduit for contamination to the regional aquifer.

4. REFERENCES

- Davidson, E.S. 1973. Geohydrology and Water Resources of the Tucson Basin, Arizona, U.S. Geological Survey Water Supply Paper 1939-E, U.S. Government Printing Office. 91 p.
- Hydro Geo Chem, Inc. (HGC). 2013. Remedial Investigation/Feasibility Study Work Plan, 7th Street and Arizona Avenue WQARF Site, Tucson Arizona. March 8, 2013.

FIGURES



Legend

7AZP-9

Perched Groundwater Well

7AZR-1

Regional Aquifer Well

Land Use Study Area

Commercial Use Property

Residential Use Property

Vacant Property

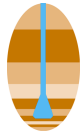
Unknown

	Square Feet	Acres
Total Commercial:	2,911,642	66.84
Total Residential:	2,534,983	58.20
Total Unknown:	7,085	0.16
Total Vacant:	118,117	2.71
Total Roads/Right of Ways:	2,928,698	67.23
Total Area:	8,500,525	195.15

Spatial Reference: NAD 1983, UTM Zone 12N



Source: Pima County Information Technical Department, GIS (2013).



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LAND USE STUDY AREA AND CITY OF TUCSON ZONING
7TH STREET AND ARIZONA AVENUE WQARF SITE
TUCSON, ARIZONA

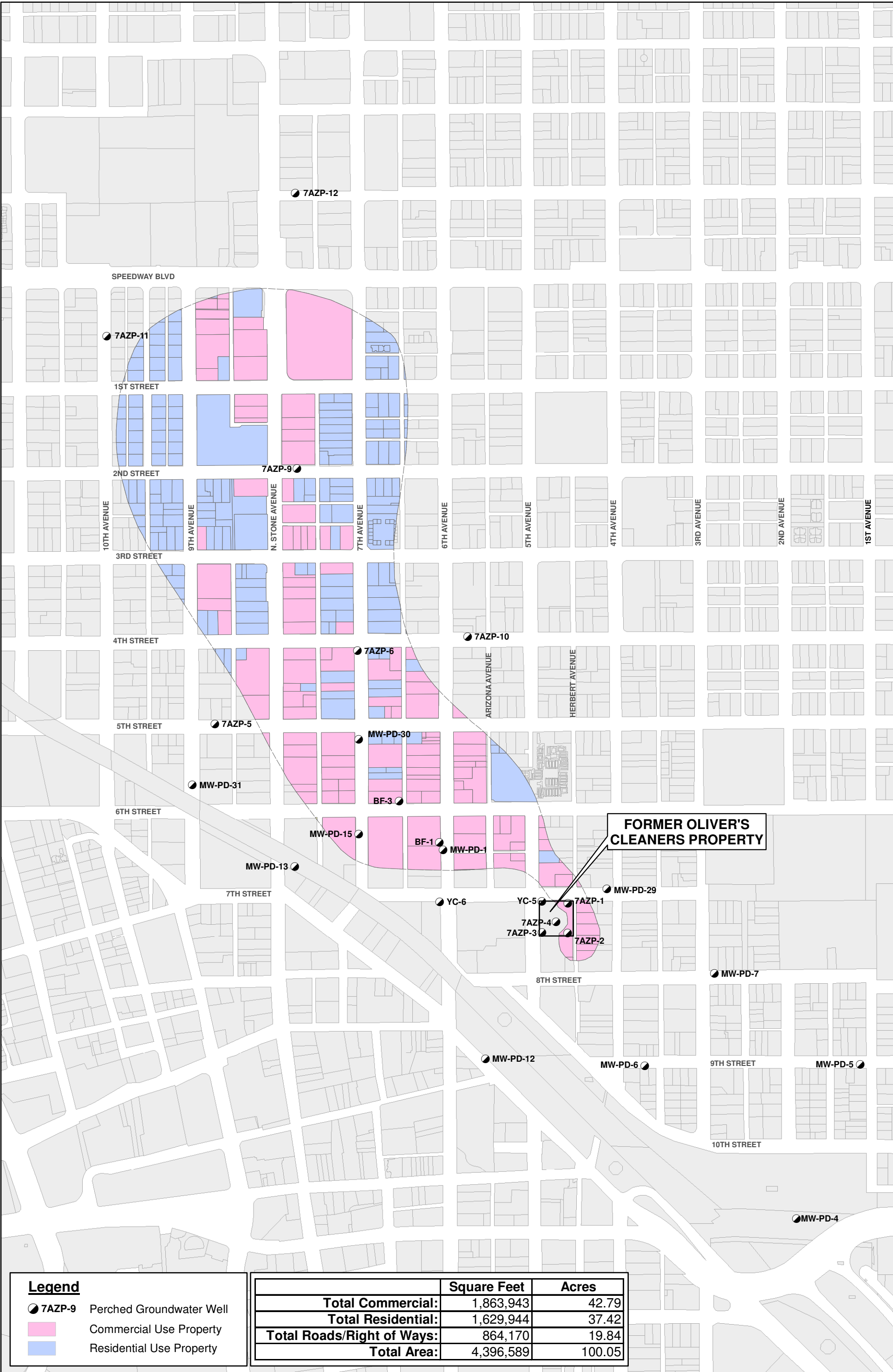
Approved
AJB

Date
01/22/14

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7AZ LU AreaParcels

Figure
A.1



Legend

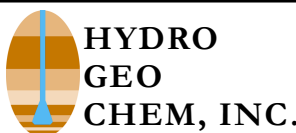
- 7AZP-9 Perched Groundwater Well
- Commercial Use Property
- Residential Use Property

	Square Feet	Acres
Total Commercial:	1,863,943	42.79
Total Residential:	1,629,944	37.42
Total Roads/Right of Ways:	864,170	19.84
Total Area:	4,396,589	100.05

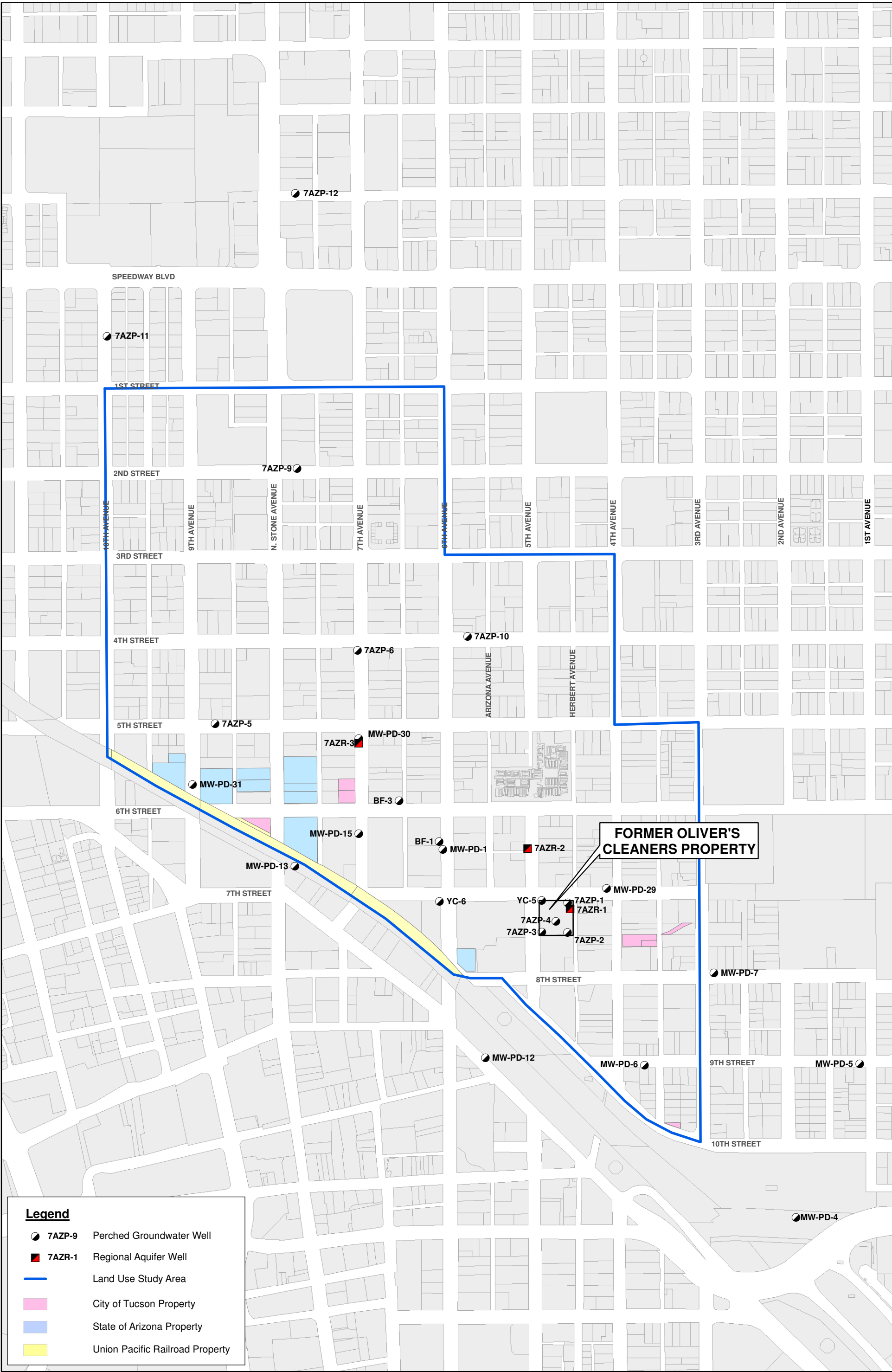
Spatial Reference: NAD 1983, UTM Zone 12N




*Projected plume based on May, 2012, November, 2012, and March, 2013 data.
Land Use Source: Pima County GIS Department, 2013.





LAND USE CATEGORIES WITHIN THE PROJECTED PCE PLUME* 7TH STREET AND ARIZONA AVENUE WQARF SITE TUCSON, ARIZONA			
Approved MJB	Date 01/20/14	File K:\2012016\7AZ Parcels 20130327.mxd	Figure A.2





Legend


 7AZP-9


 7AZR-1


 Land Use Study Area

 City of Tucson Property

 State of Arizona Property

 Union Pacific Railroad Property

 Perched Groundwater Well

 Regional Aquifer Well

Spatial Reference: NAD 1983, UTM Zone 12N



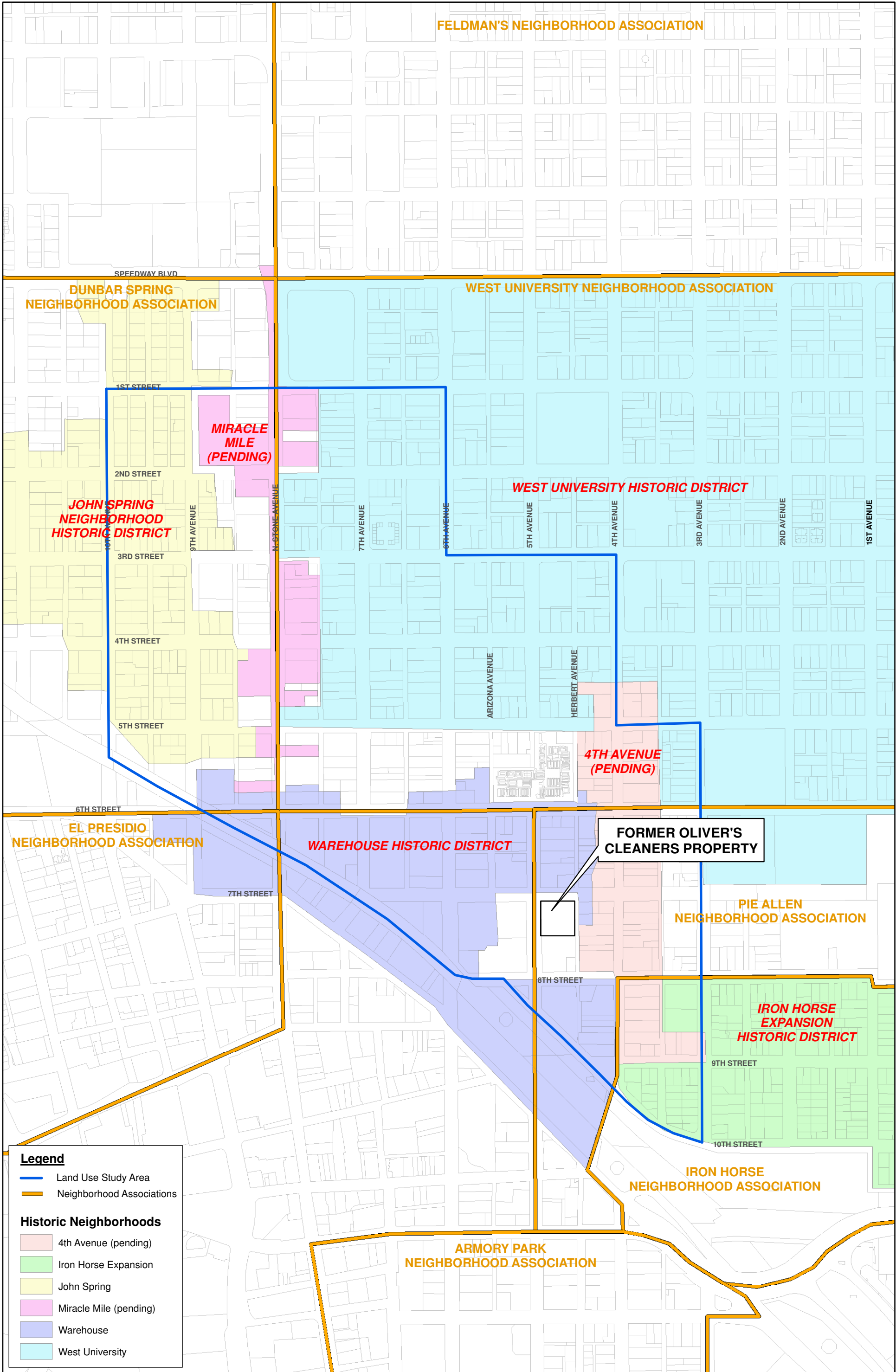
Source: Pima County Information Technical Department, GIS (2013).



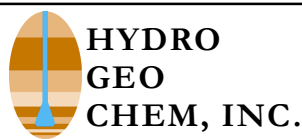
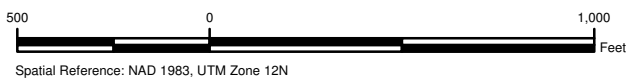
**HYDRO
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CHEM, INC.**

**CITY OF TUCSON, UPRR, AND ARIZONA STATE PARCELS
7TH STREET AND ARIZONA AVENUE WQARF SITE
TUCSON, ARIZONA**

Approved	Date	File	Figure
AJB	01/17/14	7AZ LU AreaParcels_municipal	A.3



Source: City of Tucson, GIS (2013).



CITY OF TUCSON NEIGHBORHOOD ASSOCIATIONS
AND HISTORIC DISTRICTS
7TH STREET AND ARIZONA AVENUE WQARF SITE
TUCSON, ARIZONA

Approved AJB	Date 01/20/14	File 7AZ LU AreaNeighborhoods	Figure A.4
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Legend

- Existing Wells
- Abandoned Wells
- PCE Solute Plume

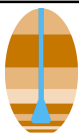
Notes:

* Location of Mackey well is unclear. ADWR records list the associated address of well as 107 E. 6h St. Unknown well could possibly be original Mackey well.

**Exact location of Tucson Steam Laundry well is unclear. Abandonment record of 55-801604 matched casing information from driller's log for well 55-700412, and cadastral location and property address were identical.

***Unit Laundry became Oliver's Cleaners in ~1956. Maps locating Unit well and Oliver's well were identical.

Spatial Reference: NAD 1983 UTM Zone 12N



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**EXISTING AND ABANDONED WELLS
7TH STREET AND ARIZONA AVENUE WQARF SITE
TUCSON, ARIZONA**

Approved	Date	File	Figure
	01/28/14	7AZ Existing_Abandonedwells.mxd	A-5

APPENDIX A.1

LAND USE STUDY REQUEST FOR INFORMATION AND RESPONSES



HYDRO GEO CHEM, INC.
Environmental Science & Technology

December 3, 2012

Mr. Ernie Duarte, Director
City of Tucson
Planning and Development Services
201 N. Stone Avenue
Tucson, Arizona 85701

Subject: Arizona Department of Environmental Quality (ADEQ) Request for Information Regarding Land Use Related to the 7th Street and Arizona Avenue Water Quality Assurance Revolving Fund (WQARF) Site

Dear Mr. Duarte:

Hydro Geo Chem, Inc. (HGC) is sending this letter on behalf of ADEQ, to request information with regard to land use for the 7th Street and Arizona Avenue WQARF site (Site). ADEQ and HGC will be completing a Remedial Investigation (RI) for the Site, pursuant to Arizona Administrative Code R18-16-406 A(3).

As part of the RI process, information must be collected regarding current and reasonably foreseeable uses of lands that are threatened to be affected by the release of contaminants, in this case tetrachlorethylene (PCE) released from the former Oliver's Cleaners on 7th Avenue and 5th Street. The attached figure (Figure 1) details the area that is relevant to this land use request.

We ask that you provide information on the attached form for current and future land uses of parcels that are owned by the City of Tucson within the boundary shown on Figure 1. We would appreciate a response to this request by December 17, 2012, so that the RI process can proceed on schedule.

If you have any questions regarding this request, please contact me at (520) 293-1500 extension 115.

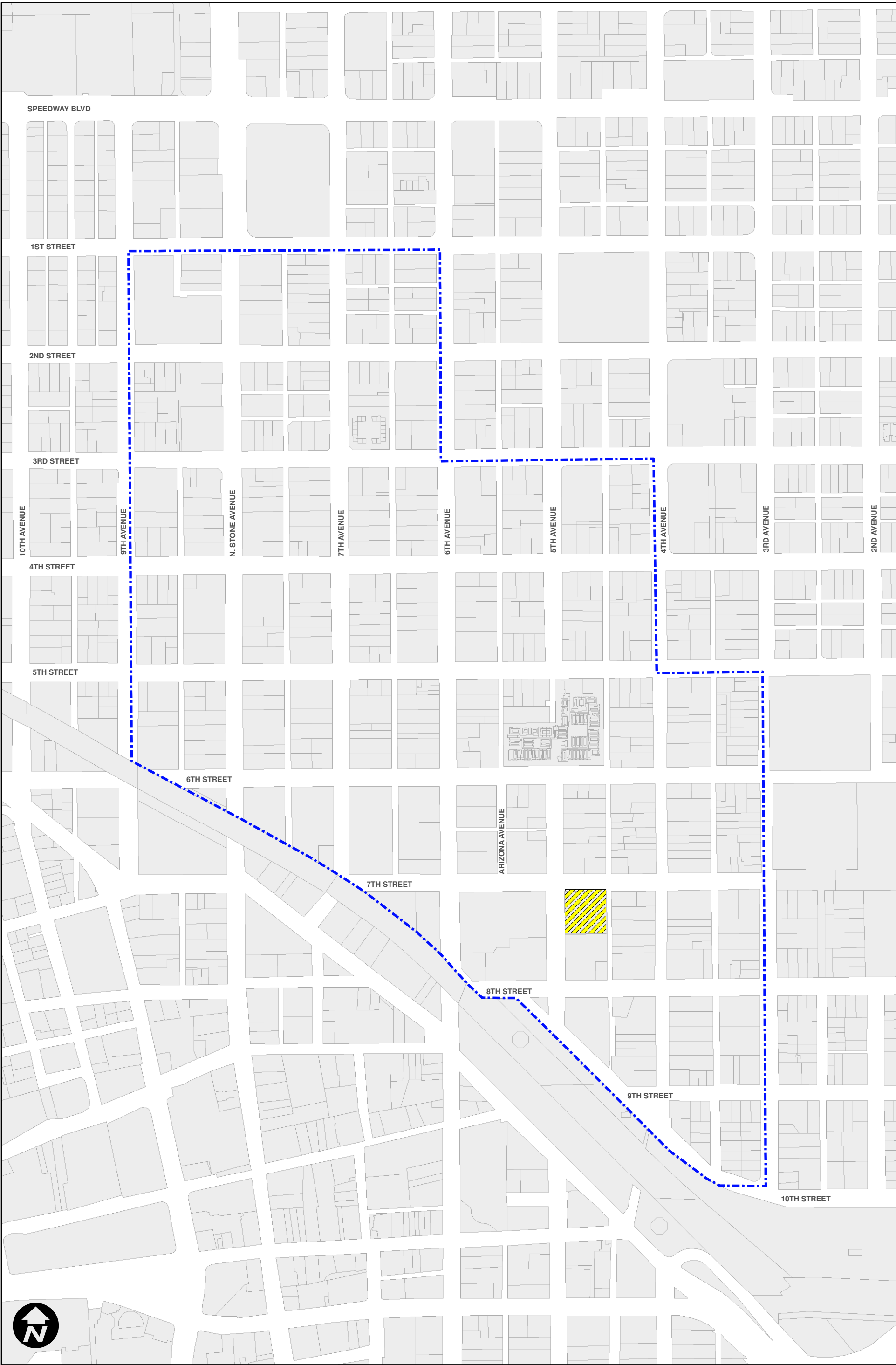
Sincerely,
HYDRO GEO CHEM, INC.

Abra J. Bentley
Project Scientist

Attachment(s): *Figure 1 Approximate WQARF Boundary, December 2012*
Land Use Study Questionnaire

cc: Robert Wallin, ADEQ
William Ellett, ADEQ

K:\20120167AZ Land Use Study Area_20121129.mxd



Spatial Reference: NAD 1983, UTM Zone 12N

- - - - - Land Use Study Area
- 7th Street and Arizona Avenue WQARF Site



**HYDRO
GEO
CHEM, INC.**

**LAND USE STUDY AREA
TUCSON, ARIZONA**

Approved
AJB

Date
11/29/12

File
K:2012016001G

Figure
1

**LAND USE STUDY QUESTIONNAIRE
7th & ARIZONA WQARF REGISTRY SITE**

Please answer all questions. Mark “NA” for questions that are not applicable. Mark “UNK” if the answer is unknown to you at the time of completion. Please attach any additional pages as needed.

Municipality name: _____

Date Questionnaire was completed: _____

Name of person completing Questionnaire: _____

Contact Name: _____

Title: _____

Division: _____

Address: _____

Phone Number: _____

1. What is the current use of your municipality’s property within the land use study area of the 7th & Arizona WQARF site? (Boundaries are shown on the attached map.)

2. Please list the municipality’s properties of concern/boundaries (neighborhood planning committees, zoning, canals, wells, etc.) within the land use study area boundary of the 7th & Arizona WQARF site.

3. What are the foreseeable plans for the municipality properties within the land use study area boundary of the 7th & Arizona WQARF site as far into the future as they are known and up to 100 years, if possible?
4. Does the municipality have a published general plan for the properties within the land use study area boundary of the 7th & Arizona WQARF site?
5. Are parcel, zoning, or land maps available through the municipality? Where are they located?
6. Please list any specific concerns the municipality is aware of within the land use study area boundary of the 7th & Arizona WQARF site? Please list future concerns (e.g.-road construction, flood control, etc.).
7. Please list any future zoning plans or area plans for the municipality within the land use study area boundary of the 7th & Arizona WQARF site.
8. Please list any “special projects” projected or anticipated within the land use study area boundary of the 7th & Arizona WQARF site.

9. If any properties are leased (the municipality is the lessor), how long are the lease terms?

10. If any properties are leased, are there plans to renew the leases, and if so, for how long?

11. Please list any environmental spill of material or waste products that has occurred within the land use study area boundary of the 7th & Arizona WQARF site in the past 5 years.

12. Does your municipality have an environmental manager or do you outsource environmental management to an environmental consulting firm? If so, please provide the following information:

Name: _____
Title: _____
Address: _____
Phone Number: _____

Thank you for your time. The ADEQ Project Manager, Mr. Robert Wallin, or a representative from ADEQ's consultant, Hydro Geo Chem, may follow-up on answers provided.



HYDRO GEO CHEM, INC.
Environmental Science & Technology

December 3, 2012

Scott Cummings
SJ Cummings Properties
305 N. Herbert Avenue
Tucson, Arizona 85705-8437

Subject: Arizona Department of Environmental Quality (ADEQ) Request for Information Regarding Land Use Related to the 7th Street and Arizona Avenue Water Quality Assurance Revolving Fund (WQARF) Site

Dear Mr. Cummings:

Hydro Geo Chem, Inc. (HGC) is sending this letter on behalf of ADEQ, to request information with regard to land use for the 7th Street and Arizona Avenue WQARF site (Site). ADEQ and HGC will be completing a Remedial Investigation (RI) for the Site, pursuant to Arizona Administrative Code R18-16-406 A(3).

As part of the RI process, information must be collected regarding current and reasonably foreseeable uses of lands that are threatened to be affected by the release of contaminants, in this case tetrachlorethylene (PCE) released from the former Oliver's Cleaners on 7th Avenue and 5th Street. The attached figure (Figure 1) details the area that is relevant to this land use request.

We ask that you provide information using the attached form for current and future land uses of parcels that are owned by you within the boundary shown on Figure 1. We would appreciate a response to this request by December 17, 2012, so that the RI process can proceed on schedule.

If you have any questions regarding this request, please contact me at (520) 293-1500 extension 115.

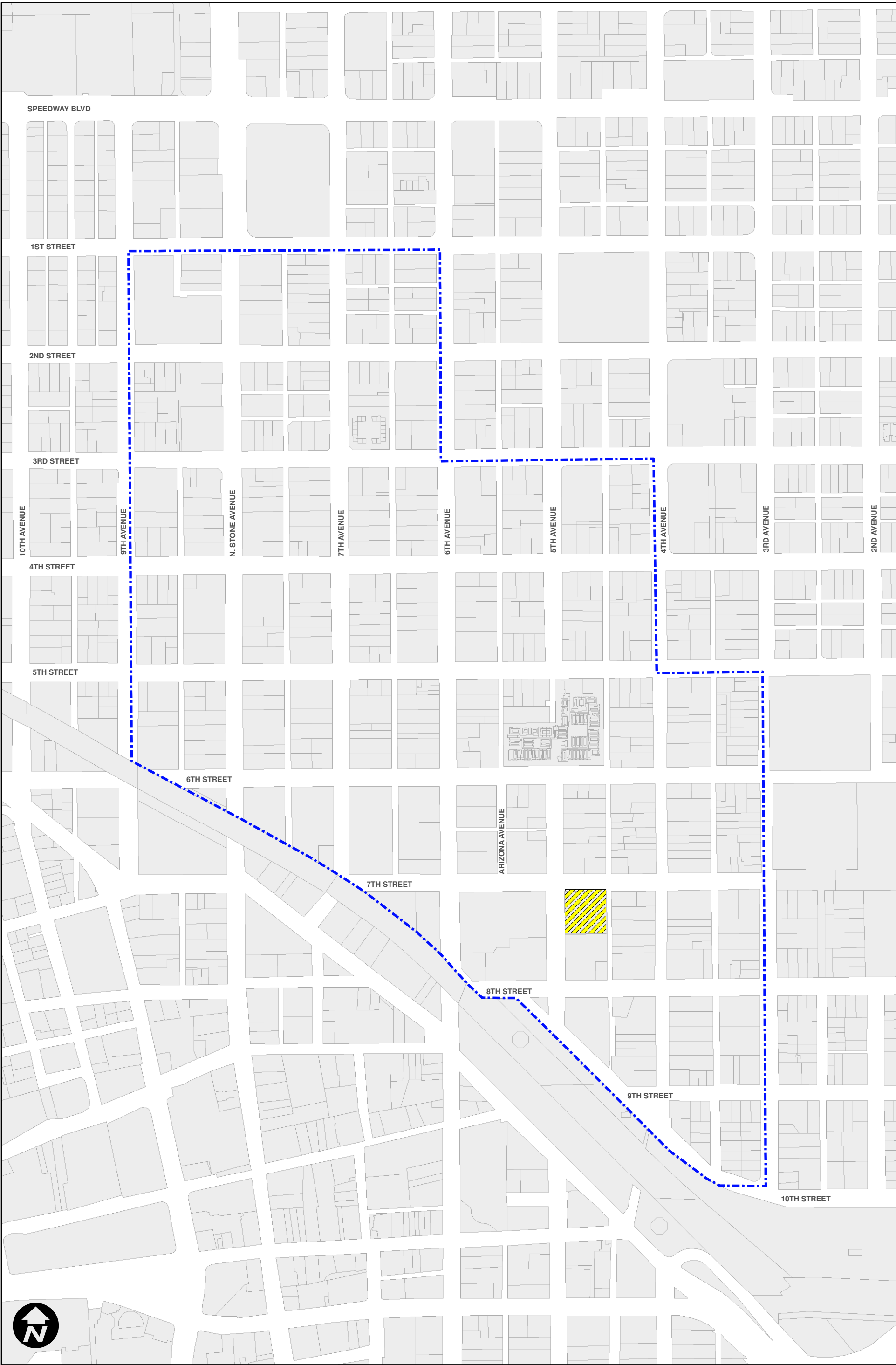
Sincerely,
HYDRO GEO CHEM, INC.

Abra J. Bentley
Project Scientist

Attachment(s): *Figure 1 Approximate WQARF Boundary, December 2012*
Land Use Study Questionnaire

cc: Robert Wallin, ADEQ
William Ellett, ADEQ

K:\20120167AZ Land Use Study Area_20121129.mxd



Spatial Reference: NAD 1983, UTM Zone 12N

- - - - - Land Use Study Area
- 7th Street and Arizona Avenue WQARF Site



**HYDRO
GEO
CHEM, INC.**

**LAND USE STUDY AREA
TUCSON, ARIZONA**

Approved
AJB

Date
11/29/12

File
K:2012016001G

Figure
1

LAND USE STUDY QUESTIONNAIRE
7th & ARIZONA WQARF REGISTRY SITE
TUCSON, AZ

Please answer all questions. Mark "NA" for questions that are not applicable. Mark "UNK" if the answer is unknown to you at the time of completion. Please attach any additional pages as needed.

Facility Name: _____

Date Questionnaire was completed: _____

Name of person completing Questionnaire: _____

Address: _____

Contact Name: _____

Address: _____

Phone Number: _____

A. Property Information

1. What is the current use of the property? Please include a detailed facility description.

2. What are the foreseeable plans for the property (extension of buildings, increased production, etc.) as far into the future as they are known and up to 100 years, if possible?

3. Is the property owned or leased?

4. Who is the owner of the property?

Name: _____

Address: _____

Phone Number: _____

5. If the property is leased, how long is the lease term?
6. If the property is leased, are there plans to renew the lease and for how long?
7. If the property is owned, do you plan on relocating and if so in what timeframe?

B. Environmental Information

1. Please list the company's waste streams?

2. Please list any spill of material or waste products that has occurred at the facility in the past 5 years.
3. Does your facility have an environmental manager or is environmental management outsourced to an environmental consulting firm? If so, please list the person's information:

Name: _____

Address: _____

Phone Number: _____

Thank you for your time. ADEQ's Project Manager, Mr. Robert Wallin, or a representative from ADEQ's consultant, Hydro Geo Chem, may follow-up on answers provided.

LAND USE STUDY QUESTIONNAIRE
7TH & ARIZONA WQARF SITE

Municipality Name: City of Tucson
Date Questionnaire was completed: December 21, 2012
Name of person completing Questionnaire: Glenn Moyer
Title: Planning Administrator
Division: Planning and Development Services Department
Address: PO Box 27210; Tucson AZ 85726-7210
Phone Number: 520-837-4954

1. Current use of municipal property
 - a. Roads
 - b. Washes
 - c. Street railway
 - d. Modern streetcar car barn
 - e. Storm drains
 - f. Signs
 - g. Ductwork
 - h. Road construction storage and staging
 - i. Fiber-optic cable
 - j. Fencing and personal storage
 - k. Wells
 - l. Vacant

The above information is available at the parcel level on the PDSD web map:
<http://maps.tucsonaz.gov/pdsd/index.html> under the “Planning and Zoning” tab and the following check-boxes:

- ☐ Real Estate
 - ☐ City Property
 - ☐ Other City
 - ☐ TRE
 - ☐ RES

2. Properties of concern (neighborhood planning committees, zoning, canals, wells)
 - a. Pie Allen N.A.
 - b. Iron Horse N.A.
 - c. West University N.A.
 - d. Dunbar Spring N.A.
 - e. El Presidio N.A.
 - f. West University Historic District

The geographic boundaries for each of the above neighborhood associations are available on the PDSD web map under the “Planning and Zoning” tab and the following check-boxes:

- ☐ Neighborhood Associations

2. cont.

The boundaries of zoning districts are available on the PDSD web map under the “Planning and Zoning” tab and the following check-boxes:

- ☐ Zoning – City of Tucson
- ☐ Zoning Overlays

The location of washes are available on the PDSD web map under the “Planning and Zoning” tab and the following check-boxes:

- ☐ Washes

3. Foreseeable plans

Continuation of current uses with increased residential densities and commercial intensity.

4. Published general plan (including area and neighborhood plans)

<http://cms3.tucsonaz.gov/planning/plans/index.html> Land use policy within the subject area is provided by the Tucson General Plan, the University Area Plan, and the West University Neighborhood Plan.

5. Parcel, zoning, and land use maps

a. Parcel, and zoning maps are available on the PDSD web map under the “Planning and Zoning” tab and the following check-boxes:

- ☐ Zoning – City of Tucson
- ☐ Parcels for streets

b. Land use maps are available from the Pima Association of Governments

<http://www.pagnet.org/documents/rdc/gis/mapexistlanduse2009.pdf>

6. Specific concerns

a. Downtown Links – Barraza-Aviation roadway and drainage project
<http://www.downtownlinks.info/>

b. Modern Streetcar/roadway construction <http://www.tucsonstreetcar.com/>

7. Future zoning plans

a. Downtown Links Overlay District

<http://www.downtownlinks.info/LandUseUrbanDesign/documents/DLUODUpdateOctober2012.pdf>

b. Tucson Modern Streetcar Land Use and Development Implementation Plan Design Charrette (Tucson Modern Streetcar Design Charrette).

http://cms3.tucsonaz.gov/pdsd/streetcar_design_charette

8. Special projects

a. Downtown Links – Barraza-Aviation roadway and drainage project
<http://www.downtownlinks.info/>

b. Tucson Modern Streetcar <http://www.tucsonstreetcar.com/>

c. Potential parking garage <http://cms3.tucsonaz.gov/parkwise> for information

9. Leased properties

Lease information is available on the Real Estate web map:

<http://maps.tucsonaz.gov/realestate/> under the “Real Estate” tab and the following check-boxes:

- ☐ Lease
 - ☐ Lease Point
 - ☐ Lease Line

10. Lease renewals

See #9 above.

11. Environmental spills

Information will be forwarded when it becomes available. Contact Richard Byrd with questions.

12. Environmental manager

Richard M. Byrd
Environmental Management Program Coordinator
4004 S. Park Ave. Bldg #1
P.O. Box 27210, Tucson, AZ 85726-7210
520-837-3710, 520-791-4155 (FAX)
520-403-0295 (Cell), 520-409-8900 (Cell)
Richard.Byrd@tucsonaz.gov

RECEIVED DEC 28 2012

LAND USE STUDY QUESTIONNAIRE
7th & ARIZONA WQARF REGISTRY SITE
TUCSON, AZ

Please answer all questions. Mark "NA" for questions that are not applicable. Mark "UNK" if the answer is unknown to you at the time of completion. Please attach any additional pages as needed.

Facility Name: 5th Ave & 7th St. (NBC)

Date Questionnaire was completed: 12.27.12

Name of person completing Questionnaire: Scott J. Cummings

Address: 323 E. 8th St

Tucson, AZ 85705

Contact Name: Scott J. Cummings

Address: "Same as above"

Phone Number: 520.770.1600

C 520.990.1123

A. Property Information

1. What is the current use of the property? Please include a detailed facility description.

- a. Surface Parking Lot
b. Special Events ie. fairs, concerts, etc.

gj

2. What are the foreseeable plans for the property (extension of buildings, increased production, etc.) as far into the future as they are known and up to 100 years, if possible?

Multi Use Commercial/Residential/ Multi-story development.

3. Is the property owned or leased?

OWNED

4. Who is the owner of the property?

Name:

ERIN Properties LLC.

Address:

323 E. 8th St

Tucson, AZ 85705

Phone Number:

520.770.1600 / 520.990.1123

5. If the property is leased, how long is the lease term?

N/A

6. If the property is leased, are there plans to renew the lease and for how long?

N/A

7. If the property is owned, do you plan on relocating and if so in what timeframe?

N/A

B. Environmental Information

1. Please list the company's waste streams?

NONE

SP

2. Please list any spill of material or waste products that has occurred at the facility in the past 5 years.

NONE

3. Does your facility have an environmental manager or is environmental management outsourced to an environmental consulting firm? If so, please list the person's information:

Name:

Address:

Phone Number:

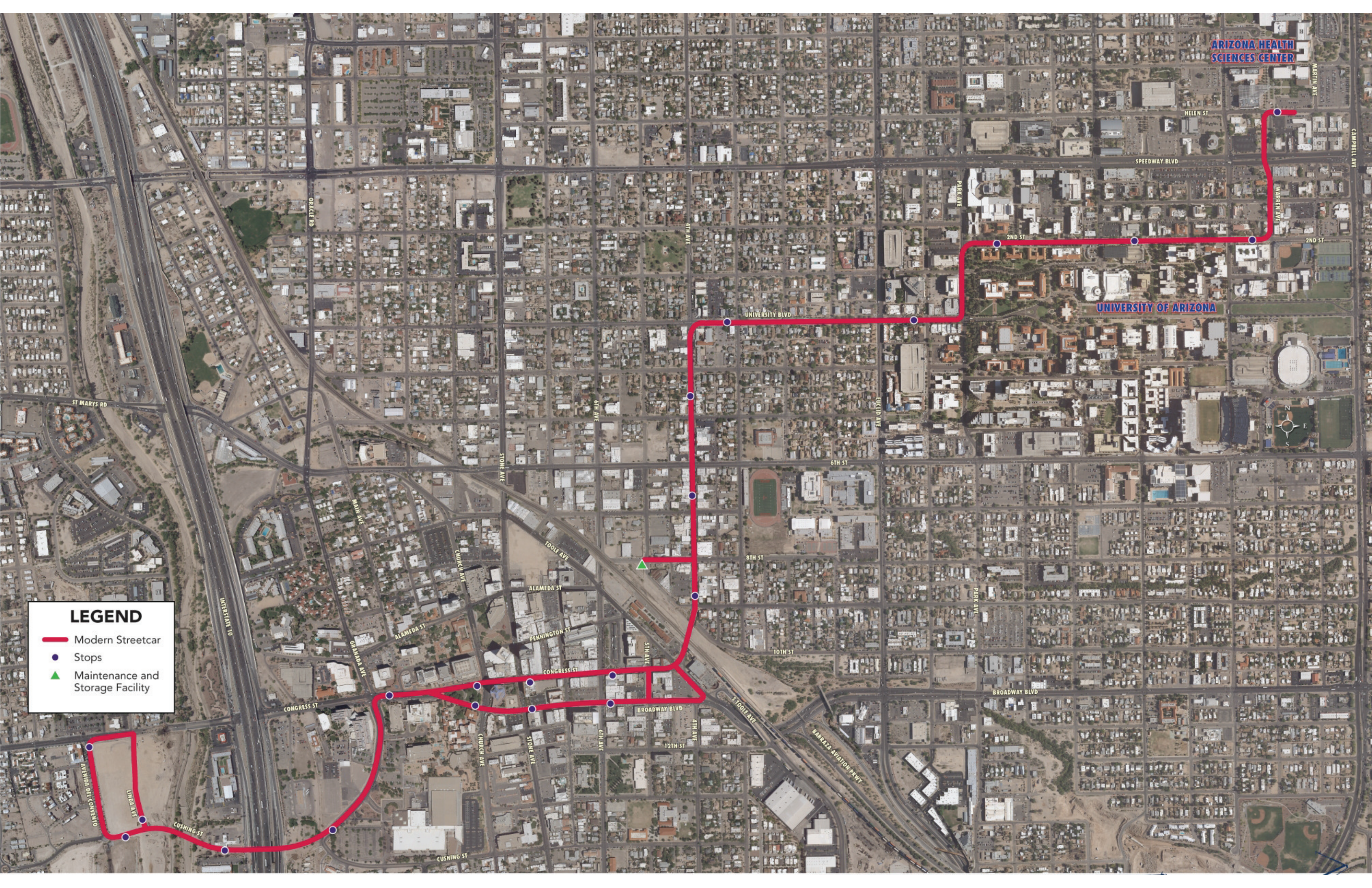
N/A

Thank you for your time. ADEQ's Project Manager, Mr. Robert Wallin, or a representative from ADEQ's consultant, Hydro Geo Chem, may follow-up on answers provided.

[Signature] 12.27.12
[Signature]

APPENDIX A.2

TUCSON MODERN STREETCAR PROJECT



ARIZONA HEALTH
SCIENCES CENTER

HELEN ST

SPEEDWAY BLVD

2ND ST

2ND ST

UNIVERSITY OF ARIZONA

UNIVERSITY BLVD

PARK AVE

ORACLE RD

4TH AVE

LUCKY AVE

ST MARYS RD

INTERSTATE 10

MAIN AVE

CHURCH AVE

TOOLE AVE

ALAMEDA ST

PENNINGTON ST

CONGRESS ST

BROADWAY BLVD

12TH ST

ST TOOLE AVE

PARK AVE

BROADWAY BLVD

BARRAZA AVIATION PARK

LEGEND

- Modern Streetcar
- Stops
- Maintenance and Storage Facility

ALVARADO DEL CORRALITO

LEIDA AVE

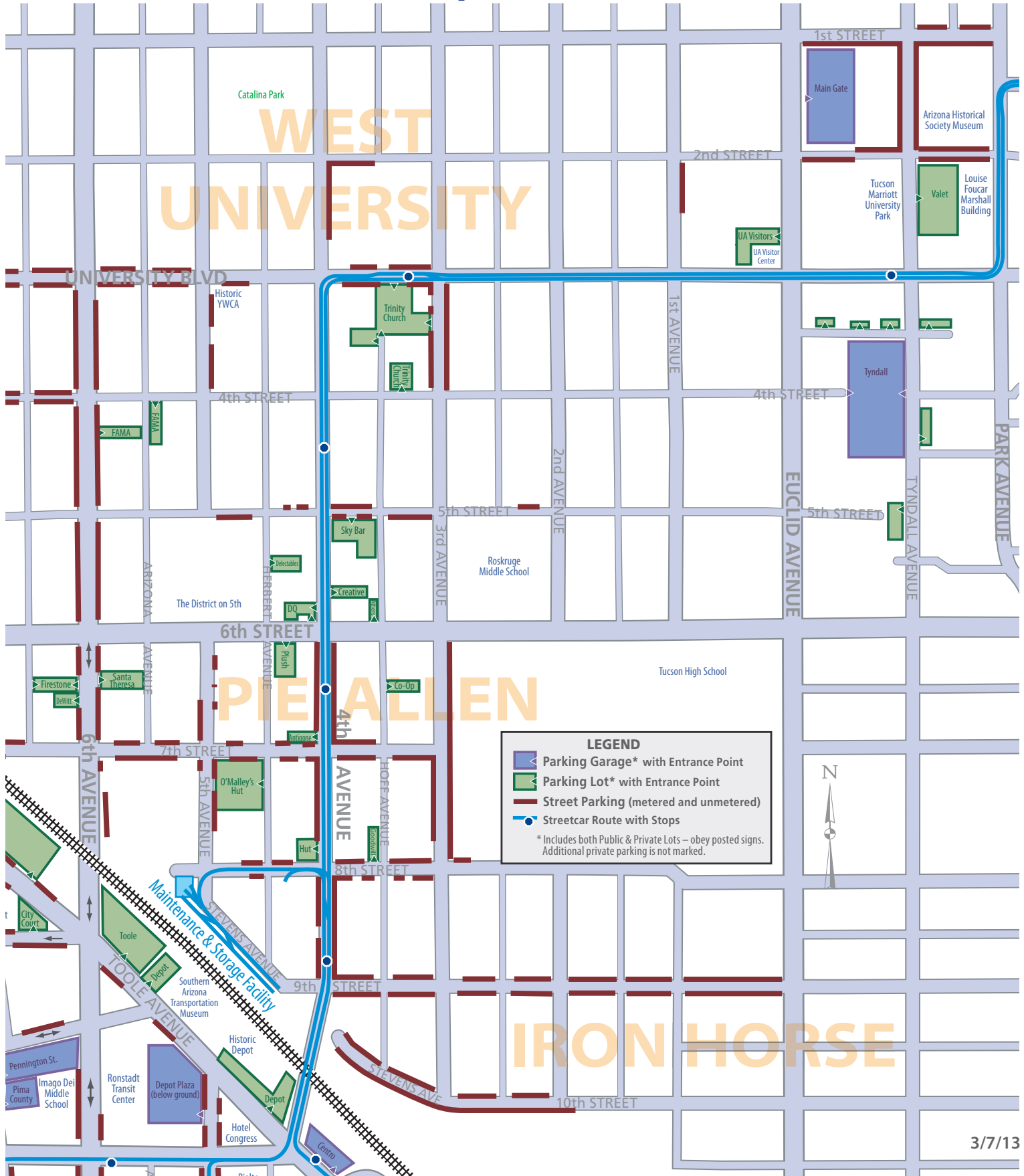
CUSHING ST

CUSHING ST

Available Public Parking



4th Avenue/University Boulevard/Main Gate Area



City of Tucson

Downtown Links District (UOD #2)

Final Submission Update May 2012



Update October 2012



POSTER
FROST
MIRTO

ARCHITECTURE
PLANNING
PRESERVATION

317 North Court Avenue
Tucson, Arizona 85701
520.882.6310 FAX 882.0725
www.posterfrostmirto.com

Downtown Links District (UOD #1)
Poster Frost Mirto, Inc.

City of Tucson

Downtown Links District (UOD #1)

May 2012

Tucson City Council

Jonathan Rothschild, Mayor

Regina Romero

Paul Cunningham

Karin Uhlich

Shirley Scott

Richard Fimbres

Steve Kozachik

Design and Planning Consultant

Poster Frost Mirto, Inc.

As a sub-consultant to HDR, Inc

Downtown Links Alternative Zoning - Table of Contents

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Downtown Links District (UOD #1)

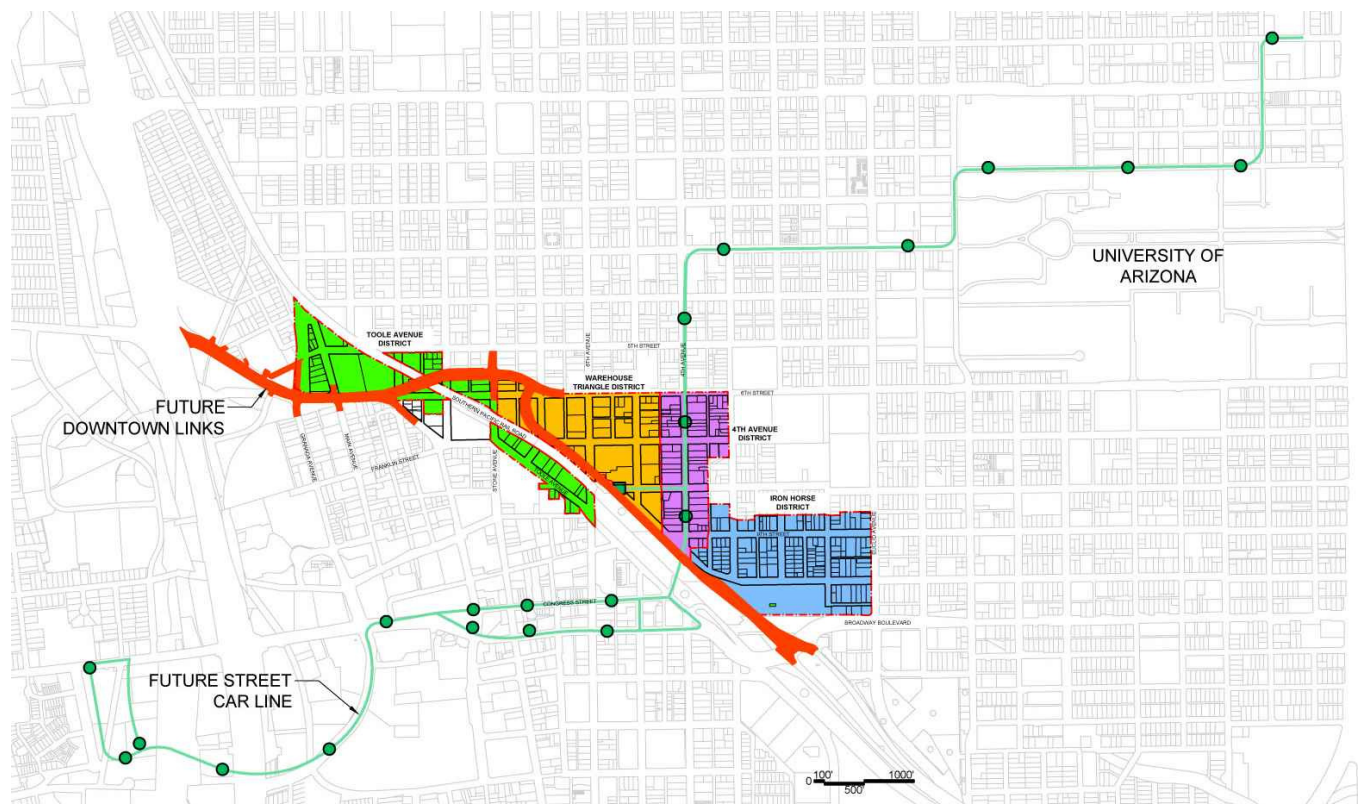
Section 0: Introduction and Policy

Introduction

The Downtown Links District is a new optional zoning district that is proposed to implement the recommendations of the *Downtown Links Land Use and Urban Design Plan*, a companion document to the Downtown Links roadway project. The Downtown Links roadway project is the final product of a series of roadway designs intended to physically connect the western terminus of the Barraza-Aviation Parkway at Broadway in Tucson Arizona, one mile west to the alignment of Interstate 10. As the scope of work for the engineering and planning for the Downtown Links roadway project was being developed, it became apparent to the City of Tucson Department of Transportation that Downtown Links had to be much more than a roadway and stormwater drainage project. The development opportunities enabled by this planning process complemented the transportation component. The strategic location of the transportation project, relative to a larger goal of downtown Tucson revitalization, required a companion planning process to insure that Downtown Links became a catalyst for positive community development and not just a road. The *Downtown Links Urban Design and Land Use Plan* is a result of that vision and the almost three years of extensive and comprehensive community process that followed that progressive planning decision.

The goal of The *Downtown Links Land Use and Urban Design Plan* is to develop an implementable plan that carries forward the revitalization goals and objectives of Downtown, the adjacent neighborhoods, the adjacent districts, and the various property owners and stakeholders. The plan was approved by the Mayor and Council of the City of Tucson on September 9, 2009.

Downtown Links District (DLD) is proposed as the regulatory tool to implement the *Downtown Links Land Use and Urban Design Plan*. The urban overlay district will be an alternative zoning choice. This will give the property owners in this district the choice of following either the provisions of the underlying zoning district (along with all other applicable zoning overlays) or the fully developed DLD with all of its by-right provisions. Of course, a third choice is always available to each property owner: pursuing his or her rezoning or PAD on his or her own property.



Downtown Links District occupies the critical mid-zone between Downtown and the University of Arizona intersecting with the future street car line. The 111-acre District has four sub-areas: Iron Horse District, 4th Avenue District, Warehouse Triangle District, and Warehouse Toole District.

Downtown Links District (UOD #1)

Introduction, cont.

The Rationale for the Use of a PAD Zone

Once chosen by the property owner, the DLD will entirely replace the underlying zone and all other applicable overlay zones. For this reason, the DLD is laid out in the PAD format as outlined in the Land Use Code. The PAD format is also preferred because it allows for alternative zoning and design standards tailored for a specific area, providing the degree of flexibility that is not possible under existing regulations.

Conformance with the General Plan and City Land Use Plans

The proposed Downtown Links District is consistent with all applicable plans as discussed below and it furthers the goals of the *Downtown Links Land Use and Urban Design Plan*.

General Plan

The DLD falls within the Central Core Growth Area defined by the *General Plan*. The policies identified for this area include the following:

Policy 5: Promote land use, transportation, and urban design improvements that would link the Downtown with Fourth Avenue, the Warehouse District, and the University of Arizona and would enhance the historic and cultural quality within the greater Downtown.

Policy 6: Support commercial revitalization that builds on transportation improvements and that establishes appropriate links to the adjacent and surrounding neighborhoods.

Policy 7: Promote the continued viability of historic neighborhoods, historically significant structures and sites, and the development and retention of residential uses in the greater Downtown.

The DLD supports these policies through a set of land use and urban design regulations geared towards enhancing the above-mentioned areas and the connectivity between them by promoting transit and pedestrian-oriented development. The regulations also provide for the protection of historic resources to reinforce the unique identity and character of historic neighborhoods.

The Land Use Element of the *General Plan* emphasizes compatible infill rather than peripheral sprawl to accommodate new growth. The land use policies promote pedestrian and transit-oriented mixed-use infill development near major activity centers. There is a set of policies created specifically for Downtown and the greater Downtown area that encourages: providing a mix of land uses including new residential opportunities, revitalizing the Warehouse District, improving the pedestrian environment, and promoting alternative modes of transit. The General Plan also recommends establishing overlay zones for areas suitable for redevelopment or enhancement and considering incentives such as parking reductions to facilitate development in such areas. The DLD is an optional overlay zone established to carry forward the revitalization goals and objectives of Downtown and adjacent districts and is in line with the land use policies of the *General Plan*.

University Area Plan

The majority of the DLD falls within the boundaries of the *University Area Plan* adopted in 1989 and amended in 2003 by the Mayor and Council. The plan emphasizes preserving historic resources, enhancing historic character and identity, and improving the quality of life in the university area residential neighborhoods. The policies are geared towards protecting these neighborhoods from non-compatible development and encouraging infill development that complements the existing neighborhood scale and character. The Plan also supports the continued vitality of 4th Avenue as a pedestrian-oriented commercial district. The DLD seeks to accomplish the same goals regarding neighborhood preservation and enhancement for the areas overlapping with the *University Area Plan*.

The Plan recommends against the granting of parking variances which may have a negative impact on residential neighborhoods. The DLD intends to solve the parking problem on a community scale through reliance on better public transit including the Modern Streetcar, more efficient on-street parking, and a new municipal parking structure

Downtown Links District (UOD #1)

Introduction, cont.

University Area Plan, cont.

(Parkwise). No parking variances are proposed within the DLD.

The Plan's policies regarding new residential development call for high density development to be in conformance with either the Residential Cluster Project provision of the Land Use Code (which has been replaced by Flexible Lot Development in the current Land Use Code) or the alternative set of criteria specified in the Plan (University Area Plan, p. 10). The new residential development provisions of the DLD meet all the alternative criteria established for high density development, with respect to surrounding land uses, vehicular access, pedestrian network, access to transit, bicycle parking, and inclusion of mixed uses.

West University Neighborhood Plan

The DLD has a small overlapping area with the *West University Neighborhood Plan* (adopted in 1982 and most recently amended in 2009) at the NE corner of Stone Avenue and 6th Street. The plan designates this area as "New Development - Mixed Use -Commercial/Residential (15-40 units per acre)" in its future development concept map. The DLD serves as a useful zoning alternative since it provides for mixed-use development on these parcels. To be consistent with the height requirements of the *West University Neighborhood Plan* regarding new residential development (West University Neighborhood Plan, p. 6), the DLD limits the structures to 40 feet on the overlapping parcels. Following the intent of the Plan, the owner/developer of these parcels will need to demonstrate no overflow parking into the West University Neighborhood.

The *West University Neighborhood Plan* also calls for protecting the historic character of the neighborhood. The DLD is in compliance with this, as it has more restrictive language on historic structures than the Neighborhood Plan itself.

Stone Avenue Corridor Study

The *Stone Avenue Corridor Study*, although not a regulatory plan, specifies goals and recommendation to make Stone Avenue a better place to live and work. The study shares a very small overlapping area with the DLD and therefore does not have significant implications.

University of Arizona Comprehensive Campus Plan Update 2009

The 2003 University of Arizona Comprehensive Campus Plan includes a section on the discussions between the University of Arizona and the City of Tucson about potential projects in downtown, including housing options for students, faculty, and staff. The 2009 Campus Plan Update states that the Modern Streetcar, which will connect these two major employment centers in 2012, "offers new transit-oriented development opportunities to meet the University needs, at appropriate downtown redevelopment sites as identified by the City, within ¼ mile of proposed Modern Streetcar line stations." The Plan Update also expresses that there is strong support for a U of A presence in downtown Tucson.

There is notable amount of vacant or under-utilized land in the Warehouse Triangle District within close proximity to future streetcar stops. The DLD supports potential U of A by providing guidelines for high-quality transit-oriented development and by removing zoning obstacles currently present in this area.

Benefits to the Community

The DLD is established to carry out the revitalization goals of Downtown and the adjacent neighborhoods. It seeks to enhance the quality of life in the greater Downtown area through promoting pedestrian and transit-oriented development, improving streetscape and pedestrian infrastructure, reinforcing bicycle and pedestrian connectivity, offering historic protection to neighborhoods, and encouraging revitalization of the area through compatible infill development.

Downtown Links District (UOD #1)

Introduction, cont.

Compatibility with Adjoining Land Uses

The DLD has four sub-areas with different sets of regulations and standards to ensure compatibility with the unique neighborhood context and character of each individual area:

Iron Horse District: Preserve the historic residential character and enhance 9th Street as a neighborhood-scale commercial district.

Fourth Avenue District: Reinforce the historic pedestrian-oriented commercial character.

Warehouse Triangle District: Create a mixed-use urban area with increased densities. (A high density, mixed-use district has received consistent community support at this location.)

Warehouse Toole District: Create a mixed-use district with an emphasis on arts-related uses in line with the recent history of the area.

Physical and Economic Suitability/Feasibility with Existing Infrastructure

The Downtown Links District is proposed to facilitate private investment in an area where enormous public investment has been made. The District intersects with the Modern Streetcar Project and the Downtown Links Project which provides a catalyst for infrastructure, pedestrian and landscape improvements. The following is a list of projects completed or funded to be completed in the near future with public dollars in the area:

- **Modern Street Car Project:** A four-mile modern streetcar line connecting the University of Arizona to the 4th Avenue, Downtown and the Mercado District (expected to be completed by 2012).
- **Downtown Links:** A multi-modal roadway project connecting the Barazza-Aviation Parkway with I-10 (construction expected to begin in 2011).
- **Depot Plaza:** A public/private multi-phased housing and pedestrian infrastructure/streetscape improvement project (currently under construction).
- **4th Avenue Underpass:** Reconstruction of the 4th Avenue Underpass completed in 2009.
- **Historic Train Depot:** Historic renovation of the train depot completed in 2004.

The large amount of land zoned as I-1 within the DLD poses an obstacle to private developers since I-1 zoning in Tucson prohibits residential development of any kind. Currently, residential development or mixed-use development with residential uses, proposed on parcels zoned as I-1, require a lengthy and costly rezoning process. The DLD provides an alternative to going through a lot-by-lot rezoning of I-1 sites. Considering the great potential for development, partly hindered by I-1 zoning in the highly under-utilized Warehouse Toole and Warehouse Triangle Districts, the DLD is a much-needed regulatory tool for a vibrant Downtown.

Purpose

The primary purpose of the Downtown Links District Urban Overlay District#1 (DLD) is to encourage redevelopment in the following ways:

- A. Encourage sustainable infill development that supports the creation of urban neighborhoods that are pedestrian and transit-oriented; and,
- B. Carries forward the revitalization goals and objectives of Downtown, the adjacent neighborhoods, the adjacent districts, and the various property owners and stakeholders; and,
- C. Address barriers to infill development in the Downtown Links District such as incompatible development standards, and associated development issues; and,
- D. Offering development incentives permitting a modification of development regulations as provided herein.

Downtown Links District (UOD #1)

Establishment

- A. The Downtown Links District (DLD) is an optional overlay zone. Individuals may choose the pre-existing underlying zone or the development options of the DLD urban overlay district. Plans submitted pursuant to the DLD shall comply with the regulations herein.
- B. The DLD is comprised of four (4) subdistricts: the Toole Avenue Subdistrict (TAS), the Warehouse Triangle Subdistrict (WTS), the Fourth Avenue Subdistrict (FAS), and the Iron Horse Subdistrict (IHS). The boundaries of the DLD and subdistricts are described in each subsection (see illustrative Maps on pages 1-2, 2-2, 3-2, and 4-2). The exact boundaries of the DLD overlay and subdistricts are identified on official zoning maps kept on file at the Planning and Development Services Department (PDSD) and the City Clerk.
- C. Regulations specific to the TAS, WTS, FAS, and IHS are provided in sections 1.0 (TAS), 2.0 (WTS), 3.0 (FAS), and 4.0 (IHS) respectively. Regardless of subdistrict, individuals choosing the DLD overlay option must comply with DLD Plan Requirements, and Review and Approval Procedures, and must submit a DLD Plan as outlined in the introductory chapter.
- D. A DLD Plan cannot be used in conjunction with other waivers or modification provisions provided by the Land Use Code. Where the DLD, the Rio Nuevo and Downtown (RND), and / or the Downtown Area Infill Incentive District Zone (IID) overlay zones overlap applicants may select the provisions of not more than one overlay zone.
- E. Where the regulations of this section conflict with other sections of the Land Use Code, the regulations of this section shall control. If specific regulations are not addressed by this section the Land Use Code shall govern.

DLD Plan Requirements

Administration of the DLD is governed by the procedures and regulations in LUC Section **2.8.13 "UOD" URBAN OVERLAY DISTRICT ZONE (UOD)**

Requirements. Use of the regulations of the DLD, as opposed to existing zoning, requires plan approval by PDSD regardless of the DLD Sub-district.

- 1. Applicants must submit a DLD Plan in compliance with applicable DLD and Sub-District regulations, identifying their intention to utilize the DLD zoning in lieu of the existing zoning.
- 2. Except as provided herein, a Plan must be prepared in compliance with Development Standard 2-01.0.0 (Development Package). Additionally, applicants are required to provide drawings and information as needed to demonstrate compliance with the requirements of each Sub-District. A drawing cover sheet/check-list will be provided to facilitate the applicants intended use of the DLD. This checklist in 24 x 36 format will be provided upon request by the PDSD.
- 3. The property owner shall at the time of initiating the "U" zoning execute a waiver of potential claims under A.R.S. Sec. 12-1134 for this zoning amendment as permitted by A.R.S. Sec. 12-1134 (I) in the form approved by the City Attorney and titled "Agreement to Waive Any Claims Against the City for Zoning Amendment".

Review and Approval Procedures

PDSD shall administer DLD Plan review procedures.

- 1. When chosen, the DLD regulations and development standards supplement and supersede existing zoning within the District and Sub-District. This DLD defines the allowed land uses and the performance criteria for future development and redevelopment within the DLD and supersedes existing regulations within the City of Tucson Land Use Code (LUC). Whenever a conflict exists between the DLD and the LUC this DLD shall control. If an issue, definition, condition or situation arises that is not addressed within this DLD, the LUC, Development Standards or other applicable City regulations shall control.
- 2. DLD interpretations will be subject to LUC review as set out for *PAD's in Section 2.6.3.10.*
- 3. Amendments to this DLD may be necessary over time in order to respond to changing context, market or financial conditions or to respond to the unanticipated needs of new users. Minor or non-substantial changes (analogous uses, interior tax code boundary changes, minor adjustments to the standards that are consistent with the stated goals of this DLD, etc.) to the DLD must be submitted through PDSD staff and with staff recommendation, may be approved by the Development Services Director. Substantial changes that contradict the intent of this DLD shall require an amendment as per *LUC UOD 2.8.13.9.*

and density) as follows:

Downtown Links District (UOD #1)

Review and Approval Procedures, cont.

4. For development within any of the DLD Sub-Districts, DLD Plans shall be processed according to the Development Compliance Code, Sec. 23A-34 (Development Plan Review), with the exception that a pre-application conference is required and that the “minimal” version of that Development Plan will be accepted. DLD Plans shall be reviewed and considered for approval within thirty (30) working days of PDSD accepting the application.
5. Historic Preservation: Use of the DLD is intended to be compatible with historic preservation. Effective May 1, 2012, any modification to “listed” or “eligible-to-be-listed” historic structure or structures that precedes, follows, or is part of a development (including alterations, additions, and full or partial demolitions) that, in the evaluation of the City of Tucson Historic Preservation Officer (COTHPO), does not meet the Secretary of Interior's Standards for the Treatment of Historic Properties and would cause the historic building or structure to be de-listed from the National Register of Historic Places, or cause it to become ineligible for listing in the National Register, disqualifies the use of the DLD zoning option for that entire site. Any development proposing to use the DLD requires a written concurrence from the COTHPO that the National Register listed or eligible-to-be-listed properties will not be de-listed or made ineligible for listing. Appeals of the COTHPO decision by any interested party can be made to the State Historic Preservation Officer (SHPO). City of Tucson activities (including full or partial demolitions) associated with the construction of the Downtown Links Roadway are excluded from this Historic Preservation standard .
6. Appeals of any decisions by the PDSD Director relative to the DLD shall be made to the Board of Adjustments of the City of Tucson in accordance with Section 23A-61 of the Tucson City Code .
7. The DLD cannot be used in conjunction with the IID (Infill Incentive District) or other waiver procedures in the LUC.

Traffic Analysis and Parking

Introduction:

The Downtown Links District has a unique location. The DLD is located .75 miles from the 40,000-student/10,000-employee University of Arizona; .25 miles from the 10,000-employee Downtown District; within .25 - .50 miles of stops of the 2013 Modern Streetcar with 10-minute headways; and in a city with excellent conditions [flat and generally dry] for bicycling and walking. The Downtown Links District has the potential to define a new set of transportation habits among users and residents of this District. To further reinforce this change in transportation paradigm, most of the overlay zoning rules in this DLD waive on-site parking requirements entirely (see Sub-Districts). Residential developers will be encouraged to break the link between apartment rental and/or sales and automobile parking, thus financially rewarding those without a car and requiring those with a car to pay for their fair-share cost of parking in structures in the District. The District, through the City of Tucson ParkWise program, will be actively promoting some form of car-share program. Finally, the District is planning for substantial improvements in facilities for bicycles and pedestrians (see Section 5-1 of this DLD, Streetscape Standards). All in all, the vision for the District is based on providing, **in this unique location**, an opportunity for some residents and users of the commercial and office facilities, to make life without a car a reasonable transportation alternative.

An evaluation of the requirements and opportunities of this DLD yields a calculated maximum build-out of this area (if all owners opted for the UOD-DLD Overlay Zoning and built to the maximum allowable heights and density) as follows:

Commercial Development, 1.4 million square feet of gross leasable area

Office: 500,000 square-foot gross leasable area (35% of commercial area)

Retail: 360,000 square-foot gross leasable area (25% of commercial area)

Restaurant: 95,000 square-foot gross leasable area (7% of commercial area)

Shopping Center: 400,000 square-foot gross leasable area (28% of commercial area)

Cinema/ Entertainment 25,000 square-foot gross leasable area (2% of commercial area)

Hotel: 400 Rooms (3% of commercial area)

Residential Development

1,849 multi-family dwelling units

Based on these projected uses and quantities, the following trip generation is projected as per *ITE Trip Generation Manual (8th Edition)*, 2008:

Total Daily External Trips = 44,401.

Downtown Links District (UOD #1)

Traffic Analysis and Parking, cont.

Mode Shift Incentives in DLD

In evaluating the impact of these generated external trips, the following list represents the transportation incentives contained in this document and projected by external transportation planning activities:

- No on-site parking will be required for most development in the DLD.
- Residents without cars typically will have no parking space cost-burden added to their rent or sales price.
- City of Tucson ParkWise will eventually provide a central structured garage so that residents with cars or visitors to the area can pay for reserved or open parking.
- A car-share program, sponsored by ParkWise (perhaps with a vendor), will allow residents easy access to a fleet of cars in the parking structure available with a card swipe.
- There will be a Modern Streetcar with 10 minute headways available within the District by 2013.
- Pedestrian environment improvements (sidewalks, safe crosswalks, ADA corner ramps and other facilities, shade, seating, "parklets", and pedestrian-scale mixed-use development) will make walking a viable alternative mode. This is especially true for trips to employment centers and educational facility (downtown and the University of Arizona).
- Bicycle environment improvements (bicycle boulevards, bike lanes and bike-able streets, Streetcar track-hazard protection, plentiful secure bicycle parking/racks at home and all destinations, safe street-crossings, etc.) will make biking, especially to employment centers and educational facility (downtown and the University of Arizona), a viable alternative mode.
- The Downtown Links District UOD will develop as a viable high intensity mixed-use district with 1.4 million square feet of commercial activity to support a very high level of "internal trip capture," i.e. many trips will be internal trips rather than external trips.

As a result of these incentives for urbanism, it is projected that automobile trips as a percentage of total external trips, will drop dramatically from suburban standards or even Light-Rail standards (85% car trips, see *Improved Estimation of Internal Trip Capture for Mixed-Use Developments* (ITE Journal, August 2010). Instead the following assumptions govern:

- Auto ownership and storage for residents in the district will fall to 1 car for every 2 housing units. Some of those cars will be stored in University of Arizona garages.
- Non car owners will participate in car share at a 50% rate. Car-share averages 1 car per 17 car-share clients (see Institute for Neighborhood Technology, *I-Go Car-Share*).
- Even among car owners, mode choice will often leave the car in structure in the district and opt for walking, bicycle and transit trips to destinations at the University of Arizona or Downtown.

The net result of projected trip generation in the DLD is a mode split of approximately 1/3 : 1/3 : 1/3 - car trips : walking/bicycle trips : transit trips. Using the 44,401 projected trip generation, the following trip/mode split is projected:

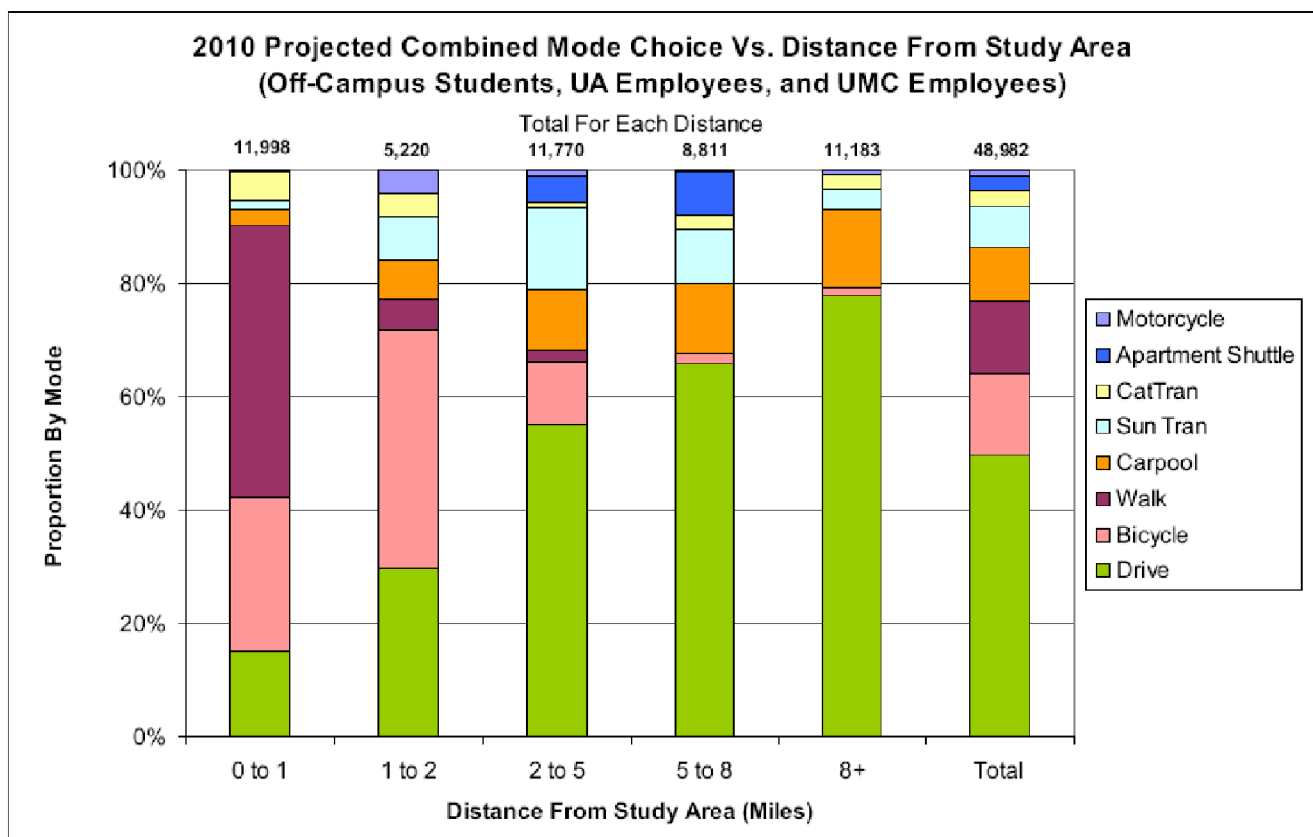
Daily Total External Vehicle Trips	Daily Total Vehicle Trips Reduced by Public Transit Trips	Daily Total Vehicle Trips Reduced by Walk/Bicycle Trips	Total Daily Net Trips
44,401	14,800	14,800	14,800

Downtown Links District (UOD #1)

Traffic Analysis and Parking, cont.

This projection is supported by recent survey and assessment by the University of Arizona. The University of Arizona is located less than 1 mile away from the DLD and has order-of-magnitude-comparable residential and commercial/institutional square footage to the projected maximum build out of DLD. It is projected that the residents and users of the DLD will have many of the same demographic characteristics of University students and employees. In the April 2008, *University of Arizona Needs Assessment Study* (Pima Association of Governments), the following data was presented to describe the current mode split of students and employees. (Note that the activation of the Modern Streetcar in the DLD in 2013 will have a significant upward impact on the use of Public Transit [now only Cat Tran and Sun Tran] in the 0 to 1 mile and 0 to 2 mile categories.)

Exhibit 3-25
YEAR 2010 MODE CHOICE BY DISTANCE FROM STUDY AREA



Traffic Impact Analysis:

Aside from the data presented above, no Traffic Impact Analysis is being presented as part of this DLD re-zoning process. However, individual projects with substantial transportation impacts will be required to provide such Traffic Impact Analysis as part of their Development Plan according to the following criteria from the **Transportation Access Management Guidelines for the City of Tucson, 2003:**

"6.3.2 Traffic Impact Analysis. A Traffic Impact Analysis (TIA) is a specialized study of the impacts that a certain type and size of development will have on the surrounding transportation system. A TIA is essential for many access management decisions, such as spacing of driveways, traffic control devices, and traffic safety issues. It is specifically concerned with the generation, distribution, and assignment of traffic to and from new development. A TIA should also

Downtown Links District (UOD #1)

Traffic Analysis and Parking, cont.

be used as part of the site planning process, not merely justification of the site plan. The purpose of this subsection is to establish uniform guidelines for when a TIA is required and how the study is to be conducted.

The specific analysis requirements, and level of detail, are determined by the following requirements.

CATEGORY I TIA -- *Developments which generate from 100 up to 500 peak hour trips. The study horizon should be limited to the opening year of the development. The minimum study area should include site access drives and adjacent signalized intersections and/or major unsignalized street intersections.*

CATEGORY II TIA -- *Developments that generate from 500 up to 1,000-peak hour trips. The study horizon should include both the opening year of the development and five years after opening. The minimum study area should include the site access drives and all signalized intersections and/or major unsignalized street intersections within one-half mile of the development.*

CATEGORY III TIA -- *Developments that generate 1,000 or more peak hour trips. The study horizon should include the opening year of the development, five years after opening and ten years after opening. The minimum study area should include the site access drives and all signalized intersections and/or major unsignalized street intersections within one mile of the development."*

Consult all of Section 6.3.2 of **Transportation Access Management Guidelines for the City of Tucson, 2003** for additional requirements; however Traffic Engineers are urged to use the University of Arizona mode-split data and the unique conditions of this DLD in their Traffic Impact Analysis.

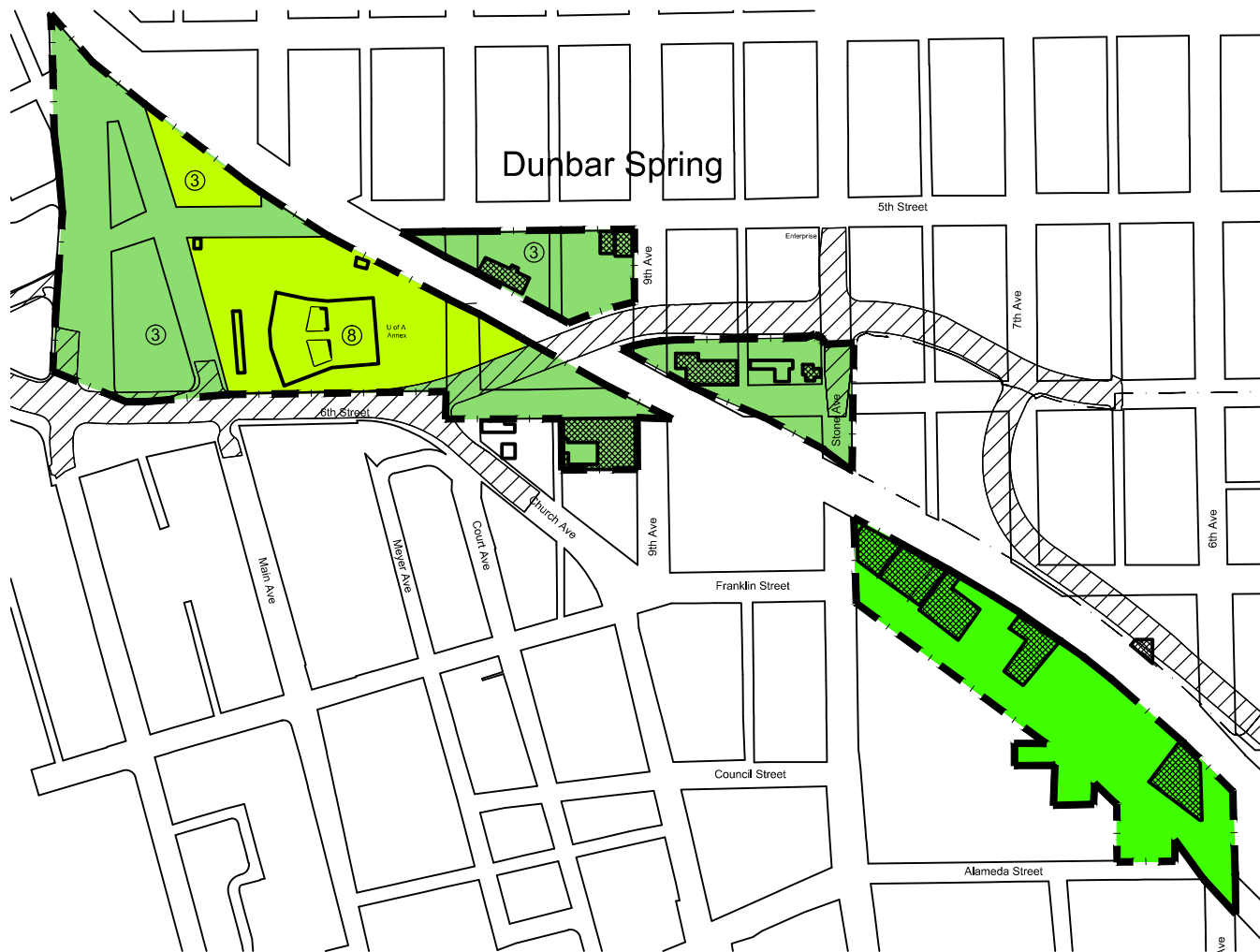
Toole Avenue Subdistrict - (TAS) Standards



The intent of this zone is to allow for and encourage development of northern Toole Avenue as per the Historic Warehouse Arts District Masterplan. Incentives offered under the Downtown Core sub-district of the infill incentive zone such as exemptions from MS&R setback, perimeter yards, lot coverage, floor area ratio, parking and landscape and screening requirements are included under this zone. Additionally, residential development (not currently allowed in the underlying I-1 zone) shall be permitted.

REGULATING PLAN

Toole Avenue Subdistrict



Key

- — — — — Property line
- — — — — Subdistrict Line
- Unlisted existing building
- ▣ Listed or eligible building ⁽¹⁾

- ▨ Future Downtown Links roadway ⁽⁴⁾

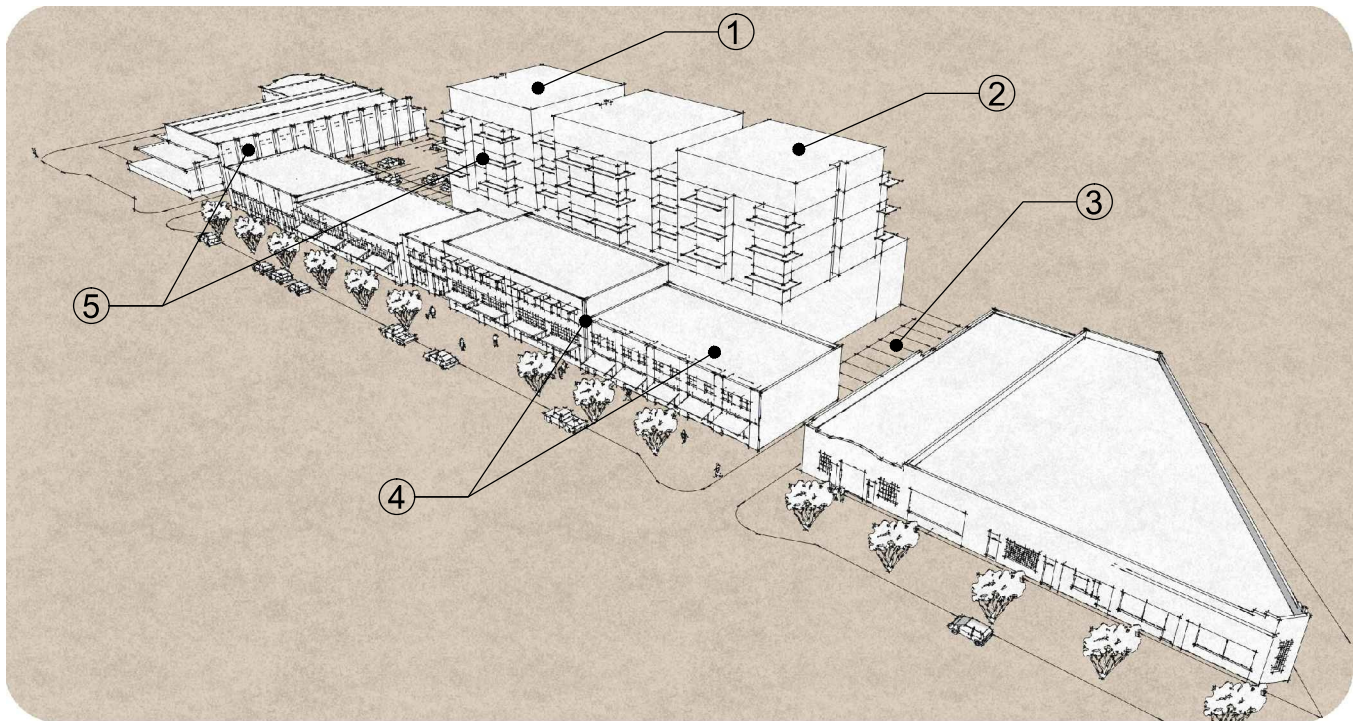
Zoning Districts

- UA Annex Sub-zone (Existing C3 Zoning) ⁽²⁾
- UA Annex Sub-zone (Optional C3 Zoning) ⁽³⁾
- Toole Avenue Sub-zone

Notes

- (1) Use of the DLD zoning option is intended to be compatible with historic preservation. Any action that has a "negative impact" on historic properties will disqualify the use of the DLD zoning option for that site. See Review and Approval Procedures, paragraph 5, page 6. The maps included in this document attempt to show the "contributing" or "eligible" properties from information available in May of 2012. For purposes of the use of DLD zoning option, it is the responsibility of each applicant for this zoning option to verify the current contributing or eligibility status of the property in question.
- (2) Existing underlying zoning applies to these areas.
- (3) Existing I-1 zoning - optional C3 zoning may be used with land uses around this area.
- (4) Development under Downtown Links District (UOD #1) is prohibited within the R.O.W. of the future Downtown Links roadway project. Preliminary location of the future R.O.W. is shown here - review with COT DSD staff at time of initial planning.

Toole Avenue Subdistrict - (TAS) Standards



Illustrative example of buildings in the Toole Avenue area

Standards Summary

- (1) Residential land use allowed.
- (2) Mid-rise (up to six stories) allowed with setback from Toole Avenue to respect scale of historic warehouses.
- (3) Exemption from parking requirements as part of transit-orientated developments - surface parking is allowed but must be set back from Toole Avenue.
- (4) Building height limited to two-stories and building massing broken down along Toole Avenue to respect scale of historic warehouses.
- (5) Exempt from lot coverage, and density limits, landscape screening requirements and setbacks modified.

