

South Mountain Freeway FEIS/ROD Reevaluation #3 for Chandler Boulevard: 27th Avenue to 19th Avenue

in the City of Phoenix, Maricopa County, Arizona



City of Phoenix



Federal Highway Administration



Arizona Department of Transportation

August 3, 2016

City of Phoenix Project Number. ST85100367

Federal-aid Project Number: NH-202-D(ADY)

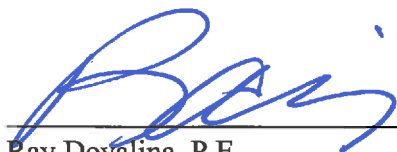
ADOT Project Number: 202L MA 054 H5764 01D

City of Phoenix Project Number: ST85100367
Federal-aid Project Number: NH-202-D(ADY)
ADOT Project Number: 202L MA 054 H5765 01D

Record of Decision

August 3, 2016

The Federal Highway Administration (FHWA), in coordination with the City of Phoenix (City), and the Arizona Department of Transportation (ADOT), conducted a reevaluation of the South Mountain Freeway, Interstate 10 (I-10, Papago Freeway) to I-10 (Maricopa Freeway) Final Environmental Impact Statement (FEIS) and Record of Decision (ROD) per 23 Code of Federal Regulations (CFR) § 771.129 to address minor modifications to the Chandler Boulevard: 27th Avenue to 19th Avenue project footprint that have been added to the project since the approval of the ROD on March 5, 2015. FHWA, with concurrence from the City, has determined that no substantial changes will occur in the social, economic, or environmental impacts of the proposed action that will substantially impact the quality of the human, socioeconomic, or natural environment. Therefore, the original environmental document remains valid for the proposed action. It is recommended that the project identified herein be advanced to the next phase of project development.



Ray Dovalina, P.E.
Street Transportation Director
City of Phoenix

8/3/16
Date



Karla S. Petty
Arizona Division Administrator
Federal Highway Administration

8/10/2016
Date



Robert Samour, P.E.
Senior Deputy State Engineer
Arizona Department of Transportation

8/9/16
Date

Table of Contents

1. Introduction and Project Description	1
Project Location	1
Approved Environmental Documentation	1
Previously Identified Impacts	3
Public and Agency Involvement	4
2. Description of Project Changes	6
3. Environmental Consequences	8
4. Public/Agency Outreach	11
5. Conclusion and Recommendation	12
Conclusion	12
Recommendation	12

List of Figures

Figure 1. Vicinity Map	2
Figure 2. Proposed Improvements Beyond FEIS Clearance for Chandler Blvd.	7

List of Tables

Table 1. Environmental Consequences Assessment, Chandler Boulevard Project	8
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List of Appendices

Appendix A - Public Involvement Information

Appendix B - Section 404 Nationwide Permit (NWP) No.14-Linear Transportation
Projects Non-Notify Compliance Documentation

Appendix C - Continuing Section 106 Consultation Responses and Concurrence Letters

Appendix D - Preliminary Initial Site Assessment (PISA) Approved 06/23/16

1. Introduction and Project Description

The Federal Highway Administration (FHWA), in coordination with the City of Phoenix (City), and the Arizona Department of Transportation (ADOT), conducted a reevaluation of the South Mountain Freeway, Interstate 10 (I-10, Papago Freeway) to I-10 (Maricopa Freeway) Final Environmental Impact Statement (FEIS) and Record of Decision (ROD) per 23 Code of Federal Regulations (CFR) § 771.129 to address modifications to the Chandler Boulevard: 27th Avenue to 19th Avenue project footprint. Since the approval of the ROD on March 5, 2015, additional sections of Chandler Boulevard at each end of the project have been identified that require minor alterations to connect with the new alignment. This reevaluation document provides an overview of the freeway project, describes the proposed modifications, assesses the environmental consequences of the proposed modifications, describes past and future public and agency outreach, and presents a conclusion related to the inclusion of the proposed modifications in the project.

Project Location

South Mountain Freeway

ADOT is the sponsor of the construction and operation of the South Mountain Freeway. The freeway will constitute a section of the Regional Freeway and Highway System, the Loop 202 (also referred to as State Route 202L). The project is in the southwestern portion of the Phoenix metropolitan area in Maricopa County, Arizona. The approximately 22-mile-long freeway will be constructed as an eight-lane divided, access-controlled facility, with four travel lanes in each direction. Three lanes will be for general purpose use and one lane will be dedicated to high-occupancy vehicle use.

Chandler Boulevard: 27th Avenue to 19th Avenue

The City is the sponsor of the Chandler Boulevard project which is located within the City's limits that will connect Chandler Boulevard from 19th Avenue to 27th Avenue (see Figure 1). This section of roadway has long been identified as part of the build-out of the City's street transportation grid. The project includes 1.2 miles of two-lane roadway with one travel lane and one bicycle lane in each direction. The new roadway will be built on land owned by the City and generally follows the path of the City's existing maintenance road. The north side will be fully developed with street lighting, drainage crossings, curb, gutter and sidewalk.

Approved Environmental Documentation

Construction of the Chandler Boulevard roadway project was included in the Selected Alternative for the South Mountain Freeway FEIS/ROD. Lengthening the project limits for the construction of the Chandler Boulevard roadway was identified during the design process due to the need to perform restriping of the existing roadway sections tying into the project at both ends.

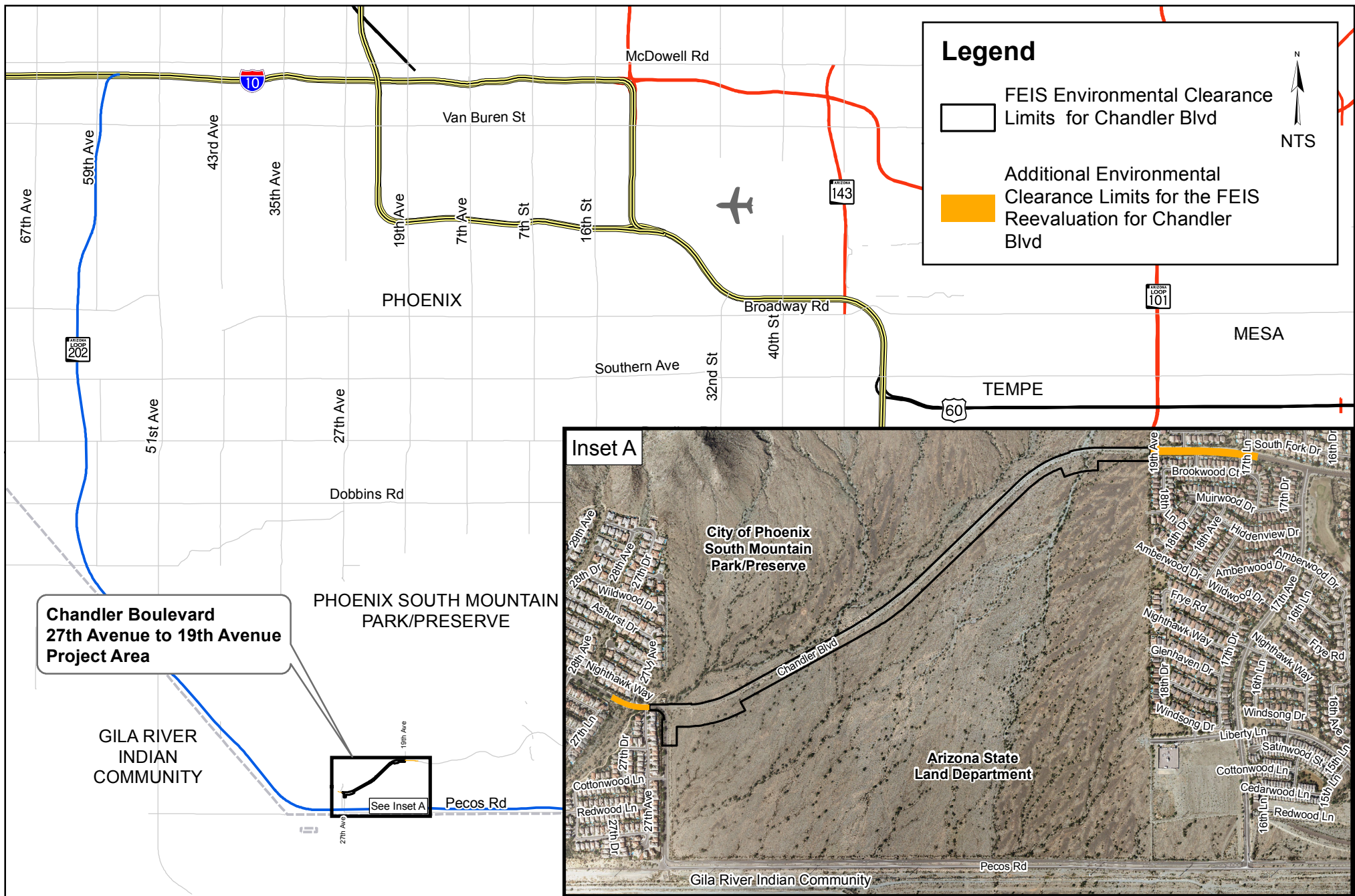


FIGURE 1

CHANDLER BOULEVARD
27TH AVENUE TO 19TH AVENUE
ST85100367
NH-202-D(ADY)
VICINITY MAP

The extended project limits exceed the footprint identified in the FEIS/ROD, and therefore a reevaluation is needed. The approved environmental documentation completed by ADOT and approved by the FHWA included:

- Draft Environmental Impact Statement (DEIS) signed on April 16, 2013, and released to the public on April 26, 2013.
- FEIS signed on September 18, 2014, and released to the public on September 26, 2014.
- Errata to the FEIS signed on November 19, 2014 and released to the public on November 28, 2014 (the Errata was published to address public comments on the DEIS that were inadvertently omitted from the FEIS).
- ROD signed on March 5, 2015, and released to the public on March 13, 2015.
- South Mountain Freeway FEIS/ROD Reevaluation #1 signed February 19, 2016, addressed the addition of a local street connector and a pedestrian bridge.
- South Mountain Freeway FEIS/ROD Reevaluation #2 signed June 20, 2016, addressed remainder parcels throughout the corridor.

Previously Identified Impacts

Chandler Boulevard: 27th Avenue to 19th Avenue

The Chandler Boulevard project has long been identified as part of the build-out of the City's street transportation grid. The project is being advanced with Regional Area Roadway Funds (RARF) to provide the transportation route for access to the existing Foothills Reserve and future Foothills West neighborhoods during construction of the South Mountain Freeway and after Pecos Road is closed and the South Mountain Freeway is operational. The City will manage the project through a governing Inter Government Agreement (IGA) with ADOT, which manages the RARF account.

The long-term plan includes future improvements to this section of roadway that will add two additional lanes to the south, resulting in two lanes in each direction with a two way left turn-lane in the middle. The land to the south is currently owned by the Arizona State Land Trust. The full build-out would occur in conjunction with the future sale and development of that land.

Design of the Chandler Boulevard project began in October 2015 and is anticipated to be completed in spring of 2016.

Key elements of the anticipated impacts related to the Chandler Boulevard project include:

- The project will convert approximately 28 acres of land to a transportation use.
- The project is consistent with local and regional plans; however, it will introduce minor visual and noise intrusion adjacent to residential neighborhoods.
- The project will not result in any exceedances of the health-based National Ambient Air Quality Standards.
- The project will impact Waters of the United States and qualifies for Section 404 Nationwide Permit No. 14-Linear Transportation Projects. Pre-Construction Notification (PCN) to the U.S. Army Corps of Engineers (USACE) is not required as impacts at each wash crossing are less than the 0.1 acre notification threshold.

- The project will not affect any currently listed threatened and endangered species. However, the project will result in the conversion of cover, nesting areas, and food resources for wildlife provided by the natural plant communities found in the Study Area.
- Impacts on views from residential and rural uses include construction impacts and visibility of the new facility.
- The existing utilities within the roadway alignment include 12-inch and 48-inch water lines, and a joint trench for Salt River Project (SRP), Cox Communications, and CenturyLink. The joint trench will be relocated along with the associated cabinets. The water lines will be relocated only in sections with conflicts.

Public and Agency Involvement

South Mountain Freeway

ADOT and FHWA undertook an extensive public and agency involvement program during the National Environmental Policy Act (NEPA) phase of the project. Key elements included:

- Publication of the Notice of Intent on April 20, 2001, in the *Federal Register* (66[77]:20345).
- Invitations sent in 2001 to USACE, U.S. Environmental Protection Agency (EPA), U.S. Bureau of Indian Affairs (BIA), and U.S. Fish and Wildlife Service (USFWS) to be cooperating agencies were issued. USACE and BIA agreed to be federal cooperating agencies. EPA and USFWS declined. In 2009, the Western Area Power Administration (Western) was invited, and agreed, to be a cooperating agency.
- Agency scoping letters were sent to 232 federal, State, and local agencies in October 2001. A 2-day agency scoping meeting was held later that month in Phoenix. Agencies were invited to participate in the project through monthly progress meetings during the project duration.
- Public scoping was initiated in November 2001 and included presentations at 23 neighborhood meetings and two public meetings.
- Between the public scoping kick-off through the release of the DEIS, over 200 presentations were made to neighborhood groups, homeowners' associations, chambers of commerce, village planning committees, trade associations, and other interested parties. Twelve public meetings were held.
- ADOT created a Citizens Advisory Team (CAT) made up of groups and organizations in the Study Area. The CAT worked as a voluntary, advisory team to provide advice and input to ADOT and FHWA. Approximately 60 CAT meetings were held, each open to the public.
- The DEIS was released to the public on April 26, 2013, beginning the 90-day comment period (the minimum requirement under NEPA is 45 days). A public hearing was held May 21, 2013, at the Phoenix Convention Center from 10 a.m. to 8 p.m. Six community forums were held in Study Area communities to supplement the public hearing. Additionally, an online public hearing was created for those who could not attend a meeting in person. Approximately 900 people attended one of the public events, almost 1,900 unique visitors viewed information from the online hearing, and the project team received over 8,000 comments.

- The FEIS was released to the public on September 26, 2014. A 60-day review period was provided. As a result of the publication of the errata, ADOT and FHWA extended the review period to December 29, 2014. During the review period for the FEIS and errata, approximately 250 comments were received.
- ADOT and FHWA worked in close coordination with the Gila River Indian Community to hold a community forum on November 15, 2014, at the Boys & Girls Club, Gila River-Komatke. The Gila River Indian Community developed the agenda and facilitated the forum, which consisted of introductions, a description of the comment opportunities and court reporters' roles, an introduction to the South Mountain Freeway video flyover simulation, and an "open-microphone" comment period. Other than invited guests, the meeting was open to only Gila River Indian Community members. FHWA and ADOT project team members were guests at the forum and were in attendance to listen to comments. A translator was provided for those wishing to speak in the native O'odham language.

Chandler Boulevard: 27th Avenue to 19th Avenue

The City and its project consultant team, in coordination with ADOT and its General Engineering Consultant team, designed and implemented a comprehensive public outreach program during the design phase of the project. The "Project Team" consists of members from the City of Phoenix staff, Kimley-Horn & Associates Design Consultant, Hunter Construction and the public information firm Gunn Communication Incorporated. Key elements included:

- Two communications strategy meetings were held that included representatives from the City, the design-build team, ADOT, and the General Engineering Consultant for the South Mountain Freeway project. The meetings provided a collaborative forum to identify optimal communication strategies for the project and coordinating the flow of information between the teams.
- A Public Involvement Plan was developed for the project with input from the organizations mentioned above. The plan encompassed intense outreach to the five communities that are most impacted and also the larger community via local publications and a public meeting.
- Key stakeholders were identified, and the public outreach team initiated communications in October 2015 with area residents, homeowner's associations, village planning committees, interest groups, and the Chamber of Commerce area branch.
- In December 2015, signage was placed at both ends of the project limits to provide notice to the public of the upcoming project. The signs included a 24-hour hotline phone number, an email address established for the project, and the City of Phoenix website.
- On January 25, 2016, the project team attended the Ahwatukee Foothills Village Planning Committee meeting to present information regarding the project including graphic exhibits and a question and response period.
- An Open House was held on February 16, 2016 at Desert Vista High School located near the project area. Notifications were sent via email to registered interest and cycling groups, HOAs, school districts and other stakeholders. A meeting notice/invitation flier was hand-delivered to approximately 4,000 residences in the area proximal to the project site. A press release was distributed on January 28, 2016 and the notice was placed on the city website. Social media outlets were utilized via Nextdoor (an electronic

communication system specific to a community) and Twitter. Council district offices posted the meeting information and it was placed on the City of Phoenix event calendar. Ahwatukee Foothills News, a local publication, announced the meeting on its calendar of events and published an article highlighting the project, which included the project hotline number and email address. Meeting reminders were sent electronically on February 9, 2016 to 72 subscribers on the project communications list, area HOAs and Ahwatukee Foothills News.

- Following the public meeting, the project team attended HOA meetings for three communities, presenting project information and graphics and responding to questions from the boards or community members.
- The project team attended a Chamber of Commerce meeting on March 4, 2016 to present project information and graphics, and responding to questions from the members.
- Written materials and graphic exhibits were created and made available to the public at each meeting. The materials were also posted on the City website. The publications included: a project fact sheet, FAQs, and copies of the PowerPoint presentation containing graphic depictions of the proposed improvements, a typical roadway section, an overall map of the area, and a timeline for the project. Comment cards were provided at each meeting to solicit feedback from community members and representatives from HOAs, Chamber of Commerce members and other organizations.

2. Description of Project Changes

This reevaluation was conducted to address changes to the footprint for the Chandler Boulevard: 27th Avenue to 19th Avenue project that have been identified since the approval of the ROD on March 5, 2015:

- Approximately 2.7 acres of additional area within City right-of-way (ROW) and City easement, but beyond the FEIS footprint for Chandler Boulevard, are required to allow for tying in to the existing pavement on Shaughnessy Road on the west end of the project (approximately 410 feet in length by 60 feet in width) and Chandler Boulevard at the east end of the project (approximately 1,135 feet in length by 85 feet in width). The only improvements that will occur in these areas are tying into existing pavement, adding a new curb ramp, microsealing existing pavement, striping, and signage all of which are located within existing roadway ROW and easement (see Figure 2).

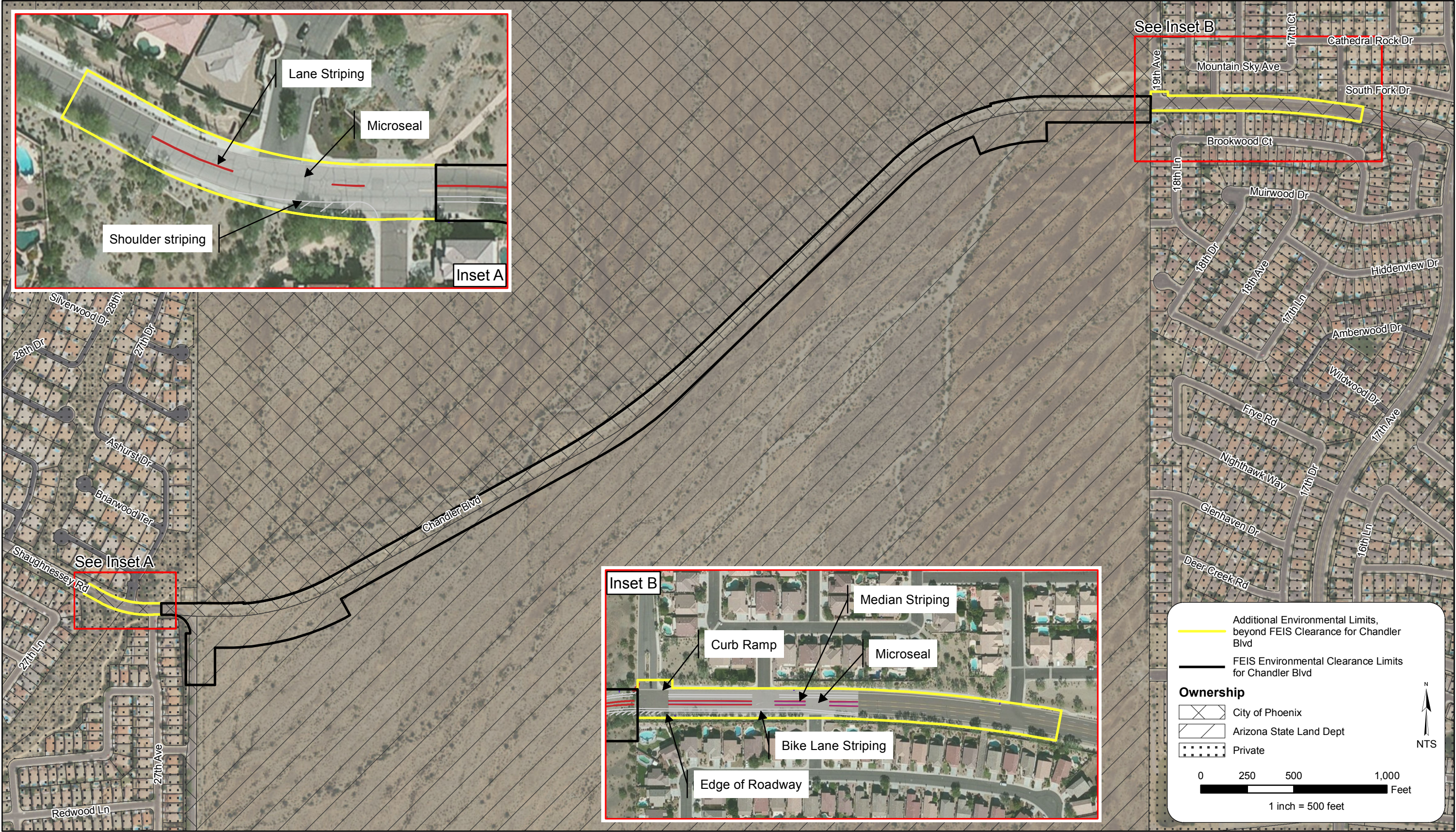


FIGURE 2

3. Environmental Consequences

The proposed work would be located entirely within the City's existing street ROW and easement. Table 1 provides an assessment of the environmental consequences from the work occurring in additional areas or work occurring outside or beyond the FEIS footprint associated with the Chandler Boulevard project. Overall the project would provide a benefit to the local community, improving mobility and access. All applicable commitments from the FEIS/ROD will be implemented for work conducted in these additional areas.

Table 1. Environmental Consequences Assessment, Chandler Boulevard Project					
Setting/Resource Circumstance	Change in Affected Environment		Change in Environmental Impact		Description
	Yes	No	Yes	No	
Land Use		X		X	
Social Conditions		X		X	
Environmental Justice and Title VI		X		X	
Displacements and Relocations		X		X	
Economics		X		X	
Air Quality		X		X	
Noise		X		X	The addition of the reevaluation clearance limits does not add capacity or alter alignment; therefore, additional noise analysis beyond what was previously completed for the FEIS is not required. Temporary noise impacts stemming from construction are anticipated in the reevaluation clearance limits.
Water Resources		X		X	
Floodplains		X		X	
Waters of the United States		X		X	Additional Waters of the United States are located in the reevaluation clearance limits near Shaughnessy Road; however, impacts to these Waters are not anticipated. The overall Chandler Boulevard project qualifies for a Non-Notify Section 404 Nationwide Permit No. 14.
Topography, Geology, Soils		X		X	
Biological Resources		X		X	See discussion below
Cultural Resources		X		X	See discussion below

Table 1. Environmental Consequences Assessment, Chandler Boulevard Project					
Setting/Resource Circumstance	Change in Affected Environment		Change in Environmental Impact		Description
	Yes	No	Yes	No	
Prime and Unique Farmland		X		X	
Hazardous Materials		X		X	A Preliminary Initial Site Assessment (PISA) was conducted for the reevaluation clearance limits. The PISA was approved by ADOT on June 23, 2016.
Visual Resources		X		X	
Energy		X		X	
Temporary Construction Impacts		X		X	See discussion below
Material Sources and Waste Material		X		X	
Secondary and Cumulative Impacts		X		X	
Section 4(f)/6(f)		X		X	See discussion below

Biological Resources

The U.S. Fish and Wildlife Service (USFWS) Information, Planning, and Conservation System (IPaC) was accessed on April 28, 2016 to obtain a list of federally protected species that should be considered in an effects analysis for the project. The list was reviewed by a qualified biologist to determine species that may occur in the project vicinity. This project will have no effect on federally protected species as the reevaluation clearance limits do not contain suitable habitat for federally protected species since it consists of existing roadway and landscape vegetation.

The Arizona Game and Fish Department (AGFD) Online Environmental Review Tool Report was accessed on April 28, 2016 to determine special status species known to occur in the project vicinity and listed the Sonoran Desert tortoise (*Gopherus morafkai*) and common chuckwalla (*Sauromalus ater*) as occurring within three miles of the project vicinity. The reevaluation clearance limits do not contain suitable habitat for these species since it consists of existing roadway and landscape vegetation. As such, the presence of these species is not likely. However, if any Sonoran Desert tortoises were encountered during construction, the contractor would adhere to AGFD's most current *Guidelines for Handling Sonoran Desert Tortoises Encountered on Development Projects*.

As shown in the FEIS, the Chandler Boulevard project area is not located within either a riparian or landscape wildlife movement area; however, the design still considered options to avoid or minimize potential impacts.

The preliminary bridge design over two unnamed ephemeral washes originally proposed installation of gabion mattresses in the wash bottoms. However, the final bridge design deleted that option and was able to leave natural wash bottoms to facilitate wildlife movement.

The bridge design also originally recommended that gabion baskets be used to stabilize natural soil embankments. After review, the position and angle of the embankments was skewed to create a funnel effect, and as such, potential wildlife movement would be guided along a natural corridor underneath a bridge. The possibility of vehicle-wildlife collisions would also be minimized.

There are no protected native plants in the reevaluation clearance limits, but protected native plants are located beyond the reevaluation clearance limits within the overall Chandler Boulevard project area. Therefore, in accordance with the required mitigation measure (BIO-22), on June 2, 2016 the Gila River Indian Community was provided a Letter of Notice to Salvage Protected Native Plants and project-related native plant inventory documenting whether the identified native plants are to be salvaged, protected in place, or removed. A 45 day access period (June 2, 2016 through July 19, 2016) has been provided for the Gila River Indian Community personnel or their contractor to salvage and relocate the identified plants or to coordinate with the City's contractor to salvage and deliver requested plants from the list to a location on Gila River Indian Community land within 1 mile of the project area. The Gila River Indian Community responded to this notice on July 18, 2016 stating the invitation to collect the salvageable cacti, trees, and plants has been accepted by the Community. The pick-up of plants at the Chandler Boulevard project onsite nursery is also acceptable to the Community and they will make necessary arrangements with the City.

Per mitigation measure BIO-1, a 60 day Notice of Intent to Clear Land was also submitted to the Arizona Department of Agriculture on June 15, 2016 and detailed the Gila River Indian Community initial selection of salvageable plants through July 19, 2016. If protected native plants are not salvaged by the Gila River Indian Community during the 45 day access period or during the 60 day Notice of Intent to Clear Land salvage period, the plants will become the property of the contractor.

Cultural Resources

The reevaluation clearance limits consist of two areas of new Area of Potential Effects (APE) that are located within a developed portion of City ROW and easement and consist of pavement, sidewalks, and landscaping. A review of records on AZSITE and at Pueblo Grande Museum indicated that the area of new APE on Shaughnessy Road was previously surveyed by SWCA, Inc., Environmental Consultants. The results were reported in "*An Archaeological Survey of 320 Acres at South Mountain, Maricopa County, Arizona*". No sites were identified within the new APE. Consultation for this report was not available. The area of new APE on Chandler Boulevard has not been previously surveyed. Archaeological survey is not warranted at this location because it consists of pavement, sidewalks, and landscaping. Based on this information, FHWA has determined that a finding of "no historic properties affected" is appropriate for the work proposed in the expanded APE. Continuing Section 106 consultation was sent to the consulting parties by FHWA on June 21, 2016.

Temporary Construction Impacts

A traffic control plan will be developed and implemented by the contractor to help reduce impacts of traffic congestion and associated emissions during construction. Access will be maintained during construction, and construction activities that might substantially disrupt traffic will not be performed during peak travel periods. To minimize disruption, the City will coordinate regarding traffic control and construction activities during special events. Requirements for the use of construction notices and bulletins will be identified as needed. The effectiveness of the traffic control measures will be monitored during construction and any necessary adjustments will be made. The City will coordinate with the responsible local entities regarding the relocation of utilities, as appropriate. Disruptions to utility services, if necessary, will be restricted to being short-term and localized. The City and project contractors will continue to coordinate with utility providers during the design phase and project construction to identify potential problems and/or conflicts and to provide opportunities for their resolution prior to proposed actions. Replacement and/or relocation of utilities will be coordinated with City construction activities and other projects in the area. Planning will include scheduling of disruptions and prior notification of adjacent property owners who will be affected by temporary service cut-offs. Emergency response procedures will be outlined by the City in consultation with local utility providers to ensure quick and effective repair of any inadvertent or accidental disruptions in service. Community access to the Traditional Cultural Properties (TCPs) will be maintained during construction, but may temporarily involve detours.

Section 4(f)/6(f)

While the additional areas at the eastern and western ends of Chandler Boulevard are within existing City ROW and easement, they are also within the administrative boundary of the South Mountains TCP. These areas are considered an additional use of the TCP. However, the Section 4(f) analysis presented in the FEIS/ROD will not change because the measures to minimize harm to the South Mountain TCPs will be implemented for these additional areas.

4. Public/Agency Outreach

The project team will reach out to the adjacent neighborhoods and other stakeholders to inform them about and obtain input on the project design. Construction is anticipated to start in mid-July 2016 and be completed in 10-12 months. Key messages to be used during this phase of the project include the following.

Why The Project is Necessary:

- To implement a project already identified in the City's long-term plans for completing the street transportation grid.
- To provide the transportation route for access to the existing Foothills Reserve and future Foothills West neighborhoods during construction of the South Mountain Freeway and after Pecos Road is closed and the South Mountain Freeway is operational.

Project Goals:

- To prepare a context-sensitive project design and to construct the project at a good value cost.
- To complete project construction prior to when Pecos Road will be closed for construction of the South Mountain Freeway, in order to maintain ingress and egress from the existing Foothills Reserve and future Foothills West communities.

5. Conclusion and Recommendation

Since the ROD was signed, it is the understanding of the City that the project development process for South Mountain Freeway has continued with preliminary engineering, acquisition, relocation, and demolition of properties needed for the project, utility locating and coordination, and geotechnical investigations within the ROW footprint analyzed in the EIS/ROD. As such, the City design schedule for the Chandler Boulevard project has also progressed. ADOT has identified a Preferred Proposer and is in the process of negotiating a final contract. The contract, which includes the design, construction, and maintenance of the project, was executed March 1, 2016. Construction could begin after July 13, 2016.

Since approval of the ROD, there have not been any changes in laws or regulations that would affect the analysis of protected resources.

The Selected Alternative with the proposed minor modifications to the Chandler Boulevard: 27th Avenue to 19th Avenue project footprint analyzed in the previous section still meets the purpose and need for the proposed action from the FEIS and ROD. No changes to the purpose and need for the project are proposed.

Conclusion

A Supplemental FEIS is not warranted for the following reasons:

- The proposed modifications are limited in scope and impacts are all within or adjacent to the footprint analyzed in the FEIS/ROD.
- The Selected Alternative and its related impacts identified in the FEIS/ROD would not significantly change as a result of the modifications described herein.

Recommendation

FHWA, in coordination with the City and ADOT, reevaluated the South Mountain Freeway, Interstate 10 (I-10, Papago Freeway) to I-10 (Maricopa Freeway) FEIS and ROD per 23 CFR 771.129. FHWA, with concurrence from the City, has determined that no substantial changes will occur in the social, economic, or environmental impacts of the proposed action that would substantially impact the quality of the human, socioeconomic, or natural environment. Therefore, the original environmental document remains valid for the proposed action. It is recommended that the project identified herein be advanced to the next phase of project development.

Appendix A – Public Involvement Information

Design Underway on Chandler Boulevard Extension Project

Jan. 28, 2016

The city of Phoenix has started design of a new street improvement project to extend Chandler Boulevard from 27th Avenue to 19th Avenue in Ahwatukee. The project includes design and construction of 1.2-miles of a two-lane roadway with one travel lane and a bicycle lane in each direction.

The city of Phoenix will hold a **public information meeting** to share details about the project and the anticipated construction schedule. The meeting will be held in an open house format, with no formal presentation, from **5:30 p.m. to 7:00 p.m. on Tuesday, Feb. 16, at Desert Vista High School – Cafeteria, 16440 S. 32nd St.**

The project will be built on land owned by the city and will generally follow the path of an existing city maintenance road. As part of the project, only the north side of the roadway will be fully developed with curb and gutter, street lighting and sidewalk.

The city anticipates completing engineering design and construction plans in spring 2016 and starting construction in mid-July. Construction is expected to be completed in spring 2017. The project is being advanced with Regional Area Roadway Funds.

Additional information about the project is available at Phoenix.gov/streets/projects.

Members of the public may sign-up to receive project updates and submit inquiries and comments via email at chandlerblvd@gci.az.com or by contacting the project hotline at 623-825-3444.

Media Contact:

Monica Hernandez

Phone Number:

602-350-8853



City of Phoenix
STREET TRANSPORTATION DEPARTMENT

Chandler Boulevard: 27th Avenue to 19th Avenue

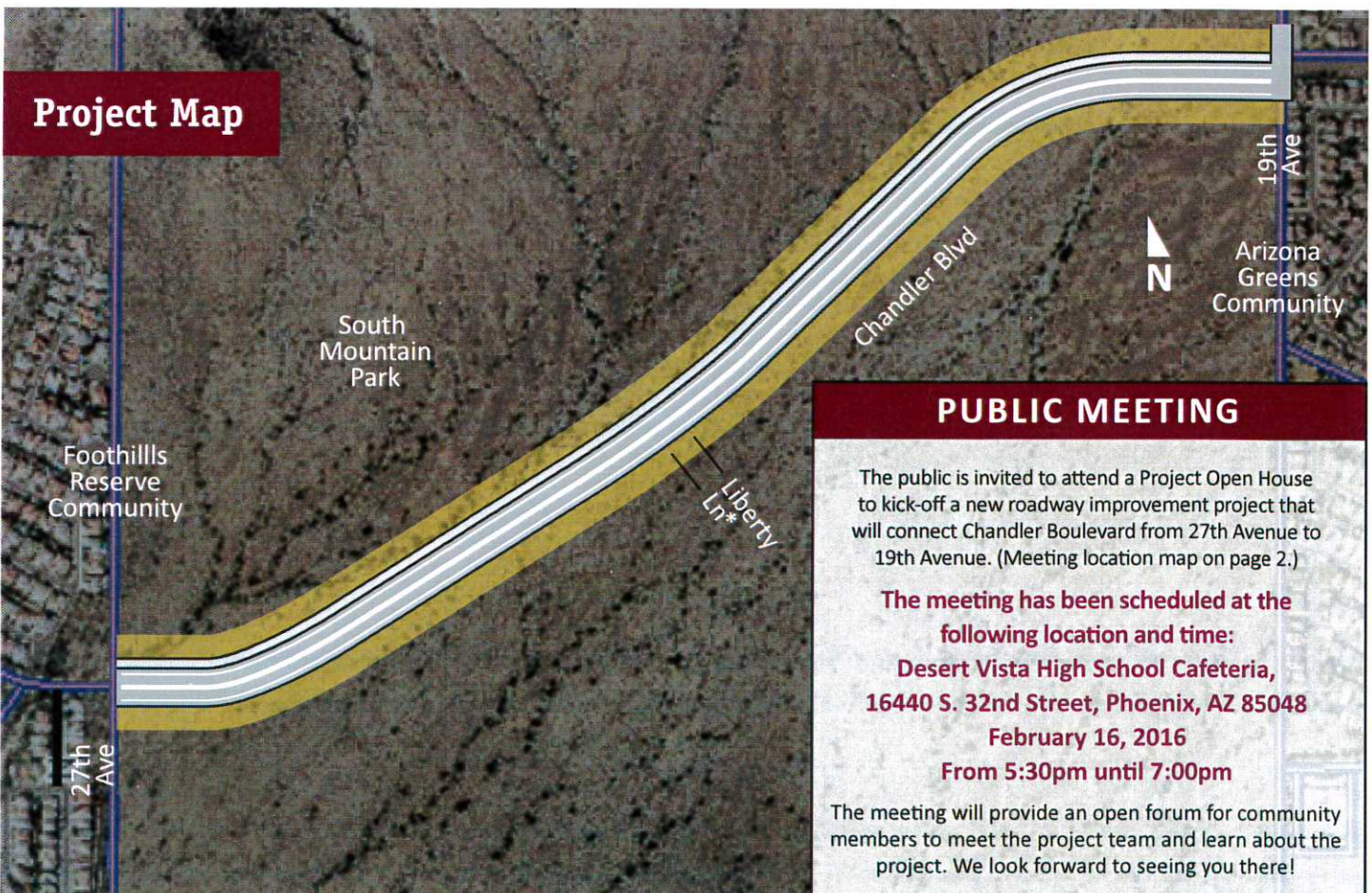
Project No. ST85100367

Project Overview

The City of Phoenix is pleased to announce the start of a new street improvement project. The project, which will connect Chandler Boulevard from 27th Avenue to 19th Avenue in Ahwatukee, involves design and construction of 1.2 miles of two-lane roadway with one travel lane and one bicycle lane in each direction. The new roadway will be built on land owned by the City and generally follow the path of the City's existing maintenance road. The north side will be fully developed with street lighting, drainage crossings, and sidewalk.

This section of roadway has long been identified as part of the build-out of the City's street transportation grid. The project is being advanced with Regional Area Roadway Funds (RARF). The City will manage the project through a governing Joint Project Agreement with ADOT, which manages the RARF account.

The long-term plan for future improvements to this section of roadway will add two additional lanes to the south, resulting in two travel lanes and a bike lane in each direction with a center turn-lane. The land to the south is currently owned by the Arizona State Land Trust. The full build-out would occur in conjunction with the future sale and development of that land.



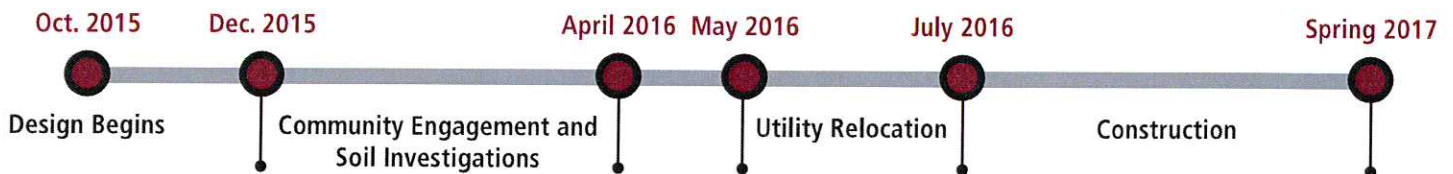
*This is a future project and is not associated with the Chandler Boulevard: 27th Avenue to 19th Avenue roadway extension project.

Project Team

This project is managed by the City of Phoenix Street Transportation Department, Design and Construction Management Division. The City selected design-build as the project delivery method, which means that the engineering design consultant and the contractor will work in collaboration to design and build a successful project for a good value price. The Design-Build team is composed of Hunter Contracting Company as the construction contractor, Kimley-Horn and Associates as the engineering design consultant, and Gunn Communications as the public outreach subconsultant.

Anticipated Schedule

Community members, hikers, and bikers may notice some onsite design-phase geotechnical investigation activities associated with the project, which began in early December 2015. Those activities will include soil investigations and location of existing utilities. Design of the project began in October 2015 with an estimated project completion date of spring 2016. During the early stage of design development, the project team will reach out to the adjacent neighborhoods and other stakeholders to inform them about and obtain input toward the project design. Construction is anticipated to start in mid-July 2016 and be completed in spring 2017.



How to Get Involved

To receive project updates and notice of upcoming public involvement opportunities, call our project hotline or send an email request to be included on the mailing list. Our project representatives are available to assist with any questions or concerns you may have regarding the Chandler Boulevard: 27th Avenue to 19th Avenue Project.

Project Hotline 623-825-3444

Project Email Address: chandlerblvd@gciaz.com

Visit: Phoenix.gov/streets for more information

Esta publicación está disponible en español. Para recibir una copia, favor de comunicarse con nuestro representante del proyecto, Albert Granillo al 623.258.3128.

Public Meeting Location Map



Desert Vista High School

16440 S. 32nd Street, Phoenix, AZ

February 16th at 5:30 pm in the cafeteria

Meeting Accommodations

To request reasonable accommodations or to receive this publication in an alternate format, please contact the project hotline at 623.825.3444. For TTY dial 7-1-1.

For Inquiries About the Loop 202/ South Mountain Freeway Project

visit ADOT's Website:

www.azdot.gov/SouthMountainFreeway

or email Projects@azdot.gov,

or call 602.712.7006.



Chandler Boulevard: 27th Avenue to 19th Avenue

Project No. ST85100367

Frequently Asked Questions

1. Why is the roadway being built and how will it be funded?

- a. This section of roadway has long been identified as part of the build-out of the City's street transportation grid. The project is being advanced with Regional Area Roadway Funds (RARF).

2. What improvements will be included in the new roadway project?

- a. The project improvements include design and construction of 1.2 miles of two-lane roadway with one travel lane and one bicycle lane in each direction. The north side of the roadway will be fully developed with street lighting, drainage crossings, and sidewalk.

3. When will construction start, and how long will it take?

- a. Construction is anticipated to begin in mid-July 2016 with an estimated completion date of spring 2017. Design-phase geotechnical investigation began in early December and is currently underway.

4. Does this project encroach on the Foothills Preserve?

- a. No, the project is being constructed in dedicated right-of-way on land owned by the City of Phoenix.

5. How will the project affect the environment?

- a. Natural and cultural resource preservation will be incorporated into the design and followed throughout construction.

6. What will be done to minimize the impact of construction on the adjacent neighborhoods?

- a. The contractor will be required to follow city, county and state ordinances and regulations regarding noise and dust control as well as times of day permitted for construction. Should you have any concerns at any time regarding conditions at the site, please contact our 24-hour project hotline at 623-825-3444 or email the team at chandlerblvd@gciaz.com.

7. How can we learn more about the project?

- a. You can contact the team anytime by calling the Project Hotline at 623-825-3444. You may also send an email message and sign up for the project mailing list to receive updates and notice of public involvement opportunities at info@gciaz.com. Visit the City of Phoenix Website at phoenix.gov/streets/ to learn more about the project.

8. Responses to any and all questions about the South Mountain Freeway:

- a. Any questions specific to the South Mountain Freeway project will need to be directed to ADOT. You can call ADOT at 602.712.7006, send an email inquiry to Projects@azdot.gov, or visit the Department's South Mountain Freeway Website at: azdot.gov/SouthMountainFreeway.



City of Phoenix

City of Phoenix Street Transportation Department
Public Information Meeting
CHANDLER BOULEVARD: 27TH AVENUE TO 19TH AVENUE
Project No. ST85100367
Feb. 16, 2016 - 5:30-7:00 p.m., Desert Vista High School

Comment Card

Thank you for your participation in tonight's public information meeting and for your interest in this project. If you have comments or suggestions for the City that, please write them on this card and return it to the reception table as you leave tonight. You may also take the card home with you and mail us your comments later.