Toole Avenue Subdistrict - (TAS) Standards

Land Use Type

Commercial Services Use Group

Administrative and Professional Office
Alcoholic Beverage Service
Day Care
Entertainment (2)
Financial Services (3) (4)
Food Service (5) (6)
Medical Service - Outpatient (7)
Parking
Personal Service
Technical Service
Trade Service and Repair, Minor
Transportation Service, Land Carrier (9)
Travelers Accommodation, Lodging (10)
Research and Product Development, but only of a scientific, non-industrial nature
Animal Services, provided that the use is entirely contained in the interior of the pertinent building (and not in any yard or patio

Retail Trade Use Group

Food and Beverage Sales (3)
General Merchandise Sales (3) (12) (13) (14)
Vehicle Rental (15)

Civic Use Group

Civic Assembly
Cultural Use
Educational Use: Postsecondary Institution and Instructional School
Membership Organization
Postal Service
Religious Use
Protective Services

Recreation Use Group

Recreation (16)

Residential Use Group

Family Dwelling
Group Dwelling
Artist Studio / Residence (17)
Residential Care Services: Adult Care Service or Physical and Behavioral Health Service (18) (20)
Residential Care Services: Rehabilitation Service
Children's Facilities (19) (20)
Home Occupation (21)

Industrial Use Group

Craftwork
General Manufacturing (22)
Perishable Goods Manufacturing: limited to baked goods and confectionery products manufacturing only (22)
Precision Manufacturing (22)
Primary Manufacturing (22)
Salvaging or Recycling (23)
Perishable Goods Manufacturing (24)
Microbrewery

Typical notes:

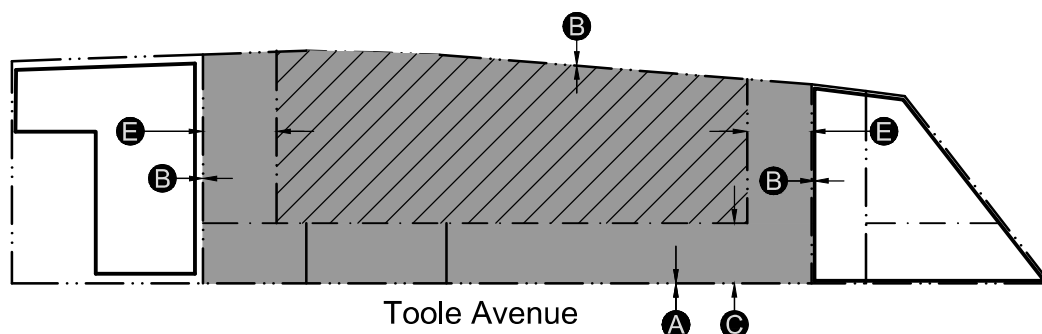
(1) Permitted uses shall be consistent with the definitions as established by the City of Tucson Land Use Code

(2) Uses that are similar in nature and intensity to the uses expressly permitted in the Downtown Links District may be permitted as Special Exception land uses if approved through a Special Exception Land Use Procedure (LUC Section 5.3.9.2.A, Approval of the Development Services Director.

Toole Avenue Subdistrict - (TAS) Standards

-
- | | |
|--|--|
| (1) Reserved. | (17) Adequate measures shall be provided to assure the health, safety, and welfare of the occupants in relation to any industrial process, use, or storage carried out in the artist studio/residence or on adjacent properties. Additionally, appropriate building code occupancy separation shall be ensured. On-site sale of the artist's products, including occasional shows of the artist's works, are permitted secondary uses. |
| (2) Circuses, carnivals, or tent shows are not allowed. | |
| (3) Drive-through services are not allowed. | |
| (4) Non-chartered financial institution facilities, such as payday loan facilities are not allowed. | |
| (5) Drive-in or drive-through restaurants are not allowed. | (18) Care is permitted for a maximum of 20 residents. |
| (6) Soup kitchens are not allowed. | (19) Care is permitted for a maximum of 10 residents. |
| (7) Blood donor centers are not allowed. | (20) If licensing is required by the State of Arizona for the use, proof of such licensure shall be provided. |
| (8) Reserved. | |
| (9) The use is limited to public transit stops. | (21) Permitted as an accessory land use to a Family Dwelling, excluding Day Care and Travelers' Accommodation, Lodging. A home occupation shall not create any nuisance, hazard, or other offensive condition, such as that resulting from noise, smoke, fumes, dust, odors, or other noxious emissions. |
| (10) Strip hotels are not allowed. Hotels shall not provide individual room access from the exterior of the building. | |
| (11) Reserved | (22) Permitted as an accessory land use to the Commercial Services and Retail Trade Use Groups, limited to 50% of the gross floor area. |
| (12) Display or storage of fertilizer, manure, or other odorous material is not allowed. | (23) Permitted as an accessory land use to religious, commercial services, retail trade use groups and educational use. Salvaging and Recycling is limited to recycling collection bins and to empty household product containers, such as, but not limited to, aluminum cans, glass and plastic bottles, and newspaper. |
| (13) Gas stations are not allowed. | |
| (14) Motor vehicle sales is not allowed. | |
| (15) Vehicle parking shall be located in structure. | |
| (16) Large recreational establishments of more than 25,000 of floor area (including gross floor area and any outside areas providing service to the public) are not allowed. | (24) Permitted as an accessory land use to Alcoholic Beverage Service. The accessory land use is limited to the manufacturing of beer, "microbrewery," not exceeding 25% of the gross floor area or 1,000 square feet, whichever is less. The products manufactured on site are sold at retail on the premises |

Toole Avenue Subdistrict - (TAS) Standards



Key

- Property Line
- Build-to Line ⁽³⁾
- Allowable Building Area- Low-Rise ⁽¹⁾
- ▨ Allowable Building Area- Mid-Rise ⁽²⁾

Building Placement

Build-to Line (Dist. from Property Line) ⁽³⁾

Street Side	0' ⁽³⁾	A
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Setback (Dist. from Property Line)

Side Yard (Low-Rise) ⁽¹⁾	0'	B
Street Frontage (Mid-Rise) ⁽²⁾	40'	C
Rear Yard	0'	D
Side Yard (Mid-Rise) ⁽²⁾	20'	E

Notes

- (1) Low-rise is defined here as buildings not exceeding 25'-0" or two stories.
- (2) Mid-Rise is defined here as buildings not exceeding 75'-0" or six stories.
- (3) At build-to lines 75% of new building frontage must be located at or near this line. Build-to line requirements apply only when shown and only when new building footprint exceeds 25% of site area. the purpose of the build-to line is to help define an urban street edge.

Open Space

Lot Coverage

Max. Lot Coverage	100% ⁽¹⁾
Min. Landscape Area	0% ⁽²⁾

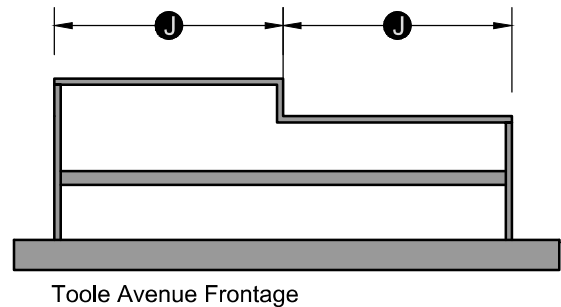
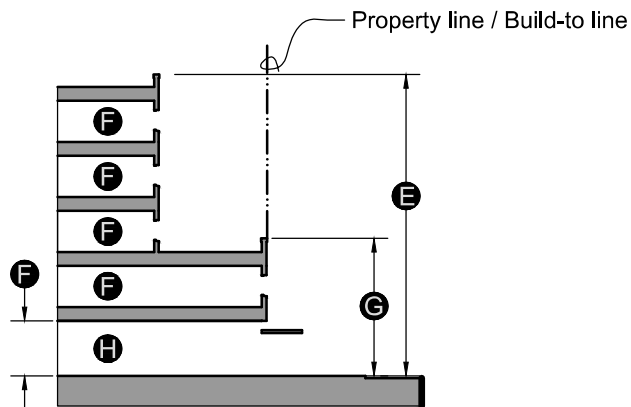
Open Space at Multi-unit Dwellings

Open Space	30 SF / Dwelling ⁽³⁾⁽⁴⁾⁽⁵⁾
Min. Landscape Area	50% of open space ⁽⁶⁾

Notes

- (1) Covered by impervious surfaces (buildings, drives, parking, other)
- (2) At other than multi-unit residential
- (3) Usable open space does not need to be located on ground.
- (4) Usable open space may be any combination of private and common space.
- (5) Parking may not be counted as open space
- (6) Minimum landscape requirement applies only to common area open space.

Toole Avenue Subdistrict - (TAS) Standards



Key

— Property Line

Height		
Building Max.	6 stories or 75'	E
First Floor Ceiling	12' min. clear	F
Low Rise Max	2 stories or 25'	G

Use		
Ground Floor	Commercial Services or Retail Uses Encouraged	H
Upper Floor(s)	Residential or Service encouraged	I

Building Massing		
Max. Unbroken Building Mass	100'-0"	J

Loading and Solid Waste

Loading	
Loading	As per land use group or class ⁽²⁾
Solid Waste	As per COT development standards ⁽³⁾

Notes

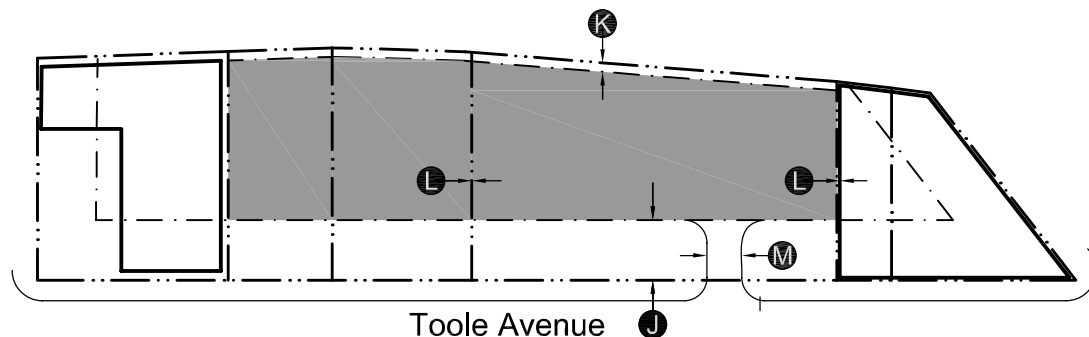
- (1) Any building over 100' long must be broken down to read as a series of buildings no longer than 100' and should include a variety of building heights.
- (2) Off-street loading zone requirements may be reduced or waived if Tucson Department of Transportation determines that no traffic safety issue is created.
- (3) On-site refuse collection container requirements governing access, type, and location may be modified if the Department of Environmental Services determines that no public health or traffic safety issue is created.

Landscaping and Screening

Notes

A complete or partial exception to Landscaping and Screening Requirements (Sec.3.7) may be granted when shade is provided for pedestrians and customers, such as along sidewalks, pedestrian circulation paths, and outdoor patios, consistent with Development Standard 9-10.4.3.B.1 (Pedestrian Pathways in the RND).

Toole Avenue Subdistrict - (TAS) Standards



Key

--- Property Line ■ Allowable Parking Area

Parking

Location (Distance from Property Line)

Street Setback	30'	J
Right of Way Setback	5'	K
Side Setback	0'	L

Required Spaces

Off-street	No off-street parking req'd ⁽³⁾
Accessible	As per underlying reqs. ⁽¹⁾⁽²⁾
Bicycle Facilities	See note #4 ⁽¹⁾

Notes

- (1) Shall not be reduced or eliminated and shall be based on the number of motor vehicle parking spaces required prior to any modifications.
- (2) May be provided 1) on-site, 2) off-site within one-quarter of a mile of project site through a shared parking agreement, or 3) on-street on the same side of the street up to five spaces.

Parking

Notes (continued)

- (3) When automobile parking is reduced below that required by the underlying zone, each development must mitigate the need for parking by providing (1) additional class one bicycle space for every (2) parking spaces omitted. These spaces are in addition to any bicycle parking required by the LUC based on land use group or class. Bicycle lockers are not permitted.
- (4) Parking drive shall be increased where required to provide fire access lane and shall meet requirements of the TFD.

Parking Drive Width	15' Max. ⁽⁴⁾	M
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Warehouse Triangle Subdistrict - (WTS) Standards



The intent of this zone is to allow for and encourage high density infill of the warehouse triangle with transit oriented and mixed-use development. The DL-AZ will go further than the infill incentive district in granting development flexibility and incentives in many areas. Residential uses will be allowed in current I-1 zone, allowable building heights and densities will be increased and developments will be exempt from parking requirements.

REGULATING PLAN

Warehouse Triangle Subdistrict



Key

- Property line
- ▬ Subdistrict Line
- Unlisted existing building
- ▨ Listed or eligible building ⁽¹⁾
- ▤ Future Downtown Links roadway ⁽²⁾

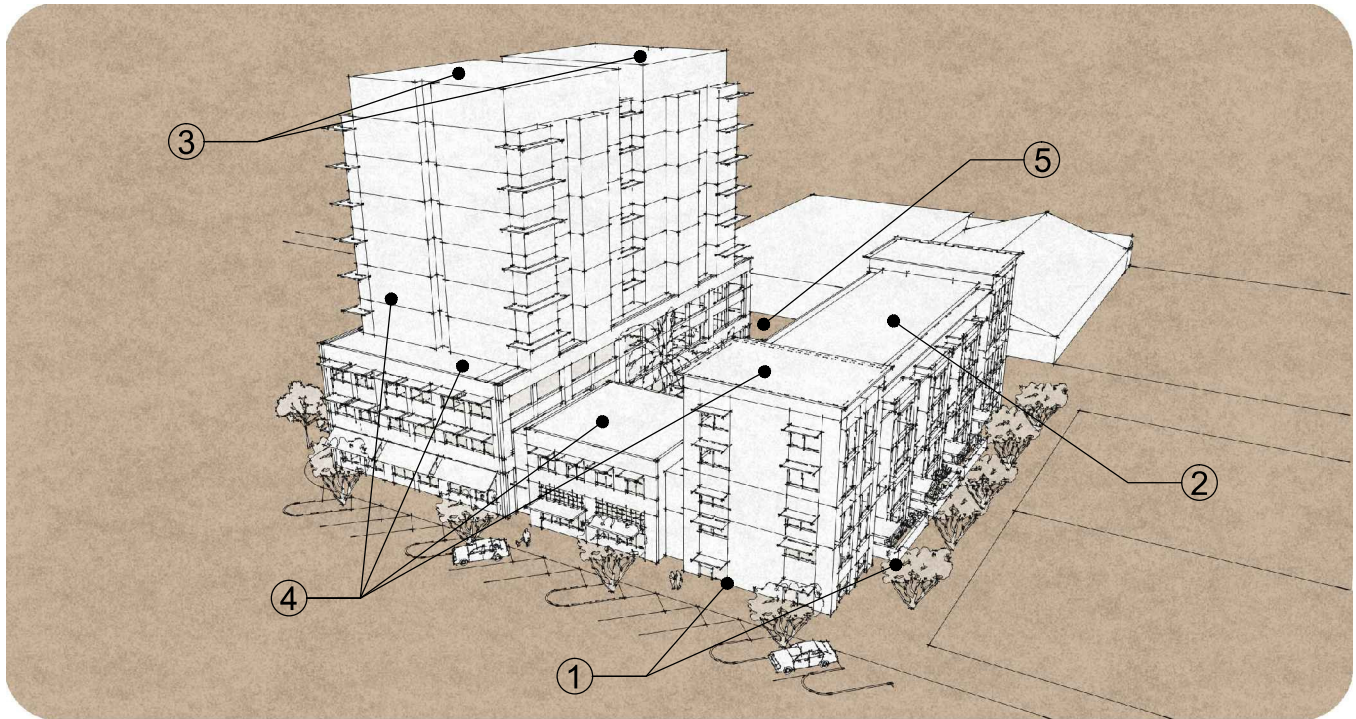
Zoning Districts

- Warehouse Triangle subdistrict

Notes

- (1) Use of the DLD zoning option is intended to be compatible with historic preservation. Any action that has a "negative impact" on historic properties will disqualify the use of the DLD zoning option for that site. See Review and Approval Procedures, paragraph 5, page 6. The maps included in this document attempt to show the "contributing" or "eligible" properties from information available in May of 2012. For purposes of the use of DLD zoning option, it is the responsibility of each applicant for this zoning option to verify the current contributing or eligibility status of the property in question.
- (2) Development under Downtown links District (UOD #1) is prohibited within the R.O.W. of the future Downtown Links roadway project. Preliminary location of the future R.O.W. is shown here - review with COT DSD staff at time of initial planning.

Warehouse Triangle Subdistrict - (WTS) Standards



Illustrative example of buildings in the Warehouse Triangle Area

Standards Summary

- (1) Zero lot line and build to requirements.
- (2) Residential allowed in current I-1 zone.
- (3) Building heights allowed up to ten stories.
- (4) Building massing scaled to context and variety of form encouraged.
- (5) No on-site parking required and no surface parking permitted.

Warehouse Triangle Subdistrict - (WTS) Standards

Land Use Type

Commercial Services Use Group

Administrative and Professional Office
Alcoholic Beverage Service
Day Care
Entertainment (2)
Financial Services (3) (4)
Food Service (5) (6)
Medical Service - Outpatient (7)
Parking (8)
Personal Service
Technical Service
Trade Service and Repair, Minor
Transportation Service, Land Carrier (9)
Travelers Accommodation, Lodging (10)
Research and Product Development, but only of a scientific, non-industrial nature
Animal Services, provided that the use is entirely contained in the interior of the pertinent building (and not in any yard or patio

Retail Trade Use Group

Food and Beverage Sales (3)
General Merchandise Sales (3) (12) (13) (14)
Vehicle Rental (15)

Civic Use Group

Civic Assembly
Cultural Use
Educational Use: Postsecondary Institution and Instructional School
Membership Organization
Postal Service
Religious Use
Protective Services

Recreation Use Group

Recreation (16)

Residential Use Group

Family Dwelling
Group Dwelling
Artist Studio / Residence (17)
Residential Care Services: Adult Care Service or Physical and Behavioral Health Service (18) (20)
Residential Care Services: Rehabilitation Service
Children's Facilities (19) (20)
Home Occupation (21)

Industrial Use Group

Craftwork
General Manufacturing (22)
Perishable Goods Manufacturing: limited to baked goods and confectionery products manufacturing only (22)
Precision Manufacturing (22)
Primary Manufacturing (22)
Salvaging or Recycling (23)
Perishable Goods Manufacturing (24)
Microbrewery

Typical notes:

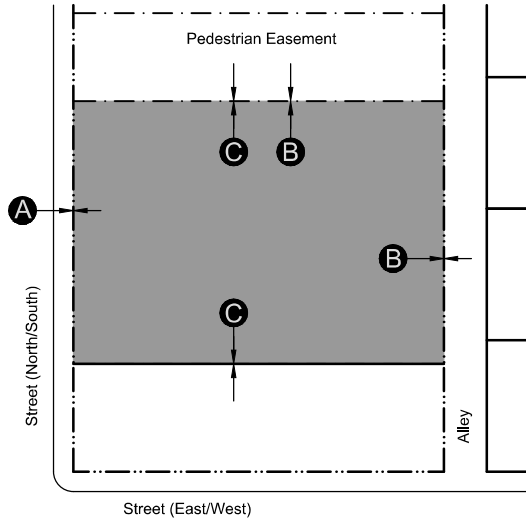
(1) Permitted uses shall be consistent with the definitions as established by the City of Tucson Land Use Code

(2) Uses that are similar in nature and intensity to the uses expressly permitted in the Downtown Links District may be permitted as Special Exception land uses if approved through a Special Exception Land Use Procedure (LUC Section 5.3.9.2.A, Approval of the Development Services Director.

Warehouse Triangle Subdistrict - (WTS) Standards

-
- | | |
|--|---|
| <ul style="list-style-type: none">(1) Reserved.(2) Circuses, carnivals, or tent shows are not allowed.(3) Drive-through services are not allowed.(4) Non-chartered financial institution facilities, such as payday loan facilities are not allowed.(5) Drive-in or drive-through restaurants are not allowed.(6) Soup kitchens are not allowed.(7) Blood donor centers are not allowed.(8) Surface parking lots are not allowed. Only in-structure parking is permitted.(9) The use is limited to public transit stops.(10) Strip hotels are not allowed. Hotels shall not provide individual room access from the exterior of the building.(11) Reserved(12) Display or storage of fertilizer, manure, or other odorous material is not allowed.(13) Gas stations are not allowed.(14) Motor vehicle sales is not allowed.(15) Vehicle parking for use shall be located in structure.(16) Large recreational establishments of more than 25,000 of floor area (including gross floor area and any outside areas providing service to the public) are not allowed. | <ul style="list-style-type: none">(17) Adequate measures shall be provided to assure the health, safety, and welfare of the occupants in relation to any industrial process, use, or storage carried out in the artist studio/residence or on adjacent properties. Additionally, appropriate building code occupancy separation shall be ensured. On-site sale of the artist's products, including occasional shows of the artist's works, are permitted secondary uses.(18) Care is permitted for a maximum of 20 residents.(19) Care is permitted for a maximum of 10 residents.(20) If licensing is required by the State of Arizona for the use, proof of such licensure shall be provided.(21) Permitted as an accessory land use to a Family Dwelling, excluding Day Care and Travelers' Accommodation, Lodging. A home occupation shall not create any nuisance, hazard, or other offensive condition, such as that resulting from noise, smoke, fumes, dust, odors, or other noxious emissions.(22) Permitted as an accessory land use to the Commercial Services and Retail Trade Use Groups, limited to 50% of the gross floor area.(23) Permitted as an accessory land use to religious, commercial services, retail trade use groups and educational use. Salvaging and Recycling is limited to recycling collection bins and to empty household product containers, such as, but not limited to, aluminum cans, glass and plastic bottles, and newspaper.(24) Permitted as an accessory land use to Alcoholic Beverage Service. The accessory land use is limited to the manufacturing of beer, "microbrewery," not exceeding 25% of the gross floor area or 1,000 square feet, whichever is less. The products manufactured on site are sold at retail on the premises |
|--|---|

Warehouse Triangle Subdistrict - (WTS) Standards



Key

- — — Property Line
- — — Build-to Line ^{(2) (3)}
- Allowable Building Area

Building Placement

Build-to Line (Dist. from Property Line) ⁽¹⁾

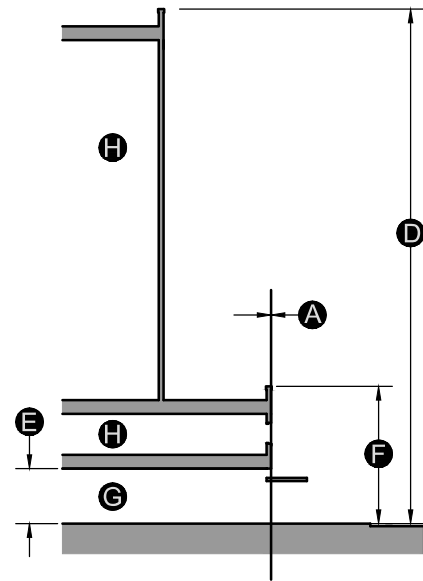
Street Side	0' ⁽²⁾	A
Alley Side	0' ⁽³⁾	B
Pedestrian Easement	0' ⁽³⁾	B

Setback (Dist. from Property Line)

Sidyard	0'	C
---------	----	----------

Notes

- (1) Build-to requirements apply to N/S street frontage when building footprint exceeds 25% of lot area. To E/W street frontage when building footprint exceeds 50% of lot area, and alley frontage when footprint exceeds 75% of footprint of lot.
- (2) Street side facades shall be built to BTL at 75% of new building frontage minimum, to help define an urban street frontage, where build-to requirements apply. ⁽¹⁾
- (3) Alley and pedestrian easement sides facade shall be built to build-to-line @ 50% of new building frontage minimum, to help define an urban edge to property, where required. ⁽¹⁾



Height

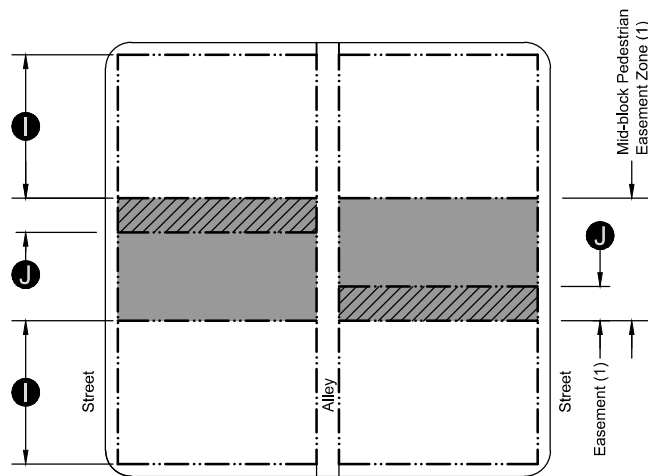
Building Max.	10 stories or 120' ^{(1) (2)}	D
First Floor Ceiling	12' min. clear	E
Bldg. Min. @ Build-to Line	25'	F

- (1) No more than 10 stories and no more than 120' typical but note that within the West University sub-district building height shall be per the underlying zone. (see sheet 2-2)

Use

Ground Floor	Commercial services or retail uses encouraged	G
Upper Floor(s)	Residential or Service encouraged	H

Warehouse Triangle Subdistrict - (WTS) Standards



Key

— Property Line	■ Pedestrian Easement Zone
	▨ Pedestrian Easement

Open Space

Pedestrian Easement ⁽¹⁾

Max. Distance from Street	125'	I
Min. Width	30'	J

Lot Coverage

Max. Lot Coverage	100% ⁽²⁾
Min. Landscape Area	0% ⁽³⁾

Open Space at Multi-unit Dwellings

Open Space	30 SF / Dwelling ⁽⁴⁾⁽⁵⁾⁽⁶⁾
Min. Landscape Area	50% of open space

Notes

- (1) Projects that develop 50% or more of the land area within the Mid-block Pedestrian Easement Zone (see map/plan above) shall set aside and develop a mid-block pedestrian passage and easement.
- (2) Covered by impervious surfaces (buildings, drives, parking, other)
- (3) At other than multi-unit residential

Open Space

Notes (continued)

- (4) Usable open space does not need to be located on ground.
- (5) Usable open space may be any combination of private and common space.
- (6) Parking may not be counted as open space

Loading and Solid Waste

Loading

Loading	As per Land Use Group or Class ⁽¹⁾
Solid Waste	As per COT Development Standards ⁽²⁾

Notes

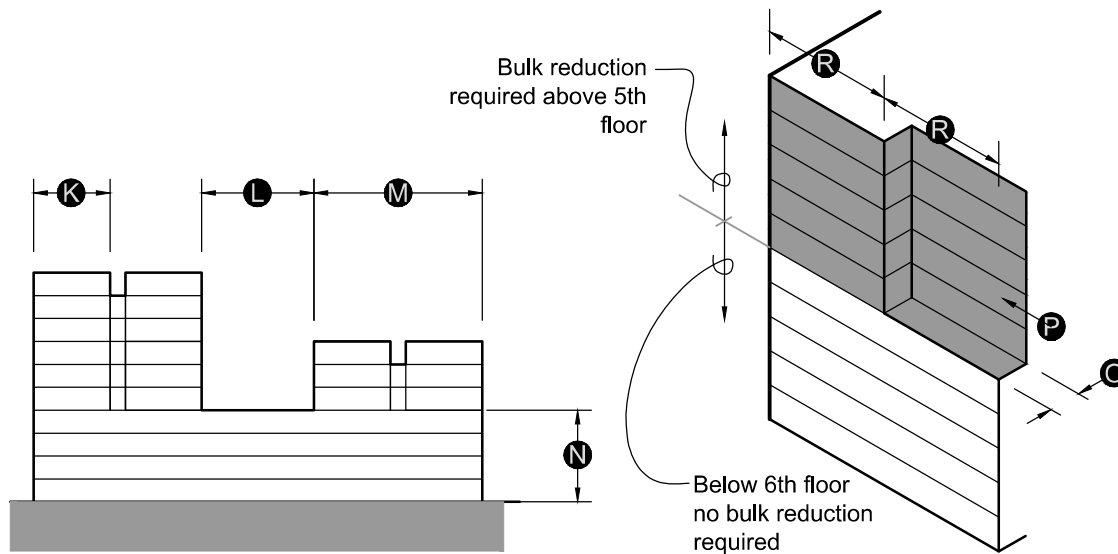
- (1) Off-street loading zone requirements may be reduced or waived if TDOT determines that no traffic safety issue is created.
- (2) On-site refuse collection container requirements governing access, type, and location may be modified if the Department of Environmental Services determines that no public health or traffic safety issue is created.

Landscaping and Screening

Notes

A complete or partial exception to Landscaping and Screening Requirements (Sec.3.7) may be granted when shade is provided for pedestrians and customers, such as along sidewalks, pedestrian circulation paths, and outdoor patios, consistent with Development Standard 9-10.4.3.B.1 (Pedestrian Pathways in the RND).

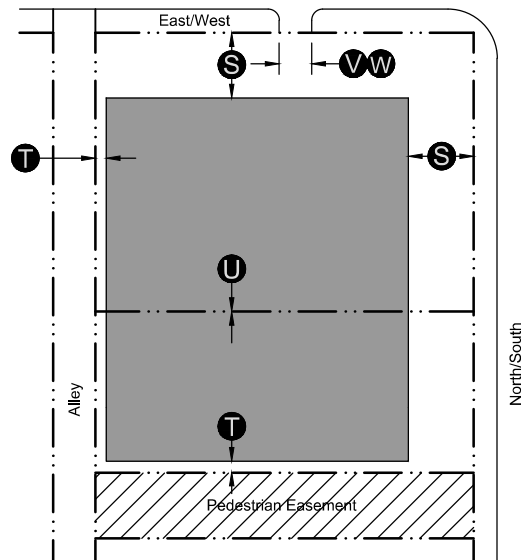
Warehouse Triangle Subdistrict - (WTS) Standards



Building Massing		
Articulation		
Max. unbroken bldg. mass	50' ⁽¹⁾	K
View Corridors		
Low rise facade	25% min ⁽²⁾	L
High rise facade	150 LF max. unbroken ⁽³⁾	M
Low rise height	4 stories or 60' max. ⁽²⁾	N
Open Space at Multi-unit Dwellings		
Open Space	30 SF / Dwelling ⁽⁴⁾⁽⁵⁾⁽⁶⁾	
Min. Landscape Area	50% of open space ⁽⁷⁾	
Notes		
(1) Any building over 50' wide must be broken down to read as a series of buildings no wider than 50', and should include a variety of building heights.		
(2) To preserve view corridors 25% of facade must be set aside as low rise, and shall not exceed four stories or 60 feet. On corner lots this requirement applies to one street only.		
(3) High rise facades of more than 150 continuous linear feet shall be broken by a low rise facade not exceeding 4 stories or 60 feet.		

Building Massing		
Bulk Reduction		
Bulk reduction setback	12' min.	O
Bulk reduction zone	Abv. 5th floor	P
Bulk reduction required at	50% of facade min.	R
Solar Exposure		
Max. glass on east & west	50% of facade	
Min. shade on E & W glass	50% ⁽¹⁾	
Max. glass on north & south	Unlimited	
Min. shade on N & S glass	0%	
Percentage of glass must be shaded between 10AM and 3PM from May through October		
(4) Usable open space does not need to be located on ground		
(5) Usable open space may be any combination of private and common space		
(6) Parking may not be counted as open space		
(7) Minimum landscape requirement applies only to common area open space.		

Warehouse Triangle Subdistrict - (WTS) Standards



First floor plan at structured parking

Key

— Property Line

■ Allowable Parking Area
▨ Pedestrian Easement

Parking

Location (Distance from Property Line) ⁽⁵⁾

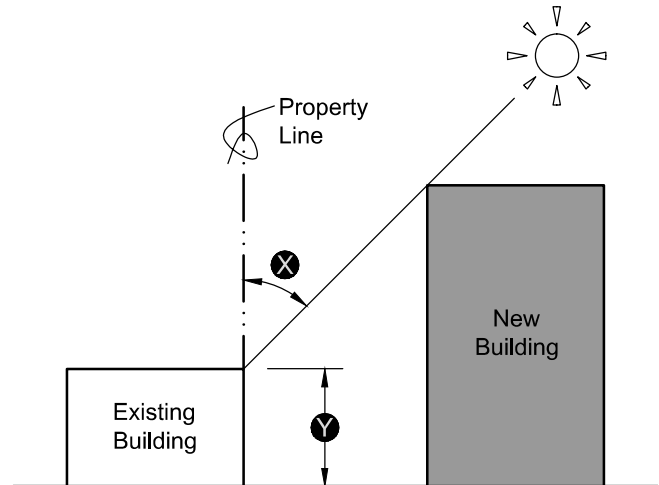
Street Setback	30'	S
Ped. Easement Setback	5'	T
Alley Setback	5'	T
Side Setback	0'	U

Required Spaces ⁽⁵⁾

Off-street	No off-street parking req'd ⁽⁵⁾⁽³⁾
Accessible	As per underlying req's ⁽¹⁾⁽²⁾
Bicycle Facilities	See note #1 and #4

Notes

- (1) Shall not be reduced or eliminated and shall be based on the number of motor vehicle parking spaces required prior to any modifications.
- (2) May be provided 1) on-site, 2) off-site within one-quarter of a mile of project site through a shared parking agreement, or 3) on-street on the same side of the street up to five spaces.
- (3) Note that developers of parcels within the Warehouse Triangle sub-district shall demonstrate no overflow parking into the West University Neighborhood or shall provide parking per the underlying zone.



Parking

Notes (continued)

- (4) When automobile parking is reduced below that required by the underlying zone, each development must mitigate the need to parking by providing (1) additional class one bicycle space for every (2) parking spaces omitted. These spaces are in addition to any bicycle parking required by the LUC based on land use group or class. Bicycle lockers are not permitted.
- (5) Surface parking allowed only under structure - no surface parking allowed
- (6) Heights of new buildings shall be limited such that no portion of new building will cast a shadow on the rooftop of any adjacent existing buildings at any time assuming a uniform 45° sun angle. on vacant adjacent lots a 20'-0" building height shall be assumed at property line.
- (7) Parking drive shall be increased where required to provide fire access lane and shall meet requirements of the TFD.

Parking Drive Width	15' Max. ⁽⁷⁾	V
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On corner lots, parking drive shall not be located on primary street.

W

Solar Access

Angle of influence	45° ⁽⁶⁾	X
Default height of adjacent land	20' ⁽⁶⁾	Y

Fourth Avenue - Subdistrict Standards



The intent of this zone is to take advantage of the Modern Street Car project and promote medium-density infill transit-oriented development.

REGULATING PLAN

Fourth Avenue Subdistrict



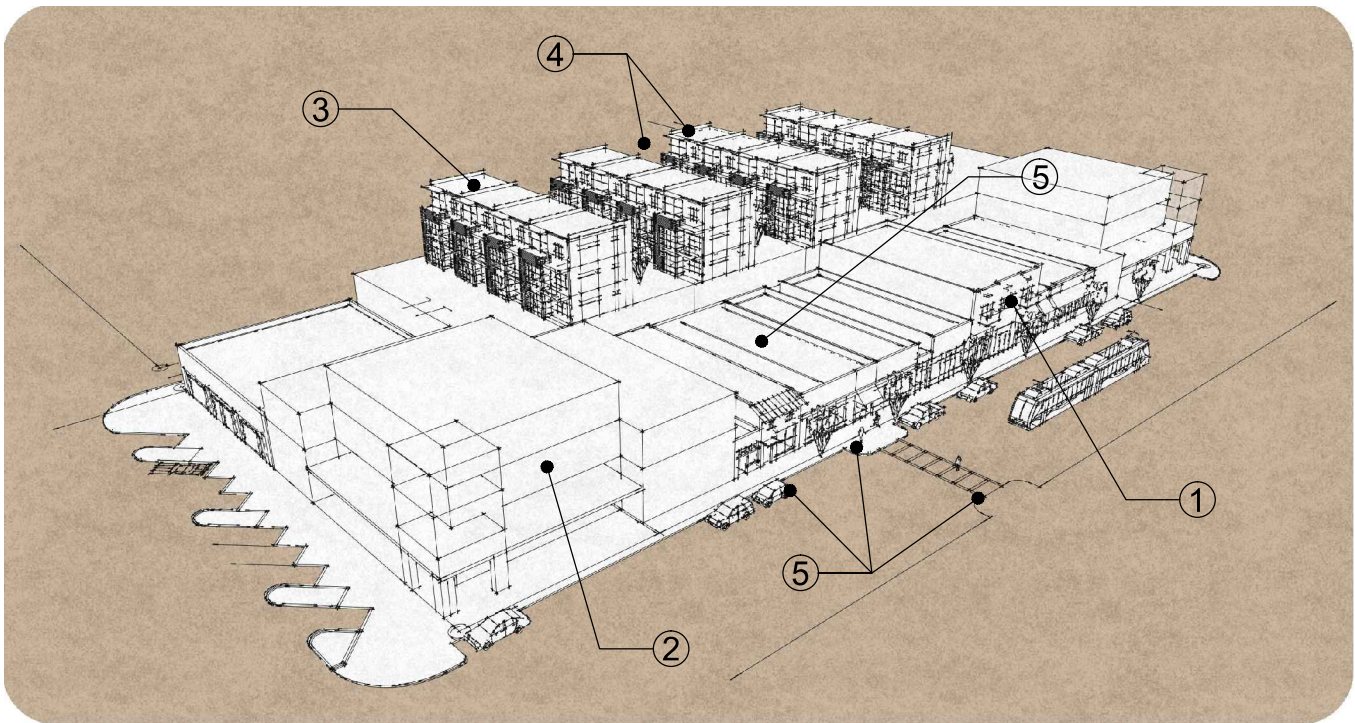
Key

- Property line
- ▬ Subdistrict Line
- Unlisted existing building
- ▨ Listed or eligible building ⁽¹⁾
- ▧ Future Downtown Links roadway ⁽²⁾

Notes

- (1) Use of the DLD zoning option is intended to be compatible with historic preservation. Any action that has a "negative impact" on historic properties will disqualify the use of the DLD zoning option for that site. See Review and Approval Procedures, paragraph 5, page 6. The maps included in this document attempt to show the "contributing" or "eligible" properties from information available in May of 2012. For purposes of the use of DLD zoning option, it is the responsibility of each applicant for this zoning option to verify the current contributing or eligibility status of the property in question.
- (2) Development under the Downtown Links District (UOD#1) is prohibited within the R.O.W. of the future Downtown Links roadway project. Preliminary location of the future R.O.W. is shown here - review with COT DSD staff at time of initial planning.

Fourth Avenue Subdistrict - (FAS) Standards



Illustrative example of buildings in the Fourth Avenue area

Standards Summary

- (1) Protect historic structures.
- (2) Allow for (3) story development near intersections
- (3) Allow for up to (5) stories of development set back from 4th Avenue to respect historic structures.
- (4) New building massing compatible with context
- (5) First floor and street scape standards encourage pedestrian and bicycle friendly environment.

Fourth Avenue Subdistrict - (FAS) Standards

Land Use Type

Commercial Services Use Group

Administrative and Professional Office

Alcoholic Beverage Service

Day Care

Entertainment (2)

Financial Services (3) (4)

Food Service (5) (6)

Medical Service - Outpatient (7)

Personal Service

Technical Service

Trade Service and Repair, Minor

Transportation Service, Land Carrier (8)

Travelers Accommodation, Lodging (9)

Research and Product Development, but only of a scientific, non-industrial nature

Animal Services, provided that the use is entirely contained in the interior of the pertinent building (and not in any yard or patio

Retail Trade Use Group

Food and Beverage Sales (3) (10)

General Merchandise Sales (3) (10) (12) (13)

Vehicle Rental (14)

Civic Use Group

Civic Assembly

Cultural Use

Educational Use: Postsecondary Institution and

Instructional School

Membership Organization

Postal Service

Religious Use

Protective Services

Recreation Use Group

Recreation (15)

Residential Use Group

Family Dwelling

Group Dwelling

Artist Studio / Residence (16)

Residential Care Services: Adult Care Service or Physical and Behavioral Health Service (17) (19)

Residential Care Services: Rehabilitation Service

Home Occupation (20)

Microbrewery

Industrial Use Group

Craftwork

General Manufacturing (21)

Perishable Goods Manufacturing: limited to baked goods and confectionery products manufacturing only (21)

Precision Manufacturing (21)

Primary Manufacturing (21)

Salvaging or Recycling (22)

Perishable Goods Manufacturing (23)

Typical notes:

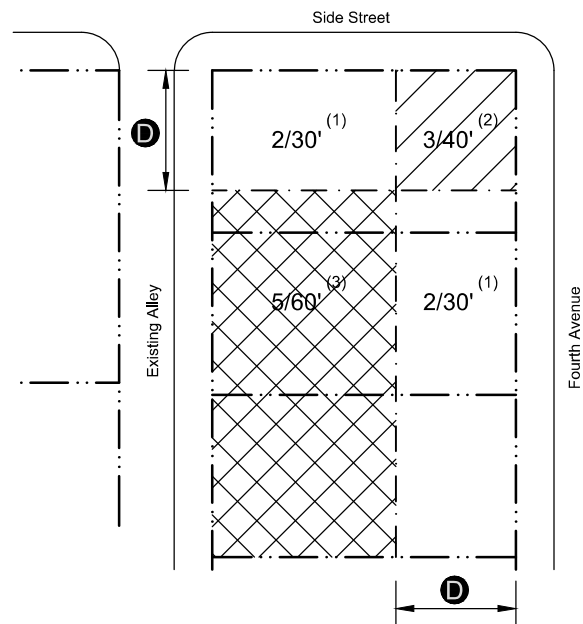
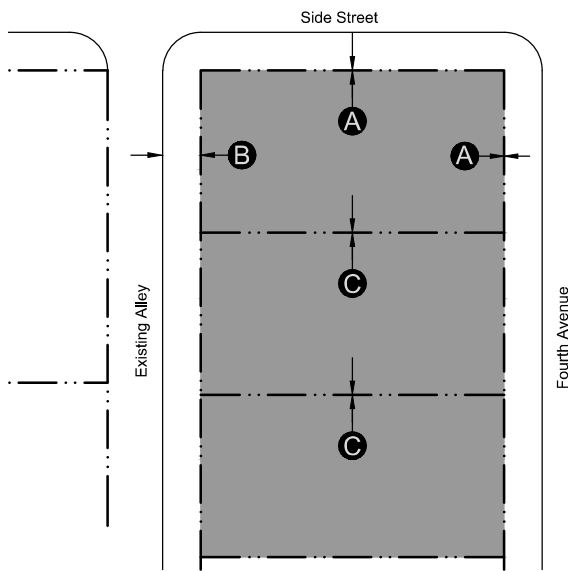
(1) Permitted uses shall be consistent with the definitions as established by the City of Tucson Land Use Code

(2) Uses that are similar in nature and intensity to the uses expressly permitted in the Downtown Links District may be permitted as Special Exception land uses if approved through a Special Exception Land Use Procedure (LUC Section 5.3.9.2.A, Approval of the Development Services Director.

Fourth Avenue Subdistrict - (FAS) Standards

- | | |
|--|---|
| <hr/> <ul style="list-style-type: none">(1) Reserved(2) Circuses, carnivals, or tent shows are not allowed.(3) Drive-through services are not allowed.(4) Non-chartered financial institution facilities, such as payday loan facilities are not allowed.(5) Drive-in or drive-through restaurants are not allowed.(6) Soup kitchens are not allowed.(7) Blood donor centers are not allowed.(8) The use is limited to public transit stops.(9) Strip hotels are not allowed. Hotels shall not provide individual room access from the exterior of the building.(10) Reserved(11) Display or storage of fertilizer, manure, or other odorous material is not allowed.(12) Gas stations are not allowed.(13) Motor vehicle sales is not allowed.(14) Vehicle parking for use shall be located in structure.(15) Large recreational establishments of more than 25,000 of floor area (including gross floor area and any outside areas providing service to the public) are not allowed. | <hr/> <ul style="list-style-type: none">(16) Adequate measures shall be provided to assure the health, safety, and welfare of the occupants in relation to any industrial process, use, or storage carried out in the artist studio/residence or on adjacent properties. Additionally, appropriate building code occupancy separation shall be ensured. On-site sale of the artist's products, including occasional shows of the artist's works, are permitted secondary uses.(17) Care is permitted for a maximum of 20 residents.(18) Reserved(19) If licensing is required by the State of Arizona for the use, proof of such licensure shall be provided.(20) Permitted as an accessory land use to a Family Dwelling, excluding Day Care and Travelers' Accommodation, Lodging. A home occupation shall not create any nuisance, hazard, or other offensive condition, such as that resulting from noise, smoke, fumes, dust, odors, or other noxious emissions.(21) Permitted as an accessory land use to the Commercial Services and Retail Trade Use Groups, limited to 50% of the gross floor area.(22) Permitted as an accessory land use to religious, commercial services, retail trade use groups and educational use. Salvaging and Recycling is limited to recycling collection bins and to empty household product containers, such as, but not limited to, aluminum cans, glass and plastic bottles, and newspaper.(23) Permitted as an accessory land use to Alcoholic Beverage Service. The accessory land use is limited to the manufacturing of beer, "microbrewery," not exceeding 25% of the gross floor area or 1,000 square feet, whichever is less. The products manufactured on site are sold at retail on the premises |
|--|---|

Fourth Avenue Subdistrict - (FAS) Standards



Key

--- Property Line ■ Allowable Building Area

▨ Mid-Rise Zone

□ Street Frontage Zone

▧ Intersection Zone

Building Placement

Setback

Street Side	0' or Prevailing	A
Alley Side	10'	B
Sideyard	0'	C
Midrise Setback	50'	D

Notes

- (1) Building heights along street frontage is restricted to 2 stories or 30'-0" to respect scale of established and/or historic structures.
- (2) Building heights may extend to 3-stories or 40'-0" within a 50'-0" x 50'-0" area at intersection.
- (3) Building heights may extend to 5-stories or 60'-0" at the rear of properties beginning at 50'-0" from property line.

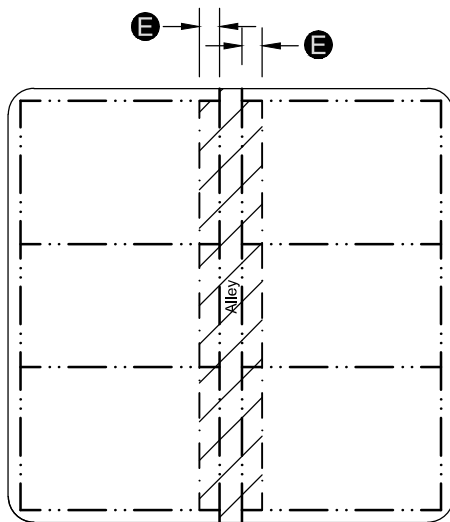
Height

Street Frontage Zone	30' / 2-Stories ⁽¹⁾
Intersection Zone	40' / 3-Stories ⁽²⁾
Mid-Rise Zone	60' / 5-Stories ⁽³⁾

Use

Ground Floor	Commercial services or retail use encouraged	G
Upper Floor(s)	Residential or Service encouraged	H

Fourth Avenue Subdistrict - (FAS) Standards



Key

— Property Line

Open Space

Pedestrian Easement ⁽¹⁾

Min. Width 10' **E**

Lot Coverage

Max. Lot Coverage 100% ⁽²⁾

Min. Landscape Area 0% ⁽³⁾

Open Space at Multi-unit Dwellings

Open Space 30 SF / Dwelling ⁽⁴⁾⁽⁵⁾⁽⁶⁾

Min. Landscape Area 50% of open space ⁽¹⁾

Notes

- (1) Projects shall set aside and develop a pedestrian passage easement as part of alley
- (2) Covered by impervious surfaces (buildings, drives, parking, other)
- (3) At other than multi-unit residential

Open Space

Notes (continued)

- (4) Usable open space does not need to be located on ground.
- (5) Usable open space may be any combination of private and common space.
- (6) Parking may not be counted as open space
- (7) Minimum landscape requirement applies only to common area open space

Loading and Solid Waste

Loading As per land use group or class ⁽¹⁾

Solid Waste As per COT development standards ⁽²⁾

Notes

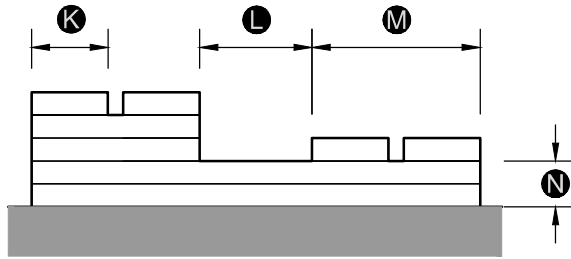
- (1) Off-street loading zone requirements may be reduced or waived if the Department of Transportation determines that no traffic safety issue is created.
- (2) On-site refuse collection container requirements governing access, type, and location may be modified if the Department of Environmental Services determines that no public health or traffic safety issue is created.

Landscaping and Screening

Notes

A complete exemption to landscape and screening requirements (Sec. 3.7) shall be granted to developments that comply with the requirements of the streetscape standards of the DL-AZ

Fourth Avenue Subdistrict - (FAS) Standards



Building Massing

Articulation

Max. unbroken bldg. mass	50' ⁽¹⁾	K
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View Corridors

Low rise facade	25% min ⁽²⁾	L
Mid rise facade	150 LF max. unbroken ⁽³⁾	M
Low rise height	2 stories or 30' max. ⁽²⁾	N

Open Space at Multi-unit Dwellings

Open Space	30 SF / Dwelling ⁽⁴⁾ ⁽⁵⁾ ⁽⁶⁾
Min. Landscape Area	50% of open space ⁽⁷⁾

Notes

- (1) Any building over 50' wide must be broken down to read as a series of buildings no wider than 50', and should include a variety of building heights.
- (2) To preserve view corridors 25% of facade must be set aside as low rise, and shall not exceed two stories or 30 feet. On corner lots this requirement applies to one street side only.
- (3) Mid rise facades of more than 150 continuous linear feet shall be broken by a low rise facade not exceeding 2 stories or 30 feet.
- (4) Usable open space does not need to be located on ground.
- (5) Usable open space may be any combination of private and common space.
- (6) Parking may not be counted as open space
- (7) Minimum landscape requirement applies only to common area open space

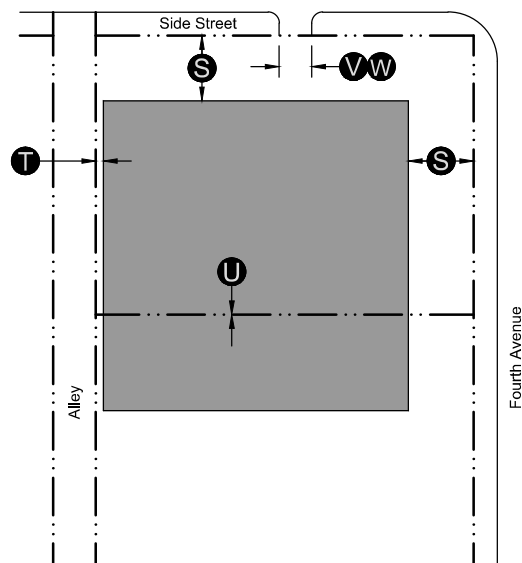
Solar Exposure

Max. glass on east & west	50% of facade
Min. shade on E & W glass	50% ⁽¹⁾
Max. glass on north & south	Unlimited
Min. shade on N & S glass	0%

Notes

- (1) Percentage of glass must be shaded between 10AM and 3PM from May through October

Fourth Avenue Subdistrict - (FAS) Standards



At Grade Plan at Structured Parking ⁽⁶⁾

Key

--- Property Line ■ Allowable Parking Area

Parking

Location (Distance from Property Line)

Street Setback	30'	S
Alley Setback	0'	T
Side Setback	0'	U

Required Spaces ⁽⁶⁾

Off-street	No off-street parking req'd
Accessible	As per underlying req's ⁽¹⁾⁽²⁾
Bicycle Facilities	See note #3 ⁽¹⁾

Notes

- (1) Shall not be reduced or eliminated and shall be based on the number of motor vehicle parking spaces required prior to any modifications.
- (2) May be provided 1) on-site, 2) off-site within one-quarter of a mile of project site through a shared parking agreement, or 3) on-street on the same side of the street up to five spaces.

Parking

Notes (continued)

- (3) When automobile parking is reduced below that required by the underlying zone, each development must mitigate the need for parking by providing (1) additional class one bicycle space for every (2) parking spaces omitted. These spaces are in addition to any bicycle parking required by the LUC based on land use group or class. Bicycle lockers are not permitted.

- | | | |
|---|-------------------------|----------|
| (4) Parking Drive Width | 15' Max. ⁽⁷⁾ | V |
| (5) Parking drive shall not be located on Fourth Avenue | | W |
| (6) Surface parking lots shall be prohibited. parking shall be allowed within structure with at-grade setbacks as shown | | |
| (7) Parking drive shall be increased where required to provide fire access lane and shall meet requirements of the TFD. | | |

Iron Horse Subdistrict Standards



Iron Horse Mixed Use Zone.

The intent of this zone is to promote transit oriented development that is compatible with the historic scale of Iron Horse Neighborhood, especially along ninth street. The most significant development incentive is an exemption from parking requirements.

Iron Horse Low Density Residential Zone.

The intent of this zone is to promote single family infill development at somewhat higher density, while protecting the historic character and privacy of existing properties. Key development incentives include reduction in minimum lot sizend reduction in parking.

REGULATING PLAN

Iron Horse Subdistrict



Key

- — — — — Property line
- ■ ■ ■ ■ Subdistrict Line
- Unlisted existing building
- ▤ Listed or eligible building ⁽¹⁾
- ▨ Future Downtown Links roadway

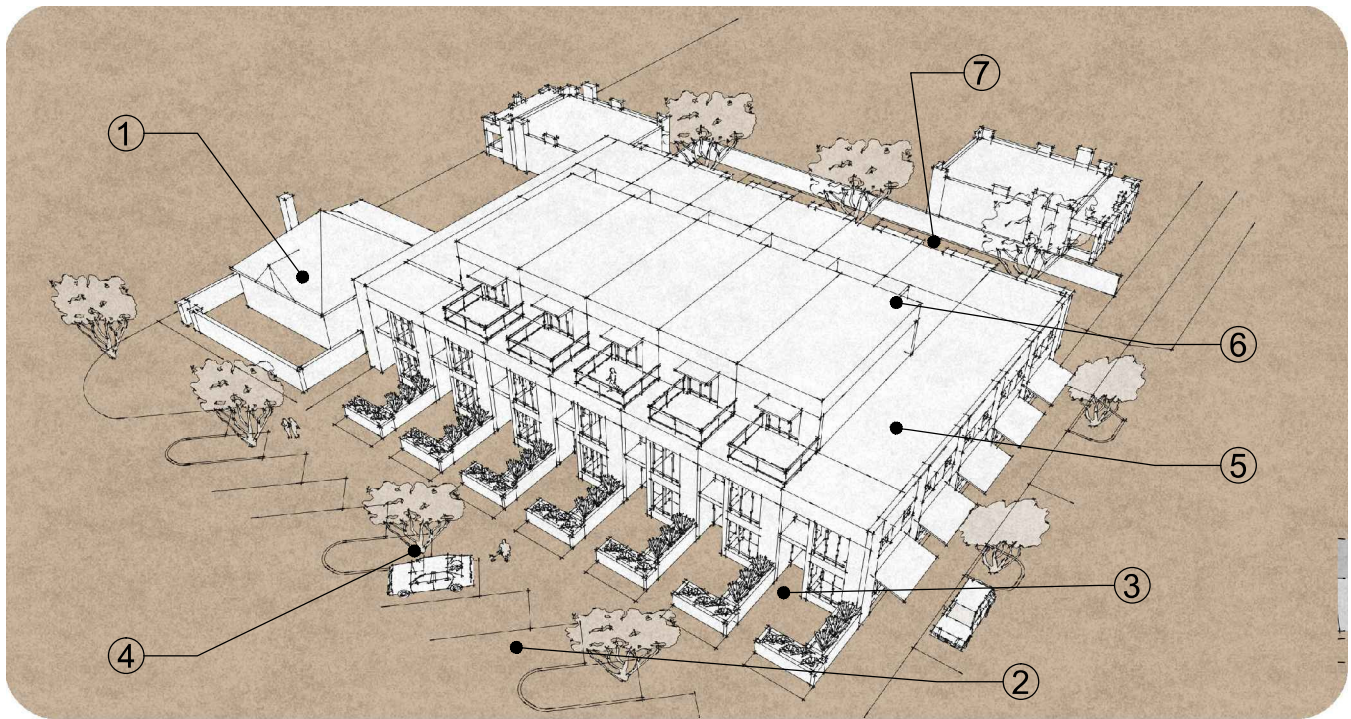
Zoning Districts

- Iron Horse Low Density Residential Infill
- Iron Horse Mixed-Use

Notes

- (1) Use of the DLD zoning option is intended to be compatible with historic preservation. Any action that has a "negative impact" on historic properties will disqualify the use of the DLD zoning option for that site. See Review and Approval Procedures, paragraph 5, page 6. The maps included in this document attempt to show the "contributing" or "eligible" properties from information available in May of 2012. For purposes of the use of DLD zoning option, it is the responsibility of each applicant for this zoning option to verify the current contributing or eligibility status of the property in question.

Iron Horse Mixed-use Standards



Illustrative example of buildings in the Iron Horse mixed-use Area

Standards Summary

- (1) Modifications to historic structures that would reduce historic status are prohibited
- (2) New developments exempt from parking requirements - streetscape standards allow for parking on street.
- (3) Prevailing setbacks respected at street frontage.
- (4) Streetscape standards to make developments pedestrian and bicycle friendly.
- (5) Two-Story allowed along perimeter.
- (6) Three-story allowed with setback from street and adjacent residential developments.
- (7) Surface parking allowed with setback from street - no access drives from ninth street on corner lots.

Iron Horse Mixed-Use Standards

Land Use Type

Commercial Services Use Group

Administrative and Professional Office*
Alcoholic Beverage Service*
Day Care*
Financial Services*
Food Service*
Personal Service*
Trade Service and Repair, Minor*
Travelers Accommodation, Lodging*
Research and Product Development, but only of a scientific, non-industrial nature
Animal Services, provided that the use is entirely contained in the interior of the pertinent building (not in any yard or patio)

Retail Trade Use Group

Food and Beverage Sales (Except Alcoholic Beverage Sales)
General Merchandise Sales (1) (6) (7) (8)*

Civic Use Group

Civic Assembly
Cultural Use
Postal Service
Religious Use
Protective Services

Recreation Use Group

Neighborhood Recreation (9)

Residential Use Group

Family Dwelling
Group Dwelling
Artist Studio / Residence (10)
Residential Care Services: Adult Care Service or Physical and Behavioral Health Service (11) (12)*
Residential Care Services: Rehabilitation Service
Children's Facilities (11) (12)*

Industrial Use Group

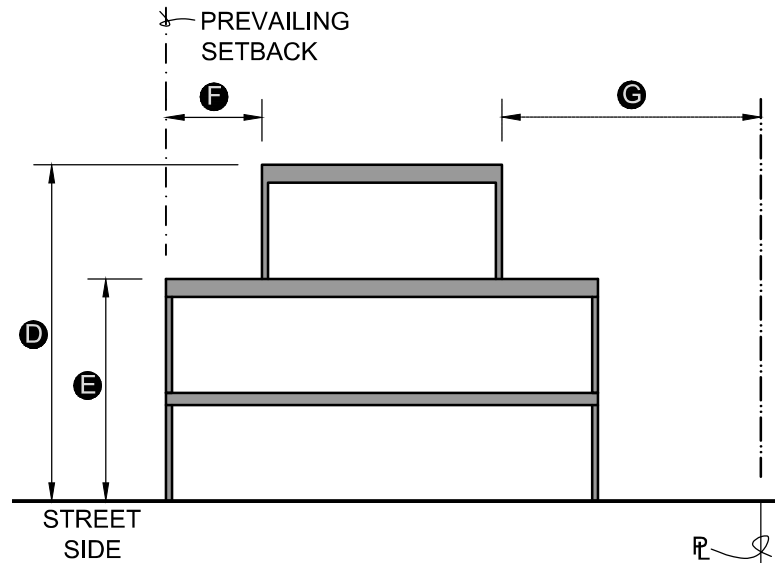
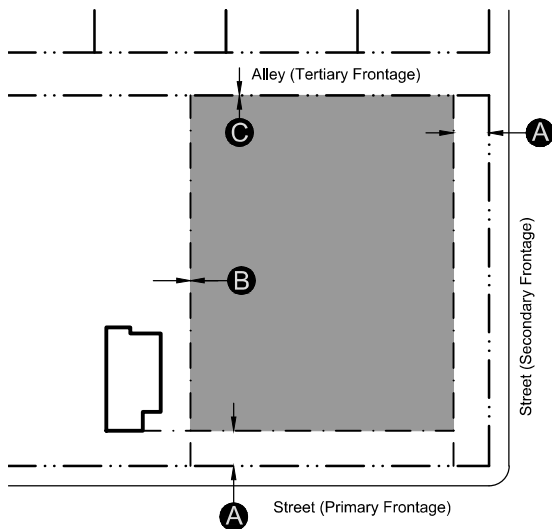
Craftwork*
Perishable Goods Manufacturing: limited to baked goods and confectionery products manufacturing only (14)*
Salvaging or Recycling (15)
Microbrewery

- (1) Drive-through services are not allowed.
- (2) Non-chartered financial institution facilities, such as payday loan facilities are not allowed.
- (3) Drive-in or drive-through restaurants are not allowed.
- (4) Soup kitchens are not allowed.
- (5) Limited to bed & breakfasts only. Permitted for up to 20 guests for a maximum stay of 14 days. No more than 10 sleeping rooms may be used to accommodate guests. Meals may be served only to guests staying in the facility. Separate cooking facilities in guest rooms are prohibited.
- (6) Display or storage of fertilizer, manure, or other odorous material is not allowed.
- (7) Gas stations are not allowed.
- (8) Motor vehicle sales is not allowed.
- (9) In addition to the requirements of Chapter 6, Section 6-101, Outdoor Lighting Code, of the Tucson Code, any outdoor lighting utilized with the use shall be located and directed to eliminate glare toward streets and adjoining residential areas.
- (10) Adequate measures shall be provided to assure the health, safety, and welfare of the occupants in relation to any industrial process, use, or storage carried out in the artist studio/residence or on adjacent properties. Appropriate building code occupancy separation shall be ensured. On-site sale of the artist's products, including occasional shows of the artist's works, are permitted secondary uses.
- (11) Care is permitted for a maximum of 10 residents.
- (12) If licensing is required by the State of Arizona for the use, proof of such licensure shall be provided.
- (13) Permitted as an accessory land use to a Family Dwelling, excluding Day Care and Travelers' Accommodation, Lodging. A home occupation shall not create any nuisance, hazard, or other offensive condition, such as that resulting from noise, smoke, fumes, dust, odors, or other noxious emissions.
- (14) Permitted as an accessory land use to the Commercial Services and Retail Trade Use Groups, limited to 50% of the gross floor area.
- (15) Permitted as an accessory land use to religious, commercial services, and retail trade use groups. Salvaging and Recycling is limited to recycling collection bins and to empty household product containers, such as, but not limited to, aluminum cans, glass and plastic bottles, and newspaper.

Typical notes:

- (a) Permitted uses shall be consistent with the definitions as established by the City of Tucson Land Use Code
- (b) Uses that are similar in nature and intensity to the uses expressly permitted in the Downtown Links District may be permitted as Special Exception land uses if approved through a Special Exception Land Use Procedure (LUC Section 5.3.9.2.A, Approval of the Development Services Director
- (c) All Land Uses are limited to 5,000 SF of gross floor area per business, except family dwelling and artist studio / residence
- (d) * Limited to 9th Street only

Iron Horse Mixed-Use Standards



Key

— — — Property Line ■ Allowable Building Area
 — · — Setback Line

Building Placement

Setback (Dist. from Property Line) ⁽¹⁾

Street Side	Match prevailing ⁽²⁾	A
Side yard	0' ⁽²⁾	B
Rear yard	0' ⁽³⁾	C

Height

Building Max.	3 stories or 40'	D
Street Frontage Height	25' ⁽²⁾	E
Interior Setback	12' ⁽²⁾	F
Setback from adj. Residential	25' ⁽²⁾	G

Key

— — — Property Line ■ Pedestrian Easement Zone
 — · — Setback Line ▨ Pedestrian Easement

Open Space

Lot Coverage

Max. Lot Coverage	100% ⁽¹⁾
Min. Landscape Area	0% ⁽²⁾

Open Space at Multi-unit Dwellings

Open Space	30 SF / Dwelling ⁽³⁾⁽⁴⁾⁽⁵⁾
Min. Landscape Area	50% of open space ⁽⁶⁾

Notes

(1) Covered by impervious surfaces (buildings, drives, parking, other)

(2) At other than multi-unit residential

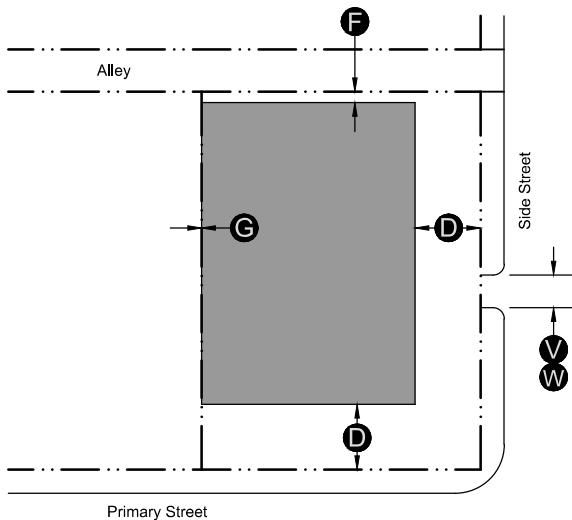
(3) Usable open space does not need to be located on ground.

(4) Usable open space may be any combination of private and common space.

(5) Parking may not be counted as open space

(6) Minimum landscape requirement applies only to common area open space

Iron Horse Mixed-Use Standards



Key

--- Property Line ■ Allowable Parking Area

Parking

Location (Distance from Property Line)

Street Setback	30'	H
Alley Setback	5'	I
Side Setback	0'	J

Required Spaces

Off-street	No off-street parking req'd
Accessible	As per underlying req's ⁽¹⁾⁽²⁾
Bicycle Facilities	See note # 1, and #3

Notes

- (1) Shall not be reduced or eliminated and shall be based on the number of motor vehicle parking spaces required prior to any modifications.
- (2) May be provided 1) on-site, 2) off-site within one-quarter of a mile of project site through a shared parking agreement, or 3) on-street on the same side of the street up to five spaces.

Parking

Notes (continued)

- (3) If automobile parking is reduced or eliminated, each development must provide a number of class one bicycle spaces equal to one half of the required number of automobile parking spaces omitted. These spaces are in addition to any bicycle parking required by the LUC based on land use group or class. Bicycle lockers are not permitted.

Parking Drive Width	15' Max. ⁽³⁾	V
---------------------	-------------------------	----------

On corner lots, parking drive shall not be located on primary street. **W**

Landscaping and Screening

Notes

A complete or partial exception to Landscaping and Screening Requirements (Sec.3.7) may be granted when shade is provided for pedestrians and customers, such as along sidewalks, pedestrian circulation paths, and outdoor patios, consistent with Development Standard 9-10.4.3.B.1 (Pedestrian Pathways in the RND).

Loading and Solid Waste

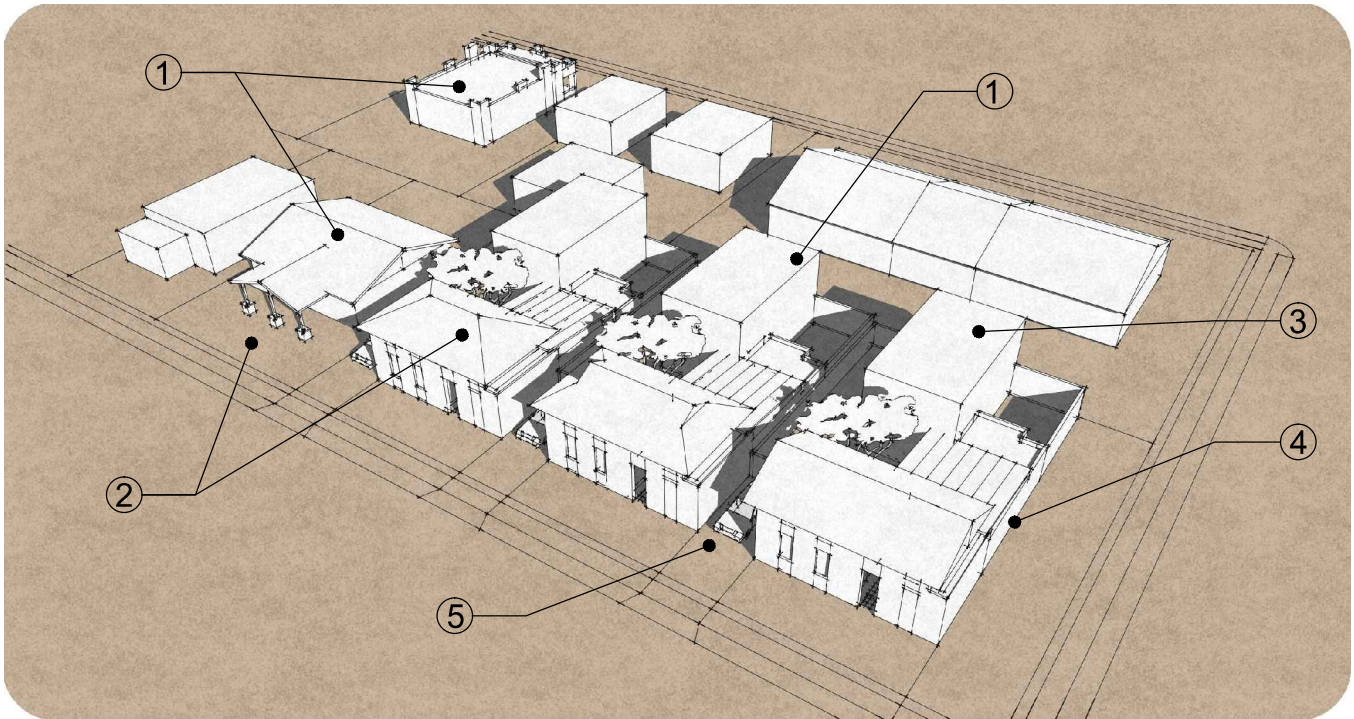
Loading

Loading	As per land use group or class ⁽¹⁾
Solid Waste	As per COT development standards ⁽²⁾

Notes

- (1) Off-street loading zone requirements may be reduced or waived if TDOT determines that no traffic safety issue is created.
- (2) On-site refuse collection container requirements governing access, type, and location may be modified if the Department of Environmental Services determines that no public health or traffic safety issue is created.
- (3) Parking drive shall be increased where required to provide fire access lane and shall meet requirements of the TFD.

Iron Horse Low Density Residential Infill Standards



Illustrative example of buildings in the Iron Horse low density residential infill area

Standards Summary

- (1) Modifications to historic structures that would reduce historic status are prohibited
- (2) Building heights and setbacks along street frontage respect historic context.
- (3) Two-Story allowed at rear of lot if privacy on adjacent properties is protected.
- (4) Minimum lot size reduced to 2,500 sf, lot coverage increased to 150%.
- (5) Parking requirement reduced to one car per dwelling unit.

Iron Horse Mixed-Use Standards

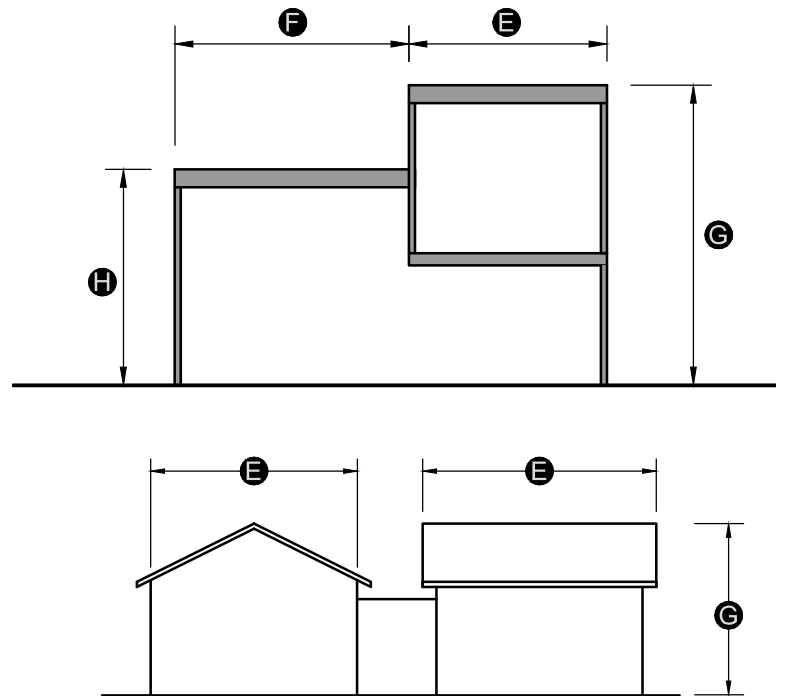
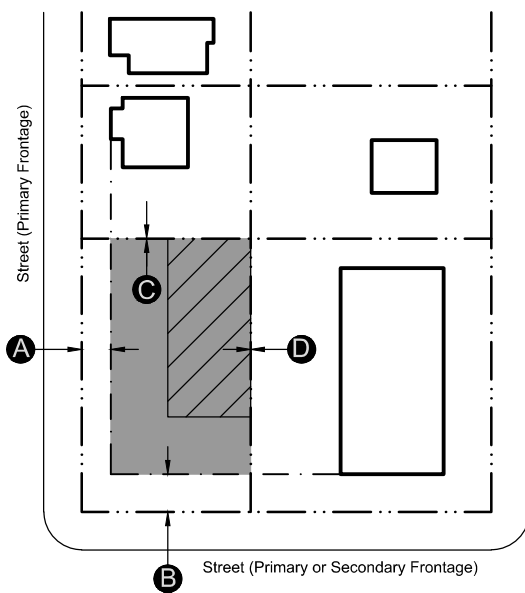
Land Use Type	9th Street Frontage Only*
Civic Use Group	
Civic Assembly	
Cultural Use	
Postal Service	
Religious Use	
Recreation Use Group	
Neighborhood Recreation (1)	
Residential Use Group	
Family Dwelling	
Artist Studio / Residence (2)	
Home Occupation (3)	
Industrial Use Group	
Salvaging or Recycling (4)	

-
- (1) In addition to the requirements of Chapter 6, Section 6-101, Outdoor Lighting Code, of the Tucson Code, any outdoor lighting utilized in conjunction with the use shall be located and directed so as to eliminate glare toward streets and adjoining residential areas.
 - (2) Adequate measures shall be provided to assure the health, safety, and welfare of the occupants in relation to any industrial process, use, or storage carried out in the artist studio/residence or on adjacent properties. Additionally, appropriate building code occupancy separation shall be ensured. On-site sale of the artist's products, including occasional shows of the artist's works, are permitted secondary uses.
 - (3) Permitted as an accessory land use to a Family Dwelling, excluding Day Care and Travelers' Accommodation, Lodging. A home occupation shall not create any nuisance, hazard, or other offensive condition, such as that resulting from noise, smoke, fumes, dust, odors, or other noxious emissions.

Permitted as an accessory land use to religious, commercial services, and retail trade use groups.
 - (4) Salvaging and Recycling is limited to recycling collection bins and to empty household product containers, such as, but not limited to, aluminum cans, glass and plastic bottles, and newspaper.
-

Note: Permitted uses shall be consistent with the definitions as established by the City of Tucson Land Use Code

Iron Horse Low Density Residential Infill Standards



Key

- — — Property Line
- — — Prevailing Setback
- Allowable Building Area
- ▨ Existing Structures

Building Placement

Setback (Dist. from Property Line)

Primary Street ⁽¹⁾	Match Prevailing ⁽²⁾	A
Secondary Street	10' or Prevailing	B
Side yard	0'	C
Rear yard	0'	D

Notes

- (1) Primary street is the street frontage to which dwellings face or are oriented.
- (2) Match prevailing setbacks of existing historic structures adjacent to parcel or on same side of street of same block.

Building Massing

Articulation

Max. unbroken bldg. mass	30' ⁽¹⁾	E
Second Story Setback	20'	F

Height

Building Max.	31'-4"	G
Street Frontage Max	20'	H

Notes

- (1) Any building over 30' wide must be broken down to read as a series of buildings no wider than 30', and should include a variety of building heights and roof

Land Use

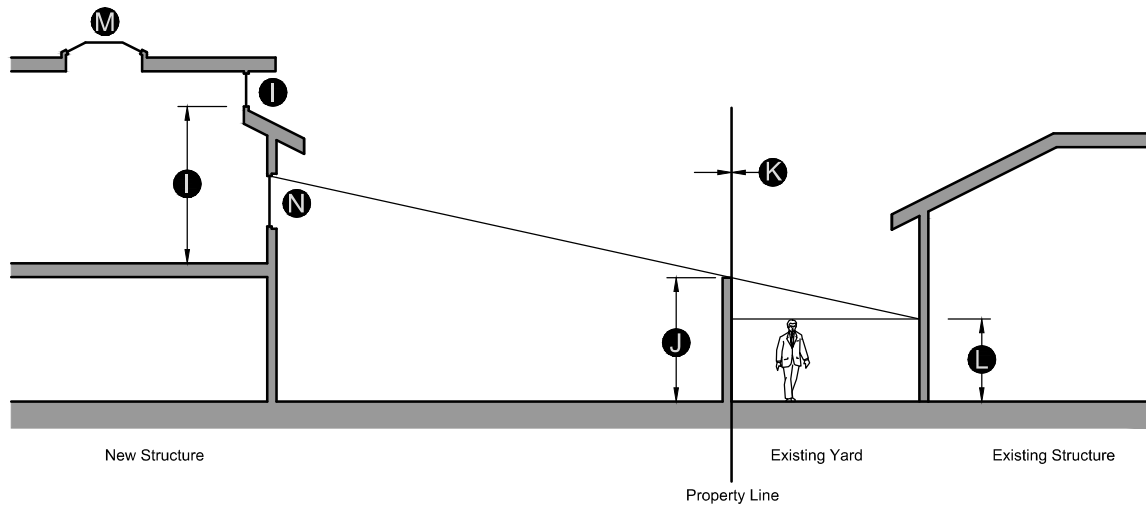
Lot Coverage

Max. Lot Coverage	100% ⁽²⁾
Min. Landscape Area	0% ⁽³⁾

Lot size

Min. Lot Size	2,500 SF
---------------	----------

Iron Horse Sub-District Standards



Privacy

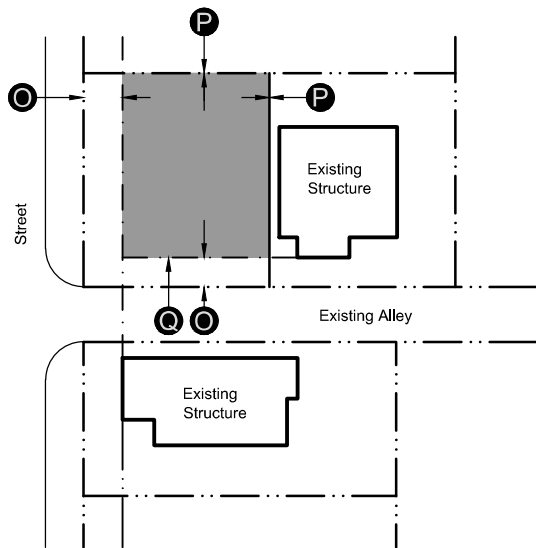
Clerestory height	9' min above 2nd floor	I
Site wall height	9' max. ⁽¹⁾	J
Site wall setback	0' min. ⁽¹⁾	K
Privacy zone	6' ⁽²⁾	L

Notes

- (1) Brick or stuccoed concrete masonry site walls may extend above Land Use Code requirements to 9' but may require structural engineering and building permits.
- (2) Privacy shall be afforded to existing developed adjacent rear or side yards by limiting second story fenestration. The lower 6' of adjacent yards shall not be visible from new second floor windows.
- (3) Alternative means of daylight may include:

Clerestory above 9'	I
Skylights	M
Translucent fixed glass	N

Iron Horse Sub-District Standards



Key

— — — — —	Property Line	■	Allowable Parking Area
- - - - -	Prevailing Setback	□	Existing Structures

Parking

Location (Distance from Property Line)

Street Setback	10' or Prevailing setback	⓪
Alley Setback	10' or Prevailing setback	⓪
Side Setback	0'	Ⓟ
Side Setback	0'	Ⓟ

Required Spaces

Off-street	One Space Per Dwelling Unit
------------	-----------------------------

Notes

Access to parking spaces may be by way of existing alleys.	⓪
--	---

STREETSCAPE STANDARDS

Intent of this section

The future development of the Downtown Links District (UOD #1), depends in a large part on the development of infrastructure improvements in the area, especially related to streetscape and related public right-of-way improvements.

In the **Toole Avenue Sub-District**, streetscape standards will be governed by the existing City of Tucson Development Standards for streetscape, except for the stretch of Toole Avenue between Stone Avenue and 6th Avenue. This streetscape is governed by the *Tucson Historic Warehouse Arts District Master Plan*, May 2004.

In the **Warehouse Triangle Sub-District**, the **4th Avenue Sub-District** and the **Iron Horse Sub-District**, for those developments opting for the Downtown Links District (UOD#1), streetscape is governed by the map on page 5-1. 6th Avenue, 4th Avenue, 8th Street east of 3rd Avenue, 2nd Avenue and 1st Avenue are all governed by the existing City of Tucson Development Standards for streetscape. For the other areas highlighted on the map on page 5-1, the streetscape standard is defined by the typical Downtown Links streetscape plan shown on page 5-2. This streetscape includes back-in diagonal parking on one side, parallel parking on the other side, wide sidewalks, street trees and wide expansions of the sidewalk at corners.

Since development in this District is likely to proceed piecemeal, the development of this streetscape

infrastructure cannot realistically be developed section-by-section as individual developments occur. Instead, the City of Tucson will seek to develop large sections of streetscape as funds become available. The funds targeted for this infrastructure development flows from 2011 changes in the State of Arizona requirements for Impact Fees.

Quoting from recently passed State Law:

9-463.05. Development fees; imposition by cities and towns; infrastructure improvements plan; annual report; advisory committee; limitation on actions; definitions
(L11, Ch. 243, sec. 1. Eff. 1/1/12)

A. A municipality may assess development fees to offset costs to the municipality associated with providing necessary public services to a development, including the costs of infrastructure, improvements, real property, engineering and architectural services, financing and professional services required for the preparation or revision of a development fee pursuant to this section, including the relevant portion of the infrastructure improvements plan.

B. Development fees assessed by a municipality under this section are subject to the following requirements:

B1. Development fees shall result in a beneficial use to the development.

B2. The municipality shall calculate the development fee based on the infrastructure improvements plan adopted

STREETSCAPE STANDARDS

Intent of this section

pursuant to this section.

B3. The development fee shall not exceed a proportionate share of the cost of necessary public services, based on service units, needed to provide necessary public services to the development.

.....

B6. Any development for which a development fee has been paid is entitled to the use and benefit of the services for which the fee was imposed and is entitled to receive immediate service from any existing facility with available capacity to serve the new service units if the available capacity has not been reserved or pledged in connection with the construction or financing of the facility.

.....

T7. "Necessary public service" means any of the following facilities that have a life expectancy of three or more years and that are owned and operated by or on behalf of the municipality:

(a) Water facilities, including the supply, transportation, treatment, purification and distribution of water, and any appurtenances for those facilities.

(b) Wastewater facilities, including collection, interception, transportation, treatment and disposal of wastewater, and any appurtenances for those facilities.

(c) Storm water, drainage and flood control facilities, including any appurtenances for those facilities.

(d) Library facilities of up to ten thousand square feet that provide a direct benefit to development, not including equipment, vehicles or appurtenances.

(e) Street facilities located in the service area, including arterial or collector streets or roads that have been designated on an officially adopted plan of the municipality, traffic signals and rights-of-way and improvements thereon.

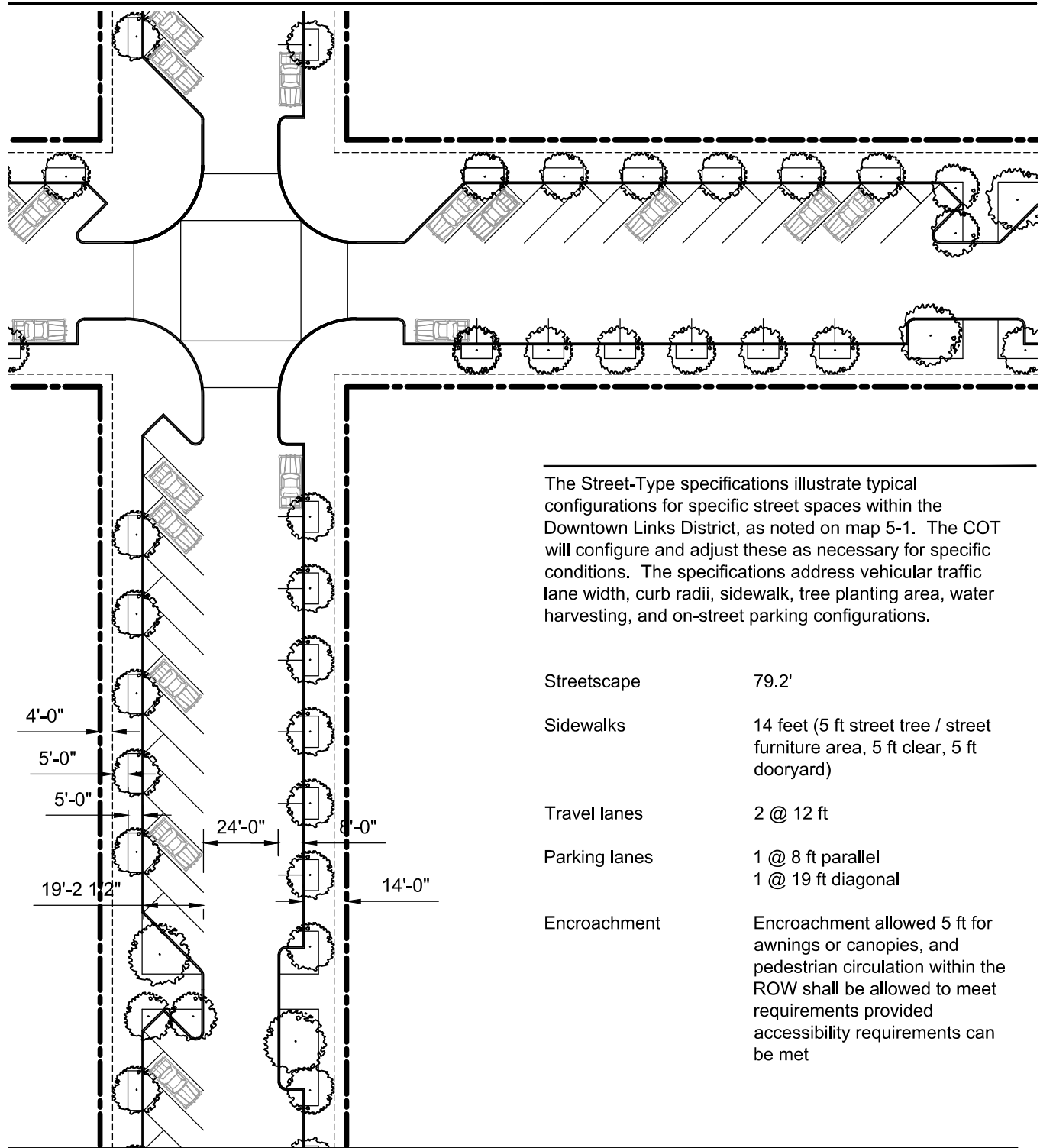
.....