Contact the project team anytime via email or phone:
Chandlerblvd@gci.az.com
Project Hotline: 623-825-3444

The following information is optional:

Name: _____
Street Address: _____
City, State, Zip Code: _____
Daytime Phone # : (_____) _____
E-mail Address: _____
How did you hear about tonight's meeting? _____



City of Phoenix

City of Phoenix Street Transportation Department
Public Information Meeting
CHANDLER BOULEVARD: 27TH AVENUE TO 19TH AVENUE
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Name: _____
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Daytime Phone # : (_____) _____
E-mail Address: _____
How did you hear about tonight's meeting? _____



City of Phoenix
STREET TRANSPORTATION DEPARTMENT

Chandler Boulevard: 27th Avenue to 19th Avenue

**Foothills Club West
Homeowner's Association
Presentation
February 18, 2016**



City of Phoenix
STREET TRANSPORTATION DEPARTMENT

Chandler Boulevard: 27th Avenue to 19th Avenue

- 1.2 Mile Roadway
- One Lane Each Direction
- Bike Lanes Both Sides
- North Side Fully Improved
 - Street Lighting
 - Curb and Gutter
 - Sidewalk

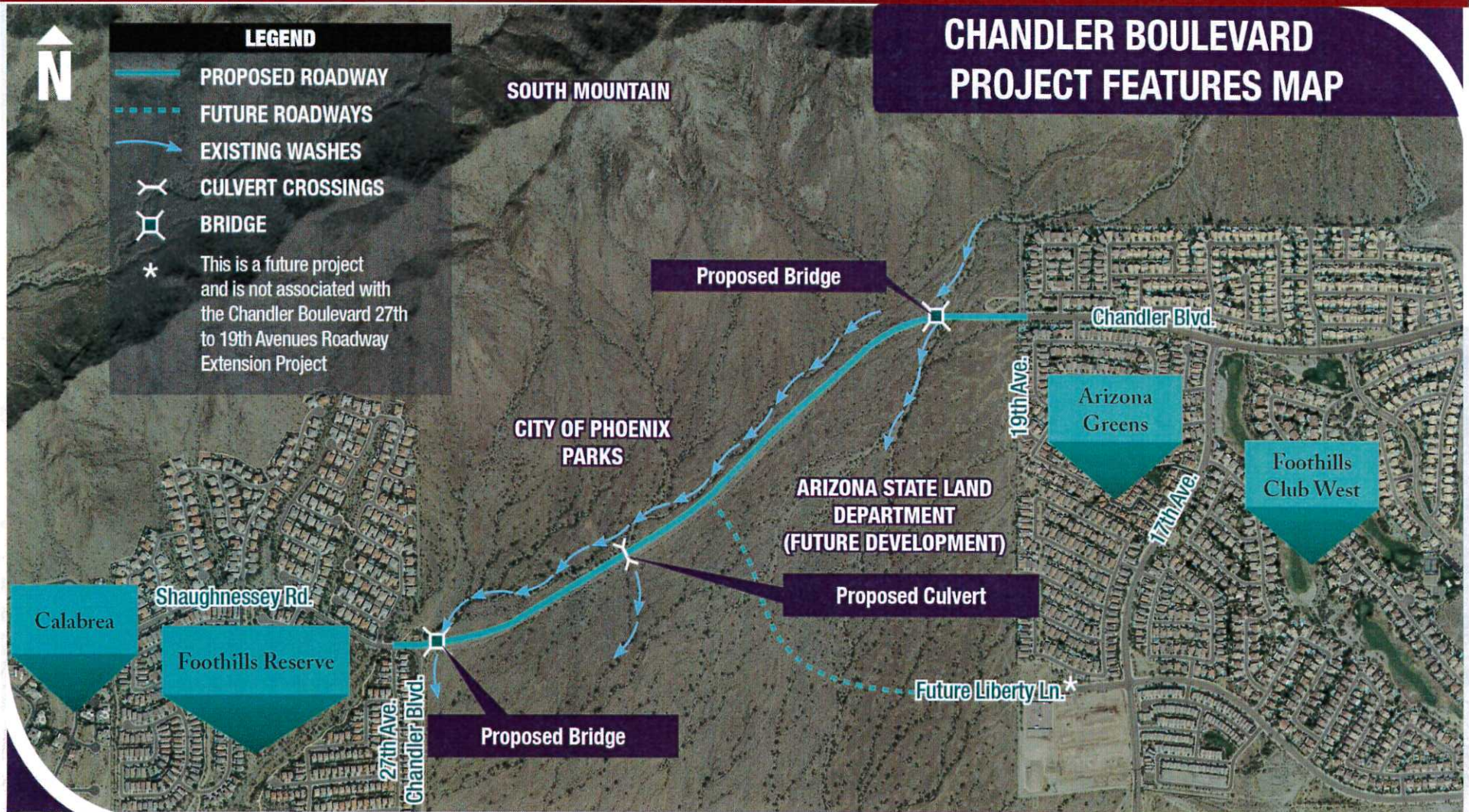


*This is a future project and is not associated with the Chandler Boulevard: 27th Avenue to 19th Avenue roadway extension project.



City of Phoenix
STREET TRANSPORTATION DEPARTMENT

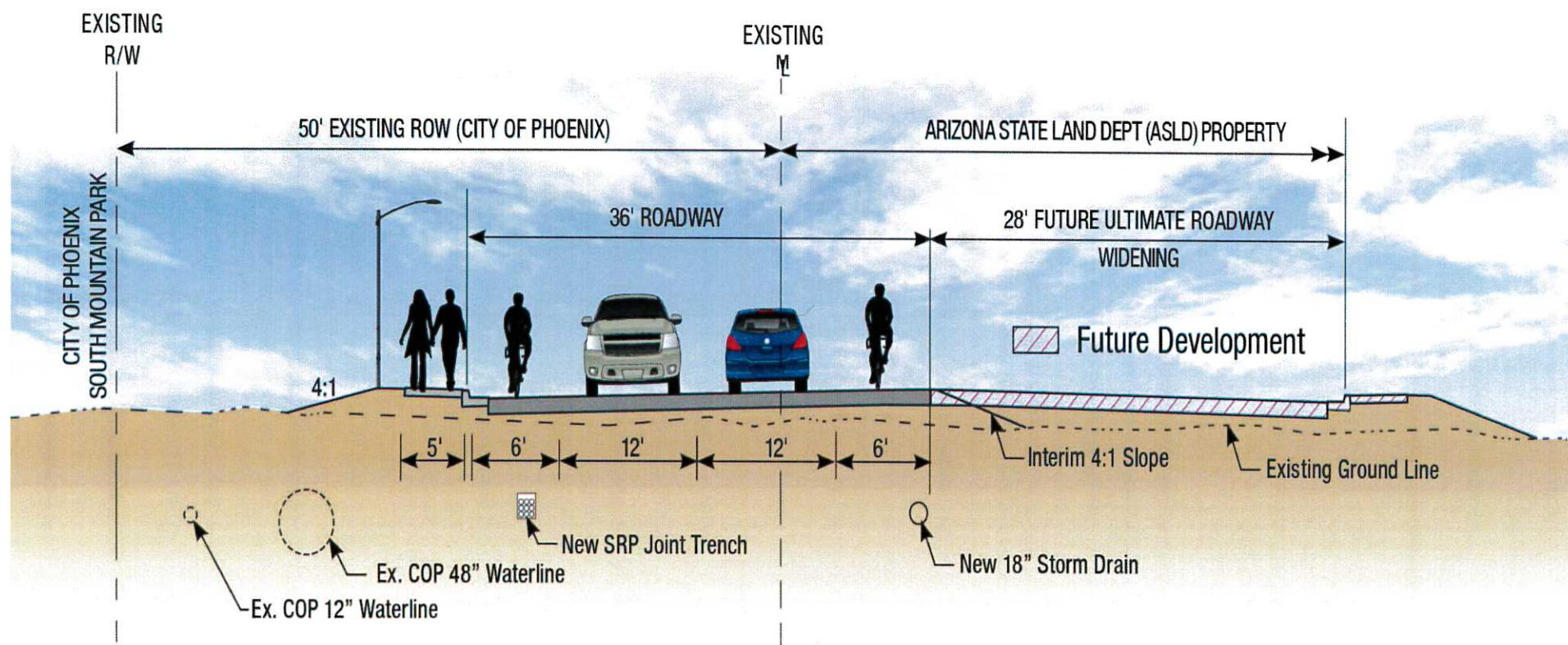
Chandler Boulevard: 27th Avenue to 19th Avenue





City of Phoenix
STREET TRANSPORTATION DEPARTMENT

Chandler Boulevard: 27th Avenue to 19th Avenue



CHANDLER BOULEVARD TYPICAL SECTION



City of Phoenix
STREET TRANSPORTATION DEPARTMENT

Chandler Boulevard: 27th Avenue to 19th Avenue

Project Consulting Team

The project will be managed by the City of Phoenix Street Transportation Department.

The Design-Build Consultant Team is composed of:

- Hunter Contracting Company – Construction Contractor
- Kimley-Horn and Associates (KHA) – Engineering Design
- Gunn Communications (GCI) – Public Outreach

Hunter
CONTRACTING CO.



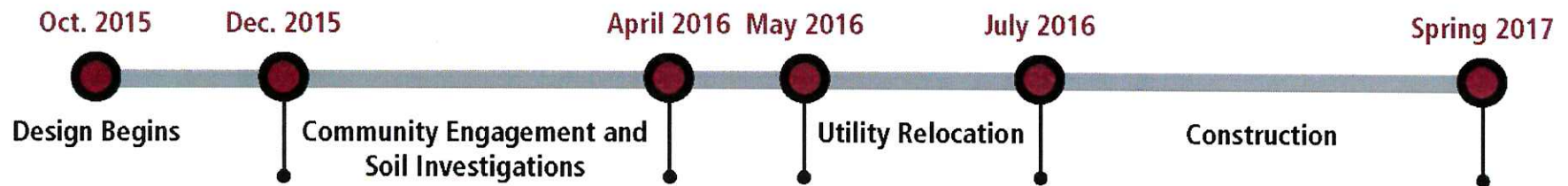
Kimley»Horn



City of Phoenix
STREET TRANSPORTATION DEPARTMENT

Chandler Boulevard: 27th Avenue to 19th Avenue

Anticipated Schedule





City of Phoenix
STREET TRANSPORTATION DEPARTMENT

Chandler Boulevard: 27th Avenue to 19th Avenue

Public Outreach

How to Get Involved

Stay apprised of project progress:

Sign up for project communications at: chandlerblvd@gciaz.com

Visit: Phoenix.gov/streets

Call 24-hour project hotline:

623-825-3444

**Appendix B – Section 404 Nationwide Permit (NWP)
No. 14-Linear Transportation Projects Non-Notify
Compliance Documentation**

Section 404 Nationwide Permit (NWP) No.14- Linear Transportation Projects Non-Notify Compliance Documentation

Chandler Boulevard:

27th Avenue to 19th Avenue
City of Phoenix, Maricopa County, Arizona

COP Project # ST85100367

Prepared for:



**City of Phoenix
Street Transportation Department**

Prepared by:

Kimley»Horn

Project No. 096495000
June 2016
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TABLE OF CONTENTS

Project Location	1
Project Description	1
Location Description.....	1
Endangered Species Act (ESA) Listed Species	4
State Sensitive Species	6
Protected Native Plants.....	6
Noxious And Invasive Species.....	6
Migratory Bird Treaty Act	7
Cultural Resources.....	7
Preliminary Jurisdictional Delineation	8
Impacts To Waters Of The U.S.	8
Avoidance And Minimization	8
Unavoidable Impacts To Waters Of The U.S.	8
Compensatory Mitigation.....	14
Nationwide Permit No. 14 Condition Compliance	14
Literature Cited.....	17

LIST OF FIGURES

Figure 1. Vicinity Map.....	2
Figure 2. USGS Quadrangle Map.....	3
Figure 3. Impacts to Waters of the U.S.	9
Figure 4. Impacts to Waters of the U.S. Cross Sections	13

LIST OF TABLES

Table 1. Species Excluded From Further Evaluation	4
Table 2. Anticipated Impacts to Potential Waters of the U.S.	14
Table 3. Nationwide Permit General and Regional Conditions.....	14

LIST OF APPENDICES

- Appendix A: U.S. Fish and Wildlife Service (USFWS) Information, Planning, and Conservation System and Arizona Game and Fish Department (AGFD) Online Environmental Review Tool Report
- Appendix B: Applicable Mitigation Measures for Chandler Blvd.: 27th Ave.–19th Ave. from the South Mountain Freeway (Loop 202) Record of Decision City of Phoenix Project no. ST85100367
- Appendix C: City of Phoenix Street Transportation Department Sonoran Desert Tortoise Awareness Flyer, AGFD's Guidelines for Handling Sonoran Desert Tortoises Encountered on Development Projects (Revised September 22, 2014), USFWS Migratory Bird Treaty Act (MBTA) project-specific Special Purpose Permit, MBTA Awareness Flyer, USFWS Western Burrowing Owl citywide Special Purpose Permit, and Western Burrowing Owl Awareness Flyer
- Appendix D: Gila River Indian Community Letter of Notice to Salvage Protected Native Plants, and Arizona Department of Agriculture 60 Day Notice of Intent to Clear Land
- Appendix E: Archaeology Assessment Result
- Appendix F: South Mountain Freeway Preliminary Jurisdictional Delineation (Corps file no. SPL-2002-00055-KAT) Sheets Applicable to Chandler Blvd.
- Appendix G: NWP No. 14. Linear Transportation Projects

PROJECT LOCATION

The Chandler Boulevard project extends from 27th Avenue to 19th Avenue in the City of Phoenix, Maricopa County, Arizona (**Figure 1** and **Figure 2**). This section of roadway has long been identified as part of the build-out of the City of Phoenix (City) street transportation grid. The project will be built on land owned by the City and generally follows the path of the City's existing waterline maintenance road.

PROJECT DESCRIPTION

The project includes 1.2 miles of two-lane roadway with one travel lane and one bicycle lane in each direction. The north side will be fully developed with street lighting, drainage inlets, curb, gutter and sidewalk. The long-term plan includes future improvements to this section of roadway that will add two additional lanes to the south, resulting in two lanes in each direction with a two way left turn-lane in the middle. The land to the south is currently owned by the Arizona State Land Trust. The full build-out would occur in conjunction with the future sale and development of that land. Design of the Chandler Boulevard project began in October 2015 and ended in May 2016.

LOCATION DESCRIPTION

The project area is located within the Lower Colorado River subdivision within the Sonoran Desertscrub biotic community (Brown 1994). The project limits consist of undeveloped native desert with the exception of the existing dirt maintenance road and utilities (12-inch and 48-inch water lines, and a joint trench for Salt River Project (SRP), Cox Communications, and CenturyLink). The project area is located within Sections 35 and 36, Township 1 South, Range 2 East, and Section 31, Township 1 South, Range 3 East (Gila and Salt River Baseline and Meridian). The project area is located on the *Lone Butte, Arizona* United States Geological Survey (USGS) 7.5-minute quadrangle map. The project area is approximately 1,280 feet above mean sea level (AMSL) at the northeastern project limits and 1,120 feet AMSL at the southwestern project limits. The project area slopes/drains to the southwest.

The following soils occur within the project area: Antho-Carrizo complex, 0 to 1 percent slopes; Carrizo-Ebon complex, 3 to 12 percent slopes; Ebon gravelly loam, 0 to 8 percent slopes; and Torrifluvents (USDA 2016). Information from the Arizona Department of Water Resources (ADWR) website was reviewed for water wells located in the vicinity of the project area. According to well registration records, groundwater depth is greater than 50 feet below ground surface in the project area (ADWR 2016). However, groundwater levels can fluctuate due to seasonal variations, groundwater withdrawal or injection, and other factors.

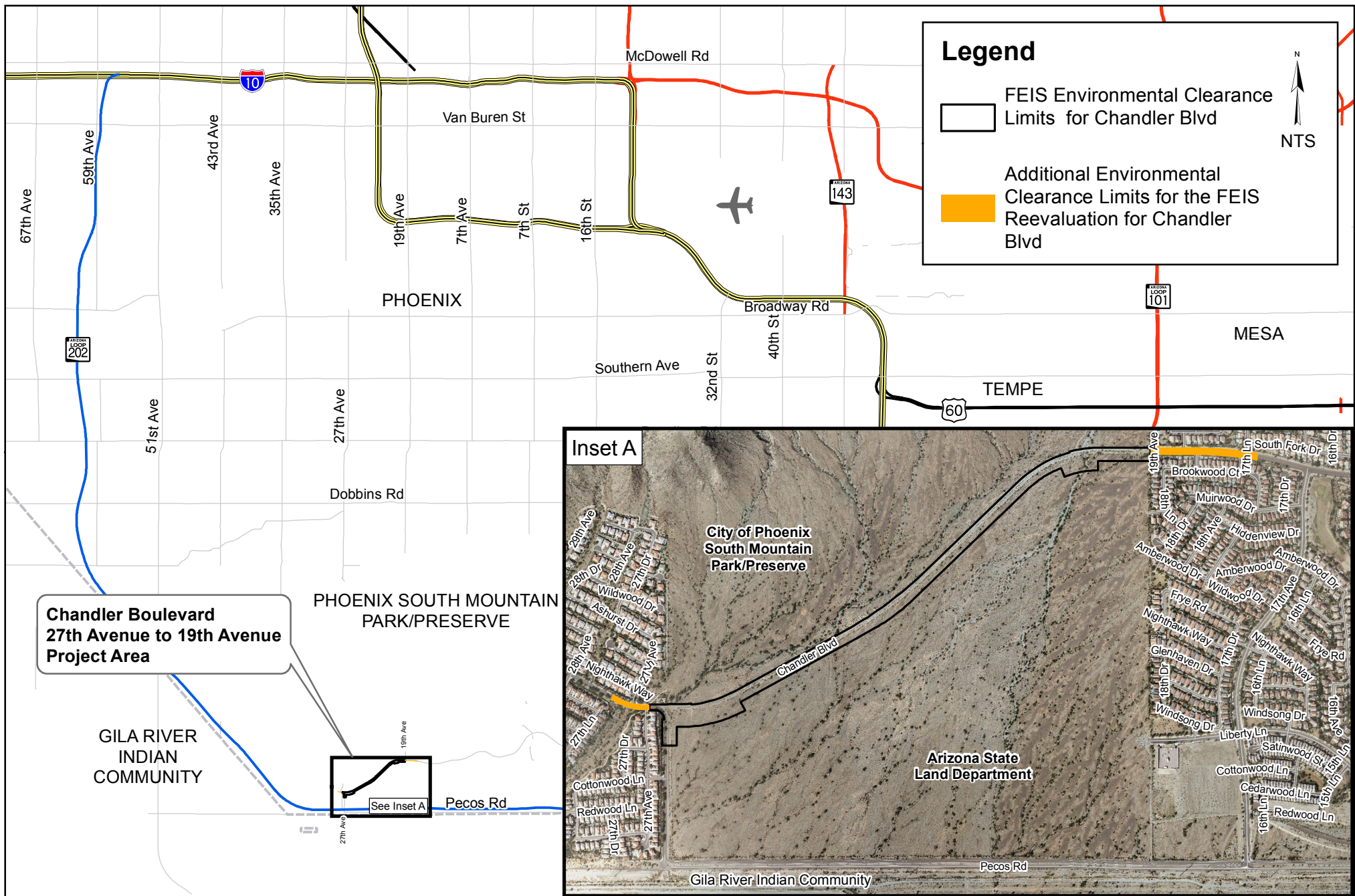
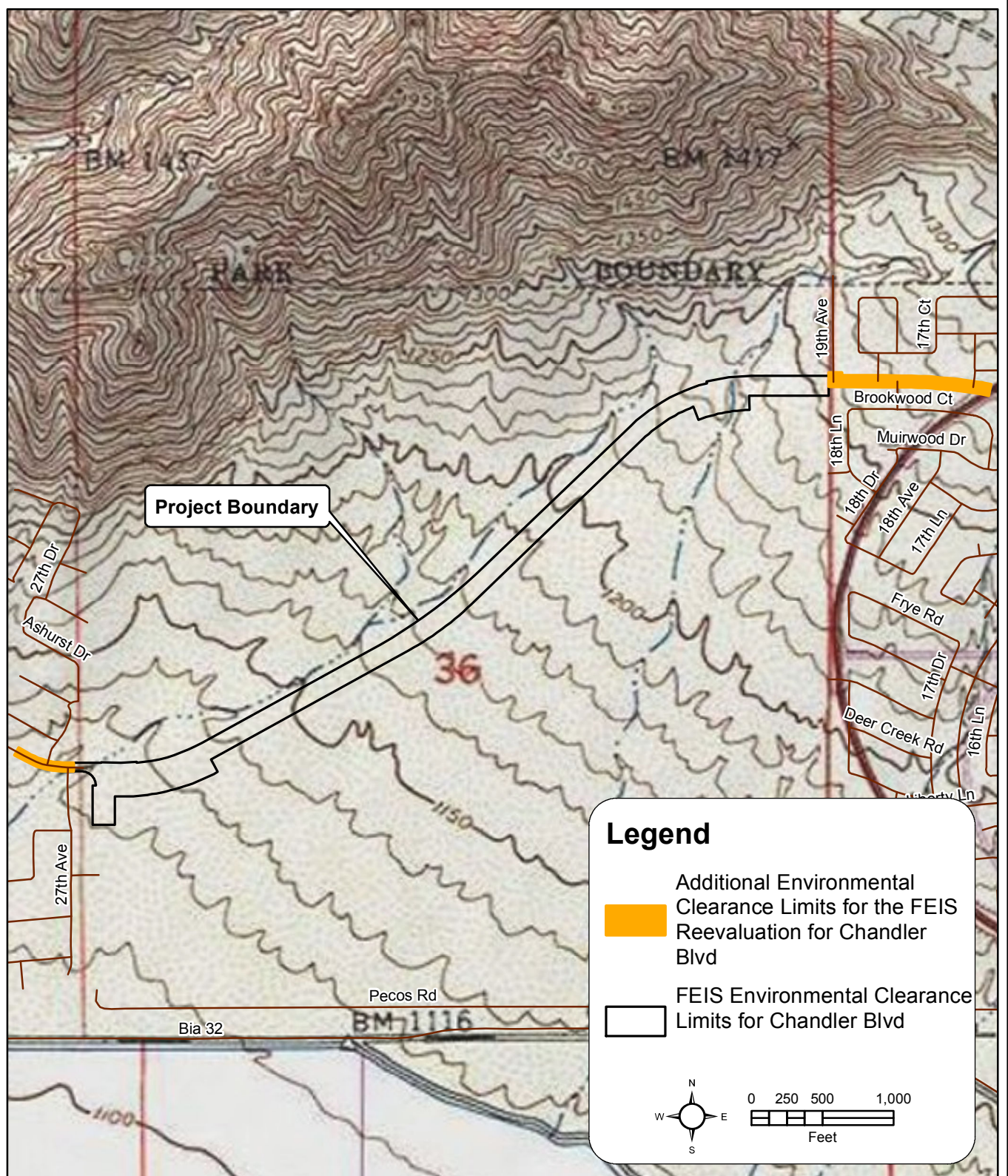


FIGURE 1

CHANDLER BOULEVARD
27TH AVENUE TO 19TH AVENUE
ST85100367
NH-202-D(ADY)
VICINITY MAP



Kimley»Horn

7740 N. 16th Street, Suite 300
Phoenix, Arizona 85020
Phone: (602) 944-5500
Fax: (602) 944-7423

7.5' USGS Quadrangle Map (Lone Butte, AZ)

Chandler Boulevard
27th Ave to 19th Ave
Approximately 27.9 Acres
City of Phoenix, Maricopa County, Arizona

Project No. ST85100367

Figure 2

ENDANGERED SPECIES ACT (ESA) LISTED SPECIES

SPECIES IDENTIFICATION

The U.S. Fish and Wildlife Service (USFWS) Information, Planning, and Conservation System (IPaC) was accessed on April 28, 2016 to obtain a list of federally protected species that should be considered in an effects analysis for the project. (**Appendix A**). The list included six (6) threatened, endangered or candidate species that should be evaluated for the project area. The list was reviewed by a qualified biologist (Jennifer Tremayne, Kimley-Horn) to determine species that may occur in the project vicinity.

Species included in the USFWS list, but excluded from further evaluation are addressed in **Table 1**. This project, and the resulting stormwater pollution prevention plan (SWPPP), will have no effect on the species listed in **Table 1**. Additionally, there is no federally designated Critical Habitat within the project vicinity.

Table 1. Species Excluded From Further Evaluation

Common Name Scientific Name	Status*	Habitat (USFWS 2016)	Exclusion Justification
California Least tern <i>Sterna antillarum browni</i>	E	Elevation: <2,000 feet Open, bare or sparsely vegetated sand, sandbars, gravel pits, or exposed flats along shorelines of inland rivers, lakes, reservoirs, or drainage systems. Species may occur in Arizona where habitat components are adequate for nesting or feeding such as large lakes, recharge basins, or wetland areas.	Suitable habitat for this species is not present in the project area and the project limits are outside the historic, present, and potential distribution range for this species according to the AGFD's HabiMap™ Arizona species distribution model. No individuals were identified in the project vicinity in Arizona Game and Fish Department (AGFD) species occurrence data.
Yellow-billed cuckoo <i>Coccyzus americanus</i>	T	Elevation: <6,500 feet Large blocks of riparian woodlands (cottonwood, willow, or tamarisk galleries). Cuckoos are found nesting statewide, mostly below 5,000 feet in central, western, and southeastern Arizona.	Suitable habitat for this species is not present in the project area and the project limits are outside the historic, present, and potential distribution range for this species according to the AGFD's HabiMap™ Arizona species distribution model. No individuals were identified in the project vicinity in AGFD species occurrence data.

Common Name Scientific Name	Status*	Habitat (USFWS 2016)	Exclusion Justification
Yuma clapper rail <i>Rallus longirostris yumanensis</i>	E	Elevation: < 4,500 feet Fresh water and brackish marshes. Species is associated with dense emergent riparian vegetation. Requires wet substrate (mudflat, sandbar) with dense herbaceous or woody vegetation for nesting and foraging. Channelization and marsh destruction are primary sources of habitat loss.	Suitable habitat for this species is not present in the project area and the project limits are outside the historic, present, and potential distribution range for this species according to the AGFD's HabiMap™ Arizona species distribution model. No individuals were identified in the project vicinity in AGFD species occurrence data.
Roundtail chub <i>Gila robusta</i>	PT	Elevation range: 1,000-7,500 feet Cool to warm waters of rivers and streams, often occupy the deepest pools and eddies of large streams.	Suitable habitat for this species is not present in the project area and the project limits are outside the historic, present, and potential distribution range for this species according to the AGFD's HabiMap™ Arizona species distribution model. No individuals were identified in the project vicinity in AGFD species occurrence data.
Lesser long-nosed bat <i>Leptonycteris curasoae yerbabuenae</i>	E	Elevation range: 1,600- 7,500 feet Desertscrub habitat with agave and columnar cacti present as food plants. The plant communities this species is typically associated with are Palo Verde/Saguaro, Semidesert Grassland, and Oak Woodland. Day roosts in caves and abandoned tunnels. Forages at night on nectar, pollen, and fruit of paniculate agaves and columnar cacti.	Suitable roosting habitat for this species is not present in the project limits and the project limits are outside the historic, present, and potential distribution range for this species according to the AGFD's HabiMap™ Arizona species distribution model. No individuals were identified in the project vicinity in AGFD species occurrence data.
Sonoran pronghorn <i>Antilocapra americana sonoriensis</i>	E	Elevation: < 656 feet Broad intermountain alluvial valleys with creosote-bursage and palo verde-mixed cacti associations. The Sonoran pronghorn population listed as endangered occurs in Maricopa, Pima, and Yuma counties.	Suitable roosting habitat for this species is not present in the project limits and the project limits are outside the historic, present, and potential distribution range for this species according to the AGFD's HabiMap™ Arizona species distribution model. No individuals were identified in the project vicinity in AGFD species occurrence data.

* E = Endangered; PT = Proposed Threatened; T=Threatened

STATE SENSITIVE SPECIES

The AGFD Online Environmental Review Tool Report was accessed on April 28, 2016 to determine special status species known to occur in the project vicinity (**Appendix A**) and listed the Sonoran Desert tortoise (*Gopherus morafkai*) and common chuckwalla (*Sauromalus ater*) as occurring within three miles of the project vicinity. The Sonoran Desert tortoise is classified as a Tier 1A “Species of Greatest Conservation Need” by the AGFD. The project area does contain suitable dispersal habitat for the Sonoran Desert tortoise. Construction of Chandler Boulevard was included as part of the Selected Alternative for the South Mountain Freeway Final Environmental Impact Statement (FEIS)/Record of Decision (ROD). Therefore, certain mitigation measures from the FEIS/ROD that are applicable to the Chandler Boulevard project will be adhered to by the City. The applicable mitigation measures are included in **Appendix B** along with compliance notes. As required by mitigation measure BIO-7, pre-construction surveys for the Sonoran Desert tortoise are required and will be completed by the City. As required by mitigation measure BIO-14, if any Sonoran Desert tortoises are encountered during construction, the contractor shall adhere to the most current guidelines regarding encounters with Sonoran Desert tortoises. The City’s Sonoran Desert tortoise awareness flyer and AGFD’s Guidelines for Handling Sonoran Desert Tortoises Encountered on Development Projects (Revised September 22, 2014) (**Appendix C**) will also be provided to the contractor.

PROTECTED NATIVE PLANTS

On behalf of the City, Kimley-Horn performed a native plant inventory for the project area. The applicable mitigation measures are included in **Appendix B** along with compliance notes.

Protected native plants are located beyond the reevaluation clearance limits within the overall Chandler Blvd. project area. Therefore, in accordance with the required mitigation measure (BIO-22), on June 2, 2016 the Gila River Indian Community was provided a Letter of Notice to Salvage Protected Native Plants and project-related native plant inventory documenting whether the identified native plants are to be salvaged, protected in place, or removed (**Appendix D**). A 45 day access period (June 2, 2016 through July 19, 2016) has been provided for the Gila River Indian Community personnel or their contractor to salvage and relocate the identified plants or to coordinate with the City’s contractor to salvage and deliver requested plants from the list to a location on Gila River Indian Community land within 1 mile of the project area. Per mitigation measure BIO-1, a 60 day Notice of Intent to Clear Land was also submitted to the Arizona Department of Agriculture on June 15, 2016 and detailed the Gila River Indian Community initial selection of salvageable plants through July 19, 2016 (**Appendix D**). If protected native plants are not salvaged by the Gila River Indian Community during the 45 day access period or during the 60 day Notice of Intent to Clear Land salvage period, the plants will become the property of the contractor.

NOXIOUS AND INVASIVE SPECIES

Noxious and invasive species were not observed during the site visit. However, the mitigation measures pertaining to noxious and invasive species are detailed in mitigation measures BIO-10 through BIO-12. The applicable mitigation measures are included in **Appendix B** along with compliance notes.

MIGRATORY BIRD TREATY ACT

Migratory birds may nest on the ground, on structures, or in trees, shrubs, or other vegetation within the project limits. As required by the applicable mitigation measures in **Appendix B**, a nesting bird survey will be conducted prior to construction since vegetation removal will occur during migratory bird breeding season. A Migratory Bird Treaty Act (MBTA) Special Purpose Permit (**Appendix C**) issued by the USFWS is in place in the event that nests cannot be avoided and wildlife rehabilitators are required to implement relocations or other appropriate mitigation measures. The City's MBTA awareness flyer (**Appendix C**) will also be provided to the contractor.

Additionally, in accordance with mitigation measure BIO-16, a biologist will be employed to complete a preconstruction survey for burrowing owls 96 hours prior to construction in all suitable habitat that will be disturbed. Mitigation measure BIO-17 is also applicable and states the following: If any burrowing owls are located in the work area, the contractor shall immediately stop work at that location and notify the City Engineer. The City Engineer will contact the Street Transportation Department Environmental Quality Specialist (602-534-6030) who will contact a qualified biologist to determine whether the owls could be avoided or must be relocated. The contractor shall not work within 100 feet of any active burrow until the situation has been evaluated by the Environmental Quality Specialist. If the Environmental Quality Specialist determines that the owl must be relocated, a biologist holding a rehabilitation permit from USFWS will relocate burrowing owls from the project area. The City holds a citywide USFWS Special Purpose Permit to implement mitigation measures regarding burrowing owls that could be utilized for this project as necessary (**Appendix C**). The City's Western burrowing owl awareness flyer (**Appendix C**) will also be provided to the contractor.

CULTURAL RESOURCES

The City prepared an Archaeology Assessment Result (**Appendix E**) dated March 25, 2015 that states the following.

AZ T:12:111(ASM), a historic archaeological mining site, was previously identified within the area of potential effects (APE), but was not encountered by the recent Brodbeck (2012) archaeological survey (Brodbeck 2012). The Brodbeck (2012) survey only identified a single isolated occurrence, and no further recommendations for archaeological work were made. Site AZ T:12:111(ASM) is believed to have been destroyed by construction of the waterline that follows the planned alignment of Chandler Boulevard. The Brodbeck (2012) survey also located sites AZ T:12:286 and 287(ASM), which may represent O'Odham Traditional Cultural Places and should be avoided. However, both sites are beyond the APE for this project and should not be affected by construction. The City of Phoenix Archaeology Office (CAO) recommended that no further archaeological work is needed for this project.

The additional environmental clearance limits for the FEIS Reevaluation for Chandler Blvd were reviewed for reviewed for cultural resources impacts and Continuing Section 106 consultation was issued to the consulting parties by ADOT on June 21, 2016. The additional environmental clearance limits consist of two areas of new Area of Potential Effects (APE) that are located within a developed portion of City ROW and easement and consist of pavement, sidewalks, and landscaping. A review of records on AZSITE and at Pueblo Grande Museum indicated that the area of new APE on Shaughnessy Road was previously surveyed by SWCA, Inc., Environmental Consultants. The results were reported in "An Archaeological

Survey of 320 Acres at South Mountain, Maricopa County, Arizona. No sites were identified within the new APE. Consultation for this report was not available. The area of new APE on Chandler Boulevard has not been previously surveyed. Archaeological survey is not warranted at this location because it consists of pavement, sidewalks, and landscaping. Based on this information, FHWA has determined that a finding of “no historic properties affected” is appropriate for the work proposed in the expanded APE.

PRELIMINARY JURISDICTIONAL DELINEATION

A Preliminary Jurisdictional Delineation (PJD) was approved for the South Mountain Freeway project (Corps file no. SPL-2002-00055-KAT) that included the majority of the Chandler Boulevard project area (applicable sheets included in **Appendix F**). A field visit was completed on February 2, 2016 to confirm site conditions. PJD 1 and PJD 2 were identified on the west end of the project area since these washes extend beyond the previously reviewed area. The only change to site conditions is a minor channel at W13 that appears to have been created by flows since the original PJD was approved. Approximately 0.37 acres of potentially jurisdictional Waters of the U.S. (WOUS) are located within the project limits and are depicted in **Figure 3**.

IMPACTS TO WATERS OF THE U.S.

AVOIDANCE AND MINIMIZATION

The City explored practicable avoidance measures; however, onsite ephemeral washes traverse the project area in a manner that does not allow for avoidance. A bridge was utilized instead of box culverts near 19th Avenue to minimize permanent impacts to WOUS to only bridge piers. Use of rip-rap and gabion mattresses were also minimized to reduce impacts to WOUS.

UNAVOIDABLE IMPACTS TO WATERS OF THE U.S.

The proposed project is expected to permanently impact a combined total of 0.10 acres of potential WOUS and temporarily impact 0.17 acres of potential WOUS (temporary construction impacts due to movement of equipment and temporary disturbance). These areas of temporary disturbance will be returned to pre-construction condition. The majority of impacts to WOUS stem from fill dirt associated with the roadway construction. Impacts are illustrated in plan-view and cross sections on **Figure 3** and **Figure 4**.

There are no indirect impacts to upstream, downstream, or adjacent parcels except as depicted in **Figure 3**. Fill dirt will be generated onsite. Should there be an insufficient amount of fill onsite; the source of fill will be transported by an approved contractor that will supply clean fill dirt/earthen fill. The fill would be transported to the project area by truck on existing roads.

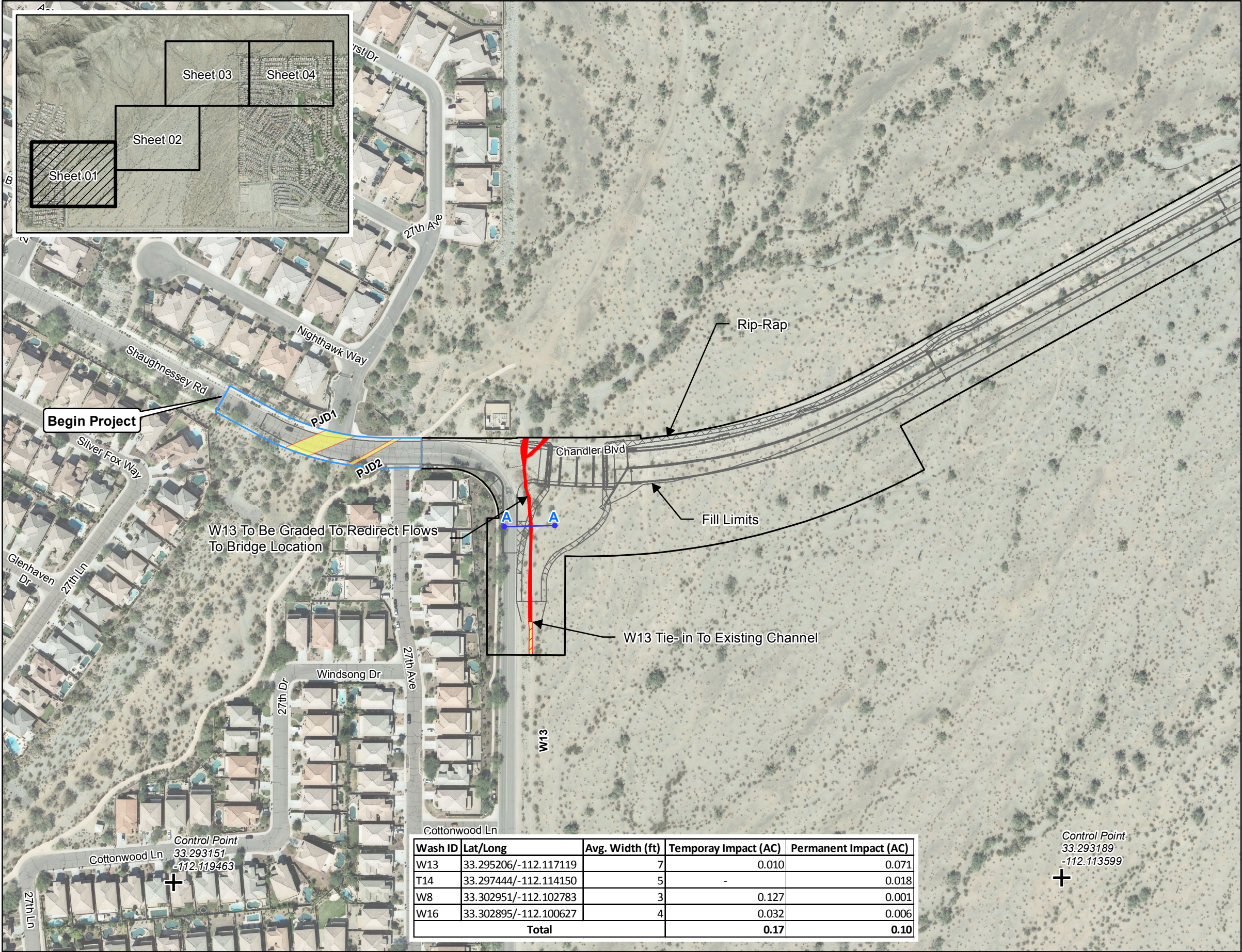
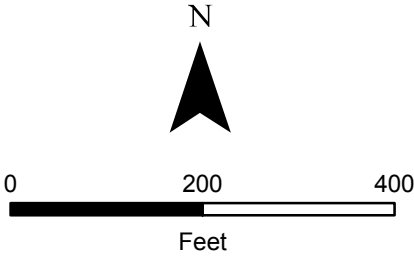


FIGURE 3.
IMPACTS TO WATERS OF THE U.S

- Additional Environmental Clearance Limits for the FEIS Reevaluation for Chandler Blvd (~2.7 AC)
- FEIS Environmental Clearance Limits for Chandler Blvd (~22.2 AC)
- Cross Sections
- Temporary Impacts to Potentially Jurisdictional Waters of the U.S. (0.17 AC)
- Permanent Impacts to Potentially Jurisdictional Waters of the U.S. (0.10 AC)
- Potentially Jurisdictional Waters of the U.S. 0.37 AC per Corps File No. 2002-00055-KAT approved 03/02/14 and revised/reverified per field conditions in 02/02/16



SCALE(H):1"= 200'
SCALE(V): N/A

DESIGNED BY: KIMLEY-HORN AND ASSOCIATES, INC., JENNIFER TREMAYNE
DRAWN BY: KIMLEY-HORN AND ASSOCIATES, INC., BRYAN YURS
CHECKED BY: KIMLEY-HORN AND ASSOCIATES, INC., JENNIFER TREMAYNE

DATE: JUNE 2016

Aerial Source: City of Phoenix, 2013
Corresponding 7.5' Quadrangle: Lone Butte, AZ

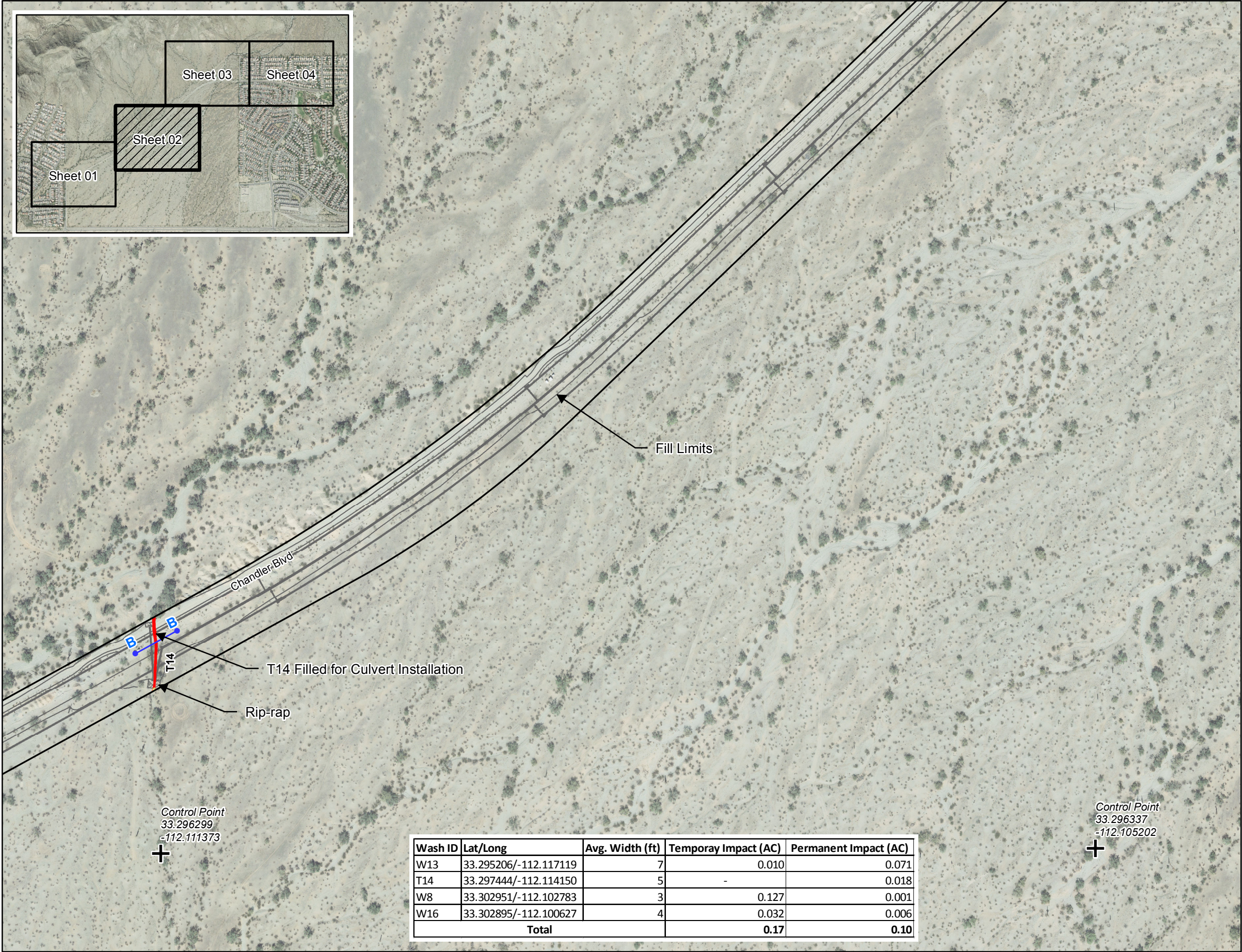
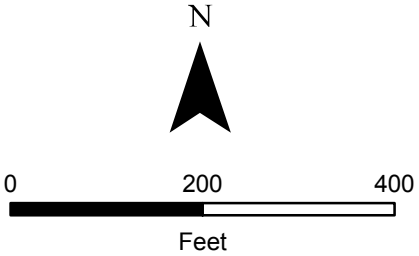


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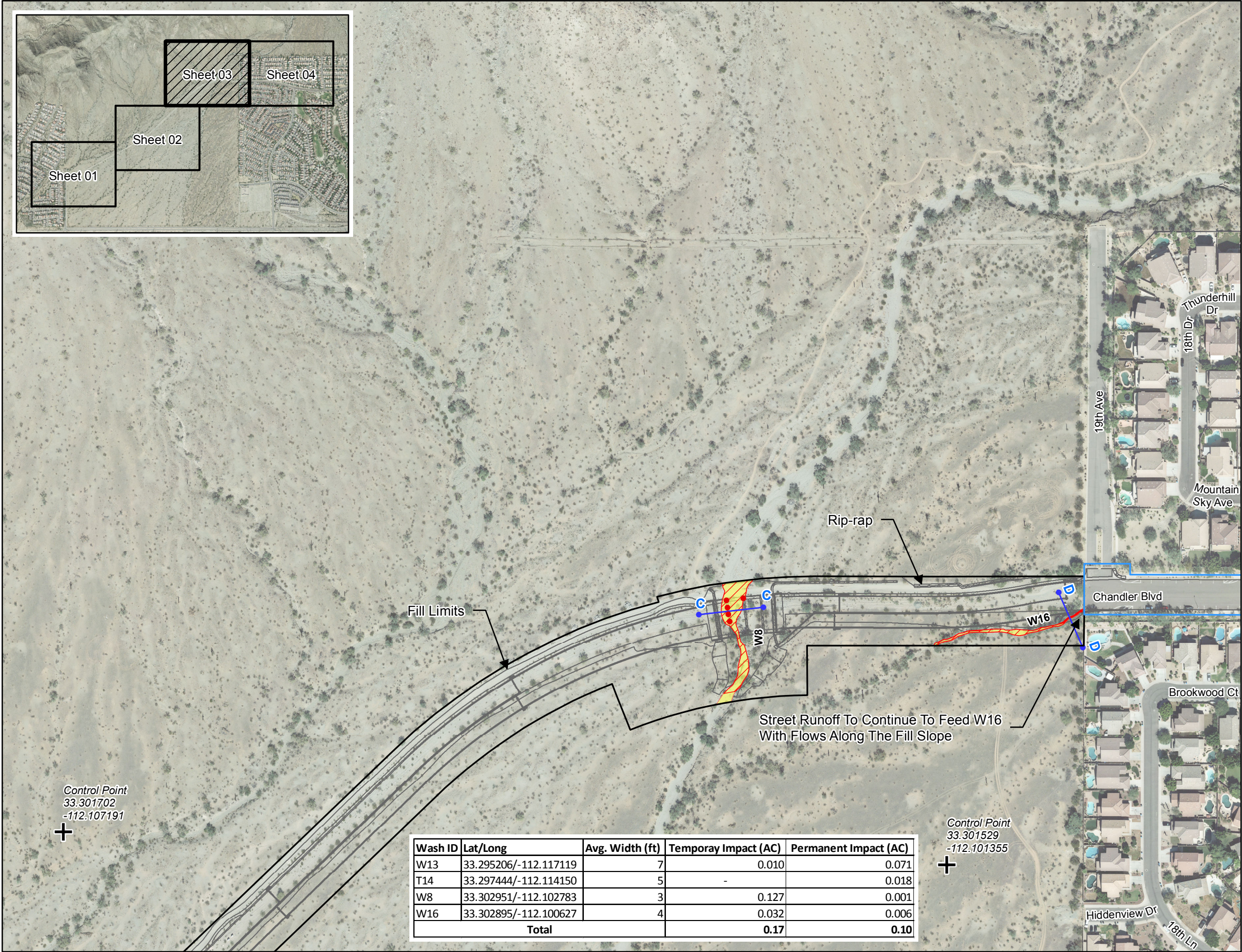
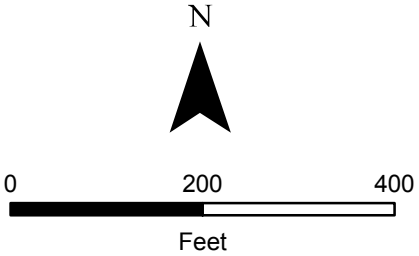