T9. "Service area" means any specified area within the boundaries of a municipality in which development will be served by necessary public services or facility expansions and within which a substantial nexus exists between the necessary public services or facility expansions and the development being served as prescribed in the infrastructure improvements plan.

Based on these changes in State Law, it is proposed in this City of Tucson Downtown Links District (UOD#1), that all City of Tucson Impact Fees (Development Fees) generated by development in the Downtown Links District (UOD#1) be expended in the Sub-District in which the development occurs, with first priority going to streetscape improvements. The City of Tucson, at its sole discretion, may choose to bond the full development of streetscape as shown on map 5-1 and drawing 5-2 and use revenue from Impact Fees (Development Fees) to repay the bonds.

STREETSCAPE STANDARDS

Typical street plan



The Street-Type specifications illustrate typical configurations for specific street spaces within the Downtown Links District, as noted on map 5-1. The COT will configure and adjust these as necessary for specific conditions. The specifications address vehicular traffic lane width, curb radii, sidewalk, tree planting area, water harvesting, and on-street parking configurations.

Streetscape	79.2'
Sidewalks	14 feet (5 ft street tree / street furniture area, 5 ft clear, 5 ft dooryard)
Travel lanes	2 @ 12 ft
Parking lanes	1 @ 8 ft parallel 1 @ 19 ft diagonal
Encroachment	Encroachment allowed 5 ft for awnings or canopies, and pedestrian circulation within the ROW shall be allowed to meet requirements provided accessibility requirements can be met

Key

—•—•— Property line

----- Dooryard

STREETSCAPE PLAN



APPENDIX A.3

DOWNTOWN LINKS ROADWAY AND DRAINAGE PROJECT

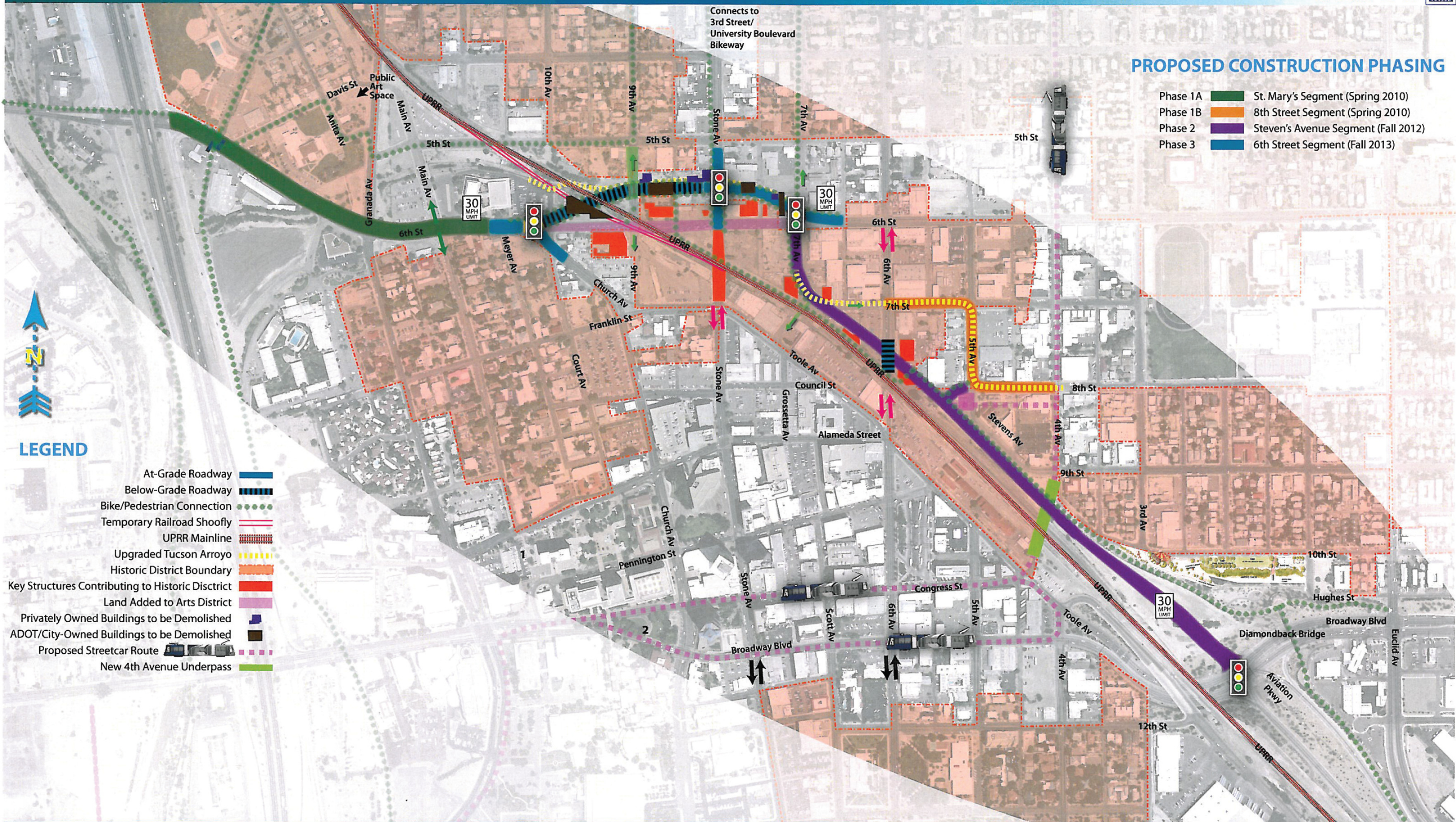
PROPOSED CONSTRUCTION PHASING

- Phase 1A St. Mary's Segment (Spring 2010)
- Phase 1B 8th Street Segment (Spring 2010)
- Phase 2 Stevens Avenue Segment (Fall 2012)
- Phase 3 6th Street Segment (Fall 2013)



LEGEND

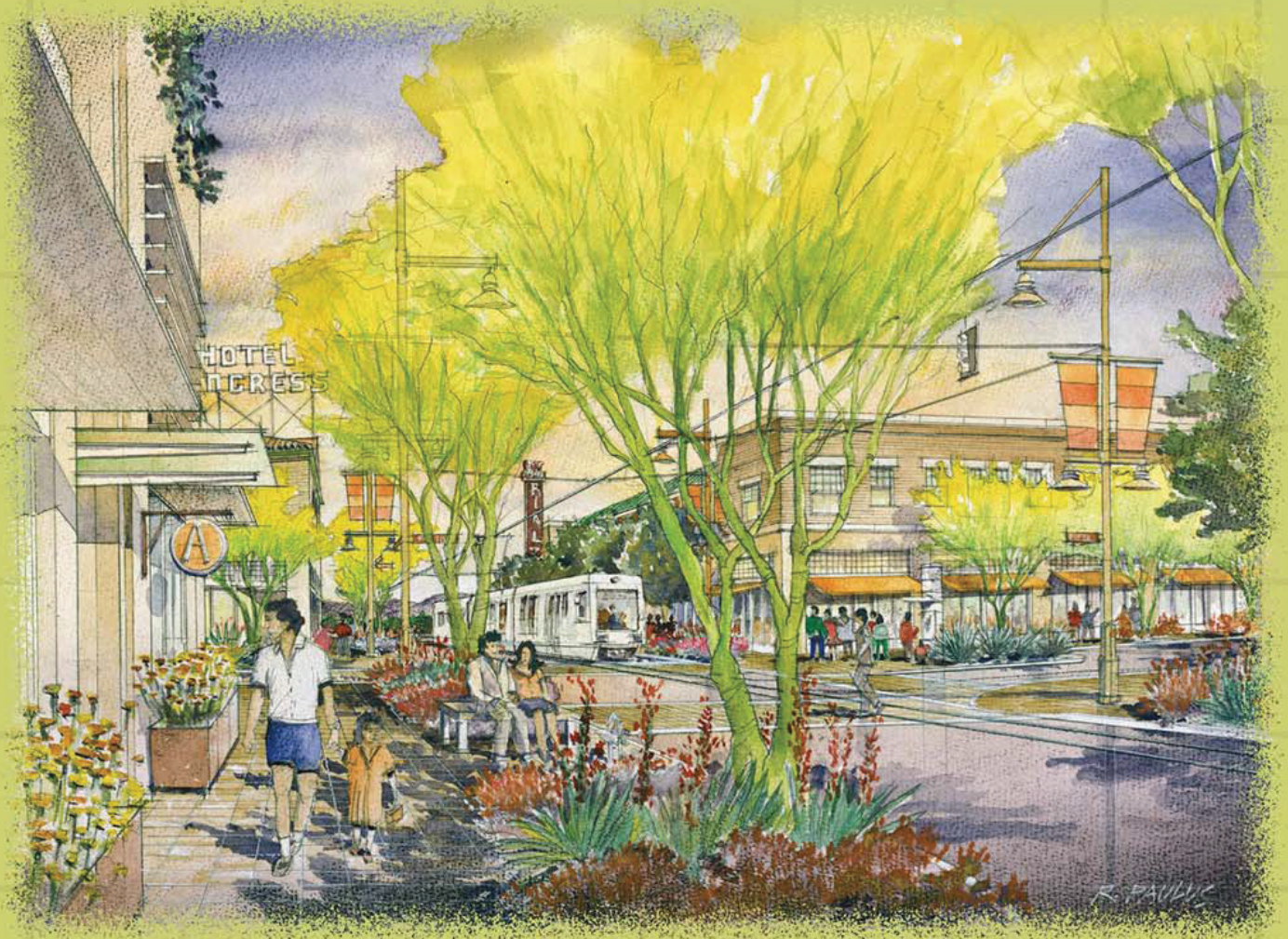
- At-Grade Roadway
- Below-Grade Roadway
- Bike/Pedestrian Connection
- Temporary Railroad Shoofly
- UPRR Mainline
- Upgraded Tucson Arroyo
- Historic District Boundary
- Key Structures Contributing to Historic District
- Land Added to Arts District
- Privately Owned Buildings to be Demolished
- ADOT/City-Owned Buildings to be Demolished
- Proposed Streetcar Route
- New 4th Avenue Underpass



APPENDIX A.4

DOWNTOWN INFRASTRUCTURE PLAN, UNIVERSITY AREA PLAN, AND WEST UNIVERSITY PLAN

DOWNTOWN INFRASTRUCTURE STUDY



MAY 2007
TUCSON DOWNTOWN PARTNERSHIP

DOWNTOWN INFRASTRUCTURE STUDY

MAY 2007

TUCSON DOWNTOWN PARTNERSHIP

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INTRODUCTION

The future of Downtown Tucson faces at a critical crossroads that will determine its future success. For the past several years, a great amount of time and energy has been invested to lay the groundwork for downtown development, and the downtown area is poised to experience a positive transformation. This transformation is by no means assured, however. There remain a number of critical issues that need to be addressed in order to ensure the success of the downtown area.

Perhaps the single most important issue that will ensure successful downtown redevelopment is the provision of adequate infrastructure to support future uses. Without sufficient infrastructure to support downtown redevelopment, we will lose exciting opportunities because the costs for upgrading and/or extending utilities in the downtown area are too great for any one project to absorb.

To date, very little has been done to provide adequate infrastructure to meet the City's goals for a thriving and vital downtown. There is a great deal of uncertainty among current and potential developers as to the location and viability of current infrastructure services.

To solve this problem, the City of Tucson, Pima County, utility agencies and private sector representatives have jointly developed recommendations for infrastructure improvements. These recommendations identify the location and capacity of current infrastructure and provide a blueprint for infrastructure improvements necessary to support downtown development over the next twenty years.

What is "Infrastructure?"

In the context of downtown redevelopment and this study, the term "infrastructure" is used to mean the services and level of capital investment required to support a successful urban environment. Beyond the typical definition of infrastructure – supplying utility and transportation services for development – we include parks and open space, pedestrian/streetscape improvements, transit (rail/bus), public parking, and public services (fire/police/trash services, etc.), among others.

Dealing with infrastructure in an urban context is much more challenging than in a suburban or greenfield development scenario. Some of the challenges we face are:

- Aging facilities (streets/utilities) are near, at, or beyond their design life
- Information on level of existing services available and the locations of those services is incomplete (especially for underground utilities)
- It is difficult to predict or control the phasing of development in an urban setting (as opposed to a new suburban development where phasing and infrastructure delivery can be tightly controlled)
- Intensity of activity/traffic makes working in downtown areas difficult to coordinate/stage
- Streetscape and public space improvements designed specifically for downtown settings (e.g., paving, lighting, landscaping, signage, etc.) are hard to find with a durable, higher level of finish

- Multiple property owners/interests are involved in/affected by infrastructure decisions
- Physical space is insufficient to accommodate all uses/needs efficiently (e.g., right-of-way widths are fixed and usually are not expandable in a downtown setting)
- Additional costs to accommodate/mitigate challenges of infrastructure development in an urban setting

These challenges can be met with careful planning and diligence, and this report is intended to serve as a starting point for the planning, design, funding and implementation of infrastructure improvements in Downtown Tucson.

Study Principles

Underlying the recommendations of this report are a set of guiding principles that are critical to the ultimate success of any effort to implement infrastructure improvements in downtown Tucson. As projects progress in the downtown area, these three principles will help ensure that decisions on investment in infrastructure are made wisely.

- A. *Infrastructure investment must be targeted to projects that make Downtown "Development Ready"*** – Ensure that the necessary infrastructure is in place to support downtown development as it occurs and to meet the public's goals of a thriving and vital downtown district. Emphasis should be placed on leveraging private investment to the greatest extent possible so that public investment provides the best possible economic return to the City.
- B. *Infrastructure work must be fully coordinated with other efforts in the downtown area – public and private.*** There are a number of infrastructure needs identified in this report - streetscape, streetcar, utilities, parks, etc. – that will require careful coordination. The City and the private sector need to work to ensure that there is a global, coordinated view of how downtown infrastructure is financed, designed, and constructed. The net benefit of this coordination is the minimization of construction impacts and the maximization of cost effectiveness and private investment leverage.
- C. *Do it once, do it right.*** – It is imperative that the improvements slated for downtown Tucson are of the highest quality. It is also critical that we do these improvements once. Downtown cannot afford – financially or otherwise – streets being torn open two or more times. A policy should be established of opening a street only once, with exceptions for minor utility service taps.

EXECUTIVE SUMMARY

The future of Downtown Tucson is in our hands. Today's actions will transform the downtown area into the thriving and vital district that truly serves as everybody's neighborhood.

There will never be a better time than now to address one of the keys to unlocking downtown's potential: the planning, funding, design and construction of infrastructure improvements that support downtown redevelopment efforts. The end benefits of this process are many, and most significantly would include:

- *Leverage of public investment* – For every \$1 of public money invested in downtown, it is conservatively anticipated that \$5 of private investment would be leveraged. This means new jobs, housing, revenues, and services within the downtown area.
- *Development Ready Downtown* – investing in infrastructure downtown will create a downtown that is "Development Ready." A major factor which is currently inhibiting downtown development is the lack of certainty surrounding needed improvements, including the Modern Streetcar, utility services, and adequate public funding for critical infrastructure elements.
- *Well-coordinated improvement efforts* - By designing and constructing various elements in a coordinated fashion, we can minimize construction impacts and maximize cost efficiency.
- *Creation of a world-class urban environment* – We should not be shy about striving for a world-class urban environment in downtown Tucson. Investing in a high quality streetscape, open space, transit system, and storefront environments can help create a unique sense of place for Tucsonans and visitors alike.

Opportunities and Challenges

Developing and implementing infrastructure improvements in downtown settings generally and downtown Tucson specifically presents unique opportunities and challenges. Tucson is currently blessed with a number of tools and projects that, if properly utilized, can help quicken the pace of downtown development and provide a catalyst for the revitalization of downtown. The opportunities present in downtown Tucson that can and should be leveraged include:

- The Modern Streetcar project, which will traverse the entire downtown area and is scheduled for completion by 2010
- Transportation projects such as the Fourth Avenue Underpass and Downtown Links, which provide opportunities to enhance downtown access and tie in other needed improvements
- An involved and motivated development community that is ready to work with the City to ensure that needed improvements are put in place and downtown can be a successful environment
- Funding sources – both public and private – that can be tapped to help finance needed improvements and ensure the ongoing success of downtown

While these and other opportunities are present in downtown, there are also a number of challenges/issues that need to be addressed, including:

- Lack of accurate as-built information for underground utilities within the downtown core

- Insufficient capacity of some infrastructure services to meet future development demands
- Lack of a clear plan for coordination of improvements within downtown Tucson or the prioritization and funding of critical infrastructure improvements
- No central point person at the City whose full-time job is to plan and implement downtown improvements and who has the authority to pull together/coordinate the various agencies working in downtown

Guiding Principles

In identifying opportunities and challenges, a set of guiding principles emerged to help formulate the recommendations and assist with future funding and prioritization decisions. These principles are:

- A. *Infrastructure investment must be targeted to projects that make Downtown "Development Ready"*** – Ensure that the necessary infrastructure is in place to support downtown development as it occurs and to meet the public's goals of a thriving and vital downtown district. Emphasis should be placed on leveraging private investment to the greatest extent possible so that public investment provides the best possible economic return to the City.
- B. *Infrastructure work must be fully coordinated with other efforts in the downtown area – public and private.*** There are a number of infrastructure needs identified in this report - streetscape, streetcar, utilities, parks, etc. – that will require careful coordination. The City and the private sector need to work to ensure that there is a global, coordinated view of how downtown infrastructure is financed, designed, and constructed. The net benefit of this coordination is the minimization of construction impacts and the maximization of cost effectiveness and private investment leverage.
- C. *Do it once, do it right.*** – It is imperative that the improvements slated for downtown Tucson are of the highest quality. It is also critical that we do these improvements once. Downtown cannot afford – financially or otherwise – streets being torn open two or more times. A policy should be established of opening a street only once, with exceptions for minor utility service taps.

As work progresses on infrastructure development in downtown Tucson, these principles must guide our funding and work efforts.

COSTS AND FUNDING

It will take a significant commitment of financial resources – public and private - to make downtown "Development Ready." Ensuring that we can invest in downtown to meet these costs, however, will pay off in the long run through increased private investment in downtown Tucson and a downtown that Tucsonans can be proud of.

Financing the infrastructure for downtown will take equal parts creativity and commitment. It will likely take many years before this plan is substantially complete, but the positive impact of these investments will be felt immediately.

The costs for the proposed improvements – along with the general categorization of anticipated funding sources to meet these costs – are summarized below and broken down in greater detail later in the report. Estimated sources to fund this infrastructure are a combination of federal grants, state allocations, county bonds, Tax Increment Finance (TIF) funds, other local taxes, user fees, Highway User Revenue Funds (HURF), impact fees, and developer contributions.

	COSTS	FUNDING	
		Anticipated Funding Source	
		Agency	Public, Private & Other Sources
Underground Utilities	\$ 94,044,500	\$ 54,290,000	\$ 39,754,500
Information Technology	\$ 14,600,000	\$ 2,300,000	\$ 12,300,000
Transportation	\$ 15,000,000	\$ -	\$ 15,000,000
Parking	\$ 303,100,000	\$ 231,600,000	\$ 71,500,000
Streetscape	\$ 107,160,344	\$ -	\$ 107,160,344
Services	\$ 1,368,300	\$ 1,318,300	\$ 50,000
Archaeology	\$ 3,302,000	\$ 3,302,000	\$ -
Environmental	\$ 22,191,920	\$ 22,191,920	\$ -
Parks	\$ 73,900,000	\$ 66,100,000	\$ 7,800,000
Public Programs	\$ 5,000,000	\$ -	\$ 5,000,000
Total	\$ 639,667,064	\$ 381,102,220	\$ 258,564,844

Recommendations

A series of recommendations for implementing this study are presented in this report. A number of critical recommendations are highlighted here, and can be found in greater detail in the Recommendations and Next Steps portion of the report. As intensive as this work process has been, there is still a great amount of work to do to fully plan, coordinate, and implement infrastructure improvements throughout the downtown core:

- Convene a working group comprised of City agencies, utility companies, and downtown interests to oversee the implementation of this report's recommendations.

- Hire a "Downtown Czar" to oversee the City's redevelopment efforts downtown, including the coordination of the City's various capital programs and overall direction of the various agencies involved in downtown.
- Build on past work/studies to create a set of streetscape standards for downtown streets that will ensure the consistency and quality of the public realm.
- Identify, fund, and implement a first phase streetscape project ("Pilot Project") at the east end of Congress Street that fully coordinates with the Fourth Avenue Underpass, future streetcar, and private development projects.
- Create a phasing plan for streetscape improvements that considers or accommodates other public projects and private development. Provide adequate funding from a variety of sources (public and private) to implement streetscape improvements consistent with the phasing plan.
- Design, fund and implement a façade improvement strategy to target and improve dilapidated storefronts in the downtown core.
- Coordinate work in the public rights-of-way (e.g., streetcar, Downtown Links, Fourth Avenue Underpass, etc.) with utility companies to ensure that necessary utility upgrades are provided concurrent with public works projects.
- Coordinate private development efforts and timelines with utility companies to ensure that utility services are available to meet current and future development needs in the downtown core.
- Create a free Wi-Fi zone in downtown.
- Identify what, if any, utility impacts are present along the streetcar alignment. Where relocation is necessary, ensure that utility relocations are consistent with future capacity needs for downtown.
- Identify other improvements (e.g., streetscape improvements, intersection improvements, etc.) that should be coordinated and timed to coincide with the Modern Streetcar to avoid future construction disruption.
- Identify potential open space opportunities in the downtown core and establish a funding plan to acquire and develop these spaces.
- Create a five year "sources and uses" funding plan for infrastructure development. The plan should include specific recommendations for funding sources by project and a cash flow by year. The plan should be updated annually to cover the next five year period and include new projects as funding allows.
- Creatively identify potential financing sources for infrastructure improvements. Utilize the City's ability to issue tax-exempt financing to stretch infrastructure dollars as far as possible.

STUDY OVERVIEW

PARTICIPANTS

Study Coordination	Tucson Downtown Partnership (TDP)
Consultants	GLHN Architects and Engineers HDR Engineering, Inc. Rob Paulus Architect
Private Utilities	Arizona Fiber AT&T Cox Communications, Inc. Level 3 Communications MCI/Verizon McLeod USA Qwest Communications, Inc. Southwest Gas Corporation Tucson Electric Power Company (Unisource)
Pima County	County Administrator Information Technology Wastewater
City of Tucson	City Manager Development Services Environmental Services Fire Information Technology Parks and Recreation ParkWise Police Rio Nuevo Transportation Tucson Convention Center Tucson Water Urban Planning & Design
State of Arizona	Arizona Department of Transportation
Other	Corps of Engineers/Floodplain Downtown Stakeholders Tucson Downtown Alliance (TDA) Tucson Downtown Merchants of TDA

METHODOLOGY

The information contained in the Downtown Infrastructure Study was the result of an intensive seven-week public-private collaborative process. More than 100 meetings were conducted between Tucson Downtown Partnership (TDP), City of Tucson, Pima County, Tucson Downtown Alliance, area utilities, and other area stakeholders.

GLHN Architects and Engineers (GLHN), a frequent consultant to the City of Tucson for infrastructure analysis, was subcontracted to perform a limited Downtown Utility Master Plan Study. Through face-to-face meetings with the City of Tucson, Pima County, and area utilities, an order of magnitude capacity study and cost estimates to correct deficiencies was obtained.

Utilizing a map and square footage estimates of downtown developments anticipated over the next twenty years, GLHN surveyed the area utilities to:

- Identify the current location, capacity and deficiencies in the downtown utility infrastructure system.
- Identify the type and size of infrastructure upgrades necessary to support a phased, twenty-year development horizon for the downtown area.
- Prepare a cost estimate for infrastructure improvements.
- Examine the most recent alignment of the modern streetcar for its impact on below-street utilities.

Follow-up meetings with the utilities addressed timelines for implementing these changes and methods for funding the improvements.

Rob Paulus Architect was retained to perform a detailed analysis of the existing area streetscape and to develop a cost estimate for bringing that streetscape up to competitive metropolitan standards. The firm conducted a comprehensive, block-by-block review of the downtown pedestrian environment. With the assistance of City of Tucson staff and area stakeholders, an extensive matrix of ideas for upgrading the downtown streetscape was developed.

City of Tucson staff, through a series of weekly meetings with the Tucson Downtown Partnership, provided information regarding transportation, police, fire, archaeology, environmental assessment, sanitation, parks, information technology, parking, façade improvements, and downtown development programs. Information on the modern streetcar was provided by City of Tucson Department of Transportation and HDR Consultants.

STUDY AREA

The Downtown Infrastructure Study project area is roughly bounded by Street Mary's Road/6th Street to the north, 4th Avenue/Barraza-Aviation Parkway to the east, 22nd Street to the south, and Mission Road/Grande Avenue to the west. For the exact study boundaries, please refer to the enclosed study area map.

As this study was primarily focused within the Rio Nuevo Tax Increment Finance District, the residential portions of Dunbar Springs, West University, Armory Park, Santa Rita, Santa Rosa, Barrio Viejo and Menlo Park were not surveyed. The mixed-commercial district situated north of West Congress Street and west of the Santa Cruz River Park was also not considered.

FINAL FOR UTILITY PROJECTIONS

DOWNTOWN DEVELOPMENT & INFRASTRUCTURE PROJECTIONS					Estimated Condo, Retail, Office, Other Space Quantities				
DATA subject to change at any time					Print Date = 3/29/2007				
#	Project	Developer	Acres	Bldg SF	Retail	Residential SqFt	Residential Units	Office	Other
Projects starting in 0-18 mos					33%		1000		
O-1	44 Broadway I	Ron Schwabe	1.0	40,000	8,500	31,500	30		
O-2	Carlos Arruza Block	City of Tucson	1.0	100,000	14,375	85,625	86		
O-3	City/County Courts I	City of Tucson/Pima Co.	3.5	375,000					375,000
O-4	Cultural Plaza/Mission complex	City of Tucson	16.0	44,000					44,000
O-5	Diamond Rock Plaza	HSL/Roger Karber	3.5	510,000	50,000	0	0	100,000	360,000
O-6	Downtown Fire Station	City of Tucson	2.8	67,000					67,000
O-7	Julian Drew Block	Ross Rulney	1.0	64,375	8,810	38,543	48	8,810	8,212
O-8	Lofts on 5th Avenue	VantagePoint/Geo. Pilloton	2.0	120,000	28,750	91,250	91		
O-9	Mercado District	Rio Development	14.0	400,000	100,000	300,000	254		
O-10	MLK Block	WDD/City of Tucson	1.9	156,400	15,000	141,400	176		
O-11	Presidio Terrace	Reliance/Peggy Noonan	1.2	134,500	4,200	130,300	120		
O-12	Rialto Block/Congress	Rialto/Biggers	0.6	38,886	16,964	13,000	13		8,922
O-13	Santa Rita Resort/Condo	Pathway Developments	2.4	211,871	24,601	99,150	95		88,120
O-14	The Post	Bourn Partners	0.5	78,850	10,000	68,850	47		
	Total acreage and square footage starting in next 18 mos		51.3	2,340,882	281,199	999,619	960	108,810	951,254
Projects starting in 19-36 mos									
G-1	200 Block	WDD	1.0	185,000	15,000	170,000	140		
G-2	Arena	City of Tucson	5.8	300,000					300,000
G-4	El Mirador	Town West/Jim Horvath	1.9	269975	66800	193175	150	10,000	
G-5	La Placita	Bourn Partners	3.5	218,000	28,000			190,000	
G-6	Menlo Park 12-acres	City of Tucson	14.3	550,000	100,000	400,000	400	50,000	
G-7	Museum complex	City of Tucson	16.0	390,000					390,000
G-8	Plaza Centro	Oasis/Jim Campbell	2.4	152,400	32,400	120,000	120		
G-9	Police Department TENTATIVE	City of Tucson	0.3	80,000					80,000
G-10	Rialto Block/Broadway	Rialto/Biggers	0.5	70,000	17,000	43,000	40	10,000	
G-11	Ronstadt Transit Ctr	City of Tucson	2.0	135,025	45,000	25,000	25	20,000	45,000
G-12	Sixth Avenue & Toole	City of Tucson	1.4	63,000				52,000	11,000
G-13	TCC Expansion	City of Tucson	1.0	45,000					45,000
	Total acreage and square footage starting in 19-36 mo		50.1	2,458,400	304,200	951,175	875	332,000	871,000

Court Building

Museum/historic recreations

Excl existing 200 hotel rms

Fire station w/dorms for 14 firemen

Artist studio space

Excl existing 91 units @ MLK

Theatre

Hotel

Museums

Crime Lab

Multiplex

Bus Stn

Meeting rms

Court Building
Museum/historic recreations
Excl existing 200 hotel rms
Fire station w/dorms for 14 firemen
Artist studio space

Excl existing 91 units @ MLK

Theatre
Hotel

Museums
Crime Lab

Multiplex
Bus Stn
Meeting rms

FINAL FOR UTILITY PROJECTIONS

DOWNTOWN DEVELOPMENT & INFRASTRUCTURE PROJECTIONS					Estimated Condo, Retail, Office, Other Space Quantities				
DATA subject to change at any time					Print Date = 3/29/2007				
#	Project	Developer	Acres	Bldg SF	Retail	Residential SqFt	Residential Units	Office	Other
Projects starting in 3-5 yrs									
Y-1	44 E Broadway II	Ron Schwabe	0.3	90,000	15,000	50,000	50	25,000	
Y-2	Baccus Lot: Broadway/Stone	Buck Baccus	0.5	21,000				21,000	
Y-3	Block 175	DDC	2.2	200,000	31,625	168,375	168		
Y-4	Fourth Ave./Brdwy	Powell/Heller	1.2	100,000	8,000	72,000	72	20,000	
Y-5	I-10 frontage @ Cushing - 22nd	Private development	25.0	535,000	35,000	500,000	425		
Y-6	Norville Exhibition Ctr	Alan Norville/Eric Hutchens	3.0	200,000	43,124	0	0		156,876
Y-7	Plaza San Agustin	Private development	1.0	90,000	10,000	80,000	65		
Y-8	Pueblo Garage	Buck Baccus	1.3	80,000	14,375	65,625	66		
Y-9	Steinfeld West Triangle	Private development	1.1	80,000	14,375	30,000	30		35,625
Y-10	Warehouse District South of RR	City of Tucson/private development	3.6	200,000	15,000	40,000	40	20,000	125,000
	Total acreage and square footage starting in 3-5 yrs		39.1	1,596,000	186,499	1,006,000	916	86,000	317,501
Projects starting after 5 yrs									
B-1	I-10 frontage @ Congress, se	Private development	5.7	80,000	75,000			5,000	
B-2	Inn Suites	Tucson St. Mary's Suite	6.0	345,000	50,000	295,000	295		
B-3	Chase Bank lot	Private development	0.2	50,000	10,000	40,000	40		
B-4	DDC Council lot	Private development	0.4	80,000	8,000	64,000	64	8,000	
B-5	Library Plaza South	City of Tucson	0.5	150,000	7,187	142,813	143		
B-6	Library Plaza West	Private development	0.3	100,000	10,000	90,000	90		
B-7	El Rio Center Redevelopment	Privatenonprofit development	6.6	500,000	20,000	50,000	50	100,000	330,000
B-8	Millstone Site	Joe Millstone	5.0	137,805	75,000	62,805	63		
B-9	Pima Co pkg lot @ B'way	Pima County	0.7	145,000	25,000	120,000	120		
B-10	Reliance Tower II pad	HUB Properties	0.5	150,000	8,000	71,000	71	71,000	
B-11	TCC parking lots	City of Tucson/Private development	12.7	400,000	150,000	150,000	150	60,000	40,000
B-12	Theresa Lee site	City of Tucson	2.7	100,000					100,000
B-13	Warehouse District North of RR	Private development	6th&6th	100,000		100,000	100		
	Total acreage and square footage starting after 5 years		25.8	2,337,805	438,187	1,185,618	1,186	244,000	470,000
	TOTAL BUILDOUT of PROJECTS LISTED		166.38	8,733,087	1,210,086	4,142,412	3,936	770,810	2,609,755
Note: all data is estimated and subject to verification									

Projects that are shaded should be carefully considered. They have utility service today. However, future development is anticipated to be substantially more intense on the lots.

Additional comments:

Total retail buildout is probably ambitious.

Total residential is probably on the low side.

Possible Future Downtown Development

Legend

— Street Car Route

Development Chronology

- 0-18 Months
- 19-36 Months
- 3-5 Years
- 3-5 Years (Infill Development)
- 5+ Years

Projects Starting in 0-18 Months

- O-1 44 E. Broadway I
- O-2 Carlos Aruza Block
- O-3 City/County Courts I
- O-4 Cultural Plaza/Mission complex
- O-5 Diamond Rock Plaza
- O-6 Tucson Fire Department
- O-7 Julian Drew Block
- O-8 Lofts on 5th Avenue
- O-9 Mercado District
- O-10 MLK Block
- O-11 Presidio Terrace
- O-12 Rialto Block/Congress
- O-13 Santa Rita Resort/Condo
- O-14 The Post
- O-15 City/County Courts II

Projects Starting in 19-36 Months

- G-1 200 Block
- G-2 Arena
- G-3 El Mirador
- G-4 La Placita
- G-5 Merlo Park 12-acres
- G-6 Museum complex
- G-7 Plaza Centro
- G-8 Tucson Police Department
- G-9 Rialto Block/Broadway
- G-10 Ronstadt Transit Center
- G-11 Sixth Avenue & Toole
- G-12 TCC Expansion

Projects Starting in 3-5 Years

- Y-1 44 E. Broadway II
- Y-2 Baccus Lot
- Y-3 Block 175
- Y-4 Fourth Ave./Broadway
- Y-5 I-10 frontage at Cushing - 22nd
- Y-6 Norville Exhibition Center
- Y-7 Plaza San Agustín
- Y-8 Pueblo Garage
- Y-9 Steinfield West Triangle
- Y-10 Warehouse District South of Railroad

Projects Starting in 5+ Years

- B-1 I-10 frontage at Congress, south
- B-2 Inn Suites
- B-3 Chase Bank lot
- B-4 DCC Council lot
- B-5 Library Plaza South
- B-6 Library Plaza West
- B-7 Mercado extension
- B-8 Millstone Site
- B-9 Pima County parking lot, Broadway
- B-10 Reliance Tower II pad
- B-11 TCC 1,2,3
- B-12 Theresa Lee site
- B-13 Warehouse District North of railroad

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**Tucson
Downtown
Partnership**



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UNDERGROUND UTILITIES

UTILITIES SUMMARY

Tucson Downtown Partnership, via a contract with Bourn Partners, LLC, retained GLHN Architects and Engineers, Inc. to provide civil and electrical engineering services to perform a brief utility master plan for the downtown Tucson planning area. This effort projects existing and future utility loads and assesses the capacity of the selected utilities within the area defined by the 3/5/07 Tucson Downtown Partnership Downtown Development & Infrastructure Projections Map. The area defined by the yellow boundary on this map is referred to in this report as the “Downtown Tucson Planning Area.”

The utilities examined are:

Water	Tucson Water
Sanitary Sewer	Pima County Wastewater
Storm Drain	Tucson Department of Transportation
Telephone	Qwest Communications
Power	Tucson Electric Power
Cable Television	Cox Communications
City of Tucson IT	COT Information Technology Communications Engineering
Pima County IT	PC Information Technology
Others	Level 3 Communications, Broadwing, Wiltel, AT&T, MCI/Verizon, McLeod, Union Pacific Railroad

The City has provided GLHN with utility maps for the first five utilities above; GLHN will obtain additional mapping for these utilities and others as requested and available. The City has also provided GLHN with existing and projected building sizes, occupancies, and locations within the defined downtown Tucson planning area.

The City's information for existing buildings of all types within the downtown Tucson boundaries is approximately 5.4 million square feet. The City's projected new construction over the entire planning period is approximately 8.8 million square feet, for a total building area of approximately 14.2 million square feet.

GLHN analyzed existing and future building loads against industry-typical consumption data, and projected existing and future utility requirements for electricity, potable water, sanitary sewer, and natural gas systems. The results of this analysis demonstrate the projected increase in load on the utility systems. The results are presented in aggregate, and for each major street affected by new development shown on the 3/5/07 Tucson Downtown Partnership Downtown Development & Infrastructure Projections Map.

GLHN has also included a discussion of the various Information Technology providers within the downtown Tucson planning area.

Note that the results presented in this utility capacity assessment are not the product of a detailed engineering effort, and are not a substitute for due diligence in design and construction. The capacity analyses are based only upon existing and future aggregate building information

provided by the City, and on industry-typical utility demand and consumption values on a square-foot of building space basis.

Cost opinions within the narratives for each utility are based upon GLHN experience with per-linear-foot cost for complete-in-place piping systems, and line-item breakdowns of materials, labor, and burdens are not provided. Costs have not been adjusted for inflation, and have not been escalated into the future.

Utility Relocations

Locations of all utilities, both above and below ground, are subject to change. Utility systems, particularly communications systems, expand and recombine rapidly. Public and private improvement projects require relocation of existing utilities. The new Justice Court/Municipal Court Complex, located southeast of the Stone Avenue/Toole Avenue intersection, will require vacation of two streets, with necessary relocation of a number of communications systems. Another project in the same area, Toole Avenue Undergrounding, from Stone to 6th Avenue, will also have impacts on aerial power and communications lines in this area. The user of this report should realize that the existing utility locations described in the text and shown on the maps provide a snapshot of the infrastructure at this moment in time.

UNDERGROUND UTILITIES

PIMA COUNTY WASTEWATER

OVERVIEW

The existing sanitary sewer system is owned, operated, and maintained by the Pima County Wastewater Management Department (PCWMD). Most all of the existing sewers in the Downtown Tucson study area are located either within the public right-of-way, or sewer easements.

The downtown wastewater flows are all directed via gravity to interceptors ultimately going to the Roger Road Wastewater Treatment Facility (RRWTF). Roger is permitted at 41 million gallons per day (mgd) and is currently operating at 38 mgd. The estimated 3 to 5 year build-out for the downtown area has projected increased average wastewater flows of 1.1 mgd for dry weather and 3.5 mgd for peak wet weather.

Under the Pima County Regional Optimization Master Plan (ROMP), the Plant Interconnect Project is “funded and under way.” When completed, this infrastructure will move flows from the RRWTF to the Ina Road Wastewater Treatment Plant. This will provide additional treatment capacity and allow a new Roger Road Treatment Plant to be constructed. Estimated completion of the Plant Interconnect Project is December 2010.

Although current treatment capacity is limited at the RRWTF, increased wastewater flows from the estimated 3 to 5 year downtown development should be accommodated.

PCWMD is performing a system wide condition assessment of sewer pipes (15” and smaller) and in the near future, better information on the condition of the sewers downtown will be available. A general recommendation is that as near term development occurs, the utility be contacted early for verification of flow capacity and infrastructure rehabilitation needs for specific individual development plans.

AGE OF INFRASTRUCTURE

The system ranges in size from 6” collector lines, up to the 60” interceptor, which runs along El Paso Southwestern Avenue, located east of Interstate 10. Many of the sewers in the downtown area are very old (over 100 years in some cases). Although they function adequately, making new connections could be a challenge. A majority of the lines located within the study area are constructed of vitrified clay pipe (VCP) and date in age of 30 years or older. Wastewater industry pipe service life values range from 50 – 100 years depending on the type of material. VCP is known for having a long service life value and a 100 life for this type of sewer pipe is not uncommon. Sewers that are more than 60 years old will probably need to be rehabilitated prior to connection.

ASSESSMENT OF CAPACITY

Sewers are available to serve virtually all parcels within the downtown area. Where parcels do not have direct access, only a short extension will be required.

Most sewers have adequate capacity. There are some local bottlenecks and some downstream capacity issues. Since several trunk and interceptor sewers traverse downtown, capacity issues are influenced more by upstream development than by the proposed downtown developments.

Initial cost estimates for rehabilitation, abandonment, and augmentation for the associated development is \$3.5 million. It is expected that most of these costs would be covered under the Pima County Wastewater Management's Sewer Rehabilitation Program.

In addition, PCWMD has an additional 6,700 feet of sewer in their Sewer Rehabilitation Program for the downtown area over the next 10 years with an estimated cost of \$750,000. These costs will also be covered within the Department's Rehabilitation Budget.

STREETCAR ALIGNMENT

The following sewer lines were identified during the early stages of the streetcar project as being located underneath or in close proximity to the conceptual streetcar alignment. Rehabilitation and repair of sewer lines in these areas will be done in-situ, thereby limiting surface disturbance and costs. Potential conflict areas are:

Broadway Boulevard

- 10" sanitary sewer in left curb lane from Pennington to footbridge (600' – 12" replacement) Estimated costs of \$335,000

Congress Street

- 12" sewer line in left curb lane on Congress between Broadway and 4th Avenue (300' – 12" replacement) Estimated costs of \$167,000
- 8" sewer in left curb lane from 4th Avenue to Scott Avenue (1400' -8" replacement) Estimated costs of \$680,000

Granada Avenue

- 15" sanitary sewer along west curb line in southbound travel lanes (650' – 15" replacement) Estimated costs of \$395,000

Manholes and Crossing Sewers

- There are a total of 48 sanitary sewer manholes within or near the modern streetcar alignment. Of the 48 manholes, 25 are assumed to need either adjustments or reconstruction. The cost for this item is \$125,000.
- A total of 14,700 feet of sewer cross the modern streetcar alignment. Adjustment of these sewers is estimated to cost \$ 1,740,000.

House Connection Sewers (HCS)

- It is expected that the Streetcar Project will install HCS taps from the public sewer to the private property line during construction. This will avoid cutting the pavement at a future date when construction takes place on a private parcel. These costs are estimated at \$100,000 and are the responsibility of the property owner or developer.

The total cost for all sewer modifications within the modern streetcar route is \$3,542,000 (\$1,740,000 for rehabilitation and \$1,802,000 for relocation/augmentation).

COST & FUNDING

The total for all wastewater system upgrades required in the study area is \$7.8 million. A detailed engineering design is required to properly identify, separate and detail rehabilitation costs and relocation/augmentation costs. Little or no street excavation is expected with sewer rehabilitation since in-situ technology will be the primary methodology used. The City of Tucson or Developers pay for relocation and augmentation costs.

This sewer study is to serve as a “first pass” analysis and estimate for planning purposes. Costs for improvements outside the planning area are not included within this study.

	Total Cost	PCWMD Rehab Cost	Relocation/ Augmentation Cost
PCWMD Rehabilitation Plan for			
Downtown	\$ 750,000	\$ 750,000	\$ 0
New Development	\$ 3,500,000	\$ 2,400,000	\$ 1,100,000
Rehab/Augmentation			
Modern Streetcar Route	<u>\$ 3,542,000</u>	<u>\$ 1,740,000</u>	<u>\$ 1,802,000</u>
Total	\$ 7,792,000	\$ 4,890,000	\$ 2,902,000

Downtown Infrastructure

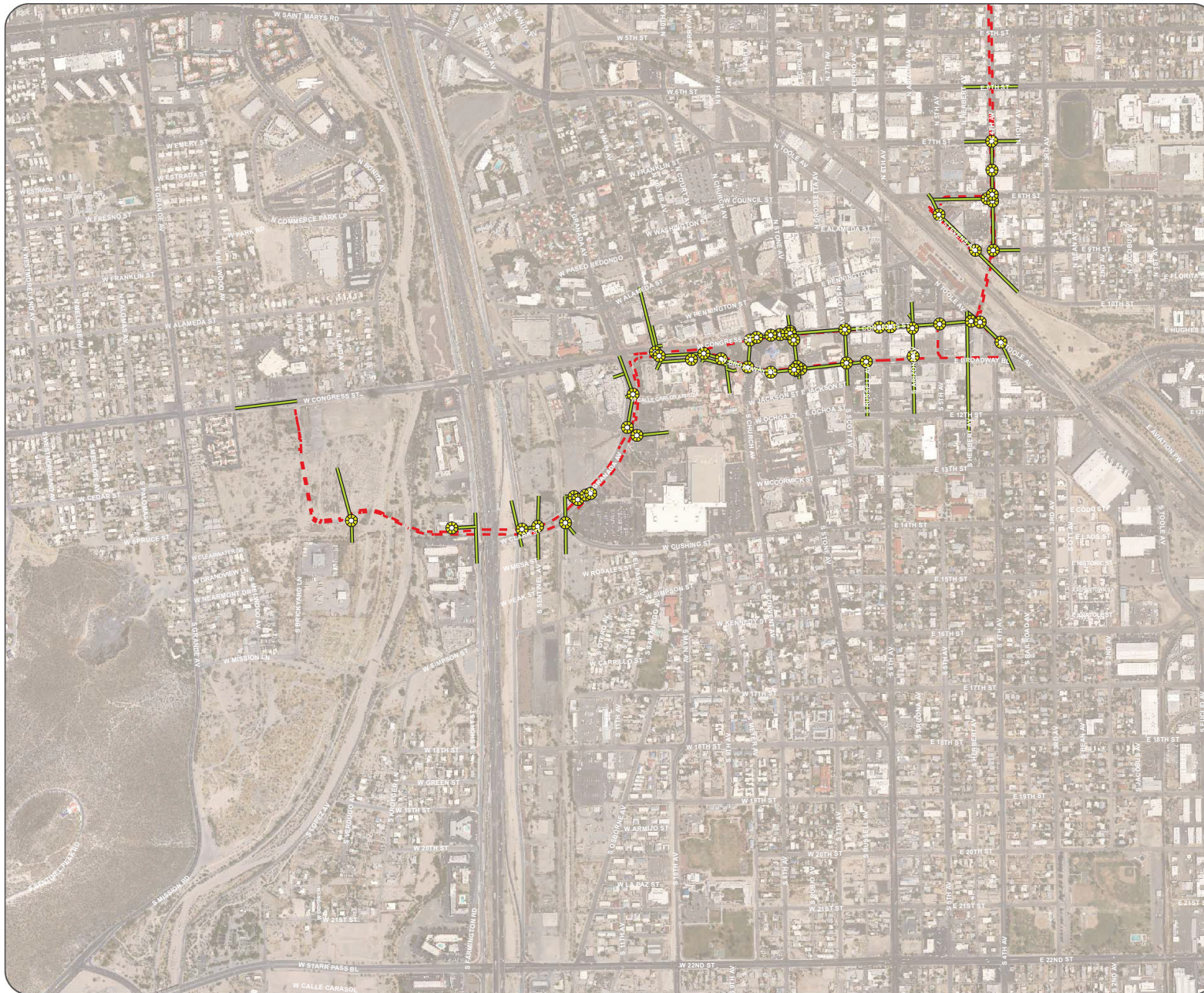
Pima County Wastewater and Street Car Alignment

Legend

● Manholes

— Sewer Pipes

- - - Street Car Route



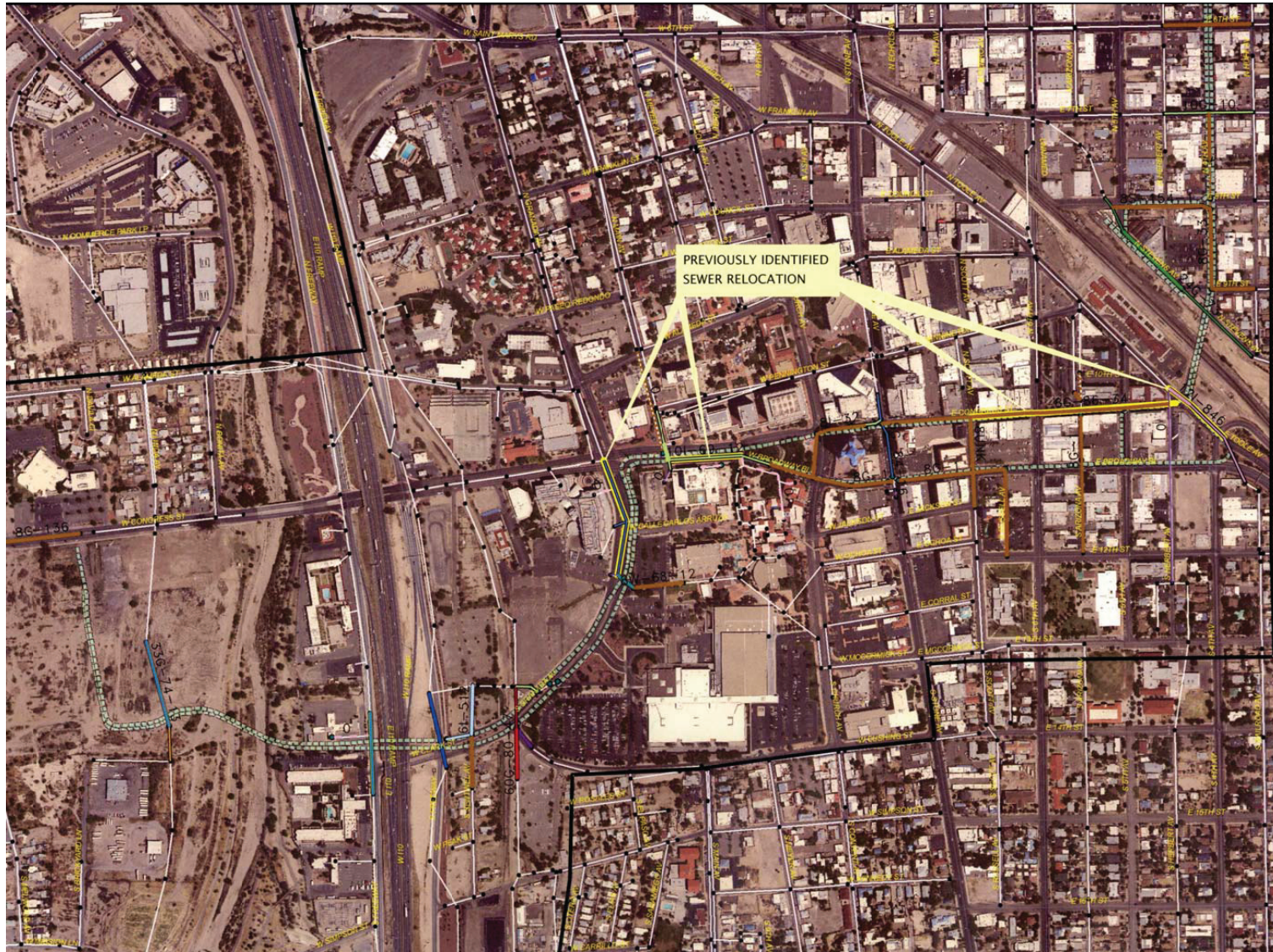
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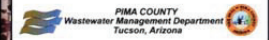
**Tucson
Downtown
Partnership**



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DOWN TOWN DEVELOPMENT

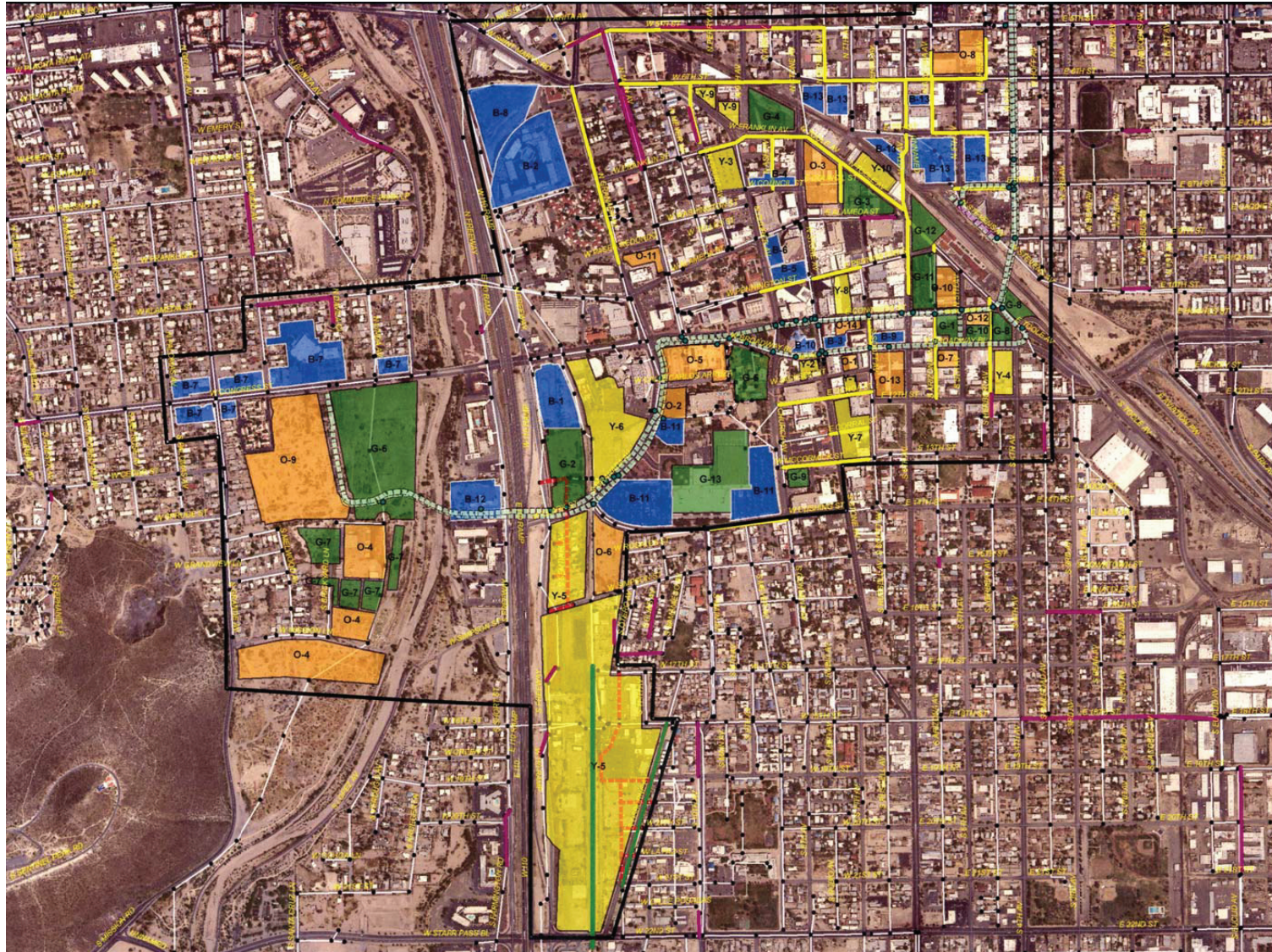


Legend

- StreetCar
- 6" EXISTING_PIPE
- 8" EXISTING_PIPE
- 10" EXISTING_PIPE
- 12" EXISTING_PIPE
- 15" EXISTING_PIPE
- 16" EXISTING_PIPE
- 18" EXISTING_PIPE
- 21" EXISTING_PIPE
- 24" EXISTING_PIPE
- 30" EXISTING_PIPE
- 33" EXISTING_PIPE
- 60" EXISTING_PIPE
- PRIVATE_PIPE
- ABANDONED_PIPE
- EXIST SEWER
- EXIST MANHOLE
- EXIST MANHOLE selection
- PCWMD IMPACT AREA
- PREVIOUSLY IDENTIFIED

MANHOLES IN ALIGNMENT

45 SEWER MANHOLE
2 PRIVATE
1 ABANDONED
48 TOTAL



DOWN TOWN DEVELOPMENT

PIMA COUNTY
Wastewater Management Department
Tucson, Arizona

N
W E
S

PROJECT STARTS

- 0-18 MONTHS
- 19-36 MONTHS
- 3-5 YEARS
- 5+ YEARS

Legend

- StreetCar
- EXIST MANHOLE
- EXIST SEWER
- ABANDONED SEWER
- REHABILITATE
- NEW SEWER
- PCWMD REHAB
- EXIST MANHOLE selection
- PCWMD IMPACT AREA

PROJECTS STARTING IN 0-18 MOS.

- O-1 44 E. Broadway I
- O-2 Carlos Arana Block
- O-3 City County Courts I
- O-4 Cultural Plaza Mission complex
- O-5 Dammed Rock Plaza
- O-6 Tucson Fire Department
- O-7 Julian Drew Block
- O-8 Lefts on 15th Avenue
- O-9 Mercado District
- O-10 ALMA Block
- O-11 Whetzel Terrace
- O-12 Whetzel Block Congress
- O-13 Santa Rita Resort/Condo
- O-14 Fire Post

PROJECTS STARTING IN 19-36 MOS.

- G-1 200 Block
- G-2 Arena
- G-3 City County Courts II
- G-4 El Mirador
- G-5 La Placita
- G-6 Merlo Park 12-acre
- G-7 Museum complex
- G-8 Plaza Centro
- G-9 Tucson Police Department
- G-10 Whetzel Block Broadway
- G-11 Hornstadt Transit Center
- G-12 South Avenue & Toole
- G-13 STCC Expansion

PROJECTS STARTING IN 3-5 YEARS

- Y-1 44 E. Broadway II
- Y-2 Bacon Lot
- Y-3 Block 175
- Y-4 Fourth Ave. Bidley
- Y-5 1-10 Frontage at Cochise - 22nd
- Y-6 Norville Exhibition Ctr
- Y-7 Plaza San Agustin
- Y-8 Pueblo Garage
- Y-9 Steelhead West Triangle
- Y-10 Warehouse District South of RR

PROJECTS STARTING IN 5+ YEARS

- B-1 1-10 Frontage at Congress, 1st
- B-2 Inn Suites
- B-3 Chase Bank lot
- B-4 DDC Council lot
- B-5 Library Plaza South
- B-6 Library Plaza West
- B-7 Mercado extension
- B-8 Millstone Site
- B-9 Pima Co. parking lot Broadway
- B-10 Ildefonso Tower II pad
- B-11 TICC 1,2,3
- B-12 Theresa Lee Site
- B-13 Warehouse District North of RR

UNDERGROUND UTILITIES

SOUTHWEST GAS CORPORATION

OVERVIEW

Southwest Gas Corporation (Southwest) owns, operates, and maintains natural gas distribution facilities within the established boundaries of the study area. These facilities are comprised of mains, services, meter set assemblies and pressure regulator stations. Almost all main and service distribution pipes are below ground. Meter set assemblies and pressure regulator stations are above ground. Southwest is typically responsible for the installation of piping (including shading and bedding), valves, cathodic protection, and other distribution components. Developers typically pay the costs of excavation and backfill. New distribution piping is typically limited to 2" and 4" polyethylene.

Southwest has high pressure steel distribution main that extends through the study area along 19th Street, Main Avenue, and Granada Street. An El Paso Natural Gas delivery point located near 19th Street and Ochoa Lane serves this main. This steel main and several other El Paso Natural delivery points serve as sources of supply for many miles of distribution mains and services throughout the study area.

The majority of gas distribution main is located in City of Tucson right-of-way. Main on private property is located in dedicated easements. Rights of way and easements containing high pressure steel main and four inch diameter plastic main are critical to Southwest from the standpoint of supply routes. Within the Congress Street right of way, Southwest has very little main and no services. The gas service to the properties along Congress Street is provided from side streets and adjacent alleys.

AGE OF INFRASTRUCTURE

Southwest has consistently maintained and upgraded the distribution systems within the downtown area. An extensive replacement of early vintage pipe in the study area was performed in the late 1980s and 1990s, with the distribution system now comprised of high-density polyethylene mains and services. The high-pressure steel distribution main was installed in the late 1960s and 1970. A portion of it was replaced in 1987 to eliminate conflicts with construction of the Tucson Community Center. While the steel main is currently in good condition, consideration would be given to replacing the 1960s and 1970 vintage steel in conjunction with the downtown redevelopment.

ASSESSMENT OF CAPACITY

A system analysis has been performed utilizing the project list provided by the City. Based upon projections which have been provided, it has been determined that Southwest has a distribution system in place today within the study area boundaries which would require some minor main and regulator station installations/upgrades over the course of two to ten years at an estimated cost of approximately \$2 million dollars. These upgrades, to be performed in conjunction with development and right-of-way improvements, would improve the integrity and reliability of the existing distribution system.

Southwest does not currently have adequate capacity outside the scope of the study area to supply the total projected requirements for the downtown area. This would require significant upgrades to both Southwest's supply mains and regulation facilities, as well as upgrades to El Paso Natural Gas delivery points. Based upon the project list, it is anticipated the upgrades would need to be performed within the next two to ten years, and are estimated to cost approximately \$5 million dollars in order to support twenty years of growth. However, this value could change substantially depending on the actual future capacity requirements.

STREETCAR ALIGNMENT

The alignment of the modern streetcar has been reviewed to determine the potential impact on Southwest's facilities. It has been verbally reported to Southwest that the excavation depth for the installation of the rails and concrete base is typically 12 inches. Southwest's main and service facilities are typically installed at a minimum depth of 24 inches to a maximum depth of 40." Provided that there are no grade changes to the existing right-of-ways being utilized for the streetcar alignment, Southwest does not see any conflicts.

Southwest does have high pressure steel distribution main running parallel to and crossing the alignment in Granada Street, Congress Street, and Main Avenue. Cathodic protection mitigation measures would need to be installed by Southwest in these locations. Southwest would also perform depth verification of existing facilities in advance of the improvements. Replacement of 1960s vintage steel main near the intersection of Granada Street and Congress Street would be performed prior to the streetcar improvements.

COST & FUNDING

As noted above, a number of improvements to the natural gas infrastructure will be required to meet the projected needs of this project. The cost of natural gas infrastructure improvements that are required to resolve physical conflicts with planned improvements would be covered under Southwest's franchise agreement with the City of Tucson. The cost of natural gas infrastructure improvements that are made to accommodate the needs of this project but are not required to resolve physical conflicts would be paid for by the City of Tucson and/or by the individual developer(s).

The cost of improvements made outside of the study area to increase capacity within the downtown area would be paid for either by the City or the individual developer(s). The cost of improvements made within the individual parcels would be the responsibility of appropriate developer(s). This study did not address these individual parcel development costs since no detailed development plans are available at this time.

Service and main extensions for new business purposes are installed on the basis of economic feasibility. Typically, the costs of these improvements are paid to Southwest Gas in advance of construction as a refundable advance and/or non-refundable contribution. The procedures governing new business are defined in greater detail in Southwest's Arizona Gas Tariff No.7.

Downtown Infrastructure

Southwest Gas Infrastructure

Legend

Southwest Gas Pipelines

- Distribution
- High Pressure Pipe
- Replacement Vintage Pipe
- Supplier Delivery Point
- System Reinforcement
- - - Street Car Route



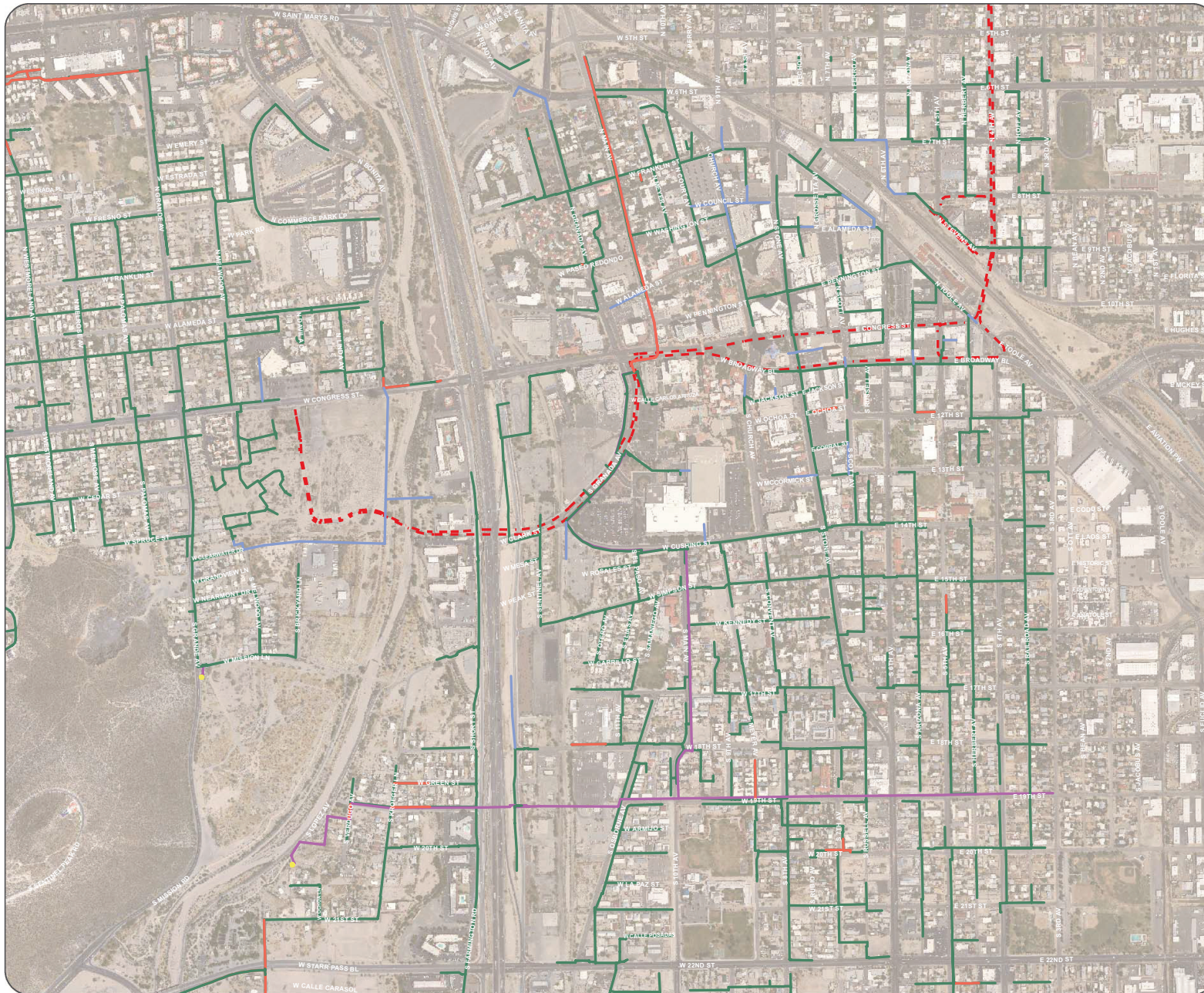
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UNDERGROUND UTILITIES

STORMWATER (CITY OF TUCSON)

OVERVIEW

The City of Tucson relies on a system of open channels, street flow, underground stormdrains, overland flow (sheet flow) and detention/retention basins for management of storm runoff. Underground stormdrains and public channels make up less than 50% of the conveyance distance for accumulated storm runoff in the study area.

The storm drainage system in most of Tucson is inadequate to convey runoff from fully developed properties. For this reason, a key component of the City's stormwater management plan is onsite stormwater retention requirements, applied to most new development within the City. In addition, Tucson City Code Sections 11-58 and 11-59 require property owners to convey existing runoff through their properties, with intake and discharge characteristics maintained to prevent adverse impacts on surrounding properties.

The Santa Cruz River runs north through the Study Area, separating the Cultural Plaza and Civic Plaza sites and acting as the outfall for all major stormdrain systems.

Two FEMA-delineated 100-year floodplains impact the study area. The 100-YEAR FEMA Floodplain for the Arroyo Chico wash (aka Tucson Arroyo) impacts all the properties north of Franklin and extends south, between Granada and Main, to one block north of Congress Avenue. The FEMA 100 year floodplain for the Santa Cruz River impacts the eastern portions of the Central Plaza site and the Tucson Origins site, as well as a small area between the Santa Cruz and I-10 at Simpson Street.

Flooding on the Arroyo Chico, including inadequate culvert capacity at I-10, should be corrected by the Corps of Engineers Park Avenue Detention Basins project. Design has been completed on this project, but funding has not been committed at this time.

100 Year Flood impacts along the Santa Cruz River can be eliminated by importing fill to raise the ground elevation.

Six watersheds contribute to runoff in the study area. These are:

Watershed	Area (acre)
Tucson Arroyo	7045
Downtown	200
Cushing Street	326
18 th Street	2306
West Bank Santa Cruz River	150+
A-Mountain Diversion Drain *	N/A

* Spruce Street alignment to Santa Cruz River.

AGE OF INFRASTRUCTURE

It is recommended that further input from TDOT regarding system condition of the existing facilities and the associated rehabilitation costs be determined. The age of the stormwater collection system in the study area ranges from 1966 to present, with a majority of the infrastructure installed in the mid 1970s to 1990. The expected service life of these structures is nominal value of 100 years prior to replacement or significant rehabilitation. Since the majority of existing infrastructure is less than 40 years in age; significant infrastructure replacement within the study planning period of 20 years is not anticipated.

ASSESSMENT OF CAPACITY

Limited input from TDOT regarding condition, capacity and relocation costs of storm drain facilities for the Downtown Development project was rendered within the relatively short time frame of data collection for the study. A capacity analysis for existing stormwater infrastructure was not performed, as well, because of limitations of this report. However, within this study new development square footages were added to the Building and Utility Model. The City's information for existing buildings of all types within the downtown Tucson boundaries is approximately 5.4 million square feet. The City's projected new construction over the entire planning period is approximately 8.8 million square feet, for a total building area of approximately 14.2 million square feet. Estimates pertaining to costs are preliminary level estimates only. Detailed engineering and hydrology studies will be necessary as site specific design and development occurs.

GLHN has performed a simplified capacity needs analysis for existing vs. fully developed conditions, provided at the end of this section.

A hydraulic model showing existing flows and projected future added flows was not performed because of costing and timing limitations of this report. Existing TDOT storm water information indicates an established grid and infrastructure of storm drains typical of an urban metropolitan area. Components include: Storm drains, manholes, bank protection, bridges and culverts, catch basins, grates and surface drainage features.

The existing stormwater system is not well developed in the north portion of the study area within the vicinity of 9th Avenue and the Stone Avenue underpass. Proposed improvements are scheduled including a proposed RCP 36" pipe system. A downtown development study area recommendation would be a future RCP system with street catch basins to collect drainage in the area bounded by Main, Franklin, Alameda and Stone Avenue and divert this to an outfall on Congress or Granada with existing storm drain capacity. This recommendation is primarily driven by the lack of existing storm water collection facilities in this portion of the study area. All future development in the study area shall be connected to the existing storm water collection system and use of on-site retention encouraged, if available space exists. Water harvesting techniques should be employed to minimize storm water run off potential as well as maximize the re-use potential of the storm water for landscape irrigation. Reference the City of Tucson Water Harvesting Guidance Manual, for commercial sites for direct application guidance for projects within the study area.

A key component to the City's Downtown Links Project is to correct drainage issues in this area associated with the Tucson Arroyo. The arroyo is undersized to handle all the drainage in the downtown area, which has been a long-standing problem that has resulted in key development

parcels remaining in the 100 year flood plain. Drainage work for the Downtown Links project will result in a new alignment for the arroyo and the replacement of the drainage structure in various locations. Seventy-six million dollars for Downtown Links has been included in the RTA plan, which specifically includes this drainage issue as part of the project. The project is currently in design. The project is programmed for construction in the RTA's second period, which begins in 2011. Cost to correct the Tucson Arroyo deficiencies is expected to be included in the Downtown Links budget.

TDOT's analysis indicates that on the west bank of the river, there is no effective drainage system and the Barrio Sin Nombre area and the Tucson Heritage Park area will have to intercept substantial off-site flows and create an effective drainage system. Plans have been developed to intercept the 'A' Mountain storm drainage across the Mission Gardens site as part of the Tucson Origins Heritage Park project. The cost for this work is included in the funding already allocated for Tucson Origins. Additional storm drains will be required in Grande Avenue extending north to the 'A' Mountain Storm Drain to alleviate flooding in the Barrio Sin Nombre neighborhood. This drainage work and other improvements are estimated at \$5 million as part of the Barrio Sin Nombre Streetscape Improvements.

Barrio Viejo, the Civic Plaza, and the Arena sites as well as the area around Tucson Police & Fire department buildings have inadequate storm drainage. In addition the Fire Central site is adjacent to the Cushing Simpson Wash which has inadequate capacity. The Clark Street Storm Drain Concept Design Report prepared by Tetra Tech, Inc., dated May 2004, has identified the need to reroute or install new concrete box culverts in the Civic Plaza area. Storm drain plans prepared by HDR Engineering, Inc., dated May 2005, have also identified the need for additional or replacement storm drains within or near the westbound frontage road of Interstate 10, near the Civic Plaza area. The additional stormwater mitigation required at the new Arena, TCC expansion project site is estimated at approximately \$3 million. The cost to upgrade the drainage system at the Cushing Simpson Wash is estimated at \$400,000 and is part of the \$5 million for the Barrio Viejo streetscape improvements.

The additional stormwater mitigation required at the new Arena, TCC expansion project site is estimated at approximately \$3 million.

STREETCAR ALIGNMENT

Streetcar utility conflicts have been preliminary identified by HDR Engineers in April, 2007. There are three potential conflicts noted:

Congress Street

- 18" storm drain in left curb lane from Stone to Church Estimated costs to relocate \$87,500

Granada Avenue

- 30" storm drain within northbound lanes near TCC entrance, diagonal towards median
- Exist 10'x3' concrete box culvert at TCC entrance (perpendicular to Granada)

Estimated costs to relocate both of the above features: \$165,000

COST & FUNDING

The total for all stormwater system upgrades required in the study area as assessed by GLHN and City of Tucson Department of Transportation is \$13,252,000 million. TDOT notes that this

estimate addresses only a portion of the stormwater work needed in the downtown area. TDOT was unable to provide cost estimates for these additional improvement projects at the time of this report. The cost to resolve all of the existing drainage deficiencies in the downtown area may be substantially higher than the estimate for the specific development sites covered in this analysis.

GLHN ANALYSIS

GLHN analyzed existing and future building loads against industry-typical data, and projected both the existing and future storm water runoff volumes*. A simplistic approach taken was to use the development square footages, and compare pre-development conditions with full build out conditions and sum the increase of storm water anticipated. The table on the following page provides an analysis on a street by street basis.

The information was taken from the master spreadsheet providing development building footages. This chart represents is a very general presumption as to the increase in development downtown and how it will effect the storm water system. The development sites were organized into street by street categories. The square footages for the proposed development were tallied for each street. A pre development coefficient of runoff was assumed with a semi- permeable surface. Q100 values were calculated in CFS for this condition. A post development coefficient of runoff factor was used assuming a near impervious surface (asphalt, roofs, concrete). Q100 values for the street were again calculated and then compared to original conditions.

DEVELOPMENT RELATED ESTIMATED INCREASES IN STORMWATER RUNOFF *

Street Location	Total sq ft. =	Pre (CFS)	Post (CFS)	Increase (CFS)
<u>4th Avenue</u>	110,000	4.6	7.6	3.0
<u>5th Avenue</u>	392,000	16.4	27.3	10.9
<u>6th Avenue</u>	413,000	17.2	28.7	11.5
<u>Alameda</u>	1,351,000	56.4	93.9	37.5
<u>Broadway</u>	1,014,000	42.3	70.5	28.2
<u>Church</u>	2,147,000	89.6	149.3	59.7
<u>Congress</u>	3,776,000	157.5	262.5	105.0
<u>Council</u>	88,000	3.7	6.1	2.4
<u>Franklin</u>	297,000	12.4	20.6	8.2
<u>Granada</u>	404,000	16.7	28.0	11.3
<u>I-10 Frontage</u>	1,647,000	68.7	114.5	45.8
<u>Main</u>	66,000	2.8	4.6	1.8
<u>Meyer</u>	6,000	.3	.4	.1
<u>Mission Lane Road</u>	477,000	19.9	33.1	13.2
<u>Paseo Redondo</u>	1,027,000	42.8	71.4	28.6
<u>Pennington</u>	105,000	4.4	7.3	2.9

<u>Scott</u>	158,000	6.6	11.0	4.4
<u>Stone</u>	1,650,000	68.8	114.7	45.9
<u>Toole</u>	224,000	9.3	15.6	6.3
<u>Rail Road Frontage</u>	330,000	13.8	22.9	9.1
TOTAL = 435.8 CFS				

Downtown Infrastructure

Stormwater Existing Infrastructure

Legend

- Street Car Route
- Bridges and Culverts
- Grates
- Pipes
- Open Channels
- COT Identified Significant Flood Hazards
- 100 Year FEMA Flood Plain

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UNDERGROUND UTILITIES

TUCSON ELECTRIC POWER

OVERVIEW

The electrical franchise holder for the downtown Tucson area is Tucson Electric Power (TEP), who has sole distribution rights within City of Tucson rights-of-way. Existing TEP feeders in the downtown Tucson planning area are typically served from the Santa Cruz substation on the east bank of the Santa Cruz River, and the Tucson substation near St. Mary's Road and Main Avenue.

Within the Tucson Convention Center, Tucson District Energy LLC generates electricity in parallel with TEP, and provides much of the power requirements of the Tucson Convention Center and the headquarters buildings for the Tucson Police and Tucson Fire Departments. Tucson District Energy's system is not considered further in this report.

Although some telecommunications providers, in particular Qwest and Cox Communications, often share a common trench or overhead line locations with TEP, they are considered under the Information Technology section of this report.

AGE OF INFRASTRUCTURE

The majority of TEP's distribution lines in the downtown area are 40 to 60 years old. Approximately 35 concrete vaults and pullboxes are located in the downtown study area. The majority of these concrete vaults were constructed between the late 1940s and the early 1970s. Many of these vaults contain abandoned cables that occupy space with newer distribution lines. Fiber optic cables from several of the downtown communication companies also run in these vaults. There are six vaults along Congress Street and Broadway Boulevard. Several of these are located beneath the newly-approved streetcar route.

ASSESSMENT OF CAPACITY

Most of the existing underground system in the downtown area is at or near capacity based on its original design. Adding additional load without upgrading the system is not possible. In recent years there have been various electrical upgrades to some of the buildings in the downtown area. Utilizing these facilities will be factored in on a spot demand basis. These upgrades are not expected to contribute significantly to meeting future demand.

Power supply to some areas is complicated by lack of available open space needed for the placement of transformers and switch cabinets. The street-front, zero lot-line configuration that characterizes much of the downtown area is a major obstacle to increasing electrical capacity to existing older buildings.

Calculations for future capacity loads were derived from information provided by the Infrastructure Task Force to TEP on anticipated future development. The baseline assumptions provided are as follows: the area of existing buildings of all types within the study area is 5.4

million square feet, projected new construction over the entire planning period is estimated at 8.8 million square feet, for a total built-out area of approximately 14.2 million square feet.

To meet anticipated future development loads, TEP has determined that a new 138kV substation will be required to serve the 38,000 Kilowatt of additional load for the ultimate 20 year build-out in the downtown area. The exact substation location cannot be determined at this time, however, the preliminary location would be somewhere along the Congress Street corridor on either the east or west ends of the downtown area. This substation would be served from an overhead 138kV line. A new overhead 138kV line and the possible upgrading of the existing 138kV system would also be required. The approximate cost for a new 138 kV substation is \$8-9 million dollars. This cost does not include land acquisition, underground feeder routes, and the 138kV overhead line. These items have too many variables to determine an approximate cost at this time.

Along with a new substation, additional distribution feeders will be needed. These feeders will run east/west and north/south (see drawing), and will consist of one or two 6 - inch conduits with associated pullboxes and manholes. They would terminate in above grade switchgear and would be distributed to customers throughout downtown. Additionally, TEP recommends that 6 - inch sleeves be placed in all streets undergoing improvements, before trenches are backfilled. The exact quantity and location would be determined at the time of the roadway design.

If the City decides to rebuild downtown streets, including major excavating and trenching, TEP would evaluate the existing underground electric infrastructure and possibly look to modernize aging below-grade equipment. The long-term benefits of these improvements could be very significant given the limited available property for above-ground facilities.

MODERN STREETCAR

The streetcar project will affect underground TEP facilities within the Broadway Boulevard, Congress Street, and Granada Avenue alignments. It is tentatively estimated that the cost to relocate and/or improve the underground TEP conduit system under these streets is \$1,900,000. This cost does not include vaults and pull boxes.

TEP has reviewed the preliminary route of the streetcar and have the following comments:

- The catenaries for the historic trolley along 4th Avenue provide adequate clearance for TEP overhead transmission lines. If the catenary elevations for the modern streetcar are higher and do not provide adequate clearance from overhead TEP lines, the lines will have to be altered (undergrounded or raised). If catenary heights remain the same as those on 4th Avenue, there should be minimal conflicts with the existing overhead system downtown.
- TEP has underground facilities in Congress Street, Broadway Boulevard, Granada and 5th Avenue. These facilities include pullboxes and manholes which may need to be relocated if the streetcar tracks pass over them.
- TEP has overhead lines at Arizona Avenue crossing Broadway Boulevard and at Sentinel Ave crossing Granada. The heights of the existing power lines may need to be adjusted to accommodate the streetcar.
- TEP has a 138 kV transmission along the Santa Cruz River and the streetcar will be passing under. These facilities may need to be adjusted depending on the exact height of the street and associated equipment.

- There are several underground vaults under the proposed streetcar route. It may be determined after further evaluation that these vaults need to be relocated due to stray electricity from the streetcar, because of conflicts with the placement of catenary pole footers, or as a response to the 4 foot cone of pressure that will be exerted by the streetcar on the underground system.

OVERHEAD TO UNDERGROUND CONVERSION

There are approximately 20,200 linear feet of overhead lines within the study area boundaries development. Approximately 12,000 linear feet of these lines lie along major streetscape improvement routes and are strong candidates for undergrounding. The approximate cost is \$300 a foot for a total of \$3.6 million. This figure does not cover residential areas or the area on Toole Avenue, Stone Avenue and 4th Avenue. This does not include transformers, secondary distribution, land costs for easement acquisition, or underground relocation of Telco and cable television. This cost should only be used for 13.8kV distribution lines, 46 kV and 138kV were not considered.

The overhead cables that are located along Toole Avenue corridor from Stone Avenue to 4th Avenue are currently being designed for conversion to underground. This is being done on two projects that are currently under contract: the 4th Avenue Underpass Project and the Pima County Courts building. Additionally, there are two underground feeders that will be relocated from the Council Street alignment to Alameda that is in conflict with the new courts building. TEP suggests that in addition to the undergrounding requirements of these two projects, an additional 6 – inch conduit be placed in the trench with the two feeders that are being relocated.

COST & FUNDING

The City of Tucson/TEP franchise agreement, TEP rules and regulations, and subsequent contract agreements may determine how system improvements will be funded.







Typically, the costs of expanding the power system are shared between TEP and the developer. Costs of expanding an overhead distribution system are almost entirely borne by TEP. Underground distribution system costs are shared between TEP and the developer or the city, divided on the basis of work additional to that required for an overhead system. When relocating an existing system to accommodate out-of-rights-of-way developer improvements, the developer may carry a greater share of the relocation costs. When relocating an existing system to accommodate City roadway or drainage improvements, TEP is required to assume the relocation costs. The City of Tucson/TEP franchise agreement and the TEP Electric Service Requirements Book carry full information on responsibilities for work on the power system.

According to TEP, costs associated with relocation of underground cable along the streetcar alignment are the responsibility of the “light rail system,” not TEP (see A.R.S. Sec. 48-5315 for more information). TDOT staff believes that this provision does not apply to Tucson’s modern streetcar because it is not considered a “light rail system.”

Downtown Infrastructure

Tucson Electric Power
Existing Infrastructure

Legend

- + Life Support Premise
- o Premise
- o Primary Meter
- Transclosure
-  Steel Structure
-  Substation
-  OH Service
-  OH Primary
-  OH Secondary
-  Jumper Span

Subtransmission Line

-  138 kV
-  46 kV



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Downtown Infrastructure

TEP Communications
Anticipated Infrastructure
Needs

Legend

--- Street Car Route

— Single 6" Duct

— Double 6" Duct



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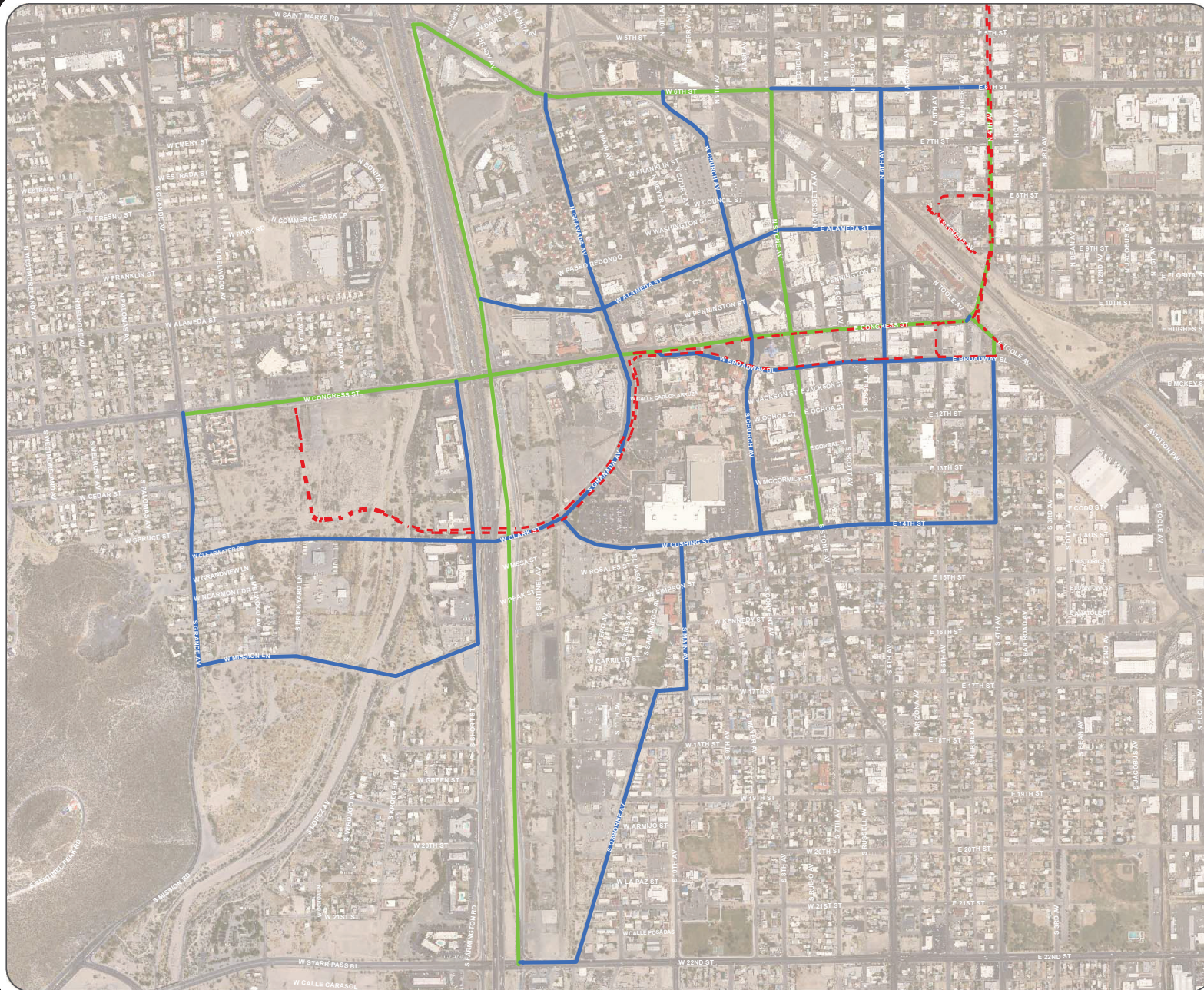
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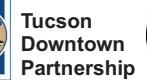


Tucson Electric Power Cables to be Undergrounded

— OH Primary Cables to be Undergrounded


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UNDERGROUND UTILITIES

TUCSON WATER

OVERVIEW

The potable (drinking) water system located in the downtown development plan area is owned and maintained by the City of Tucson Water Department (COTWD). The majority of these water lines are within the public right-of-way. Only in a few instances are water lines located within privately owned properties which require a water line easement. Tucson Water's system ranges in size from 1" diameter pipes to 36" diameter. Pipe material varies and includes ductile iron pipe (DIP), cast iron (CI) polyvinylchloride (PVC), concrete cylinder pipe (CCP), and cement asbestos (CA) pipe.

AGE OF INFRASTRUCTURE

Water service life for pipeline varies on location, pipe material and water chemistry, but a conservative value is 50-60 year service life. Pipes considered for replacement are those which are 40 years and older assuming that within the project planning period of 20 years, replacement or rehabilitation will have to be done.

Costs for replacement were calculated by identifying footages and diameters and then multiplying by unit construction costs. Small diameter pipes less than 4 inch will be replaced with 6 inch diameter to comply with current Tucson Water Design Standards. The Design Standards require 6 inch or greater pipe diameters for adequate pressure and flow for fire suppression. The total cost for replacing pipes in the area is \$ 6.8 million.

ASSESSMENT OF CAPACITY

For the entire area of this study, the service area is within one pressure zone, designated "A" zone by COTWD. This water system is typical of other Tucson service zones in that redundant reservoirs located at pressure zone high-water elevations, provide constant pressure and water supply under various demand scenarios. The City's information for existing buildings of all types within the downtown Tucson boundaries is approximately 5.4 million square feet. The City's projected new construction over the entire planning period is approximately 8.8 million square feet, for a total building area of approximately 14.2 million square feet.

GLHN analyzed existing and future building loads against industry-typical consumption data, and projected existing and future utility requirements for potable water demands. Hydraulic modeling analysis was carried out to determine possible main transmission upgrades (larger diameters) for future demands. Results indicated that current transmission mains have enough capacity to supply future water demands. Projected water demands from the building and utility model were estimated two ways: by population and by building square footage. Both methods produced fairly close results. The building and utility model projected water daily demand is 2,150,000 gallons per day (based upon projected occupancy populations). The existing water system for the study area inventory of total footage is approximately 100,000 linear feet.

Reclaimed Water

Reclaimed water service is currently available in some of the downtown Rio Nuevo development area; however, main extensions and new laterals will be required to serve many of the facilities identified for reclaimed water service. The Business Improvement District (BID) currently does not have any reclaimed mains or extensions. A determination of the economic and practical feasibility of making these improvements is recommended prior to committing to service. Consideration should be given to the volume of reclaimed water to be delivered to the individual facilities, the Rio Nuevo area, and beyond versus the cost of the infrastructure to supply it. Opportunities to combine reclaimed water system construction with other street/pipeline work should also be considered.

It is recommended that funds be set aside for the enhancement of the reclaimed system in the downtown area. For the purpose of preliminary budgeting, funds for 2 miles of 8" reclaimed water pipe (\$1,500,000) should be set aside. This cost estimate includes 30% for contingency.

Reclaimed water use is governed by ADEQ regulations (Title 18, Chapter 9) and the Uniform Plumbing Code. The Plumbing Code prohibits reclaimed water for residential toilet flushing. The ADEQ regulations contain rules for the operation of sites using reclaimed water, i.e. irrigation can be done only during times when the potential for public is minimized and ponding and runoff of reclaimed water is prohibited.

Plant One Relocation

Tucson Water operates a citywide maintenance facility at 18th Street and Osborne Avenue. It is on twelve acres of land. Operations located there include daily maintenance crews, dispatch, meter readers reporting to work for billing customers, equipment maintenance, electronic shop, welding shop, fueling, Bluestake locating services, training, planning/scheduling, administrative offices, meter shop, salvage, and Backflow offices.

This is a critical facility for Tucson Water. The development plans for downtown require the relocation of this facility. Costs for rebuilding the facility including additional offices will be approximately \$40 million. The total required relocated building square footage is from a space analysis of all the current and future uses of the facility. Cost estimates were taken from recent construction costs of a new similar, maintenance facility on the east side of Tucson.

It is anticipated the Plant One Relocation project design and construction will be coincident to the Kino Boulevard/22nd St RTA Project. Design starts in 2011 with construction in 2014.

STREETCAR ALIGNMENT

This category of water work involves moving all pipes in the route of the modern streetcar. Pipes need to be relocated due the excessive cost of system maintenance below the streetcar alignment. The methodology for the analysis was to calculate costs to move pipes for the modern streetcar started with the creation of a GIS data set of the modern streetcar route. Next buffers were created along this route. All water infrastructure within the buffer was selected. Additional costs were included for cathodic protection required to reduce the potential for accelerated pipe corrosion from stray electric currents in the vicinity of the streetcar system.

The following potential water utility conflicts were identified during the early stages of the streetcar project:

- Broadway Boulevard - 16" water line in left curb lane from Church to Broadway/Congress split

- Congress Street - 8" water in/near left curb lane from Stone to Pennington (Federal Building)
- Granada Avenue - 24" water line along east curb line (off street near Hotel Arizona); 16" water in median of Granada, southwest to Cushing

The total estimated cost for removing and relocation of all waterlines in the streetcar route is \$4.1 million.

COST & FUNDING

Water costs were derived from GIS and hydraulic model analysis of modern streetcar routes, approximate future demands of specific projects in the downtown area, age and materials of the water system. These costs provide an order-of-magnitude estimate of the capital costs of water projects that are required in the downtown area for the Rio Nuevo development. These cost estimates were made without detailed engineering design data and are based on previous bids of similar construction projects. Capital cost estimates were not adjusted for inflation. Contingency cost was calculated as 30 percent of the total cost estimate. The total costs are \$52.4 million. Costs for improvements outside the planning area are not included within this study.

TUCSON WATER PLANT ONE RELOCATION

SPACE SUMMARY

WORK GROUPS	BLDG SQ.FT.	SHOP/ WAREHOUSE SQ.FT.	EXTERIOR SQ.FT.	TOTAL SQ.FT.
O&M Central Mx., Sys. Supt.	7,771	5,520		13,291
O&M Sys. Maintenance	5,579	24,540	95,718	125,837
Customer Svc Metering	2,890			2,890
Planning & Engineering	17,011	8,640		25,651
Common Areas	17,160	48,000	241,200	306,360
Totals	50,411	86,700	336,918	

COST SUMMARY

Unit Costs \$/SQ.FT.	\$ 250.00	\$ 175.00	\$ 10.00	
Construction Cost	\$ 12,602,700	\$ 15,172,500	\$ 3,369,180	\$ 31,144,380
Contingency	25%			\$ 7,786,095
Professional Fees	10%			\$ 778,610
Totals				\$ 39,709,085

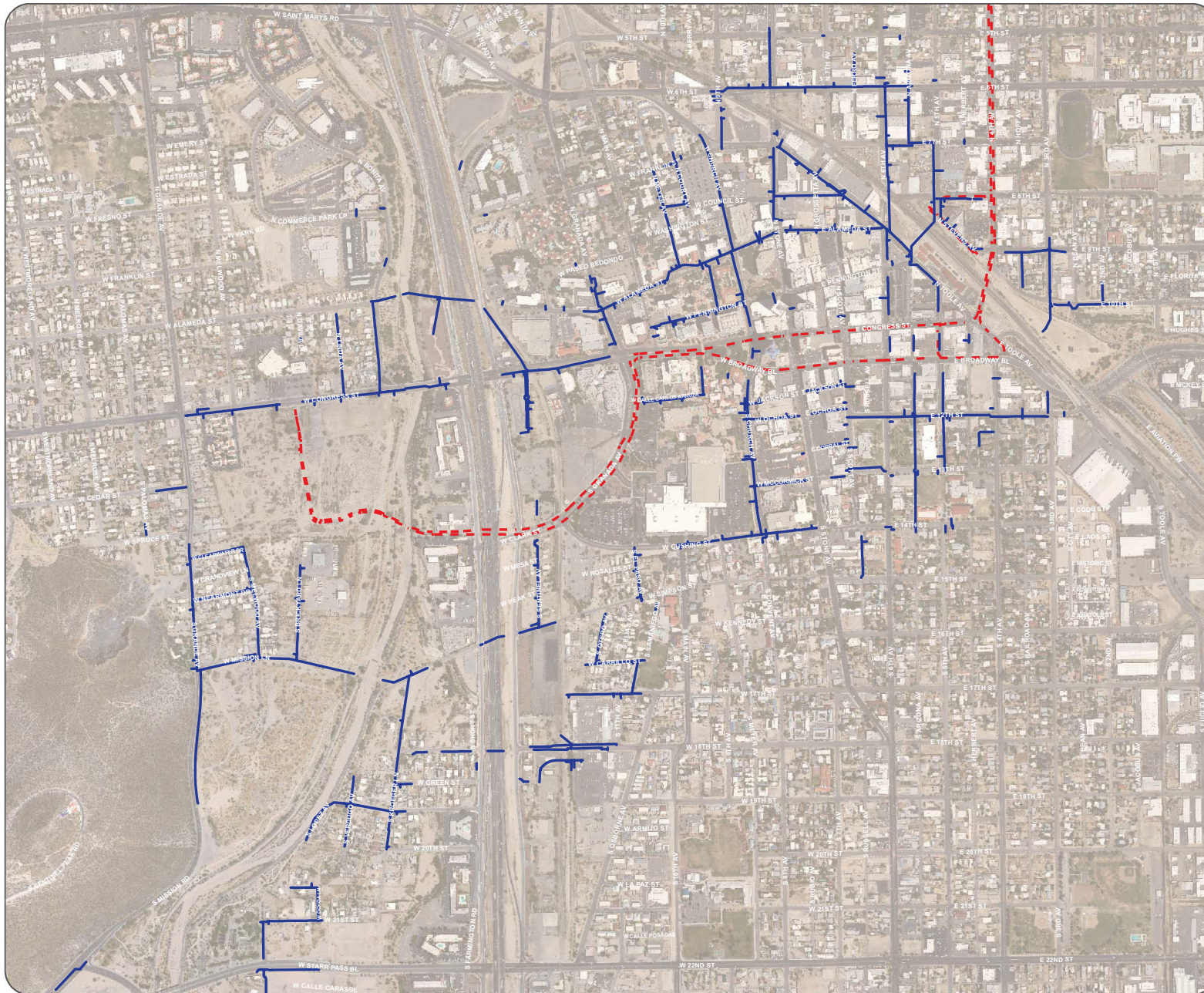
Downtown Infrastructure

Tucson Water Infrastructure

Legend

— Tucson Water Infrastructure

- - - Street Car Route



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**Tucson
Downtown
Partnership**



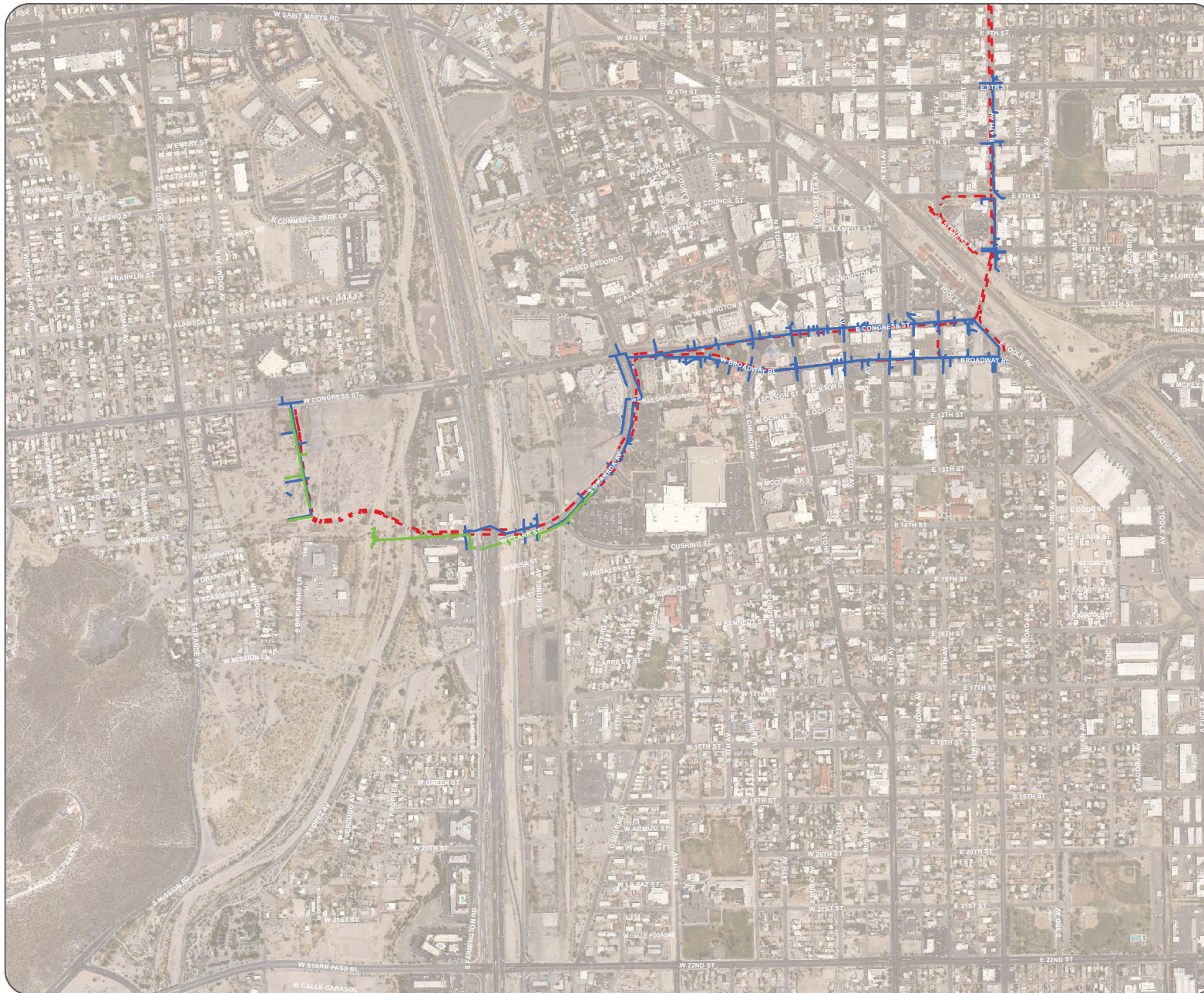
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Downtown Infrastructure

Tucson Water Lines and Street Car Alignment

Legend

- Potential Street Car Conflict - Non-Potable Water
- Potential Street Car Conflict - Potable Water
- - - Street Car Route



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INFORMATION TECHNOLOGY

CITY OF TUCSON FIBER NETWORK

OVERVIEW

The City of Tucson fiber optic network infrastructure currently connects City of Tucson buildings in the downtown area. In addition the City of Tucson fiber network has existing and planned connections to all public schools in the area. The system is operated by the City of Tucson Department of Information Technology, Communications Engineering. City of Tucson Fiber Network facilities are identified as City of Tucson INET in the records of the Arizona Blue Stake Center.

Regulations pertaining to the Tucson Fiber Network can be found in the Tucson Regional Networking and Communications Guidelines (latest edition), published by City of Tucson's Department of Information Technology, Communications Engineering. This guideline establishes the underground infrastructure requirements for the City's wide-area data, voice, and video network. In particular, refer to the Rio Nuevo Planning and Design Objectives and the Rio Nuevo Execution Requirements.

Refer also to the Rio Nuevo Utility Master Plan, prepared by GLHN Architects and Engineers Inc. in 2006, which depicts utilities within the Rio Nuevo planning area in more detail.

ASSESSMENT OF CAPACITY

The City of Tucson Fiber Network is currently only partially extended within the study area. Some conduit for future use is in place east of the Tucson Convention Center, and there is fiber optic cable connectivity to the TCC, Music Hall, and Leo Rich Theater.

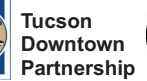
Current City policy provides for installation of fiber optic conduit on any City projects that provide open trenching along critical communication areas. (See attached memo.) Although the Modern Streetcar project will not require significant trenching as part of the track construction, it is expected that the City would wish to take advantage of major-street excavation to install a 4" conduit in the Congress Street, Broadway Boulevard, and Granada Avenue alignments as part of the modern streetcar project. This cost, including approximately 10,000 feet of underground 4" conduit and pull boxes located approximately 500 feet apart, is estimated at \$1 million.

Unlike other major metropolitan markets, Tucson has not created a comprehensive Wi-Fi free zone to date. Information Technology staff are currently working on a feasibility study on creating a free-zone downtown, as well as extending this service throughout the metropolitan area. The results of this study will be presented to Mayor and Council sometime in May or June of 2007.

The downtown system will be comprised of a series of Wi-Fi access points mounted on rooftops, streetlights, and City of Tucson facilities. Some fiber optic cable may have to be installed underground to support the system. The cost estimate for the creation of a downtown Wi-Fi free zone is \$5-\$6 million.

Tucson I-Net Fiber Route Existing Infrastructure

— Fiber Route
- - - Street Car Route



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INFORMATION TECHNOLOGY

COX COMMUNICATIONS, INC.

OVERVIEW

The cable television franchise holder in the downtown Tucson area is Cox Communications, who also provides information services, broadband communications services, and high speed data transmission lines to the area customers. Cox Communications typically installs all work related to their system, including conduit, cabling, and equipment.

AGE OF INFRASTRUCTURE

The age of the existing system is reported to be in good condition. What few facilities exist in the core downtown area were installed between 1983-85 at the time of Cox's first franchise agreement with the city.

ASSESSMENT OF CAPACITY

Cox Communications has provided a conceptual drawing to GLHN Architects and Engineers, Inc., showing existing Cox fiber optic routes and possible routes of new 4" conduit that would be required to support future development within the downtown planning area. The drawing shows 66 vaults, and approximately 23,000 feet of underground 4" conduit. The cost for these improvements is estimated at \$2.3 million.

Except for a 1-½ block area between Arizona Avenue and Scott Avenue, Cox Communications does not have service or conduits along the streetcar route east of I-10. Additionally, south 6th Avenue from Toole Avenue to Cushing Street, and Stone Avenue from Pennington to McCormick Street are also without service.

STREETCAR ALIGNMENT

The Cox Communications drawing shows little existing facilities in the streetcar route. Short runs on Congress Street between Scott Ave – 5th Ave and from Granada Ave east to the Pima County complex are shown. Cox shares a vault with Qwest at an average depth of 36 inches at those locations. The cost to relocate approximately 1000 feet of underground facilities is estimated at \$200,000. These estimates do not include trenching.

COST & FUNDING

The costs for relocating an existing system to accommodate out-of-right-of-way developer improvements are usually borne by the developer or Cox Communications. The cost of relocating an existing system to accommodate City roadway or drainage improvements are usually borne by Cox Communications in accordance with its franchise agreement with City of Tucson. The company shares overhead pole lines and underground trenches with Tucson Electric Power, and their routes generally follow those of TEP.

Downtown Infrastructure

Cox Communications
New & Existing Infrastructure

Legend

▲ New Vaults

New Fiber Lines

— 4-inch Duct for Future Fiber Service
— Existing 4-inch Duct
(No Service at this Time)

Existing Fiber Lines (Aerial & Underground)

— Aerial Lines
— Underground Lines
- - - Street Car Route



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Tucson
Downtown
Partnership



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MCI NETWORK SERVICES (PARENT COMPANY VERIZON)

OVERVIEW

MCI Network Services (recently purchased by Verizon) provides voice and data communications services to business customers in the downtown area. MCI is one of three Competitive Local Exchange Carriers (CLEC's) operating in the downtown Tucson area.

MCI Network Services has a business office and communication node at 71 E. Alameda Street, now identified as the Verizon office.

MCI facilities in the downtown area are mainly located underground, in a system of company owned and rented ducts. South of 15th Street and west of I-10, MCI shifts to aerial facilities. MCI facilities are typically buried at a depth of 36 to 48 inches and are not encased in concrete unless 36-inch depth could not be achieved.

MCI also has long distance underground fiber optic facilities, but these are contained entirely within the Union Pacific Railroad right-of-way.

AGE OF INFRASTRUCTURE

No response was received on infrastructure age.

ASSESSMENT OF CAPACITY

MCI has no plans for expansion of the local network in Tucson at this time. Relocation of underground cable (possibly to temporary aerial cable attached to TEP poles) will be required in the area of the new Justice Court/Municipal Court Complex, located southeast of the Stone Avenue/Toole Avenue intersection.

STREETCAR ALIGNMENT

MCI has duct runs parallel to and crossing the planned Modern Streetcar track location on Congress between Pennington and Granada, and on Granada south of Congress.

At this time no determination has been made on whether upgrades or relocations of MCI facilities will be needed in connection with the Streetcar construction. Verizon's normal policy is to remain in place unless its facilities are directly impacted or put in jeopardy by construction activities.

COST & FUNDING

Relocation required by public roadway improvements will be paid for by the company. Occasionally the City of Tucson offers joint trench opportunities, where the City pays for the cost of the trench and (possibly) conduit installation.

INFORMATION TECHNOLOGY

PIMA COUNTY FIBER NETWORK

OVERVIEW

Pima County Information Technology (PC IT) has leased Tucson Electric Power spare underground ducts where available.

Pima County desires to establish connectivity between an existing pull box on the NW corner of Pennington and Congress Streets, and the County Detention facility at Silverlake Avenue and Mission Road. To this end, the Utility Master plans shows conduit through Rio Nuevo to the southwestern boundary of Tucson Origins Heritage Park; other work along Mission Road should take any opportunity to further this conduit path.

It is expected that Pima County would wish to take advantage of major-street excavation to install a 4" conduit in the Congress Street, Broadway Boulevard, and Granada Avenue alignments as part of the modern streetcar project. This cost, including approximately 10,000 feet of underground 4" conduit and pull boxes at approximately 500 feet apart, is estimated at \$1 million.

INFORMATION TECHNOLOGY

QWEST COMMUNICATIONS

OVERVIEW

Qwest Communications owns an extensive fiber optic and copper network in the downtown area, selling telecommunication services to local customers. Qwest owns the local distribution infrastructure that was accumulated by Mountain Bell (originally AT&T) while operating as the local telephone monopoly, in the years before the 1996 Cabling Act opened local communication services distribution to competitive marketing.

Typically, where possible, Qwest conduits share a joint trench with Tucson Electric Power conduits, at a shallower burial depth.

Qwest also owns a long haul fiber line, usually referred to as Qwest National (and identified as "Qwest World" or "Qwest Net" in Arizona Blue Stake Center records). The long haul line is located in the Union Pacific Railroad (UPRR) right-of-way.

AGE OF INFRASTRUCTURE

The local distribution network in the study area is a mix of copper aerial lines, constructed mainly in the 1940s, and underground copper and fiber optic cables, installed primarily in the late 1940s (copper) and late 1980s (fiber).

ASSESSMENT OF CAPACITY

Qwest central office facilities are located within two miles of all proposed developments.

STREETCAR ALIGNMENT

If it is decided that utilities will be relocated, Qwest estimates their cost to relocate their underground infrastructure along the line to be approximately \$3 million. This includes cost to relocate new facilities to the appropriate side of the street.

There may be opportunities for joint trench installation of relocated and new Qwest conduit along the planned Modern Streetcar alignment, which extends from the UA owned University Medical Center (UMC) through the main campus, downtown, and terminates at the Rio Nuevo Development District west of the Santa Cruz River.

COST & FUNDING

Cost to underground existing aerial cable: Qwest may have over 10,000 feet of cable on TEP poles in the downtown planning area. At an assumed cost of approximately \$150/ft to underground this infrastructure a possible cost of this effort might be \$2.1 million.

Relocation and Expansion Costs: Qwest is responsible for cabling and connections to the Qwest network in new installations. The developer typically pays for all conduit, vault, and earthwork costs related to new connections to the Qwest system. When relocating an existing system to accommodate onsite developer improvements, the developer will carry all costs of the development.

Downtown Infrastructure

Qwest
Existing Infrastructure

Legend

--- Street Car Route

Qwest Infrastructure

— Aerial

— Aerial and Underground

— Underground

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Tucson
Downtown
Partnership



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AT&T

OVERVIEW

AT&T provides no direct service to local customers, but provides optional long distance service for calls/internet originating in the local Qwest network. This type of operation is known as Long Distance Competitive Access Service (LDCA).

AT&T has two distinct communications lines running through the City: the AT&T Core Line, constructed in 1986, and the "Nex Gen" line completed in 2002. ("nex gen" is short for "next generation") The "nex gen" line is located west of the Core Line. Both lines converge on the downtown AT&T building, 126 E. Alameda.

The Core AT&T line is multiple ducts, encased in 4500 psi concrete, located approximately 3' below the surface, except at some of the major intersections, where AT&T used a steel sleeve and a deeper installation to stay clear of existing utilities.

The "Nex Gen" line is multi-duct HDPE installed by directional boring methods. It is located at a depth of about 3 feet in Alameda, but can be quite deep.

AT&T requires any new installations to maintain a 2' horizontal and vertical clearance from AT&T facilities. Also, AT&T requires that any excavation taking place within 5 feet of AT&T lines be undertaken only while an AT&T representative is onsite to monitor the digging.

AGE OF INFRASTRUCTURE

The Core AT&T line was constructed in 1986. The "Nex Gen" line was constructed in 2002.

ASSESSMENT OF CAPACITY

AT&T provided no information about planned capacity increases.

STREETCAR ALIGNMENT

AT&T duct runs parallel to the planned Modern Streetcar track location on Congress between Stone and Church. At this time it is not known whether relocations or upgrades would be needed in connection with the Streetcar construction.

COST & FUNDING

Relocation required by public roadway improvements will be paid for by the company. Relocations needed to accommodate private development will be paid by the developer.

LEVEL 3/BROADWING/WITEL COMMUNICATIONS

OVERVIEW

Level 3 Communications has recently acquired two other telecommunication companies in downtown Tucson. These are WilTel Communications (acquired December 2005) and Broadwing Communications (acquired January 2007). These separate business identities are still maintained on the Arizona Blue Stake listings.

Level 3 (along with and its recently acquired telecoms) is a long haul fiber carrier, with a fiber optic presence in the Union Pacific Railroad right-of-way. Broadwing owns aerial cable in the UPRR right-of-way that goes underground at TEP's Tucson Substation (near 5th Street and Main) and continues in TEP duct bank to 33 North Stone, where it enters the building from the Pennington Street side. WilTel's fiber optic presence leaves the UPRR right-of-way near the historic train station, and lands in the Level 3 telecommunications building at 135 N. 6th Avenue, just east of the AT&T/Qwest Tucson Main building at 126 E. Alameda. This fiber is typically installed in TEP duct bank. TEP is no longer renting duct space to telecommunications providers, but it is not requiring existing duct bank tenants to vacate.

AGE OF INFRASTRUCTURE

No information was provided on infrastructure age.

ASSESSMENT OF CAPACITY

No information was provided on existing capacity or any plans for capacity improvements.

STREETCAR ALIGNMENT

Because of the location of the Level 3 facilities (at least 1/2 block north of Congress), no impacts are expected from the planned Modern Streetcar project.

COST & FUNDING

No information was provided.

McLEOD USA

OVERVIEW

McLeod USA operates a small city ring which offers internet services. The ring has it's northwest corner at the 12th Street/3rd Avenue intersection. Long distance transport is on cable infrastructure owned by others. Because of the location of the McLeod facilities, no impacts are expected in the downtown Tucson planning area, or with the planned Modern Streetcar.

AGE OF INFRASTRUCTURE

No information was provided on infrastructure age.

ASSESSMENT OF CAPACITY

No information was provided on existing capacity or any plans for capacity improvements.

STREETCAR ALIGNMENT

Because of the location of the McLeod facilities, entirely located south and east of 12th Street and 3rd Avenue, the northwest corner, no impacts with the planned Modern Streetcar.

COST & FUNDING

No information was provided.

TIME WARNER TELECOM/XSPEDIUS

OVERVIEW

Time Warner Telecom provides voice and communications services and data transport services to a variety of customers, as a Competitive Local Exchange Carrier (CLEC) operating in the Tucson metropolitan area. With the merger of Time Warner Telecom and Xspedius in 2007, the number of CLEC's operating in the downtown Tucson was reduced to three. Customers of Time Warner/Xspedius include small and large businesses and various government agencies.

Time Warner maintains underground facilities in a majority of the streets located in the downtown and Rio Nuevo areas as part of a city wide fiber ring.

The Time Warner system is almost entirely underground in the downtown area. Time Warner cable switches from underground to aerial at the intersection of Court and Church, and then heads north across 6th Street and along 10th Avenue to the MCI Point of Presence (POP) at 220 West Elm. Time Warner also owns aerial fiber along Toole Avenue between Stone and 6th Avenue at this time, but this cable is scheduled to be relocated underground in the next few months, to accommodate construction of the Pima County/City Joint Courts Complex .

AGE OF INFRASTRUCTURE

Much of the Time Warner fiber system is located in underground conduit leased from TEP. All duct owned by Time Warner (as opposed to cable systems occupying rented TEP duct) has been installed since 1996. This comprises approximately 50% of the Time Warner communications system in the downtown and Rio Nuevo area. These newer duct systems were installed by Time Warner and Xspedius as stand alone (not joint trench) projects.

ASSESSMENT OF CAPACITY

At this time the Time Warner system has adequate capacity to meet customer needs. Cable extensions are designed and installed to meet new customer demand. No forecast or business plan providing for system expansion exists at this time, although this could change with the addition of one or two major customers.

STREETCAR ALIGNMENT

Time Warner has provided information on possible conflicts with the proposed Modern Streetcar alignment. There are many Time Warner underground crossings of the planned streetcar alignment in the downtown area, and many locations where underground conduit occupies Congress and Broadway. The most likely points of conflict (where Time Warner ducts are located parallel and in close proximity to the planned track locations) are: Congress directly east of Granada, and both Congress and Broadway, between Stone Avenue and 6th Avenue,

Splice length considerations will, in most cases, prevent reconstruction of underground crossings under the new streetcar track, but sleeves constructed in conjunction with the Streetcar might be used in future years.

Time Warner would be interested in joint trench opportunities associated with the Streetcar construction.

COST & FUNDING

Relocation required by public roadway improvements will be paid for by Time Warner. Occasionally the City of Tucson offers joint trench opportunities, where the City pays for the cost of the trench and (possibly) conduit installation.

Duct systems in new subdivisions would be placed at the developer's expense. Time Warner installs cable and makes connection. Funding for other customer-driven system expansions would be determined on a case-by-case basis.

UNIVERSITY OF ARIZONA FIBER OPTIC SYSTEM

OVERVIEW

The University of Arizona (UA) maintains a fiber optic system throughout its Main Campus. Within the downtown and Rio Nuevo study area the UA campus fiber net is limited to aerial cable attached to TEP power poles, along the north side of 6th Street, between the University Service Annex (USA) Building at 220 West 6th Street and Park Avenue. The 6th Street fiber optic line connects the main campus to the USA building. A second fiber connection to the Main Campus enters the USA building from the north.

The University of Arizona maintains off-campus connectivity through two fiber optic connections to the WiTel (Level 3) node at 235 North 6th Avenue. The first long distance connection is through aerial fiber optic cable running down the Union Pacific Railroad right-of-way from the USA building to a point near Toole Avenue and Alameda, where it leave the Railroad to connect to WiTel. The second runs from WiTel across the railroad right-of-way, then east along 8th Street to Herbert, and north to 6th Street and then east to Euclid.

New UA facilities will be constructed as part of the Rio Nuevo development. The extent and location of these new UA facilities are currently in negotiation between City of Tucson and UA. Communications connections between these facilities and the Main Campus are expected to run through the City of Tucson Fiber Network. The City has a fully redundant fiber ring which is already connected to the UA Computer Center located at 1077 N. Highland (SW corner of Speedway and Highland). Any additional UA facilities constructed in the downtown Rio Nuevo area will be connected to UA via the City's fiber network.

AGE OF INFRASTRUCTURE

The University's aerial fiber optic line running along the north side of 6th Street was installed in 2002. The UA WiTel connections were installed in 2005 and 2006.

All components of the Tucson Fiber Network have been constructed in the last 8 years.

ASSESSMENT OF CAPACITY

Communications engineers at UA calculate that the existing infrastructure will provide adequate capacity for 10 to 15 years.

STREETCAR ALIGNMENT

At this time it is expected that any fiber infrastructure expansion in conjunction with the Modern Streetcar alignment will be the responsibility of City of Tucson Fiber Network, with no direct involvement by UA.

COST & FUNDING

The University's communications needs for the new UA Rio Nuevo sites will be provided by the City of Tucson Fiber Network, and funded from the Rio Nuevo project.

UNION PACIFIC RAILROAD – INTERSTATE COMMUNICATIONS CORRIDOR

OVERVIEW

The Union Pacific Railroad (UPRR) right-of-way is a major interstate communication corridor. Copper and fiber optic lines for a number of interstate carriers, including Qwest National, Level 3 Communications, and MCI/Verizon are contained within the railroad right-of-way. Major nodes for these carriers are maintained at the Qwest/AT&T building on Alameda west of 6th Avenue, and at the MCI Building at 220 West Elm Street.

AGE OF INFRASTRUCTURE

No attempt was made, as part of this study, to obtain information on the specific ages and configurations of the individual long haul fiber systems occupying the UPRR right-of-way.

ASSESSMENT OF CAPACITY

No attempt was made, as part of this study, to obtain information on existing capacity or planned capacity improvements for the long haul fiber systems occupying the UPRR right-of-way.

STREETCAR ALIGNMENT

The planned Modern Streetcar route will take the streetcar under the Union Pacific Railroad tracks at the new 4th Avenue underpass, which is currently under construction. It is anticipated that the streetcar tracks will be installed in the underpass as part of the current 4th Avenue construction project. Therefore, no obstructions or conflicts are anticipated for the streetcar project.

COST & FUNDING

Any work performed in the UPRR right-of-way requires many additional regulatory and review steps. It is assumed that any work in the railroad right-of-way will be in connection with a public improvement project or utility expansion/relocation project. Private development projects should have no reason to disturb any facilities in the UPRR right-of-way.

INFORMATION TECHNOLOGY

VALLEY TELECOM GROUP

OVERVIEW

Valley Telecom Group is an incumbent local exchange carrier serving rural communities east of Tucson. Valley Telecom's presence in downtown Tucson is limited to a long distance fiber optic line, whose primary purpose is transfer of long distance calls from Valley Telecom customers (residing outside of Tucson) to Qwest, for further long distance distribution. The Valley Telecom fiber system is also utilized as Long Haul Transport for other communications companies.

The downtown Valley Telecom facility is an 8-duct underground fiber optic line, with minimum depth 50 inches, originating on the south side of Alameda at the Qwest building in the block directly west of Toole Avenue, then traveling south and east on Toole Avenue and local streets until passing outside of the downtown area. In some areas the conduit depth may be as great as 20 feet to avoid other utilities. The City of Tucson has 2 ducts in the same trench through most of this run.

Valley Telecom recently completed relocations in the Toole and 5th Avenue/4th Avenue area to eliminate conflicts with the upcoming 4th Avenue Railroad Underpass project. The relocated duct is placed at a minimum depth of 5 feet.

AGE OF INFRASTRUCTURE

The downtown part of Valley Telecom's system was placed in 2002 and 2003.

ASSESSMENT OF CAPACITY

Valley Telcom has plans to increase its internet capacity by leasing existing fiber from Time Warner. There are no plans for new construction in Tucson streets, however.

STREETCAR ALIGNMENT

The current Valley Telecom route crosses the planned Modern Streetcar track on 5th Avenue at Broadway and at Congress. This is part of the new duct bank that was installed at a depth of 5 feet to avoid conflicts with the 4th Avenue Underpass project. No upgrades should be needed during construction of the Modern Streetcar.

COST & FUNDING

Construction and operation of the system is paid from long distance tolls applied to Valley Telecom's local customers outside of Tucson.

Downtown Infrastructure

Other Utilities
Existing Infrastructure

Legend

--- Street Car Route

McLeodUSA

AT & T Infrastructure

Valley Telephone Infrastructure

Current Valley Telephone Conduit

Old Route (Abandoned)

MCI Infrastructure

+ Aerial

Underground



Tucson
Downtown
Partnership



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TRANSPORTATION

4TH AVENUE UNDERPASS

OVERVIEW

Planning is underway for a new 4th Avenue Underpass that will replace the existing underpass. Upon completion, it will provide for two lanes carrying traffic and streetcars, separate bicycle lanes, and two pedestrian walkways accessible for persons with disabilities. The pedestrian pathways will be 20 feet wide on the east side of the underpass and 10 feet wide on the west side.

To assist with pedestrian and bicycle access during the construction period, TDOT plans to install sidewalk and street light improvements along Eighth Street, to link 4th Avenue with the Sixth Avenue Underpass. Additionally, TDOT will complete a paved bike and pedestrian pathway from the Coronado Hotel to the existing sidewalk and bike lane on the north side of the Broadway Underpass.

PROJECT TIMELINE

The project is currently in the planning and engineering design phase. Construction of the new underpass will begin in summer 2007 and will take approximately 18 months to complete. The construction will require that the underpass be closed (between Congress Street and Ninth Street) for approximately 10 to 14 months.

STREETCAR ALIGNMENT

The streetcar will go through the new underpass. The new underpass will accommodate both the historic trolley and the modern streetcar.

COST & FUNDING

It is estimated that the total construction costs related to the project will be \$26 million. Most of the funding will come from State Highway User Revenue Funds (HURF). Utility companies will provide for approximately \$1.0 million of the costs associated with relocating their facilities and equipment involved in the project. Approximately \$1.7 million will be required from other funding sources.

TRANSPORTATION

CORPS OF ENGINEERS

OVERVIEW

The United States Army Corps of Engineers (USACE) provides engineering services to the nation including designing, building and operating water resources and other civil works projects (Navigation, Flood Control, Environmental Protection, Disaster Response)

In the downtown area the USACE is engaged in feasibility studies for the Paseo de las Iglesias project and the El Rio Medio Ranch project. The USACE is conducting feasibility studies for restoration of the Santa Cruz River in two reaches where portions of which are in downtown Tucson.

Paseo de las Iglesias Reach

The Paseo de las Iglesias Environmental Restoration Feasibility Study addresses a 7-mile reach of the Santa Cruz River from Los Reales Road on the south to Congress Street on the north. The study was undertaken by the US Army Corps of Engineers and the Pima County Regional Flood Control District, with input from the City of Tucson and other stakeholders. The study, completed in 2005, evaluated ecosystem restoration, flood control improvements, and river park trail development. The project is currently awaiting Federal authorization. The Recommended Plan includes 1,100 acres of mesquite bosques on river terraces and floodplain, bordered by palo verde woodland and desert shrubs. Plan features are consistent with the desires expressed by public involvement work groups, and have been endorsed by the County. Total first cost is \$97,000,000. The federal share is \$59,666,800. Of the remaining \$34,195,000 non-federal share, \$26,242,000 is accounted for by land contributions, leaving \$7,953,000 as the local sponsor's financial commitment. Local funding currently available includes \$14,000,000 in dedicated 2004 bonds.

El Rio Medio Reach

The El Rio Medio Feasibility Study focuses on a 4.5 miles reach of the Santa Cruz River and adjacent lands from Congress Street on the south to Prince Road on the north, constituting a study area of approximately 3,080 acres. The feasibility study phase was initiated in January 2001. The Pima County Regional Flood Control District and the City of Tucson are the current non-Federal sponsors of the project, which is being conducted by the US Army Corps of Engineers. The total cost of the feasibility phase is \$3,427,000, which is being shared equally (50/50) between the Corps and the non-Federal sponsors. The primary purpose of the study is ecosystem restoration. Water supply recharge for later recovery and municipal use is a secondary project purpose. The study team is developing an initial array of ecosystem restoration alternatives, and a separate array of water supply recharge alternatives. The best of each of these alternatives will be selected and combined to create a final recommended plan using tradeoff analysis. The study team anticipates having the recommended plan complete by December 2007.

TRANSPORTATION

I-10 WIDENING

OVERVIEW

Interstate 10 (I-10) through Tucson carries an estimated 60 million vehicles per day. Arizona Department of Transportation (ADOT) recently began construction on widening I-10 in the City of Tucson from Prince Road to 29th Street. This project will widen I-10 from the current six lanes of freeway to eight lanes (including the addition of two auxiliary lanes). The widening began in January 2007 and it is expected to be completed by Spring 2010.

CONDITION OF FREEWAY

The downtown portion of I-10 was constructed in the early 1960s. This section of the freeway is one of the oldest in Arizona. It was reconstructed in 1996; however, the reconstruction (primarily concentrated on the frontage roads) did not fully prepare for future traffic demand. Once the current I-10 Mainline Widening project from Prince Road to 29th Street is completed in 2010, the I-10 mainline and frontage roads will be adequate to handle the traffic needs through the year 2030.

CLARK STREET BRIDGE AND UNDERPASS

The widening of the Clark Street underpass will create greater east-west connectivity in the downtown area. Currently, approximately 2000 vehicles drive across Clark Street every day. Commuters make half of the daily vehicle trips across Clark Street.

In addition to the widening of the underpass, the Clark Street Bridge will be moved approximately 100 feet to the north of the existing bridge as part of the circulation and drainage plan for Rio Nuevo. The bridge opening was expanded to 230 feet to accommodate 140 feet of pedestrian/bicycle facilities. The I-10 widening project will also accommodate the streetcar passing underneath.

COST & FUNDING

It is estimated that ADOT will have spent in excess of \$220 million by the completion of the I-10 widening from Prince Road to 29th Street. TIF funds in the amount of \$9 million have been dedicated to construction related to the Clark Street Underpass. Additionally, the City has committed another \$4 million (in non-TIF funds) for underground box culverts and drainage improvements on and around the site of the proposed new arena.

TRANSPORTATION

DOWNTOWN LINKS

OVERVIEW

Downtown Links is a roadway construction project recently initiated by the Tucson Department of Transportation that will provide links between Barraza-Aviation Parkway and I-10, Broadway Boulevard and the 4th Avenue shopping district, and downtown and the neighborhoods to its north. These Downtown Links have been conceived as a modest, four-lane roadway on the north side of the railroad tracks, enhanced pedestrian and bicycle access routes, and the connection of Barraza-Aviation Parkway to 22nd Street and I-10. Enhancements on this corridor will provide more efficient access to downtown, new and safer underpasses, railroad crossings and sidewalks.

Downtown Links is part of the long-range Regional Transportation Authority (RTA) plan that was approved by Tucson-area voters in May 2006. All of the projects contained in the plan, including Downtown Links, will be funded by a half-cent transportation sales tax that went into effect on July 1, 2006.

HISTORY

Moving traffic from the eastside of downtown Tucson to I-10 has been an ongoing debate since the 1970s. In 1972, plans for the Butterfield Parkway were rejected because the El Trajito Shrine, which was in the parkway's path, was placed on the National Register of Historic Places. In the early 1980s, Tucson's City Council directed staff to begin developing plans for the Aviation Parkway. After several routes for the Parkway were accepted and rejected, the downtown portion or "last mile" of Aviation Parkway was approved in 1985. However, in 1986 the voters turned down a vote to raise the sales tax by ½ cent and fund transportation projects that included money for the downtown leg of Aviation Parkway. Shortly after the election, many neighborhood and other community leaders began opposing the elevated 6-lane Aviation Parkway being built through downtown because it destroyed many historic buildings and cut off sections of the downtown, such as the Warehouse District and the 4th Avenue Business District.

In the late 1980s, the City of Tucson initiated the Downtown Land Use and Circulation Study (DLUCS) in response to citizen's concerns with a previous design concept and roadway alignment for the "last mile" of the parkway, through downtown Tucson. The DLUCS planning process allowed the community to develop a preferred alternative for the downtown section of the parkway. This new concept for the "last mile" was a four-lane roadway, which followed the Steven Avenue alignment, parallel to and north of the Southern Pacific Railroad. The new roadway would cross over 4th Avenue at about the same level as the railroad. It would dip down to meet 6th Avenue and then follow the Toole Avenue alignment to Stone Avenue. From this point, it would follow the Franklin Street alignment to Church Avenue at 6th Street, and would continue to I-10. The new roadway would provide a means to and from downtown and have bicycle and pedestrian pathways, as well as public art and urban design amenities. In addition, the design concept included a new roadway drainage system and major reconstruction of the Tucson Arroyo that would remove parts of downtown from the 100-year flood plain. In 1993, the

Mayor and Council approved the DLUCS Design Concept Report and in 1996, they approved the Barraza-Aviation Parkway General Plan.

At its meeting on December 12, 2006, the Downtown Links Citizen's Advisory Committee approved a concept to move forward for more detailed engineering and environmental study. The concept consists of a modest four-lane roadway starting at the Broadway/Barraza-Aviation Parkway Interchange and parallels the north side of the Union Pacific Railroad tracks and turns north along the existing Seventh Avenue alignment until it intersects with Sixth Street. The concept proceeds to the west and passes beneath a proposed railroad bridge in the proximity of Ninth Avenue. It is anticipated that this roadway will have vehicular connections to Fifth and Sixth Avenues and additional bicycle and pedestrian connections throughout.

The design concept phase of project development has begun and is anticipated to be complete by the end of 2007. Once the design concept phase is complete the final design phase will begin and is expected to take 18 to 24 months. Construction is expected to begin when funding from the RTA becomes available, currently in 2011.

TRANSPORTATION

PARKING

OVERVIEW

ParkWise, the City of Tucson Department of Transportation parking division, is responsible for on-street parking and a number of parking garages and lots in the downtown area. The Division also operates the Tucson Inner City Express Transit, the free downtown shuttle service, and administers both residential and non-resident parking permit programs throughout the community. ParkWise is a fully self-supporting program with both capital and operating budgets being paid through user fees.

OFF-STREET PARKING REQUIREMENTS

ParkWise has developed a 5-year off-street parking master plan for the core of downtown based on the same development assumptions used in this study. It is estimated that 13,000 parking spaces will be developed in new parking structures – 6,000 to replace existing surface parking, and 6,000 new spaces to meet the demand of new development. The projected cost for all of these structured spaces is \$230 million. It is anticipated that approximately \$73.5 million of TIF assistance will be required over the life of the district to help cover the shortfall of revenues to operating and debt service expenses. The timing of construction of each parking structure will need to be carefully considered to coincide with parking needs in order to assure the financial strategy can be successful. Prior to the TIF district terminating, it is anticipated that the off-street parking system will be fully self-supporting.

ON-STREET PARKING REQUIREMENTS

Downtown Tucson has a basic on-street metered parking system. Consideration should be given to an upgrade of this approach that would replace meters with a pay-by-space system and offer multiple payment options to customers. The pay-by-space system would also allow ParkWise to implement a pricing strategy that would eliminate the need for on-street time limits that are often a source of customer frustration. The cost to implement such a system is approximately \$3 million – with \$1.5 million in TIF assistance necessary.

PARKING INCENTIVES

The ParkWise Program and Commission are open to considering incentives such as a “first hour free” program in off-street facilities (on-street parking would not be included). This program would be available to all downtown customers as opposed to select ones. One hour free in garages may be a good marketing tool and should not significantly impact the revenue needed to build and provide the parking needed to support downtown revitalization. Longer periods of time, such as two-hours free, or overall rate reductions, would significantly impact revenue and could be easily abused. These incentives would also require a significantly larger contribution from the TIF district to make the system work.

See appendix for further details on parking.

ParkWise/Rio Nuevo Parking Funding Partnership

Fiscal Year	08	08	09	09	10	10	11	11	12	12
	PW	RN	PW	RN	PW	RN	PW	RN	PW	RN
Contribution (millions)	\$ 38.4	\$ 3.9	\$ 26.4	\$ 6.5	\$ 87.5	\$ 14.5	\$ 53.9	\$ 16.9	\$ 23.9	\$ 15.6

Fiscal Year	13	13	14	14	15	15	16	16	17	17
	PW	RN	PW	RN	PW	RN	PW	RN	PW	RN
Contribution	\$ -	\$ 10.2	OP*	\$ 6.5	OP	\$ -	OP	\$ -	OP	\$ -

Fiscal Year	18	18	19	19	20	20	21	21	22	22
	PW	RN	PW	RN	PW	RN	PW	RN	PW	RN
Contribution	OP	\$ -	OP	\$ -	OP	\$ -	OP	\$ -	OP	\$ -

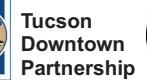
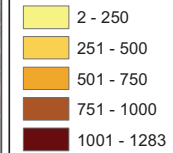
* OP = operating & debt service expenses only

Period 1		Period 2		Period 3		Period 4	
PW	RN	PW	RN	PW	RN	PW	RN
38.4	3.9	87.5	6.5	53.9	16.9	0	10.2
26.4			14.5	23.9	15.6		6.5
64.8	3.9	87.5	21	77.8	32.5	0	16.7

Totals		Totals with RN backed out of PW Numbers	
PW	RN	PW	RN
64.8	3.9	60.9	3.9
87.5	21	66.5	21
77.8	32.5	45.3	32.5
0	16.7	0	16.7
230.1	74.1	172.7	74.1
			246.8

Parkwise
Downtown Parking

- — ■ Street Car Route



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Downtown Infrastructure

Parkwise Future Downtown Parking

Legend

--- Street Car Route

Future Parking Development Plans

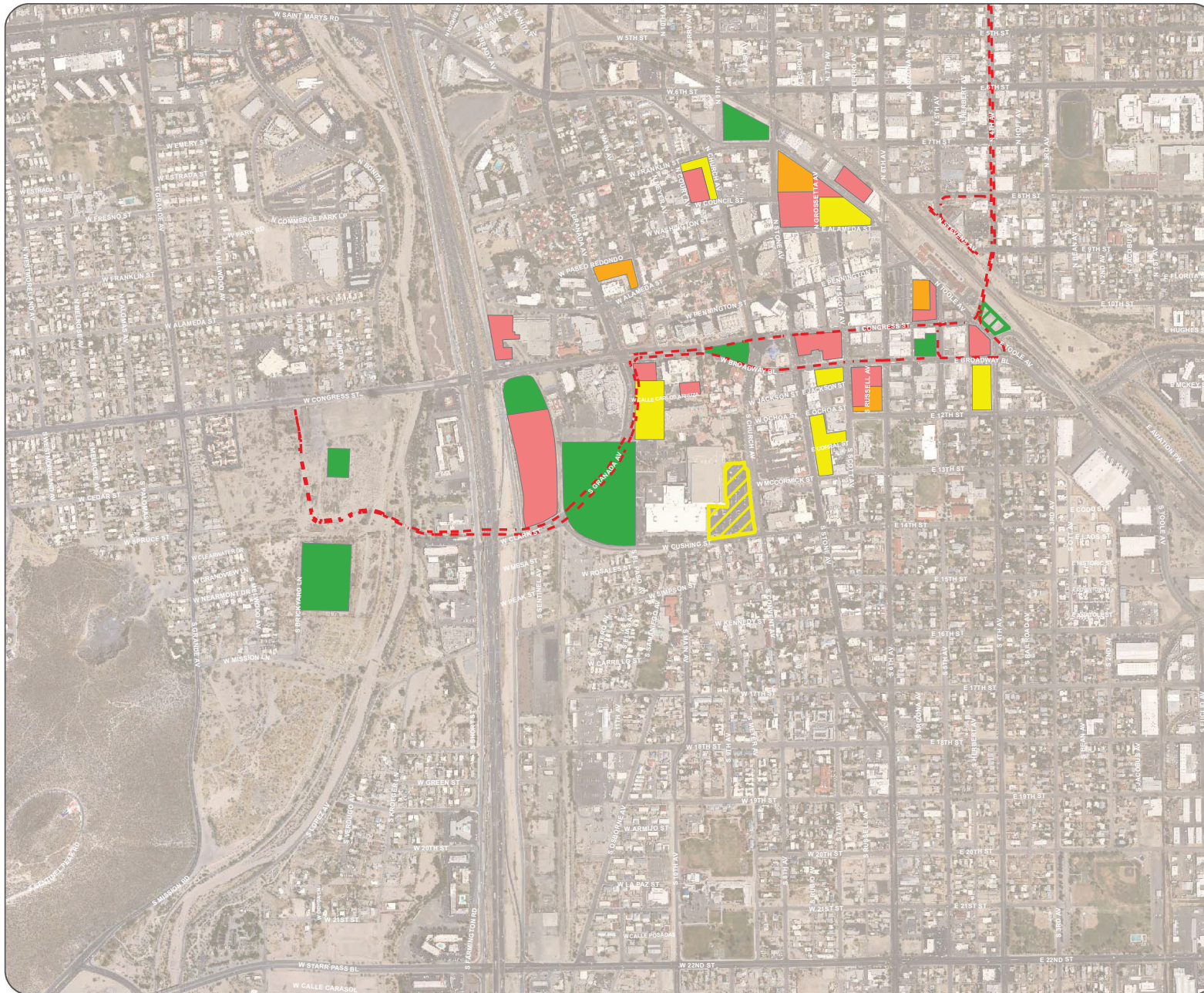
- 5-year redevelopment parcels
- Mixed 5-year redevelopment and new parking structure (0-18 months)
- New parking structure (19-36 months)
- Mixed 5-year redevelopment and new parking structure (19-36 months)
- New parking structure (3-5 years)
- Mixed 5-year redevelopment and new parking structure (3-5 years)



**Tucson
Downtown
Partnership**



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TRANSPORTATION

MODERN STREETCAR

OVERVIEW

The Modern Streetcar is currently undergoing preliminary engineering and will connect the University of Arizona to downtown Tucson along a four-mile route. It is anticipated that the construction of the Modern Streetcar will be completed in early 2010.

BACKGROUND

In the fall of 2004, the Tucson Department of Transportation (TDOT) began a federally sponsored Major Transit Investment Study now referenced as the Tucson Urban Corridor Study, to identify potential transit solutions in central Tucson. The study area boundaries are Grant Road on the north, 22nd Street on the south, Grande Avenue on the west and Campbell Avenue on the east. The study's goals are to provide a sustainable transportation investment within the central core that is able to:

- Connect major activity centers
- Create economic development
- Support population and employment growth
- Improve transit service
- Mitigate parking constraints

PROJECT TIMELINE

Phase 1 - 2004 – 2007 - Alternatives analysis and adoption of the locally preferred alternative

Phase 2 - 2006 – 2008 - Draft and final environmental assessment and preliminary engineering

Phase 3 - 2008 - 2010 - final design, vehicle testing, and construction

STREETCAR ALIGNMENT

In the downtown area, the streetcar will run west from the 4th Avenue Underpass along Congress and turn south on Granada and connect again to Congress on the west side of the freeway. Heading east, the streetcar runs along Broadway from Church Avenue to the 4th Avenue Underpass. Transit-oriented development opportunities are maximized on this route.

COST & FUNDING

The Modern Streetcar project is currently being advanced through the Federal Transit Administration (FTA) project development process to secure federal funding. Local funding for the Modern Streetcar project was approved by Pima County voters as part of the successful Regional Transportation Authority Plan in May 2006. It is anticipated that the construction of the Modern Streetcar will be funded by a 50 percent federal/local share.

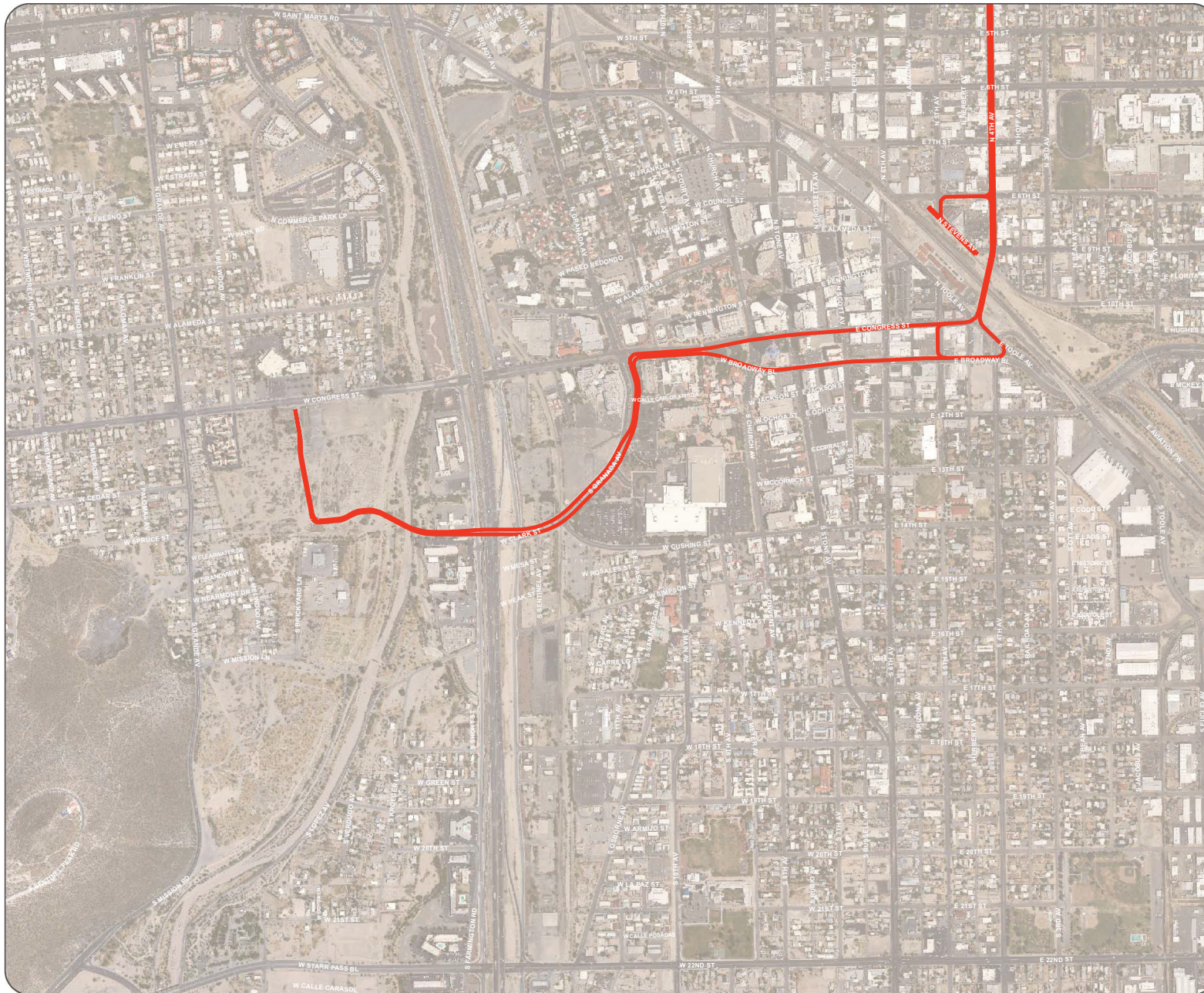
Additional funding is needed for the extension of the streetcar from its original terminus at the center of the Mercado at Menlo Park on Avenida del Convento, to its approved terminus on West Congress Street (see Streetcar map). Costs are estimated at \$10 million.

Downtown Infrastructure

Street Car Route

Legend

 Street Car Route



1:10,000



**Tucson
Downtown
Partnership**



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4TH AVENUE DESIGN
PROVIDED BY TRANSYSTEMS
EVERYTHING IN PURPLE

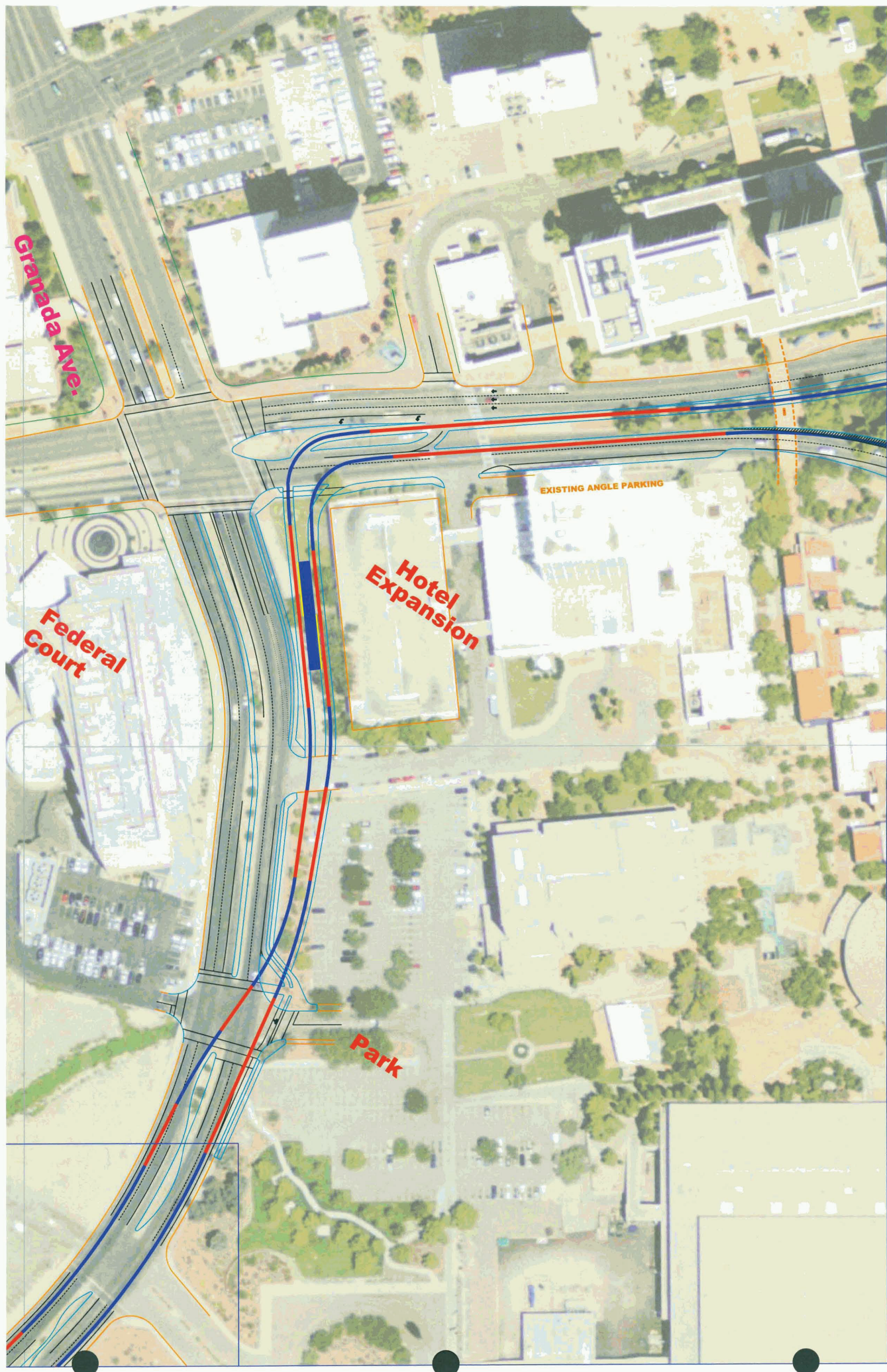
LOOP FOR OPT
AND MODERN
STREET CAR

ALL RED PHASE
FOR STREET CAR

PARALLEL PARKING

**CONGRESS - BROADWAY ONE WAY
MODERN STREET CAR LEFT SIDE RUNNING**

c:/dwg/tucson/splitmsc left side running\1-4-07-final.dwg



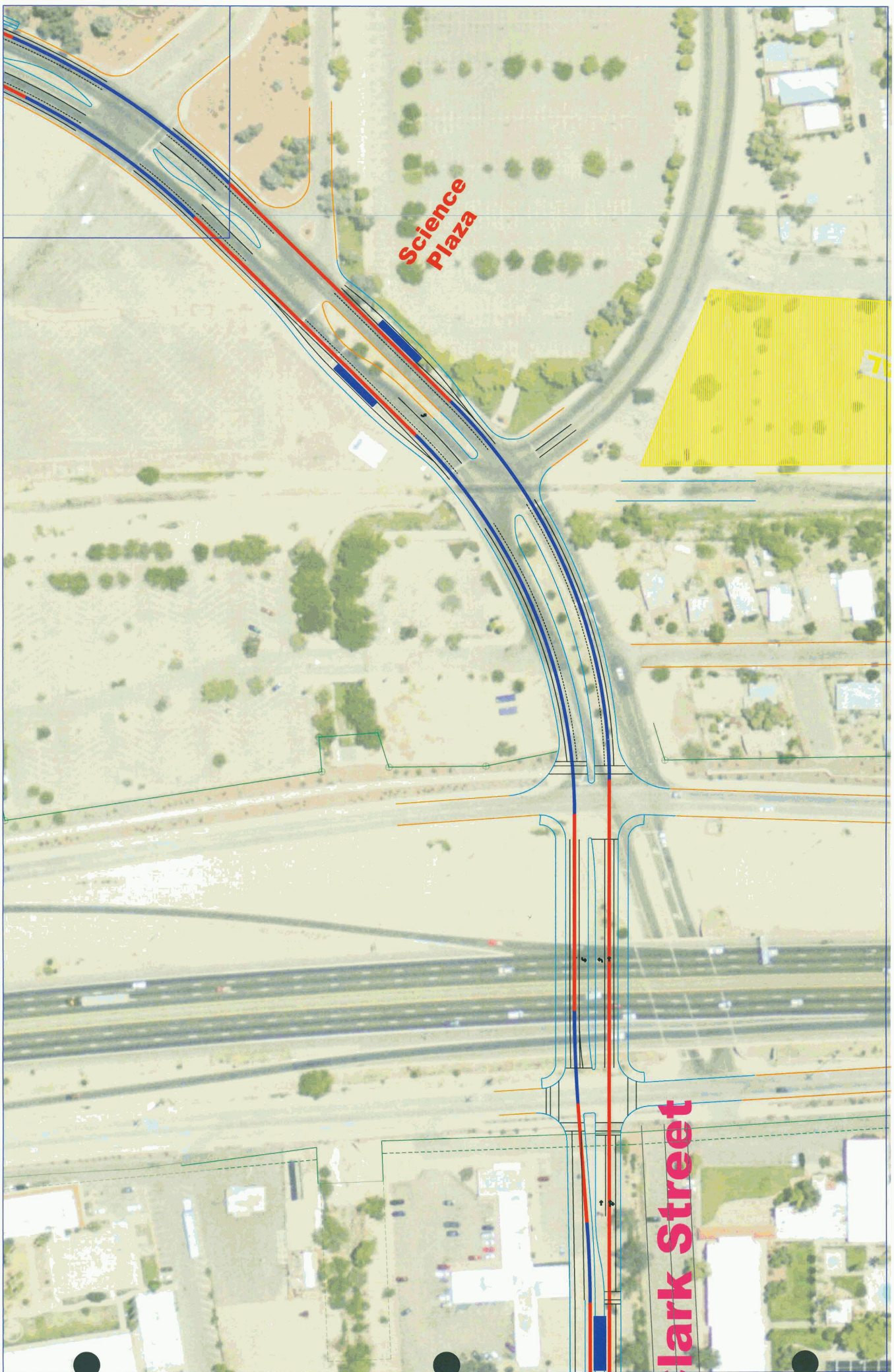
Granada Ave.

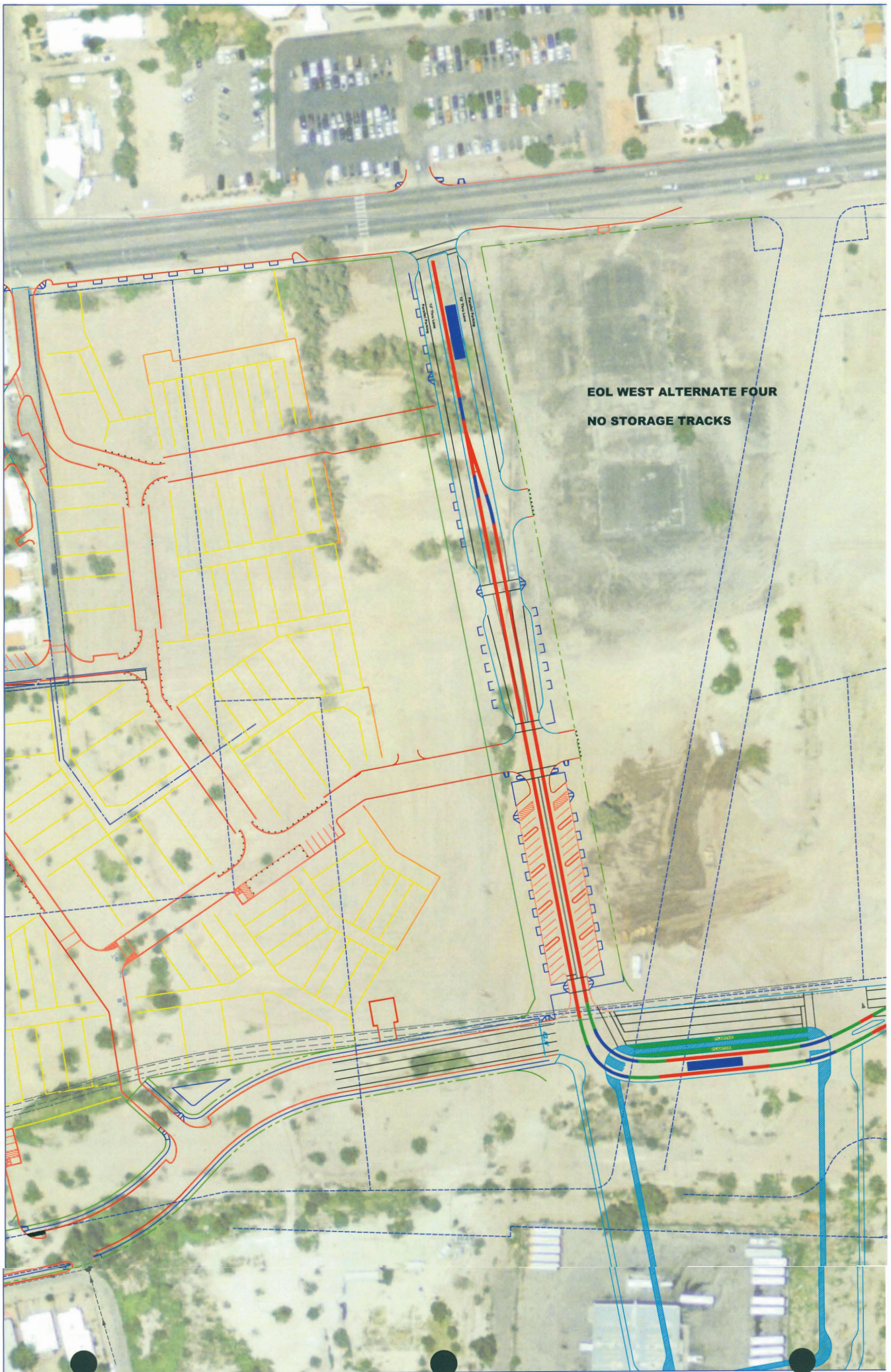
Federal Court

Hotel Expansion

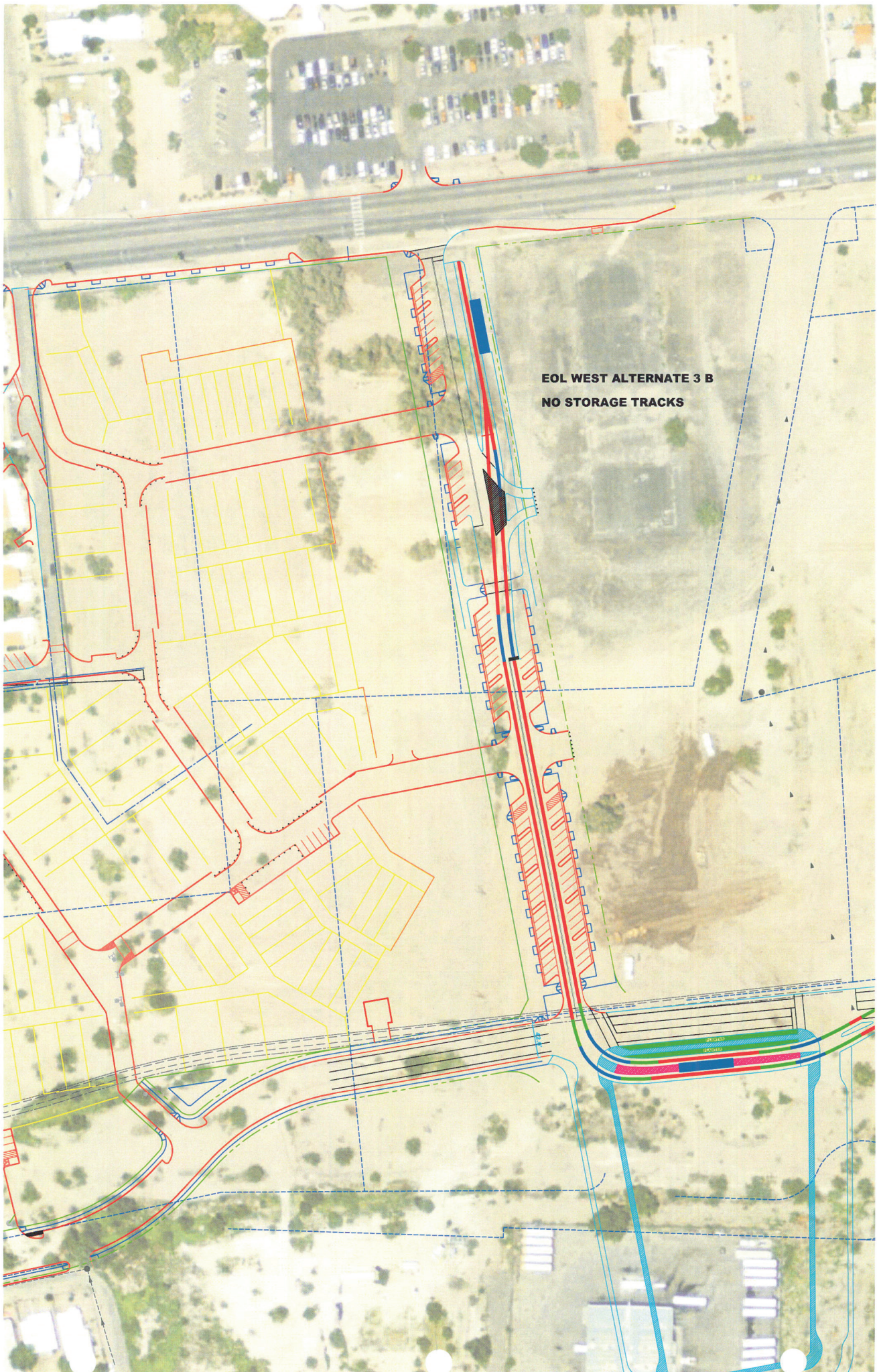
EXISTING ANGLE PARKING

Park

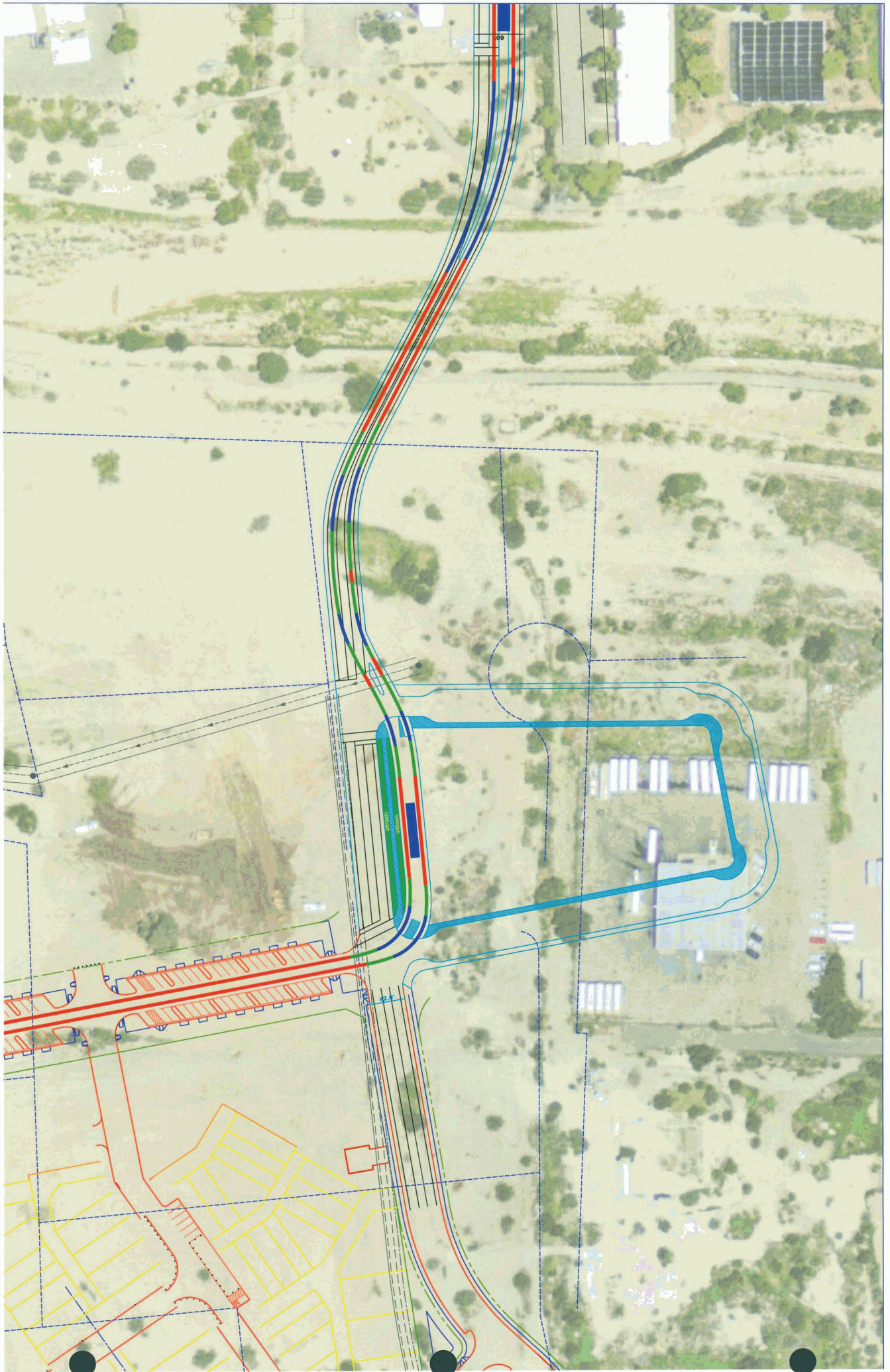




EOL WEST ALTERNATE FOUR
NO STORAGE TRACKS



**EOL WEST ALTERNATE 3 B
NO STORAGE TRACKS**





CITY OF TUCSON RIGHT-OF-WAY IMPROVEMENTS/STREETSCAPE

OVERVIEW

The majority of Tucson's downtown streetscape is owned by the City of Tucson (COT). For purposes of this report, streetscape includes all sidewalks, landscaped areas, plazas, parks, and streets located within the public right-of-way (ROW). Within these areas, specific elements include trees, shrubs, flowering plants, potted plants, lawns, sidewalks, plazas, crosswalks, street lighting, traffic lighting, pedestrian lighting, benches, trash receptacles, public art, drinking fountains, public restrooms, parking meters, information and security kiosks, and signage.

The focus of this study is the streetscape within the commercial business district, the TCC, and portions of the west Congress/Mercado district. Residential neighborhoods were not considered for this study.

AGE OF INFRASTRUCTURE

Much of the downtown streetscape has become physically and functionally obsolete. The concrete sidewalk, some almost a century old, is cracked and heaving. Brick surfaces vary in age and condition and many date back to the urban renewal efforts of the 1960s. Street lighting varies as well, from turn-of-the-century historic globe lighting to heavily oxidized 1970s modern fixtures. Much of the street furniture (e.g., benches, trash receptacles, and kiosks) are dated and dilapidated.

ASSESSMENT OF CAPACITY

A large portion of the public ROW area lacks the infrastructure necessary for elevating Tucson's decaying downtown environment to modern metropolitan standards. Reclaimed water lines, necessary for irrigating an expanded landscape, are not in place. Electrical service for lighting, irrigation, electronic parking meters, and special events will have to be installed. Water harvesting, including rain water and stormwater collection, can be implemented, but will require careful pre-planning and coordination with streetscape improvements.

Lighting needs to be thoroughly evaluated and a comprehensive array of streetlights, landscape lighting, façade lights, pedestrian lights, and festival lights needs to be implemented. The conduits, pull boxes, outlets, and fixtures that support this system need to be installed.

Pavers need to be considered carefully. Concerns regarding heat island effect, porosity, safety, and durability need to be balanced with value-enhancing style selections.

An extensive drought-tolerant native vegetation landscape should be developed and implemented. Consideration should be given to creating bio-diverse habitats within landscaped areas. Water harvesting combined with reclaimed water should be utilized in place of depleting potable water resources.

PILOT STREETScape

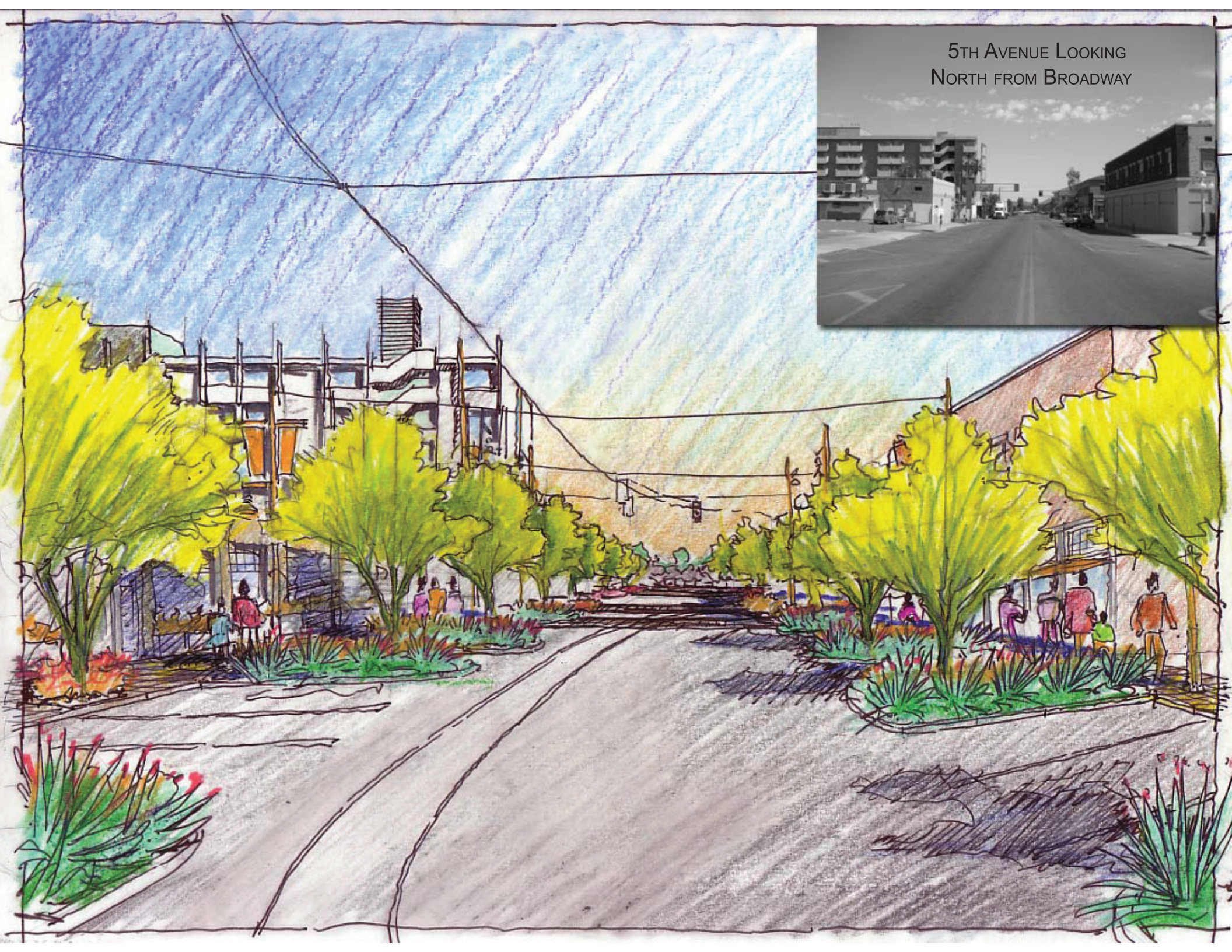
It is recommended that a pilot streetscape be constructed as an initial demonstration project. The pilot would cover the east end of downtown (5th Avenue from Broadway to Toole, Broadway Boulevard from 5th Avenue to 4th Avenue, 4th Avenue between Broadway and Toole, Congress Street from 4th Avenue to Arizona Avenue, and Toole Avenue from 4th Avenue to 5th Avenue). The estimated cost for this pilot streetscape is \$3.1 million (this is not broken out in the budget breakdown on the following page, but is included in the totals in the breakdown).

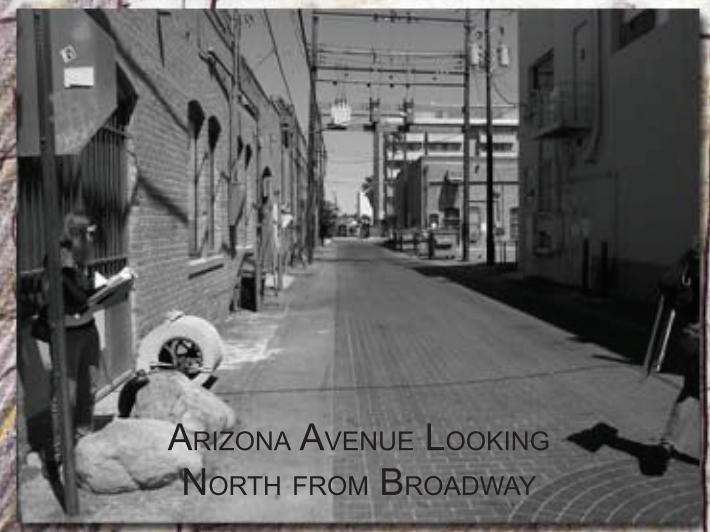
COST & FUNDING

Funding for implementing this comprehensive streetscape plan is estimated at \$107 million. The majority of streetscape improvements are anticipated to occur along the existing built environment. Future development projects may be responsible for funding portions of the streetscape bordering their project. A budget breakdown for the streetscape is on the following page.