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DESIGNED BY: KIMLEY-HORN AND ASSOCIATES, INC., JENNIFER TREMAYNE
DRAWN BY: KIMLEY-HORN AND ASSOCIATES, INC., BRYAN YURS
CHECKED BY: KIMLEY-HORN AND ASSOCIATES, INC., JENNIFER TREMAYNE

DATE: JUNE 2016

Aerial Source: City of Phoenix, 2013
Corresponding 7.5' Quadrangle: Lone Butte, AZ

Wash ID	Lat/Long	Avg. Width (ft)	Temporay Impact (AC)	Permanent Impact (AC)
W13	33.295206/- 112.117119	7	0.010	0.071
T14	33.297444/- 112.114150	5	-	0.018
W8	33.302951/- 112.102783	3	0.127	0.001
W16	33.302895/- 112.100627	4	0.032	0.006
Total			0.17	0.10

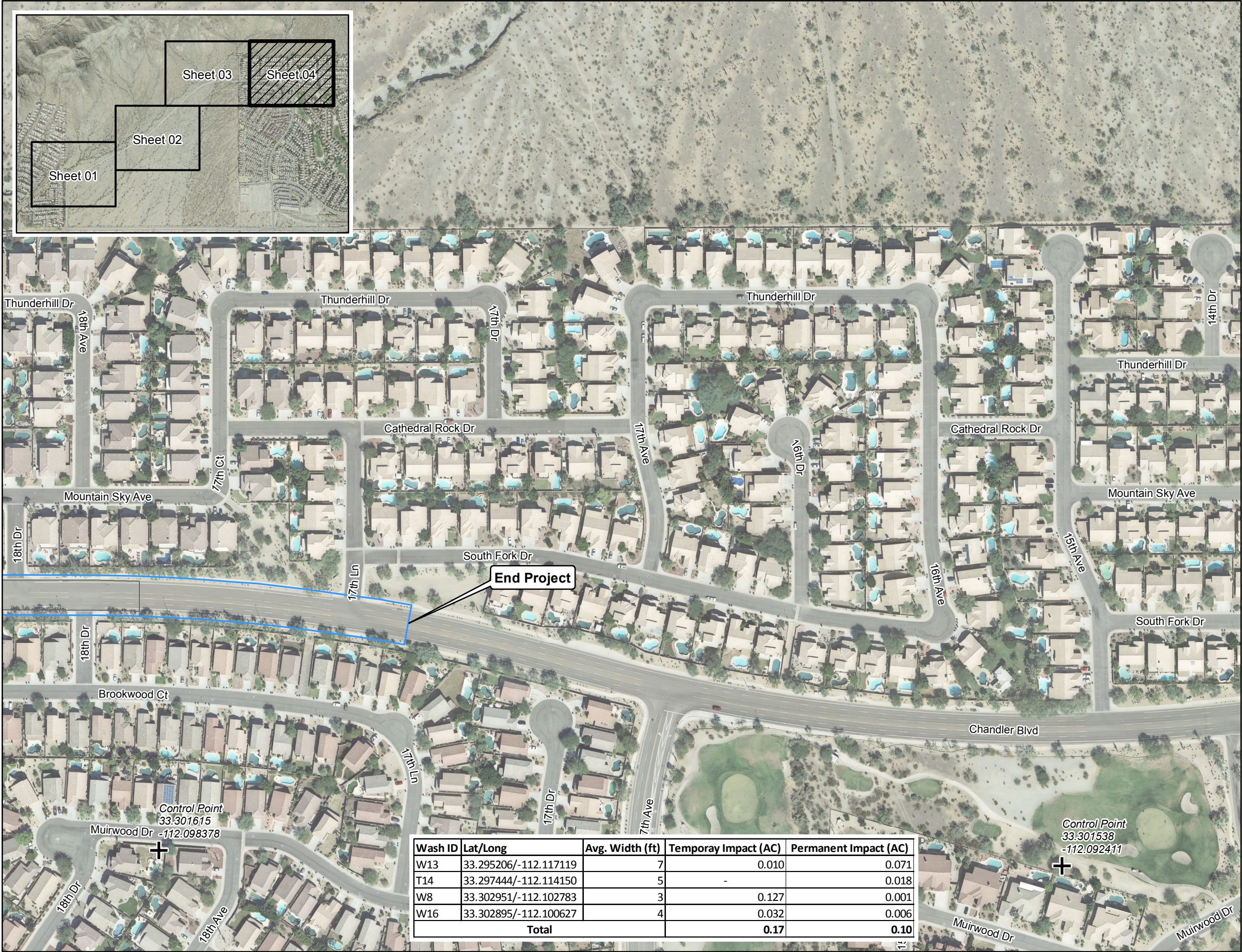
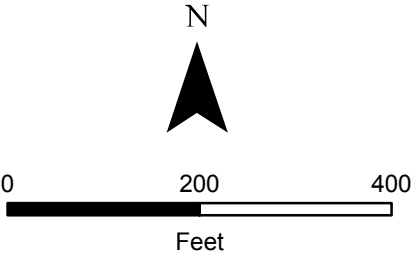


FIGURE 3.
IMPACTS TO WATERS OF THE U.S

- Additional Environmental Clearance Limits for the FEIS Reevaluation for Chandler Blvd (~2.7 AC)
- FEIS Environmental Clearance Limits for Chandler Blvd (~22.2 AC)
- Cross Sections
- Temporary Impacts to Potentially Jurisdictional Waters of the U.S. (0.17 AC)
- Permanent Impacts to Potentially Jurisdictional Waters of the U.S. (0.10 AC)
- Potentially Jurisdictional Waters of the U.S. 0.37 AC per Corps File No. 2002-00055-KAT approved 03/02/14 and revised/verified per field conditions in 02/02/16



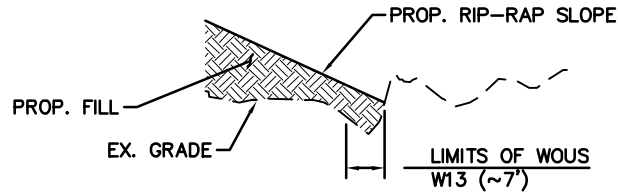
SCALE(H):1"= 200'
SCALE(V): N/A

DESIGNED BY: KIMLEY-HORN AND ASSOCIATES, INC., JENNIFER TREMAYNE
DRAWN BY: KIMLEY-HORN AND ASSOCIATES, INC., BRYAN YURS
CHECKED BY: KIMLEY-HORN AND ASSOCIATES, INC., JENNIFER TREMAYNE

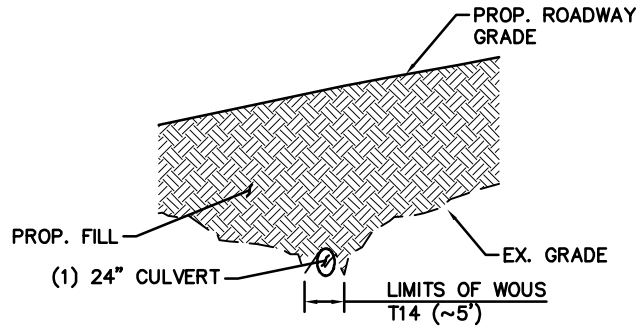
DATE: JUNE 2016

Aerial Source: City of Phoenix, 2013
Corresponding 7.5' Quadrangle: Lone Butte, AZ

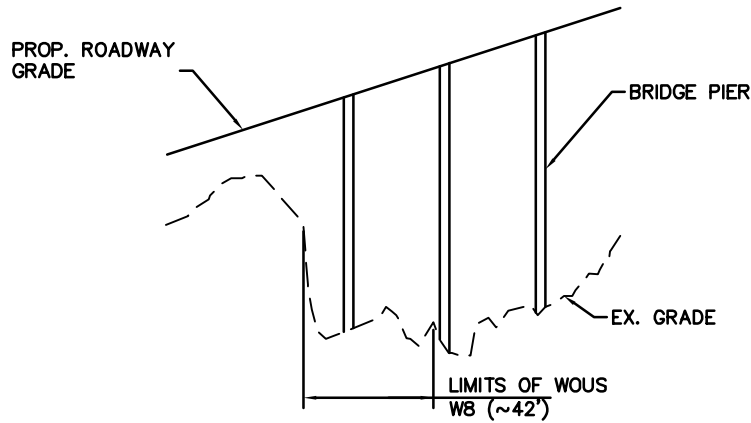
Wash ID	Lat/Long	Avg. Width (ft)	Temporay Impact (AC)	Permanent Impact (AC)
W13	33.295206/- 112.117119	7	0.010	0.071
T14	33.297444/- 112.114150	5	-	0.018
W8	33.302951/- 112.102783	3	0.127	0.001
W16	33.302895/- 112.100627	4	0.032	0.006
Total			0.17	0.10



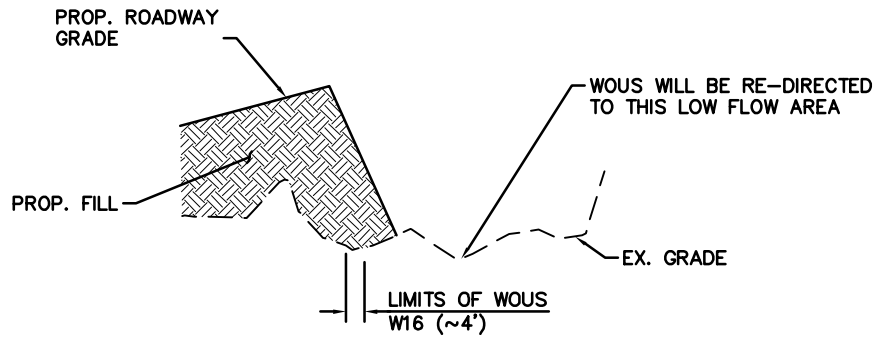
SECTION A-A:
CHANNEL GRADING IMPACT



SECTION B-B:
ROAD/CULVERT IMPACT



SECTION C-C:
BRIDGE IMPACT



SECTION D-D:
FILL SLOPE IMPACT

PROJECT NO. 191784003	FIGURE 4: IMPACTS TO POTENTIAL WATERS OF THE U.S. CROSS SECTIONS	SCALE (H): 1"=80' SCALE (V): NONE	Kimley»Horn © 2018 KIMLEY-HORN AND ASSOCIATES, INC. 7740 North 16th Street, Suite 300 Phoenix, Arizona 85020 (602) 944-8800			
DRAWING NAME XS.dwg		DESIGNED BY: BY DRAWN BY: BY CHECKED BY: JT				
OF		DATE: MAR. 2018				
				NO.	REVISION	DATE

Table 2 describes the impacts to WOUS, type and quantity of fill in WOUS. The total fill is approximately 142 cubic yards.

Table 2. Anticipated Impacts to Potential Waters of the U.S.

Wash ID	Lat/Long	Avg. Width (ft)	Length (ft)	Temp. Impact (ac)*	Perm. Impact (ac)*	Fill Below OHWM (CY)	Excavation Below OHWM (CY)	Fill Type
W13	33.295206/ -112.117119	7	372	0.010	0.071	96	0	Earthen fill
T14	33.297444/ -112.114150	5	157	-	0.018	29	0	Concrete Culvert
W8	33.302951/ -112.102783	3	3	0.127	0.001	1	0	Concrete Piers
W16	33.302895/ -112.100627	4	104	0.032	0.006	15	0	Earthen fill
Total			636	0.17	0.10	142	0	

COMPENSATORY MITIGATION

The City has minimized permanent impacts to WOUS to a combined total of 0.10 acres; therefore, impacts to WOUS have been minimized to an extent that compensatory mitigation is not required.

NATIONWIDE PERMIT NO. 14 CONDITION COMPLIANCE

Kimley-Horn analyzed the project and the NWP No. 14 terms, general conditions (1-31) and regional conditions for compliance (**Appendix G**). The proposed project will be in compliance with the Nationwide Permit General and Regional Conditions. Compliance with these Conditions is addressed in **Table 3**.

Table 3. Nationwide Permit General and Regional Conditions

Condition Number	General Conditions (See NWP No. 14 For Details of Each Condition)	Applicability (A/NA)	Rationale
1(a)-(c)	Navigation	NA	The onsite WOUS are not navigable.
2	Aquatic Life Movements	NA	The onsite WOUS do not support aquatic life.
3	Spawning Areas	NA	No spawning areas are located within the project area.
4	Migratory Bird Breeding Areas	NA	No migratory bird breeding areas are located within the project area.
5	Shellfish Beds	NA	No shellfish beds are located within the project area.
6	Suitable Material	A	Suitable materials will be used during construction.

Condition Number	General Conditions (See NWP No. 14 For Details of Each Condition)	Applicability (A/NA)	Rationale
7	Water Supply Intakes	NA	Activity associated with the proposed project will not occur in proximity to public water supply intake.
8	Adverse Effects from Impoundments	NA	The proposed project will not include impoundments.
9	Management of Water Flows	A	The proposed project has been designed to maintain existing flows as practicable.
10	Fills within 100-year floodplain	A	The activity will comply with applicable Federal Emergency Management Agency (FEMA) - approved state or local floodplain management requirements.
11	Equipment	NA	No wetlands or mudflats are being impacted by the project.
12	Soil Erosion and Sediment Controls	A	Appropriate soil erosion and sediment controls will be used and maintained during construction.
13	Removal of Temporary Fill	A	All temporary fill impacts to WOUS will be returned to pre-construction condition.
14	Proper Maintenance	A	Authorized fill will be properly maintained by the permittee.
15	Single and Complete Project	A	The proposed project will be a single and complete project. The same NWP will not be used more than once.
16	Wild and Scenic Rivers	NA	No wild or scenic rivers are located within the project area.
17	Tribal Rights	NA	See cultural resources discussion.
18(a)	Endangered Species	NA	See biological resources discussion.
18(b)		NA	The permittee is not a federal agency.
18(c)		NA	See biological resources discussion.
18(d)		NA	Consultation is not required. See biological resources discussion.
18(e)		NA	There will be no "take" of a threatened or endangered species as defined under the ESA. See biological resources discussion.
18(f)		A	See biological resources discussion.

Condition Number	General Conditions (See NWP No. 14 For Details of Each Condition)	Applicability (A/NA)	Rationale
19	Migratory Birds and Bald and Golden Eagles	NA	There will be no “take,” therefore, permits are not required.
20(a)	Historic Properties	NA	See cultural resources discussion.
20(b)		NA	The permittee is not a federal agency.
20(c)-(d)		NA	PCN is not required.
20(e)		NA	See cultural resources discussion.
21	Discovery of Previously Unknown Remains and Artifacts	A	See cultural resources discussion.
22	Designated Critical Resource Waters	NA	No designated critical resource waters exist within the project area.
23(a)	Mitigation	A	The project has been designed and will be constructed to avoid and minimize impacts to WOUS to the maximum extent practicable at the project area.
23(b)		A	Appropriate avoidance and minimization have been provided. Compensatory mitigation is not required.
23(c)1-5		NA	Compensatory mitigation is not required.
23(d)-(h)		NA	PCN is not required.
24	Safety of Impoundment Structures	NA	There are no impoundment structures in the project area.
25	Water Quality	A	Nationwide Permit No. 14 is Conditionally Certified by the Arizona Department of Environmental Quality (ADEQ)
26	Coastal Zone Management	NA	No coastal zone present.
27	Regional and Case-By-Case Conditions	A	Applicable regional conditions have been complied with.
28	Use of Multiple Nationwide Permits	NA	Only one authorization under NWP No. 14 is necessary for this project.
29	Transfer of Nationwide Permit Verifications	NA	A verification letter will not be issued since PCN is not required.
30	Compliance Certification	NA	A verification letter will not be issued since PCN is not required.
31(a)1-2	Pre-Construction Notification	NA	PCN is not required.
31(b)1-4	Contents of Pre-Construction	NA	

Condition Number	General Conditions (See NWP No. 14 For Details of Each Condition)	Applicability (A/NA)	Rationale
31(b)5	Notification:	NA	PCN is not required.
31(b)6		NA	See biological resources discussion. PCN is not required.
31(b)7		NA	See cultural resources discussion.
31(c)		NA	PCN is not required.
31(d)1	Agency Coordination	NA	
31(d)2-4		NA	
Los Angeles District Final Regional Conditions for the 2012 NWPs			
Regional Condition 1		NA	The project does not contain habitat suitable for federally listed fish species.
Regional Condition 2		NA	The project will not result in the "loss" of wetlands, mudflats, vegetated shallows or riffle and pool complexes.
Regional Condition 3		NA	PCN is not required.
Regional Condition 4		NA	Project waters are not perennial or special aquatic sites.
Regional Condition 9		NA	300 Linear Foot Rule Waiver is not required by NWP 14.
Regional Condition 10		NA	Compensatory mitigation is not required.

LITERATURE CITED

Arizona Department of Water Resources. 2016. Accessed at <http://gisweb.azwater.gov/gwsi>

Brodbeck, Mark. 2012 *A Class III Cultural Resources Survey for the Chandler Boulevard Extension, 202L, South Mountain Freeway EIS & L/DCR Project, Maricopa County, Arizona*. HDR Cultural Resource Report No. 11-01. HDR, Phoenix.

Brown, David E. 1994. Biotic Communities. Southwestern United States and Northwestern Mexico.

City of Phoenix Street Transportation Department. 2015. Sonoran Desert Tortoise and Western Burrowing Owl Awareness Flyers

U.S. Army Corps of Engineers. 2008. A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States.

U.S. Army Corps of Engineers. 2008. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0), ed. J. S. Wakeley, R. W. Lichvar, and C. V.

Noble. ERDC/EL TR-08-28. Vicksburg, MS: U.S. Army Engineer Research and Development Center.

U.S. Army Corps of Engineers and Environmental Protection Agency. 2007. Jurisdictional Determination Form Instructional Guidebook.

U.S. Department of Agriculture (USDA), Natural Resources Conservation Service. 2016. Custom Soil Resource Report for Maricopa County, Arizona, Central Part.

U.S. Fish and Wildlife Service (USFWS). 2016. Quick Reference Guide to all Arizona Species (04/28/16)

U.S. Geological Survey (USGS). *Nogales, Arizona* USGS 7.5-minute topographic quadrangle map

Wetland Training Institute, Inc. Field Guide for Wetland Delineation: 1987 Corps of Engineers Manual. Glenwood, NM. WTI 01-2 143 pp. 2001.

U.S. Fish and Wildlife Service
(USFWS) Information, Planning, and
Conservation System and Arizona
Game and Fish Department (AGFD)
Online Environmental Review Tool
Report



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Arizona Ecological Services Field Office
2321 WEST ROYAL PALM ROAD, SUITE 103
PHOENIX, AZ 85021

PHONE: (602)242-0210 FAX: (602)242-2513

URL: www.fws.gov/southwest/es/arizona/;
www.fws.gov/southwest/es/EndangeredSpecies_Main.html

Consultation Code: 02EAAZ00-2016-SLI-0400

April 28, 2016

Event Code: 02EAAZ00-2016-E-00572

Project Name: Chandler Boulevard:27th Avenue to 19th Avenue

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The Fish and Wildlife Service (Service) is providing this list under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*). The list you have generated identifies threatened, endangered, proposed, and candidate species, and designated and proposed critical habitat, that *may* occur within one or more delineated United States Geological Survey 7.5 minute quadrangles with which your project polygon intersects. Each quadrangle covers, at minimum, 49 square miles. Please refer to the species information links found at http://www.fws.gov/southwest/es/arizona/Docs_Species.htm or <http://www.fws.gov/southwest/es/arizona/Documents/MiscDocs/AZSpeciesReference.pdf> for a quick reference, to determine if suitable habitat for the species on your list occurs in your project area.

The purpose of the Act is to provide a means whereby threatened and endangered species and the habitats upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of Federal trust resources and to determine whether projects may affect federally listed species and/or designated critical habitat. A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If the Federal action agency determines that listed species or critical habitat *may be affected* by a federally funded, permitted or authorized activity, the agency must consult with us pursuant to 50 CFR 402. Note that a "may affect" determination includes effects that may not be adverse and that may be beneficial, insignificant, or discountable. An effect exists even if only one individual or habitat segment may be affected. The effects analysis should include the entire action area, which often extends well outside the project boundary or "footprint" (e.g., downstream). If the Federal action agency determines that the action may jeopardize a *proposed* species or adversely modify *proposed* critical habitat, the agency must enter into a section 7 conference. The agency may choose to confer with us on an action that may affect proposed species or critical habitat.

Candidate species are those for which there is sufficient information to support a proposal for listing. Although candidate species have no legal protection under the Act, we recommend that they be considered in the planning process in the event they become proposed or listed prior to project completion. More information on the regulations (50 CFR 402) and procedures for section 7 consultation, including the role of permit or license applicants, can be found in our Endangered Species Consultation Handbook at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>.