City of Tucson Right-of-Way Improvements/Streetscape		
Budget Breakdown		
Right of Way	Pavers through intersections	\$ 402,950
Parking	Solar power meters, pay-by-space	\$ 502,750
Transit	Transportation stops (streetcar, bus)	\$ 237,500
Public Interest	Signage (traffic, parking, other)	\$ 1,094,200
Landscaping	Planters, plants	\$ 5,676,448
Hardscape	Pavers, tree grates	\$ 6,471,314
Lighting	Street lights, landscape lights, upgraded catenary poles, traffic signals, festival lights	\$ 10,876,920
Furnishings	Bollards, trash bins, seating, fountains	\$ 4,946,000
Features + Amenities	Shard structures, restrooms, speakers	\$ 4,510,113
Infrastructure	Irrigation lines, water lines, sewer (for restrooms), electrical, fountains	\$ 24,360,365
<i>Sub-total</i>		\$ 59,078,560
Demolition	Remove existing concrete, pavers, etc.	\$ 2,888,528
Escalation	1% per month	\$ 15,861,026
Contractor Fees	23%	\$ 17,900,466
A/E Fees	20%	\$ 19,145,716
Public Art	1% of budget	\$ 1,148,743
<i>Sub-total</i>		\$ 116,023,039
Additional Streetscapes:		
Pedestrian Bridges	Civic plaza/arena, south of 4th Avenue	\$ 3,000,000
TCC Landscaping	Not included in TCC/Arena budget	\$ 19,500,000
Mercado/Origins	Upgrade landscape	\$ 537,600
Congress St. - Grande/Silverbell	Extension of sidewalk and landscaping	\$ 1,080,000
<i>Sub-total</i>		\$ 140,140,639
Potential Deducts	Budgeted elsewhere in report	\$ 23,205,400
Sub-total		\$ 116,935,239
Streetscapes Outside Rio Nuevo Boundary	Deduct streetscapes out of the boundaries of Rio Nuevo	\$ 9,774,895
Streetscape Total		\$ 107,160,344

5TH AVENUE LOOKING
NORTH FROM BROADWAY





ARIZONA AVENUE LOOKING
NORTH FROM BROADWAY



BROADWAY LOOKING WEST FROM 5TH AVENUE

TOOLE AVENUE LOOKING
NORTHWEST FROM CONGRESS



Downtown Tucson Streetscape Matrix

Street Type	Street Segment					Street Definition																					
		Block Length (North side - A) ¹	Block Length ² (East side - A) ³	Block Length (South side - B) ⁴	Block Length (West side - B) ⁵																						
Arterial / Streetcar	4th Avenue																										
	6th Street to 9th Street	-	1178	-	1188	55	A	4	-	12	-	12	28392	-	-	●	6	●	2	●	-	-	-	-	-	-	-
	9th Street to Congress	-	480	-	520	26	-	-	-	7	-	7	7000	●	-	-	-	●	0	●	-	-	-	-	-	-	-
	Congress																										
	Toole Avenue to 5th Avenue	200	-	200	-	40	A	1	10	-	10	-	4000	-	●	●	3	●	1	-	●	0	●	2	-	-	-
	5th Avenue to 6th Avenue	355	-	355	-	40	A	1	10	-	10	-	7100	-	●	●	3	●	1	-	●	1	●	2	-	-	-
	6th Avenue to Scott	328	-	275	-	40	A	1	13	-	10	-	7014	-	-	●	2	●	0	-	●	0	●	0	-	-	-
	Scott to Stone Avenue	391	-	391	-	50	A	1	13	-	10	-	8993	-	●	●	4	●	0	-	●	0	●	0	-	-	-
	Stone Avenue to Church Street	996	-	944	-	55	A	2	12	-	12	-	23280	●	-	-	2	●	1	-	●	1	●	1	-	-	-
	Church Street to Granada	721	-	679	-	56	A	1	12	-	12	-	16800	-	-	●	8	●	2	-	?	-	-	-	-	-	-
	Broadway																										
	Toole (4th Avenue) to 5th Avenue	397	-	424	-	55	A	1	12	-	12	-	9852	-	●	●	3	●	1	-	●	1	-	-	-	-	-
	5th Avenue to 6th Avenue	396	-	424	-	55	A	1	12	-	12	-	9840	-	●	●	3	●	1	-	●	1	-	-	-	-	-
	6th Avenue to Scott	266	-	245	-	55	A	1	12	-	12	-	6132	-	-	●	2	●	0	-	●	0	-	-	-	-	-
	Scott to Stone Avenue	371	-	304	-	44	A	1	10	-	10	-	6750	-	●	-	4	●	1	-	●	1	-	-	-	-	-
	Stone Avenue to Pennington Street	691	-	1013	-	40	A	1	10	-	10	-	19040	-	●	-	-	●	1	-	●	1	-	-	-	-	-
	Granada Avenue																										
	Congress to Cushing Street	-	1360	-	1280	50	A	1	-	10	-	9	25120	●	-	-	-	●	2	-	●	4	●	1	-	-	-
	Clark Street																										
	Granada to Interstate 10	280	-	310	-	50	A	2	12	-	12	-	6840	●	-	-	-	●	1	-	?	-	-	-	-	-	-
	Interstate 10 to Mercado District**	2240	-	2240	-	50	A	6	12	-	12	-	53760	●	-	-	-	●	2	-	?	-	-	-	-	-	-

SUB TOTALS 7812 3018 7804 2988

A 17 165301 34 12 9 4

20852
46387
41762

Street Type	Street Segment	Block Length (North side - A) ¹				Block Length (East side - A) ²				Block Length (South side - B) ³				Block Length (West side - B) ⁴			
Arterial / Streetcar	4th Avenue																
	6th Street to 9th Street					- 1178								- 1188			
	9th Street to Congress					- 480								- 520			
	Congress																
	Toole Avenue to 5th Avenue	200				-				200				-			
	5th Avenue to 6th Avenue	355				-				355				-			
	6th Avenue to Scott	328				-				275				-			
	Scott to Stone Avenue	391				-				391				-			
	Stone Avenue to Church Street	996				-				944				-			
	Church Street to Granada ⁴	721				-				670				-			
	Bradway																
	Toole (4th Avenue) to 5th Avenue	397				-				424				-			
	5th Avenue to 6th Avenue	396				-				424				-			
	6th Avenue to Scott	266				-				245				-			
	Scott to Stone Avenue	371				-				304				-			
Stone Avenue to Pennington Street	891				-				1013				-				
Granada Avenue																	
Congress to Cushing Street					- 1360								- 1280				
Clark Street																	
Granada to Interstate 10	260				-				310				-				
Interstate 10 to Mercado District ⁵	2240				-				2240				-				

5/11/2007

Street Type	Street Segment				Amenities																Infrastructure				Notes										
					Furnishings	Benches ^a	Quantity	Bike Racks ^a	Quantity	Drinking Fountains ^a	Quantity	Ash Tys ^a	Quantity	Trash Cans ^a	Quantity	Recycling Bins ^a	Quantity	Ballards ^a	F10A	Features	Columns	Burners	A3A	AAA		A1A	Overhead Utility Line Relocation	Impervious (f)	Electrical for Street Lighting	Power for Landscaping/Freshly Lighting	Power for Signage Lighting	Electrical grid connection for Pkts	Wi-Fi	Water Utilities (f)	Sewer Lines (f)
Arterial / Streetcar	4th Avenue					F8A		F6C		F8A		F5A		F7A		F7D		F1C	F10A			A2A	A3A	AAA	A1A										
	6th Street to 9th Street	-	1178	- 1188	100	23.7	100	23.7	200	11.8	50	47.3	50	47.3	50	47.3	4	1				63.09	-	7.887		2.366		2366	2366	6.76	3.38			2366	2366
	9th Street to Congress	-	480	- 520	100	10	-	-	-	-	50	20	50	20	50	20	4	-				28.33	-	3.333		1			-	1000	- 1,429			-	-
	Congress																																		
	Toole Avenue to 5th Avenue	200	-	200	-	100	4	100	4	200	2	50	8	50	8	50	8	4	1				10.29	10.29	1.333		0.4		400	400	1.143	0.571		400	400
	5th Avenue to 6th Avenue		-	355	-	100	7.1	100	7.1	200	3.55	50	14.2	50	14.2	50	14.2	4	1				18.26	18.26	2.367		0.71		710	710	2.029	1.014		710	710
	6th Avenue to Scott	328	-	275	-	100	6.03	100	6.03	200	3.02	50	12.1	50	12.1	50	12.1	4	1				15.51	15.51	2.01		0.603		603	603	1.723	0.861		603	603
	Scott to Stone Avenue	391	-	391	-	150	5.21	100	7.82	300	2.61	50	15.6	50	15.6	50	15.6	4	1				20.85	20.85	2.607		0.521		782	782	2.234	1.117		782	782
	Stone Avenue to Church Street	996	-	944	-	150	12.9	100	19.4	300	6.47	50	38.8	50	38.8	50	38.8	4	1				51.73	51.73	6.467		1.293		1940	1940	5.543	2.771		1940	1940
	Church Street to Granada ^a	721	-	679	-	150	8.33	100	14	300	4.67	50	28	50	28	50	28	-	1				37.33	-	4.667		0.933		1400	1400	4	2		1400	1400
Broadway																																			
Toole (4th Avenue) to 5th Avenue	397	-	424	-	150	5.47	100	8.21	300	2.74	50	16.4	50	16.4	50	16.4	-	1				21.89	21.89	2.737		0.547		821	821	2.346	1.173		821	821	
5th Avenue to 6th Avenue	396	-	424	-	150	5.47	100	8.2	300	2.73	50	16.4	50	16.4	50	16.4	-	1				21.87	21.87	2.733		0.547		820	820	2.343	1.171		820	820	
6th Avenue to Scott	266	-	245	-	150	3.41	100	5.11	300	1.7	50	10.2	50	10.2	50	10.2	-	1				13.63	13.63	1.703		0.341		511	511	1.46	0.73		511	511	
Scott to Stone Avenue	371	-	304	-	150	4.5	100	6.75	300	2.25	50	13.5	50	13.5	50	13.5	-	1				17.36	17.36	2.25		0.45		675	675	1.929	0.964		675	675	
Stone Avenue to Pennington Street	891	-	1013	-	150	12.7	100	19	300	6.35	50	38.1	50	38.1	50	38.1	-	1																	

Downtown Tucson Streetscape Matrix

Street Type	Street Segment					Street Definition																										
		Block Length (North side - A)	Block Length (East side - A)	Block Length (South side - B)	Block Length (West side - B)	Right of Way ¹					Parking					Transit					TICET											
Arterial	Congress Street																															
	Granada Avenue to Interstate 10 ²	900	-	920	-	55	C	3	12	-	12	-	21840	●	-	-	-	-	-	-	-	-	-	●	2	●	2					
	Interstate 10 to Santa Cruz River	600	-	600	-	55	C	4	12	-	12	-	14400	●	-	-	-	-	-	-	-	-	-	●	2	●	1					
	Santa Cruz River to Grande Avenue ³	1280	-	1280	-	56	A	1	12	-	12	-	15360	●	-	-	-	-	-	-	-	-	-	●	2	●	0					
	Grande Avenue to Silverbell Ave.	1000	-	1000	-	56	C	3	12	-	12	-	24000	●	-	-	-	-	-	-	-	-	-	●	-	-	-					
	6th Avenue to Stone																															
	6th Street to Underpass	-	734	-	674	55	B	2	-	12	-	12	16896	-	-	●	-	-	-	-	-	-	-	●	1	●	2					
	Underpass to Alameda	-	238	-	153	26	-	-	-	9	-	9	3519	-	-	●	-	-	-	-	-	-	-	●	2	●	2					
	Alameda to Congress	-	594	-	715	55	B	1	-	12	-	12	15708	-	-	●	2	-	-	-	-	-	-	-	-	-	-					
	Congress to Broadway Blvd.	-	235	-	235	60	-	-	-	12	-	12	5640	-	-	●	2	-	-	-	-	-	-	●	0	-	-					
	Broadway to 12th Street	-	396	-	396	55	B	1	-	12	-	12	9504	-	●	●	6	-	-	-	-	-	-	●	0	-	-					
	12th Street to 13th Street	-	385	-	385	55	B	1	-	12	-	12	9240	-	-	●	-	-	-	-	-	-	-	●	1	-	-					
	13th Street to 14th Street	-	396	-	396	55	B	1	-	12	-	12	9504	-	-	●	-	-	-	-	-	-	-	●	0	-	-					
	Stone Avenue																															
	6th Street to Toole Avenue	-	322	-	384	40	-	-	-	9	-	9	6714	-	-	●	-	-	-	-	-	-	-	●	0	-	-					
	Toole Avenue to Alameda	-	623	-	623	55	B	2	-	12	-	12	14952	-	-	●	-	-	-	-	-	-	-	-	-	-	-					
	Alameda to Pennington	-	481	-	469	60	B	1	-	12	-	12	11400	-	-	●	2	-	-	-	-	-	-	-	-	-	-					
	Pennington to Congress	-	293	-	291	47	-	-	-	10	-	10	5840	●	-	-	-	-	-	-	-	-	-	-	-	-	-					
	Congress to Broadway Blvd.	-	246	-	248	52	-	-	-	10	-	10	4940	-	-	●	2	-	-	-	-	-	-	●	0	-	-					
	Broadway Blvd. to Cushing	-	1030	-	910	50	B	3	-	10	-	10	19400	-	-	●	4	-	-	-	-	-	-	●	1	-	-					
	6th Street																															
	4th Avenue to 7th Avenue	1010	-	1137	-	55	B	3	12	-	12	-	25764	●	-	-	-	-	-	-	-	-	-	●	1	-	-					
	7th Avenue to Granada Avenue	1516	-	1705	-	55	B	3	12	-	12	-	38652	●	-	-	-	-	-	-	-	-	-	●	1	-	-					
	Toole Avenue																															
	4th Avenue to 6th Avenue	840	-	757	-	60	A	3	10	-	10	-	15970	●	-	-	-	-	-	-	-	-	-	●	0	-	-					
	6th Avenue to Stone	1025	-	863	-	44	A	1	10	-	10	-	18880	●	-	-	-	-	-	-	-	-	-	-	-	-	-					
SUB TOTALS					8171	6013	8262	5879						224357						18						10						6
					A	4																										
					B	15																										
					C	6																										
										198593																						
										5640																						

Street Type	Street Segment				
		Block Length (North side - A)	Block Length (East side - A)	Block Length (South side - B)	Block Length (West side - B)
Arterial	Congress Street				
	Granada Avenue to Interstate 10*	900	-	920	-
	Interstate 10 to Santa Cruz River	600	-	600	-
	Santa Cruz River to Granada Avenue*	1280	-	1280	-
	Granada Avenue to Silverbell Ave.	1000	-	1000	-
	6th Avenue to Stone				
	6th Street to Underpass	-	734	-	674
	Underpass to Alameda	-	238	-	153
	Alameda to Congress	-	594	-	715
	Congress to Broadway Blvd.	-	235	-	235
	Broadway to 12th Street	-	396	-	396
	12th Street to 13th Street	-	385	-	385
	13th Street to 14th Street	-	396	-	396
	Stone Avenue				
	6th Street to Toole Avenue	-	362	-	384
	Toole Avenue to Alameda	-	623	-	623
	Alameda to Pennington	-	481	-	469
	Pennington to Congress	-	293	-	291
	Congress to Broadway Blvd.	-	246	-	248
	Broadway Blvd. to Cushing	-	1030	-	910
6th Street					
4th Avenue to 7th Avenue	1010	-	1137	-	
7th Avenue to Granada Avenue	1516	-	1705	-	
Toole Avenue					
4th Avenue to 6th Avenue	840	-	757	-	
6th Avenue to Stone	1025	-	863	-	

Street Character																																									
Public Interest						Street Character																																			
	A1 Installation	Historic Context	Signage ⁷	Directional Info / Kiosk	Gateway Markers	Special Events	Landscape	Tree Spacing (ft on center) ⁸	Spacing (ft on center) ⁹	Quantity	Tree (aka B)	Spacing (ft on center)	Quantity	Planter Extension / Median Planter	Frequency	Quantity	Related Planter	Area (L-F per segment shown)	Quantity	Ground Cover	Area (L-F per segment shown)	Quantity	Building Formage Features	Area (L-F per segment shown)	Quantity	Kartscape	Sidewalk Paving	Area (S-P per segment shown)	Accent 1	Area (S-P per segment shown)	Accent 2	Area (S-P per segment shown)	Tree Goals	Lighting	Street Lights Spacing ¹⁰	Quantity	Pedestrian Lights Spacing	Quantity	Landscape Lighting ¹¹	Festive Tree Lighting	
	S1A		S2A	S3A																														H6A		E3B		E5A		E7A	E8A
	1	-	-	-	-		L6F	30	30	L6F	30	30.7	-	-	-	L1B	1	1820	L1D	1	1820	L1B	1	1820	H1A	19656	H1B	1092	H1C	1092	60.667		150	12.1	-	100	18.2	9.1	60.667		
	1	-	1	-	-		L6F	30	20	L6F	30	20	-	-	-	L1B	1	1200	L1D	1	1200	L1B	1	1200	H1A	12960	H1B	720	H1C	720	40		150	8	-	100	12	6	40		
	1	-	-	-	-		L6F	30	42.7	L6F	30	42.7	-	-	-	L1B	1	1280	L1D	1	1280	L1B	1	1280	H1A	13824	H1B	768	H1C	768	42.667		150	8.53	-	100	12.8	6.4	42.667		
	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	-	-	-	-	-		L6A	20	36.7	L6A	20	33.7	L2A	350	2.097	L1B	0.5	704	L1D	0.5	704	L1B	1	1408	H1A	15206.4	H1B	844.8	H1C	844.8	70.4		150	9.39	-	100	14.1	3.52	70.4		
	-	-	-	1	●		L6A	20	11.9	L6A	20	7.65	L2A	350	0.68	L1B	0.75	293.25	L1D	0.75	293.25	L1B	0	0	H1A	3167.1	H1B	175.95	H1C	175.95	19.55		175	2.23	-	100	3.91	1.468	19.55		
	-	-	-	-	-		L6A	20	29.7	L6A	20	35.8	L2A	350	1.697	L1B	1	1309	L1D	1	1309	L1B	1	1309	H1A	14137.2	H1B	785.4	H1C	785.4	65.45		150	8.73	-	100	13.1	6.545	65.45		
	1	-	-	-	-		L6A	10	23.5	L6A	10	23.5	L2A	350	0.671	L1B	1	470	L1D	1	470	L1B	1	470	H1A	5076	H1B	282	H1C	282	47		150	3.13	-	100	4.7	2.35	47		
	1	-	-	-	-		L6A	10	39.6	L6A	10	39.6	L2A	350	1.131	L1B	0.5	396	L1D	0.5	396	L1B	0.5	396	H1A	8553.6	H1B	475.2	H1C	475.2	79.2		150	5.28	-	100	7.92	1.98	79.2		
	-	-	-	-	-		P/R	-	-	P/R	-	-	L2A	350	1.1	P/R	-	-	P/R	-	-	P/R	-	-	P/R	-	P/R	-	P/R	-	-		P/R	-	-	100	7.7	-	-		
	-	-	-	-	-		L6A	20	19.8	L6A	20	19.8	L2A	350	1.131	L1B	1	792	L1D	1	792	L1B	1	792	H1A	8553.6	H1B	475.2	H1C	475.2	39.6		150	5.28	-	100	7.92	3.96	39.6		
	-	-	-	-	-		L6A	20	18.1	L6A	20	19.2	L2A	350	1.034	-	0	0	-	0	0	-	0	0	H1A	6942.6	H1B	335.7	H1C	335.7	37.3		175	4.26	-	100	7.46	0	37.3		
	-	-	-	-	-		L6A	20	31.2	L6A	20	31.2	L2A	350	1.78	L1B	1	1246	L1D	1	1246	L1B	1	1246	H1A	13456.8	H1B	747.6	H1C	747.6	62.3		150	8.31	-	100	12.5	6.23	62.3		
	-	-	-	-	-		L6A	20	24.1	L6A	20	23.5	L2A	350	1.374	L1B	0.5	475	L1D	0.5	475	L1B	1	950	H1A	10260	H1B	570	H1C	570	47.5		150	6.33	-	100	9.5	2.375	47.5		
	-	-	-	-	-		L6A	20	14.7	L6A	20	14.6	-	-	-	L1B	1	584	L1D	1	584	L1B	0.33	192.72	H1A	5256	H1B	292	H1C	292	29.2		175	3.34	-	100	5.84	2.92	29.2		
	-	-	-	-	-		L6A	20	12.3	L6A	20	12.4	L2A	350	0.703	L1B	0.5	247	L1D	0.5	247	L1B	0.33	163.02	H1A	4446	H1B	247	H1C	247	24.7		150	3.29	-	100	4.94	1.235	24.7		
	-	-	-	1	-		L6A	20	51.5	L6A	20	45.5	L2A	350	2.943	L1B	0	0	L1D	0.5	970	L1B	0	0	H1A	17460	H1B	970	H1C	970	97		150	12.9	-	100	19.4	0	97		
	-	-	-	-	●		L6B	20	50.5	L6C	20	56.9	-	-	-	L1B	1	2147	L1D	1	2147	L1B	1	2147	H1A	23187.6	H1B	1288.2	H1C	1288.2	107.35		150	14.3	-	100	21.5	10.74	107.35		
	-	-	-	-	●		L6B	20	75.8	L6C	20	85.3	-	-	-	L1B	1	3221	L1D	1	3221	L1B	1	3221	H1A	34798.8	H1B	1932.6	H1C	1932.6	161.05		150	21.5	-	100	32.2	16.11	161.05		
	●	3	1	1	●		L6E	20	42	L6E	20	37.9	-	-	-	L1A	1	1597	L1D	1	1597	L1A	0.33	527.01	H2A	14373	H2B	798.5	H2C	798.5	79.85		150	10.6	-	100	16	7.985	79.85		
	●	-	1	1	●		L6E	20	51.3	L6E	20	43.2	L2B	3	3075	L1A	1	1888	L1D	1	1888	L1A	0.33	623.04	H2A	16992	H2B	944	H2C	944	94.4		175	10.6	-	100	18.9	9.44	94.4		

5/3/2007

Street Type	Street Segment				Amenities																Infrastructure								Notes																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
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					F8B	F8C	F8D	F9A	F9B	F9C	F9D	F10A	F10B	F10C	F10D	F10E	F10F	F10G	F10H	F10I	F10J	F10K	F10L	F10M	F10N	F10O	F10P	F10Q	F10R	F10S	F10T	F10U	F10V	F10W	F10X	F10Y	F10Z	F10AA	F10AB	F10AC	F10AD	F10AE	F10AF	F10AG	F10AH	F10AI	F10AJ	F10AK	F10AL	F10AM	F10AN	F10AO	F10AP	F10AQ	F10AR	F10AS	F10AT	F10AU	F10AV	F10AW	F10AX	F10AY	F10AZ	F10BA	F10BB	F10BC	F10BD	F10BE	F10BF	F10BG	F10BH	F10BI	F10BJ	F10BK	F10BL	F10BM	F10BN	F10BO	F10BP	F10BQ	F10BR	F10BS	F10BT	F10BU	F10BV	F10BW	F10BX	F10BY	F10BZ	F10CA	F10CB	F10CC	F10CD	F10CE	F10CF	F10CG	F10CH	F10CI	F10CJ	F10CK	F10CL	F10CM	F10CN	F10CO	F10CP	F10CQ	F10CR	F10CS	F10CT	F10CU	F10CV	F10CW	F10CX	F10CY	F10CZ	F10DA	F10DB	F10DC	F10DD	F10DE	F10DF	F10DG	F10DH	F10DI	F10DJ	F10DK	F10DL	F10DM	F10DN	F10DO	F10DP	F10DQ	F10DR	F10DS	F10DT	F10DU	F10DV	F10DW	F10DX	F10DY	F10DZ	F10EA	F10EB	F10EC	F10ED	F10EE	F10EF	F10EG	F10EH	F10EI	F10EJ	F10EK	F10EL	F10EM	F10EN	F10EO	F10EP	F10EQ	F10ER	F10ES	F10ET	F10EU	F10EV	F10EW	F10EX	F10EY	F10EZ	F10FA	F10FB	F10FC	F10FD	F10FE	F10FF	F10FG	F10FH	F10FI	F10FJ	F10FK	F10FL	F10FM	F10FN	F10FO	F10FP	F10FQ	F10FR	F10FS	F10FT	F10FU	F10FV	F10FW	F10FX	F10FY	F10FZ	F10GA	F10GB	F10GC	F10GD	F10GE	F10GF	F10GG	F10GH	F10GI	F10GJ	F10GK	F10GL	F10GM	F10GN	F10GO	F10GP	F10GQ	F10GR	F10GS	F10GT	F10GU	F10GV	F10GW	F10GX	F10GY	F10GZ	F10HA	F10HB	F10HC	F10HD	F10HE	F10HF	F10HG	F10HH	F10HI	F10HJ	F10HK	F10HL	F10HM	F10HN	F10HO	F10HP	F10HQ	F10HR	F10HS	F10HT	F10HU	F10HV	F10HW	F10HX	F10HY	F10HZ	F10IA	F10IB	F10IC	F10ID	F10IE	F10IF	F10IG	F10IH	F10II	F10IJ	F10IK	F10IL	F10IM	F10IN	F10IO	F10IP	F10IQ	F10IR	F10IS	F10IT	F10IU	F10IV	F10IW	F10IX	F10IY	F10IZ	F10JA	F10JB	F10JC	F10JD	F10JE	F10JF	F10JG	F10JH	F10JI	F10JJ	F10JK	F10JL	F10JM	F10JN	F10JO	F10JP	F10JQ	F10JR	F10JS	F10JT	F10JU	F10JV	F10JW	F10JX	F10JY	F10JZ	F10KA	F10KB	F10KC	F10KD	F10KE	F10KF	F10KG	F10KH	F10KI	F10KJ	F10KK	F10KL	F10KM	F10KN	F10KO	F10KP	F10KQ	F10KR	F10KS	F10KT	F10KU	F10KV	F10KW	F10KX	F10KY	F10KZ	F10LA	F10LB	F10LC	F10LD	F10LE	F10LF	F10LG	F10LH	F10LI	F10LJ	F10LK	F10LL	F10LM	F10LN	F10LO	F10LP	F10LQ	F10LR	F10LS	F10LT	F10LU	F10LV	F10LW	F10LX	F10LY	F10LZ	F10MA	F10MB	F10MC	F10MD	F10ME	F10MF	F10MG	F10MH	F10MI	F10MJ	F10MK	F10ML	F10MM	F10MN	F10MO	F10MP	F10MQ	F10MR	F10MS	F10MT	F10MU	F10MV	F10MW	F10MX	F10MY	F10MZ	F10NA	F10NB	F10NC	F10ND	F10NE	F10NF	F10NG	F10NH	F10NI	F10NJ	F10NK	F10NL	F10NM	F10NN	F10NO	F10NP	F10NQ	F10NR	F10NS	F10NT	F10NU	F10NV	F10NW	F10NX	F10NY	F10NZ	F10OA	F10OB	F10OC	F10OD	F10OE	F10OF	F10OG	F10OH	F10OI	F10OJ	F10OK	F10OL	F10OM	F10ON	F10OO	F10OP	F10OQ	F10OR	F10OS	F10OT	F10OU	F10OV	F10OW	F10OX	F10OY	F10OZ	F10PA	F10PB	F10PC	F10PD	F10PE	F10PF	F10PG	F10PH	F10PI	F10PJ	F10PK	F10PL	F10PM	F10PN	F10PO	F10PP	F10PQ	F10PR	F10PS	F10PT	F10PU	F10PV	F10PW	F10PX	F10PY	F10PZ	F10QA	F10QB	F10QC	F10QD	F10QE	F10QF	F10QG	F10QH	F10QI	F10QJ	F10QK	F10QL	F10QM	F10QN	F10QO	F10QP	F10QQ	F10QR	F10QS	F10QT	F10QU	F10QV	F10QW	F10QX	F10QY	F10QZ	F10RA	F10RB	F10RC	F10RD	F10RE	F10RF	F10RG	F10RH	F10RI	F10RJ	F10RK	F10RL	F10RM	F10RN	F10RO

Downtown Tucson Streetscape Matrix

Street Type	Street Segment					Street Definition																						
						Right of Way ^a	Street Width ^a	Intersection Type ^a	Intersection Quantity	Sidewalk Width North side - A/	Sidewalk Width East side - A/	Sidewalk Width South side - B/	Sidewalk Width West side - B/	Street Segment Square Footage	Parking	No Parking	Angled Parking	Parallel Parking	Parking Meters (new)	Transit	Street Car Route	Street Car Stop (per segment)	Blue Route	Bus Route	Bus Stop (per segment)	TTCET Route	TTCET Stop (per segment)	
Collector Local	5th Avenue																											
		Toole to Broadway	-	374	-	459	55	D	1	-	12	-	12	9996	-	-	●	●	6	-	-	-	-	-	-	-	-	
		Broadway to 12th Street	-	396	-	396	55	C	1	-	12	-	10	8712	-	-	●	●	6	-	-	-	-	-	-	-	-	
		12th Street to 13th Street	-	380	-	396	55	D	1	-	12	-	10	8520	-	-	-	●	6	-	-	-	-	-	-	-	-	
	Church Avenue																											
		6th Street to Franklin Avenue	-	440	-	440	50	C	1	-	5	-	5	4400	-	-	-	●	-	-	-	-	-	-	-	-	-	
		Franklin Avenue to Alameda	-	751	-	744	49	C	2	-	10	-	8	13462	-	●	-	-	-	-	-	-	-	●	1	-	-	
		Alameda to Pennington	-	425	-	383	59	C	1	-	10	-	8	7314	-	●	-	-	-	-	-	-	-	●	0	-	-	
		Pennington to Congress	-	261	-	252	50	-	-	-	9	-	10	4869	-	-	-	●	2	-	-	-	-	-	-	-	-	
		Congress to Broadway	-	243	-	208	50	-	-	-	12	-	12	5412	-	●	-	-	-	-	-	-	-	-	-	-	-	
		Broadway to Ochoa (La Placita)	-	410	-	440	50	D	2	-	12.5	-	14	11285	-	-	●	●	4	-	-	-	-	●	1	-	-	
		Ochoa to Cushing Street (Convention)	-	760	-	810	50	D	2	-	12	-	12	18840	-	-	●	●	-	-	-	-	-	●	1	-	-	
	Granada Avenue																											
		6th Street to Franklin	-	692	-	692	51	C	1	-	10	-	11	14532	-	-	-	●	-	-	-	-	-	●	4	-	-	
		Franklin to Alameda	-	896	-	896	35	C	2	-	10	-	10	17920	-	●	-	-	-	-	-	-	-	-	-	-	-	
		Alameda to Congress	-	320	-	312	47	-	-	-	9	-	10	6000	-	●	-	-	-	-	-	-	-	-	●	0	-	-
	Alameda Street																											
		Toole to Stone Avenue	711	-	815	-	40	C	1	10	-	10	-	15260	-	-	-	●	2	-	-	-	-	-	-	-	-	
		Stone to Granada	1052	-	976	-	40	-	-	10	-	10	-	20280	-	-	-	●	2	-	-	-	-	-	-	-	-	
	Pennington Street																											
		6th Avenue to Stone Avenue	784	-	755	-	48	-	-	8	-	8	-	12312	-	-	●	●	4	-	-	-	-	-	-	-	-	
		Stone Ave. to Church Ave.	295	-	292	-	32	-	-	8	-	8	-	4696	-	-	-	●	2	-	-	-	-	-	-	-	-	
		Church Avenue to Congress Street (EW)	660	-	640	-	45	-	-	0	-	0	-	0	-	●	-	-	-	-	-	-	-	-	-	-	-	
		Church Avenue to Congress Street (NS)	-	140	-	160	45	D	1	-	8	-	8	2400	-	●	-	-	-	-	-	-	-	-	-	-	-	
	Cushing Street																											
		Stone Avenue to Church Avenue	550	-	550	-	48	-	-	10	-	10	-	11000	-	-	-	●	-	-	-	-	-	-	-	-	-	
		Church Avenue to Granada Avenue	1850	-	1850	-	45	-	-	10	-	8	-	33300	-	-	-	●	-	-	-	-	-	●	2	-	-	
SUB TOTALS						5902	6488	5878	6588	C	9			230510						34						9		
										D	7																	
														92810														
														4356														

Street Type	Street Segment	Block Length			
		North side - A ¹	East side - A ¹	South side - B ¹	West side - B ¹
Collector Local	5th Avenue				
	Toole to Broadway	-	374	-	459
	Broadway to 12th Street	-	396	-	396
	12th Street to 13th Street	-	380	-	396
	Church Avenue				
	8th Street to Franklin Avenue	-	440	-	440
	Franklin Avenue to Alameda	-	751	-	744
	Alameda to Pennington	-	425	-	383
	Pennington to Congress	-	261	-	252
	Congress to Broadway	-	243	-	208
	Broadway to Ochoa (La Placita)	-	410	-	440
	Ochoa to Cushing Street (Convention)	-	760	-	810
	Granada Avenue				
	8th Street to Franklin	-	692	-	692
	Franklin to Alameda	-	896	-	896
	Alameda to Congress	-	320	-	312
	Alameda Street				
	Toole to Stone Avenue	711	-	815	-
	Stone to Granada	1052	-	976	-
	Pennington Street				
8th Avenue to Stone Avenue	784	-	755	-	
Stone Ave. to Church Ave.	295	-	292	-	
Church Avenue to Congress Street (E/W)	680	-	640	-	
Church Avenue to Congress Street (N/S)	-	140	-	160	
Cushing Street					
Stone Avenue to Church Avenue	550	-	550	-	
Church Avenue to Granada Avenue	1850	-	1850	-	

[illegible]

5/3/2007

Street Type	Street Segment				Amenities													Infrastructure												
					Furnishings									Features						Infrastructure										
Collector Local					F8C	F6E	F9A	F5C	F7C	F7E	F1C				A2A	A4A	A1A													
					Benches ¹	Quantity	Bike Racks ⁴	Quantity	Drinking Fountains ⁴	Quantity	Art Tiers ⁴	Quantity	Trash Cans ²	Quantity	Recycling Bins ⁴	Quantity	Ballards (Spacing across ROW) ¹⁰	Quantity	Media Enclosures ⁸ / Dumpster Enclosures	Columns	Barricade	Sound System (public address speaking)	Wave Signals	Bike Lockers	Shade Structures	Water Features				
	5th Avenue																													
					Toole to Broadway		-	374	-	459	150		5.553	150	5.553	450	1.851	75	11.11	75	11.11	75	11.11	-	-	-	13.88	-	1.686	0.555
					Broadway to 12th Street		-	396	-	396	150		5.28	150	5.28	450	1.78	75	10.56	75	10.56	75	10.56	-	-	-	13.2	-	1.584	0.528
					12th Street to 13th Street		-	380	-	380	150		5.173	150	5.173	450	1.724	75	10.35	75	10.35	75	10.35	-	-	-	12.93	-	1.552	0.517
	Church Avenue																													
					6th Street to Franklin Avenue		-	440	-	440	175		5.029	150	5.867	350	2.514	75	11.73	75	11.73	-	-	-	14.67	-	1.76	0.503		
					Franklin Avenue to Alameda		-	751	-	744	175		8.543	150	9.967	350	4.271	75	19.93	75	19.93	75	19.93	-	-	-	23.49	-	2.99	0.854
					Alameda to Pennington		-	425	-	383	175		4.617	150	5.387	350	2.308	75	10.77	75	10.77	75	10.77	10	5.9	-	13.47	-	1.616	0.482
					Pennington to Congress		-	261	-	252	175		2.931	150	3.42	350	1.466	75	6.84	75	6.84	75	6.84	-	-	-	8.55	-	1.026	0.293
					Congress to Broadway		-	243	-	208	175		2.577	150	3.007	350	1.289	75	6.013	75	6.013	75	6.013	-	-	-	7.517	-	0.902	0.258
					Broadway to Ochoa (La Placita)		-	410	-	440	175		4.857	150	5.667	350	2.429	75	11.33	75	11.33	75	11.33	-	-	-	14.17	-	1.7	0.486
					Ochoa to Cushing Street (Convention)		-	760	-	810	200		7.85	150	10.47	350	4.486	75	20.93	75	20.93	75	20.93	10	5	-	26.17	-	3.14	0.785
	Granada Avenue																													
					6th Street to Franklin		-	692	-	692	175		7.909	150	9.227	450	3.076	65	21.29	65	21.29	65	21.29	-	-	-	23.07	-	2.786	0.791
					Franklin to Alameda		-	896	-	896	175		10.24	150	11.95	450	3.982	65	27.57	65	27.57	65	27.57	-	-	-	29.87	-	3.584	1.024
					Alameda to Congress		-	320	-	312	175		3.611	150	4.213	450	1.404	65	9.723	65	9.723	65	9.723	-	-	-	9.931	-	1.264	0.361
	Alameda Street																													
				Toole to Stone Avenue		711	-	815	-	150	10.17	150	10.17	450	3.391	65	23.48	65	23.48	65	23.48	-	-	-	23.98	-	3.052	1.017		
				Stone to Granada		1052	-	976	-	150	13.52	150	13.52	450	4.507	65	31.2	65	31.2	65	31.2	-	-	-	31.87	-	4.056	1.352		
Pennington Street																														
				6th Avenue to Stone Avenue		784	-	755	-	150	10.26	150	10.26	450	3.42	65	23.68	65	23.68	65	23.68	-	-	-	24.18	-	3.078	1.026		
				Stone Ave. to Church Ave.		295	-	292	-	150	3.913	150	3.913	450	1.304	65	9.031	65</												

Downtown Tucson Streetscape Matrix

Street Type	Street Segment				Street Definition																						
		Block Length (North side - A)	Block Length (East side - A)	Block Length (South side - B)	Block Length (West side - B)	Right of Way	Street Width	Intersection Type	Intersection Quantity	Street Width (North side - A)	Street Width (East side - A)	Street Width (South side - B)	Street Width (West side - B)	Street Segment Square Footage	Parking	No Parking	Angled Parking	Parallel Parking	Parking (Meters (feet))	Transit	Street Car Route	Street Car Stop (per segment)	Bike Route	Bus Route	Bus Stop (per segment)	TICET Route	TICET Stop (per segment)
Local / Alley	Arizona Avenue (Alley)																										
		Toole to 12th Street	-	640	-	639	26	D	6	-	5	-	6	16640		●	-	-	-	-	-	-	-	-	-	-	-
	8th Avenue																										
		Broadway Boulevard to 12th Street	-	396	-	396	55	D	3	-	12	-	12	9504		-	-	●	6		-	-	-	-	-	-	-
	12th Street																										
		Scott Avenue to 4th Avenue	948	-	948	-	55	-	-	12	-	12	-	22752		-	●	-	6		-	-	-	-	-	-	-
	Scott Avenue																										
		Pennington to Congress	-	350	-	363	30	C	1	-	5	-	5	3565		●	-	-	-		-	-	-	-	-	-	-
		Congress to Broadway	-	197	-	229	53	-	-	-	11	-	12	4915		-	●	-	1		-	-	-	-	-	-	-
		Broadway to 12th Street	-	396	-	259	51	C	2	-	12	-	12	7860		-	●	●	6		-	-	-	-	-	-	-
		12th Street to 13th Street	-	385	-	513	51	C	1	-	12	-	12	10776		-	●	●	2		-	-	-	-	-	-	-
		13th Street to 14th Street	-	396	-	393	51	C	1	-	12	-	12	9468		-	●	-	2		-	-	-	-	-	-	-
	Herbort Avenue (Alley)																										
		Congress Street to Broadway Boulevard	-	267	-	267	26	C	1	-	0	-	0	6942		●	-	-	-		-	-	-	-	-	-	-
		Broadway Boulevard to 12th Street	-	396	-	396	30	C	2	-	10	-	10	7920		-	-	●	2		-	-	-	-	-	-	-
	McCormick Street																										
		Church Avenue to Stone Avenue	400	-	396	-	50	-	-	10	-	8	-	7168		●	-	-	-		-	-	-	-	-	-	-
		Stone Avenue to Scott Avenue	220	-	210	-	33	-	-	7	-	7	-	3010		●	-	-	-		-	-	-	-	-	-	-
	13th Street																										
		Scott Avenue - 6th Avenue	228	-	212	-	55	-	-	17	-	9	-	5750		●	-	-	-		-	-	-	-	-	-	-
		6th Avenue - 5th Avenue	381	-	365	-	64	-	-	10	-	10	-	7560		●	-	-	-		-	-	-	-	-	-	-
		5th Avenue - 4th Avenue	350	-	396	-	56	-	-	9	-	10	-	7110		●	-	-	-		-	-	-	-	-	-	-
	Corral Street																										
		Scott Avenue to Stone Avenue	240	-	236	-	20	D	2	6	-	6	-	2856		●	-	-	-		-	-	-	-	-	-	-
	Delona Street																										
		Church Avenue to Scott Avenue	318	-	312	-	37	-	-	8	-	8	-	5040		●	-	-	-		-	-	-	-	-	-	-
	Jackson Street																										
		Church Avenue to Scott Avenue	749	-	730	-	39	C	1	8	-	8	-	11832		●	-	-	-		-	-	-	-	-	-	-
	Council Street																										
		Court Avenue to Church Avenue	236	-	236	-	36	-	-	6	-	7	-	3068		-	-	●	-		-	-	-	-	-	-	-
		Church Avenue to Stone Avenue	367	-	368	-	49	-	-	12	-	12	-	8820		-	-	●	-		-	-	-	-	-	-	-
	Franklin Street																										
		Court Avenue to Church Avenue	306	-	244	-	37	-	-	8	-	8	-	4400		-	-	●	-		-	-	-	-	-	-	-
		Church Avenue to Stone Avenue	396	-	450	-	58	-	-	12	-	12	-	10152		-	-	●	-		-	-	-	-	-	-	-
	Court Avenue																										
		Franklin Street to Council Street	-	349	-	341	40	C	2	-	8	-	8	5520		-	-	●	-		-	-	-	-	-	-	-
	Ash Avenue (Alley)																										
		Council Street to Franklin Street	-	396	-	396	28	D	2	-	0	-	0	11088		●	-	-	-		-	-	-	-	-	-	-
SUB TOTALS					5147	4168	5103	4192	C	11				193716					25								
									D	13																	

Street Type	Street Segment				
		Back Length (North side - A)	Back Length (East side - A)	Back Length (South side - B)	Back Length (West side - B)
Local / Alley	Arizona Avenue (alley)				
	Toole to 12th Street	-	640	-	639
	9th Avenue				
	Broadway Boulevard to 12th Street	-	396	-	396
	12th Street				
	Scott Avenue to 4th Avenue	948	-	948	-
	Scott Avenue				
	Pennington to Congress	-	350	-	363
	Congress to Broadway	-	197	-	229
	Broadway to 12th Street	-	396	-	259
	12th Street to 13th Street	-	385	-	513
	13th Street to 14th Street	-	396	-	393
	Northwest Avenue (alley)				
	Congress Street to Broadway Boulevard	-	267	-	267
	Broadway Boulevard to 12th Street	-	396	-	396
	McCormick Street				
	Church Avenue to Stone Avenue	400	-	396	-
	Stone Avenue to Scott Avenue	220	-	210	-
	13th Street				
	Scott Avenue - 6th Avenue	226	-	212	-
	6th Avenue - 5th Avenue	391	-	365	-
	5th Avenue - 4th Avenue	350	-	386	-
	Corral Street				
	Scott Avenue to Stone Avenue	240	-	236	-
	Deane Street				
	Church Avenue to Scott Avenue	318	-	312	-
	Madison Street				
	Church Avenue to Scott Avenue	749	-	730	-
	Monarch Street				
	Court Avenue to Church Avenue	236	-	236	-
	Church Avenue to Stone Avenue	367	-	368	-
	Franklin Street				
Court Avenue to Church Avenue	306	-	244	-	
Church Avenue to Stone Avenue	396	-	450	-	
Court Avenue					
Franklin Street to Council Street	-	349	-	341	
4th Avenue (alley)					
Council Street to Franklin Street	-	396	-	396	
SUB TOTALS		5147	4168	5103	4192

Prepared by: Rob Paulus Architect, Ltd.

Downtown Tucson Streetscape Matrix

Street Type	Street Segment				Amenities																Infrastructure								
				Back Length (North side - A) Back Length (East side - A) Back Length (South side - B) Back Length (West side - B)																									
Local / Alley	Arizona Avenue (Alley)																												
	Toole to 12th Street			- 640 -	639																								
	8th Avenue																												
	Broadway Boulevard to 12th Street			- 396 -	396																								
	12th Street																												
	Scott Avenue to 4th Avenue			945	- 945 -																								
	Scott Avenue																												
	Pennington to Congress			- 350 -	363																								
	Congress to Broadway			- 197 -	229																								
	Broadway to 12th Street			- 396 -	259																								
	12th Street to 13th Street			- 385 -	513																								
	13th Street to 14th Street			- 396 -	393																								
	Herbert Avenue (Alley)																												
	Congress Street to Broadway Boulevard			- 267 -	267																								
	Broadway Boulevard to 12th Street			- 396 -	396																								
	McCormick Street																												
	Church Avenue to Stone Avenue			400	- 396 -																								
	Stone Avenue to Scott Avenue			220	- 210 -																								
	13th Street																												
	Scott Avenue - 6th Avenue			226	- 212 -																								
	6th Avenue - 5th Avenue			391	- 365 -																								
	5th Avenue - 4th Avenue			350	- 396 -																								
	Corral Street																												
	Scott Avenue to Stone Avenue			240	- 236 -																								
	Debona Street																												
	Church Avenue to Scott Avenue			318	- 312 -																								
	Jackson Street																												
	Church Avenue to Scott Avenue			749	- 730 -																								
	Council Street																												
	Court Avenue to Church Avenue			236	- 236 -																								
	Church Avenue to Stone Avenue			367	- 368 -																								
	Franklin Street																												
	Court Avenue to Church Avenue			306	- 244 -																								
	Church Avenue to Stone Avenue			396	- 450 -																								
	Court Avenue																												
	Franklin Street to Council Street			- 349 -	341																								
	Rob Avenue (Alley)																												
	Council Street to Franklin Street			- 396 -	396																								
SUB TOTALS				5147	4168	5193	4192	23.21	23.21	9.52	54.01	54.01	54.01	8	6	5.802	17821	18610	29.81	4760	4760								

Downtown Tucson Streetscape Matrix

General Notes

P/R Parks + Recreation - refer to Parks + Rec plans

X Existing to remain

- Not Applicable

red indicates information to be verified / confirmed

blue indicates quantities *NOT* included in component totals or sub-totals; components for these segments are calculated in a separate budget number (included as line item in streetscape budget report) or excluded from streetscape budget

green indicates quantity that has been reduced by an amount as indicated in Notes column at far right end of respective matrix row

* Refer to plans for Hotel Arizona / Arena project

** Refer to plans for the Mercado district

*** Refer to plans for the Origins project

Footnotes

1 Street segment lengths (shown in feet) based on plans provided by Tucson Department of Transportation archives (March 2007)
Lengths shown are for sidewalk street frontage; intersections are excluded and should be quantified separately

2 Right-of-way widths (shown in feet) based on plans provided by Tucson Department of Transportation archives (March 2007)

3 El Presidio neighborhood includes no intersection modifications

4 Apply one unit per length of linear feet indicated; unit frequency is per single side of street

5 Catenary poles for streetcar may double as street light poles; apply spacing from street light column on street

6 All street lights are to be staggered on both sides of the street unless ROW is 50' or greater.

7 Signage (including transportation signage, downtown signage, destination signage, etc.) to be allocated by TDOT
Signage budget - not yet incorporated

8 *not used*

9 Intersection types established for a general budget depending on elaboration of paving material, plantings and interest

10 Apply one unit per length of linear feet indicated across right-of-way street width

11 If spacing of trees is less than 20', it indicates a double-row of trees to occur along sidewalk

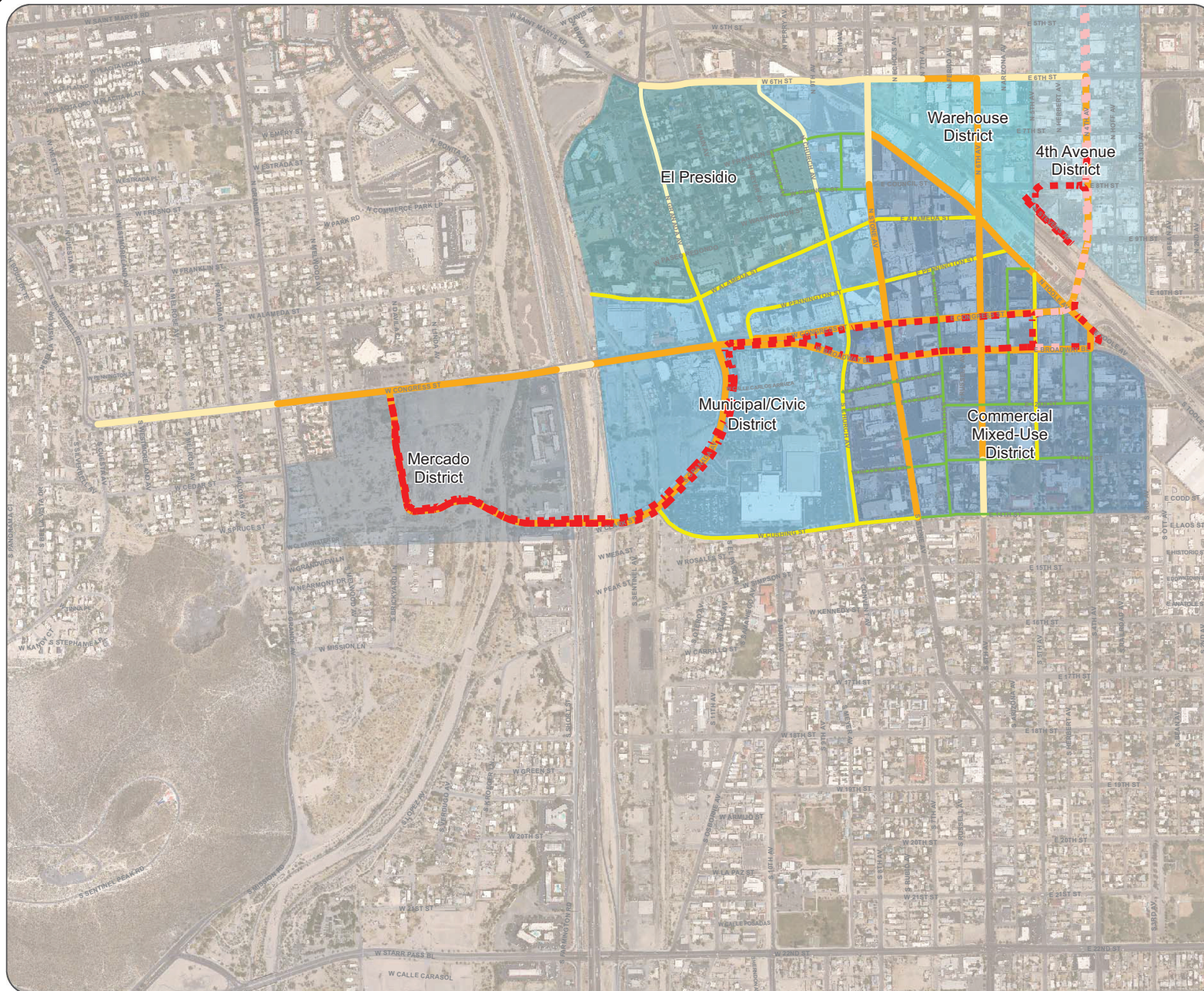
12 Landscape Lights = 1/200sf of Raised Planter area on arterial + collector; 1/300sf of raised planter on local

Downtown Infrastructure

Streetscape

Legend

- ■ ■ Street Car Line
- Arterial
- Collector
- Local Street or Alleyway



N
1:10,000



**Tucson
Downtown
Partnership**



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Downtown Tucson Streetscape

Component List + Budget

MasterFormat	MasterFormat Category	Item	Keynote	Letter	Location	Description	Material	Labor/Equip	Cost	Unit	
Right of Way	Intersection Type	Intersection paving + design		A	streetcar / arterial	Intensive: pavers continuing across street + patterns, landscape curb-outs	\$4,000	\$3,400	\$7,400	ea	
		Intersection paving + design		B	collector	Medium: pavers continuing across street, landscape curb-outs	\$3,000	\$2,850	\$5,850	ea	
		Intersection paving + design		C	local	Standard: painted crosswalk indicators	\$2,000	\$800	\$2,800	ea	
		Intersection paving + design		D	local / alley	T-type intersection: paver design at termination crossing	\$1,500	\$2,850	\$4,350	ea	
Parking											
11 12 26	Parking Collection	Parking Meter	P1	A	streetcar / arterial	Solar powered, multiple space meter (includes power source)	\$8,000	\$250	\$8,250	ea	
				B	collector / local	Pay-by-space meter (includes power source)	\$1,000	\$250	\$1,250	ea	
		Parking Striping	Paint Striping			parallel parking					
					angled parking						
Transit											
10 73 43	Transportation Stop Shelters	Streetcar Stop	T1	A	streetcar routes	Solar powered, LED-lit shelter	\$10,000	\$1,100	\$11,100	ea	
				B	streetcar routes (alt)	Euramodel "Urban Shelter"	\$8,500	\$850	\$9,350	ea	
10 73 43	Transportation Stop Shelters	Bus Transit Stop	T2	A	streetcar / arterial	custom bus shelter w/ PVs integrated	\$2,500	\$850	\$3,350	ea	
				B	collector / local	custom bus shelter	\$2,000	\$850	\$2,850	ea	
				C	TICET route	custom bus shelter	\$1,000	\$850	\$1,850	ea	
Public Interest											
	Public Art	Art Installations			TBD	public art = 1% of streetscape budget					
10 ____	Signage	Street Name Signage			intersections	street name signs (lump sum allocation)					
10 ____	Signage	Signage			RND	Signage Kiosks for downtown (per ParkWise allocation)			\$20,000	ea	
10 ____	Signage	Historic Content	S1	A	streetcar / arterial route	Historic signage indicator (plaque, lighting, engraved paver)	\$1,000	\$350	\$1,350	ea	
				B	collector / local	Historic signage indicator (plaque, lighting, engraved paver)	\$800	\$350	\$1,150	ea	
10 13 00	Directories	Directional Info Kiosk		S2	A	streetcar / arterial route	Euramodel free standing box: "Sealth" interactive kiosk	\$1,500	\$600	\$2,100	ea
10 18 00	Informational Kiosks			B	collector / local	Euramodel with seating, trash receptacle	\$1,000	\$600	\$1,600	ea	
10 ____	Signage	Gateway Markers	S3	A	streetcar / arterial route	Elaborate gateway marquees (custom design, w/lighting, etc)	\$3,000	\$350	\$3,350	ea	
				B	collector / local	Moderate gateway signage marquees	\$1,500	\$350	\$1,850	ea	
Landscaping											
12 93 33	Planters	Raised Planters	L1	A	streetcar route	Galvanized steel planters (with landscape + ped. lighting)	\$22	\$5.00	\$27.00	sf	
				B	arterial routes	Stainless steel planters (with landscape + ped. lighting)	\$20	\$5.00	\$25.00	sf	
				C	collector	Masonry planters (with landscape)	\$15	\$3.50	\$18.50	sf	
				D	local	Cast concrete planters + w/resevoir system for water conservation	\$10	\$3.00	\$13.00	sf	
32 90 00	Planting	Planter Extension		L2	A	between street pkg	curb-out with plants, groundcover, total area of one parking space (~150sf)	\$1,500	\$250	\$1,750	ea
		Median Planters		L2	B	at middle of street	median with plants, groundcover, pedestrian lights	\$25	\$5	\$30	sf
32 96 13	Groundcover	Groundcover plants	L4	A	streetcar / arterial	mix of Verbena, bear grass, etc.	\$17	\$1.50	\$18.50	sf	
				B	collector / local	mix of Salvia, agave, etc.	\$15	\$1.50	\$16.50	sf	
32 96 43	Trees	Trees	L6	A	east/west side of street	Hybrid Palo Verde (Desert Museum)	\$800	\$125	\$925	ea	
				B	north side of street	Velvet Mesquite	\$800	\$125	\$925	ea	
				C	south side of street	TBD (Varies)	\$800	\$125	\$925	ea	
				D	east/west side of street	Sweet Acacia	\$800	\$125	\$925	ea	
				E	Toole Ave	Phoenix Hybrid Mesquite	\$800	\$125	\$925	ea	
				F	Mercado	Palo Brea	\$800	\$125	\$925	ea	
	Trellis	Landscape - Trellis + Vines		L7	A	alleys	custom trellis (steel + cable) with landscape vines	\$10	\$2.50	\$12.50	sf
	Boulders	Decorative boulders		L8	A	Alley edges, ends		\$3	\$2.50	\$5.50	sf

[illegible]

Downtown Tucson Streetscape

Component List + Budget

[illegible]

Greencare	Sub-Total	Artial	Sub-Total	Collector	Sub-Total	Local	Sub-Total	Total	Category
									\$6,471,314
			162240	\$827,424	133501	\$680,855		\$1,508,279	
			9013	\$33,799	9632	\$36,120		\$69,919	
			9013	\$24,786	9632	\$26,488	105038	\$286,855	
28764	\$273,258	31365	\$297,968			15682	\$148,978	\$720,235	
1598	\$16,779	1743	\$18,302			871	\$9,146	\$44,228	
1598	\$15,181	1743	\$16,559			871	\$8,275	\$40,014	
120007	\$1,020,060			71798	\$610,283	39380	\$334,730	\$1,965,073	
6667	\$66,670			3989	\$39,890	2188	\$21,880	\$128,440	
6667	\$66,670			3989	\$39,890	2188	\$21,880	\$128,440	
								\$0	
						18000	\$153,255	\$153,255	
558	\$334,800	967	\$580,200					\$915,000	
				886	\$373,006			\$373,006	
						1219	\$85,330	\$85,330	
									\$10,876,920
93	\$887,220							\$887,220	
		158	\$1,343,000					\$1,343,000	
				152	\$1,185,600			\$1,185,600	
						101	\$670,640	\$670,640	
						20	\$137,800	\$137,800	
149	\$566,200							\$566,200	
139	\$1,056,400	251	\$1,907,600		249	\$1,767,900	26	\$184,600	
								\$2,964,000	
								\$1,952,500	
60	\$15,600	98	\$25,480	43	\$11,180	15	\$3,900	\$56,160	
558	\$55,800	1205	\$120,500					\$176,300	
8.5	\$425,000	6.25	\$312,500	4	\$200,000			\$937,500	
									\$4,946,000
								\$0	
20	\$8,000	18	\$7,200	20	\$8,000	8	\$3,200	\$26,400	
								\$0	
284	\$369,200							\$369,200	
		369	\$369,000					\$369,000	
				334	\$334,000	54	\$54,000	\$388,000	
								\$0	
								\$0	
149	\$52,150							\$52,150	
		109	\$32,700					\$32,700	
				157	\$39,250	23	\$5,750	\$45,000	
								\$0	
284	\$340,800							\$340,800	
		377	\$527,800					\$527,800	
				334	\$400,800	54	\$64,800	\$465,600	
284	\$284,000	364	\$364,000					\$648,000	
				334	\$300,600	54	\$48,600	\$349,200	
								\$0	
110	\$209,000							\$209,000	
		129	\$193,500					\$193,500	
				138	\$151,800	23	\$25,300	\$177,100	
								\$0	
55	\$115,500							\$115,500	
								\$0	
55	\$151,250	65	\$178,750					\$330,000	
				57	\$111,150	10	\$19,500	\$130,650	
								\$0	
13	\$54,600	23	\$96,800					\$151,200	
						8	\$25,200	\$25,200	

Downtown Tucson Streetscape

Component List + Budget

MasterFormat	MasterFormat Category	Item	Keynote	Letter	Location	Description	Material	Labor/Equip	Cost	Unit	Streetcar	Sub-Total	Arterial	Sub-Total	Collector	Sub-Total	Local	Sub-Total	Total	Category		
Features + Amenities																						
10 71 00	Exterior Sun Control	Amenity - Shade Structures	A1	A	at seating areas, benches	custom shade structures (incorporate PVs where feasible)	\$5,000	\$2,000	\$7,000	ea										\$4,510,113		
			B		plazas	Euromodel shades	\$12,000	\$4,800	\$16,800	ea									\$0			
			C		special event streets	Eide tensile shade structures (occasional use for special events)	\$2,500	\$1,000	\$3,500	ea									\$140,000			
10 73 13	Awnings	Amenity - Awnings	A1	C	streetcar / arterial	Majestic shades	\$15,000	\$6	\$21,000	sf									\$1,167,491			
			D		collector / local	Hunter Douglas shades	\$12,500	\$5	\$17,500	sf									\$968,398			
10 83 16	Banners	Amenity - Banners	A2	A	arterial + collector streets	Includes banner + brackets on street-light poles	\$500	\$200	\$700	ea									\$773,500			
	Sound System	Public Address Speakers	A3	A	streetcar / arterial	public address system (loudspeakers mounted on light poles)	\$150	\$25	\$175	ea									\$46,200			
	Water Spigots	Water Spigots	A4	A	arterial + collector	power wash, lockable, water spigots for sidewalk clearing	\$150	\$25	\$175	ea									\$28,525			
	Fountains	Amenity - Water Features	A5	A	plazas	Custom fountains, water features	\$10,000	\$4,000	\$14,000	ea									\$84,000			
22 42 00	Public Restroom Facilities	Amenity - Restroom	A6	A	plazas	Exxos East "Galaxy"	\$180,000	\$72,000	\$252,000	ea									\$504,000			
			B		transit hubs	Hering Bau "WCmatic"	\$175,000	\$70,000	\$245,000	ea									\$490,000			
	Storage Facilities	Maintenance Storage				parking bays for storage + maint vehicles + equipment				ea									\$0			
Streetscape Budget (before sub-grade improvements)											SubTotals before infrastructure		163,931 at \$58.58	\$9,348,701	224,357 at \$46.83	\$10,506,732	230,510 at \$37.62	\$8,671,716	193,716 at \$20.41	\$3,953,047	\$34,718,195 at \$42.66	813,884 sf
Infrastructure																						
	Irrigation	Landscape - Irrigation			at planted areas + trees	irrigation system (does not include reclaimed rainwater)				\$110	lf									\$24,360,365		
	Water	Water Line			for d.f. + spigots					\$55	lf											
					for water features					\$65	lf											
					for public restrooms					\$65	lf											
	Sewer	Sewer Line			for d.f.					\$65	lf											
					for water features					\$65	lf											
					for public restrooms					\$85	lf											
	Electrical	Electrical Line			streetcar streets	streetcar street lighting				\$155	lf											
					arterial + collector	street + pedestrian lighting				\$110	lf											
					local streets	pedestrian lighting only				\$75	lf											
	Power	Power source				power for landscape + festival lights				\$650	ea											
						power for signage				\$500	ea											
						power for gateway marquees				\$500	ea											
	Electrical PV	PV Grid Connection				contingency																
Streetscape Budget (with Infrastructure)											SubTotals		163,931 at \$58.58	\$15,082,236	224,357 at \$78.68	\$17,651,802	230,510 at \$71.70	\$16,526,716	193,716 at \$40.78	\$7,899,807	\$59,078,560 at \$72.59	813,884 total sf
Demolition							Contingency					\$784,611.80				\$882,590.11			\$826,335.78		\$2,888,528	
Escalation							1% per month (phase: 1-year per type)					\$1,883,068				\$4,236,433			\$5,949,618		\$15,861,026	
Sub Total												\$18,359,916				\$22,770,825			\$23,382,669		\$12,086,704	
Contractor Fees							23% (per Sundt)					\$4,222,781				\$5,237,290			\$5,359,614		\$2,779,942	
Sub Total												\$22,582,697				\$28,008,114			\$28,662,283		\$14,866,646	
A/E Fees							20% (per TDOT)					\$4,516,539				\$5,601,823			\$5,732,457		\$2,973,329	
Sub Total												\$27,099,236				\$33,609,737			\$34,394,739		\$17,839,975	
Public Art							1% of Budget					\$270,992				\$336,097			\$343,947		\$178,400	
Out of TIF Boundary							Deduct for street segments outside of TIF boundary					\$29,800				\$3,612,622			\$1,812,769		\$1,854,214	
Streetscape Budget TOTAL											TOTAL		\$27,340,829		\$38,333,213			\$32,925,917		\$16,364,161	\$106,248,144	
Additional Project Streetscapes																						
	Pedestrian Bridges	Pedestrian Bridges			Civic Plaza / Arena south of 4th Ave					\$2,000,000	ea								\$2,000,000			
										\$1,000,000	ea								\$1,000,000			
	Tucson Convention Center	Convention Center Landscape			TCC	landscape + hardscape + lighting + FFE improvements				\$75	sf								\$19,500,000			
	Mercado / Origins Improvments	Streetscape Improvements			Mercado/Origins	Cushing Street/Avenue del Convento additional street improvements				\$10	sf								\$537,600			
	Congress St.: Grande - Silverbell	Streetscape Improvements			West Congress St.	Grande - Silverbell street improvements (phased in future)				\$45	sf								\$1,080,000			
Streetscape Budget (with Additional Projects)											TOTAL										\$130,365,744	

Downtown Tucson Streetscape

Component List + Budget

MasterFormat	MasterFormat Category	Item	Keynote	Letter	Location	Description	Material	Labor/Equip	Cost	Unit	Streetcar	Sub-Total	Arterial	Sub-Total	Collector	Sub-Total	Local	Sub-Total	Total	Category
Potential Deducts (redundancies)																				
Streetcar Budget Redundancy										per TDOT										
Parking																				
Parks & Recreation										Tools Avenue										
Parks & Recreation										Arizona Avenue										
Parks & Recreation										Cushing Street/Armory Park link										
Parks & Recreation										(C18)										
Parks & Recreation										El Presidio Walk (50% of \$800,000 at Church + Alameda)										
Infrastructure										Water + Sewer (well-coordinated installation + upgrades)										
Streetscape Budget (with deducts)										TOTAL										
Pilot Project																				
East End (overage on 4th Ave. underpass implementation)																				
5th Avenue (Bdwy. + Toole)										\$71.70	sf					9996	\$716.676			\$716.676
Broadway Ave. (1/2 block)										\$94.93	sf	9852	\$935.263							\$935.263
4th Ave (btwn Bdwy. + Toole)										\$94.93	sf	3500	\$332.259							\$332.259
Congress Ave. (4th-Az. Ave)										\$94.93	sf	7500	\$711.985							\$711.985
Toole Ave. (4th-5th Ave.)										\$78.68	sf			5325	\$418.957					\$418.957
East End										TOTAL										\$3,115,140

Descriptive Items

- 1 Demolition
- 2 Signage
- 3 Lighting
- 4 Plants
- 5 Parking
- 6 Trees
- 7 Barrio del Sol
- 8 Building Frontage Planting
- 9 Shade Structures
- 10 Awnings
- 11 Existing Billboards

Demolition of existing streetscape is included as a contingency number

TDOT/ParkWise complete signage budget is not included; only additional portion for the kiosks and additional signage enhancement for streetscape

Note: It is proposed that signage elements be integrated with or attached to other elements such as light poles, traffic signal poles, transit stop structures, shade structures, etc. This will alleviate the need for additional signage poles and related pole foundations, and will alleviate visual clutter along the streetscape.

It is recommended that the street lighting be phased into an LED system. Utilization of PVs that offset the cost of street lighting is recommended

Include as annual, recurring budget for seasonal plantings and maintenance (spring annuals and perennials)

It is recommended that all parking meters be replaced with ticket-vendor meters.

It is recommended that the City go into contract early with a nursery to train young trees to grow vertical for streetscape implementation. This additional nursery contract cost should be considered.

The future Barrio del Sol neighborhood street improvement area is not included in this study.

It is recommended that a building frontage planting zone be included on all sidewalks wider than 10'-0".

Shade structures to incorporate photovoltaics where possible

A portion of the streetscape budget should be allocated to business owners for installation of awnings (along streetcar routes + pedestrian alleys)

Refurbish existing billboards (i.e., 6th Ave + Broadway)

Downtown Tucson Streetscape

Street Segments outside of TIF Boundary				
Streetcar				
4th Avenue	6th Street - 9th Street			28,392 sf
Sub-Total				28,392 sf
Arterial				
W. Congress Street	Grande - Silverbell street improvements (phased in future)			24,000 sf
Congress Street	Melwood Ave. - Grande Ave.			3,840 sf
6th Street	4th Ave. - 6th Ave.			17,600 sf
Stone Avenue	Council Street - Toole Ave.			1,246 sf
6th Avenue	13th St. - 14th St.			9,504 sf
Sub-Total				56,190 sf
Collector				
Granada Avenue	Paseo Redondo - 6th Street			25,284 sf
Church Avenue	Council Street - 6th Street			11,131 sf
Sub-Total				36,415 sf
Local / Alley				
Court Avenue	Council Street - Franklin Street			5,520 sf
Franklin Street	Court Avenue - Stone Avenue			14,552 sf
Council Street	Church Avenue - Court Avenue			3,068 sf
4th Avenue	Broadway - 12th Street (12th - 14th St. already excluded from budget)			9,504 sf
Herbert Avenue	Broadway - 12th Street			7,920 sf
Scott Avenue	13th Street - 14th Street			9,468 sf
12th Street	4th Avenue - 5th Avenue			8,400 sf
13th Street	4th Avenue - 5th Avenue			7,110 sf
14th Street	Stone Avenue - 4th Avenue (already excluded from budget)			
Sub-Total				65,542 sf
TOTAL				186,539 sf

	\$94.93		\$78.68		\$71.70		\$40.78	
	\$2,695,289							\$2,695,289
Sub-Total								\$2,695,289
		\$45	\$1,080,000					\$1,080,000
			\$302,121					\$302,121
			\$1,384,720					\$1,384,720
			\$98,032					\$98,032
			\$747,749					\$747,749
Sub-Total								\$3,612,622
					\$1,812,769			\$1,812,769
					\$798,052			\$798,052
Sub-Total								\$1,812,769
							\$225,108	\$225,108
							\$593,436	\$593,436
							\$125,114	\$125,114
							\$387,576	\$387,576
							\$322,980	\$322,980
							\$386,108	\$386,108
							\$342,555	\$342,555
							\$289,948	\$289,948
							n/a	n/a
Sub-Total								\$1,654,214
TOTAL								\$9,774,895

BUSINESS IMPROVEMENT DISTRICT

OVERVIEW

The Downtown Tucson Enhanced Municipal Services Improvement District (EMSID) was established by the City of Tucson in 1998, pursuant to A.R.S. 48-575, with the cooperation of a majority of the commercial property owners in the downtown core. The EMSID, more commonly known as the Business Improvement District (BID), was approved by the Mayor and Council, governing the delivery of services with “baseline services” performed by the City and “enhanced services” carried out by Tucson Downtown Alliance (TDA).

HISTORY

The BID was established with an initial five-year term, expiring on June 30, 2003. The BID was renewed for a second five-year term, which expires on June 30, 2008. The funding formula and boundaries remain as originally established.

Downtown properties that are not part of the BID include the Santa Rita Hotel, properties west of Granada Avenue and south of Congress, Pima County properties, State of Arizona properties, and U.S. Government properties. The Hotel Arizona and La Placita properties have recently joined the District by contract, although the BID boundaries have not been formally altered.

The Tucson Downtown Alliance (TDA) is under contract with the City of Tucson to provide the following services within the enhanced municipal district:

- Sidewalk pressure-washing
- Litter pickup, done manually and by machine vacuum
- Service pedestrian trash cans
- Graffiti Removal
- Weeding, Tree trimming
- Curb Painting
- Security

Security is also provided with foot, bicycle, and golf cart/GEM vehicle patrols, seven days a week, 16-18 hours per day. TDA's Security Department is a licensed security agency through the Arizona Department of Public Safety (DPS), and all of its personnel are licensed through DPS.

BID EXPANSION

TDA, various stakeholders, and City officials desire to extend the BID boundaries to include the areas excluded in 1998 and 2003, as well as future Rio Nuevo developments. Under this expansion, the BID would be extended westward from its present-day boundary along Granada to bring in the new arena and private property between Cushing and Congress Streets, as well as the new developments west of the freeway: the 14 acres recently offered by the City as a

development opportunity, the Mercado District at Menlo Park, the Tucson Origins Heritage Park, and the Cultural Campus—consisting of the University of Arizona’s Science Center, Arizona State Museum, and the Arizona History Museum.

The expanded area is expected to see intensive new developments, accompanied by dramatically increased traffic flow. The new arena is expected to draw three quarters of a million visitors annually, and the new museums (on the west side) are anticipated to attract several hundred thousand as well.

SERVICE ASSESSMENT

Expanding the BID to the West Side would necessitate the use of a pickup truck to patrol the larger area. Foot, bicycle, and golf cart patrols could serve specific zones or districts as they presently do in downtown, in order for lightly staffed shifts to serve the entire area, they would need to rely on a truck.

Many BID members desire 24/7 security. With the increase in staffing at the Tucson Police Department’s Operations Division Downtown, downtown will have 24/7 police coverage effective April 1, 2007. With this change, it is now more practical for BID Security to consider 24-hour coverage as well because BID Security personnel are not armed and it is safer and more practical for them to patrol when they can depend on police backup.

Other factors necessitating an additional nighttime security presence include:

- A developing residential base in the downtown core
- Development of the Congress Street Entertainment District; more late-night venues open to attracting increased numbers of patrons
- Downtown becoming a nighttime destination due to the new arena
- More public investment in high-quality amenities requiring vandalism protection

With additional visitors downtown, there is also a need for ambassadors to welcome, greet, and assist visitors with directions to destinations, such as parking, restrooms, lodging, restaurants, and attractions.

MAINTENANCE

BID expansion will necessitate additional staffing, the acquisition of additional equipment, and the procurement of a storage area and base of operations on the West Side. A pickup truck will be necessary to transport personnel and haul equipment between the two sides of the freeway.

Since power-washing is done primarily at night and in the dark early morning hours when parked cars and traffic do not hinder the work, an expanded BID would necessitate that a second work crew with its own equipment would need to be utilized. Two crews will have to work simultaneously in the early morning hours at different locations.

It is anticipated that extending the BID to the west side of Menlo District at Menlo Park will require the staffing of six additional full-time-equivalent personnel.

EXPANDING EXISTING SERVICES

TDA does not currently service the planters that were installed in 2005 on East Congress Street. The addition of dozens of planters and landscaped areas, and possibly, plants hung high on light poles, will require a significant commitment of qualified staff and equipment to maintain them and keep them attractive and green.

Servicing hanging planters will require either a ladder or use of a mechanized aerial work platform. Safety considerations would seem to argue against the use of ladders, and in favor of a mechanized aerial work platform, which could serve multiple purposes. Among these are the installation and change-out of street banners on a regular basis, servicing festive lighting, tree pruning, and removing debris from high places without having to rely on expensive equipment rentals.

It is anticipated that servicing the existing BID, with its improved streetscape, more planters, trees, and flower beds, will require that at least three full-time-equivalent positions be staffed.

COST & FUNDING

The City participates financially in the BID, according to the same formula used to assess private commercial properties. The formula is based on square footage of land (10.6 cents/sq. ft.) plus 5.3 cents/sq. ft. of built or improved space. Properties owned by non-profit organizations are given a 50% discount.

The BID anticipates that the cost of acquiring the needed equipment to service the expanded BID area will be approximately \$110,800, and the annual operating cost to service that area will be approximately \$398,560. Much of this funding is expected to come from the new commercial businesses currently under development on the west side.

More intensive service coverage of the existing BID area will require \$26,500 worth of new equipment. Total annual operating expanses are projected at \$315,420.

PUBLIC SERVICES

TUCSON FIRE

OVERVIEW

The Tucson Fire Department (TFD) is responsible for protecting life, safety, and property in the community. Fire Station #1, currently located at Stone Avenue and Cushing Street serves the downtown area. This station is being relocated a few blocks west to the south side of the Tucson Convention Center into a new state-of-the-art facility.

ASSESSMENT OF CAPACITY

The department reports no problems with the infrastructure in the downtown area or concerns about the impact of the Modern Streetcar on its normal operations.

PUBLIC SERVICES

TUCSON POLICE

OVERVIEW

The Tucson Police Department (TPD) has primary responsibility for public safety in the downtown area. Several years ago, the Department designated the downtown area as a separate “beat,” acknowledging the unique needs of the area. This designation assisted the department in assigning the resources necessary to properly serve the area.

ASSESSMENT OF CAPACITY

As progress continues in Tucson’s downtown redevelopment, TPD believes that the City must invest in the Police Department and the visibility of officers in the downtown area. With the growth occurring downtown it is critical that the Downtown Division is staffed 24 hours a day. Boundary changes scheduled for this summer will allow for significant increase in downtown staffing, removing some of the scheduling issues that created staffing shortages at certain times of the day. Future growth of the residential population in the Downtown Division is a major driving force of the new boundaries in that division, as midnight shift officers must now deal with the issues facing residential populations in addition to the general security concerns found in any central business district. It is recommended that there be an increase in the number of Walking Beat Officers, Bike Officers and Community Response Team Officers for the downtown area. Their presence and visibility in the downtown community is essential to the safety and piece of mind of residents. Increasing the number of officers by 18 (16 Officers and 2 Sergeants) would cost an estimated \$1.8 million annually.

POLICE KIOSK AT RONSTADT TRANSIT CENTER

In an effort to further enhance police visibility downtown, the police department recommends building a Police Department Kiosk located at the Ronstadt Transit Center. Having officers highly visible and available at the Ronstadt Center would have a dramatic impact on the level of safety at the center, a key downtown location. Establishing a kiosk at this heavily used, highly visible location is an excellent way to continue the efforts already in place to make downtown a safe, inviting, friendly destination for people coming downtown. The cost of a kiosk is estimated to be \$50,000.

CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN (CPTED)

As the city looks at new developments and infrastructure it is important that analysis is done which incorporates crime into site analysis. This may include numerous design principles, for instance demographic analysis, crime analysis, site analysis, use analysis, neighborhood/user consultation, pathway and lighting analysis. There cost for this is included in the cost for new officers.

DOWNTOWN SECURITY CAMERAS

A comprehensive package of communication tools can help detect and prevent crimes in the downtown area. These tools include merchant-to-merchant email alerts, radio links, enhanced security ambassadors (Downtown Alliance Officers) and closed circuit television cameras throughout downtown Tucson.

This “Safe City” concept has a long record of successes in both the United States and the United Kingdom. The concept was established in the United Kingdom where partnerships between businesses, retailers, police and local government have worked together for years to reduce crime and violence while increasing health and vibrancy in metropolitan business districts. These tools in addition to increase police presence and visibility will broaden the safety net for downtown workers, visitors and residents. These enhanced tools provide valuable assistance to police officers charged with protecting public safety. With diminishing public resources, a closed circuit camera program would provide downtown Tucson with an innovative opportunity to detect and prevent crime from occurring.

The concept of a Safe City program centers on the creation of a wireless network, which would blanket a portion of the Downtown Division policed by the Tucson Police Department. Camera locations will utilize fiber backbone or wireless transmission. The wireless network (Wi-Fi Signal) would enable the use of wireless high-definition digital video cameras, mounted at designated public areas through downtown Tucson. The cameras would be linked via wireless signal to a video network with monitors housed at the Tucson Police Department Headquarters located at 270 S. Stone. The use of wireless technology and computer monitoring will allow new camera locations to be added to the system relatively easily and inexpensively.

The cameras would be mounted on businesses and intersections in designated public areas throughout the downtown area. They have the ability to rotate 360 degrees and would have night vision capability and the ability to read a license plate up to 200 yards. Dummy cameras could be located throughout the downtown area as a visible deterrent to criminal activity. Potential suspects will never know if the camera positioned in the area is real or a decoy. Due to the minimal cost, visible deterrence to crime can be achieved by fielding a large amount of decoy cameras. The wireless system of cameras will allow for simple and cost effective expansion, redeployment and reconfiguration of the surveillance system as the downtown redevelopment continues. Officer safety and risk management issues would be improved and criminal cases would be strengthened with video evidence. A media campaign would be initiated to increase the public knowledge and awareness of the program, which would also serve as a crime deterrent. The downtown police officers would have the ability to remotely monitor and control the pan, tilt and zoom controls.

Strategic planning with City of Tucson Officials, the Tucson Police Department personnel, business owners, residents, and technology experts should take place to determine safety needs and guidelines for implementation. Police Department officials would encourage community support through open discussion at town hall meetings, making the plan a welcomed community based effort. Guidelines would need to be established with the County Attorney, City Prosecutors Office and Courts for acceptable use and successful prosecution. In order to minimize privacy concerns and uphold public trust, video would be strictly limited to publicly viewable areas. It is important to realize that a “Safe City” concept utilizes a combination of technology and information-sharing tools to empower citizens and achieve results. This program will assist Tucson residents in feeling safer and less vulnerable. Tucson Police believes the program will have a strong impact in reducing shoplifting, auto theft, panhandling and assaults in our downtown areas.

The City needs to continue looking forward to utilize technological innovations as part of the Police Departments commitment to employ the latest and most efficient law enforcement tools to protect all of our Tucson residents.

TRASH/RECYCLING PICKUP

OVERVIEW

Solid waste and recycling pickup in the downtown area are provided by the City of Tucson Department of Environmental Services (ES). Residential collections are provided exclusively by the department while commercial customers have a choice and may contract with the solid waste department or with private haulers.

Solid waste management services for the downtown area pose challenges due to the density of projected development and the desirability of mitigating solid waste collection and disposal systems.

ASSUMPTIONS

In assessing the methods available for solid waste management in a dense downtown environment, the following assumptions have been made:

- In conjunction with new construction, the Cultural Plaza will plan and set aside appropriate collection space that accommodates large capacity collection dumpster/rolloffs (approximately a 10'x30' space per rolloff).
- In conjunction with new construction, the Civic Plaza will expand the current systems in place at the Tucson Convention Center. This includes planning space allocations for large capacity dumpster/rolloffs. Rolloff capacity ranges from 20 cubic yards to 40 cubic yards and require the dimensions specified above.
- Unlike the new construction assumptions for the two plazas, the areas that comprise the Warehouse Arts District and Congress Street Entertainment District will be predominantly infill development. Solid Waste Management has established guidelines for the Fox block, and assumes that this level of service would be provided for future infill development. The level of service prohibits commercial curbside containers and requires hand-loading. While labor intensive, hand-loading does minimize the need for large equipment.

ASSESSMENT

Per the assumptions stated above, it is estimated that an additional front load truck would be needed in the first 36 months as retail and residential demand increases. At full build-out, a second front load truck would be required. Between the first 36-month development and completed build-out, ES would absorb the increased demand with existing inventory. Average cost over the next five years for new front loading trucks is estimated to be \$225,000. The vehicles should be on a 10-year replacement schedule.

There are 20 cubic yard roll-offs with compactors in the City's existing inventory. Depending on exact placement, it is highly probable there will be a need at the Civic Plaza for a large capacity (40 cubic yard) roll-off within the first 36 months. Self-contained rolloffs with compactor, which are the most desirable for food waste, are estimated to cost \$175,000. Compactors not integrated into a roll-off unit are \$25,000.

ARCHAEOLOGY

ARCHAEOLOGICAL SERVICES (CITY OF TUCSON)

OVERVIEW

Archaeological services are under the City of Tucson Urban Planning and Design (UPD) Department. This service is provided under the 1999 Administrative Directive requiring assessment and appropriate treatment of archaeological and historic resources impacted by publicly funded capital improvement projects. This directive covers all COT, Rio Nuevo, Pima County and State of Arizona projects occurring within the study area. Federally funded projects also carry this requirement and are often more complicated as the federal agency oversees the process of assessing and addressing cultural resources.

Archaeological assessment is carried out by one of four on-call contractors. Desert Archaeology, Inc. had the sole on-call for 17 years, so they have provided the following status and cost estimates for the remaining City of Tucson held parcels.

ASSESSMENT

UPD reviewed all City-owned parcels in the downtown study area to determine the status of archaeological assessments. Costs for remaining work were identified.

COSTS & FUNDING

The cost for assessing the remaining publicly-owned properties within the study area is estimated to be \$3.3 million. A detailed parcel-by-parcel explanation of these estimates is attached.

City of Tucson Urban Planning & Design
Downtown Infrastructure - Archaeology

ID#	Project	Parcel #	Owner - COT/Private	Address	Status	Funding source	Cost for remaining work	Cost to Infrastructure Effort	Comments
O-3	City/County Courts I		City of Tucson/Pima Co.						
		117160140			Archaeology underway	Pima County		\$0	
		117160150							
		117160160							
		117160180							
		117160230							
		117160200							
		117160260							
O-4	Cultural Plaza/Mission complex		City of Tucson						
		11623090A			Archaeology	Mission project	\$0.00	\$0	
		11620031B			completed and underway	Rio Nuevo			
O-5	Diamond Rock Plaza		HSL/Roger Karber						
		117200310	City of Tucson			TIF	\$25,000.00	\$25,000	Cost is for both COT lots.
		11720019A	Pueblo Center Partners	181 W. Broadway					
		11720019B	HSL Circle Properties	175, 177, & 179 W. Broadway					
		11720016C	City of Tucson						
O-6	Downtown Fire Station		City of Tucson						
		11713069E			Archaeology underway, Capital project Testing complete			\$0	
O-10	MLK Block		WDD/City of Tucson						
		11706089A			Archaeology done, MOA signed	HUD Project		\$0	
		117060950							
		117060940							
		11706183A							
O-11	Presidio Terrace		Reliance/Peggy Noonan						
		116192310			Archaeology almost complete	Community Services		\$0	Reviewing impact on Paseo Redondo
G-2	Arena		City of Tucson						
		116201390				Arena project	\$90,000.00	\$90,000.00	Part done.
		116201360							Included in project budget??
		11620041B							
		11620042B							
		11620043B							
		11620044B							
G-4	El Mirador		City of Tucson (Town West)						
		11705068D			Assessment	Rio Nuevo	\$86,000.00	\$ 86,000.00	
		11705068C			complete				
G-5	La Placita		Bourn Partners						

ID#	Project	Parcel #	Owner - COT/Private	Address	Status	Funding source	Cost for remaining work	Cost to Infrastructure Effort	Comments
		11720016F	BP La Placita Village Investors						Park is City-owned, any modification would be handled through normal cultural resource review process
		117200180	City of Tucson						
		11720017B	City of Tucson						
		11720016H	Metro, Tucson TC & Visitors Bureau	100 S. Church					
		11720016G	BP La Placita Village Investors	120 W. Broadway, 110 & 222 S. Church					
G-6	Menlo Park 12-acres		City of Tucson						
		11620137A			Cleared		\$0.00	\$0	Cleared for development
		11620137A							
		116201250							
		11620124B							
		116201260							
		116201280							
		116201270							
		11620129A							
		116201320							
		116201330							
		116201340							
G-7	Museum complex		City of Tucson						
		11620031D			Completed and	Rio Nuevo	\$0.00	\$0	
		116200320			underway				
G-8	Plaza Centro		Oasis/Jim Campbell						
		11706175A	City of Tucson	Former Greyhound, 2 S. 4th Av	Preliminary	Rio Nuevo	\$228,000.00	\$ 228,000.00	Not determined if developer or COT will
		11706162C	Union Pacific	330 N. Toole Ave	assessment				fund. Development agreement will determine
		11706562C	Union Pacific						
		11706081D	City of Tucson	396, 400, 410, 414 & 418 N. Toole					
G-9	Police Department TENTATIVE		City of Tucson						
		117200250	City of Tucson/Fuel Island	260 S. Stone		COT Capital budget			Depends on final placement of new structures.
G-11	Ronstadt Transit Ctr		City of Tucson						
		11706097A			Cleared		\$0.00	\$0	Cleared in current footprint
		11706185A							If center is moved, assessment will be needed.
G-12	Sixth Avenue & Toole		City of Tucson						
		11706081D		*Parcel is NW Train Depot	Cleared NE of	TDOT	\$164,000.00	\$0	Cleared NE of Toole Ave - Desert Arch.
		117060820		Parking Lot	Toole Ave.				working on balance. Testing recommended
		117060830		Parking Lot					in previous report.
		117060850		Parking Lot					
		117060840		Parking Lot					

ID#	Project	Parcel #	Owner - COT/Private	Address	Status	Funding source	Cost for remaining work	Cost to Infrastructure Effort	Comments
G-13	TCC Expansion (TCC AREA)	11720029A	City of Tucson		Probably OK	TIF	\$25,000 for assessment and testing	\$25,000	
Y-3	Block 175	11710089A	DDC			TIF or Developer	\$1,200,000.00	\$1,200,000	Significant resources on this parcel
Y-5	I-10 frontage @ Cushing - 22nd		Private development						
		116200460	Private	418 S SENTINEL AV	Data recovery plan prepared for a portion - will develop estimate.		1,350,000	\$1,350,000	
		116200470	Private	608 W MESA ST					
		116200540	Private	609 W MESA ST					
		116200550	Private						
		116200560	Private	406 S SENTINEL AV					
		116200570	Private	440 S SENTINEL AV					
		116200580	Private	none					
		116200650	Private	617 W PEAK ST					
		116200660	Private	500 S SENTINEL AV					
		116200670	Private	320 S SENTINEL AV					
		116200680	Private	615 W SIMPSON ST					
		116200690	Private	618 W SIMPSON ST					
		116200780	Private	337 S SENTINEL AV					
		116200790	Private	387 S SENTINEL AV					
		116200800	Private	421 S SENTINEL AV					
		116200810	Private						
		116200820	Private	425 S SENTINEL AV					
		116200830	Private	435 S SENTINEL AV					
		116200840	Private						
		116200850	Private	none					
		116200860	Private	443 S SENTINEL AV					
		116200870	Private	none					
		116200880	Private	none					
		116200890	Private	406 S SENTINEL AV					
		116200900	Private	473 S SENTINEL AV					
		116200910	CITY	none					
		116201400	Private	331 S SENTINEL AV					
		116230190	Private	712 W 18TH ST					Many of these lots are not private but state.
		116230200	Private	714 W 18TH ST					\$1.35 million represents an approximation
		116230210	Private	708 W 18TH ST					of public property that will be included in this project.
		116230220	Private	704 W 18TH ST					
		116230230	Private	718 W 18TH ST					
		116230240	Private	713 W 18TH ST					
		116230250	Private	725 W 18TH ST					
		116230260	Private	720 W GREEN ST					
		116230270	Private	701 W 18TH ST					
		116230290	Private	704 W GREEN ST					
		116230560	Private	717 W GREEN ST					

ID#	Project	Parcel #	Owner - COT/Private	Address	Status	Funding source	Cost for remaining work	Cost to Infrastructure Effort	Comments
Y-7	Plaza San Agustin	Private development							
		117131620	De La Warr Investment Corp	141 S. Stone	Likely historic	Private developer	\$545,000.00	\$0	
		117131610	De La Warr Investment Corp	23 E. Ochoa	period resources				
		117131630	De La Warr Investment Corp						
		117131640	De La Warr Investment Corp						
		117131650	De La Warr Investment Corp						
		117131660	De La Warr Investment Corp						
		117131680	De La Warr Investment Corp						
		117131660	De La Warr Investment Corp						
		117131670	De La Warr Investment Corp						
		117131760	De La Warr Investment Corp						
		117131750	De La Warr Investment Corp						
		117131740	De La Warr Investment Corp						
		117131770	De La Warr Investment Corp						
		117131730	De La Warr Investment Corp						
		117131780	De La Warr Investment Corp						
		117131790	Bring Funeral Home						
		117131800	Bring Funeral Home						
		117131720	Bring Funeral Home	236 S. Scott					
Y-9	Steinfeld West Triangle	Private development							
		117100590	Madsen James E. and Deborah			Private	\$80,000 for private parcels		Private developer build out.
		117100550	Madsen James E. and Deborah						
		117100540	State of Arizona			TIF	\$80,000 for all state parcels)		If City purchases lot.
		117100390	State of Arizona						
		117100570							
		117100560							
		117100520	State of Arizona	302, 402 & 406 N. Church Ave.					
		11710049B							
		11710041A							
Y-10	Warehouse District South of RR	City of Tucson/private development							
		117160050							Estimate being prepared
		117160060							
		117160070							
B-1	I-10 frontage @ Congress, se	Private development							
		116201350			Most cleared	COT	\$135,000.00	\$0	
B-4	DDC Council lot	DDC							
		11710072A			Likely archaeology	COT	\$218,000.00	\$218,000	
		11710069A							
		11710069B							
		117100670							
		117100680							

ID#	Project	Parcel #	Owner - COT/Private	Address	Status	Funding source	Cost for remaining work	Cost to Infrastructure Effort	Comments
B-5	Library Plaza South		City of Tucson						
		117110720							Some work done at time of construction.
		117110710							
		11711069C							
B-6	Library Plaza West		Private development						
		11711064C		*Section for library only					Some work done at time of construction
B-7	Mercado extension		Private development						
		11618254B			Private			\$ -	
		11618254C							
		116182530							
		116182520							
		116182510							
		11618250A		1002 W. Congress				\$0	
		11618250B		1002 W. Congress					
		116182270							
		116182260							
		11618224A							
		116182230							
		116182220							
		116182210							
		116181940							
		116181960							
		116183200							
		116213020							
		116213030							
		11620010B							
		11620010C							
		116191290							
		116191300							
		11619131A							
		116210270							
		116210260							
		116210250							
		116210240							
		116210230							
		116210220							
		116210020							
		116210010							
		116213040							
B-8	Millstone Site		Joe Millstone						
		11619153A	First Family Co. Ltd.	460 N. Freeway	Private				Have information as a result of I-10 work.
		11619154C	First Family Co. Ltd.	450 N. Freeway					Some resources found.
		116193780	City of Tucson			COT			Some work done

ID#	Project	Parcel #	Owner - COT/Private	Address	Status	Funding source	Cost for remaining work	Cost to Infrastructure Effort	Comments
B-11	TCC 1,2,3		City of Tucson/Private development						
	(TCC AREA)	117200260	City of Tucson						Parking lots on fill, will need assessment.
B-12	Theresa Lee site		Pima County						
		11620027A			Building Assesment done.	Rio Nuevo	\$117,000.00	\$0	Archaeology remains to be done.
B-13	Warehouse District North of RR		Private development						
		117050650			Private			\$0	
		117050640							
		117051340							Some of area assessed as part of streetcar project. Historic architectural resources present.
		117160020							
		11716001A							
		11705069B							
		11705069A							
		11705074A							
		11705080B							
		11705080C							
TOTALS									

ENVIRONMENTAL TECHNICAL SERVICES

OVERVIEW

Environmental Technical Services (ETS) is a division of the City's Environmental Services Department that has responsibility for environmental impacts at inactive landfills and Brownfields sites. ETS has responsibility for identifying, assessing, and remediating environmental issues at City-owned sites.

GUIDELINES

Phase I Environmental Site Assessments (ESAs) are completed for all City property acquisitions and/or conveyance of City-owned property to a new owner. Phase II ESAs will be completed for "recognized environmental conditions" (RECs) as recommended in the Phase I ESA report.

Phase I Environmental Site Assessments (ESA)

- Phase I ESAs shall be conducted for City-property purchases.
- Phase I ESAs shall be conducted in accordance with ASTM E1527-05 and continuing obligations must be met in order to ensure CERCLA liability protection.
- Phase I ESAs shall be completed within one year prior to the date of property acquisition with the exception that the following components must be completed/updated within 180 days of purchase date:
 1. Interviews
 2. Searches for environmental cleanup liens
 3. Government records review
 4. Visual inspection of property/adjoining property(s)
 5. Declaration regarding qualifications of the Environmental Professional
- Phase I ESAs conducted on private property will require a written access agreement with existing property owner to conduct a site inspection of the subject property as per "all appropriate inquiry" rule, ASTM E1527-05.

Phase II Environmental Site Assessments (ESA)

- The end use of the property must be known in order to adequately scope Phase II activities and define appropriate cleanup levels.
- Existing environmental conditions in the project area could potentially impact proposed subsurface structures.
 1. Investigation, remediation, and design costs may increase substantially due to existing environmental conditions.
 2. Engineering/institutional controls may need to be implemented.
 3. Project constructability may be influenced by environmental conditions.
- Existing agreements with previous property owners along the Union Pacific Railroad corridor must be carefully assessed prior to design and construction activities due to contractual obligations associated with environmental liabilities.
- Complexity and costs of Phase II ESAs vary significantly from property to property.

ASSESSMENT

For this study, ETS completed the tasks listed below. Costs were assigned based on assessment and remediation work yet to be completed.

- Reviewed existing environmental reports pertaining to parcels underlying identified development area(s) indicated in the Downtown Development and Infrastructure Projections Map dated, March 5, 2007.
- Identified known status of environmental conditions at each project area based upon existing reports as of March 30, 2007.
- Projected recommended additional environmental work to be performed.
- Projected costs for additional environmental work to be performed based on existing environmental data.
- Defined limitations and assumptions
- Prepared an appendix of existing environmental reports on file

COSTS & FUNDING

The following assumptions were made when completing the Downtown Development and Infrastructure Projections:

- Costs in 2007 dollars.
- Costs have been estimated to the next level of environmental assessment needed. Final total costs can only be determined once all investigation is complete.
- Costs have not been developed for private properties due to lack of environmental information.
- Costs of asbestos pre-demolition work will be dependent on square footage of existing structures.
- Cost projection does not include operations and maintenance costs if remediation is necessary.
- Soil borings costs:
 1. Assume 50 foot depth along Union Pacific railroad corridor (adjoining properties) and 80 foot depth elsewhere
 2. Samples collected at 10-foot intervals
- Public and private monitoring wells can be found throughout the underlying identified development area. Their locations must be considered during site design and pre-construction. Right of entry and access agreements for future monitoring activities may be needed.
- Some sites in the project area may have land use/title restrictions and/or environmental remediation systems due to historical environmental conditions.
- Soils in the project area may have been impacted by environmental conditions in the perched aquifer (depth may vary in the shallow groundwater zone).
- Unknown Recognized Environmental Conditions may be encountered and should be addressed during site construction activities.

The total estimated environmental costs for Phase I and II assessments and known remediation for identified parcels is \$22.2 million. It is anticipated that much of this funding may come from

TIF. Other sources of funds typically used for assessment and remediation include EPA Brownsfields grants and City-department capital budgets where applicable.

LIMITATIONS

Environmental Services shall not be responsible for conditions or consequences arising from relevant facts that were not readily available or fully disclosed. Environmental Services has assumed the information used to generate environmental costs/activities is true, correct, accurate, and complete, and has not conducted an independent examination of the materials and statements.

Downtown Infrastructure

Environmental Services Site Assessments

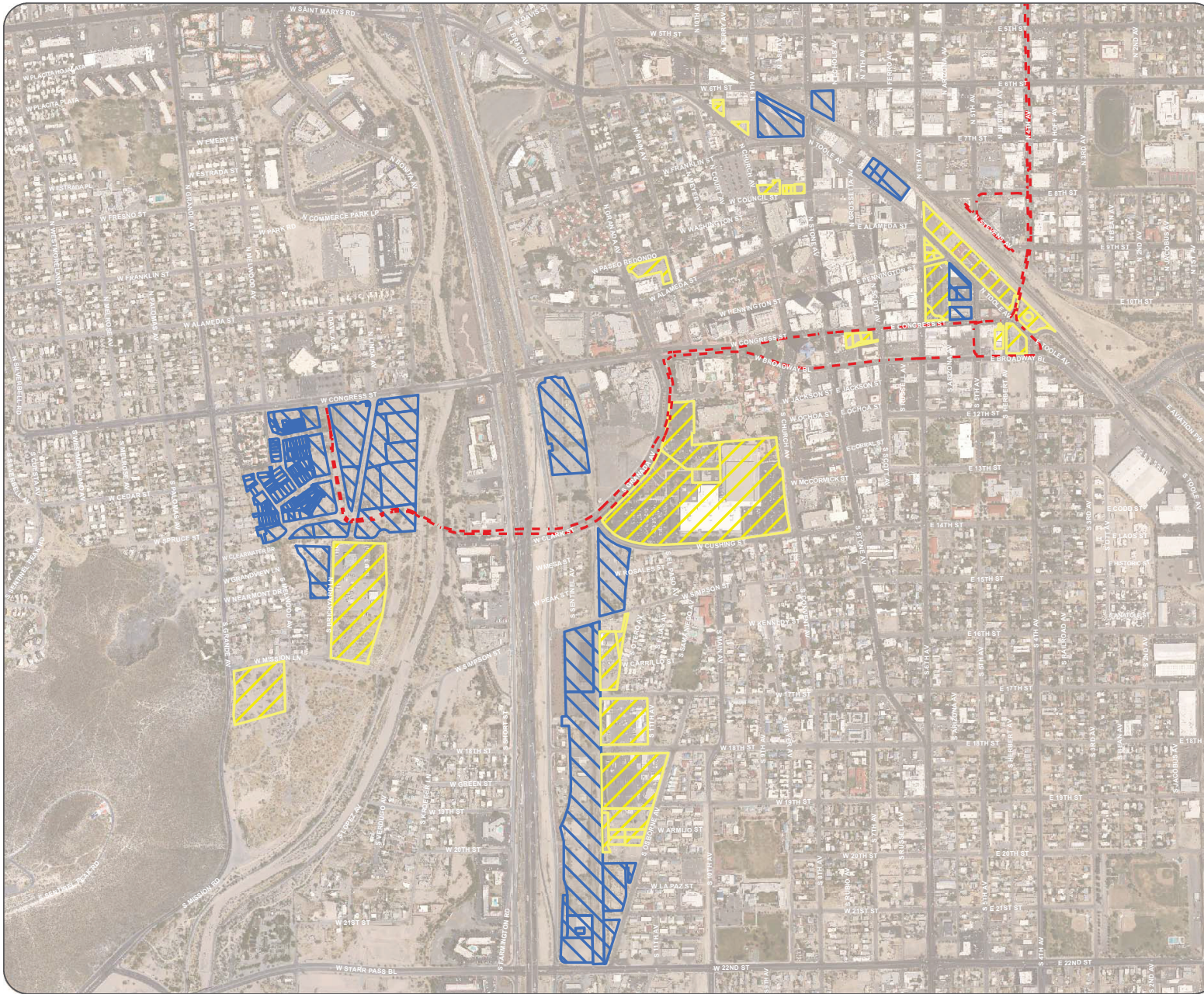
Legend

--- Street Car Route

Site Assessments

 Phase I

 Phase II



1:10,000



**Tucson
Downtown
Partnership**



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City of Tucson Environmental Service

Estimated Environmental Assessment/Remediation Costs for Rio Nuevo Downtown Redevelopment Target Areas (for City of Tucson Properties)

ID#	Project	Parcel #	Owner - COT/Private	Address	Phase I completed Yes/No	Phase I - Date	Phase II completed Yes/No	Phase II Date	Estimated Environmental Costs	Cost Assumptions/ Notes
O-1	44 Broadway I		Ron Schwabe						\$0	Private property
		11713038F	44 Broadway Block LLC	34 E. Broadway & 44 E. Broadway	No		No			
		11713037A	Williams Gary Intl. Bonding Corp.	50,56,60 E. Broadway & 57 E. Jackson St.	No		No			
O-2	Carlos Arruza Block		City of Tucson						\$5,000	Phase I update
	(TCC AREA)	*same as B-11 parcel	City of Tucson		Yes	06/20/06	No			
O-3	City/County Courts I		City of Tucson/Pima Co.						\$0	Funded by Pima County
		117160140			No		No			
		117160150			No		No			
		117160160			No		No			
		117160180			No		No			
		117160230		Former UST Site	No		No			
		117160200			No		No			
		117160260			No		No			
O-4	Cultural Plaza/Mission complex		City of Tucson						\$10,559,400	Phase II and remediation
		11623090A			Yes	05/01/05	No			Does not include waste disposal fees
		11620031B			Yes	05/01/05	No			\$8.9 million approved by Mayor and Council on 6/27/06
O-5	Diamond Rock Plaza		HSL/Roger Karber						\$5,000	Phase I on City properties
		117200310	City of Tucson		No		No			
		11720019A	Pueblo Center Partners	181 W. Broadway	No		No			
		11720019B	HSL Circle Properties	175, 177, & 179 W. Broadway	No		No			
		11720016C	City of Tucson		No		No			
O-6	Downtown Fire Station		City of Tucson						\$0	Under development
		11713069E			Yes	05/05/06	Yes	02/09/07		
O-7	Julian Drew Block		Ross Rulney							Private property
		117170020	Lewis Hotel LLC	177 E. Broadway	No		No			
		117170010	Lewis Hotel LLC	178, 179, 180, 188 E. Broadway	No		No			
		117170090	Lewis Hotel LLC	118 S. 5th Av	No		No			
		117170100	Tiberon Apts.	128 S. 5th Av	No		No			
O-8	Lofts on 5th Avenue		VantagePoint/Geo. Pilloton						\$0	Private property
					No		No			
O-9	Mercado District		Rio Development						\$0	Property currently under development
		116206240			Yes	05/01/05	Yes	09/01/05		
		116206280			Yes	05/01/05	Yes	09/01/05		
		116206290			Yes	05/01/05	Yes	09/01/05		
		116205330			Yes	05/01/05	Yes	09/01/05		
		116206260			Yes	05/01/05	Yes	09/01/05		
		116206230			Yes	05/01/05	Yes	09/01/05		
		116205240			Yes	05/01/05	Yes	09/01/05		

ID#	Project	Parcel #	Owner - COT/Private	Address	Phase I completed Yes/No	Phase I - Date	Phase II completed Yes/No	Phase II Date	Estimated Environmental Costs	Cost Assumptions/ Notes
		116205270			Yes	05/01/05	Yes	09/01/05		
		116205250			Yes	05/01/05	Yes	09/01/05		
		116205300			Yes	05/01/05	Yes	09/01/05		
		116205280			Yes	05/01/05	Yes	09/01/05		
		116205260			Yes	05/11/05	Yes	09/01/05		
		116205230			Yes	05/01/05	Yes	09/01/05		
		116205340			Yes	05/01/05	Yes	09/01/05		
		116205310			Yes	05/01/05	Yes	09/01/05		
		116205290			Yes	05/01/05	Yes	09/01/05		
		116206240			Yes	05/01/05	Yes	09/01/05		
		116205320			Yes	05/01/05	Yes	09/01/05		
		116206270			Yes	05/01/05	Yes	09/01/05		
		116205350			Yes	05/01/05	Yes	09/01/05		
		116205360			Yes	05/01/05	Yes	09/01/05		
		116205370			Yes	05/01/05	Yes	09/01/05		
		116205380			Yes	05/01/05	Yes	09/01/05		
		116205390			Yes	05/01/05	Yes	09/01/05		
		116205400			Yes	05/01/05	Yes	09/01/05		
		116205420			Yes	05/01/05	Yes	09/01/05		
		116205430			Yes	05/01/05	Yes	09/01/05		
		116205450			Yes	05/01/05	Yes	09/01/05		
		116205460			Yes	05/01/05	Yes	09/01/05		
		116205410			Yes	05/01/05	Yes	09/01/05		
		116205440			Yes	05/01/05	Yes	09/01/05		
		116206230			Yes	05/01/05	Yes	09/01/05		
		116206270			Yes	05/01/05	Yes	09/01/05		
		116205500			Yes	05/01/05	Yes	09/01/05		
		116205480			Yes	05/01/05	Yes	09/01/05		
		116205470			Yes	05/01/05	Yes	09/01/05		
		116205490			Yes	05/01/05	Yes	09/01/05		
		116205530			Yes	05/01/05	Yes	09/01/05		
		116205510			Yes	05/01/05	Yes	09/01/05		
		116205520			Yes	05/01/05	Yes	09/01/05		
		116206260			Yes	05/01/05	Yes	09/01/05		
		116206300			Yes	05/01/05	Yes	09/01/05		
		116206240			Yes	05/01/05	Yes	09/01/05		
		116205590			Yes	05/01/05	Yes	09/01/05		
		116205600			Yes	05/01/05	Yes	09/01/05		
		116205580			Yes	05/01/05	Yes	09/01/05		
		116205570			Yes	05/01/05	Yes	09/01/05		
		116205560			Yes	05/01/05	Yes	09/01/05		
		116205550			Yes	05/01/05	Yes	09/01/05		
		116206230			Yes	05/01/05	Yes	09/01/05		
		116205540			Yes	05/01/05	Yes	09/01/05		
		116205610			Yes	05/01/05	Yes	09/01/05		
		116205660			Yes	05/01/05	Yes	09/01/05		
		116205670			Yes	05/01/05	Yes	09/01/05		
		116205680			Yes	05/01/05	Yes	09/01/05		
		116206230			Yes	05/01/05	Yes	09/01/05		

ID#	Project	Parcel #	Owner - COT/Private	Address	Phase I completed Yes/No	Phase I - Date	Phase II completed Yes/No	Phase II Date	Estimated Environmental Costs	Cost Assumptions/ Notes
		116205700			Yes	05/01/05	Yes	09/01/05		
		116205690			Yes	05/01/05	Yes	09/01/05		
		116205710			Yes	05/01/05	Yes	09/01/05		
		116206270			Yes	05/01/05	Yes	09/01/05		
		116205620			Yes	05/01/05	Yes	09/01/05		
		116205630			Yes	05/01/05	Yes	09/01/05		
		116205640			Yes	05/01/05	Yes	09/01/05		
		116205790			Yes	05/01/05	Yes	09/01/05		
		116205780			Yes	05/01/05	Yes	09/01/05		
		116205770			Yes	05/01/05	Yes	09/01/05		
		116205760			Yes	05/01/05	Yes	09/01/05		
		116205750			Yes	05/01/05	Yes	09/01/05		
		116205740			Yes	05/01/05	Yes	09/01/05		
		116205720			Yes	05/01/05	Yes	09/01/05		
		116205730			Yes	05/01/05	Yes	09/01/05		
		116205820			Yes	05/01/05	Yes	09/01/05		
		116205830			Yes	05/01/05	Yes	09/01/05		
		116206230			Yes	05/01/05	Yes	09/01/05		
		116205740			Yes	05/01/05	Yes	09/01/05		
		116205850			Yes	05/01/05	Yes	09/01/05		
		116206240			Yes	05/01/05	Yes	09/01/05		
		116205900			Yes	05/01/05	Yes	09/01/05		
		116205890			Yes	05/01/05	Yes	09/01/05		
		116205910			Yes	05/01/05	Yes	09/01/05		
		116205880			Yes	05/01/05	Yes	09/01/05		
		116205920			Yes	05/01/05	Yes	09/01/05		
		116206230			Yes	05/01/05	Yes	09/01/05		
		116205940			Yes	05/01/05	Yes	09/01/05		
		116205950			Yes	05/01/05	Yes	09/01/05		
		116205960			Yes	05/01/05	Yes	09/01/05		
		116205970			Yes	05/01/05	Yes	09/01/05		
		116205980			Yes	05/01/05	Yes	09/01/05		
		116205990			Yes	05/01/05	Yes	09/01/05		
		116206160			Yes	05/01/05	Yes	09/01/05		
		116206170			Yes	05/01/05	Yes	09/01/05		
		116206230			Yes	05/01/05	Yes	09/01/05		
		116206180			Yes	05/01/05	Yes	09/01/05		
		116206080			Yes	05/01/05	Yes	09/01/05		
		116206090			Yes	05/01/05	Yes	09/01/05		
		116206190			Yes	05/01/05	Yes	09/01/05		
		116206200			Yes	05/01/05	Yes	09/01/05		
		116206210			Yes	05/01/05	Yes	09/01/05		
		116206100			Yes	05/01/05	Yes	09/01/05		
		116206030			Yes	05/01/05	Yes	09/01/05		
		116206110			Yes	05/01/05	Yes	09/01/05		
		116206020			Yes	05/01/05	Yes	09/01/05		
		116206010			Yes	05/01/05	Yes	09/01/05		
		116206000			Yes	05/01/05	Yes	09/01/05		
		116206120			Yes	05/01/05	Yes	09/01/05		

ID#	Project	Parcel #	Owner - COT/Private	Address	Phase I completed Yes/No	Phase I - Date	Phase II completed Yes/No	Phase II Date	Estimated Environmental Costs	Cost Assumptions/ Notes
		116206130			Yes	05/01/05	Yes	09/01/05		
		116206310			Yes	05/01/05	Yes	09/01/05		
		116206230			Yes	05/01/05	Yes	09/01/05		
		116206140			Yes	05/01/05	Yes	09/01/05		
		116206150			Yes	05/01/05	Yes	09/01/05		
		116206040			Yes	05/01/05	Yes	09/01/05		
		116206050			Yes	05/01/05	Yes	09/01/05		
		116206060			Yes	05/01/05	Yes	09/01/05		
		116206070			Yes	05/01/05	Yes	09/01/05		
		116206250			Yes	05/01/05	Yes	09/01/05		
		116206220			Yes	05/01/05	Yes	09/01/05		
		11620130A			Yes	05/01/05	Yes	09/01/05		
		11620131A			Yes	05/01/05	Yes	09/01/05		
O-10	MLK Block		WDD/City of Tucson						\$264,550	Remediation of contaminated soil
		11706089A		345 E. Toole, Phase I 3-02-06	Yes	10/15/2003	Pre Demo ACM			
		117060950			Yes	10/15/2003	Yes	03/02/06		
		117060940			Yes	10/15/2003	Yes	03/02/06		
		11706183A			Yes	10/15/2003	Pre Demo ACM			
O-11	Presidio Terrace		Reliance/Peggy Noonan						\$0	Property currently under development
		116192310		Recommend Updated Phase I	Yes	11/5/2004	No			
O-12	Rialto Block/Congress		Rialto/Biggers						\$0	Private property
		11706168B			No		No			
		11706168C			Yes	12/23/97	No			
		11706168A			No		No			
		117061740			No		No			
		11706177B			Yes	12/23/97	No			
O-13	Santa Rita Resort/Condo		Pathway Developments						\$0	Private property
		11717022B			No		No			
		11717023C			No		No			
		11717026A			No		No			
		11717029A			No		No			
		11717030A	Hotel Corp. Downtown Tucson	142 S. 6th	No		No			
O-14	The Post		Bourn Partners						\$0	Private property
		117120850		Pre-Phase I : May 2002	Yes	11/15/2006	No			
		11712084A		Pre-Phase I : May 2002	Yes	11/15/2006	No			
		11712083A		Pre-Phase I : May 2002	Yes	11/15/2006	No			
		11712083B		Pre-Phase I : May 2002	Yes	11/15/2006	No			
G-1	200 Block		W&D						\$0	Private property
		11706187D			No		No			
		11706193A			No		No			
		117062000		Former UST Site	No		No			
G-2	Arena		City of Tucson						\$5,000	Phase I
		116201390			No		No			Phase II may be needed depending on findings. Cost to be determined.
		116201360			No		No			
		11620041B			No		No			

ID#	Project	Parcel #	Owner - COT/Private	Address	Phase I completed Yes/No	Phase I - Date	Phase II completed Yes/No	Phase II Date	Estimated Environmental Costs	Cost Assumptions/ Notes
		11620042B			No		No			
		11620043B			No		No			
		11620044B			No		No			
G-3	City/County Courts II		City of Tucson/Pima Co.						\$0	Funded by Pima County
		117160170			No		No			
		117160280			No		No			
		117160300			No		No			
		117160310			No		No			
		117160380			No		No			
		117160320			No		No			
		11716029A			No		No			
		117160360			No		No			
		117160370			No		No			
		117160330			No		No			
G-4	El Mirador (Franklin Lot)		City of Tucson (Town West/Jim Horvath)						\$23,950	Additional Phase II work
		11705068D			Yes	12/15/2005	Yes	12/04/06		
		11705068C			Yes	12/15/2005	Yes	12/04/06		
G-5	La Placita		Bourn Partners						\$25,000	Potential Waste Water Permits required on City-owned properties
		11720016F	BP La Placita Village Investors		No		No			
		117200180	City of Tucson		No		No			
		11720017B	City of Tucson		No		No			
		11720016H	Metro, Tucson TC & Visitors Bureau	100 S. Church	No		No			
		11720016G	BP La Placita Village Investors	120 W. Broadway, 110 & 222 S. Church	No		No			
G-6	Menlo Park 12-acres		City of Tucson						\$93,900	Phase II and remediation
		11620137A			Yes	05/01/05	Yes	05/01/06		Phase II findings indicate possible UST in sidewalk area.
		11620137A			Yes	05/01/05	Yes	05/01/06		
		116201250			Yes	05/01/05	Yes	05/01/06		
		11620124B			Yes	05/01/05	Yes	05/01/06		
		116201260			Yes	05/01/05	Yes	05/01/06		
		116201280			Yes	05/01/05	Yes	05/01/06		
		116201270			Yes	05/01/05	Yes	05/01/06		
		11620129A			Yes	05/01/05	Yes	05/01/06		
		116201320			Yes	05/01/05	Yes	05/01/06		
		116201330			Yes	05/01/05	Yes	05/01/06		
		116201340			Yes	05/01/05	Yes	05/01/06		
G-7	Museum complex		City of Tucson						\$9,900,000	Remediation
		11620031D			Yes	05/01/05	Yes	multiple reports		Does not include waste disposal fees
		116200320			Yes	05/01/05	Yes	multiple reports		
G-8	Plaza Centro		City of Tucson (Oasis/Jim Campbell)						\$0	Phase II may be needed. Cost to be determined.
		11706175A	City of Tucson	Former Greyhound, 2 S. 4th Av	Yes	04/09/04	No			
		11706162C	Union Pacific	330 N. Toole Ave	No		No			

ID#	Project	Parcel #	Owner - COT/Private	Address	Phase I completed Yes/No	Phase I - Date	Phase II completed Yes/No	Phase II Date	Estimated Environmental Costs	Cost Assumptions/ Notes
		11706562C	Union Pacific		Yes	11/10/06	No			
		11706081D	City of Tucson	396, 400, 410, 414 & 418 N. Toole	Yes	11/11/06	No			
G-9	Police Department TENTATIVE		City of Tucson						\$49,160	Additional Phase II work
		117200250	City of Tucson/Fuel Island	260 S. Stone	No		No			
G-10	Rialto Block/Broadway		Rialto/Biggers						\$0	Private property
		11706179A		Former Trailways LUST Site	No		No			
		117061780			No		No			
		11706177A			No		No			
		11706177B		Rialto Theater	Yes	12/23/1997	No			
G-11	Ronstadt Transit Ctr		City of Tucson						\$60,120	Phase II and remediation
		11706097A			Yes	01/29/07	No			
		11706185A			Yes	1/29/2007	No			
G-12	Sixth Avenue & Toole		City of Tucson						\$39,800	Phase II
		11706081D		*Parcel is NW Train Depot			Yes	09/01/98		
		117060820		Parking Lot	Yes	3/14/2005	Yes			Pre-phase I completed in 2005
		117060830		Parking Lot	Yes	3/14/2005	Yes	05/05/97		Geophysical completed in 1997
		117060850		Parking Lot	Yes	3/14/2005	Yes	05/05/97		
		117060840		Parking Lot	Yes	3/14/2005	Yes	05/05/97		
G-13	TCC Expansion (TCC AREA)		City of Tucson						\$470,640	Phase II and remediation
		11720029A	City of Tucson		Yes	06/20/06	No			
Y-1	44 E Broadway II		Ron Schwabe						\$0	Private property
		117130410	44 Broadway Block LLC 18 & 20 E. Ochoa		No		No			
Y-2	Baccus Lot		Buck Baccus						\$0	Private property
		117130290	Lerdal LTD Partnership		No		No			
		117130250	Lerdal LTD Partnership	62, 64, 66, 68, 70, 72, 74, & 76 S. Stone	No		No			
		117130300	Lerdal LTD Partnership		No		No			
		117130310	Lerdal LTD Partnership		No		No			
Y-3	Block 175		DDC						\$0	Private property
		11710089A			No		No			
Y-4	Fourth Ave./Brdwy		Powell/Heller						\$0	Private property
		117062010	Dorothy Powell	245 & 246 E. Broadway	No		No			
		117062050	Dorothy Powell		No		No			
		117062080	Dorothy Powell		No		No			
		117062090	Dorothy Powell		No		No			
		117062110	Dorothy Powell	231 E. 12th	No		No			
		117062120	Dorothy Powell	146, 148 & 150 S. 4th Ave	No		No			
Y-5	I-10 frontage @ Cushing - 22nd		Private development						\$265,800	Phase II and remediation on City-owned properties
		116200460	Private	418 S SENTINEL AV	No		No			
		116200470	Private	608 W MESA ST	No		No			
		116200540	Private	609 W MESA ST	No		No			

ID#	Project	Parcel #	Owner - COT/Private	Address	Phase I completed Yes/No	Phase I - Date	Phase II completed Yes/No	Phase II Date	Estimated Environmental Costs	Cost Assumptions/ Notes
		116200550	Private		No		No			
		116200560	Private	406 S SENTINEL AV	No		No			
		116200570	Private	440 S SENTINEL AV	No		No			
		116200580	Private	none	No		No			
		116200650	Private	617 W PEAK ST	No		No			
		116200660	Private	500 S SENTINEL AV	No		No			
		116200670	Private	320 S SENTINEL AV	No		No			
		116200680	Private	615 W SIMPSON ST	No		No			
		116200690	Private	618 W SIMPSON ST	No		No			
		116200780	Private	337 S SENTINEL AV	No		No			
		116200790	Private	387 S SENTINEL AV	No		No			
		116200800	Private	421 S SENTINEL AV	No		No			
		116200810	Private		No		No			
		116200820	Private	425 S SENTINEL AV	No		No			
		116200830	Private	435 S SENTINEL AV	No		No			
		116200840	Private		No		No			
		116200850	Private	none	No		No			
		116200860	Private	443 S SENTINEL AV	No		No			
		116200870	Private	none	No		No			
		116200880	Private	none	No		No			
		116200890	Private	406 S SENTINEL AV	No		No			
		116200900	Private	473 S SENTINEL AV	No		No			
		116200910	CITY	none	No		No			
		116201400	Private	331 S SENTINEL AV	No		No			
		116230190	Private	712 W 18TH ST	No		No			
		116230200	Private	714 W 18TH ST	No		No			
		116230210	Private	708 W 18TH ST	No		No			
		116230220	Private	704 W 18TH ST	No		No			
		116230230	Private	718 W 18TH ST	No		No			
		116230240	Private	713 W 18TH ST	No		No			
		116230250	Private	725 W 18TH ST	No		No			
		116230260	Private	720 W GREEN ST	No		No			
		116230270	Private	701 W 18TH ST	No		No			
		116230290	Private	704 W GREEN ST	No		No			
		116230560	Private	717 W GREEN ST	No		No			
		116230590	Private	949 S FREEWAY	No		No			
		116230750	Private	747 S FREEWAY	No		No			
		117190600	CITY	No address available	Yes	10/17/06	No			Former Flint Oil - EPA Grant funds
		11714356A	CITY	No address available	Yes	10/17/06	No			Former Flint Oil - EPA Grant funds
		11620045B	Private		No		No			
		11623058A	Private	705 W GREEN ST	No		No			
		11623058B	Private		No		No			
		11623144A	Private	1007 S FREEWAY	No		No			
		11623154C	Private							

ID#	Project	Parcel #	Owner - COT/Private	Address	Phase I completed Yes/No	Phase I - Date	Phase II completed Yes/No	Phase II Date	Estimated Environmental Costs	Cost Assumptions/ Notes
					Yes	06/01/00	Yes	10/25/02		
		11623154D	Private							
		11623155B	Private	1125 S I10 WB FRONTAGE RD						
		11623555B	Private							
		11623155E	Private	601 W SIMPSON ST	Yes	12/01/97	Yes	06/05/98		
		11623555C	Private		No		No			
		11623555D	Private		No		No			
		117143570	CITY	510 W 18TH ST	Yes	04/15/04	No			Tucson Water Plant 1
		11708164B	CITY	501 W 18TH ST						
		11708165B	CITY							
		11708166B	CITY							
		11708169A	CITY	910 S OSBORNE AV	Yes	04/15/04	No			
		11708170A	CITY							
		11708171A	CITY							
		11708172A	CITY							
		11709082B	CITY	500 W 20TH ST	Yes	12/01/97	Yes	06/05/98		Vacant
		11709083A	CITY	555 W 20TH ST	Yes	12/01/97	Yes	06/05/98		Vacant
		11709092A	CITY		Yes	12/01/97	Yes	06/05/98		Vacant
		11719059A	Private							
		11623155D	CITY		Yes	12/01/97	Yes	06/05/98		Vacant
Y-6	Norville Exhibition Ctr		Alan Norville/Eric Hutchens						\$0	Private property
		11620023J			No		No			
		11620023H			No		No			
		11713061D			No		No			
		11713061P			No		No			
		11713061N			No		No			
		117200300			No		No			
		11713069D			No		No			
Y-7	Plaza San Agustin		Private development						\$0	Private property
		117131620	De La Warr Investment Corp	141 S. Stone	No		No			
		117131610	De La Warr Investment Corp	23 E. Ochoa	No		No			
		117131630	De La Warr Investment Corp		No		No			
		117131640	De La Warr Investment Corp		No		No			
		117131650	De La Warr Investment Corp		No		No			
		117131660	De La Warr Investment Corp		No		No			
		117131680	De La Warr Investment Corp		No		No			

ID#	Project	Parcel #	Owner - COT/Private	Address	Phase I completed Yes/No	Phase I - Date	Phase II completed Yes/No	Phase II Date	Estimated Environmental Costs	Cost Assumptions/ Notes
		117131660	De La Warr Investment Corp		No		No			
		117131670	De La Warr Investment Corp		No		No			
		117131760	De La Warr Investment Corp		No		No			
		117131750	De La Warr Investment Corp		No		No			
		117131740	De La Warr Investment Corp		No		No			
		117131770	De La Warr Investment Corp		No		No			
		117131730	De La Warr Investment Corp		No		No			
		117131780	De La Warr Investment Corp		No		No			
		117131790	Bring Funeral Home		No		No			
		117131800	Bring Funeral Home		No		No			
		117131720	Bring Funeral Home	236 S. Scott	No		No			
Y-8	Pueblo Garage		Buck Baccus						\$0	Private property
		117120080			No		No			
		11712007A			No		No			
Y-9	Steinfeld West Triangle		Private development						\$10,000	Phase I's for ADOT properties the City may potentially purchase
		117100590	Madsen James E. and Deborah D. JR/RS		No		No			
		117100550	Madsen James E. and Deborah D. JR/RS		No		No			
		117100540	State of Arizona		No		No			
		117100390	State of Arizona		No		No			
		117100570	State of Arizona	302, 402 & 406 N. Church Ave.	No	09/26/99	No			
		117100560	State of Arizona	302, 402 & 406 N. Church Ave.	Yes	09/26/99	No			
		117100520	State of Arizona	302, 402 & 406 N. Church Ave.	Yes	09/27/99	No			
		11710049B	State of Arizona	302, 402 & 406 N. Church Ave.	Yes	09/28/99	No			
		11710041A	State of Arizona	302, 402 & 406 N. Church Ave.	Yes	09/29/99	No			
Y-10	Warehouse District South of RR		City of Tucson/private development						\$0	
		117160050			No		No			
		117160060			Yes	11/10/2006	Yes	01/01/00		
		117160070			Yes	11/10/2006	Yes	01/01/00		
B-1	I-10 frontage @ Congress, se				Yes	multiple reports	Yes	multiple reports	\$379,600	Phase II and remediation on City-owned parcels
		116201350			Yes	multiple reports	Yes	multiple reports		
B-2	Inn Suites		Tucson St. Mary's Suite						\$0	Private property
		11619175B	Tucson St. Mary's Suite	475 N. Granada Ave.	No		No			

ID#	Project	Parcel #	Owner - COT/Private	Address	Phase I completed Yes/No	Phase I - Date	Phase II completed Yes/No	Phase II Date	Estimated Environmental Costs	Cost Assumptions/ Notes
B-3	Chase Bank lot		Private development						\$0	Private property
		11712091D			No		No			
		11712089A			No		No			
		117120950			No		No			
B-4	DDC Council lot		Private development						\$0	Private property
		11710072A			Yes	6/5/2000	No			
		11710069A			Yes	6/5/2000	No			
		11710069B			Yes	6/5/2000	No			
		117100670			Yes	6/5/2000	No			
		117100680			Yes	6/5/2000	No			
B-5	Library Plaza South		City of Tucson						\$5,000	Phase I
		117110720			No		No			
		117110710			No		No			
		11711069C			No		No			
B-6	Library Plaza West		Private development						\$5,000	Phase I
		11711064C		*Section for library only	No		No			
B-7	Mercado extension		Private development						\$0	Private property
		11618254B			No		No			
		11618254C			No		No			
		116182530			No		No			
		116182520			No		No			
		116182510			No		No			
		11618250A		1002 W. Congress	No		No			
		11618250B		1002 W. Congress	No		No			
		116182270			No		No			
		116182260			No		No			
		11618224A			No		No			
		116182230			No		No			
		116182220			No		No			
		116182210			No		No			
		116181940			No		No			
		116181960			No		No			
		116183200			No		No			
		116213020			No		No			
		116213030			No		No			
		11620010B			No		No			
		11620010C			No		No			
		116191290			No		No			
		116191300			No		No			
		11619131A			No		No			
		116210270			No		No			
		116210260			No		No			
		116210250			No		No			
		116210240			No		No			
		116210230			No		No			

ID#	Project	Parcel #	Owner - COT/Private	Address	Phase I completed Yes/No	Phase I - Date	Phase II completed Yes/No	Phase II Date	Estimated Environmental Costs	Cost Assumptions/ Notes
		116210220			No		No			
		116210020			No		No			
		116210010			No		No			
		116213040			No		No			
B-8	Millstone Site		Joe Millstone						\$0	Private property
		11619153A	First Family Co. Ltd.	460 N. Freeway	No		No			
		11619154C	First Family Co. Ltd.	450 N. Freeway	No		No			
		116193780	City of Tucson		No		No			
B-9	Pima Co pkg lot @ B'way		Pima County						\$0	Private property
		117150060			No		No			
		117150080			No		No			
B-10	Reliance Tower II pad		HUB Properties						\$0	Private property
		11712099A			No		No			
B-11	TCC 1,2,3		City of Tucson/Private development						\$0	See O-2 for cost
	(TCC AREA)	117200260	City of Tucson		Yes	06/20/06	No			
B-12	Theresa Lee site		City of Tucson						\$20,000	Phase I and II
		11620027A			No		No			
B-13	Warehouse District North of RR		Private development						\$0	Private property
		117050650			No		Yes	03/15/00		ADOT
		117050640			No		No			Rest of parcels are privately owned
		117051340			No		No			
		117160020			No		No			
		11716001A			No		No			
		11705069B			No		No			
		11705069A			No		No			
		11705074A			No		No			
		11705080B			No		No			
		11705080C			No		No			
TOTALS									\$22,186,920	

OVERVIEW

The City of Tucson Parks and Recreation Department has responsibility for developing and maintaining all public parks and plazas in the downtown area. Green space is an essential element of urban revitalization and is critical to the success of Rio Nuevo. Green space in the form of parks, plazas, and pedestrian-oriented promenades plays a vital role in creating a quality place and an environment people want to experience.

The inventory listed below is keyed to the accompanying map and provides an overview of existing green spaces, green spaces currently planned, and opportunities for new green space within the greater downtown area. The focus of these projects is on furthering the goals established for Rio Nuevo including:

- Creating life beyond the weekday hours of 8 a.m. to 5 p.m. for new residents craving an exciting urban lifestyle.
- Creating places for both visitors and residents to enjoy a variety of cultural, artistic, retail, and entertainment venues.
- Creating linkages within the downtown built environment for people to use as they experience the rich history and traditions of Tucson.

The Parks and Recreation Department has a long-range plan for downtown and its surrounding context that reflects a system of destinations and trail connects for bike and pedestrian use. The plan encompasses more than just the Rio Nuevo district. The enclosed cost estimate for the Department's Downtown Green Infrastructure Plan provides subtotaled project costs for those projects within the study area (or "district"), as well as a subtotal of those in the areas surrounding it. Asterisks (*) denote those projects that are located within the study area.

INVENTORY OF CURRENT FACILITIES

- E1** Iron Horse Park – Located at the mouth and golden eyes end of Rattlesnake Bridge, this small park has a ramada, picnic tables, art work and a playground. The trail that passes through the Rattlesnake Bridge will be connected to the south with the construction of the Basket Bridge. When the Downtown Links Project and 4th Avenue Underpass are completed, the access to and awareness of this small park will increase.
- E2** Broadway Boulevard Greenway
- E3** Aviation Bikeway
- E4** Barrio San Antonio – This is a new natural resource "pocket park", located at Santa Rita and 14th Avenue It will be accessible to the Cherry Fields project and Arroyo Chico Trail. It has a group barbecue, shade cloth ramada, small neighborhood meeting and performance area, with rocks for seats. It also has a sand playground, and a special neighbor who supplies sand toys.
- E5** Tucson High School – The Tucson High School Feasibility Plan, which features exploration of activity space and renovation and parking needs at this 100-year old site, includes a suggestion for creating/scheduling spaces that can be used by the general public. The plan

is supported by a community/school design team and the area neighborhood associations. How the students travel through spaces downtown and use transportation sites is important in planning public spaces and linkages, as is the partnership with the school and district for usable spaces.

- E6** Miles Elementary School – A new partnership with the school opens the school grounds to the public when school is not in session. The playground includes a backstop, a walking path, playground features, picnic tables, and turf.
- E7** Highland Bike Route – A bike route that connects the University of Arizona and the Arroyo Chico detention basin project in Barrio San Antonio.
- E8** Santa Rita Park – Located at 22nd Street and 4th Ave, this park has two newly lighted softball fields, a concession stand, lit baseball field, basketball court, a playground, and a “flat water” pool (originally constructed in 1936, renovated in the 1980s). A much-anticipated skatepark is planned. It also has a continuing homeless population. The pool may be “lost” when 22nd Street is widened, which may provide an opportunity for a new style pool. The area along the east side of the park has been suggested for some community housing.
- E9** Mirasol Park – Located south of 22nd Street, 1100 E. Silverlake. The park has a lit softball field and playground, and a basketball court.
- E10** Silverlake Park – Although relatively new, Silverlake Park (at Kino and 36th Street) has developed into a much used and loved park. It houses the four lit “Challenger Little League” fields, used for children with disabilities, as well as other leagues, two unlit soccer fields, a playground, picnic areas, a path around the park, a community garden, the American Israel Friendship path, and a Recreation Center with class spaces, weight room, child care and senior space. The park has a new, zero depth entry pool, spray toys, competition lanes and a slide. The park hosts a public library, and will soon have additional turf, with the addition of space from Hollinger School. This park will link with downtown when the El Paso Greenway is developed.
- E11** Herrera Quiroz Park – Located at St. Mary’s Rd. and I-10. Oury Center is a small, historic center (1919), housing recreation programming for children and seniors. The park has two softball fields, a playground, and a pool. The recent Master Plan of the site calls for a future center and improved grounds. A covered basketball court will be built within the year.
- E12** Carrillo Pool – Located at Carrillo Elementary School and owned and operated by the City of Tucson Parks and Recreation Department.
- E13** El Tiradito and La Pilita Neighborhood Center – The “wishing shrine” site and historic building next door. La Pilita is leased and run by a non-profit that provides good programming for elementary students regarding Tucson’s history and the environment.
- E14** Ormsby Park – This small park located one block south of 22nd Street near the Santa Cruz River, currently houses a small center and softball field. This area is a critical opportunity area, with plans to be expanded to include equestrian accommodations, and accessibility to the river and to the Heritage Park downstream.
- E15** Cesar Chavez Park – A small space located at the “Five Points” area, along 6th Avenue, containing small seating area.

- E16** Santa Rosa Park – Santa Rosa Park and Santa Rosa Center, childcare, and Library complex. Located on 10th Avenue near 22nd Street, the facilities include a medium-size recreation center, gym, weight room, classroom and meeting space. It also houses/hosts non-profits agencies on-site or across the street. The park is diagonal from the center, and has a ramada, playground, ball field, and basketball court (soon to be lighted).
- E17** Children's Museum Green Space – Located across the street from Armory Park & Center. The Museum, an active non-profit, offers children's science, learning, and recreational programs. (If the Children's Museum re-locates to Origins Heritage Park, a teen site at this location would provide much needed active space.)
- * **E18** Armory Park – One of the oldest parks in Tucson, Armory is the home of an increasing number of festivals and events, and "ending festival site" for holiday and St. Patrick's Day Parades. The Center houses a comprehensive senior program, and is home of the teen program, "AIR." It is on historic tour; it is the former site of Camp Lowell and the old Armory, Tucson's first "convention center" of activity after Arizona became a state in 1912.
- E19** Performing Arts Center – This is the old All Saints Church, and is now a City-owned property. It is on the historical register, and was used as an emerging artist's performance space until a crack in one of the interior arches was discovered. Currently closed, the Center will be repaired using funds approved from the most recent Pima County bond program. Work can begin after an intergovernmental agreement between the City and the County is completed. An estimate for repairs is currently being performed. It is a good cornerstone for the Scott Avenue Art District area plan.
- E20** Jacome Plaza – Located in front of Joel Valdez Main Library. The plaza space is a site for many special festivals, displays, and press announcements. It needs a playground for children, and re-design of hill and performance space. Construction of a high-rise building on the site, which has been publicly discussed, would eliminate downtown green space and an active festival area.
- E21** El Presidio Plaza at City Hall – Between City Hall and the historic County Courthouse, the Plaza is home to many large-scale special events, such as the annual Tucson Meet Yourself Festival, and a portion of the Family Arts Festival. Repairs are needed, as well as a re-design of the space. The Plaza is within the historic grounds of the old Presidio. An opportunity exists here to organize spaces leading from the TCC, over the bridge at Broadway, through Presidio Plaza, the County Courthouse, and to Jacome Plaza, for very large festivals. There also exists an opportunity to link the Plaza to the East Civic Plaza.
- E22** Sunset Park – The small area surrounding City Hall is a good meditative/meeting place. Low water use native vegetation is used throughout the Park. A portion of a re-created Presidio wall will be installed late summer 2007 to mark the Old Presidio boundaries. Future plans to commemorate the Tucson Meteorite/Blacksmith shop in this area should be considered.
- E23** El Presidio San Agustin del Tucson – This re-creation of the northeast tower of the Spanish Presidio is currently under construction, and due to open in May 2007. Included on the grounds are a Torreón (tower), a munitions building, soldiers quarters, and a commissary. A pit house, one of several on location, will be part of the interpretation of the site. A typical Mexican era plaza and row houses and zaguan is also part of the property. The row

houses will include a meeting space, interpretation of the artifacts found on site, and a small gift shop.

E24 Veinte de Agosto (Pancho Villa) Park – This Park is located between Broadway Boulevard and Congress Street, west of Church Avenue. Identified as the “gateway” between Congress Street, and the TCC/ Arena area, the site has a fountain feature, the infamous statue of Pancho Villa (a gift from Mexico), and the foundation stones for the original St. Agustin cathedral. This park was identified as an opportunity to link Congress Street with the East Civic Plaza, and to include expansion onto Church Avenue, where kiosks could be built to oversee the area, provide information (visitors bureau), and concessions for the area (see unadopted Congress Street Master Plan). It is one of two suggested sites for a carousel that would feature desert animals, and an interactive water feature. This is also a good location for a skate park. Teens and younger children should be included in planning downtown development and identifying a variety of gathering and play spaces.

To the north of the park along Congress Street are the Pima County government buildings. The south landscaped space could be re-designed to feature tables and umbrellas for meeting or lunch time use, bringing more people to the outside spaces to build a better “sense of place.”

E25 La Placita, The Gazebo – A small remnant of former site of Mesilla Plaza, this includes a historic gazebo, located near the Hotel Arizona and La Placita buildings. The gazebo is a popular site for weddings. This can be reconnected to Veinte de Agosto.

E26 Adele Smith Sculptural Park – On Main Avenue, between Congress Street and St. Mary’s Road, this is a small contemplative space with sculptures.

E27 University of Arizona – An important node in the City of Tucson Parks and Recreation Department’s strategy for connecting areas of interest and destinations with linkages like trails, greenways, bikeways and pedestrian corridors.

E28 Estevan Park – Originally a “tent city”, this old park contains the signature mesquite tree for the City Parks and Recreation Department logo. The park is at the end point for the Greenway, and a connection to it should be developed. The park contains a center, currently on loan to Tucson Urban League, who contracts it out for daycare use. Also at this site is the “home” for the Rugby League. A large field is the main feature. The park had a pool at one time, which has since been demolished. The park also has a basketball court. It is located across the street from Dunbar Spring.

E29 Mel, Tucson’s heritage tree

E30 Menlo Park – Located on Granada, across from the Ward 1 Office. It has playgrounds, fields, basketball court, and pool with slide. It is due an upgrade.

E31 Santa Cruz River and DeAnza Trail – The river path, developed on one or both sides of the river with accessibility for pedestrians and bicycles. There is a standard for trail development along the river, and riverside owners are encouraged to design features to make the pathway more appealing. In the downtown area, two identified Army Corps of Engineer projects are planned (not funded), including the Paseo de las Iglesias portion, and the Rio Medio portion. Also identified along the river is the Anza Trail, which includes historic commemorative plaques at points along the river. The river portion south of 22nd Street to Congress Street will be along the Sonoran Desert Natural Resource Park, the

Heritage Park, including Mission Gardens, the Convento, Chapel, Carrillo House, and festival area. Museums, the Mercado district, and 14 acres of land to be developed along Congress Street are included in this river area. It is critical to the “view shed” of the downtown area.

- E32** “A” Mountain – Originally named “Sentinel” because it was used by the Spanish and other early settlers as a “lookout. The peak includes a white boulder “A”, built in 1916, and is now commonly referred to as “A” Mountain. For many years students burned the “A” the night before University of Arizona Homecoming and then whitewashed the “A” the next morning. The peak is archaeologically and historically significant, and it remains a citywide lookout point. Warner’s old mill site, located on the northeast corner of the mountain at Mission Road and Mission Lane, should be purchased and developed as part of the area’s history.
- E33** Leon Property – Located behind the Manning House, this historic site, unexcavated, is on the direct path of the Greenway, and will be important to interpret. There is an opportunity to acquire land to the north of the Manning House, which would be used to re-establish the once-planned Archaeology Park.
- E34** Garden of Gethsemane – This garden, located at Congress Street and Bonita Avenue, includes sculptural works of Felix Lucero in an enclosed park setting. It is the setting for many weddings and “quinceañeras.”
- E35** Bonita Park – This park is located north of the Garden of Gethsemane, along the riverwalk. It has a playground and restroom, picnic tables and small turf areas. A small tot playground will be built north of the park within the year.
- E36** DeAnza Park – Located at Speedway Boulevard. and Stone Avenue, it is a “gateway” to downtown from the north. DeAnza has a playground, lit sand volleyball courts, restrooms, a playground, and open space. Some renovation is needed. It has an historic “A” Mountain basalt wall on its west side.
- E37** Catalina Park – Located on 4th Avenue, south of Speedway Boulevard. It has a playground, a historic registered ramada, and a wading pool. A splash park has been proposed, but is unfunded.

PLANNED IMPROVEMENTS

- P1** Arroyo Chico – The Arroyo Chico Wash provides a planned urban greenway connecting downtown with Reid Park and many other destinations. The greenway portion between the Rattlesnake Bridge and Campbell Avenue has been designed and is in the process of being funded by the Army Corps of Engineers. One million dollars from Pima County 2004 bonds is available toward development of the greenway between Campbell Avenue and Tucson Boulevard. The City of Tucson Parks Department is pursuing other funding sources to close the funding gap for the greenway between Campbell Avenue and Reid Park.
- P2** Oury/Davis Connection – Herrera Quiroz Park and the neighborhood center located there (Oury Center) will have a pedestrian connection between the park and the nearby Davis Bilingual Magnet School. The pedestrian connection will pass through the El Paso

Greenway and the Community Services Department's SMART housing project east of the park.

- * **P3** El Paso Greenway – A major connection and structural element in the downtown green infrastructure plan, the El Paso Greenway is in the planning process, which will identify funding sources. The Greenway is ultimately planned to span from the Kino Boulevard/36th Street area, through South Tucson along Barrios' Santa Rosa, Viejo, Historico, by Fire Station One (under design), through the new arena area and El Presidio neighborhood, along the east side of I-10, across St. Mary's Rd., through Barrio Anita and ending near Estevan Park. It will be a connector path with some amenities along the way. It is being planned to emphasize walking and cycling. The old railroad roundhouse and the adjacent detention basin are located along the greenway and the area is a possibility for a park node.
- P4** Mendoza Park – A small neighborhood park in memory of two Barrio Viejo children killed in a traffic accident, it contains a shrine to the victims and a winding path with plants and shade. It will be located at Convent Avenue and 18th Street
- * **P5** Depot Plaza – A planned urban plaza between the Train Depot and Club Congress.
- * **P6** DeAnza Trail – A recreation of the historic Juan Batista DeAnza trail, on which the Spanish conquistadors rode between Mexico City and San Francisco, California. Pima County is implementing the trail in segments.
- * **P7** Heritage Park – A large Rio Nuevo project that celebrates the origins of Tucson as an organized settlement. Heritage Park, west of the Santa Cruz, includes a reconstructed Convento, chapel and Mission Gardens. Other planned amenities include an archaeological area, Origins Center, museums and festival space. The project is in the design phase.
- * **P8** Sonoran Desert Park – A planned natural resource park at the base of "A" Mountain. The site is a former landfill. This Brownfield project will include trails, a connection to the DeAnza Trail and the Heritage Park, native plants, water harvesting and interpretation of the Sonoran Desert along the Santa Cruz River.

NEW PARK CONSIDERATIONS

- * **O1** Gateway Park – This park would be located at the confluence of Iron Horse Park, the 4th Avenue underpass and the Arroyo Chico/Aviation urban greenway network. This would provide a green gateway into downtown.
- O2** Railroad Wash Greenway – A trail connection to complement the planned Arroyo Chico Urban Greenway and the existing Aviation bikeway.
- O3** High School Wash Greenway – A pedestrian/bike connection between Tucson High School, the University of Arizona and the Arroyo Chico Urban Greenway. This is an important link to complete a network of urban trails.

- * **O4** New park: El Paso Greenway meets the Arroyo Chico Greenway – A parcel along the El Paso Greenway just south of St. Mary’s provides an opportunity for a green space node or park to complement the intersection of the greenway with the northern section of the Arroyo Chico Urban Greenway. The Arts District Walk connects to this proposed park via the Arroyo Chico Urban Greenway near St. Mary’s Road/6th Street.
- O5** Partnership with Davis Elementary – The City of Tucson Parks and Recreation Department enters into partnerships with schools when possible to create public parks on school grounds for use after school hours. Davis Elementary School is a potential partner.
- * **O6** Arts District Walk – A pedestrian corridor from the proposed gateway park at the 4th Avenue Underpass to the northern end of the Arts District provides an opportunity to link the Arts District with a larger network of pedestrian/bike trails. A complete network of trails brings together downtown amenities, the University of Arizona, Reid Park, 4th Avenue, the Arroyo Chico Urban Greenway, the Aviation bikeway and many neighborhoods.
- O7** Arroyo Chico North Trail – A northern segment of the Arroyo Chico Urban Greenway that runs between the Arts District and the El Paso Greenway at St. Mary’s Road.
- O8** New park: Round House and adjacent detention basin – The historic railroad round house and an adjacent detention basis sit along the El Paso Greenway two blocks south of 22nd Street. These parcels are an opportunity for a park that could provide historic interpretation as well as active recreation in downtown.
- O9** New Pedestrian/Bike Connection Between Santa Rosa Park and New Park at Osborne and 18th Street - A pedestrian/bike connection to join Santa Rosa Park with a network of community spaces and parks along Osborne Avenue
- O10** Partnership with Carrillo School – Carrillo School is a potential partner for the City of Tucson Parks and Recreation Department to create a joint use park on the school campus.
- O11** New Park: Tucson Water Property – A parcel on 18th Street and Osborne along the El Paso Greenway is an opportunity for a new park. It would complement Santa Rosa Park, Carrillo Pool, El Tiradito, La Pilita Neighborhood Center. These destinations would be joined by a pedestrian/bike trail along Osborne Avenue
- O12** Osborne Avenue Pedestrian/Bike Connection - A pedestrian/bike connection along Osborne Avenue would create a well connected network of destinations including Santa Rosa Park, Carrillo Pool, El Tiradito, La Pilita Neighborhood Center and the proposed new park at Osborne and 18th Street This local network of community spaces would be connected to the larger network along the El Paso Greenway.
- * **O13** New Park: adjacent to Fire Station 1 – Fire Station No. 1 is projected to fill the northern part of the parcel leaving room for a new park at the southern end.
- O14** Pedestrian/Bike Underpass – A pedestrian/bike underpass that will connect the El Paso Greenway to the Santa Cruz River Park trail system.
- O15** Ormsby Greenway to the Santa Cruz River - A greenway to connect Ormsby Park to the Santa Cruz River so that the park may be used for equestrian staging to support festivals

at the Heritage Park. The connection also complements a larger network of trails and green spaces west of I-10.

- O16 Ormsby Park Expansion** – An expanded Ormsby Park would provide an opportunity to provide an equestrian amenity to complement the Heritage Park. Horses could be staged at Ormsby Park and transferred to the Heritage Park via the Santa Cruz River. The park expansion would also create a significant greenspace in the downtown region. A pedestrian/bike connection between the park, the Santa Cruz River, the Heritage Park and the El Paso Greenway would support an expanded network between the west and east side of I-10.
- * **O17 Cushing Street Pedestrian/Bike Connection** – A connection between the Osborne Avenue amenities and the Children’s Museum and Armory Park.
- * **O18 Armory Park/M.L.K. Housing Pedestrian Connection** – A landscaped pedestrian connection between Armory Park and its senior center to the Martin Luther King housing.
- O19 Recreation on Rooftop of Pennington Street Garage** – Finding green space and active recreation opportunities in downtown is a challenge and requires taking advantage of opportunities not normally pursued. The roof of the Pennington Street Garage is an opportunity for tennis courts, basketball courts or other active recreation.
- * **O20 Armory Park/Arizona Avenue Arcade** – A pedestrian arcade along Arizona Avenue
- O21 New Park: at Surface Parking across from El Charro** – A surface parking lot at the northeast corner of Church and Council provides an opportunity for a large greenspace in downtown. It is one of the only opportunities for a park to support downtown activities, musical performances and festivals.
- * **O22 Viente de Agosto Park Expansion** – An expansion of Viente de Agosto Park that connects the park to La Placita would create a seamless connection from the Tucson Convention Center to El Presidio Plaza. The area could become a significant pedestrian connection and festival space.
- * **O23 El Presidio San Agustin Historic Walk with Trailhead** – The historic location of the El Presidio wall provides an opportunity for a trailhead and commemorative walk.
- * **O24 Warren Mill Interpretation** - The historic Warren Mill site is privately held and provides an opportunity for a publicly interpreted site.
- * **O25 Wildlife Connection Between A Mountain/Tucson Mountain Park and the Santa Cruz River** – The Sonoran Desert Park is one of the last places to connect wildlife areas like Tucson Mountain Park and “A” Mountain to the Santa Cruz River.
- O26 Ormsby Park/Sonoran Desert Park Trail Loop** – A loop trail to connect the Sonoran Desert Park and Ormsby Park.
- O27 Pedestrian/Bike Crossing at I-10** – A pedestrian/bike crossing to connect the community spaces on the west and east sides of I-10.

- * **O28** Pedestrian/bike crossing at 18th Street and I-10 – A pedestrian/bike crossing at 18th Street to connect the community spaces on the west and east sides of I-10.
- O29** New Park: Commerce Loop – A proposed new park to support active recreation.
- O30** Pedestrian/Bike Connection Between New Park at Commerce Loop and the Santa Cruz River - A connection between the proposed park at Commerce Loop and the Santa Cruz River Park.
- O31** Dunbar Spring Pedestrian/Bike Connection – A pedestrian and bike link between the Dunbar Spring Neighborhood and the Arts District Walk. The intersection of 9th Avenue and 6th Street is a popular spot for bicycles to access downtown.
- O32** Railroad Greenway – An urban greenway along the existing railroad line to connect the Arts District with Dunbar Spring neighborhood and the El Paso Greenway.

COST & FUNDING

Costs for projects within the study area are expected to total \$73,900,000. The majority of the funding will come from bonds, HURF, RTA, City of Tucson Parks and Recreation and private development. An additional \$7,800,000 will be requested from TIF funding.

Cost Estimate
Downtown Green Infrastructure Plan
City of Tucson Parks and Recreation Department
April 24, 2007

Inside Rio Nuevo District?	Label (see map)	Project	Total Cost of Project	Amount of Current Funding	Source of Current Funding	Unfunded	TIF Request	Potential Funding Sources	Project Start (0-18 mo.s), (19-36 mo.s), (3-5 years), (5+ years)
y	P3	El Paso Greenway	\$5,000,000	\$600,000	R.T.A.	\$4,400,000	\$1,000,000	R.T.A.	0-18 mo.s
y	P5	Depot Plaza	\$500,000	\$500,000	development, Rio Nuevo	\$0	\$0		19-36 mo.s
y	P6	deAnza Trail	\$3,000,000	\$0		\$3,000,000	\$0	Pima County bonds 2008	19-36 mo.s
y	P7	Heritage Park	to be determined	to cover cost	Rio Nuevo	\$0	\$0		0-18 mo.s
y	P8	Sonoran Desert Park	\$20,000,000	0	none	\$20,000,000	\$0	Pima County bonds	0-18 mo.s
y	O1	Gateway Park	\$1,300,000	\$0	none	\$1,300,000	\$0	developer funded	19-36 mo.s
y	O4	New Park at El Paso/Arroyo Chico Greenway	\$1,500,000	\$0	none	\$1,500,000	\$0	developer funded	19-36 mo.s
y	O6	Art District Walk	\$5,000,000	\$0	none	\$5,000,000	\$0	developer funded; included in another TIF request	3-5 years
y	O13	new park at Fire Station 1	tbd	to cover cost	Fire Station 1 project	\$0	\$0		0-18 mo.s
y	O17	Cushing St. pedestrian/bike connection	\$3,000,000	0	none	\$3,000,000	\$0	included in another TIF request	3-5 years
y	O20	Armory Park/Scott Ave. pedestrian/bike connection	\$800,000	\$0	none	\$800,000		Rio Nuevo, bonds, developer funded	19-36 mo.s
y	O18	Arizona Avenue Arcade	\$2,000,000	\$0	none	\$2,000,000	\$2,000,000	covered in another TIF request; HURF	3-5 years
y	O22	Viente de Agosto Park expansion	\$20,000,000	\$0	none	\$20,000,000	\$1,000,000	covered in ParkWise TIF request; bonds, HURF	19-36 mo.s
y	O23	El Presidio walk	\$800,000	\$0	none	\$800,000	\$800,000	Presidio Trust, HURF	3-5 years
y	O24	Warren Mill site	\$3,000,000	\$0	none	\$3,000,000	\$0	2008 County bonds, R.T.A.	3-5 years
y	O25	wildlife/pedestrian connection at A Mt.	\$5,000,000	\$0	none	\$5,000,000	\$0	2008 Pima County bonds, R.T.A.	3-5 years
y	O28	pedestrian/bike crossing at Clark St.	tbd	to cover cost	Rio Nuevo	\$0	\$0		0-18 mo.s
y	E18	Armory Park Expansion	\$3,000,000	\$0	none	\$3,000,000	\$3,000,000	Rio Nuevo	19-36 mo.s
		subtotal for sites inside district	\$73,900,000			\$72,800,000	\$7,800,000		
n	P1	Arroyo Chico Urban Greenway	\$6,000,000	\$1,450,000	2004 County bonds (\$1 million), impact fees (\$450,000)	\$4,450,000			0-18 mo.s
n	O7	Arroyo Chico West Greenway	\$750,000	\$0	none	\$750,000		Rio Nuevo, bonds, developer funded, HURF	19-36 mo.s
n	P2	Oury Center/Davis Elementary Connection	\$300,000	\$0	none	\$300,000		developer funded through SMART Housing project	19-36 mo.s
n	P4	Mendoza Park	\$220,000	\$220,000	\$205,000 Tucson B2B \$15,000 County Neighborhood Reinvestment	\$0			0-18 mo.s
n	O2	Railroad Wash Greenway	\$1,500,000	\$0	none	\$1,500,000		bonds, HURF	3-5 years
n	O3	High School Wash Greenway	\$2,000,000	\$0	none	\$2,000,000		bonds, HURF	3-5 years
n	O5	Partnership with Davis Elementary	\$1,000,000	\$0	none	\$1,000,000		bonds, Pima County Neighborhood Reinvestment, Community Services CDBG	19-36 mo.s
n	O8	New Park at Round House and detention basin	\$1,500,000	\$0	none	\$1,500,000		bonds, Pima County Neighborhood Reinvestment, impact fees, Community Services CDBG, Back to Basics	3-5 years

n	O9	Pedestrian/bike connection along 20th St.	\$500,000	\$0	none	\$500,000	bonds, Pima County Neighborhood Reinvestment, Community Services CDBG, Back to Basics	3-5 years
n	O10	Carrillo School Partnership	\$1,000,000	\$0	none	\$1,000,000	bonds, Pima County Neighborhood Reinvestment, Community Services CDBG, Back to Basics	19-36 mo.s
n	O11	new park at 18th St. and Osborne Ave.	\$1,300,000	\$0	none	\$1,300,000	bonds, Pima County Neighborhood Reinvestment, Community Services CDBG, Back to Basics	3-5 years
n	O12	Osborne Avenue pedestrian/bike connection	\$2,000,000	\$0	none	\$2,000,000	bonds, Pima County Neighborhood Reinvestment, Community Services CDBG, Back to Basics	3-5 years
n	O14	Pedestrian/bike underpass	\$5,000,000	\$0	none	\$5,000,000	bonds, Pima County Neighborhood Reinvestment, Community Services CDBG, Back to Basics	3-5 years
n	O15	Ormsby Greenway	\$1,000,000	\$0	none	\$1,000,000	bonds, impact fees, Pima County Neighborhood Reinvestment, Community Services CDBG, Back to Basics	19-36 mo.s
n	O16	Ormsby Park Expansion	\$5,000,000	\$0	none	\$5,000,000	bonds, impact fees, Pima County Neighborhood Reinvestment, Community Services CDBG, Back to Basics	19-36 mo.s
n	O21	new park at surface parking lot on Church/Council	\$5,000,000	\$0	none	\$5,000,000	bonds, impact fees, Pima County Neighborhood Reinvestment, Community Services CDBG, Back to Basics	3-5 years
n	O26	Ormsby/Sonoran Desert Park trail loop	\$1,700,000	\$0	none	\$1,700,000	bonds, impact fees, Pima County Neighborhood Reinvestment, Community Services CDBG, Back to Basics	19-36 mo.s
n	O27	pedestrian/bike crossing at 18th St.	\$1,000,000	\$0	none	\$1,000,000	bonds, Pima County Neighborhood Reinvestment, Community Services CDBG, Back to Basics	3-5 years
n	O29	new park at Commerce Loop	\$2,000,000	\$0	none	\$2,000,000	bonds, Pima County Neighborhood Reinvestment, Community Services CDBG, Back to Basics	3-5 years
n	O30	Commerce Loop Park/Santa Cruz River connection	\$1,000,000	\$0	none	\$1,000,000	bonds, Pima County Neighborhood Reinvestment, Community Services CDBG, Back to Basics	3-5 years
n	O31	Dunbar Springs pedestrian/bike connection	\$700,000	\$0	none	\$700,000	Aviation project, bonds, Pima County Neighborhood Reinvestment, Community Services CDBG, Back to Basics	3-5 years
n	O32	Railroad Greenway	\$1,600,000	\$0	none	\$1,600,000	bonds, Pima County Neighborhood Reinvestment, Community Services CDBG, Back to Basics, R.T.A.	3-5 years
		subtotal for sites outside district	\$42,070,000			\$40,300,000		
		GRAND TOTAL	\$115,970,000			\$113,100,000		

Downtown Infrastructure

Greenspace Infrastructure Plan

Legend

--- Street Car Route

Opportunities for Greenspace

Existing Amenities

- E1 Iron Horse Park
- E3 Aviation Bikeway
- E5 Tucson High School
- E8 Santa Rita Park
- E11 Herrera Quiroz Park
- E12 Castillo Pool
- E13 El Tiradito and La Pilita Neighborhood Center
- E15 Cesar Chavez Park
- E16 Santa Rosa Park
- E17 Children's Museum
- E18 Armory Park
- E19 Performing Arts Center
- E20 Jacome Park
- E21 El Presidio Plaza at City Hall
- E22 Sunset Park
- E23 El Presidio San Agustín del Tucson
- E24 Viente de Agosto Park
- E25 La Placita
- E26 Adela Smith Sculptural Park
- E29 Mt. Tucson's heritage tree
- E30 Menlo Park
- E31 Santa Cruz River and DeAnza Trail
- E32 A Mountain
- E33 Leon Property
- E34 Garden of Gethsemane
- E35 Bonita Park

Opportunities

- O1 Gateway Park
- O4 New park: El Paso Greenway meets the Arroyo Chico Greenway
- O5 Partnership with Davis Elementary
- O6 Art District Walk
- O7 Arroyo Chico North Trail
- O9 New pedestrian/bike connection between Santa Rosa Park and new park at Osborne and 18th St.
- O10 Partnership with Camillo School
- O11 New park: Tucson Water Property
- O12 Osborne Av. pedestrian/bike connection
- O13 New park: adjacent to Fire Station #1
- O17 Cushing Street pedestrian/bike connection
- O18 Armory Park/Anzola Av.
- O19 Unnamed
- O20 Armory Park/Scott Av. pedestrian connection
- O21 New park: at surface parking across from El Chamo
- O22 Viente de Agosto Park Expansion
- O23 El Presidio San Agustín Historic Walk with trailhead
- O24 Warren Mill Interpretation
- O25 Wildlife connection between A Mountain/Tucson Mountain Park and the Santa Cruz River
- O26 Ormsby Park/Sonoran Desert Park trail loop
- O27 Pedestrian/bike crossing at I-10
- O28 Pedestrian/bike crossing
- O29 New park: Commerce Loop
- O30 Pedestrian/bike connection between new park at Commerce Loop and the Santa Cruz River
- O31 Dunbar Springs pedestrian/bike connection
- O32 Railroad Greenway

Planned

- P2 Oury/Davis Connection
- P3 El Paso Greenway
- P4 Menendez Park
- P5 Depot Plaza
- P6 DeAnza Trail
- P7 Heritage Park
- P8 Sonoran Desert park



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**Tucson
Downtown
Partnership**



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GREEN SPACE / PARKS

DOWNTOWN GREEN INFRASTRUCTURE PLAN: NODES AND CONNECTIONS

Downtown needs green space to be livable and sustainable. The City of Tucson Parks and Recreation Department proposes the Downtown Green Infrastructure Plan: Nodes and Connections as our long range planning document for creating lively, useable green space in the downtown area. The concept is one of creating nodes of green space for active and passive recreation, outdoor performances or festivals and connecting these nodes to the urban fabric through a network of urban greenways, pedestrian and bicycle paths and trails. The connections and nodes are describes below (Cs represents connections and Ns represent nodes).

C1 Arroyo Chico Urban Greenway

The Arroyo Chico Wash provides a planned urban greenway connecting downtown with Reid Park and many other destinations along the way. The greenway between the rattle snake bridge and Campbell Avenue is designed and is in the process of being funded for construction by the Army Corps of Engineers. \$1 million from Pima County 2004 bonds is available toward development of the greenway between Campbell Avenue and Tucson Boulevard. The City of Tucson Parks Department is pursuing other funding sources to close the funding gap for the greenway between Campbell Avenue and Reid Park.

C2 Railroad Wash Urban Greenway

The Railroad Wash is the route of a proposed urban greenway to connect the existing Aviation bikeway to the Arroyo Chico Urban Greenway.

C3 Aviation Bikeway

The existing bike route along Aviation will connect to the rattle snake bridge and the Arroyo Chico Urban Green Way with the completion of the basket bridge.

C4 Highland Avenue Bicycle and Pedestrian Route

The City of Tucson Department of Transportation is constructing a bicycle path along Highland between the University of Arizona and the Arroyo Chico detention basins. This trail links the University of Arizona with the Arroyo Chico Urban Greenway and beyond to the Aviation Bikeway.

C5 High School Wash Linear Park (Highland Avenue to Tucson High School)

A proposed urban pathway along High School Wash connects the University of Arizona, Tucson High School, and the Arroyo Chico Urban Greenway to Reid Park and the Aviation Bike Way to southeast Tucson.

C6 High School Wash Linear Park (Tucson High School to Fourth Avenue)

A proposed linear park along High School Wash to connect Tucson High School and downtown via the Fourth Avenue Underpass and the Arts District Pedestrian Corridor.

C7 Arts District Pedestrian Corridor

A landscaped, shaded pedestrian oriented streetscape that connects Gateway Park to the El Paso Greenway.

C8 El Paso Greenway

A major greenway link to provide a strong alternate mode connection between the Kino Blvd./36th Street area (Silverlake Park) through South Tucson and along Barrios Santa Rosa, Viejo and Historico. The greenway passes through the planned Fire Station One (under design) through the potential Arena area, El Presidio neighborhood, along the east side of I-10, across St. Mary's, through Barrio Anita, and ending near Estevan Park. The greenway includes activity nodes. The project is partially funded and converts the abandoned El Paso Railroad into an urban trail system.

C9 Ormsby Urban Green Way

A proposed urban greenway to connect the El Paso Greenway to an expanded Ormsby Park and the Santa Cruz River. The connection between Ormsby Park and the Santa Cruz River is used for transferring horses from Ormsby Park north along the Santa Cruz River and into Origins for equestrian related special events.

C10 Santa Cruz River Park

A planned urban greenway along the Santa Cruz River. The Santa Cruz River Park is a significant north/south connection for amenities on the west side of I-10. These amenities (the Sonoran Desert Park, Origins, A Mountain, Ormsby Park, mixed use development south of Congress Street, Warren Mill) form a circuit of destinations held together by the Santa Cruz River Park.

C11 18th Street Connector

A proposed trail to connect the proposed 18th Street/Osborn Avenue park with the Santa Cruz River Park via an existing pedestrian underpass at I-10.

C12 Pedestrian/ Bicycle Connector Path at the proposed Rio Nuevo Overpass

A link between the El Paso Greenway and the Santa Cruz River Park to facilitate pedestrian and bicycle travel between downtown and the Rio Nuevo projects on the west side of I-10.

C13 Osborne Avenue Pedestrian/Bicycle Route

A proposed route to connect The El Paso Greenway with the Carillo School School/Park Partnership facilities and the southern downtown area.

N1 Arroyo Chico Detention Basin

The Arroyo Chico Detention Basin project brings the Barrio San Antonio out of the floodplain, but also provides greenspace and trails. Pima County Flood Control and City of Tucson Department of Transportation have been working with the Army Corps of Engineers to design and construct this major infrastructure improvement. The project design is complete and the Army Corps is securing additional funding to complete construction.

N2 Tucson High School

Tucson High School's master planning includes community space and meeting rooms.

N3 Gateway Park

The proposed park is a gateway into the eastern end of downtown and its green infrastructure. The park incorporates the existing Iron Horse Park and proposes the acquisition of new parcels at Toole Avenue and Congress. Gateway Park serves as a collector for urban pathways and greenways from the southeast (i.e. the Arroyo Chico Urban Greenway, Aviation Bikeway), the north (i.e. pedestrian walkway along the Arts District) and the east (i.e. the 4th Avenue underpass, modern street car). Gateway Park provides a connection between 4th Avenue, the Train Depot, Depot Plaza and the Greyhound Depot. Suggested park amenities include a play area, including tot and youth playground structure, rock climbing wall, splash pad for interactive water play, sand volleyball, stage area for small outdoor concerts and kiosks for concessions. It has the potential to showcase great public art.

N4 Proposed Park at the El Paso Greenway South of Saint Mary's

Arroyo Chico Wash Urban Greenway meets the El Paso Greenway at a proposed new park. The park would create a node for outdoor performances, children's play equipment and other urban park amenities to complement the El Paso Greenway.

N5 Proposed Park at 18th Street and Osborne Avenue

A proposed new park on the southwest corner of 18th Street and Osborne Avenue. The park is connected to the surrounding urban trail system and nearby existing amenities via a pedestrian oriented streetscape along Osborne Avenue and an underpass to the west side of I-10. The streetscape along Osborne Avenue connects the new park with the existing Carrillo School. The Parks Department currently runs the Carrillo Pool at the school site. Other amenities along the Osborne Avenue streetscape include the El Tiradito Wishing Shrine and La Pilita neighborhood center. Osborne ends at the TCC. An existing pedestrian underpass connects the new park and Osborne Avenue amenities with the Santa Cruz River Park and a large circuit of planned and existing amenities at the base of A Mountain.

N6 Carrillo School Partnership

A proposed partnership between Carrillo School and the City of Tucson Parks and Recreation Department for shared active recreation opportunities on the school campus. The Parks Department currently operates the Carrillo Pool.

N7 Roundhouse and Detention Basin

A proposed new park for active recreation at the historic railroad yard and adjacent detention basin at the I-10 Frontage Road, 29th Street and Osborne Avenue. A wash to the east of the roundhouse is a proposed urban green way to connect a nearby school to the El Paso Greenway.

N8 Ormsby Park

A proposed expansion to an existing park to accommodate equestrian staging and active recreation. An equestrian staging area is needed to compliment festivals and special events at Origins.

N9 Sonoran Desert Park and Origins

The Sonoran Desert Park is a natural resource park planned at the base of A Mountain on the site of a landfill. It compliments Origins and provides a wildlife and pedestrian connection between the Santa Cruz River and A Mountain/Tucson Mountain Park. This

wildlife connection is one of the last possible opportunities to bring a natural area to the basin's most significant riparian habitat.

N10 Downtown

A node containing multiple pocket to neighborhood sized parks as well as an abundance of other cultural and historical resources. Open space downtown ranges from a small sculpture garden to the new Presidio San Agustin del Tucson to such established parks as El Presidio Plaza and Armory Park. Many new greenspace-development opportunities exist in this node and each should be explored to the fullest in order to provide the population of this inner urban core with opportunities for open space and recreational activities.

N11 University of Arizona

A major population node with its own extensive green infrastructure.

N12 Menlo Park

Located on Granada, across from the Ward 1 office. It has playgrounds, fields, basketball court, and pool with slide. It is due an upgrade.

N13 David Herrera/Ramon Quiroz Park and Oury Center and pool

Located at St. Mary's road and I-10. Oury Center is a small, historic center (1919), housing recreation programming for children and seniors. The park has two softball fields, a playground, and a pool. The recent Master Plan of the site calls for a future center, and improved grounds. A covered basketball court will be built within the year.

N14 Estevan Park

Originally a "tent city", this old park contains the signature mesquite tree for the City Parks and Recreation Department logo. The park is at the end point for the El Paso Greenway, and a connection to it should be developed. The park contains a center, currently on loan to Tucson Urban League, who contracts it out for Day Care use. Also at this site is the "home" for the Rugby league. A large field is the main feature. The park also has a basketball court. It is located across the street from Dunbar Spring.

N15 Gateway to The Arroyo Chico Urban Greenway

A proposed new park development to act as a welcoming node to the Arroyo Chico network of urban trails leading south and east to Reid Park.

N16 Proposed Park/Ball Fields - Menlo Park Neighborhood

Possible new sports field location.