In addition to species listed under the Act, we advise you to consider species protected under the Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703-712) and the Bald and Golden Eagle Protection Act (BGEPA) (16 U.S.C. 668 *et seq.*). Both laws prohibit the take of covered species. The list of MBTA-protected birds is in 50 CFR 10.13 (for an alphabetical list see <http://www.fws.gov/migratorybirds/RegulationsPolicies/mbta/MBTANDX.HTML>). The Service's Division of Migratory Birds is the lead for consultations under these laws (Southwest Regional Office phone number: 505/248-7882). For more information regarding the MBTA, BGEPA, and permitting processes, please visit the following web site:

<http://www.fws.gov/migratorybirds/mbpermits.html>. Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g. cellular, digital television, radio, and emergency broadcast) can be found at:

<http://www.fws.gov/southwest/es/arizona/CellTower.htm>

Although bald eagles (*Haliaeetus leucocephalus*) are no longer listed under the Act, they are protected under both the BGEPA and the MBTA. If a bald eagle nest occurs in or near the proposed project area, our office should be contacted. An evaluation must be performed to determine whether the project is likely to disturb nesting bald eagles (see <http://www.fws.gov/southeast/es/baldeagle/>) and the Division of Migratory Birds consulted if necessary. The National Bald Eagle Management Guidelines provide recommendations to minimize potential project impacts to bald eagles (see <http://www.fws.gov/midwest/eagle/pdf/NationalBaldEagleManagementGuidelines.pdf>).

Activities that involve streams and/or wetlands are regulated by the U.S. Army Corps of Engineers (Corps). We recommend that you contact the Corps to determine their interest in proposed projects in these areas. For activities within a National Wildlife Refuge, we recommend that you contact refuge staff for specific information about refuge resources.

If your action is on Indian land or has implications for off-reservation tribal interests, we encourage you to contact the tribe(s) and the Bureau of Indian Affairs (BIA) to discuss potential

tribal concerns, and to invite any affected tribe and the BIA to participate in the section 7 consultation. In keeping with our tribal trust responsibility, we will notify tribes that may be affected by proposed actions when section 7 consultation is initiated. For more information, please contact our tribal coordinator, John Nystedt, at (928) 556-2160 or John_Nystedt@fws.gov.

The State of Arizona protects some species not protected by Federal law. We recommend you contact the Arizona Game and Fish Department (AGFD) for animals and Arizona Department of Agriculture for plants to determine if species protected by or of concern to the State may occur in your action area. The AGFD has an Environmental Review On-Line Tool that can be accessed at <http://www.azgfd.gov/hgis/>. We also recommend that you coordinate with the AGFD regarding your project.

For additional communications regarding this project, please refer to the consultation Tracking Number in the header of this letter. We appreciate your concern for threatened and endangered species. If we may be of further assistance, please contact Brenda Smith at 928/556-2157 for projects in Northern Arizona, our general Phoenix number (602/242-0210) for central Arizona, or Jean Calhoun at 520/670-6150 (x223) for projects in southern Arizona.

Sincerely,

/s/

Steven L. Spangle

Field Supervisor

Attachment



United States Department of Interior
Fish and Wildlife Service

Project name: Chandler Boulevard:27th Avenue to 19th Avenue

Official Species List

Provided by:

Arizona Ecological Services Field Office

2321 WEST ROYAL PALM ROAD, SUITE 103

PHOENIX, AZ 85021

(602) 242-0210

<http://www.fws.gov/southwest/es/arizona/>

http://www.fws.gov/southwest/es/EndangeredSpecies_Main.html

Consultation Code: 02EAAZ00-2016-SLI-0400

Event Code: 02EAAZ00-2016-E-00572

Project Type: TRANSPORTATION

Project Name: Chandler Boulevard:27th Avenue to 19th Avenue

Project Description: The City is the sponsor of the Chandler Boulevard project which is located within the City's limits that will connect Chandler Boulevard from 19th Avenue to 27th Avenue. This section of roadway has long been identified as part of the build-out of the City's street transportation grid. The project includes 1.2 miles of two-lane roadway with one travel lane and one bicycle lane in each direction. The new roadway will be built on land owned by the City and generally follows the path of the City's existing maintenance road. The north side will be fully developed with street lighting, drainage crossings, curb, gutter and sidewalk.

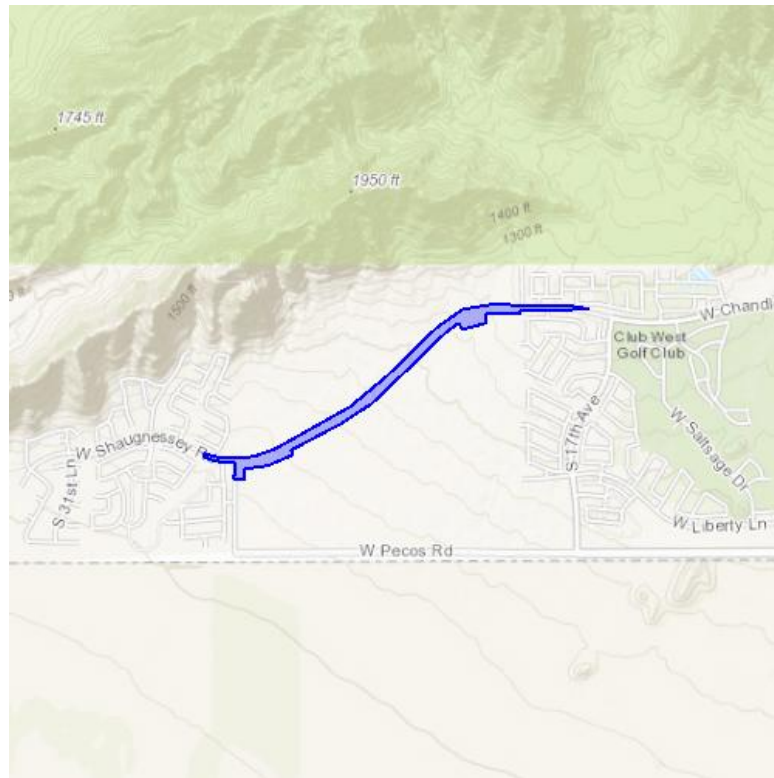
Please Note: The FWS office may have modified the Project Name and/or Project Description, so it may be different from what was submitted in your previous request. If the Consultation Code matches, the FWS considers this to be the same project. Contact the office in the 'Provided by' section of your previous Official Species list if you have any questions or concerns.



United States Department of Interior
Fish and Wildlife Service

Project name: Chandler Boulevard:27th Avenue to 19th Avenue

Project Location Map:



Project Coordinates: The coordinates are too numerous to display here.

Project Counties: Maricopa, AZ



United States Department of Interior
Fish and Wildlife Service

Project name: Chandler Boulevard:27th Avenue to 19th Avenue

Endangered Species Act Species List

There are a total of 6 threatened or endangered species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

Birds	Status	Has Critical Habitat	Condition(s)
California Least tern (<i>Sterna antillarum browni</i>)	Endangered		
Yellow-Billed Cuckoo (<i>Coccyzus americanus</i>) Population: Western U.S. DPS	Threatened	Proposed	
Yuma Clapper rail (<i>Rallus longirostris yumanensis</i>) Population: Entire	Endangered		
Fishes			
Roundtail chub (<i>Gila robusta</i>) Population: Lower Colorado River Basin DPS	Proposed Threatened		
Mammals			
Lesser Long-Nosed bat (<i>Leptonycteris curasoae yerbabuenae</i>) Population: Entire	Endangered		
Sonoran pronghorn (<i>Antilocapra americana sonoriensis</i>)	Endangered		



United States Department of Interior
Fish and Wildlife Service

Project name: Chandler Boulevard:27th Avenue to 19th Avenue

Population: Entire			
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United States Department of Interior
Fish and Wildlife Service

Project name: Chandler Boulevard:27th Avenue to 19th Avenue

Critical habitats that lie within your project area

There are no critical habitats within your project area.

Arizona Environmental Online Review Tool Report



Arizona Game and Fish Department Mission

To conserve Arizona's diverse wildlife resources and manage for safe, compatible outdoor recreation opportunities for current and future generations.

Project Name:

Chandler Boulevard: 27th Avenue to 19th Avenue

Project Description:

The City is the sponsor of the Chandler Boulevard project which is located within the City's limits that will connect Chandler Boulevard from 19th Avenue to 27th Avenue. This section of roadway has long been identified as part of the build-out of the City's street transportation grid. The project includes 1.2 miles of two-lane roadway with one travel lane and one bicycle lane in each direction. The new roadway will be built on land owned by the City and generally follows the path of the City's existing maintenance road. The north side will be fully developed with street lighting, drainage crossings, curb, gutter and sidewalk.

Project Type:

Transportation & Infrastructure, Road construction (including staging areas), Realignment/new roads

Contact Person:

Jennifer Tremayne

Organization:

Kimley-Horn

On Behalf Of:

CONSULTING

Project ID:

HGIS-03496

Please review the entire report for project type and/or species recommendations for the location information entered. Please retain a copy for future reference.

Disclaimer:

1. This Environmental Review is based on the project study area that was entered. The report must be updated if the project study area, location, or the type of project changes.
2. This is a preliminary environmental screening tool. It is not a substitute for the potential knowledge gained by having a biologist conduct a field survey of the project area. This review is also not intended to replace environmental consultation (including federal consultation under the Endangered Species Act), land use permitting, or the Departments review of site-specific projects.
3. The Departments Heritage Data Management System (HDMS) data is not intended to include potential distribution of special status species. Arizona is large and diverse with plants, animals, and environmental conditions that are ever changing. Consequently, many areas may contain species that biologists do not know about or species previously noted in a particular area may no longer occur there. HDMS data contains information about species occurrences that have actually been reported to the Department. Not all of Arizona has been surveyed for special status species, and surveys that have been conducted have varied greatly in scope and intensity. Such surveys may reveal previously undocumented population of species of special concern.
4. HabiMap Arizona data, specifically Species of Greatest Conservation Need (SGCN) under our State Wildlife Action Plan (SWAP) and Species of Economic and Recreational Importance (SERI), represent potential species distribution models for the State of Arizona which are subject to ongoing change, modification and refinement. The status of a wildlife resource can change quickly, and the availability of new data will necessitate a refined assessment.

Locations Accuracy Disclaimer:

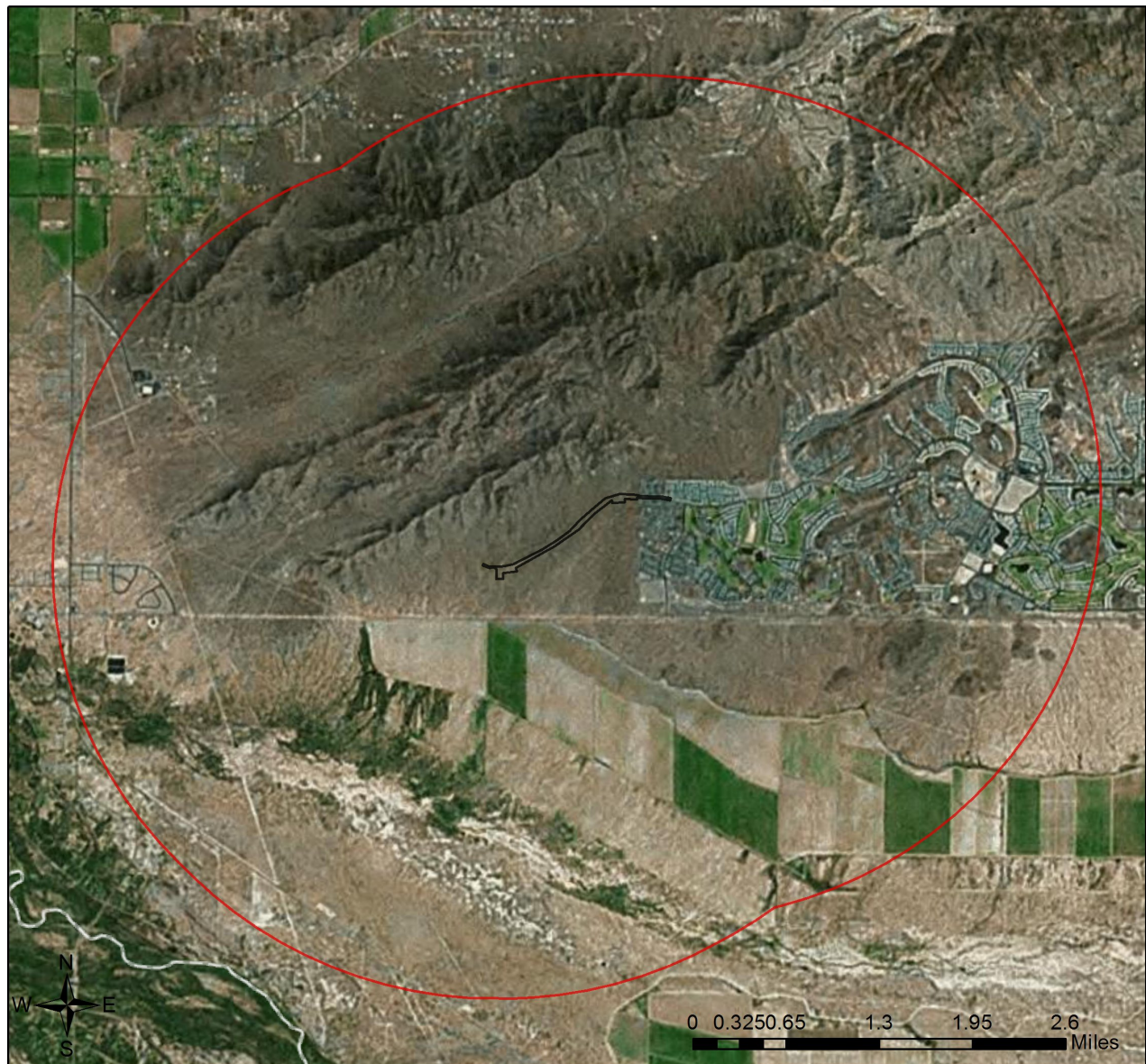
Project locations are assumed to be both precise and accurate for the purposes of environmental review. The creator/owner of the Project Review Report is solely responsible for the project location and thus the correctness of the Project Review Report content.



Recommendations Disclaimer:

1. The Department is interested in the conservation of all fish and wildlife resources, including those species listed in this report and those that may have not been documented within the project vicinity as well as other game and nongame wildlife.
2. Recommendations have been made by the Department, under authority of Arizona Revised Statutes Title 5 (Amusements and Sports), 17 (Game and Fish), and 28 (Transportation).
3. Potential impacts to fish and wildlife resources may be minimized or avoided by the recommendations generated from information submitted for your proposed project. These recommendations are preliminary in scope, designed to provide early considerations on all species of wildlife.
4. Making this information directly available does not substitute for the Department's review of project proposals, and should not decrease our opportunity to review and evaluate additional project information and/or new project proposals.
5. Further coordination with the Department requires the submittal of this Environmental Review Report with a cover letter and project plans or documentation that includes project narrative, acreage to be impacted, how construction or project activity(s) are to be accomplished, and project locality information (including site map). Once AGFD had received the information, please allow 30 days for completion of project reviews. Send requests to:
Project Evaluation Program, Habitat Branch
Arizona Game and Fish Department
5000 West Carefree Highway
Phoenix, Arizona 85086-5000
Phone Number: (623) 236-7600
Fax Number: (623) 236-7366
Or
PEP@azgfd.gov
6. Coordination may also be necessary under the National Environmental Policy Act (NEPA) and/or Endangered Species Act (ESA). Site specific recommendations may be proposed during further NEPA/ESA analysis or through coordination with affected agencies

Chandler Boulevard: 27th Avenue to 19th Avenue

Aerial Image Basemap With Locator Map



-  Project Boundary
-  Buffered Project Boundary

Project Size (acres): 30.55

Lat/Long (DD): 33.2994 / -112.1084

County(s): Maricopa

AGFD Region(s): Mesa

Township/Range(s): T1S, R2E; T1S, R3E

USGS Quad(s): LONE BUTTE

Service Layer Credits: Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong),



Chandler Boulevard: 27th Avenue to 19th Avenue

Web Map As Submitted By User



- ☐ Project Boundary
- ☐ Buffered Project Boundary

Project Size (acres): 30.55

Lat/Long (DD): 33.2994 / -112.1084

County(s): Maricopa

AGFD Region(s): Mesa

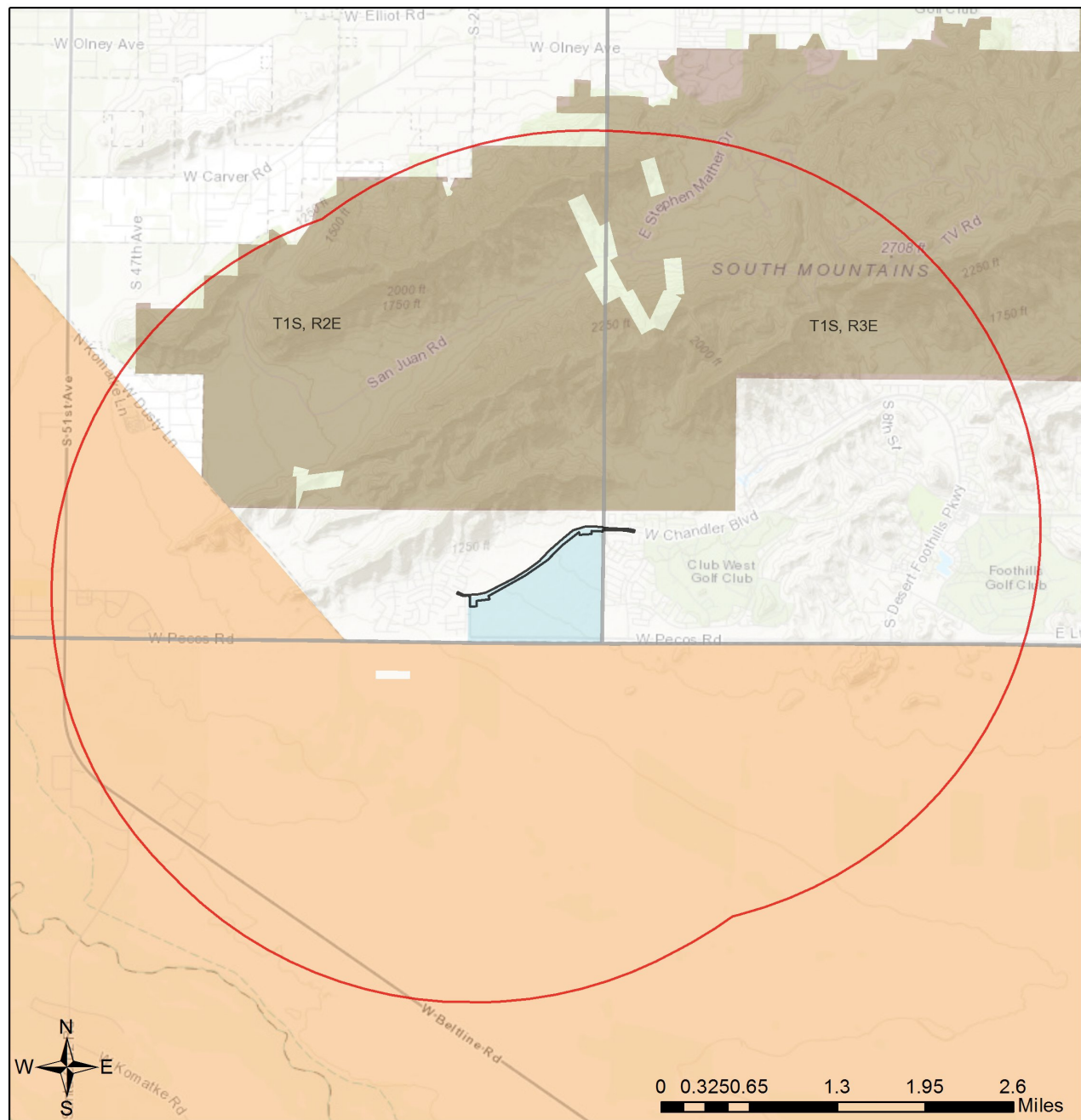
Township/Range(s): T1S, R2E; T1S, R3E

USGS Quad(s): LONE BUTTE

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Chandler Boulevard: 27th Avenue to 19th Avenue

Topo Basemap With Township/Ranges and Land Ownership



- | | |
|---------------------------|--------------------------|
| Project Boundary | Mixed/Other |
| Buffered Project Boundary | National Park/Mon. |
| Township/Ranges | Private |
| AZ Game and Fish Dept. | State and Regional Parks |
| BLM | State Trust |
| BOR | US Forest Service |
| Indian Res. | Wildlife Area/Refuge |
| Military | |

Project Size (acres): 30.55

Lat/Long (DD): 33.2994 / -112.1084

County(s): Maricopa

AGFD Region(s): Mesa

Township/Range(s): T1S, R2E; T1S, R3E

USGS Quad(s): LONE BUTTE

Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Special Status Species and Special Areas Documented within 3 Miles of Project Vicinity

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Gila River Indian Reservation	Gila River Indian Reservation					
Gopherus morafkai	Sonoran Desert Tortoise	CCA	S			1A
Sauromalus ater	Common Chuckwalla	SC				

Note: Status code definitions can be found at http://www.azgfd.gov/w_c/edits/hdms_status_definitions.shtml.

**Species of Greatest Conservation Need
Predicted within Project Vicinity based on Predicted Range Models**

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Aix sponsa	Wood Duck					1B
Ammospermophilus harrisi	Harris' Antelope Squirrel					1B
Anaxyrus retiformis	Sonoran Green Toad			S		1B
Anthus spragueii	Sprague's Pipit	C*				1A
Aquila chrysaetos	Golden Eagle	BGA		S		1B
Athene cunicularia hypugaea	Western Burrowing Owl	SC	S	S		1B
Botaurus lentiginosus	American Bittern					1B
Buteo regalis	Ferruginous Hawk	SC		S		1B
Castor canadensis	American Beaver					1B
Catostomus clarkii	Desert Sucker	SC	S	S		1B
Catostomus insignis	Sonora Sucker	SC	S	S		1B
Chilomeniscus stramineus	Variable Sandsnake					1B
Chionactis occipitalis klauberi	Tucson Shovel-nosed Snake	SC				1A
Coccyzus americanus	Yellow-billed Cuckoo (Western DPS)	LT	S			1A
Colaptes chrysoides	Gilded Flicker			S		1B
Coluber bilineatus	Sonoran Whipsnake					1B
Corynorhinus townsendii pallescens	Pale Townsend's Big-eared Bat	SC	S	S		1B
Crotalus tigris	Tiger Rattlesnake					1B
Dipodomys spectabilis	Banner-tailed Kangaroo Rat			S		1B
Euderma maculatum	Spotted Bat	SC	S	S		1B
Eumops perotis californicus	Greater Western Bonneted Bat	SC		S		1B
Falco peregrinus anatum	American Peregrine Falcon	SC	S	S		1A
Gopherus morafkai	Sonoran Desert Tortoise	C*	S			1A
Haliaeetus leucocephalus	Bald Eagle	SC, BGA	S	S		1A
Heloderma suspectum	Gila Monster					1A
Incilius alvarius	Sonoran Desert Toad					1B
Kinosternon sonoriense sonoriense	Desert Mud Turtle			S		1B
Lasiurus blossevillii	Western Red Bat		S			1B
Lasiurus xanthinus	Western Yellow Bat		S			1B

**Species of Greatest Conservation Need
Predicted within Project Vicinity based on Predicted Range Models**

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Leptonycteris curasoae yerbabuenae	Lesser Long-nosed Bat	LE				1A
Lepus alleni	Antelope Jackrabbit					1B
Lithobates yavapaiensis	Lowland Leopard Frog	SC	S	S		1A
Macrotus californicus	California Leaf-nosed Bat	SC		S		1B
Melanerpes uropygialis	Gila Woodpecker					1B
Melospiza lincolni	Lincoln's Sparrow					1B
Melospiza aberti	Abert's Towhee		S			1B
Micruroides euryxanthus	Sonoran Coralsnake					1B
Myotis occultus	Arizona Myotis	SC		S		1B
Myotis velifer	Cave Myotis	SC		S		1B
Myotis yumanensis	Yuma Myotis	SC				1B
Nyctinomops femorosaccus	Pocketed Free-tailed Bat					1B
Panthera onca	Jaguar	LE				1A
Passerculus sandwichensis	Savannah Sparrow					1B
Perognathus amplus	Arizona Pocket Mouse					1B
Perognathus longimembris	Little Pocket Mouse					1B
Phrynosoma goodei	Goode's Horned Lizard					1B
Phrynosoma solare	Regal Horned Lizard					1B
Phyllorhynchus browni	Saddled Leaf-nosed Snake					1B
Rallus longirostris yumanensis	Yuma Clapper Rail	LE				1A
Setophaga petechia	Yellow Warbler					1B
Tadarida brasiliensis	Brazilian Free-tailed Bat					1B
Toxostoma lecontei	Le Conte's Thrasher					1B
Troglodytes pacificus	Pacific Wren					1B
Vireo bellii arizonae	Arizona Bell's Vireo					1B
Vulpes macrotis	Kit Fox					1B

Species of Economic and Recreation Importance Predicted within Project Vicinity

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Callipepla gambelii	Gambel's Quail					
Zenaidura macroura	White-winged Dove					
Zenaidura macroura	Mourning Dove					

Project Type: Transportation & Infrastructure, Road construction (including staging areas), Realignment/new roads

Project Type Recommendations:

Bridge Maintenance/Construction Identify whether wildlife species use the structure for roosting or nesting during anticipated maintenance/construction period. Plan the timing of maintenance/construction to minimize impacts to wildlife species. In addition to the species list generated by the Arizona's On-line Environmental Review Tool, the Department recommends that surveys be conducted at the bridge and in the vicinity of the bridge to identify additional or currently undocumented bat, bird, or aquatic species in the project area. To minimize impacts to birds and bats, as well as aquatic species, consider conducting maintenance and construction activities outside the breeding/maternity season (breeding seasons for birds and bats usually occur spring - summer). Examining the crevices for the presence of bats prior to pouring new paving materials or that the top of those crevices be sealed to prevent material from dripping or falling through the cracks and potentially onto bats. If bats are present, maintenance and construction (including paving and milling) activities should be conducted during nighttime hours, if possible, when the fewest number of bats will be roosting. Minimize impacts to the vegetation community. Unavoidable impacts to vegetation should be mitigated on-site whenever possible. A revegetation plan should be developed to replace impacted communities. Consider design structures and construction plans that minimize impacts to channel geometry (i.e., width/depth ratio, sinuosity, allow overflow channels), to avoid alteration of hydrological function. Consider incorporating roosting sites for bats into bridge designs. During construction, erosion control structures and drainage features should be used to prevent introduction of sediment laden runoff into the waterway. Minimize instream construction activity. If culverts are planned, use wildlife friendly designs to mitigate impacts to wildlife and fish movement. Guidelines for bridge designs to facilitate wildlife passage can be found on the home page of this application at <http://www.azgfd.gov/hgis/guidelines.aspx>.

Fence recommendations will be dependant upon the goals of the fence project and the wildlife species expected to be impacted by the project. General guidelines for ensuring wildlife-friendly fences include: barbless wire on the top and bottom with the maximum fence height 42", minimum height for bottom 16". Modifications to this design may be considered for fencing anticipated to be routinely encountered by elk, bighorn sheep or pronghorn (e.g., Pronghorn fencing would require 18" minimum height on the bottom). Please refer to the Department's Fencing Guidelines located on the home page of this application at <http://www.azgfd.gov/hgis/guidelines.aspx>.

During the planning stages of your project, please consider the local or regional needs of wildlife in regards to movement, connectivity, and access to habitat needs. Loss of this permeability prevents wildlife from accessing resources, finding mates, reduces gene flow, prevents wildlife from re-colonizing areas where local extirpations may have occurred, and ultimately prevents wildlife from contributing to ecosystem functions, such as pollination, seed dispersal, control of prey numbers, and resistance to invasive species. In many cases, streams and washes provide natural movement corridors for wildlife and should be maintained in their natural state. Uplands also support a large diversity of species, and should be contained within important wildlife movement corridors. In addition, maintaining biodiversity and ecosystem functions can be facilitated through improving designs of structures, fences, roadways, and culverts to promote passage for a variety of wildlife.

Consider impacts of outdoor lighting on wildlife and develop measures or alternatives that can be taken to increase human safety while minimizing potential impacts to wildlife. Conduct wildlife surveys to determine species within project area, and evaluate proposed activities based on species biology and natural history to determine if artificial lighting may disrupt behavior patterns or habitat use. Use only the minimum amount of light needed for safety. Narrow spectrum bulbs should be used as often as possible to lower the range of species affected by lighting. All lighting should be shielded, cantered, or cut to ensure that light reaches only areas needing illumination.

Minimize potential introduction or spread of exotic invasive species. Invasive species can be plants, animals (exotic snails), and other organisms (e.g., microbes), which may cause alteration to ecological functions or compete with or prey upon native species and can cause social impacts (e.g., livestock forage reduction, increase wildfire risk). The terms noxious weed or invasive plants are often used interchangeably. Precautions should be taken to wash all equipment utilized in the project activities before leaving the site. Arizona has noxious weed regulations (Arizona Revised Statutes, Rules R3-4-244 and R3-4-245). See Arizona Department of Agriculture website for restricted plants, <https://agriculture.az.gov/>. Additionally, the U.S. Department of Agriculture has information regarding pest and invasive plant control methods including: pesticide, herbicide, biological control agents, and mechanical control, <http://www.usda.gov/wps/portal/usdahome>. The Department regulates the importation, purchasing, and transportation of wildlife and fish (Restricted Live Wildlife), please refer to the hunting regulations for further information http://www.azgfd.gov/h_f/hunting_rules.shtml

Minimization and mitigation of impacts to wildlife and fish species due to changes in water quality, quantity, chemistry, temperature, and alteration to flow regimes (timing, magnitude, duration, and frequency of floods) should be evaluated. Minimize impacts to springs, in-stream flow, and consider irrigation improvements to decrease water use. If dredging is a project component, consider timing of the project in order to minimize impacts to spawning fish and other aquatic species (include spawning seasons), and to reduce spread of exotic invasive species. We recommend early direct coordination with Project Evaluation Program for projects that could impact water resources, wetlands, streams, springs, and/or riparian habitats.

The Department recommends that wildlife surveys are conducted to determine if noise-sensitive species occur within the project area. Avoidance or minimization measures could include conducting project activities outside of breeding seasons.

Based on the project type entered, coordination with State Historic Preservation Office may be required (<http://azstateparks.com/SHPO/index.html>).

Trenches should be covered or back-filled as soon as possible. Incorporate escape ramps in ditches or fencing along the perimeter to deter small mammals and herptefauna (snakes, lizards, tortoise) from entering ditches.

Design culverts to minimize impacts to channel geometry, or design channel geometry (low flow, overbank, floodplains) and substrates to carry expected discharge using local drainages of appropriate size as templates. Reduce/minimize barriers to allow movement of amphibians or fish (e.g., eliminate falls). Also for terrestrial wildlife, washes and stream corridors often provide important corridors for movement. Overall culvert width, height, and length should be optimized for movement of the greatest number and diversity of species expected to utilize the passage. Culvert designs should consider moisture, light, and noise, while providing clear views at both ends to maximize utilization. For many species, fencing is an important design feature that can be utilized with culverts to funnel wildlife into these areas and minimize the potential for roadway collisions. Guidelines for culvert designs to facilitate wildlife passage can be found on the home page of this application at <http://www.azgfd.gov/hgis/guidelines.aspx>.

Based on the project type entered, coordination with Arizona Department of Environmental Quality may be required (<http://www.azdeq.gov/>).

Based on the project type entered, coordination with U.S. Army Corps of Engineers may be required (<http://www.usace.army.mil/>)

Based on the project type entered, coordination with County Flood Control district(s) may be required.

Vegetation restoration projects (including treatments of invasive or exotic species) should have a completed site-evaluation plan (identifying environmental conditions necessary to re-establish native vegetation), a revegetation plan (species, density, method of establishment), a short and long-term monitoring plan, including adaptive management guidelines to address needs for replacement vegetation.

The Department requests further coordination to provide project/species specific recommendations, please contact Project Evaluation Program directly. PEP@azgfd.gov

Project Location and/or Species Recommendations:

HDMS records indicate that Sonoran Desert Tortoise have been documented within the vicinity of your project area. Please review the Tortoise Handling Guidelines found at: <http://www.azgfd.gov/hgis/pdfs/Tortoisehandlingguidelines.pdf>

Tribal Lands are within the vicinity of your project area and may require further coordination. Please contact:

Gila River Indian Community
PO Box 97
Sacaton, AZ 85247
(520) 562-6000
(520) 562-6010 (fax)



Applicable Mitigation Measures for
Chandler Blvd.: 27th Ave.–19th Ave.
from the South Mountain Freeway
(Loop 202) Record of Decision City of
Phoenix Project no. ST85100367

**Applicable mitigation measures for Chandler Blvd.: 27th Ave.–19th Ave.
from the South Mountain Freeway (Loop 202) Record of Decision**
City of Phoenix Project No. ST85100367

ROD code	Mitigation measures	Geotech notes	Construction notes (based on 100% construction plans). All mitigation measures are included in the special provisions of the 100% construction plans.
Land Use: the land use mitigation measure (LNDU-1) does not apply to the Chandler Blvd. project. If easement from ASLD is needed, City will undertake appropriate coordination.		N/A	The City is coordinating with ASLD for required easements and right-of-way.
Social Conditions			
SOC-2	City of Phoenix ¹ will coordinate during design phase to designate necessary utility corridors for relocations where appropriate.	N/A	Coordination for utility relocations is ongoing. Mitigation measure is included in the special provisions of the construction plans.
SOC-3	City of Phoenix will coordinate with all local agencies and private facility owners to minimize, where possible, the effects of utility relocations and adjustments. Coordination will include, when possible, developing construction schedules to coincide with scheduled maintenance periods and off-peak loads.	N/A	Coordination for utility relocations is ongoing. Mitigation measure is included in the special provisions of the construction plans.
SOC-7	City of Phoenix will coordinate with all appropriate emergency services, and efforts will be made to minimize effects on response routes and times for all service areas.	N/A	<p>Specs are provided as follows:</p> <p>City of Phoenix will coordinate with all appropriate emergency services, and efforts will be made to minimize effects on response routes and times for all service areas.</p> <p>Hospital Access Requirements:</p> <p>The Contractor shall maintain the Emergency entrance to Hospitals by way of a paved lane for emergency vehicles at all times for the duration of the project. The Contractor shall coordinate any access restrictions with the hospital administrator at least fourteen (14) days prior to any restrictions, and shall restore access as soon as possible.</p>

¹ As determined appropriate for this mitigation measure list, 'ADOT' has been replaced with 'City of Phoenix' as the responsible party for the purpose of constructing Chandler Blvd.

**Applicable mitigation measures for Chandler Blvd.: 27th Ave.–19th Ave.
from the South Mountain Freeway (Loop 202) Record of Decision**
City of Phoenix Project No. ST85100367

ROD code	Mitigation measures	Geotech notes	Construction notes (based on 100% construction plans). All mitigation measures are included in the special provisions of the 100% construction plans.
			<p>Fire Station and Police Station Access Requirements:</p> <p>The Contractor shall maintain paved emergency vehicle access to and from all fire stations and police stations at all times. The Contractor shall coordinate with the Fire Station and/or Police Station Commander at least fourteen (14) calendar days prior to any restrictions, and again at least 72 hours prior to any restrictions, and shall restore full access as soon as possible.</p> <p>Mitigation measure is included in the special provisions of the construction plans.</p>
	<i>The City of Phoenix will reach out to/inform adjacent landowners about the project prior to construction²</i>	N/A	<p>The City and its project consultant team, in coordination with ADOT and its General Engineering Consultant team, designed and implemented a comprehensive public outreach program during the design phase of the project. The “Project Team” consists of members from the City of Phoenix staff, Kimley-Horn & Associates Design Consultant, Hunter Construction and the public information firm Gunn Communication Incorporated. Mitigation measure is included in the special provisions of the construction plans.</p>
Displacements and Relocations: No displacements or relocations are needed for the Chandler Blvd. project; therefore, the mitigation measures do not apply.		N/A	N/A
Economics: Access to local businesses will not be impacted by the Chandler Blvd. project; therefore, the mitigation measures do not apply.		N/A	N/A

² Notes in italics are not mitigation measures directly from the ROD but are ADOT requests or are City notes about a particular mitigation measure.

**Applicable mitigation measures for Chandler Blvd.: 27th Ave.–19th Ave.
from the South Mountain Freeway (Loop 202) Record of Decision**
City of Phoenix Project No. ST85100367

ROD code	Mitigation measures	Geotech notes	Construction notes (based on 100% construction plans). All mitigation measures are included in the special provisions of the 100% construction plans.
Air Quality			
AQ-1	<p>Mitigation measures will be followed in accordance with Maricopa County rules 310 and 310.01. Such measures could include, but are not limited to:</p> <p>Site preparation</p> <ul style="list-style-type: none"> • Minimize land disturbance • Use watering trucks to minimize dust • Stabilize the surface of dirt piles if not removed immediately • Use windbreaks to prevent accidental dust pollution • Limit vehicular paths and stabilize temporary roads • To prevent dirt from tracking or washing onto paved roads, stabilized construction entrances will be placed adjacent to paved roads and fencing will be installed to direct vehicles to drive over the track pad immediately before entering a paved surface. 	N/A	Mitigation measure is included in the special provisions of the construction plans. Contractor is responsible for implementation.
AQ-2	<p>Construction</p> <ul style="list-style-type: none"> • Use dust suppressants on unpaved traveled paths • Minimize unnecessary vehicular and machinery activities • To prevent dirt from tracking or washing onto paved roads, stabilized construction entrances will be placed adjacent to paved roads and fencing will be installed to direct vehicles to drive over the track pad immediately before entering a paved surface • To the extent practicable, construction equipment that meets EPA's Tier 4 emission standards shall be used • Where feasible, construction equipment powered by alternative fuels shall be used 	N/A	Mitigation measure is included in the special provisions of the construction plans. Contractor is responsible for implementation.

**Applicable mitigation measures for Chandler Blvd.: 27th Ave.–19th Ave.
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City of Phoenix Project No. ST85100367

ROD code	Mitigation measures	Geotech notes	Construction notes (based on 100% construction plans). All mitigation measures are included in the special provisions of the 100% construction plans.
	<ul style="list-style-type: none"> City of Phoenix will require training in compliance with Maricopa County rule 310 for contractor's personnel regarding air quality impacts from construction activities, potential health risks, and methods to reduce emissions 		
AQ-3	Post construction <ul style="list-style-type: none"> Revegetate or use decomposed granite or rock mulch on all disturbed land Remove dirt piles and unused materials Revegetate all vehicular paths created during construction to avoid future off-road vehicular activities Include control of access fence to prevent vehicle traffic on unpaved surfaces 	N/A	Mitigation measure is included in the special provisions of the construction plans. Contractor is responsible for implementation.
AQ-4	A Traffic Management Plan will be developed and implemented to help reduce impacts of traffic congestion and associated emissions during construction.	N/A	<p>Specs to provide a traffic control plan as follows have been provided:</p> <p>A Traffic Management Plan will be developed and implemented to help reduce impacts of traffic congestion and associated emissions during construction.</p> <p>Traffic Control Plan</p> <p>The Contractor shall submit a traffic control plan for approval, showing placement of all traffic control devices, including all conflicting signs to be covered/removed or relocated, or other features that may conflict with the placement of temporary signage. This plan shall be professionally drawn on a 24" x 36" reproducible medium, and shall be submitted to the Engineer at the Pre-Construction meeting or before. The Contractor shall allow the</p>

**Applicable mitigation measures for Chandler Blvd.: 27th Ave.–19th Ave.
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City of Phoenix Project No. ST85100367

ROD code	Mitigation measures	Geotech notes	Construction notes (based on 100% construction plans). All mitigation measures are included in the special provisions of the 100% construction plans.
			Engineer fourteen (14) calendar days for review and approval of an acceptable plan.
AQ-5	An approved dust permit will be obtained prior to demolition and construction from the Maricopa County Air Quality Department for the proposed action. The permit will describe measures to control and regulate air pollutant emissions.	N/A	Mitigation measure is included in the special provisions of the construction plans. Contractor is responsible for implementation.
Noise: Noise barriers will not be constructed as part of the Chandler Blvd. project; therefore, this mitigation measure does not apply.		N/A	N/A
Water Resources			
WRE-2	Vegetative or mechanical means will be used to minimize erosion from cut and fill slopes.	N/A	Mitigation measure is included in the special provisions of the construction plans. Contractor is responsible for implementation.
WRE-5	A construction AZPDES permit, for ground-disturbing activities exceeding 1 acre, will be obtained from ADEQ for the project in accordance with the provisions set forth in Section 402 of the CWA. The AZPDES permit must be consistent with discharge limitations and water quality standards established for the receiving water. The contractor shall coordinate with the City of Phoenix before filing a Notice of Intent and a Notice of Termination with ADEQ in accordance with Section 402 of the CWA and shall provide copies of the permit authorization to the City of Phoenix.	N/A	Mitigation measure is included in the special provisions of the construction plans. Contractor is responsible for implementation.
WRE-6	A SWPPP shall be prepared by the contractor in accordance with the AZPDES construction general permit. Upon construction completion, all contaminated material (e.g., concrete wash water) will be removed and disposed of in accordance with local, regional, and federal regulations.	N/A	Mitigation measure is included in the special provisions of the construction plans. Contractor is responsible for implementation.

**Applicable mitigation measures for Chandler Blvd.: 27th Ave.–19th Ave.
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ROD code	Mitigation measures	Geotech notes	Construction notes (based on 100% construction plans). All mitigation measures are included in the special provisions of the 100% construction plans.
WRE-7	City of Phoenix will communicate with appropriate governmental bodies such as City of Phoenix floodplain manager and the Community ³ when designing drainage features for the proposed action.	N/A	Coordination took place during design and comments were incorporated to the 100% construction plans. Mitigation measure is included in the special provisions of the construction plans.
WRE-12	City of Phoenix will comply with the State of Arizona Surface Water Quality Standard Rules (18 A.A.C. §11).	N/A	Mitigation measure is included in the special provisions of the construction plans. Contractor is responsible for implementation.
WRE-13	Water used for dust suppression will not contain contaminants that could violate ADEQ water quality standards for surface waters or aquifers and will not be discharged off site. City will obtain the necessary permits for such activities.	N/A	Mitigation measure is included in the special provisions of the construction plans. Contractor is responsible for implementation.
Floodplains			
FLD-3	The City of Phoenix Floodplain Manager will be given an opportunity to review and comment on design plans	N/A	Coordination took place during design and comments were incorporated to the 100% construction plans. Mitigation measure is included in the special provisions of the construction plans.
FLD-5	<p>The hydraulic design of culverts shall be performed using [City standards]. Other criteria include:</p> <ul style="list-style-type: none"> • Culverts will be sized, at a minimum, based on the design discharge of a 50-year storm. • With the 100-year storm, water levels should not significantly increase the flood damage potential on areas outside of the proposed ROW. • Reinforced concrete box culvert and reinforced concrete pipe will be provided with adequate cover. 	N/A	Culverts were designed to these criteria. Mitigation measure is included in the special provisions of the construction plans.

³ Community=Gila River Indian Community

**Applicable mitigation measures for Chandler Blvd.: 27th Ave.–19th Ave.
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ROD code	Mitigation measures	Geotech notes	Construction notes (based on 100% construction plans). All mitigation measures are included in the special provisions of the 100% construction plans.
	<ul style="list-style-type: none"> Outflow discharges from detention basins shall not cause peak discharges downstream greater than peak discharges without the project 		
FLD-6	Comprehensive hydrologic, hydraulic, sediment transport, and erosion-related assessments regarding potential 100-year flood effects associated with ephemeral washes will be conducted on the Selected Alternative. Results will provide information necessary to make a determination regarding what mitigation measures will need to be implemented. Measures may include physical structures such as culverts.	N/A	Drainage design incorporated these criteria. Mitigation measure is included in the special provisions of the construction plans.
Waters of the United States			
WUS-1	<p>City of Phoenix will prepare and submit an application to USACE for a CWA Section 404 permit, dictated by impacts on jurisdictional waters. If necessary, City of Phoenix will submit a CWA Section 401 application to ADEQ. No work will occur within jurisdictional waters until the appropriate CWA Section 401 certification and Section 404 permit is obtained.</p> <p><i>**Per direction from the U.S. Army Corps of Engineers on 3/20/15, the Chandler Blvd. project is a separate and complete project and will be permitted as such. The City assumes, at the most, a PCN for NWP 14 will be needed, although the goal is a non-notifying NWP 14 if possible. **</i></p>	Geotech activities are authorized under Section 404 Nationwide Permit No. 6, Survey Activities. The Section 401 Water Quality Certification is conditionally certified because the Section 404 permit is non-notifying.	The project qualifies for a non-notify Section 404 Nationwide Permit 14 as impacts to Waters of the U.S. are less than 0.1 acres at each wash crossing. The Section 401 Water Quality Certification is conditionally certified by ADEQ. Compliance documentation has been prepared and is on file with the City. Mitigation measure is included in the special provisions of the construction plans.
WUS-3	If previously unidentified cultural resources are encountered in or adjacent to waters of the U.S. during the construction, City of Phoenix will notify USACE immediately to make arrangements for the proper treatment of those resources.	Section 404 Nationwide Permit No. 6, Survey Activities was provided to geotech contractor to adhere	Section 404 Nationwide Permit No. 14, Linear Transportation Projects was provided to the contractor to adhere to permit conditions and keep onsite during work. Mitigation measure is included in the special provisions of the construction plans.