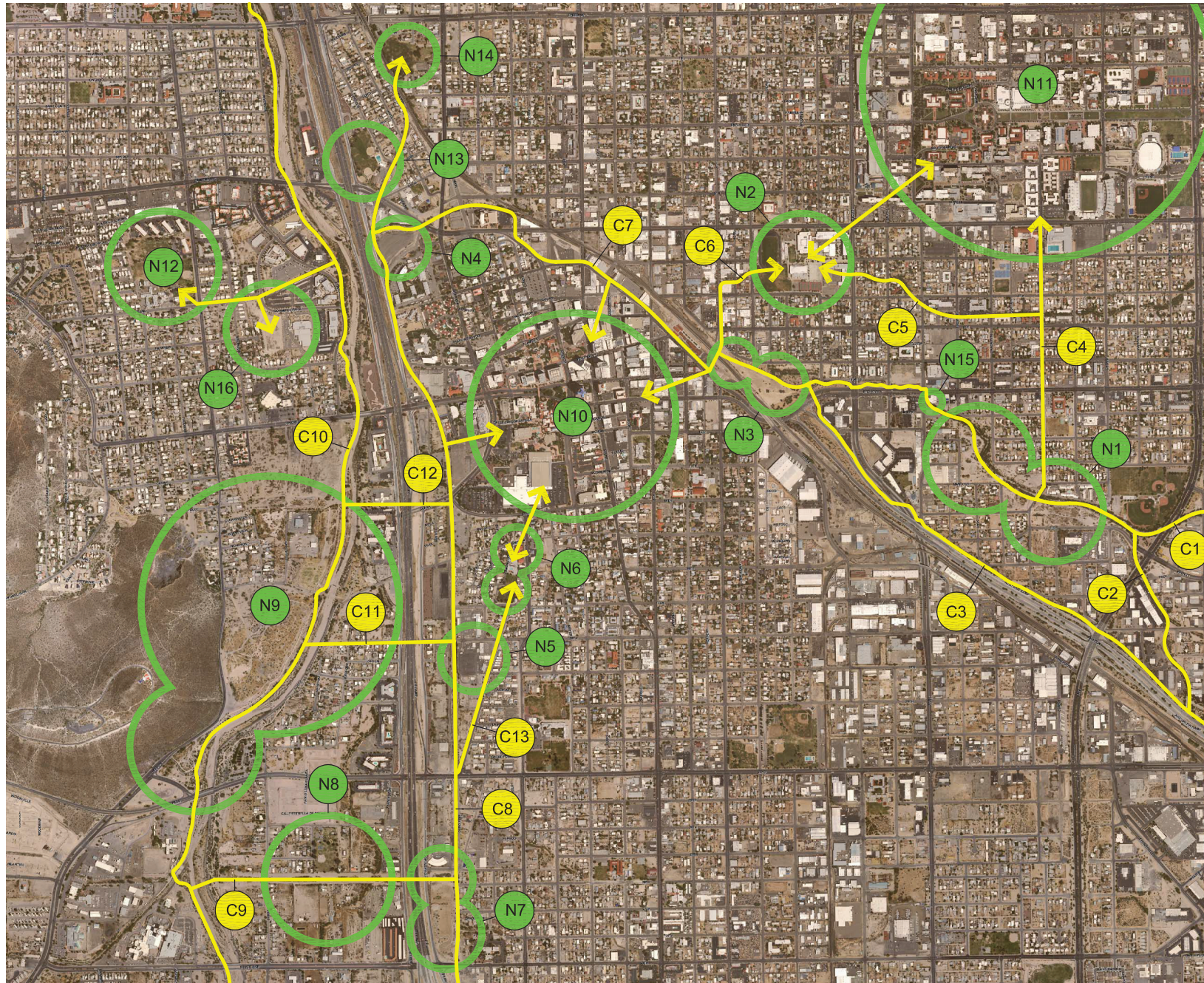
Downtown Green Infrastructure Nodes and Connections Master Plan

Nodes:

- N1 Arroyo Chico Detention Basin
- N2 Tucson High School
- N3 Gateway Park
- N4 Proposed Park at El Paso Greenway & Saint Mary's
- N5 Proposed Park at 18th Street & Osborne Avenue
- N6 Carillo School Partnership
- N7 Roundhouse & Detention Basin
- N8 Ormsby Park
- N9 Sonoran Desert and Origins Parks
- N10 Downtown Parks
- N11 U of A Greenspace
- N12 Menlo Park
- N13 Herrera / Quiroz Park
- N14 Estevan Park
- N15 Gateway to Arroyo Chico Urban Greenway
- N16 Proposed Park / Ball Field Site

Connections:

- C1 Arroyo Chico Urban Greenway
- C2 Railroad Wash Urban Greenway
- C3 Aviation Bikeway
- C4 Highland Avenue Bicycle and Pedestrian Route
- C5 Highschool Wash (Highland to Tucson High)
- C6 Highschool Wash (Tucson High to 4th Avenue)
- C7 Arts District Pedestrian Corridor
- C8 El Paso Greenway
- C9 Ormsby Urban Greenway
- C10 Santa Cruz River Park
- C11 18th Street Connector
- C12 Pedestrian & Bicycle Connection to Rio Nuevo
- C13 Osborn Avenue Bicycle and Pedestrian Route



DOWNTOWN AREA INFILL INCENTIVE DISTRICT

OVERVIEW

On October 24, 2006, the City of Tucson established a Downtown Area Infill Incentive District (Resolution No. 20487). The goals of the Infill District are to: address barriers to downtown development such as inadequate infrastructure, lengthy permit processes, obsolete development standards, difficult parcel assembly, environmental clean-up issues, and associated development barrier issues. It is anticipated that the incentives included in this legislation will help enliven and revitalize the downtown area by promoting public-private partnerships, a pedestrian environment, and a mix of well-designed land use contributing to Tucson's rich historic, cultural, and artistic heritage.

DETAILS OF THE INFILL INCENTIVE DISTRICT

Under this legislation, the City of Tucson, through a development agreement, can waive or defer building permit fees, rezoning application fees, and/or fees for plan review. The City may also allow for modification to lot coverage standards, parking standards, or loading standards. Minimum project requirements to receive these benefits are: 1) a minimum physical project cost of at least \$250,000, and 2) meeting at least three of the stated goals of the legislation. A map of the Infill Incentive District is included in this report.

Infill Incentive
District

— — ■ Street Car Route

 Infill Incentive District

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PUBLIC PROGRAMS

FAÇADE PROGRAM

OVERVIEW

A Façade Program for the Congress Street District was drafted in the first quarter of 2007 with input from private property owners and business owners along Congress Street. The program is designed to encourage aesthetic improvements in the Congress Street Entertainment District, and to facilitate Certificates of Occupancy. The geographic area for the program includes Congress Street and Broadway Boulevard from Veinte de Agosto Park at Church Ave to Toole Avenue. The district also covers the portions of 5th Avenue, 6th Avenue, Scott Avenue, Stone Avenue, and Church Avenue between Congress Street and Broadway Boulevard. The primary emphasis will be placed on proposals that front Congress Street between Stone and 4th Avenue. Facades are defined as sides of buildings that face public streets, alleyways, and rights-of-way.

APPLICATION PROCESS

Any property owner or business operator with the property owner's approval within the district may apply for funds. A Program Review Panel will be created, consisting of a representative from the Tucson Downtown Alliance, a representative appointed by the City Manager and a representative from the underwriter. In addition, a registered architect will serve a non-voting, advisory role. The Panel will review applications, consult with the architect on aesthetic issues and make recommendations for forwarding to the underwriter for final analysis and approval.

All projects will be subject to normal development procedures, including review by the Design Review Board, Historical Commission Plans Review Committee, permitting standards and review fees. Projects will be eligible for permit fee waivers and tax rebates as has been approved by the Mayor and Council.

Eligible expenses include physical improvements to façade of building, including but not limited to: painting, sandblasting, mortar repair, window replacement, installation of awnings, Temporary Revocable Easement (TRE) improvements, and signage. Architectural fees and construction management expenses up to 5% of total project funding awarded under this program will be eligible.

Property owners with a history of code enforcement actions, real estate or business tax delinquencies are not eligible to apply.

Proposals will be reviewed and ranked by the Program Review Panel for project's visible impact to streetscape of Congress District and compatibility with the District image as an arts and entertainment hub complemented by unique retail.

COST & FUNDING

There are two funding sources for the program. Each successful proposal will be funded with a combination of loan and grant proceeds. Each proposal must meet underwriting standards for the loan term.

- 1) Approximately \$550,000 from the Downtown Revolving Loan Fund, administered and underwritten by the Business Development Finance Corporation (BDFC) or a downtown-based lender.
- 2) Approximately \$2 million (pending approvals) from Rio Nuevo District, subject to historic facade conservation easements or facade improvement and maintenance easements and long-term District facade leases.

Loans will be zero percent interest with a forgivable clause. Loan terms would be 20-year amortization, five-year balloon. Standard underwriting analysis would be applied to all projects recommended by the Program Review Panel. Eligibility for principle forgiveness will be based on quality and tenure of tenants and a matching formula greater than 1:2 that would allow forgiveness as a function of additional improvements made to the building.

For Rio Nuevo funding, a lease would be negotiated with the owner of each building to be improved, pursuant to which the owner would lease to Rio Nuevo approximately 10 horizontal feet of the building, measured from the public right of way. The term would be 20 years. In consideration, Rio Nuevo would agree to make certain specified improvements to the facade of the building.

Funding will be provided with a 1:1 match from the business or property owner for improving buildings with long-term, existing tenants and a current certificate of occupancy. Funding will be provided at a 1:2 match for buildings without existing tenants and/or current certificate of occupancy.

There will be a cap on funding available per project, and it will be calculated at \$50 per square foot of eligible facade. For historic renovations the cap would be \$65 per square foot of eligible facade.

Changes in the approved and constructed facade projects could subject property owner and/or assignees to repayment penalties.

It is recommended that a similar and separate program for the warehouse district be implemented. Program costs would be \$2.55 million.

PROPERTY RESEARCH ONLINE

OVERVIEW

The Property Research Online (PRO) project being developed by the City's Development Services Department, with mapping assistance from the Department of Transportation, intends to provide a web site that offers a rich resource of information to assist developers, property owners, and potential property owners with a contextually related and integrated site that is comprehensive, current, and provides most information needed when developing a property. The web site will provide both a text and map interface and will provide the following information on any property in Tucson and is designed to provide the same to any participating jurisdiction in Pima County:

- Jurisdiction and link to jurisdiction web site
- Parcel number and list of all addresses on the parcel
- All zoning on each parcel and:
 - Context link to Land Use Code for each specific zone
 - Link to the rezoning and annexation conditions impacting the parcel (if any)
- All overlays (including web links to explanatory material) affecting the development of the property including:
 - Impact Fee Benefit Area
 - Ward
 - Downtown Core, Rio Nuevo Downtown, Incentive Zone
 - Infrastructure availability
 - Airport Environs Zone
 - Wash and Floodplain
 - Scenic Corridor
 - Landfill
 - Historic
 - Etc.
- Permits, Inspection and Plan review results
- All documents and plans available over the web:
 - Certificate of Occupancy documents
 - Last CofO
 - Last approved Site Plan
 - Last approved Floor Plan
 - Relevant Ordinances and Codes
 - Building Plans, Site Plans, Grading Plans, etc.

All of the above would be provided both in a text format and a map format with each displayed by parcel or address; there will be no need to travel to multiple sites or visit the record section of various departments. All information is available online by simply typing in an address or parcel, or selecting a parcel from a map.

COST & FUNDING

In order to assemble this information and add the mapping interface for the downtown area within the next 6 months additional funding is needed for hardware, software, consulting, and staffing as follows:

Item Description	Amount
Department of Transportation	
Map Server Hardware	\$27,000
Map Server Software	\$69,000
Mapping Software Consulting Services	\$48,000
<i>Transportation Subtotal</i>	<i>\$144,000</i>
Development Services Department	
Temporary Records Staff to Research and Digitize Film	\$40,000
Web Software Consulting Services	\$40,000
<i>Development Services Subtotal</i>	<i>\$80,000</i>
Total Budget Requested	\$224,000

This assumes that the Development Services Information Technology section will be at full strength and positions vacated will be backfilled either with new hire(s) or consultants with comparable and needed skills. The six-month delivery schedule starts after budget is in place and most if not all support positions are secured. Monies in existing department budgets earmarked to fund required items not included above will be fully available to project needs.

TUCSON CONVENTION CENTER / ARENA

OVERVIEW

The Tucson Convention Center (TCC) was built in 1971. The TCC is the largest event facility in Tucson. It includes exhibit halls, an arena, two performing arts theaters, a ballroom and a limited amount of meeting space. Due to lack of meeting space, and an additional exhibit hall, the TCC is limited in the type of conventions and conferences it can attract. A proposed new arena and renovation of the current TCC should help alleviate the current space limitations. In addition to the new arena and TCC renovation, a Civic Plaza and a new hotel also serve a vital component of Rio Nuevo.

TCC Renovation

TCC Exhibit Hall will be renovated and the existing TCC arena converted into a second exhibit hall. Meeting rooms will be added to the complex at the location of TCC's existing east parking lot. The renovation will also include an additional ballroom. It is estimated that the cost of the renovation will be \$60 million. TIF dollars could account for \$30 million of the funding.

New Arena

A new arena is being proposed for an area of land located east of the Interstate 10 frontage road between West Congress and Cushing Street. The proposed arena would be approximately 300,000 square feet. The facility will contain approximately 12,300 seats. The facility will be developed as a quality, state-of-the-art venue and would accommodate the needs of various user types. It is estimated that the full costs of the new arena maybe approximately \$130 million (to be funded with TIF monies).

Civic Plaza

The proposed Civic Plaza will be located south of Congress Street and east of Interstate 10. It will connect the TCC with the proposed University of Arizona Science Center and the proposed new arena. It will have open space, ramadas, fountains and landscaping. Additionally, a parking garage will be located under the plaza. Estimated costs for the Civic Plaza adjacent to the new arena are \$2.5 million.

Some of the construction and improvement projects are shown in the following list:

- Greenway landscape and pedestrian pathway
- Private Hotel renovation
- Private Exhibition Facility
- Private Office Building.
- Parking (Cost included in Parkwise section)
- Retail/Entertainment
- Symphony Hall
- Utility, Roadway, and Streetscape Improvements
- Expansion of existing Central Energy Plant to meet development demand

New Hotel

Recently, the City issues a Request for Qualifications (RFQ) regarding the design and development of flagship convention center hotel.

ROADWAYS, STREETScape, & PLAZAS

Significant realignment of roadways is not planned based on the current Arena location. It will be necessary to reconstruct the existing Granada Avenue for the installation of utilities, streetcar track, and new streetscape elements. Construction of roadway improvements is included for El Paso Southwestern Avenue (Greenway).

ASSESSMENT OF CAPACITY

The TCC's capacity and distribution system will need to be increased to serve the Arena and possibly the new hotel.

Expansion of TDE Central Plant

Existing capacity of TDE Central Plant is inadequate to meet expansion needs. The chiller and cooling tower capacity will need to be increased along with re-piping of the Central Plant. Cost \$19,025,500.

Chilled Water

Distribution piping within the Civic Plaza area will need to be installed with the streetscape projects.

Heating water

Expansion of the heating water system (other than TCC expansion) is not currently planned.

Potable Water

Expansion and relocation of the potable system is required to serve new development.

Reclaimed Water

Expansion of system to allow future connection and use by buildings.

Sanitary Sewer

New sewer system and connection to existing 60" Pima Count interceptor. Relocation or replacement of the interceptor is not included here.

Storm Sewer

New storm drains are required to correct existing drainage problems.

Natural Gas

Connections to new developments.

Electricity

New underground distribution system to serve development sites. Costs are shared between City and TEP per the existing franchise agreement.

Telephone

Expansion of distribution system to serve development sites. Costs shared with Qwest.

Cable TV

Expansion of distribution system to serve development sites. Costs shared with Cox.

COT/Pima County IT Networks

Expansion of system to include Civic Plaza area.

STREETCAR ALIGNMENT

The streetcar will run between the TCC and the new arena on the existing Granada Avenue alignment.

COST & FUNDING

Costs for the new arena, the TCC expansion, the upgrade of the TDE Central Plant for heating and cooling, and the Civic Plaza will be funded from the bond issue for the new arena and are not included in the master budget spreadsheet for this report.

DOWNTOWN INFRASTRUCTURE STUDY

	COSTS Total Cost to Upgrade	FUNDING Anticipated Funding Source		NOTES
		Agency	Public, Private & Other Sources	
UNDERGROUND UTILITIES				
Pima County Wastewater:				
Rehab. Existing Sewer	\$ 750,000	\$ 750,000	\$ -	
Streetcar Route Relocation	\$ 3,542,000	\$ 1,740,000	\$ 1,802,000	Relocation cost responsibility under discussion btwn. City & County
Upgrades for Future Development	\$ 3,500,000	\$ 3,500,000	\$ -	
Total	\$ 7,792,000	\$ 5,990,000	\$ 1,802,000	
Southwest Gas:				
Upgrades Associated with Streetcar Route	\$ 2,100,000	\$ -	\$ 2,100,000	\$1M to increase capacity, \$100,000 cathodic protection, and \$1M to replace vintage steel pipes
Other Upgrades for Future Development (within Study Area)	\$ 1,000,000	\$ -	\$ 1,000,000	
Upgrades for Future Development (outside Study Area)	\$ 5,000,000	\$ -	\$ 5,000,000	
Total	\$ 8,100,000		\$ 8,100,000	
Stormwater (City Transportation):				
Streetcar Route Relocation	\$ 252,500	\$ -	\$ 252,500	
Upgrades for Future Development	\$ 13,000,000	\$ -	\$ 13,000,000	Barrio Sin Nombre, Barrio Viejo, Civic Plaza, TCC expansion
Total	\$ 13,252,500		\$ 13,252,500	
Tucson Electric Power:				
Upgrade in Streetcar Route	\$ 3,500,000	\$ -	\$ 3,500,000	Estimated upgrade at \$300 per sq. ft. (11,702 feet from 4th Ave. to Santa Cruz River)
New Substation	\$ 8,000,000	\$ 8,000,000	\$ -	
Undergrounding Power Lines	\$ 1,000,000	\$ 300,000	\$ 700,000	Approximately a split in cost between TEP (30%) and developer (70%)
Total	\$ 12,500,000	\$ 8,300,000	\$ 4,200,000	
Tucson Water:				
Streetcar Route Relocation (potable water)	\$ 4,100,000	\$ -	\$ 4,100,000	
Replacement of Pipe (potable water)	\$ 6,800,000	\$ -	\$ 6,800,000	Pipe older than 40 years needs replacement
Relocation of Maintenance Facility	\$ 40,000,000	\$ 40,000,000	\$ -	
New Reclaimed Water Lines	\$ 1,500,000	\$ -	\$ 1,500,000	
Total	\$ 52,400,000	\$ 40,000,000	\$ 12,400,000	
UNDERGROUND UTILITIES TOTAL	\$ 94,044,500	\$ 54,290,000	\$ 39,754,500	
INFORMATION TECHNOLOGY				
City of Tucson:				
Fiber Network (with Pima County)	\$ 1,000,000	\$ -	\$ 1,000,000	
Downtown Wi-Fi	\$ 6,000,000	\$ -	\$ 6,000,000	Costs could be shared with private operator
Total	\$ 7,000,000		\$ 7,000,000	
Cox Communications:				
Upgrades for Future Development	\$ 2,300,000	\$ 2,300,000	\$ -	Does not include trenching
Streetcar Route Relocation	\$ 200,000	\$ -	\$ 200,000	No service on much of Congress, Broadway
Total	\$ 2,500,000	\$ 2,300,000	\$ 200,000	
Qwest Communications:				
Streetcar Route Relocation	\$ 3,000,000	\$ -	\$ 3,000,000	
Undergrounding Lines	\$ 2,100,000	\$ -	\$ 2,100,000	Would be joint trenched with TEP, which will lower cost
Total	\$ 5,100,000		\$ 5,100,000	
INFORMATION TECHNOLOGY TOTAL	\$ 14,600,000	\$ 2,300,000	\$ 12,300,000	

DOWNTOWN INFRASTRUCTURE STUDY

	COSTS	FUNDING		NOTES
	Total Cost to Upgrade	Anticipated Funding Source		
		Agency	Public, Private & Other Sources	
TRANSPORTATION				
4th Avenue Underpass Utility Relocation:	\$ 2,000,000	\$ -	\$ 2,000,000	
Access and Circulation:				
Extension and Bridge (Cushing across Santa Cruz)	\$ -	\$ -	\$ -	\$9M Rio Nuevo funding through Tucson Origins
New Streets (Heritage Park and Mercado Areas)	\$ -	\$ -	\$ -	\$1M Rio Nuevo funding through Tucson Origins
Pedestrian Bridge Across Congress to connect City/State Garage to Arena	\$ 2,000,000	\$ -	\$ 2,000,000	
Pedestrian Bridge Across 4th Ave. South of RR Tracks)	\$ 1,000,000	\$ -	\$ 1,000,000	
Total	\$ 3,000,000		\$ 3,000,000	
City of Tucson Right-of-Way Improvements/Streetscape:				
Landscape and Hardscape	\$ 12,550,712	\$ -	\$ 12,550,712	Planters, plants, pavers, tree grates
Lighting	\$ 10,876,920	\$ -	\$ 10,876,920	Street lights, landscape lights, upgraded catenary poles, traffic signals, festival lights
Furniture, Features, and Amenities	\$ 12,439,306	\$ -	\$ 12,439,306	Bollards, trash bins, seating, fountains, restrooms, speakers, trans. stops, parking amenities, public art, signage
Infrastructure	\$ 24,360,365	\$ -	\$ 24,360,365	Irrigation lines, water lines, sewer (for restrooms), electrical, fountains
Demolition	\$ 2,888,528	\$ -	\$ 2,888,528	Remove existing concrete, pavers, etc.
Contractor Fees, Overhead, Escalation	\$ 33,761,492	\$ -	\$ 33,761,492	
A/E Fees	\$ 19,145,716	\$ -	\$ 19,145,716	20%
TCC Landscaping	\$ 19,500,000	\$ -	\$ 19,500,000	Not included in TCC/Arena budget
Streetscape for Ped. Bridges, Mercado /Origins, Congress St. (Grande/Silverbell)	\$ 4,617,600	\$ -	\$ 4,617,600	Civic plaza/arena, south of 4th Avenue
Deduct for Items Budgeted Elsewhere	\$ 23,205,400	\$ -	\$ 23,205,400	
Deduct for Streetscapes Outside Rio Nuevo Boundary	\$ 9,774,895	\$ -	\$ 9,774,895	Extension of streetscape to Silverbell
Total	\$ 107,160,344	\$ -	\$ 107,160,344	
I-10 Widening:				
Clark Street Bridge and Underpass	\$ -	\$ -	\$ -	\$9M in TIF funding already approved
Box Culverts and Drainage for Arena Site	\$ -	\$ -	\$ -	\$4M - City commitment of funds (non-TIF)
Modern Streetcar - Extension to Westside	\$ 10,000,000	\$ -	\$ 10,000,000	Through Mercado and Menlo Park
Parking:				
New Parking Structures (cost plus debt)	\$ 300,100,000	\$ 230,100,000	\$ 70,000,000	Structures to be built throughout the life of the TIF
New Pay-by-Space On-Street Parking System	\$ 3,000,000	\$ 1,500,000	\$ 1,500,000	
Total	\$ 303,100,000	\$ 231,600,000	\$ 71,500,000	
TRANSPORTATION TOTAL	\$ 425,260,344	\$ 231,600,000	\$ 193,660,344	

DOWNTOWN INFRASTRUCTURE STUDY

	COSTS Total Cost to Upgrade	FUNDING Anticipated Funding Source		NOTES
		Agency	Public, Private & Other Sources	
SERVICES				
Business Improvement District:				
<i>New Capital Equipment (for expanded BID and enhanced services)</i>	\$ 137,300	\$ 137,300	\$ -	
<i>Enhanced Services (expanded BID and existing BID)</i>	\$ 714,000	\$ 714,000	\$ -	Not a capital expenditure.
Total	\$ 851,300	\$ 851,300	\$ -	
Fire	\$ -	\$ -	\$ -	
Police:				No expenses identified
<i>Additional Police Officers</i>	\$ -	\$ -	\$ -	18 officers, plus bikes/vehicles - \$1.8M, not a capital expenditure
<i>Police Department Kiosk</i>	\$ 50,000	\$ -	\$ 50,000	To be located at the Ronstadt Transit Center
<i>Downtown Security Cameras</i>	\$ -	\$ -	\$ -	Cost estimate: \$300,000
Total	\$ 50,000	\$ -	\$ 50,000	
Trash/Recycling Pick-up:				
<i>Front Loading Trucks</i>	\$ 450,000	\$ 450,000	\$ -	
<i>Rolloff with Compactor</i>	\$ 17,000	\$ 17,000	\$ -	
Total	\$ 467,000	\$ 467,000	\$ -	
SERVICES TOTAL	\$ 1,368,300	\$ 1,318,300	\$ 50,000	
ARCHAEOLOGICAL SERVICES				
<i>Assessments on Publicly Owned Sites</i>	\$ 3,302,000	\$ 3,302,000	\$ -	Does not include TPD fuel island, Ronstadt, and I-10 frontage
ENVIRONMENTAL TECHNICAL SERVICES				
<i>Assessments on Publicly Owned Sites</i>	\$ 22,191,920	\$ 22,191,920	\$ -	\$8.9 million already programmed in Cultural Plaza/Museum Complex
PARKS				
<i>Green Space/Parks</i>	\$ 73,900,000	\$ 66,100,000	\$ 7,800,000	
PUBLIC PROGRAMS				
<i>Facade Program</i>	\$ 5,000,000	\$ -	\$ 5,000,000	\$2.5 million associated with Congress and \$2.5 million for the remainder of downtown
GRAND TOTALS	\$ 639,667,064	\$ 381,102,220	\$ 258,564,844	

RECOMMENDATIONS AND NEXT STEPS

The following section outlines the recommendations and Next Steps that are necessary to successfully create a "Development Ready" downtown.

1. Overall Recommendations

Actions:

- Convene a working group comprised of City agencies, utility companies, and downtown interests to oversee the implementation of this report's recommendations.
- Hire a "Downtown Czar" to oversee the City's redevelopment efforts downtown, including the coordination of the City's various capital programs and overall direction of the various agencies involved in downtown. This position should have the authority to provide the overall direction for City agencies in order to ensure the consistency of their efforts with the overall vision for downtown Tucson.
- Implement a streamlined permitting process for downtown development.
- Establish a thorough electronic database of infrastructure improvements (existing and proposed) within the downtown area.
- Improve downtown's image as a safe place by increasing the visibility of Tucson Police downtown, including the creation of a visible and welcoming police kiosk near the Rondstadt Transit Center.

Next Steps (Complete within 3 Months):

- Convene a study group to identify approaches to streamlining the development permitting process in the downtown area.
- Hire a "Downtown Czar."

2. Streetscape Improvements/Pedestrian and Bicycle Circulation

Goal: Create a world-class downtown streetscape that is "uniquely Tucson."

Actions:

- Build on past work/studies to create a set of streetscape standards for downtown streets that will ensure the consistency and quality of the public realm.
-
- Identify, fund, and implement a first phase streetscape project ("Pilot Project") at the east end of Congress Street that fully coordinates with the Fourth Avenue Underpass, future streetcar, and private development projects.
-
- Create a phasing plan for streetscape improvements that considers or accommodates other public projects and private development. Provide adequate funding from a variety

of sources (public and private) to implement streetscape improvements consistent with the phasing plan.

- Ensure adequate funding of ongoing maintenance of the downtown streetscape (e.g., irrigation, planter maintenance, street sweeping, painting, etc.) so that a high level of quality is maintained over the life of the streetscape projects.
- Coordinate streetscape improvements with other downtown projects such that the timing of streetscape implementation minimizes the overall disruption to downtown residents, businesses and visitors.
- Design, fund and implement a façade improvement strategy to target and improve dilapidated storefronts in the downtown core.
- Develop a comprehensive plan for downtown bikeways and walkways.
- Create an attractive and inviting pedestrian corridor linking the Tucson Community Center to Congress/Broadway.

Next Steps (Complete within 3 Months):

- Fund the development of streetscape standards for downtown and undertake the production of these standards. (Costs part of Pilot Project)
- Form a working group including city agencies and private interests to oversee the streetscape standards process.
- Identify and fully fund a first phase streetscape Pilot Project.
- Identify and fund a façade rehabilitation program for downtown.

3. Utility Improvements

Goal: Provide adequate utility services in the correct locations to ensure that downtown Tucson is Development Ready.

Actions:

- Coordinate work in the public rights-of-way (e.g., streetcar, Downtown Links, Fourth Avenue Underpass, etc.) with utility companies to ensure that necessary utility upgrades are provided concurrent with public works projects.
- Coordinate private development efforts and timelines with utility companies to ensure that utility services are available to meet current and future development needs in the downtown core.
- Create a free Wi-Fi zone in downtown.
- Enact a street cut moratorium policy that prohibits the installation or upgrade of utilities within a five-year period of a street being brought to full standards (e.g., completion of streetscape standards, completion of streetcar project, completion of repaving, etc.).

- Maximize cost efficiencies in the delivery of utility services to downtown by grouping utility improvements in common trenches where applicable.

Next Steps (Complete within 3 Months):

- Draft an RFP to solicit interest among Wi-Fi providers to create free Wi-Fi zone downtown.
- Utilizing the working group identified under #1. above, identify projects where utility upgrades/coordination will need to occur immediately. Among those projects which will require discussion are the Fourth Avenue Underpass, Modern Streetcar, and Downtown Links.

4. Modern Streetcar

Goals:

- Ensure that the Streetcar project is funded, developed, and in operation by as early a date as possible
- Upgrade utility services along the streetcar alignment in coordination with streetcar construction and ensure that construction impacts are minimized.

Actions:

- Identify what, if any, utility impacts are present along the streetcar alignment. Where relocation is necessary, ensure that utility relocations are consistent with future capacity needs for downtown.
- Identify other improvements (e.g., streetscape improvements, intersection improvements, etc.) that should be coordinated and timed to coincide with the Streetcar project to avoid future construction disruption.

Next Steps (Complete within 3 Months):

- Convene a utility working group immediately to coordinate utility relocation efforts with the Streetcar project.
- Study opportunities to move up construction of the track slab on Congress and Broadway downtown to minimize construction impacts.
- Secure federal funding to complete the streetcar funding package and explore a local funding package for phase 2 of the streetcar project.

5. Parks/Open Space Improvements

Goal: Establish/create exciting and high quality open spaces in the downtown area to engender a sense of place and create social and recreational opportunities for downtown residents, employees, and visitors.

Actions:

- Identify potential open space opportunities in the downtown core and establish a funding plan to acquire and develop these spaces.
- Work with private sector developers to identify opportunities to incorporate public and semi-public open spaces within development projects.

Next Steps (Complete within 3 Months):

- Identify a City Parks representative to work with other infrastructure stakeholders in the downtown core on the planning, development and funding of open space improvements.

6. Funding and Financing

Goals:

- Create a realistic and sustainable funding and financing plan for the implementation of infrastructure improvements within the downtown core.
- Identify and secure a variety of funding sources – public and private – to broaden the base of available funding and potentially accelerate the pace of infrastructure development.

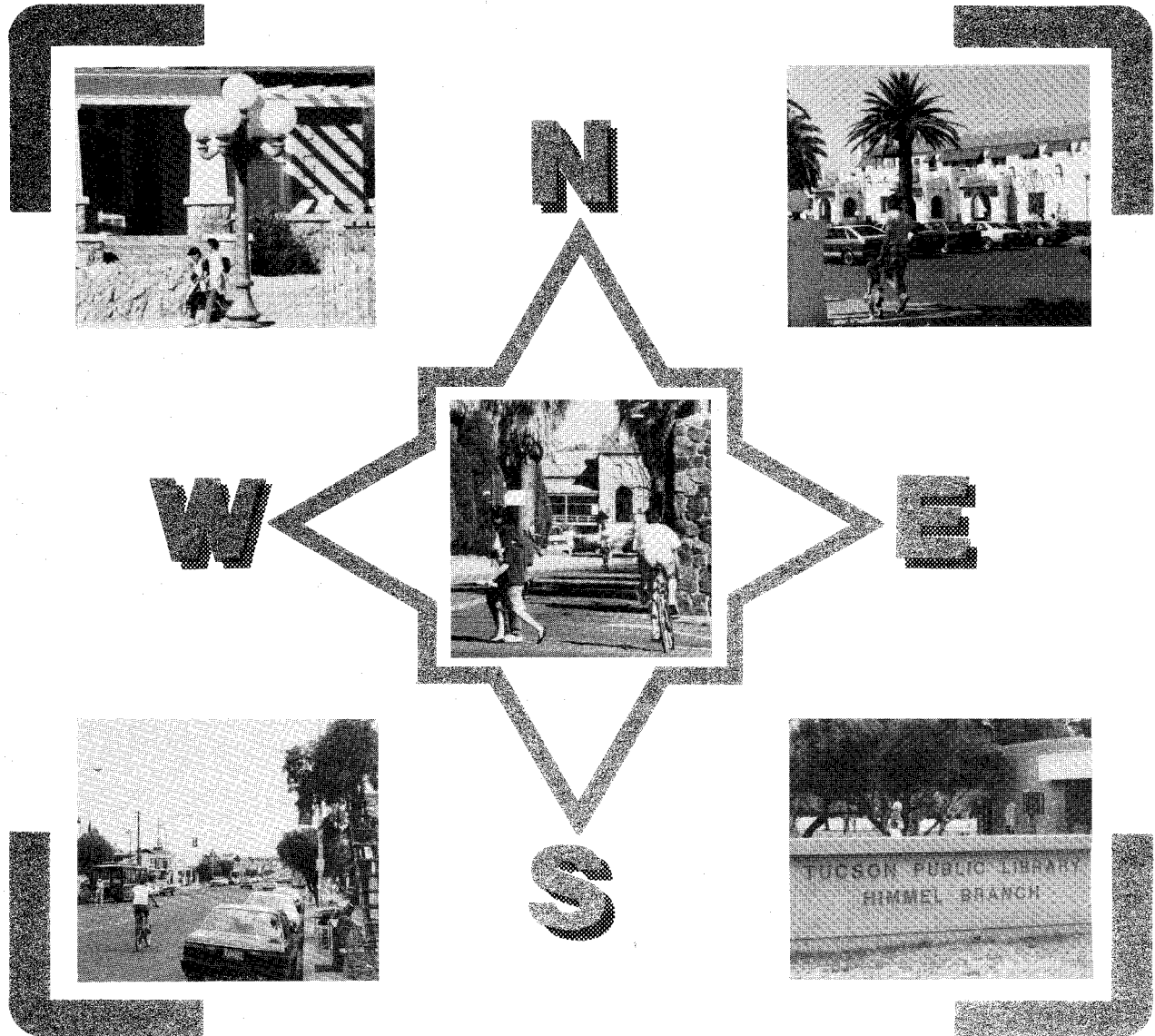
Actions:

- Create a five year sources and uses funding plan for infrastructure development. The plan should include specific recommendations for funding sources by project and a cash flow by year. The plan should be updated annually to cover the next five year period and include new projects as funding allows.
- As part of the five year funding and financing plan, include a look-ahead budget for the next 5-10 years that identifies the infrastructure projects that will likely be pursued and the funding needs for those projects.
- Establish a \$1M - \$2M Strategic Opportunity Fund within the five year plan that provides a flexible fund that the City can utilize to catalyze or respond to development proposals.
- Creatively identify potential financing sources for infrastructure improvements. Utilize the City's ability to issue tax-exempt financing to stretch infrastructure dollars as far as possible.
- Analyze the creation of a Municipal Services District covering all or portions of the downtown area as a mechanism to incorporate private investment in downtown infrastructure.

Next Steps (Complete within 3 Months)

- Establish an initial draft of a five year funding and financing plan for review and comment.
- Identify potential funding sources (public and private) that may be utilized for implementing infrastructure improvements.

U·N·I·V·E·R·S·I·T·Y



A·R·E·A·P·L·A·N

ADOPTED BY THE
MAYOR AND COUNCIL
MAY 8, 1989
RESOLUTION NO. 14889

planning
department
City of Tucson, Arizona

UNIVERSITY AREA PLAN

Prepared by the City of Tucson Planning Department
May 8, 1989

MAYOR AND COUNCIL

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Special thanks to David Duffy and Bruce Wright from the University of Arizona, and Tony Paez and Benny Young from the City of Tucson Department of Transportation for their input and assistance.

UNIVERSITY AREA PLAN

CITY OF TUCSON PLANNING DEPARTMENT

May 8, 1989

Este documento se publica en inglés solamente. Para solicitar asistencia en la traducción de este documento, las personas de habla hispana pueden comunicarse con el Departamento de Planeación y Servicios de Desarrollo, llamando al 791-5500, o visitando sus oficinas ubicadas en el segundo piso del edificio County-City Public Works, con dirección 201 North Stone Avenue.

Mayor and Council

May 8, 1989 - Resolution #14889 (Adoption)

June 10, 1991 - Resolution #15693 (Amendment)

February 24, 2003 - Resolution #19520 (Amendment)

December 13, 2011 – Resolution #21835 (Amendment)

Citizen's Advisory Planning Committee

April 12, 1989

May 1, 1991

Planning Commission

January 8, 2003

November 2, 2011

UNIVERSITY AREA PLAN

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INTRODUCTION

Location

The *University Area* is centrally located in the developed portion of metropolitan Tucson (Map 1), bounded by Broadway Boulevard on the south, Country Club Road on the east, Grant Road on the north, Stone Avenue on the west, and Toole Avenue on the southwest. The 5.17 square mile plan area includes eleven registered neighborhoods and several pedestrian districts surrounding the main campus of the University of Arizona (UA).

(December 13, 2011, Resolution 21835, changed ‘pedestrian commercial districts’ to ‘pedestrian districts’)

Important Note: In accordance with State law, UA property is not subject to City of Tucson jurisdiction, if used for government purposes. UA campus development is guided through the policies of the *Comprehensive Campus Plan*, adopted and administered by the UA. In order to distinguish the City’s adopted area plan from the University’s adopted *Campus Plan*, references to the City of Tucson *University Area* and *University Area Plan* will be noted in *italics*.

Character

The *University Area* is rich and diverse in character, offering a unique blend of housing and lifestyle options, educational and cultural amenities, and pedestrian-oriented commercial services. The special qualities of the *University Area* are built on a foundation of individual neighborhoods and commercial districts closely linked to the activity and development of the University of Arizona.

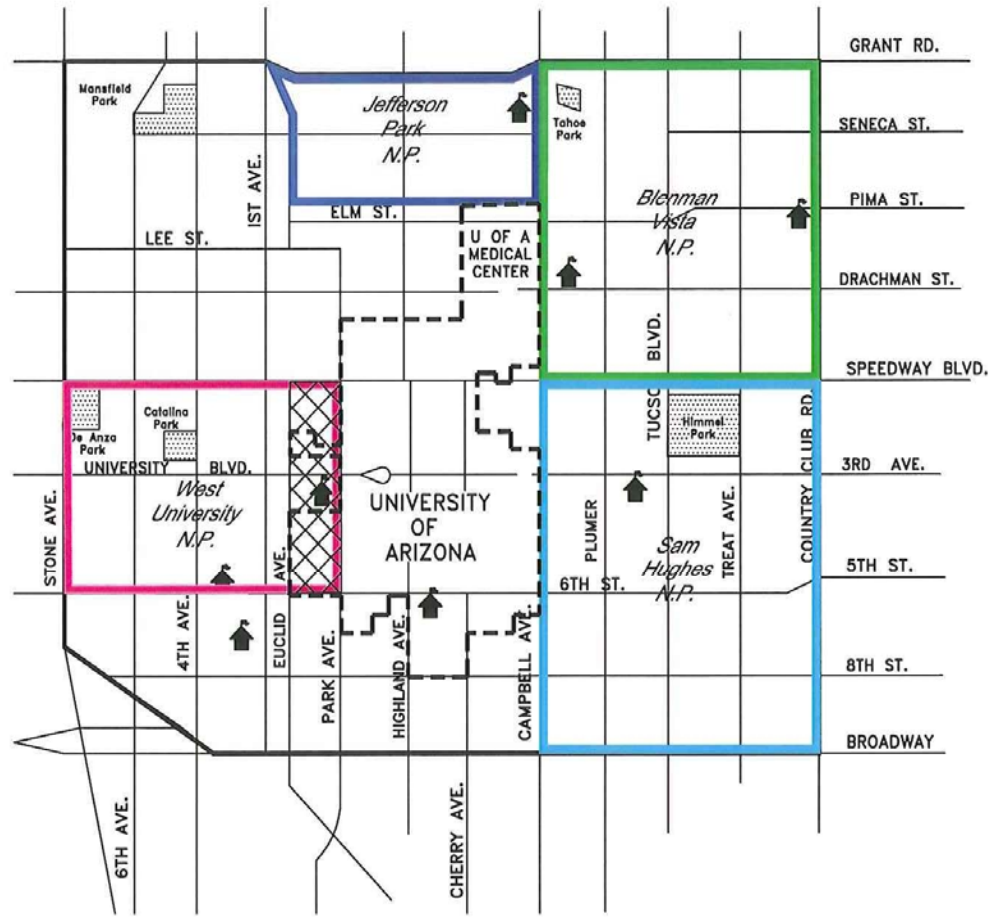
Demographic and housing characteristics in the *University Area* are strongly influenced by the large population of students (over 30,000) attending the UA. In 1988, more than 50 percent of all *University Area* residents were between 20 and 44 years of age, and more than 50 percent of all *University Area* residents rented their homes.

Land uses in the *University Area* (Map 2) have developed around a square mile “gridiron” system of major streets surrounding low-density residential subdivisions. Over time, intensified development in the UA campus vicinity has resulted in the establishment of the University of Arizona regional activity center, a relatively compact area of residential, commercial, educational, and recreational uses.

Neighborhoods which surround the UA activity center (Map 3) have retained their historic charm and residential vitality. These neighborhoods, in combination with historic landmarks such as the University’s Old Main Building, and pedestrian-oriented commercial districts such as Fourth Avenue, serve to enrich the spirit of place which characterizes the *University Area*.

UNIVERSITY AREA PLAN

Map 1: University Area



Legend



West University Transition Area



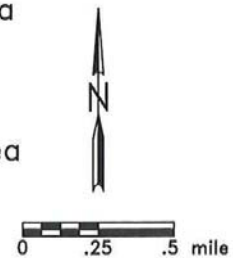
Plan Area Boundary



U of A Campus Planning Area



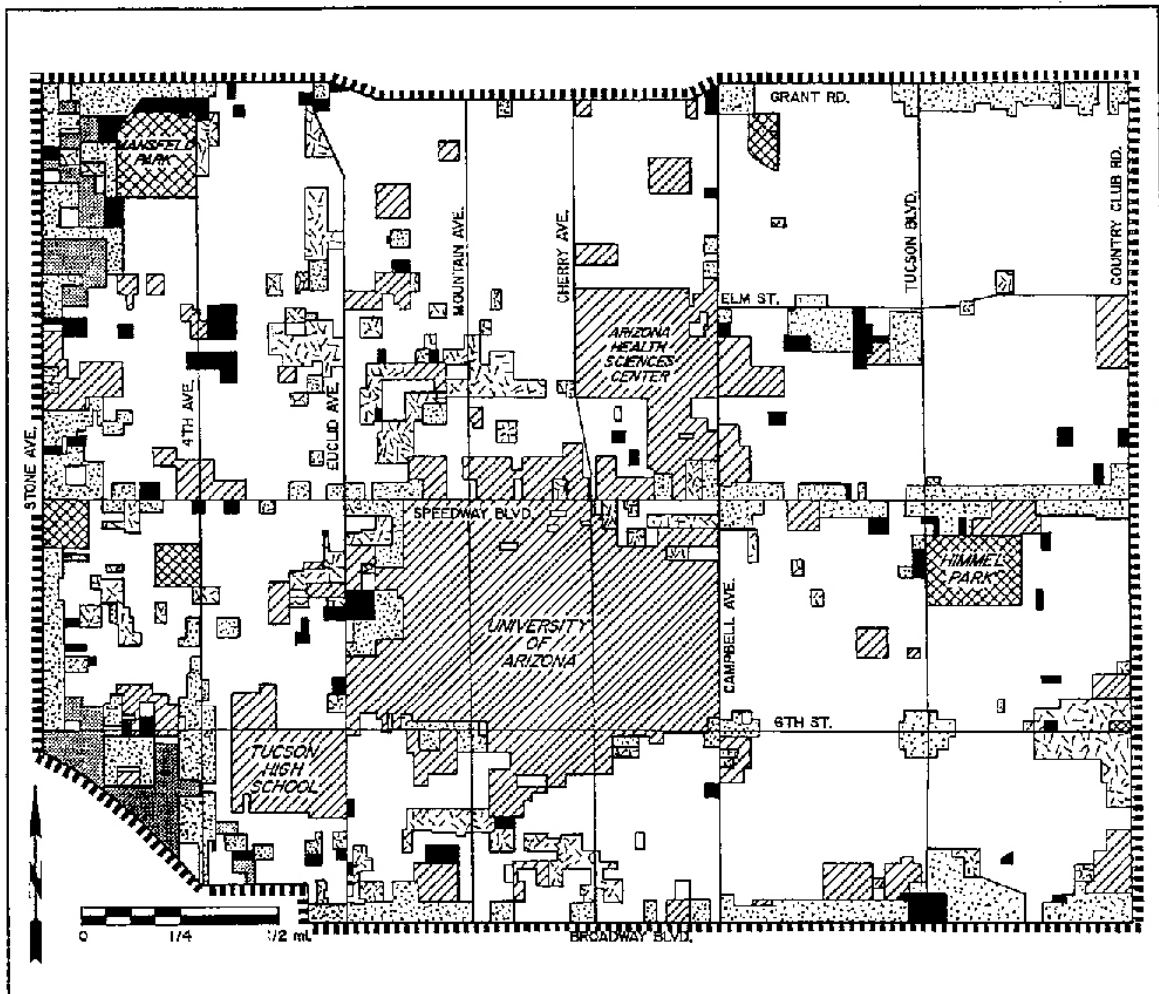
Schools



(December 13, 2011, Resolution 21835, revised Map 1)

UNIVERSITY AREA PLAN

Map 2: General Land Use



Legend

	Low/Medium Density Residential
	Moderate/High Density Residential
	Public/Institutional
	Industrial
	Parks/Open Space
	Office/Commercial
	Vacant

Note: Land use on University of Arizona Property is guided by the policies of the UA Comprehensive Campus Plan adopted by the Arizona Board of Regents in 1988

History

The UA was founded in 1885 as Arizona's first and only land grant college. Following the establishment of the UA campus and the extension of a trolley line east of Downtown Tucson, residential neighborhoods began to develop and eventually surround the original campus site. As the UA campus developed, so did the need for additional land to serve a growing student population. Extensive University land acquisition in the 1960's and 1970's resulted in the establishment of the University Medical Center and McKale Arena as well as the loss of numerous residences from the surrounding neighborhoods.

In 1980, the Mayor and City Council adopted the *University District Plan* to guide land use in the neighborhoods surrounding the UA campus. Between 1980 and 1988, City of Tucson neighborhood plans were adopted for the West University, Sam Hughes, and Blenman-Vista neighborhoods, and a portion of the West University neighborhood was granted historic zoning status under the City's Historic District and Landmark Zone Ordinance. During the same period, National Historic Districts were established in the Iron Horse Expansion Neighborhood and portions of the West University Neighborhood and University of Arizona campus.

Shortly following the adoption of the *University District Plan*, the University of Arizona began to lay the groundwork for the establishment of their own plan to guide the long-term development of the campus within a defined planning area. The *Comprehensive Campus Plan* was adopted by the Arizona Board of Regents in 1988 with substantial input from neighborhood residents and the general public. In addition to providing an organized framework for land use and transportation system development, the *Campus Plan* includes measures designed to improve compatibility between the UA and the surrounding neighborhoods of the University Area. The *Campus Plan* was most recently updated in 2009.

(December 13, 2011, Resolution 21835, included reference to 2009 Campus Plan update)

The City of Tucson's 1989 *University Area Plan* is the logical extension of the 1980 *University District Plan*, which sought to "maintain the neighborhoods in the University District as healthy residential areas". Since 1980, numerous changes have taken place within the plan area. These include residential infill projects, major street development, and the adoption of the *Comprehensive Campus Plan* by the University of Arizona.

Currently, UA campus development is continuing under the guidance of the *Campus Plan*. A number of University Area neighborhoods have matured to the point where many properties are now eligible for historic designation at the national or local levels. Strong gains have been made in the preservation and enhancement of the University Area's historic development and vitality, often through the innovative combination of public, private, and neighborhood efforts. Perhaps most importantly, planning policy based on organized citizen involvement is now recognized as an essential tool for guiding both public and private development in the community.

Purpose

The City of Tucson's *University Area Plan* has been established for an area surrounding but not including the main campus of the University of Arizona. Land use and development on UA property is guided by the policies of the University's *Comprehensive Campus Plan*, adopted by the Arizona Board of Regents in 1988, and most recently updated in 2009.

The *University Area Plan* recognizes the importance of the *Comprehensive Campus Plan*, and seeks to enhance coordination between the policies of the two plans in the best interests of University Area neighborhoods and the community of Tucson.

The *University Area Plan* provides general guidance for (non-campus) land uses throughout the University Area, while three adopted neighborhood plans (*West University*, *Blenman-Vista*, and *Sam Hughes*) offer more specific direction for land use in each respective neighborhood (Map 3). While the policies of the *University Area Plan* and the three neighborhood plans are intended to work together, the neighborhood plans will be controlling where they provide more specific policy direction than the *University Area Plan*.

(December 13, 2011, Resolution 21835, modified wording of the previous sentence, but maintained the intent)

The *University Area Plan* will play a key role in the review of new development in the University Area. The Mayor and City Council will make decisions on specific land use proposals based on the direction established by the *University Area Plan*, adopted neighborhood plans, and the professional recommendations of City staff, as well as input from the Planning Commission, registered neighborhood associations, and the general public.

(December 13, 2011, Resolution 21835, changed 'Citizen's Advisory Planning Committee' to 'Planning Commission')

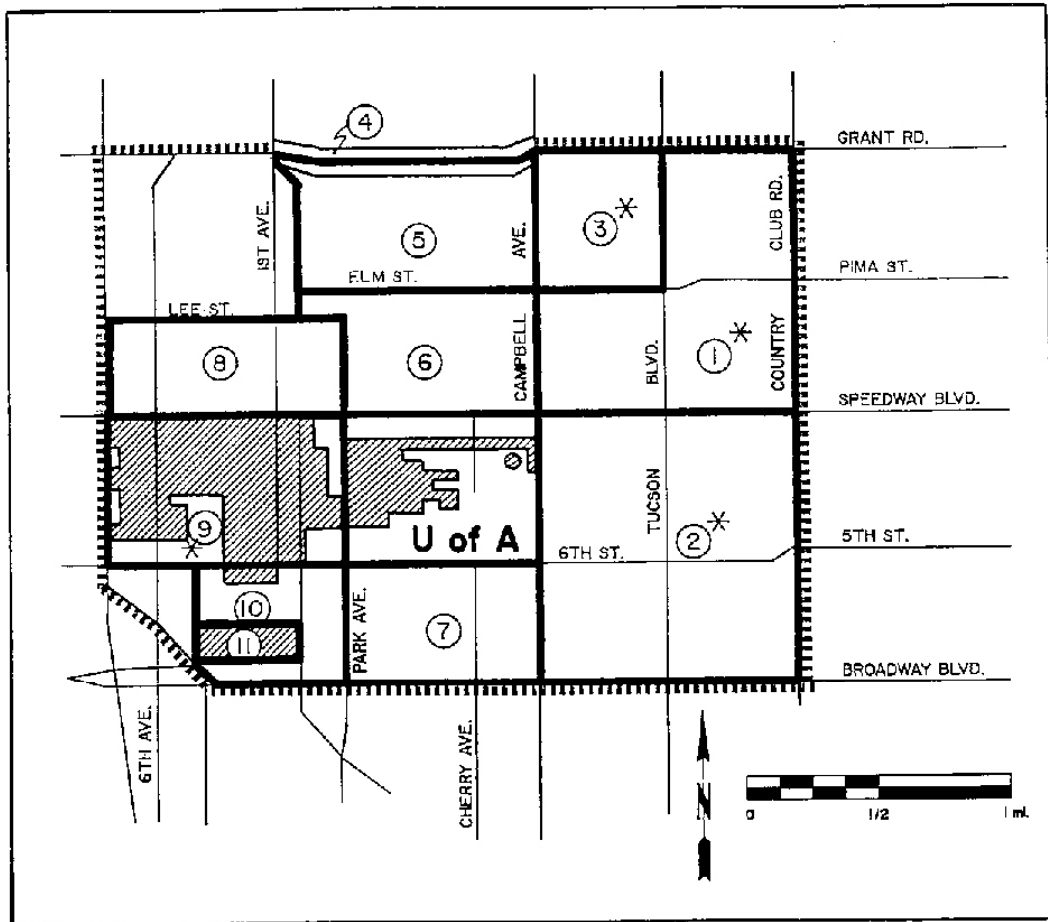
Adopted Policies and Recommendations

SECTION 1: OVERALL GOALS OF THE UNIVERSITY AREA PLAN

1. Recognize distinct neighborhoods in the University Area, and support those changes which protect and enhance the character, identity, and residential quality of life in these neighborhoods.
2. Promote cooperation between neighborhoods, private developers, the City of Tucson, and the UA to ensure that new development is sensitive to local neighborhood concerns and supportive of adopted city-wide policies.
3. Recognize the nature and potential of the University and its immediate surroundings as a relatively compact, pedestrian-oriented regional activity center, and work to strengthen the identity and quality of this area consistent with city-wide and neighborhood goals (see *City of Tucson General Plan*).


UNIVERSITY AREA PLAN

Map 3: Neighborhoods and Historic Districts



Registered Neighborhoods: (City of Tucson Citizen Participation Office)

Legend

- | | | | |
|---|------------------|---|----------------------------|
| ① | Blenman-Elm * | ⑧ | Northwest University |
| ② | Sam Hughes * | ⑨ | West University * |
| ③ | Catalina Vista * | ⑩ | Pie Allen |
| ④ | Grant Road | ⑪ | Iron Horse |
| ⑤ | Jefferson Park | * | Adopted Neighborhood Plan |
| ⑥ | North University |  | National Historic District |
| ⑦ | Rincon Heights | | |

SECTION 2: NEIGHBORHOOD CONSERVATION/HISTORIC PRESERVATION

Goal: Preserve and enhance the historic character and residential quality of life in University Area neighborhoods.

Policies:

1. Utilize the City's Historic District and Landmark Zone Ordinance to designate and protect local historic resources, including those properties which are listed on the National Register of Historic Places and those which may be eligible for historic designation.
2. Utilize the City's adopted ordinances, plans, and guidelines (e.g., *Tucson Land Use Code*, *University Area Plan*, *Roadway Development Policies*) to protect neighborhood perimeters from the intrusion of noncompatible uses.
3. Support the continued vitality of established pedestrian districts (Map 4), including those areas such as Fourth Avenue which provide historic and cultural value to the University Area and the City.

(December 13, 2011, Resolution 21835, Policy 2.3, changed 'pedestrian commercial districts' to 'pedestrian districts')

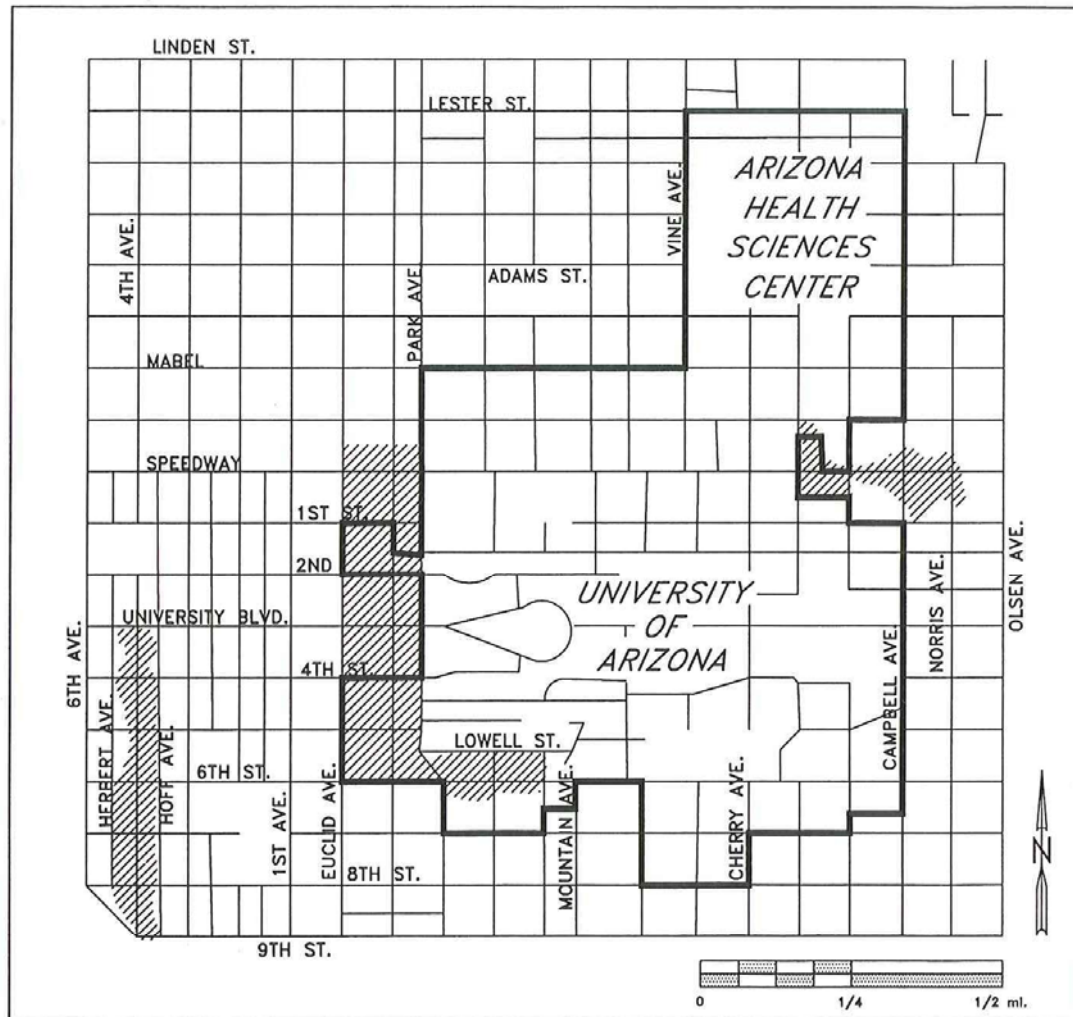
4. Support new cooperative efforts between the City of Tucson, the University of Arizona, and registered neighborhood associations to:
 - 4.1 Encourage the preservation of all properties undergoing historic survey until final eligibility is determined;
 - 4.2 Protect designated and potentially eligible historic properties from demolition or neglect; and
 - 4.3 Assist in the relocation of displaced neighborhood commercial services to pedestrian districts (Map 4) and other appropriate locations within the University Area.

(December 13, 2011, Resolution 21835, Policy 2.4.3, changed 'pedestrian commercial districts' to 'pedestrian districts')

- 4.4 Achieve the objectives of the above policies (4.1 - 4.3) through the continued revision of City Codes, and through the establishment of rehabilitation funds, preservation easements, and revolving loan programs.
5. Work to ensure the timely implementation of approved development projects so as to minimize disruption to neighborhood residents and businesses.
6. Recommend against the granting of parking variances which may produce unacceptable levels of on-street parking, noise, or through-traffic in residential areas (see Transportation Policies, Section 4).

University Area Plan

Map 4: Pedestrian Districts



Legend



Pedestrian District



University of Arizona Campus Planning Area

10-11

(December 13, 2011, Resolution 21835, revised Map 4 to replace 'pedestrian commercial districts' with 'pedestrian districts'; show new UA campus planning boundaries; and show entire West University Transition Area as a pedestrian district)

SECTION 3: LAND USE AND DEVELOPMENT

Goal: Support new development which serves to enhance the character and quality of University Area neighborhoods.

SECTION 3.A: GENERAL POLICIES:

1. Strongly encourage the development of vacant property throughout the University Area to complement the existing scale, character, and identity of the surrounding neighborhood.
2. Encourage the retention of contributing historic buildings and viable residential structures by including them as integral components of new development.
3. Support new development on the perimeter of residential areas which serves to protect and enhance the quality of life for neighborhood residents.
4. Demonstrate sensitivity to surrounding uses in the design, location, orientation, landscaping, screening, and transportation planning of new development, as outlined in the General Design Guidelines (Section 8).
5. Utilize Defensible Space Guidelines (Section 9) in the design of new development.
6. Builders and developers of proposed projects which require City of Tucson rezoning approval are encouraged to consult in the early stages of project planning with representatives of neighborhood associations registered with the City of Tucson Citizen Participation Office:
 - 6.1 The City of Tucson shall provide public and neighborhood notification of rezonings and other land use changes in compliance with adopted standards and procedures.
 - 6.2 Developers are strongly encouraged to notify and offer to meet with neighborhood associations and residents within 300 feet of a proposed development site in the early stages of rezoning case review to provide a summary of the proposed project.
 - 6.3 In rezoning cases where specific traffic impacts from new development are uncertain, a developer-funded traffic impact study may be required at the discretion and approval of the City of Tucson Traffic Engineer.
7. Encourage the City of Tucson Citizen Participation Office to explore the use of public access cable television, supplemental newspaper advertising, and other means to provide additional early public notice of proposed development projects.

SECTION 3.B: NEW RESIDENTIAL DEVELOPMENT

Subgoal: Support new residential development which provides a wide range of housing types to meet the diverse needs of University Area residents while serving to enhance the stability of neighborhoods and schools.

Policies:

1. Except in the West University Transition Area, encourage residential infill which is compatible with neighborhood scale, density, and character, as outlined in the General Design Guidelines.

(December 13, 2011, Resolution 21835, Policy 3.B.1, added 'Except in the West University Transition Area')

2. Under the guidance of the General Design Guidelines, provide for residential development in appropriate locations:
 - 2.1 Low density (1-6 units per acre) residential development is appropriate in the interior of established single-family residential areas.
 - 2.2 Except in the West University Transition Area, medium density (7-14 units per acre) residential development is appropriate in conformance with the Flexible Lot Development (FLD) provision of the *Land Use Code*, or where vehicular access is provided to an arterial or collector street and vehicular traffic is directed away from the interior of low density residential areas.

(December 13, 2011, Resolution 21835, Policy 3.B.2. 2, added 'Except in the West University Transition Area'; and changed Residential Cluster Project to Flexible Lot Development)

- 2.3 Except in the West University Transition Area, high density (15 or more units per acre) residential development is appropriate in conformance with the FLD provision of the *Land Use Code*, or in conformance with the following criteria:

(December 13, 2011, Resolution 21835, Policy 3.B.2.3, added 'Except in the West University Transition Area', and changed RCP to FLD)

- 2.3.1 The site is surrounded by predominantly medium/high density residential or nonresidential development;
 - 2.3.2 Vehicular access is provided to an arterial or collector street, and vehicular traffic is directed away from the interior of low density residential areas;
 - 2.3.3 Development includes a well-defined pedestrian system linked to the public sidewalk system, convenient access to transit facilities, and secure bicycle parking areas; and

2.3.4 Where appropriate, development includes integrated neighborhood commercial services (e.g., grocery market, cafe, florist) oriented to a local pedestrian clientele (see Mixed Use Development Policies, Section 3.D).

2.4 Support new residential development in the West University Transition Area in accordance with the policy direction provided in the West University Neighborhood Plan.

(December 13, 2011, Resolution 21835, added new Policy 2.4)

3. Explore the provision of incentives to encourage compatible residential infill development. Such measures may include fee waivers and tax credits for new residential development, while avoiding the use of "density bonus" provisions, except in conformance with the FLD provision of the *Land Use Code*.

SECTION 3.C: OFFICE/COMMERCIAL DEVELOPMENT

Subgoal: Support the development of new commercial and office activities which complement the scale and character of neighborhoods and commercial districts in the University Area.

Policies:

1. Support the maintenance and intensification of neighborhood and UA campus-oriented commercial services (under the guidance of Office/Commercial Development Policies 3-3.3) in the following established pedestrian districts:

- Speedway/Campbell
- Sixth Street, Park to Santa Rita
- Fourth Avenue Shopping District
- Park/Speedway
- West University Transition Area

Note: Pedestrian Districts are illustrated on Map 4.

(December 13, 2011, Resolution 21835, Policy 3.C.1., changed 'pedestrian commercial districts' to 'pedestrian districts'; and changed 'University Blvd./Tyndall' district to 'West University Transition Area' district)

2. Support the development of concentrated centers of pedestrian-oriented commercial/office activity through the following means:

2.1 Discourage the establishment or extension of strip commercial development.

- 2.2 Recommend against rezonings or changes in development plans which include new drive-through facilities, except as provided for in adopted neighborhood plans.

(December 13, 2011, Resolution 21835, Policy 3.C.2.2, added 'except as provided for in adopted neighborhood plans')

- 2.3 Encourage the consolidation of adjacent development parcels in order to provide integrated circulation and access while reducing the number of vehicular curb cuts along the street.
 - 2.4 Encourage the establishment of a well-defined pedestrian system linking adjacent uses, secure bicycle parking areas, and convenient access to transit facilities, as integral components of new office/commercial development.
3. Consider the special characteristics of individual neighborhoods and adopted neighborhood plan policy in the review of rezoning cases involving the conversion of residential uses to nonresidential uses. Characteristics to be evaluated include:
 - adjacent uses and zoning
 - existing land use patterns
 - traffic, noise, and visual impacts of the proposed development
 - historic significance and physical condition of structure(s)
 - viability of continued residential use
 - 3.1 Consider the conversion of residential uses on arterial streets to residentially-scaled office uses under the guidance of the General Design Guidelines (Section 8) and through the analysis of the characteristics outlined in Office/Commercial Development Policy 3.
 - 3.2 Consider the conversion of residential uses on arterial streets to commercial uses under the guidance of the General Design Guidelines (Section 8) and through the analysis of the characteristics outlined in Office/Commercial Development Policy 3, and in conformance with the following criteria:
 - 3.2.1 Adjacent uses and zoning are commercial;
 - 3.2.2 Sufficient lot depth exists to provide adequate buffering, landscaping, and on-site circulation and parking in compliance with City of Tucson standards; and
 - 3.2.3 Vehicular access is provided to an arterial or collector street, and vehicular traffic is directed away from the interior of residential areas.

- 3.3 Recommend against the conversion to nonresidential use of residentially-zoned properties abutting Fifth-Sixth Street, except as provided for in adopted neighborhood plans.
- 3.4 Consider the conversion of residential to commercial uses on Park Avenue in the Speedway Pedestrian District under the guidance of the General Design Guidelines (Section 8), through the analysis of the characteristics outlined in Office/Commercial Development Policy 3 and in conformance with the following criteria:
 - 3.4.1 The proposed site design provides well-defined pedestrian and bicycle access and demonstrates that the proposed commercial use serves the surrounding University community.
 - 3.4.2 The proposed site design is sensitive to adjacent residential uses in terms of screening, landscaping, access and traffic circulation.

Vehicular access is provided only to Park Avenue.

(June 10, 1991, Resolution #15693, UAP, Office/Commercial Policy 3.4)

- 3.5 Consider the conversion of residential uses to parking on 422 and 428 North Martin, in order to provide parking for commercial uses located northeast of the amendment site, on 6th Street between Martin Avenue and Campbell Avenue. Development is to be consistent with *University Area Plan* General Design Guidelines (Section 8), Office/Commercial Policy 3, the direction of the University *Campus Plan*, and the following criteria:
 - 3.5.1 Primary vehicular access is oriented towards the arterial.
 - 3.5.2 Development includes pedestrian access throughout the site, including landscaping of pedestrian facilities.
 - 3.5.3 University input and comment is provided as a part of any rezoning submittal.
 - 3.5.4 A narrow intense vegetative buffer is placed on the south side of the parking lot.

(February 24, 2003, Resolution #19520, UAP, Office/Commercial Policy 3.5)

- 3.6 Refer to the West University Neighborhood Plan for policy direction that applies to the West University Transition Area.

(December 13, 2011, Resolution 21835, added new Policy 3.C.3.6)

SECTION 3.D: MIXED USE DEVELOPMENT

Subgoal: Support carefully designed and located mixed use development as a viable means to integrate housing, employment, shopping, and related activities in a relatively compact pedestrian-oriented area, consistent with regional activity center policy (*General Plan*, August 6, 2001, Element 2, Policy 6.13).

Policy:

Support the careful integration of residential and nonresidential development in areas which are predominantly high density residential or nonresidential, under the guidance of the General Design Guidelines (Section 8) and in conformance with the following criteria:

1. Except in the West University Transition Area, vehicular access is provided to an arterial or collector street, and vehicular traffic is directed away from the interior of residential areas;

(December 13, 2011, Resolution 21835, Policy 3.D.1., added 'Except in the West University Transition Area')

2. Commercial activity is located at the street level, and is connected to the public sidewalk system;
3. Tenant mix offers goods and services oriented to local residents and compatible with the neighborhood; and
4. Development includes a well-defined pedestrian system linked to the public sidewalk system, convenient access to transit facilities, and secure bicycle parking areas.

SECTION 3.E: INDUSTRIAL DEVELOPMENT

Subgoal: Support the maintenance and development of light industrial, commercial, and mixed use development in identified districts as permitted by current zoning.

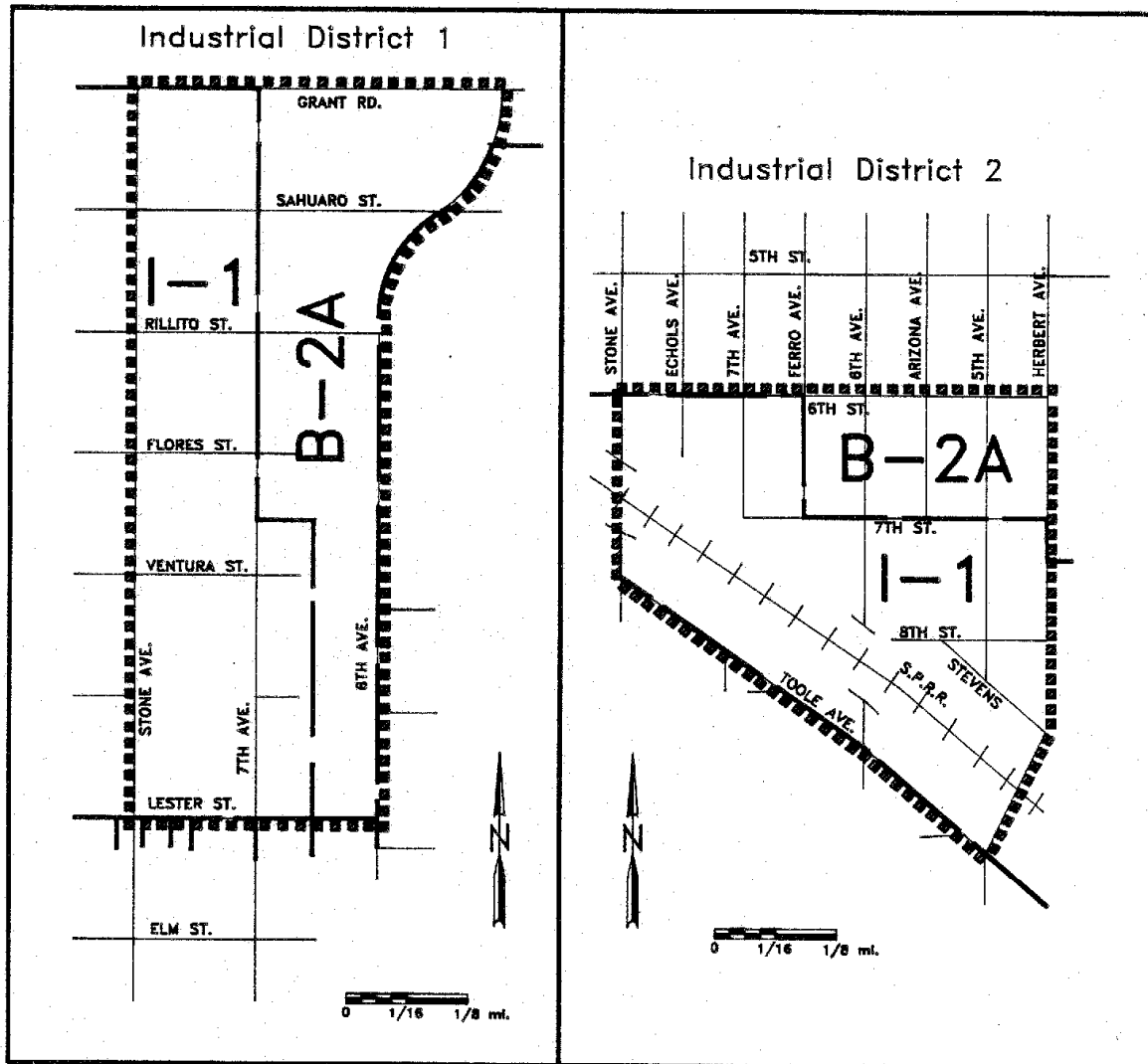
Policies:

1. Recognize two established districts of predominantly commercial/industrial use in the University Area (Map 5), and encourage the upgrading and sensitive redevelopment of these areas:
 - 1.1 Industrial District 1 is bounded by Lester Street, Stone Avenue, Sixth Avenue, and Grant Road. Support the development and upgrading of commercial and light industrial uses as permitted by current zoning and under the guidance of the General Design Guidelines (Section 8).

- 1.2 Industrial District 2 is bounded by Toole Avenue, Herbert Avenue, Stone Avenue, and Sixth Street. In conjunction with the development of the Tucson Arts District and Fourth Avenue Shopping District, encourage the establishment of artists housing and studio space and arts-related commercial/industrial uses in District 2.
2. Maintain existing commercial zoning (Map 5) for properties at the perimeter of industrial Districts 1 and 2 to provide a transitional buffer between industrial uses at the district core and residential uses in the surrounding neighborhoods.
3. Discourage rezonings to permit new industrial uses on land which is currently zoned for residential or commercial uses.
4. Encourage both new and existing industrial development in the University Area to comply with federal, state, and local guidelines ensuring that:
 - 4.1 Noise, fumes, lighting, and other negative impacts are not extended off-site;
 - 4.2 Any potentially noxious or hazardous materials, activity, and/or byproducts are separated from the environment in a safe and lawful manner; and
 - 4.3 Adequate pollution control and monitoring, emergency evacuation and containment procedures are established.

UNIVERSITY AREA PLAN

Map 5 : Industrial Districts and Zoning



Legend

- Industrial District Boundary
- Zoning Boundary
- I-1 Zoning Designation

7-89

SECTION 3.F: PUBLIC/SEMI-PUBLIC DEVELOPMENT

Subgoal: Recognize the important role of public and semi-public uses, and encourage the development of these uses in a manner which is compatible with the character and quality of University Area neighborhoods.



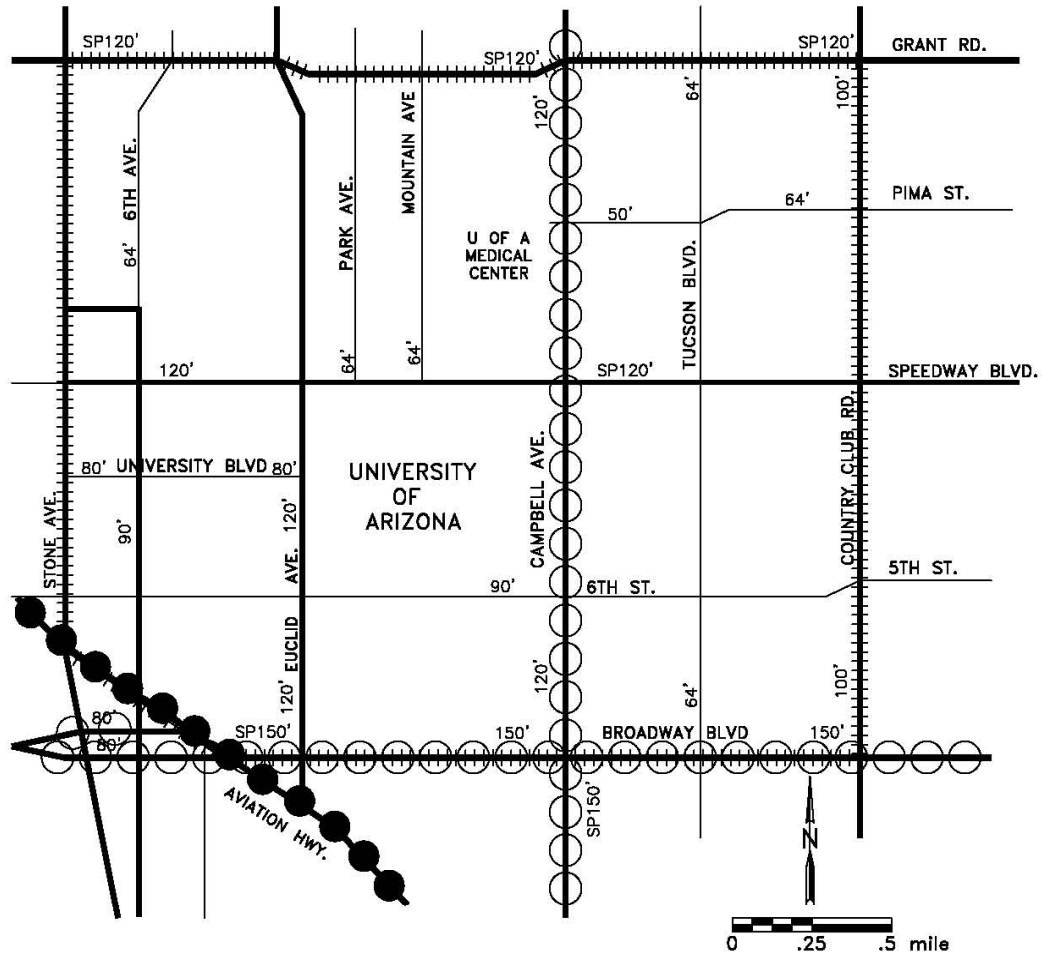
Policies:

1. Encourage the maintenance and enhancement of existing public and semi-public uses such as libraries, schools, parks, churches, social and cultural facilities.
2. Support the development of new public and semi-public uses which are compatible with the physical environment and social needs of the University Area neighborhoods.
3. Demonstrate sensitivity in the design and location of new public facilities and open spaces through the guidance of the General Design Guidelines (Section 8) and local neighborhood input.
4. Encourage public development which supports city-wide planning policy and complies with locally adopted ordinances and guidelines.
5. Support the inclusion of neighborhood amenities (e.g., useable open space, recreational facilities, public art) in the development of new public and semi-public facilities. Such amenities should be coordinated with input from local neighborhoods.

Note: See University of Arizona Policies 2 and 11 (Section 7).

UNIVERSITY AREA PLAN

Map 6: Major Streets



(From City of Tucson Major Streets and Routes Plan)

Legend

- +++++ Plan Boundary
- Arterial Street
- Collector Street
- ○ ○ Gateway Route
- ● ● Parkway
- 90' Required Future Right of Way (feet)

(December 13, 2011, Resolution 21835, revised Map 6)

SECTION 4: TRANSPORTATION

Goal: Encourage the development of a multi-modal transportation system which is sensitive to neighborhood and regional concerns.

Policies:

1. Ensure neighborhood participation in roadway project design through the adopted ordinances and policies of the City of Tucson.
2. Undertake joint City/University efforts to design and implement multi-modal streetscape designs and neighborhood buffer treatments for the following streets providing access to the University of Arizona regional activity center:
 - Highland Avenue from Sixth Street to Broadway
 - Mountain Avenue from Speedway to Grant Road
 - Speedway Boulevard
 - Park Avenue
 - Euclid Avenue
 - Campbell Avenue
 - Sixth Street
 - University Boulevard
3. Beginning in the earliest stages of roadway planning and development, ensure that the following actions are taken under the guidance of the City's adopted *Roadway Development Policies*, the *General Plan*, and public input:
 - 3.1 Inventory and evaluate the impacts of proposed roadway development on historic resources, neighborhood landmarks, pedestrian circulation and safety, noise levels, air quality, and other elements which determine residential quality of life.
 - 3.2 Mitigate the impacts of proposed roadway development on neighborhoods through the preservation of historic structures and viable residences, the development of frontage roads, street closures, noise walls, landscaped buffers and recreational amenities, acquisition of entire properties on one side of the street (as opposed to partial takings from both sides), and variations in roadway alignment and streetscape design as appropriate to enhance the quality and character of each neighborhood.
 - 3.3 Maintain and enhance communication among City officials, roadway project consultants, neighborhood organizations, property owners, and residents.
 - 3.4 Mitigate any existing or potential drainage problems.

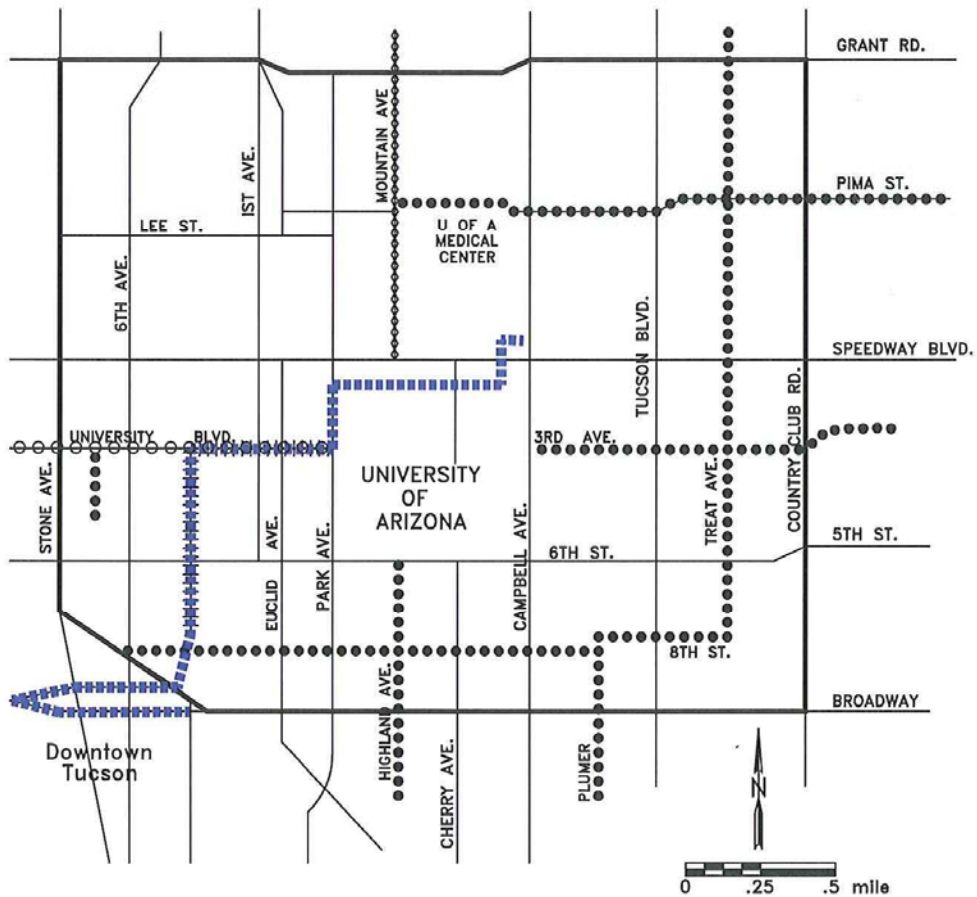
4. Mitigate the impacts of traffic from the proposed Broadway Corridor and Aviation Parkway projects on neighborhood streets, residences, and businesses.
5. Encourage timely funding for the advance purchase of private properties to be utilized in future roadway development projects.
6. Work to ensure the timely implementation of approved roadway projects so as to minimize disruption to area residents and businesses.
7. Mitigate the impacts of non-resident parking demand in neighborhoods, and support efforts to address parking issues in commercial districts such as Fourth Avenue through the following means:
 - 7.1 Expand the utilization of the Residential Parking Permit program where appropriate to ensure an adequate supply of residential parking and address the special parking needs of residents.
 - 7.2 Encourage the implementation of organized circulation and parking improvements in cooperation with the City of Tucson, the University of Arizona, and University Area businesses and residents.
8. Design and locate public and private parking facilities so as to mitigate traffic and visual impacts on surrounding residential areas.
9. Support the continued development of alternate modes transportation facilities throughout the University Area, including the expansion of existing transit, bicycle, and pedestrian access to the UA regional activity center. For example, support the implementation of the proposed Mountain Avenue Bicycle Corridor demonstration project. (Map 7)
10. Support the enhancement of physical access between the UA, Fourth Avenue, and Downtown Tucson, while maintaining or reducing volumes of auto traffic. For example, encourage the continued development of trolley and/or streetcar service connecting the UA with Downtown Tucson via University Boulevard and Fourth Avenue.

(December 13, 2011, Resolution 21835, Policy 4.10, added 'and/or streetcar')

11. Undertake a coordinated City-University transportation study to develop a balanced multi-modal transportation network which enhances travel efficiency to the UA regional activity center while reducing impacts of auto traffic on surrounding neighborhoods. This *Plan* would update the 1983 *Joint Comprehensive Circulation Study* (Barton-Aschman).

UNIVERSITY AREA PLAN

Map 7: Alternate Modes Transportation Routes



Note: City Bus Route Information can be obtained by calling Suntran at 792-9222.

Legend

- Plan Boundary
- Bike Route (signs only)
- - - - - Bike Lane (signs and pavement markings)
- - - - - Bicycle Corridor
- + + + + + Trolley Line
- - - - - Streetcar Line

(December 13, 2011, Resolution 21835, revised Map 7 – added streetcar line)

SECTION 5: ENVIRONMENT

Goal: Maintain and enhance the environmental quality of the University Area, in support of city-wide and regional efforts.

Policies:

1. Support measures throughout the University Area designed to:
 - 1.1 Improve air quality in the community by encouraging the development of alternate modes of transportation and pedestrian-oriented regional activity centers (CP Section 2, Policy 5).
 - 1.2 Regulate and control airborne dust and pollen.
 - 1.3 Maintain high standards of water quality through the continued identification, monitoring, and control of potential sources of surface and groundwater pollution.
 - 1.4 Regulate and control noise and light pollution.
 - 1.5 Monitor and control the transportation, storage, and disposal of toxic waste.

Note: See Industrial Development Policy 4 (Section 3.E), and UA Policy 8 (Section 7).

2. Utilize the *City of Tucson Floodplain Ordinance* and additional flood management guidelines to:
 - 2.1 Protect the safety of residents and properties in the University Area.
 - 2.2 Encourage the maintenance of open spaces adjacent to drainageways and natural wash areas for a combination of scenic, pedestrian/bicycle circulation, and flood control purposes.
 - 2.3 Protect and enhance the condition and appearance of all drainageways and any remaining natural wash areas (CP Section 3, Policy 2).
3. Encourage the use of drought-tolerant and low pollen-producing plants in the landscaping of new development. Landscaping should be compatible in scale, character, and use pattern with established neighborhood landscape/streetscape themes.

Note: The City of Tucson *Development Standards*, Section 9-06.0 contains an updated list of drought-tolerant landscaping plants. Additional copies of this list may be obtained through the Southern Arizona Water Resources Association, at (602)881-3939.

4. Encourage the use of energy and water saving devices and the demonstration of energy-efficient technology in new development.

SECTION 6: PUBLIC SERVICES

Goal: Ensure an adequate supply of high quality public services to meet the current and projected needs of University Area residents and businesses.

Policies:

1. Support local crime prevention efforts through the implementation of Defensible Space Guidelines (Section 9) and the organization of neighborhood watch groups in cooperation with the City of Tucson Police Department.
2. Support local fire prevention and safety efforts through area-wide and neighborhood participation in public education and safety programs offered through the City of Tucson Fire Department.
3. Encourage government agencies and utility providers to coordinate the planning and development of projects in order to maximize efficiency while minimizing neighborhood disruption.
4. Encourage government agencies and utility providers to consult with representatives from registered neighborhood associations and Historic District Review Boards in the early stages of project planning to ensure that projects are designed to enhance the character and quality of each neighborhood.
5. Support the inclusion of neighborhood amenities (e.g., open space, recreational facilities, public art) in the development of new public facilities and infrastructure.
6. Wherever possible, place utility and service equipment underground or in other visually screened locations.
7. Maintain and expand recreational opportunities through the expansion of joint use agreements between the City Parks Department and the Tucson Unified School District.
8. Support governmental efforts to enhance public safety and health through street, alley, and drainageway maintenance and improvement, and the upgrading of solid waste disposal service. Specific improvements should be coordinated with input from registered neighborhood associations.

SECTION 7: UNIVERSITY OF ARIZONA

Goal: Recognize the importance of the University of Arizona and its immediate environs as a regional activity center (CP Section 2, Policy 5), and support cooperative efforts in the development of this activity center in a manner which protects and enhances University Area neighborhoods.

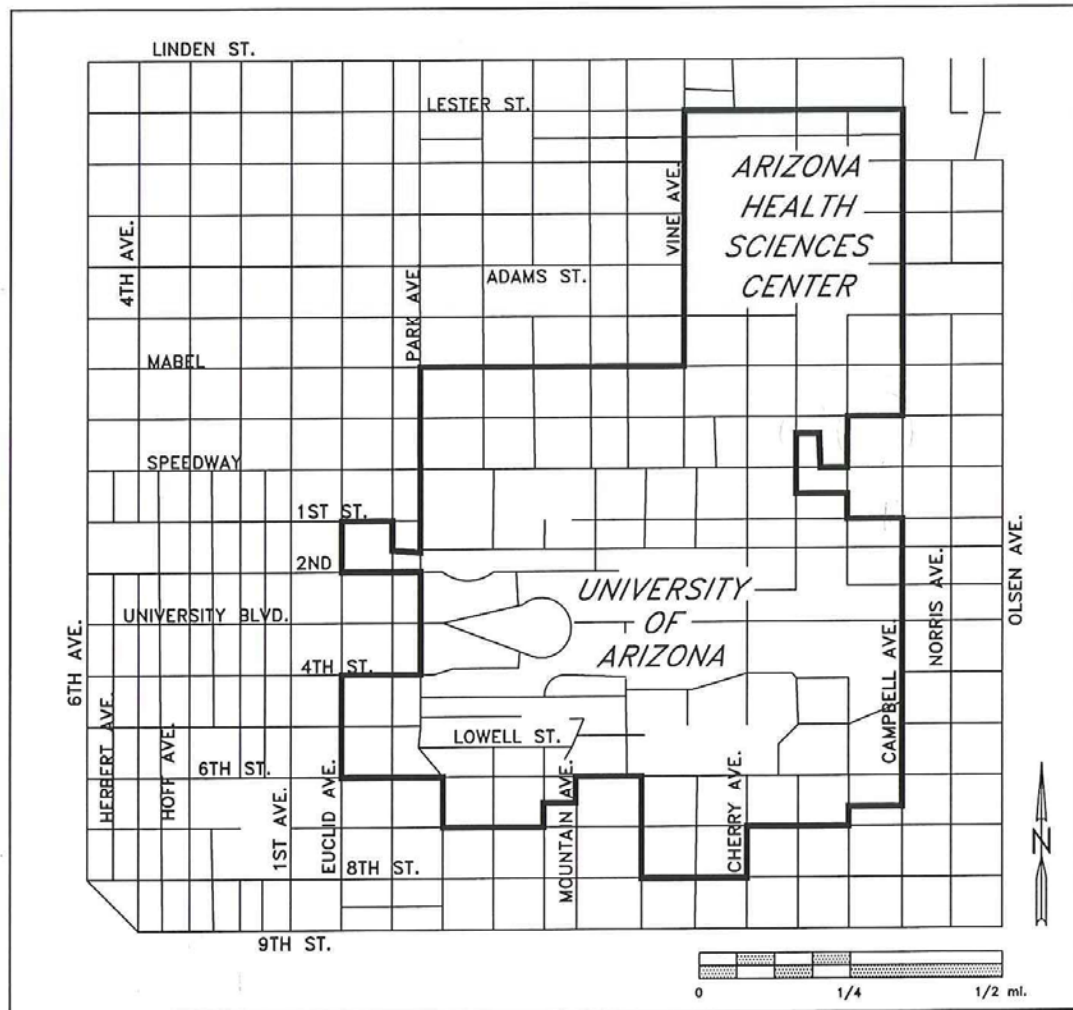
Policies:

1. Encourage the University of Arizona to comply with local plans, guidelines, ordinances, and regulations in the implementation of its projects.
2. Support continued efforts to coordinate adopted City policy with the policies of the University of Arizona *Comprehensive Campus Plan* in the development of streets and other infrastructure serving the campus, and in the development of new land uses at the campus planning area perimeter.
3. Support the implementation of the University's adopted *Comprehensive Campus Plan* policies to mitigate impacts on adjacent neighborhoods through the development of a transition zone or buffer at the campus perimeter (Map 8).
4. Encourage the University to recognize the value and significance of historic and potentially historic properties within the campus planning area (Map 8), and to preserve and enhance such properties wherever feasible in conjunction with new project planning and development.
5. Encourage the University to provide for student housing needs and related services within the boundaries of the campus planning area.
6. Enhance the physical and symbolic linkages between the University of Arizona and Downtown Tucson. For example, support the coordination of activities and linkages between the UA Fine Arts Complex and the Tucson Arts District.
7. Encourage the University to continue to support the development and utilization of alternate modes of transportation through the following means:
 - expansion of Rideshare incentives;
 - expansion of the Sun Tran bus pass program;
 - implementation of further restrictions on parking;
 - provisions for improved bicycle facilities; and
 - implementation of the proposed campus shuttle system.

Note: See the Transportation Policies, (Section 4) for additional University-related transportation guidelines.

University Area Plan

Map 8: U of A Planning



Legend

————— University of Arizona Campus Planning Area

10-11

(December 13, 2011, Resolution 21835, revised Map 8 to show new UA campus planning boundary)

8. Encourage the University to continue to comply with federal, state, and local guidelines ensuring that:
 - 8.1 Noise, fumes, lighting and other negative impacts are not extended off-site;
 - 8.2 Any potentially noxious or hazardous materials, activity, and/or byproducts are separated from the environment in a safe and lawful manner; and
 - 8.3 Adequate pollution control and monitoring, emergency evacuation and containment procedures are established.
9. Encourage the University of Arizona to continue to comply with City and County stormwater detention policies to mitigate the impacts of University development on downstream areas.
10. Encourage the University to provide additional open space areas for groundwater recharge, water harvesting, and stormwater detention.
11. Investigate the establishment of a "greenbelt" system (Figure 1) at the UA campus perimeter to serve as a neighborhood buffer and visual amenity while providing new circulation and recreational opportunities (e.g., bicycle routes, seating and play areas, jogging trails).

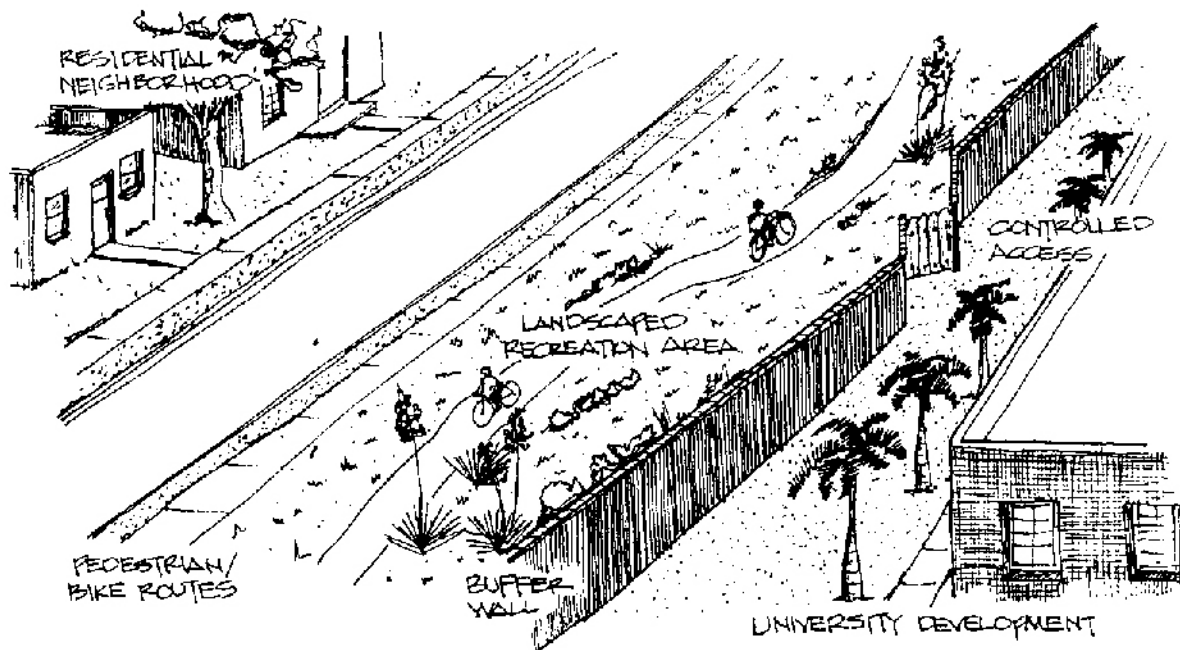


Figure 1: Perimeter greenbelt concept

SECTION 8: GENERAL DESIGN GUIDELINES

1. Complement surrounding development - Utilize compatible building materials, architectural style and ornamentation, setbacks, stepbacks, and variations in building height or mass to complement the scale and character of surrounding development and reduce the appearance of excessive height and bulk (Figure 2).

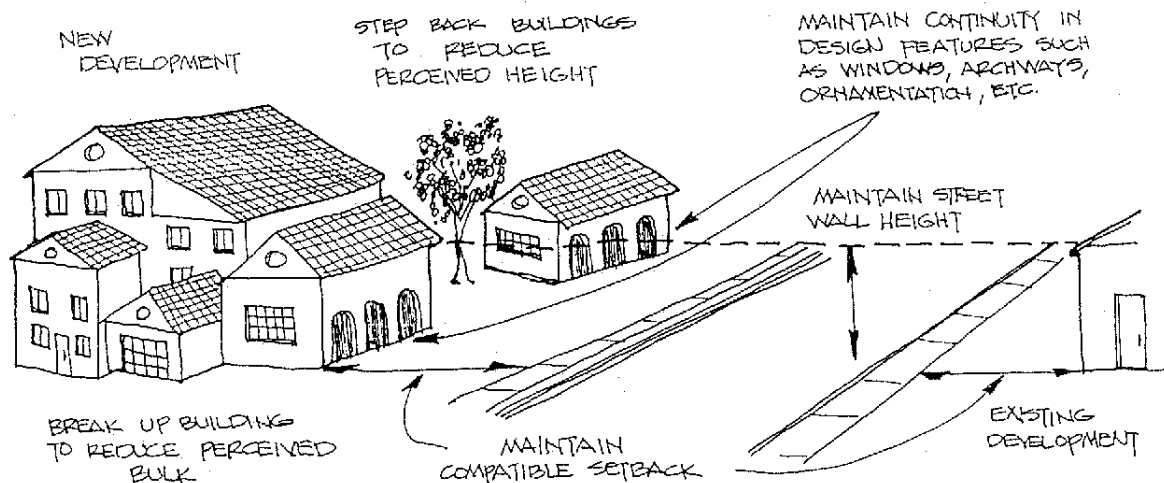


Figure 2: Elements of compatible scale and character

2. Reflect neighborhood character - New development should be carefully designed to reflect and enhance neighborhood identity, streetscape continuity, historic development patterns, neighborhood landmarks, predominant architectural and landscaping themes, and scenic or historic views (Figure 3).

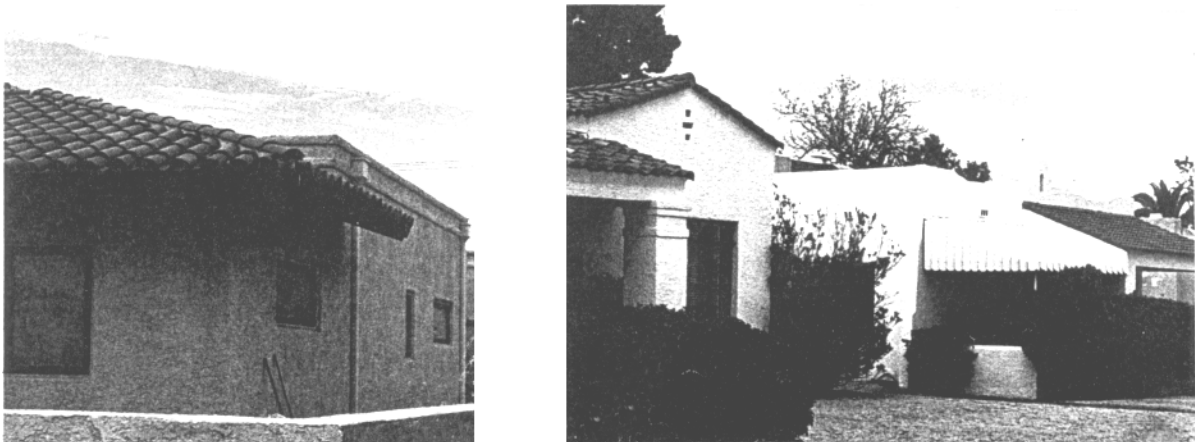


Figure 3: New residential infill development (left) reflects the predominant land use and architectural style of the surrounding neighborhood (right).

3. Buffer adjacent uses - Utilize appropriate screening techniques to mitigate the impacts of new development on adjacent uses. Design and orient drought-tolerant landscaping, masonry walls, earthen berms, outdoor lighting, trash storage areas and other elements to provide an attractive and effective barrier to undesirable access, noise, odor, or views (Figure 4). Limitations on the hours of operation for a commercial use may also be considered.

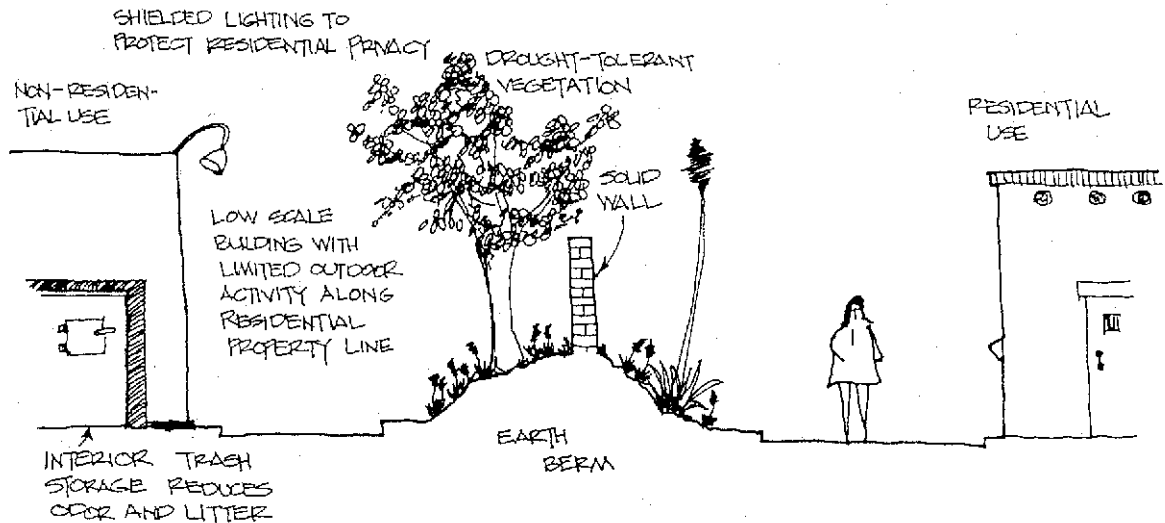


Figure 4: Appropriate buffering techniques

4. Respect historic development - Ensure compatibility between the character and appearance of new development and that of adjacent historic properties (Figure 5). New development should also demonstrate sensitivity to the broader context of a surrounding historic district.

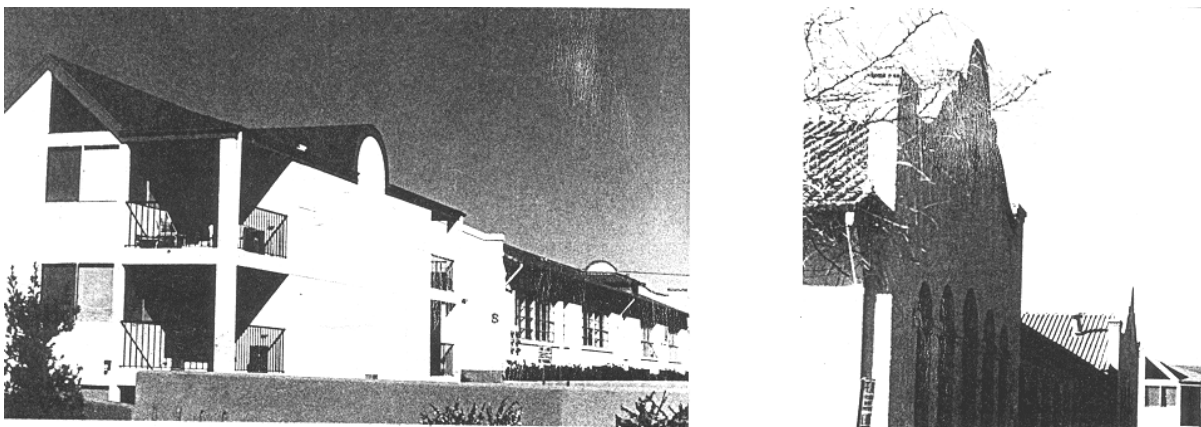


Figure 5: New apartment development (left) was designed to reflect the architectural character of the historic University Heights School (right).

5. Use drought-tolerant landscaping - Encourage the use of drought-tolerant, and low pollen-producing plants in new landscaping projects. Landscaping should be compatible in scale, character, and use pattern with established neighborhood landscape/streetscape themes (see Environment, Policy 3).

Note: The *City of Tucson Development Standards*, Section 9-06.0 contains an updated list of drought-tolerant landscaping plants. Additional copies of this list may be obtained through the Southern Arizona Water Resources Association, at (602)881-3939.

6. Screen private service areas - Outdoor storage and trash collection areas should be screened from view of all adjacent streets and properties, and designed and located to minimize litter and odor. Trash dumpsters should be located within screened enclosures.
7. Preserve residential privacy - Orient buildings, windows and balconies so as to protect the privacy of adjacent residents (Figure 6). Outdoor lighting should be directed away from adjacent residential uses to protect residential privacy, and shielded above the horizon to comply with regional light pollution guidelines.



Figure 6: Windows and balconies oriented to protect residential privacy.

8. Coordinate pathways and linkages - Coordinate private pedestrian walkways and bicycle paths with public pedestrian and bicycle facilities.
9. Employ defensible space concepts - Employ defensible space concepts in the design of new development (see Defensible Space Guidelines, Section 9).

Additional Guidelines for multi-family and nonresidential development:

10. Encourage alternate modes of transportation - Provide a well-defined pedestrian system linked to the public sidewalk system, convenient access to transit facilities, and secure bicycle parking areas. Where appropriate, integrate convenient, comfortable transit facilities into the design of new development.

11. Consolidate adjacent parcels - Wherever possible, consolidate adjacent development parcels in order to provide integrated circulation and access, reduce the number of curb cuts along the street, and enhance screening and buffering between adjacent, noncompatible uses.
12. Coordinate information with architecture - Integrate signs and other information systems into the overall design of new development in an architecturally coordinated and sensitive manner. Building addresses should be clearly visible from the public right-of-way.
13. Provide neighborhood amenities - Wherever possible, incorporate neighborhood amenities such as open space, recreational facilities, and public art in new development and in the redevelopment of existing areas. Such amenities should be developed with input from local neighborhoods.
14. Provide active and interesting development at the street level - Provide "fine-grained" design elements and pedestrian-oriented amenities and services at the street level to enhance streetscape vitality and visual interest. (Figure 7) Large expanses of unbroken wall surface or reflective glass should not occur at the street level.

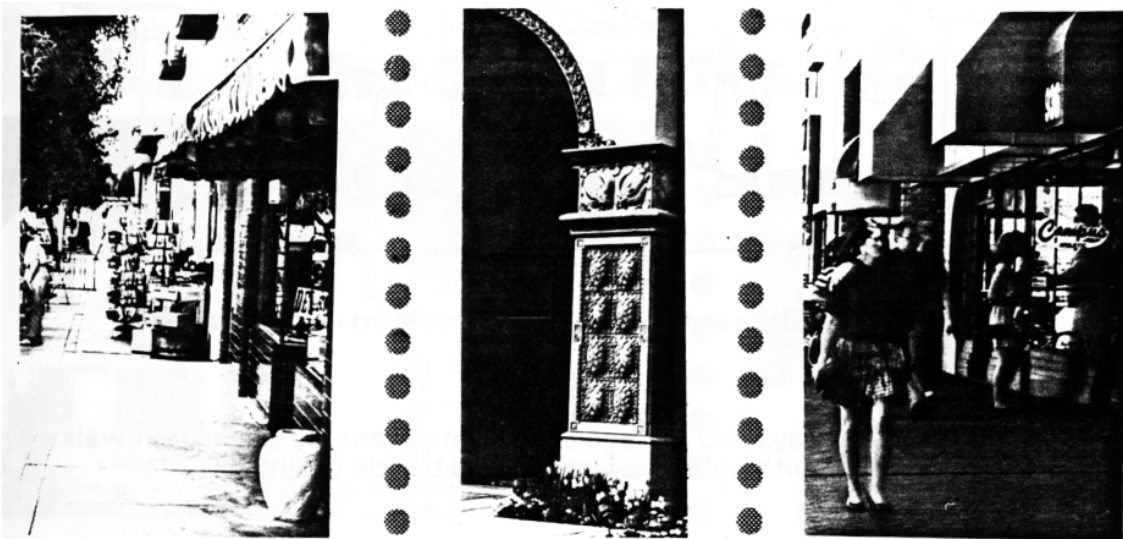


Figure 7: Fine-grained architectural treatment and a concentration of pedestrian-oriented activity at the street level serve to enhance streetscape and neighborhood vitality.

SECTION 9: DEFENSIBLE SPACE GUIDELINES

1. Create Territorial Spaces - Utilize design relationships and materials to establish the territorial limits of development. A combination of physical barriers (walls, fences, gates) and symbolic barriers (changes in surface grade or texture, landscaped areas, steps) can be used to define transition zones between public, semiprivate, and private spaces (Figure 8).

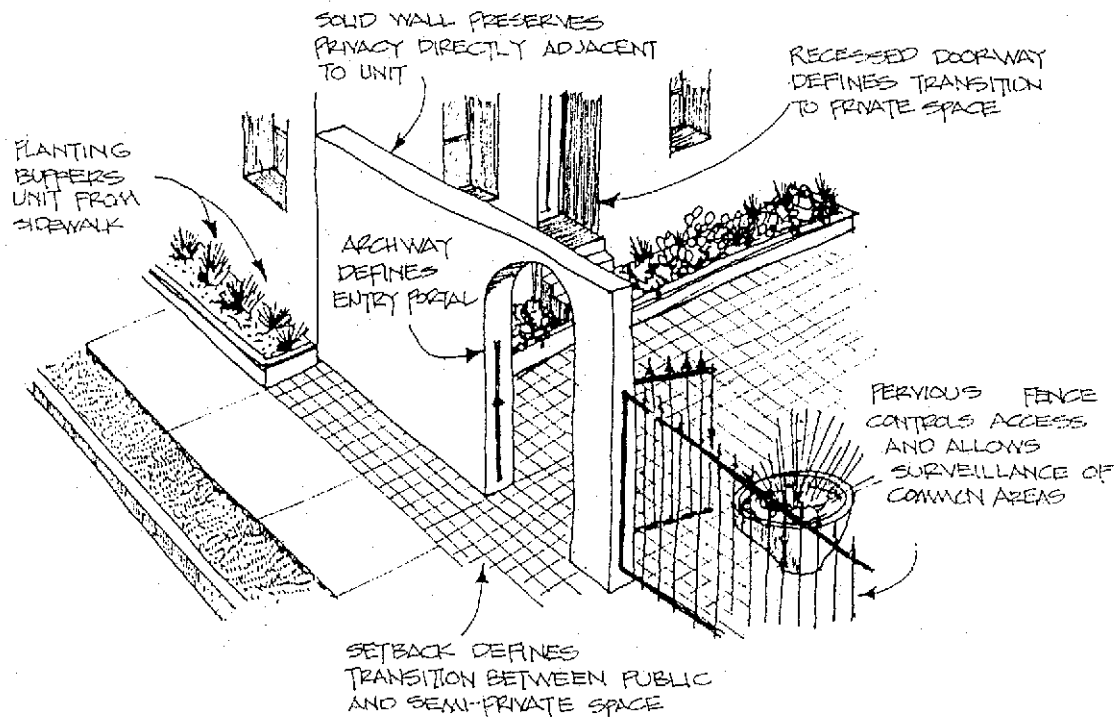


Figure 8: Territorial design methods

2. Provide surveillance opportunities - Design and locate building units, paths, windows, stairwells, landscaping, doors, and elevators to facilitate the visual monitoring of non-private spaces within a development complex (examples: clustered building units, strategically located windows or wall openings, pervious fencing material). Design building corridors and openings to limit opportunities for human intrusion and concealment.
3. Assign open spaces - Use territorial methods and design techniques to "assign" open space areas to a specific group of buildings or units so that strangers entering the space are easily identified and observed by building tenants and residents (Figure 9).
4. Control access - Limit the number of public access points and views into semiprivate spaces, while designing entryways so as to permit the observation of people leaving and entering these "assigned" spaces.

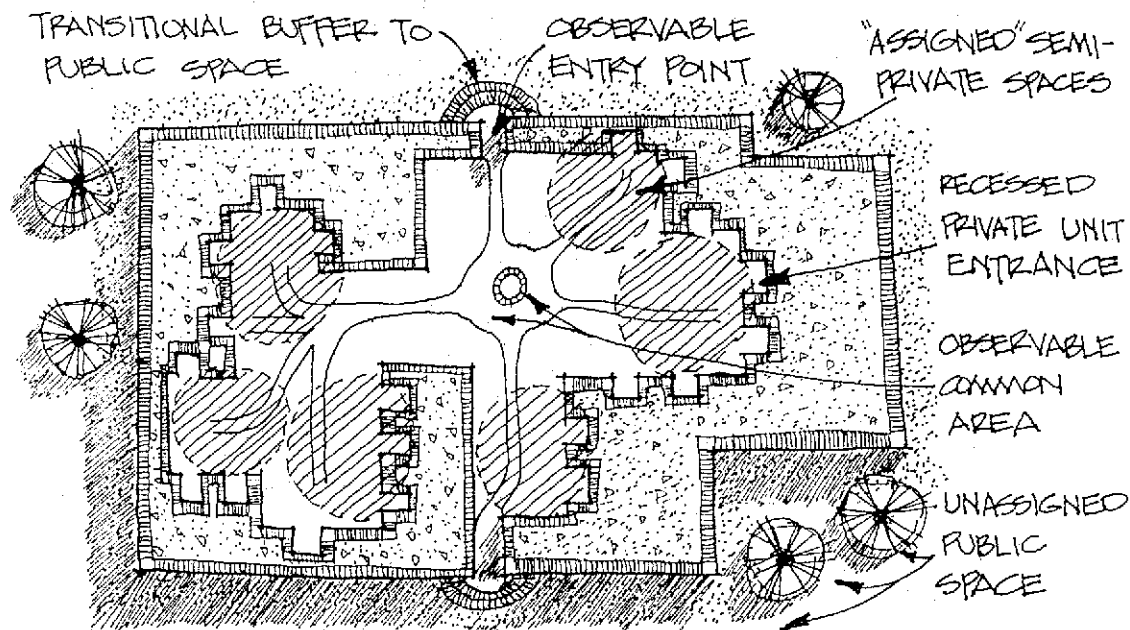


Figure 9: Utilize design techniques to “assign” open space to a specific cluster of units.

5. Design landscaping for safety - Design and maintain landscaping to provide surveillance opportunities. Dense landscaping should not be located directly adjacent to pathways, windows, and doorways. In unassigned public spaces, landscaping should be trimmed to permit the surveillance of human activity in an area approximately 2-8 feet above surface grade.
6. Consider defensive landscaping - Consider the establishment of dense, thorny vegetation (cactus, pyracantha, etc.) beneath windows and around fences to discourage intrusion.
7. Provide adequate lighting - Utilize shielded outdoor lighting to increase night time visibility around doorways, windows, pathways, and landscaped areas. Lighting should be shielded above the horizon to comply with regional light pollution guidelines.
8. Post address numbers - Building address numbers should be clearly visible from the public right-of-way. Address numbers may also be painted on building rooftops to facilitate identification from the police helicopter.
9. Coordinate development with the Tucson Police Department - Encourage contact between developers and the City of Tucson Police Department in the review of development proposals for compliance with Crime Prevention Through Environmental Design (CPTED) principles. The Police Department Community Services Division can be reached by telephone at (602)791-4450.

SECTION 10: DEFINITIONS

Activity Center (Regional): Identified in the City of Tucson *General Plan* as an area where mixed use development is permitted and/or encouraged. The purpose of activity center development is to combine housing, shopping, recreation, and other activities in a compact arrangement which serves to reduce auto dependence, air pollution, and the cost of public service delivery while providing interesting and exciting places in which to live, work, and play.

Alternate Modes of Transportation: Means of transportation other than the private automobile. Alternate modes include buses, bicycles, van pools, shuttle trams, rail systems, and walking. The widespread use of alternate modes can serve to improve air quality and reduce traffic congestion, while also extending the functional capacity of existing public right-of-way.

Arterial Street: Identified in the City of Tucson *Major Streets and Routes Plan* as a street which carries moderate to high volumes of traffic (12,000 or more average daily trips) across the City of Tucson, providing access to regional destinations and connecting to the interstate highway system.

Buffer: The use of design elements such as masonry walls, landscaping, earth berms, building setbacks, and stepbacks to minimize the impacts of more intense development on adjacent, less intense uses.

Campus Planning Area: Defined area (see Map 8) surrounding the main campus of the University of Arizona. The campus planning area is to be developed under the policies of the University's *Comprehensive Campus Plan* over a period of 20-30 years.

Collector Street: Identified in the City of Tucson *Major Streets and Routes Plan* as a street which carries low to moderate volumes of traffic (3,000-12,000 average daily trips) between local neighborhood streets and major arterial streets.

(December 13, 2011, Resolution 21835, deleted definition of Commuter Arterial Street)

Comprehensive Campus Plan (University of Arizona): A physical development guide for the UA campus planning area, including the UA main campus and the Arizona Health Sciences Center. The *Comprehensive Campus Plan* was adopted by the Arizona Board of Regents in 1988. It was revised in 2003, and updated in 2009.

Curb Cut: Depressed portion of a vertical curb which is utilized for vehicular access. The elimination of curb and median cuts along major streets serves to enhance travel efficiency by reducing friction from vehicular ingress/egress.

Density: Number of dwelling units per acre (43,560 square feet)

Low Density - Average density of up to six units per acre. Low density housing consists primarily of single family detached residences, although duplex and townhome units on larger lots may be considered low density.

Medium Density - Average densities of 7-14 units per acre, including a variety of housing types such as single family homes on small lots, duplexes, townhomes, mobile homes, apartments, and condominiums.

High Density - Density of 15 or more units per acre. High density housing generally includes multi-story or densely developed apartments, condominiums, and townhomes.

Defensible Space: Defensible space is a term used to describe a series of physical design characteristics that maximize the control of human behavior, particularly crime, within a residential or nonresidential building complex. Defensible space is designed and organized to define the territorial limits of development and provide opportunities to monitor activity and control movement between public, semiprivate, and private zones of space.

Public Spaces - These are generally "unassigned" spaces which are available for public use on a 24 hour basis. Examples include public parks, perimeter open space, and city sidewalks.

Semiprivate Spaces - These are "assigned" spaces which provide a transition zone between public and private spaces. Examples include common open space, recreation facilities, corridors, and lobbies associated with a private building complex or cluster of buildings.

Private Spaces - These are spaces which are "assigned" to an individual building unit and accessible only at the discretion of the unit occupant. Examples include enclosed private yards, balconies, patios, and unit interiors.

Drought-Tolerant Vegetation: Plants which can survive in an arid environment (e.g., Sonoran Desert) with little or no supplemental watering after becoming established.

* *The General Plan* was originally adopted as the "*Comprehensive Plan*" pursuant to the *Tucson Zoning Code* and, subsequently, the *Tucson Land Use Code*. The term "Comprehensive Plan (CP)" was changed to the "General Plan" by Ordinance 9517, which was adopted by Mayor and Council on February 12, 2001. This change in title does not affect the content of the Plan.

Earth Berm: A mound of earth utilized as a screen to undesirable views and/or noise. Earth berms are often supplemented with vegetation or low walls.

Fine-Grained: Rich in detail, texture, and variety. Fine-grained building design emphasizes diversity, visual interest, and human scale.

Flexible Lot Development (FLD) Option: The FLD provision of the *City of Tucson Land Use Code* provides flexibility in the development of residential projects which include consolidated open space and support community goals such as historic and archaeological preservation, the development of barrier-free or low income housing, and urban infill. The FLD may exceed standard residential densities subject to compliance with a number of specific development criteria, as outlined in Section 3.6.1 of the *Land Use Code*.

(December 13, 2011, Resolution 21835, changed name of ‘Residential Cluster Project’ to ‘Flexible Lot Development Option’, and changed ‘Zoning Code’ to ‘Land Use Code’)

Gateway Route: Identified in the *Major Streets and Routes Plan* as a specially designated route linking major employment centers, shopping areas, recreation areas, and transportation centers, and which is traveled by large numbers of residents and visitors (generally greater than 30,000 average daily trips). Special regulations for Gateway Routes include additional landscaping and screening requirements.

General Plan (City of Tucson): Regional plan and physical development guide for Tucson, adopted by the Mayor and City Council in 1979. The policies of the *General Plan* offer a framework for the development of more specific plans to guide land use, transportation, and housing in the City of Tucson. The General Plan referred to in this document was adopted on August 6, 2001.

(December 13, 2011, Resolution 21835, added last sentence to the definition above)

Historic: Property officially designated at the national, state, or local level as worthy of preservation based on specific criteria outlined for National Register of Historic Places nomination and/or that has been designated in compliance with the City of Tucson's Historic District and Landmark Zone Ordinance.

Natural Wash Area: A drainageway and its immediate surroundings which have not been substantially altered in course or cross section except through natural processes. In the University Area sections of natural wash areas may include mature nonnative vegetation and minor man-made improvements.

Neighborhood Commercial Service: Business which provides goods and/or services oriented to local neighborhood residents. Examples include small grocery markets, cafes, and specialty retail stores.

Pedestrian District: Concentrated area of mixed-use development in which pedestrian-oriented activities are facilitated and encouraged, while auto circulation and parking is generally restricted. (see Map 4)

(December 13, 2011, Resolution 21835, changed 'Pedestrian Commercial District' to 'Pedestrian District' and modified definition)

Regional Activity Center: (see Activity Center)

Roadway Development Policies: The City of Tucson's official guidelines for the development of major street improvements, adopted by the Mayor and Council in 1986 and administered through the City of Tucson Department of Transportation.

Scale: Size, height, shape, and setback in comparison to adjacent buildings, architectural elements, landscaping, and human form.

Street Level: Elevation of a building or space which abuts the street and serves the users of the street and sidewalk (generally 0-10 feet above sidewalk grade).

Streetscape: A combination of distinct physical elements and land use characteristics which define and characterize a contiguous segment of street frontage. Streetscape elements may include buildings, landscaping, lighting, benches, and the types of activities which occur in and along the street.

Streetwall: Average height and setback of a segment of buildings which abut the street, particularly where a group of adjacent buildings are similar in scale.

Territorial Space: Property belonging to or associated with a specific individual or group of individuals by virtue of grade change, access control, visual separation, and other design techniques which provide distinct definition to public, semi-public, or private spaces.

Transit: Mass transportation such as buses, shuttle trams, trolleys, and light rail systems.

Unbroken Wall Surface: Vertical building surface devoid of ornamentation, variation, or decoration. Particularly undesirable at the street level, as a monotonous visual impression can be created. Street level building surfaces may include windows and voids which permit views of interior spaces or activities, surface ornamentation, information, and/or artwork.

University Area: 5.17 square mile area within the City of Tucson bounded by Stone Avenue on the west, Toole Avenue on the southwest, Broadway on the south, Country Club Road on the east, and Grant Road on the north. Property controlled by the University of Arizona, while located within the boundaries of the University Area, does not fall under the jurisdiction of the City of Tucson's *University Area Plan*.

University Area Plan: Land use plan adopted by the Mayor and City Council to guide future development within the defined boundaries of the University Area, excluding property owned and controlled by the University of Arizona.

University of Arizona Comprehensive Campus Plan: (see *Comprehensive Campus Plan*)

West University Transition Area: The area bounded by Speedway Boulevard on the north, Park Avenue on the east, Sixth Street on the south, and Euclid Avenue on the west.

(December 13, 2011, Resolution 21835, added definition of West University Transition Area, and deleted University Area Public Agency Resource Directory)

WEST UNIVERSITY NEIGHBORHOOD PLAN

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WEST UNIVERSITY NEIGHBORHOOD PLAN

Prepared by West University Neighborhood Association
November 1981

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Map 5 – Land Use Map

APPENDIX

WUNP – Amendment History

(December 13, 2011, Resolution #21836, added Table of Contents, Transition Area Policy 2, and Appendix)

Formal Action

Mayor and Council:

February 1, 1982 - Resolution 11733 (Adoption)
March 24, 1986 - Resolution 13561 (Amendment)
October 12, 1987 - Resolution 14220 (Amendment)
August 1, 1988 - Resolution 14564 (Update)
November 28, 1988 - Resolution 14706 (Amendment)
February 11, 1991 - Resolution 15586 (Amendment)
September 14, 1992 - Resolution 16107 (Amendment)
June 28, 1993 - Resolution 16335 (Amendment)
April 14, 1997 - Resolution 17608 (Amendment)
April 12, 1999 – Resolution 18264 (Amendment)
January 12, 2004 – Resolution 19760 (Amendment)
December 7, 2009 – Resolution 21449 (Amendment)
December 13, 2011 – Resolution 21836 (Amendment)

Hearings:

Mayor and Council

February 1, 1982
March 24, 1986
October 12, 1987
August 1, 1988
November 28, 1988
February 11, 1991
September 14, 1992
June 28, 1993
April 14, 1997
April 12, 1999
January 12, 2004
December 7, 2009
December 13, 2011

Citizens Advisory Planning Committee*

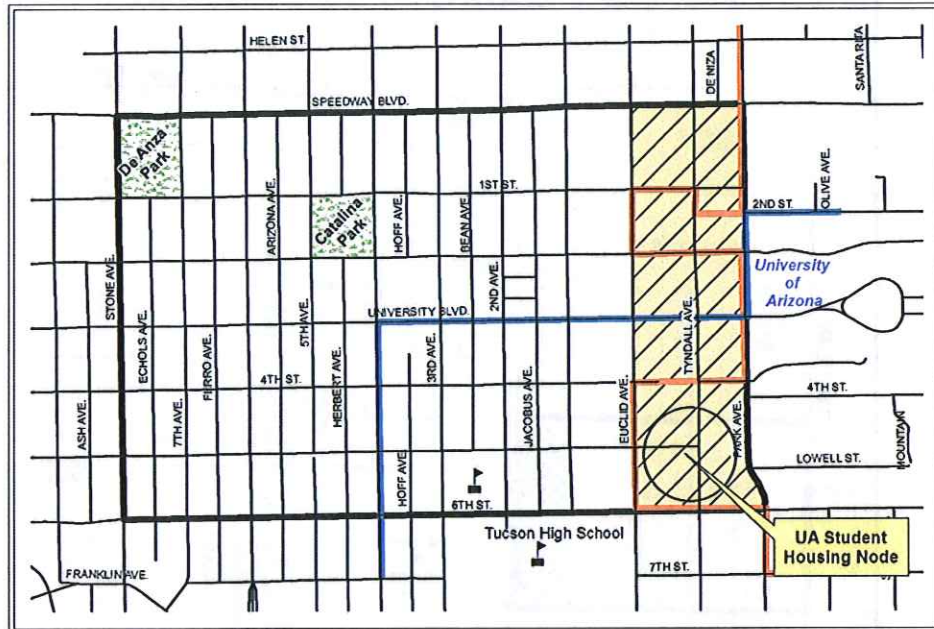
December 1 & 2, 1981
March 5, 1986
September 2, 1987
July 6, 1988
November 2, 1988
January 16, 1991
August 5, 1992
April 7, 1993
March 5, 1997 (Planning Commission)
March 3, 1999 (Planning Commission)
December 3, 2003 (Planning Commission)
October 7, 2009 (Planning Commission)
November 2, 2011 (Planning Commission)

* The name of the Citizens Advisory Planning Committee was changed to the Planning Commission in 1995.

Profile/Related Plans

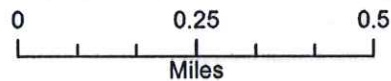
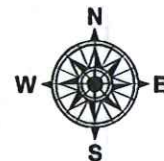
The *West University Neighborhood Plan* area is bounded by Speedway Boulevard on the north, Park Avenue on the east, Sixth Street on the south, and Stone Avenue on the west (see Map 1). It encompasses a 60-block area located approximately six blocks north of the Downtown Tucson area and immediately west of the University of Arizona (UA), and includes the northern portion of the Fourth Avenue commercial district. The West University plan area is approximately 0.36 square miles, and it is wholly located within the *University Area Plan* area (Adopted in 1989, see Map 2).

WEST UNIVERSITY NEIGHBORHOOD PLAN AREA MAP 1



Legend

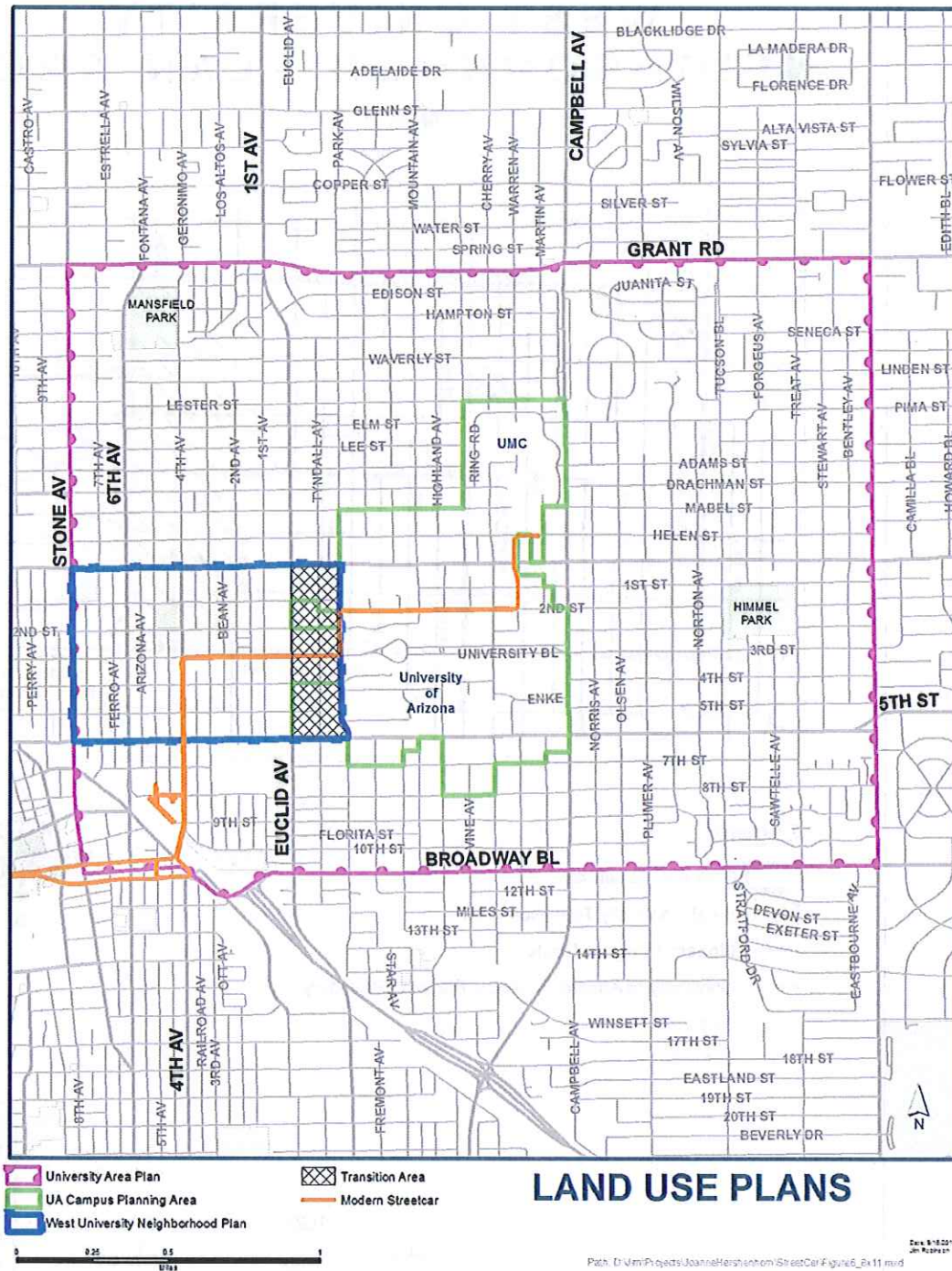
-  Plan Area Boundary
-  West University Transition Area
-  Modern Streetcar Route
-  University of Arizona Campus Planning Boundary
-  Parks
-  Schools



JPN 1021/11

(December 13, 2011, Resolution #21836, updated Map 1)

MAP 2



(December 13, 2011, Resolution #21836, added Map 2)

The policies of the *West University Neighborhood Plan*, the *University Area Plan* and the City of Tucson's *General Plan** provide guidance for proposed land use changes in the West University Neighborhood. If there are policy contradictions, the West University Neighborhood Plan will be controlling where it provides the most specific direction.

Plan History

University District Plan, 1970. Prior to the adoption of the *West University Neighborhood Plan* in 1982, the *1970 University District Plan* was used to guide land use planning in the West University area. The *University District Plan* assumed the UA would expand westward, and envisioned high-density apartments for UA students, and a mix of land uses across much of the neighborhood. Neighbors were concerned this plan would lead to the razing of many historic homes, and change the character of their neighborhood. To have a more active voice in neighborhood matters, they formed the West University Neighborhood Association (WUNA) in 1978, and began working toward achieving historic district status for the neighborhood.

At WUNA's urging, the *University District Plan* was revised in 1980. By then, the UA had limited its planned westward expansion to the area between Park and Euclid (i.e., the Transition Area), and the revised *University District Plan* reflected this. The *1980 Plan* also emphasized preserving historic residential development. In 1980, WUNA's efforts led to most of the West University Neighborhood achieving National Historic District status. WUNA was also working to achieve listing as a local City of Tucson Historic District (i.e., the local Historic Preservation Zone or HPZ), which occurred in 1984.

West University Neighborhood Plan, 1982. WUNA also worked with city staff to draw up a new land use plan for the neighborhood. This led to the adoption, in 1982, of the *West University Neighborhood Plan*, which replaced the *1980 University District Plan* as the land use planning document for the West University Neighborhood. The focus of the new *Plan* was to preserve and enhance the historic residential character of the neighborhood. This plan established a residential density cap of 40 units per acre in certain locations.

In the few years after the adoption of the *1982 Plan*, there were several rezoning requests throughout the neighborhood, to allow residential structures to be converted to office and commercial uses. Redevelopment to higher intensity land uses was also getting underway in the Transition Area between Park and Euclid Avenues. At WUNA's request, the *West University Neighborhood Plan* was updated in 1988.

* The *General Plan* was originally adopted as the "*Comprehensive Plan*" pursuant to the Tucson *Zoning Code* and, subsequently, the Tucson *Land Use Code*. The term "*Comprehensive Plan (CP)*" was changed to the "*General Plan*" by Ordinance 9517, which was adopted by Mayor and Council on February 12, 2001. This change in title does not affect the content of the Plan.

West University Neighborhood Plan, 1988 Update. The 1988 update maintained most of the policies in the 1982 *Plan*. Policies were added and/or revised to further restrict the conversion of residential structures to non-residential uses, limit building height throughout the neighborhood, and guide redevelopment in the Transition Area (between Speedway Boulevard and Sixth Street, and Park and Euclid Avenues). It was during this update that the 40-foot building height restriction in the Transition Area was added.

West University Neighborhood Plan, 2011 Amendment. Since the late 1980s, the Transition Area has been evolving into a higher-intensity mixed-use activity node, consistent with what would be expected next to a major university. A UA student housing node is near the southern end of the Transition Area, and the Main Gate commercial development is in the center of the Transition Area. Continued, higher-intensity infill development is expected, especially north of Main Gate and south of Speedway Boulevard.

In early 2010, the Mayor and Council directed staff to analyze policy issues and recommend changes that would facilitate infill development in the Downtown and University areas. Staff had long identified the 40-foot building height restriction and the density cap of 40 units per acre in the Transition Area as problematic relative to urban intensity infill. The 2011 amendment removed the 40-foot building height restriction and the 40 units per acre density cap, and added a new policy section and design guidelines to guide the development of appropriate, mixed-use, pedestrian and transit-oriented urban infill in the Transition Area.

(December 13, 2011, Resolution #21836, added new section on Plan History)

Purpose

The goals of this plan are to

- Preserve and enhance the historic, residential character of the established neighborhood west of Euclid Avenue;

(December 13, 2011, Resolution #21836, added “historic” and “west of Euclid Avenue” to the above)

- Recognize the potential for land use changes associated with the planned implementation of the modern streetcar; and
- Promote transit-oriented infill development in the Transition Area (between Park and Euclid Avenues, and Speedway Boulevard and Sixth Street).

(December 13, 2011, Resolution #21836, added the second and third goals)

Adopted Policies and Recommendations

POLICY 1 - NEIGHBORHOOD CONSERVATION: Protect the residential character of the established neighborhood west of Euclid Avenue.

(December 13, 2011, Resolution #21836, added "west of Euclid Avenue" to the above)

Action Needed

- A. Utilize *Tucson's Historic District Ordinance* to protect the historic character of the West University Neighborhood.
- B. Preserve sound housing throughout the West University Neighborhood while implementing programs to improve deteriorated housing.
 - 1. Establish a housing rehabilitation cooperative in the West University Neighborhood that will sponsor and implement a series of self-help programs for neighborhood property owners and residents to minimize building rehabilitation costs.
 - 2. Encourage the use of currently available and future Federal, State and local housing rehabilitation and historic preservation programs by neighborhood residents (e.g., local emergency rehabilitation and weatherization programs).
 - 3. Aid and encourage owners and residents to improve and maintain their properties and contribute to an improved appearance for the neighborhood.
 - 4. Encourage owners of alley houses to upgrade the structures to make them an attractive part of the neighborhood.
 - 5. Except in the Transition Area, encourage voluntary downzonings throughout the neighborhood in areas where:

(December 13, 2011, Resolution #21836, added "Except in the Transition Area" to the above)

- a) Existing land use is inconsistent with present zoning;
- b) The stability and integrity of the neighborhood is threatened;
- c) Present zoning is inconsistent with the land uses specified on the Land Use Map, particularly in those areas designated "Maintain and Infill Low Density Residential and Related Services."

(December 13, 2011, Resolution #21836, changed name of Development Concept Map to Land Use Map)

Groupings of downzonings are encouraged in order to maximize their impact and assure efficient processing.

6. Discourage rezonings to nonresidential use or more intensive residential use in the areas designated as "low density residential" on the Land Use Map, except as provided for in Policy 4.A.1., which supports the conversion of residential structures to office uses along major streets, subject to certain criteria.

(December 13, 2011, Resolution #21836, changed Policy 3.A.1 to Policy 4.A.1, and added description of Policy 4.A.1 to the above)

7. Limit building heights west of Euclid Avenue to that allowed by zoning on August 1, 1988.

(December 13, 2011, Resolution #21836, deleted policies 1.B.7. – 9. Maintained Policy 1.B.10, renumbered it to Policy 1.B.7., and modified allowable building heights in the Transition Area – see Transition Area policy section)

- C. Develop and implement programs that will contribute to an increase in homeownership within the West University Neighborhood to promote neighborhood stability and reinvestment.
 1. Support the conversion of existing rental housing units to fee simple owner-occupancy, cooperative and condominium forms of ownership.
 2. Maintain and infill low density (1-15 units per acre) housing in appropriate locations as shown on the Land Use Map.
- D. Maintain the economic and ethnic diversity historically present in the West University Neighborhood.
 1. Provide a full range of recreational, educational and community service facilities to fulfill the needs of neighborhood residents.
 2. Support the continued presence of community-based organizations offering community service and recreational facilities.
 3. Support the continued presence of Roskrige Elementary School.
 4. Encourage the development of an agreement between the City of Tucson Parks Department and Tucson Unified School District #1 to provide community recreational facilities and programs at Roskrige Elementary School.

- E. Improve the appearance and quality of the landscape within the West University Neighborhood consistent with the area's historic character.
1. Improve, as economically feasible, the condition of the residential landscape.
 2. Encourage the selection and installation of plant materials that were historically used or are of similar appearance and scale of historically utilized plants to the neighborhood.
 3. Encourage the selection and installation of plant materials that will not require excessive water or maintenance, especially when located in the public right-of-way.

POLICY 2 - TRANSITION AREA

The Transition Area is subject to the following policies and design guidelines. If there is a conflict between this section's policies and another part of the neighborhood plan, this section shall take precedent.

The Transition Area includes Areas 1, 2, and 3, as shown on Map 3. Areas 1 and 2 consist mostly of privately-owned property, while Area 3 consists mostly of property owned by the Arizona Board of Regents (ABOR). It is encouraged that the ABOR properties be developed consistent with the transit-oriented development (TOD) policies and design guidelines in this plan. Land uses encouraged in Areas 1, 2, and 3 are indicated in Policy A below. Maximum allowable building heights are indicated in Policy B below.

POLICIES

A. Land Use

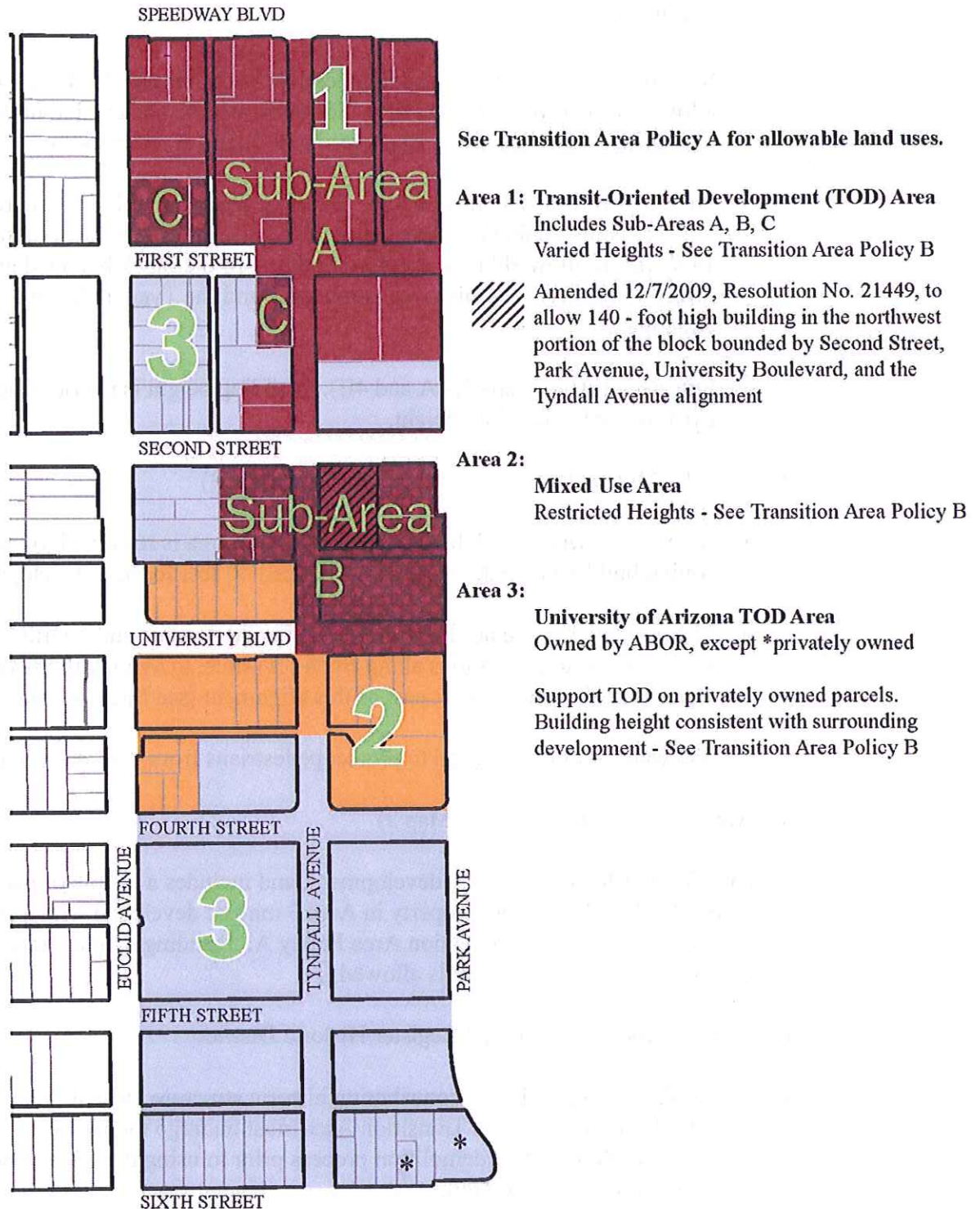
1. The following uses are considered supportive of TOD and are encouraged in Areas 1, 2, and 3. In addition, a use not listed below may be allowed if the Planning and Development Services Director makes a finding that the subject use is of the same intensity as the uses listed below.

Administrative and Professional Offices
Alcoholic Beverage Services, including micro-breweries
Civic Assembly
Cultural Uses
Day Care - Child Care
Educational Uses
Educational Use-Post-Secondary
Entertainment Uses, including theaters
Financial Services
Food and Beverage Sales
General Merchandise Sales
Instructional School
Lodging
Medical Services – Outpatient
Mixed Use (a combination of residential and other uses in this list)
Parking
Personal Services
Residential, Attached
Residential, Multi-Family
Travelers' Accommodation

2. Allowable Special Transit-Oriented Development (TOD) Uses

Drive-thrus may be allowed as an accessory use and shall be designed so as not to interfere with pedestrian circulation.

MAP 3 TRANSITION AREA LAND USE DESIGNATIONS



B. Building Height

1. Area 1 – Transit-oriented Development (TOD) Area

Area 1 has three Sub-Areas, A, B and C (see Map 3). Allowable building heights are as follows:

- a. Sub-Area A: A variety of building heights, not to exceed 14 stories, is allowed, as per Maps 4A and 4B. Sidewalks will be designed to protect pedestrians from Speedway Boulevard and Euclid Avenue traffic.
- b. Sub-Area B (Maps 3, 4A and 4B): Building heights in this area are restricted to the existing zoning building height; except a building height not to exceed 14 stories is allowed in the northwest portion of the block bounded by 2nd Street, Park Avenue, University Boulevard, and the Tyndall Avenue alignment.
- c. Sub-Area C (see Maps 3, 4A and 4B): Building height is restricted to the existing zoning building height.

2. Area 2 – Mixed Uses, Restricted Heights (see Map 3)

- a. Unless otherwise noted, building height in this area is restricted to the existing zoning building height, and shall not exceed 40 feet for new development.
- b. The properties at the northeast corner of Euclid Avenue and Fourth Street may be developed to four stories along Euclid Avenue, to align with the Geronimo Hotel, and six stories to the east of this alignment (see Maps 4A and 4B).
- c. Sidewalks will be designed to protect pedestrians from Euclid Avenue traffic.

3. Area 3 – UA TOD Area (see Map 3)

Area 3 consists mostly of UA development, and includes a couple of parcels not owned by ABOR. Private property in Area 3 may be developed with TOD-supportive uses, as per Transition Area Policy A. Building height consistent with the surrounding development is allowed.

C. Demolition Proposals, National Register Historic District

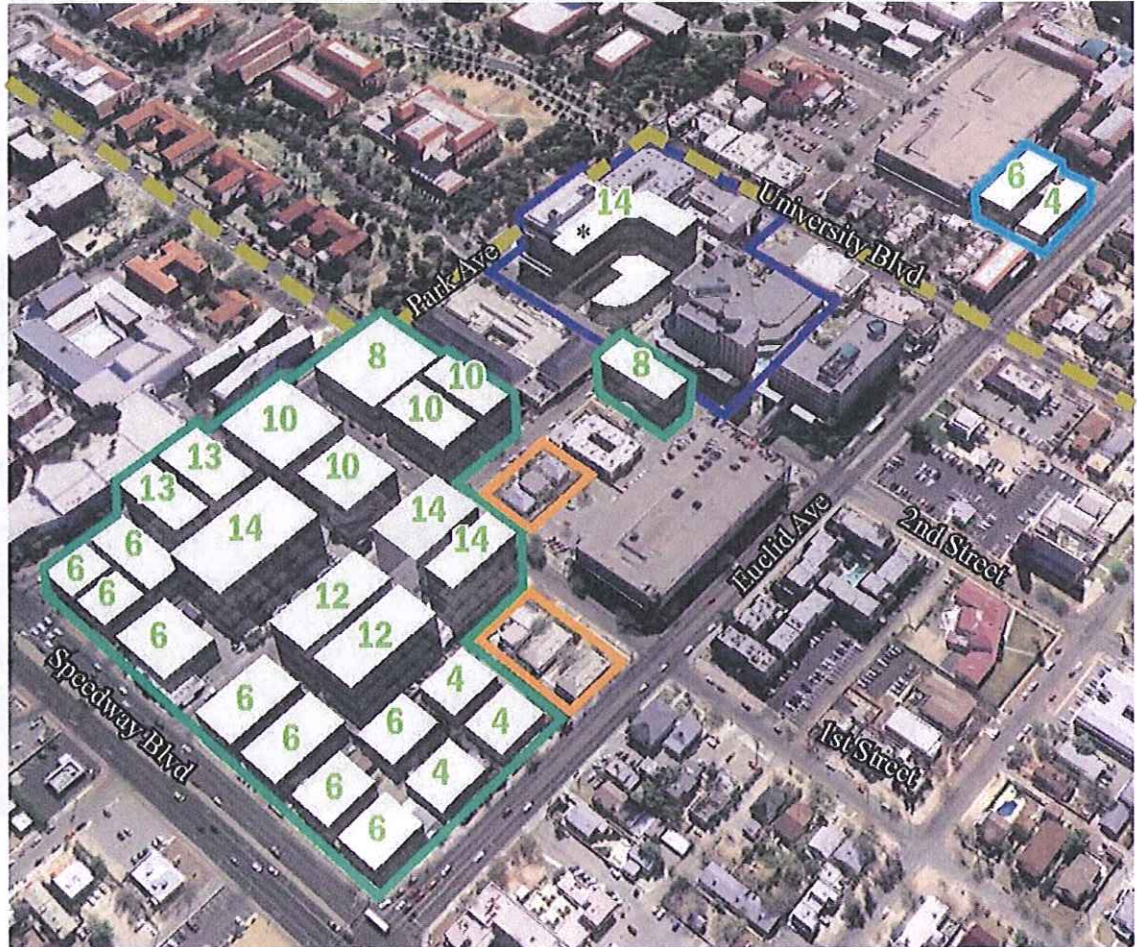
- 1. A demolition proposal for a contributing historic structure located in the National Register District within the Transition Area must undergo the Historic Preservation Zone (HPZ) demolition process prior to using the Urban Overlay District (UOD) zoning option.








MAP 4A BUILDING and MASSING

View from Speedway/Euclid, looking southeast

Numbers refer to stories. Massing boundaries are approximate.

*2009 Plan Amendment, 140' building height allowed.



	Modern Street Car Line
	Area 1
	Sub Area A
	Sub Area B
	Sub Area C
	Area 2
	NE Corner of Euclid Ave and 4th Street


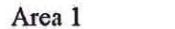





MAP 4B BUILDING and MASSING

View from University/Euclid, looking northeast

Numbers refer to stories. Massing boundaries are approximate.

*2009 Plan Amendment, 140' building height allowed.



	Modern Street Car Line
	Area 1
	Sub Area A
	Sub Area B
	Sub Area C
	Area 2
	NE Corner of Euclid Ave and 4th Street

TRANSIT-ORIENTED DESIGN GUIDELINES

The following design guidelines apply to the Transition Area:

1. Overall Design Guideline - Development in the Transition Area shall be focused on creating an urban neighborhood with residential and non-residential uses, and a multi-modal emphasis that is comfortable for pedestrians.
2. Streetscape Design - In developing a streetscape for a new development, the following design features apply:

Sidewalks

Sidewalks should be designed to be consistent with adjoining properties, and wide enough to comfortably accommodate pedestrian traffic. Further, they should include space for street features like outdoor seating for restaurants and cafes, merchandise display, vegetation, and street lights. Sidewalks will be designed to protect pedestrians from arterial traffic.

Building Height Transitions

Buildings along Speedway Boulevard and Euclid Avenue should be designed to step back building height away from the arterial streets.

Permeability

First floors of buildings should have a significant portion of the façade area with windows that highlight visible activity within and outside the building.

Entrances

Front doors should be visible or identifiable from the street and spaced to accommodate pedestrians.

Setbacks

Building should be designed to be adjacent to the sidewalk. Parking areas should be either within a parking structure or at the side or rear of the building.

Shade

Walking, waiting, and seating areas should be designed to assure that pedestrians are provided a shade option by trees or artificial shading devices, such as covered walkways, awnings, balconies, and overhangs. Shaded patios, courtyards, and covered walkways contribute to a pedestrian environment, add architectural value, and create areas for passive and active recreation.

Landscaping

Vegetation should be encouraged around development to provide shade and ground cover so as to present a cool respite from the extremes of Tucson weather. The vegetation should be drought tolerant and planted using best practices of urban landscaping design. Vegetation should be strategically located to reduce solar heat gain and create shade.

Street Corners

Street corners offer an opportunity to create open space, public gathering places, and neighborhood entry features. Buildings at street corners have a high level of visibility. The height, massing and accent materials of buildings at corners should be encouraged to display interesting architectural features, and create shade areas and public gathering spaces. Uses such as cafes and restaurants, when safely designed, should be located nearby to activate the area.

Open Space

New development is encouraged to have ample open space features such as esplanades, courtyards, plazas and similar features to create public gathering spaces. Pedestrian activities should be considered in the design and planning of ground floor spaces so there is easy passage to the nearby public spaces. It is important that the plazas, parks and similar open space areas provide ample shade structures and tree canopies. Open space areas should be designed as a ratio of the lot size, and have a public function.

3. Architectural Design

Scale, Proportion, and Massing

A building's scale, proportion and massing should create a comfortable and well-detailed urban environment by establishing a broad variety of buildings, heights, architectural form and detail. Scale, proportion, and massing should also establish architectural patterns or features that relate to adjacent developments. Large areas of undifferentiated or blank building façades or out-of-scale buildings should be avoided. Varying proportions are encouraged. The building design and street level architectural details should reinforce active streetscapes and be of visual interest to pedestrians.

Solar Heat Gain

Landscaping and shade are especially encouraged on the south and west sides of new development. Heat build-up should be minimized, especially in pedestrian areas. Energy consumption should be designed to be efficient within the development. Paved surfaces should be minimized on the south and west sides of buildings where vegetated ground cover, permeable surfaces and trees are encouraged. Roofs should be designed to include vegetation and/or highly reflective materials.

4. Parking Design - Most parking should be within a parking structure. Parking structures should be designed to activate the street level by incorporating ground floor retail/commercial uses, and have visually appealing facades. Large areas of surface parking should be discouraged, as they create an uninviting pedestrian zone. Individual parking plans are encouraged for each development. The City or other property owners may need to consider a public parking structure if the need for one is identified. All new development must include adequate bicycle parking.

5. Loading and Service Areas Design - Loading and service areas should be located away from pedestrian areas, and visually minimized. Service driveways should be at the rear or side of development, or located within a parking structure. They should be screened with landscaping or other architectural screening elements. Temporary loading zones may be located on rear or side streets and used during off-peak hours.
6. Access Management - Existing and new sidewalks should be maintained to be readily accessible and easily connected to adjoining properties. Where driveways are necessary, they should be designed to have the least interference with pedestrian areas.
7. Special Streetscape Design Scenarios
 - a. *Speedway Boulevard and Park Avenue Buffering*

Development along Speedway Boulevard and Park Avenue should be designed to assure pedestrian comfort and safety, by incorporating wider street setbacks along Speedway Boulevard and maintaining existing sidewalk widths (at least 10 feet) on Park Avenue. Bollards, trees and similar features should be used to increase pedestrian safety, especially along Speedway Boulevard. Wider sidewalks should also be considered, to allow pedestrian passage and safety.
 - b. *Southeast Corner of Speedway Boulevard and Euclid Avenue*

Development along this corner should be designed to be historically compatible with the adjacent neighborhood to the west.
 - c. *Northeast corner of Euclid Avenue and Fourth Street Buffering*

Development along Euclid Avenue should be designed to assure pedestrian comfort and safety. Bollards, trees and similar features should be used to increase pedestrian safety. Wider sidewalks should also be considered, to allow pedestrian passage and safety.

(December 13, 2011, Resolution #21836, added new Transition Area policy section – Policy 2)

POLICY 3 - NEW RESIDENTIAL DEVELOPMENT (Outside of the Transition Area)

(December 13, 2011, Resolution #21836, Policy 2 was renumbered to Policy 3, and added "Outside of the Transition Area")

As living in the inner city becomes more attractive and more in demand, incentives are needed to encourage construction of residential units that maintain the vitality of neighborhoods and their schools. This policy applies to new residential development outside of the Transition Area.

(December 13, 2011, Resolution #21836, added the last sentence to the paragraph above)

Action Needed

- A. Encourage the construction of new compatible residential development within the West University Neighborhood.
 - 1. Encourage the development of sensitively designed housing units on scattered lots (infill construction) throughout the West University Neighborhood.
 - 2. Stimulate the construction of sensitively designed, moderate density housing and explore the potential for mixed use residential/commercial development at appropriate locations as shown on the Land Use Map. Except in the Transition Area, moderate residential densities of 15-40 units per acre are appropriate.

(December 13, 2011, Resolution # 21836, added "except in the Transition Area"; renumbered Policy 2.A.2.a. to Policy 3.A.2., and deleted Policies 2.A.2.b. and c. Policy 2.A.2.b. related to an October 12, 1987 amendment for the block bounded by 2nd Street, Tyndall Ave., University Blvd. and Euclid Ave., which was subsequently developed as part of Main Gate Square (Resolution # 14220). Policy 2.A.2.c. related to a January 12, 2004 amendment (Resolution # 19760) at the southwest corner of Park Avenue and First Street, which was superseded by the Transition Area Policies).

- B. Ensure that new residential developments of significant size incorporate general recreational amenities and landscape areas as part of their overall development programs.
- C. Ensure that new residential developments provide adequate off-street parking. This is especially important in areas of the neighborhood where existing houses do not have off-street parking.
- D. Encourage that underutilized alleys either be vacated and returned to adjacent property owners, developed for other public purposes (e.g., recreational facilities), developed as off-street parking areas, or sold to private developers.

POLICY 4 - COMMERCIAL AND OFFICE DEVELOPMENT (Outside of the Transition Area)

(December 13, 2011, Resolution #21836, Policy 3 was renumbered to Policy 4, and added "Outside of the Transition Area")

Commercial and office activities serve the needs of the neighborhood, the community and the region. Therefore, the adequacy and appropriateness of office or commercially zoned land should be evaluated and zoning adjustment made when necessary. This policy applies to new commercial and office development outside of the Transition Area.

(December 13, 2011, Resolution #21836, added the last sentence to the paragraph above)

Action Needed

A. Ensure that conversion of residential structures to nonresidential uses is minimized to protect the integrity of residential areas.

1. Closely review all zoning requests for conversion within the neighborhood to ensure they comply with the following criteria:

Consider conversion of residential uses to office uses along major streets in the "Low Density and Related Services" areas, only when all of the following criteria apply:

(March 24, 1986, Resolution #13561, WUNP Commercial Development Policy 4.A.1)

(December 13, 2011, Resolution #21836, renumbered Policy 3.A.1 in amendment reference above to 4.A.1)

- a. the adjacent uses and zoning are also office or commercial.
- b. access can be provided from the front or side of the property
- c. parking and maneuvering requirements can be met on-site.
- d. the parcel is not suitable for residential purposes.

When a rezoning application is for adaptive reuse, the stability of the property for residential purposes shall be determined by the governing body on a case by case basis.

2. Consider the partial conversion of residential uses to residentially scaled office uses in the "Low Density and Related Services" areas when in conformance with the following criteria:

- a. The property is of suitable size and configuration such that the residential and office component use can operate compatibly on-site. This will be accomplished by maintaining the existing residential portion of the site.
- b. The scale of the office use, considering its size and intensity, will not create traffic, parking, or other negative impacts which would adversely affect the character of the area.
- c. The residential and office component use meets the following criteria:
 - 1) The property is located within 400 feet of Speedway Boulevard, Stone Avenue or Euclid Avenue.
 - 2) All parking and maneuvering can be met on-site.
 - 3) The office component portion of the site contains no more than two offices. If two offices are desired, the total square footage of both offices combined total a minimum of 1,600 square feet.
 - 4) No more than 60 percent of the building or structure is devoted to office use.
 - 5) The residential component is retained on-site and does not have a home occupation
 - 6) The residential portion of the property contains only one single family use.

(June 28, 1993, Resolution #16335, WUNP Commercial Development Policy 4.A.2.)

(December 13, 2011, Resolution #21836, renumbered Policy 3.A.2 in amendment reference above to 4.A.2)

- B. Prevent the establishment or extension of strip commercial districts in the neighborhood.
 - 1. Support the maintenance, intensification, and strengthening of existing neighborhood commercial nodes at University Boulevard/Tyndall Avenue and Fourth Avenue/Sixth Street.
 - 2. Restrict commercial development to those areas identified on the Land Use Map.

(December 13, 2011, Resolution #21836, changed Development Concept Map to Land Use Map)

- C. Upgrade and maintain existing commercial services.
1. Promote shared off-street parking facilities, the development of streetscape improvement programs, and the establishment of landscape buffers between commercial uses and adjacent residential properties.
 2. Encourage commercial retail and service uses and related facilities to screen storage and trash removal areas.
 3. Encourage the development of off-street parking areas with appropriate amenities and screening within defined commercial districts.

- D. Allow for the adaptive use/reuse of the historic YWCA building for professional and semiprofessional office uses, if the following criteria are met:
1. The existing principal structure on the parcel is retained.
 2. The existing principal structure, which contributes to the historic district, is maintained.
 3. The governing body has determined that the structure is not suitable for residential use.
 4. The office use does not adversely impact surrounding land uses.

(September 14, 1992, Resolution 16107, WUNP, add Commercial Development Policy 4.D Adaptive Reuse of YWCA)

(December 13, 2011, Resolution #21836, renumbered Policy 3.D in amendment reference above to 4.D.)

- E. Allow for the adaptive reuse of the old Lohse YMCA site for residential, craftwork, entertainment, gallery, professional, and semi-professional office and restaurant uses if the following criteria are met:
1. The craftwork, entertainment, gallery, and office uses do not adversely impact surrounding residential land uses.
 2. Adequate off street parking is provided to prevent spill-over into the West University Neighborhood.
 3. Parking access and egress are designed so as to minimize non-residential traffic on residential streets.

(April 14, 1997, Resolution #17608, WUNP add Commercial Development Policy 4.E. Adaptive Reuse of YMCA)

(December 13, 2011, Resolution #21836, deleted the first criterion under Policy 4.E, as the principal structure had long been demolished, and renumbered the remaining three criteria; and renumbered Policy 3.E in amendment reference above to 4.E.)

POLICY 5: PUBLIC IMPROVEMENTS

West of Euclid Avenue, develop and maintain a streetscape that supports the West University Neighborhood's residential and historic character.

(December 13, 2011, Resolution #21836, Policy 4 was renumbered to Policy 5, and added "West of Euclid Avenue" to the sentence above)

Action Needed

- A. Ensure that any transportation improvements that affect the West University Neighborhood are designed to ensure maintenance and preservation of neighborhood integrity and character.
 - 1. Ensure that any transportation improvements within or adjoining the neighborhood are done in a manner which minimizes impact on the neighborhood. Great care should be taken to ensure maximum protection to existing residential structures within the National Register of Historic Districts, and minimum property acquisition should occur only after all other avenues of action have been explored with the neighborhood.
 - 2. Work closely with municipal and regional transportation planners to minimize new traffic flow within the neighborhood and, insofar as possible, to reduce existing traffic flow.
 - 3. Maintain residential speed limits on all interior streets within the neighborhood.
 - 4. Ensure that new major traffic arteries are routed around, rather than through, the neighborhood.
 - 5. Ensure that all residential uses are adequately buffered from major transportation corridors.
- B. Support the development of public transit facilities necessary to serve the West University Neighborhood, and link it with other parts of the community.

(December 13, 2011, Resolution #21836, added "and link it with other parts of the community")

- 1. Maintain a level of bus routes and stops which adequately serve the community while protecting lower density residential areas from unwarranted intrusion.
- 2. Encourage the appropriate maintenance of bus stops and waiting areas, including the surfacing and placement of benches and bus waiting shelters.
- 3. Develop bus stop benches and shelters that are architecturally consistent with the historic nature of the West University Neighborhood.

4. In coordination with the *El Centro de Tucson Design Plan*, encourage the reintroduction of the University trolley/tram following the Fourth Avenue/University Boulevard route to the Central Business District (CBD).
5. Support the implementation of a modern streetcar in the neighborhood, linking the UA, Fourth Avenue, the Tucson Downtown area, and areas west of Downtown.

(December 13, 2011, Resolution #21836, added new Policy 5.B.5.)

- C. West of Euclid Avenue, upgrade and improve the existing streetscape elements (lights, signs, and sidewalks) in a manner that is consistent with the residential and historic nature of the West University Neighborhood.

(December 13, 2011, Resolution #21836, added “West of Euclid Avenue”)

1. Develop and implement a neighborhood-wide program to upgrade the existing street light system to contemporary standards for security and energy conservation, while maintaining the historic street lights in designated areas.
 2. Ensure that all remaining old style street signs are preserved. In addition, develop a program to replace all new style signs with newly-manufactured replicas of the old style signs. The designated National Register of Historic Districts should receive first priority for this program. However, the entire West University Neighborhood should eventually receive the old style signs to promote neighborhood identity.
 3. Replace damaged sidewalks and install new sidewalks where none exist. Ensure that all sidewalk replacement and repair work maintain WPA imprints and cast metal water utility stop boxes.
- D. Designate and improve major pedestrian corridors that: (a) link major community elements (e.g., residential areas, commercial areas, campus) and (b) stimulate foot travel and bicycling.
 1. Install handicapped ramps at all major street intersections.
 2. Encourage paving and lighting improvements to public alleys throughout the neighborhood.
- E. Work for the continued upgrading, facility improvements, and security patrols in DeAnza and Catalina Parks to encourage community social interaction.
 1. Provide general improvements to DeAnza and Catalina Parks, such as lighting, irrigation systems, planting beds, walkways, seating, etc.

2. Continue the development of DeAnza Park, at Speedway Boulevard and Stone Avenue, as a community park to serve the needs of the neighborhood, the adjacent Pima Community College and city-wide needs.
3. Continue the development of Catalina Park, at Fourth Avenue and Second Street, as a neighborhood park to primarily serve the needs of neighborhood residents (e.g., active recreation, passive recreation, events programming).

POLICY 6: UNIVERSITY OF ARIZONA

(December 13, 2011, Resolution #21836, Policy 5 was renumbered to Policy 6)

Work closely with the UA to assure that University-related development is compatible with the character of the neighborhood.

Action Needed

- A. Continue to coordinate with the UA regarding the implementation of projects in the West University neighborhood, consistent with this neighborhood plan and the UA Comprehensive Campus Plan.


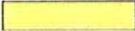


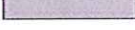


(December 13, 2011, Resolution #21836, modified policy wording but maintained intent. Deleted references to Campus Community Relations Committee, transition zone, and 1988 UA Comprehensive Campus Plan)

- B. Work with the UA and the City of Tucson to limit the number and ensure the appropriate location of fraternities and sororities so as to minimize adverse impacts on the Neighborhood.
- C. Continue to work with the UA and the City of Tucson Transportation Department in examining the possibility of street closures in the Fifth Street and Tyndall Avenue area.

MAP 5 West University Neighborhood Plan Land Use Map



Legend

-  Maintain and Infill Low Density Residential and Related Services (1-15 Units Per Acre)
-  Maintain Moderate Density Residential (15-40 Units Per Acre)
-  New Development - Mixed Use Commercial/Residential (15-40 Units Per Acre)
-  Maintain Existing Commercial
-  University Acquisition Area
-  Maintain Existing Public and Semi-Public (See Commercial and Office Development Land Use Policy 3.D for Adaptive Reuse of the Historic YWCA Building. Amended September 14, 1992, Resolution No. 16107.)
-  Amended December 13, 2011, Resolution No. 21836 to allow land uses and building heights as per the Transition Area Policies.

(December 13, 2011, Resolution #21836, revised Proposed Generalized Future Development Concept Map in the Transition Area, and renamed it the WUNP Land Use Map)

APPENDIX

WUNP – AMENDMENT HISTORY

West University Neighborhood Plan

DATE	Reso. #	Amendment Description	Map Change	Policy Change	NOTES
3/24/1986	#13561	In "low density and related services areas", the policies were revised to prohibit conversions of residential to commercial uses, and to allow conversions of residential to office uses only along major streets, and subject to certain criteria.		X	Neighborhood-initiated amendment, in response to several rezoning requests to convert residential to commercial and office uses, in "low density and related services areas."
10/12/1987	#14220	Allowed high-density dormitory housing (up to 126 units/acre), and building heights of up to 90 feet, with integrated commercial development, on the block between Tyndall and Euclid Avenues, and University Boulevard and 2 nd Street Prior to the amendment, the plan called for "maintaining existing commercial uses" on the eastern half of the site, and mixed-use commercial/residential development (15-40 units/acre) on the western half of the site.	X	X	The project upon which the amendment was based (UT Commons) was never built. Because the amendment allowed for an increased building height, it allowed a rezoning to proceed for the Main Gate redevelopment, including the hotel at the southwest corner of Tyndall and 2 nd Street. The amendment area was redeveloped with the hotel, the UA's University Services building west of the hotel, and Main Gate shops along University Boulevard.

West University Neighborhood Plan

DATE	Reso. #	Amendment Description	Map Change	Policy Change	NOTES
8/1/1988	#14564	Neighborhood Plan Update		X	Plan was updated at the request of the neighborhood. Plan policies were revised to strengthen the language that promotes maintaining and enhancing the residential character of the neighborhood. New policies were added to guide development in the transition area, as well as development by the University of Arizona in the neighborhood plan area.
11/28/1988	#14706	On Speedway Boulevard, in "low density and related services" areas, permitted the conversion of residential uses to O-1 office uses even if the adjacent uses and zoning are residential (it waived the adjacency criterion along Speedway Boulevard).		X	See Commercial And Office Development Policy 3.A.1, and footnote 1. Some homes along Speedway were subsequently rezoned to O-1 and converted to residentially-scaled office uses.
2/11/1991	#15586	Allowed residentially-scaled office uses on the east side of Euclid, between Speedway Boulevard and First Street. Prior to the amendment, low density residential and related services were allowed.	X	X	The Marshall Foundation rezoned and converted three residential structures to O-1 office uses, at the northeast corner of Euclid and First Street.
9/14/1992	#16107	Allowed the historic YWCA building, at 738 N. Fifth Avenue, to be adaptively re-used for office purposes. Prior to the amendment, the plan allowed "public/semi-public uses."	X	X	The site was rezoned to permit office uses, and the building is currently used as offices.

West University Neighborhood Plan

DATE	Reso. #	Amendment Description	Map Change	Policy Change	NOTES
6/28/1993	#16335	Allowed partial conversion of residential uses to residentially-scaled office uses, in "low density residential and related services areas", subject to criteria.		X	Amendment was filed to allow the property at 1010 N. Fifth Ave. to be rezoned to O-1, to allow the owner to sublease the office space. There was a legal, non-conforming office use on the site, in addition to a residential use. Without the rezoning, code restrictions allowed only the resident and one outside employee to use the office space. The amendment request resulted in a decision to add a new policy allowing partial conversions of residential to office uses in certain locations, subject to certain criteria. The site was subsequently rezoned and redeveloped with a small office use.
4/14/1997	#17608	Allowed a mix of studio, rehearsal, performance, gallery, office and residential uses, on the site of the former Lohse YMCA building on NEC N. 5 th Ave. and E. 6 th Streets.		X	This amendment was for the International Arts Center, which was never built. The building was razed. The site, which had been vacant for over a decade, is being developed as a 5-story student housing project.
4/12/1999	#18264	Allowed a residentially-scaled office use (O-1) on three lots at the southwest corner of First Street and Tyndall Avenue. Prior to the amendment, the area was designated as University Acquisition Area.	X		A rezoning to O-1 was processed but expired. The buildings are used primarily for University of Arizona purposes.

West University Neighborhood Plan

DATE	Reso. #	Amendment Description	Map Change	Policy Change	NOTES
1/12/2004	#19760	Allowed up to 6-story, mixed-use development at the southwest corner of Park Avenue and First Street. The previous land use designation was "maintain existing commercial".	X	X	The site has been developed with a bank and an associated parking area for several decades.
12/7/2009	#21449	Allowed a 140-foot high building at the southeast corner of Tyndall Avenue and Second Street. The site, which is west of the Louise Foucar Marshall Building, is currently vacant and is used as a surface parking area.	X		The amendment was for a planned hotel that would be the final phase of the Main Gate development.
12/13/2011	#21836	Added a new policy section and design guidelines to support transit-oriented development in the Transition Area, and the implementation of a modern streetcar through the neighborhood. Updated other sections of the plan.	X	X	This amendment was directed by the Mayor and Council.