**Applicable mitigation measures for Chandler Blvd.: 27th Ave.–19th Ave.
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ROD code	Mitigation measures	Geotech notes	Construction notes (based on 100% construction plans). All mitigation measures are included in the special provisions of the 100% construction plans.
		to permit conditions and keep onsite during work.	
WUS-5	City of Phoenix will provide a copy of the Section 401 water quality certification conditions to all appropriate contractors and subcontractors. City of Phoenix will post a copy of these locations in a water-resistant location at the construction site where it may be seen by workers.	Section 404 Nationwide Permit No. 6, Survey Activities was provided to geotech contractor to adhere to permit conditions and keep onsite during work.	Section 404 Nationwide Permit No. 14, Linear Transportation Projects was provided to the contractor to adhere to permit conditions and keep onsite during work. The Section 401 Water Quality Certification is conditionally certified by ADEQ. Mitigation measure is included in the special provisions of the construction plans.
WUS-6	City of Phoenix will maintain the project authorized by the permit in good condition and in conformance with the terms and conditions of the permit. City of Phoenix will not be relieved of this condition even if the City abandons the project.	Section 404 Nationwide Permit No. 6, Survey Activities was provided to geotech contractor to adhere to permit conditions and keep onsite during work.	Section 404 Nationwide Permit No. 14, Linear Transportation Projects was provided to the contractor to adhere to permit conditions and keep onsite during work. Mitigation measure is included in the special provisions of the construction plans.
WUS-7	If a substantive change/modification to the project is necessary, City of Phoenix will provide notice and supporting information to USACE for review.	N/A	Substantive change/modification has not occurred; however, this mitigation measure is included in the special provisions of the construction plans.
WUS-9	City of Phoenix will comply with all conditions set forth in the CWA Section 404 permit, CWA Section 401 certification and Section 402 construction general permit made as part of the project.	Section 404 Nationwide Permit No. 6, Survey Activities was provided to geotech	Section 404 Nationwide Permit No. 14, Linear Transportation Projects was provided to the contractor to adhere to permit conditions and keep onsite during work. The Section 401 Water Quality Certification is conditionally certified by ADEQ. The contractor will obtain and comply with the Section 402 construction

**Applicable mitigation measures for Chandler Blvd.: 27th Ave.–19th Ave.
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ROD code	Mitigation measures	Geotech notes	Construction notes (based on 100% construction plans). All mitigation measures are included in the special provisions of the 100% construction plans.
		contractor to adhere to permit conditions and keep onsite during work. Section 402 is N/A for geotech.	general permit. All permits will be kept onsite during construction. Mitigation measure is included in the special provisions of the construction plans.
WUS-10	Prior to initiating construction activities under the permit, City of Phoenix will ensure that all appropriate contractors and subcontractors have been provided with a copy of the Section 404 authorization. This will be intended to confirm that the contractor(s) will comply with the terms and conditions of the Section 404 authorization and that a copy of the permit will be maintained on-site.	Section 404 Nationwide Permit No. 6, Survey Activities was provided to geotech contractor to adhere to permit conditions and keep onsite during work.	Section 404 Nationwide Permit No. 14, Linear Transportation Projects was provided to the contractor to adhere to permit conditions and keep onsite during work. The Section 401 Water Quality Certification is conditionally certified by ADEQ. Mitigation measure is included in the special provisions of the construction plans.
WUS-11	After completion of the proposed project, the washes will be returned to a preconstruction elevation.	Impacts for geotech are temporary in nature and will be returned to preconstruction conditions.	Temporary impacts to washes will be returned to pre-construction conditions per Section 404 Nationwide Permit No. 14, Linear Transportation Projects permit requirements. Contractor is responsible for implementation. Mitigation measure is included in the special provisions of the construction plans.
WUS-12	Pollution from the operation of equipment in the floodplain shall be cleaned up and removed by the contractor before it can be washed into a watercourse. Spills will be promptly cleaned and properly disposed.	Noted.	Mitigation measure is included in the special provisions of the construction plans. Contractor is responsible for implementation.
WUS-13	Temporary erosion and sediment control measures will be installed prior to construction and maintained as necessary	N/A	Mitigation measure is included in the special provisions of the construction plans. Contractor is responsible for implementation.

**Applicable mitigation measures for Chandler Blvd.: 27th Ave.–19th Ave.
from the South Mountain Freeway (Loop 202) Record of Decision**
City of Phoenix Project No. ST85100367

ROD code	Mitigation measures	Geotech notes	Construction notes (based on 100% construction plans). All mitigation measures are included in the special provisions of the 100% construction plans.
	during construction and will not be installed in a manner that causes noncompliance with the Section 404 permit.		
WUS-14	If permanent erosion and sediment control measures are required, they will be installed as soon as practicable, preferably prior to construction activities, and will be maintained throughout the life of the project. Permanent erosion and sediment control measures will be located to protect downstream entities from construction impacts when there will be a flow in watercourses within the project boundary.	N/A	Mitigation measure is included in the special provisions of the construction plans. Contractor is responsible for implementation.
WUS-15	Any soil contaminated as a result of contractors' operations shall be assessed and then disposed of in an appropriate, approved disposal facility.	Noted.	Mitigation measure is included in the special provisions of the construction plans. Contractor is responsible for implementation.
WUS-16	No excavation, fill, or leveling will be permitted in the watercourses outside the boundaries of the permitted work area.	Noted.	Mitigation measure is included in the special provisions of the construction plans. Contractor is responsible for implementation.
WUS-17	No fill will be taken from any watercourse outside the boundaries of the permitted work area. Fill will come from an area outside the OHWM of any watercourses and will be free of any contaminants or pollutants.	Noted.	Mitigation measure is included in the special provisions of the construction plans. Contractor is responsible for implementation.
WUS-18	Heavy equipment traffic shall be restricted from entering the watercourse outside the boundaries of the permitted work area. Appropriate barricades shall be installed to preclude this activity.	Noted.	Mitigation measure is included in the special provisions of the construction plans. Contractor is responsible for implementation.
WUS-19	During construction, the work sites shall be maintained such that no construction debris or material spillover shall be allowed in the watercourses. Upon completion of the work, all construction debris and excess material shall be removed from the job sites and disposed of appropriately outside the USACE jurisdictional areas.	N/A	Mitigation measure is included in the special provisions of the construction plans. Contractor is responsible for implementation.

**Applicable mitigation measures for Chandler Blvd.: 27th Ave.–19th Ave.
from the South Mountain Freeway (Loop 202) Record of Decision**
City of Phoenix Project No. ST85100367

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Topography, Geology, and Soils			
GEO-2	Geotechnical-related construction effects will be mitigated through use of appropriate design, including excavations and slopes in soil and rock with an accepted degree of safety, placement of fills with an accepted degree of safety, protection of excavation and fill slopes against erosion, and design of roadway subgrade and foundations in accordance with accepted practices.	Mitigation measure provided to contractor 12/10/15.	N/A
Biological Resources			
BIO-1	Protected native plants within the project limits will be affected by this project; therefore, City of Phoenix will determine whether ADA notification will be needed. If notification is needed, City of Phoenix will send the notification at least 60 calendar days prior to the start of construction.	Native plant survey and tagging completed on 12/1/15. Protected native plants will not be impacted by geotech work. Mitigation measure provided to contractor 12/10/15.	ADA notification will be needed and a Notice of Intent to Clear Land will be submitted to ADA at least 30 days prior to construction since the project area is more than one acre, but less than 40 acres. Mitigation measure is included in the special provisions of the construction plans.
BIO-3	For drainage structures, such as culverts located in potential wildlife movement corridors, ADOT will coordinate with USFWS, AGFD, and the Community's Department of Environmental Quality during the design phase regarding the location and design of wildlife-sensitive roadway structures based on the results of species surveys. <i>** This is included because ADOT requested the City design allow continued wildlife movement through the culverts. **</i>	N/A	Coordination with applicable agencies has taken place during design and comments have been incorporated into the construction plans to the extent practicable. Mitigation measure is included in the special provisions of the construction plans.

**Applicable mitigation measures for Chandler Blvd.: 27th Ave.–19th Ave.
from the South Mountain Freeway (Loop 202) Record of Decision**
City of Phoenix Project No. ST85100367

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BIO-4	All disturbed soils not paved that will not be landscaped or otherwise permanently stabilized by construction will be seeded using species native to the project vicinity.	N/A	Mitigation measure is included in the special provisions of the construction plans. Contractor is responsible for implementation.
BIO-5	ADOT will coordinate with AGFD and the Community's Department of Environmental Quality regarding state and culturally sensitive species and ADOT will determine whether additional species-specific mitigation measures are appropriate. <i>**Per Kris Gade, ADOT/FHWA will undertake this coordination. Chandler Blvd. construction cannot occur until this coordination for the Chandler Blvd. project area is complete.**</i>	Mitigation measure provided to contractor 12/10/15.	Coordination with applicable agencies has taken place during design and species-specific mitigation measures beyond those represented in this document have not been requested. Mitigation measure is included in the special provisions of the construction plans.
BIO-6	If new species or critical habitat is listed following completion of the ROD, the City of Phoenix will coordinate with ADOT and FHWA to determine whether any additional species-specific mitigation measures will be required.	Mitigation measure provided to contractor 12/10/15.	Not applicable as additional species or critical habitat impacting this project have not been listed since the ROD. Biological resources were reviewed as part of the Non-Notify Section 404 Nationwide Permit No. 14, Linear Transportation Projects compliance documentation. No additional action is warranted at this time. Mitigation measure is included in the special provisions of the construction plans.
BIO-7	Prior to construction, City of Phoenix will arrange for surveys to be completed for the Sonoran Desert tortoise and other species as determined by ADOT to be necessary.	Survey for Sonoran desert tortoise completed 12/9/15. No tortoises or burrows found. Mitigation measure provided to contractor 12/10/15.	Surveys for Sonoran Desert tortoise will be completed prior to construction. Mitigation measure is included in the special provisions of the construction plans.
BIO-8	City of Phoenix will require the contractor's personnel to receive training as part of the overall project safety program regarding	This information was included in the geotech plans.	This information will be provided to the contractor. Mitigation measure is included in the special provisions of the construction plans.

**Applicable mitigation measures for Chandler Blvd.: 27th Ave.–19th Ave.
from the South Mountain Freeway (Loop 202) Record of Decision**
City of Phoenix Project No. ST85100367

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	procedures for interactions with sensitive species that may be encountered during construction.	Mitigation measure provided to contractor 12/10/15.	
BIO-9	If vegetation clearing will occur during the migratory bird breeding season (March 1 to August 31), the contractor shall avoid any active bird nests. If the active nests cannot be avoided, the contractor shall notify the City Engineer to evaluate the situation. During the non-breeding season (September 1 to February 28), vegetation removal is not subject to this restriction. If active bird nests cannot be avoided by vegetation clearing or construction activities, the City Engineer will contact the Street Transportation Department Environmental Quality Specialist (602-534-6030) to arrange for a qualified biologist to evaluate the situation.	Geotech is outside this window; therefore, not applicable. Protected native plants will not be impacted by geotech work. Mitigation measure provided to contractor 12/10/15.	A nesting bird survey will be conducted prior to construction since vegetation removal will occur during migratory bird breeding season. A USFWS Special Use Permit will be in place in the event that nests cannot be avoided and wildlife rehabilitators are required to implement relocations or other appropriate mitigation measures. Mitigation measure is included in the special provisions of the construction plans.
BIO-10	Invasive species surveys will be conducted during the design phase. If noxious or invasive species are found to be present in the project footprint, the contractor will develop and implement an invasive and noxious species control plan.	N/A	Invasive species were not documented during field reconnaissance. Therefore, the mitigation measures below will be implemented to control invasive and noxious species. Mitigation measure is included in the special provisions of the construction plans.
BIO-11	To prevent the introduction of invasive species seeds, the contractor shall inspect all earthmoving and hauling equipment at the equipment storage facility and the equipment shall be washed prior to entering the construction site.	Mitigation measure provided to contractor 12/10/15.	Mitigation measure is included in the special provisions of the construction plans. Contractor is responsible for implementation.
BIO-12	To prevent invasive species from leaving the site, the contractor shall inspect all construction equipment and remove all attached plant/vegetation and soil/mud debris prior to leaving the construction site.	Mitigation measure provided to contractor 12/10/15.	Mitigation measure is included in the special provisions of the construction plans. Contractor is responsible for implementation.

**Applicable mitigation measures for Chandler Blvd.: 27th Ave.–19th Ave.
from the South Mountain Freeway (Loop 202) Record of Decision**
City of Phoenix Project No. ST85100367

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BIO-13	Habitat impacts shall be minimized by restricting construction activities to the minimum area necessary to perform the activities and by maintaining natural vegetation where possible.	Mitigation measure provided to contractor 12/10/15.	Mitigation measure is included in the special provisions of the construction plans. Contractor is responsible for implementation.
BIO-14	If any Sonoran Desert tortoises are encountered during construction, the contractor shall adhere to the most current guidelines regarding encounters with Sonoran Desert tortoises.	COP species flyer and mitigation measure provided to contractor 12/10/15.	Mitigation measure is included in the special provisions of the construction plans. Contractor is responsible for implementation. COP species flyer will be provided to contractor.
BIO-16	A biologist will be employed to complete a preconstruction survey for burrowing owls 96 hours prior to construction in all suitable habitat that will be disturbed. The biologist shall possess a burrowing owl survey protocol training certificate issued by AGFD. Upon completion of surveys, the survey results will be reviewed with the Street Transportation Department Environmental Quality Specialist and qualified biologist and a course of action will be identified.	Survey completed 12/9/15. No burrows or owls found. Mitigation measure provided to contractor 12/10/15.	A biologist will be employed to complete a preconstruction survey for burrowing owls 96 hours prior to construction in all suitable habitat that will be disturbed. Mitigation measure is included in the special provisions of the construction plans.
BIO-17	If any burrowing owls are located in the work area, the contractor shall immediately stop work at that location and notify the City Engineer. The City Engineer will contact the Street Transportation Department Environmental Quality Specialist (602-534-6030) who will contact a qualified biologist to determine whether the owls could be avoided or must be relocated. The contractor shall not work within 100 feet of any active burrow until the situation has been evaluated by the Environmental Quality Specialist. If the Environmental Quality Specialist determines that the owl must be relocated, a biologist holding a rehabilitation permit from USFWS will relocate burrowing owls from the project area.	COP species flyer provided to geotech. Mitigation measure provided to contractor 12/10/15.	COP species flyer and mitigation measure will be provided to contractor. Contractor is responsible for implementation. Mitigation measure is included in the special provisions of the construction plans.

**Applicable mitigation measures for Chandler Blvd.: 27th Ave.–19th Ave.
from the South Mountain Freeway (Loop 202) Record of Decision**
City of Phoenix Project No. ST85100367

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BIO-22	<p>*Specific wording not yet reviewed by FHWA*</p> <p>ADOT will conduct a survey for plants listed in the GRIC Native Plant Ordinance between 24th Street and 51st Avenue. At least 60 days before the contractor begins plant salvage activities, ADOT will provide GRIC DEQ and THPO a list of plants protected by the GRIC Native Plant Ordinance that occur within the construction area, will be disturbed by construction, and are not intended for reuse within the project area. The contractor shall either allow a 45-day access period for GRIC personnel or their contractor to salvage the identified plants or the contractor shall salvage and deliver requested plants from the list to a location on GRIC land within 1 mile of the project area.</p>	<p>Protected native plant survey including tagging completed 12/1/15. Protected native plants will not be impacted by geotech. Mitigation measure provided to contractor 12/10/15.</p>	<p>The City prepared a native plant inventory. The GRIC will be provided a Letter of Notice to Salvage Protected Native Plants and project-related native plant inventory documenting whether the identified native plants are to be salvaged, protected in place, or removed. This notice will provide GRIC with the inventoried list of plants identified for protection by the GRIC Native Plant Ordinance that occur within the construction area, will be disturbed by construction, and are not intended for reuse within the project area. A 45-day access period will be provided for GRIC personnel or their contractor to salvage and relocate the identified plants or to coordinate with the City's contractor to salvage and deliver requested plants from the list to a location on GRIC land within 1 mile of the project area. Mitigation measure is included in the special provisions of the construction plans.</p>
BIO-23	<p>*Specific wording not yet reviewed by FHWA*</p> <p>The contractor will employ qualified biological monitors to directly observe all ground disturbing work, including surveying work areas immediately prior to initiation of work, and relocate wildlife as necessary during construction between 24th Street and 51st Ave and 500 feet north and south of the Salt River. During non-ground disturbing work, monitor(s) must be available to relocate wildlife as needed with 20 minutes of notice. Documentation will be kept of wildlife relocated or transferred to a licensed wildlife rehabilitator. These reports will be provided quarterly or more frequently if requested by ADOT.</p>	<p>Surveys completed 12/9/15. No owls, tortoises or burrows found. Any animals encountered shall be allowed to leave of their own accord. A biologist is on staff to relocate during construction and maintain records to include in ADOT reports. Mitigation measure provided to contractor 12/10/15.</p>	<p>Surveys will be completed. Any animals encountered shall be allowed to leave of their own accord. A biologist is on staff to relocate during construction and maintain records to include in ADOT reports. Mitigation measure is included in the special provisions of the construction plans. Contractor is responsible for implementation.</p>

**Applicable mitigation measures for Chandler Blvd.: 27th Ave.–19th Ave.
from the South Mountain Freeway (Loop 202) Record of Decision**
City of Phoenix Project No. ST85100367

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BIO-24	<p>*Specific wording not yet reviewed by FHWA*</p> <p>ADOT will provide the GRIC THPO and GRIC DEQ biologist annual reports until construction is complete that document</p> <ul style="list-style-type: none"> • wildlife species identified as culturally significant to GRIC that are relocated from the SMPP and Pecos Rd sections of the project area or transferred to a licensed wildlife rehabilitator, and • salvage and survival rates of native plant species listed on the GRIC Native Plant Ordinance that are transplanted within the project area. 	<p>ADOT EPG/Kris Gade: Animal relocation/injury and plant salvage are unlikely to occur with most geotech – a system of record-keeping will need to be implemented for construction.</p> <p>Kimley-Horn/Jennifer Tremayne: Any animals encountered shall be allowed to leave of their own accord. Protected native plants shall not be impacted by geotech. Mitigation measure provided to contractor 12/10/15.</p>	<p>Wildlife relocation activities will be documented by the City and provided to ADOT. Protected native plants will not be transplanted within the project area; therefore, this type of documentation is not applicable. Mitigation measure is included in the special provisions of the construction plans.</p>
BIO-25	<p>*Specific wording not yet reviewed by FHWA*</p> <p>The contractor shall maintain a contract with a wildlife rehabilitator licensed by USFWS to accept animals injured or permanently displaced during construction.</p>	<p>ADOT EPG/Kris Gade: Not needed for geotech</p>	<p>The City will have a USFWS Special Use Permit in place in the event that nests cannot be avoided and wildlife rehabilitators are required to implement relocations or other appropriate mitigation measures. Mitigation measure is included in the special provisions of the construction plans.</p>

**Applicable mitigation measures for Chandler Blvd.: 27th Ave.–19th Ave.
from the South Mountain Freeway (Loop 202) Record of Decision**
City of Phoenix Project No. ST85100367

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BIO-29	<p>*Specific wording not yet reviewed by FHWA*</p> <p>Drainage structures, such as bridges and culverts, that correspond to jurisdictional washes W5 and W8 of the Preliminary Jurisdictional Delineation will be designed and constructed to allow unimpeded access for amphibians and reptiles.</p>	<p>ADOT EPG/Kris Gade: Not needed for geotech. This will require continued coordination between ADOT and City of Phoenix (or CoP consultants) through design and construction.</p>	<p>Wildlife connectivity has been incorporated to the extent practicable and coordination with AGFD and ADOT has taken place throughout design. Mitigation measure is included in the special provisions of the construction plans.</p>
<p>Cultural Resources <i>**Per Linda Davis, no cultural survey, testing, data recovery, or construction monitoring is needed in the Chandler Blvd. project area as long as the project does not extend outside the cleared Area of Potential Effects and the previously completed FHWA/ADOT consultation for the SMF project is used for Chandler Blvd.**</i></p>		N/A	
CUL-4	<p>ADOT and FHWA will fund a TCP evaluation of the South Mountains TCP to be prepared by the Community. FHWA and ADOT will fund the development and implementation of a TCP enhancement and management plan to be prepared by the Community.</p> <p><i>**Per Linda Davis at the March 18, 2015 meeting, ADOT/FHWA will undertake this coordination for the Chandler Blvd. project early. Completion of the Chandler Blvd. coordination will not depend on completion of the SMF coordination. Chandler Blvd. construction will not occur until coordination for the Chandler Blvd. project only is complete.</i></p>	<p>11/24/15: Prior to start of geotech activities, COP Street Transportation/Gret a Halle notified ADOT EPG/Linda Davis regarding anticipated 12/9/15 start date. 11/30/15: ADOT EP/Linda Davis notified GRIC THPO/Barnaby Lewis so the land can</p>	<p>ADOT EP/Linda Davis is aware of the upcoming utility relocation and overall construction as these dates are discussed in City/ADOT EP coordination meetings. ADOT EP/Linda Davis will notify GRIC THPO/Barnaby Lewis so the land can undergo ceremonial preparations. Mitigation measure is included in the special provisions of the construction plans.</p>

**Applicable mitigation measures for Chandler Blvd.: 27th Ave.–19th Ave.
from the South Mountain Freeway (Loop 202) Record of Decision**
City of Phoenix Project No. ST85100367

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		undergo ceremonial preparations.	
CUL-5	The City of Phoenix will continue coordination throughout design and construction with ADOT EP HPT regarding other appropriate mitigation strategies; selected, limited disclosure of locations of cultural resources sites; and other cultural resources issues related to Chandler Boulevard. As determined by ADOT EP HPT, consultation throughout design and construction will continue with SHPO, GRIC, and other Tribes.	N/A	The City has coordinated with ADOT EP HPT throughout design and will continue to coordinate through construction. Mitigation measure is included in the special provisions of the construction plans.
CUL-8	If previously unidentified cultural resources are encountered during activity related to the construction of the freeway, the contractor shall stop work immediately at that location and shall take all reasonable steps to secure the preservation of those resources and notify the City Engineer. The City Engineer will contact the Street Transportation Environmental Quality Specialist (602-534-6030) immediately and make arrangements for the proper treatment of those resources.	N/A	Mitigation measure is included in the special provisions of the construction plans. Contractor is responsible for implementation.
CUL-10	If human remains or funerary objects are encountered during activity related to the construction of Chandler Boulevard, the contractor shall stop work immediately within the area of the discovery, take steps to protect the discovery, and immediately notify the City of Phoenix Archaeologist (602-534-1573) and City of Phoenix Environmental Quality Specialist (602-534-6030). The City of Phoenix shall coordinate with ADOT EP HPT and ADOT EP HPT shall notify and consult with appropriate Native American groups to determine the proper treatment and disposition measures in accordance with the implemented burial agreement. ADOT EP HPT shall also inform the director of the ASM and SHPO of the discovery.	N/A	Mitigation measure is included in the special provisions of the construction plans. Contractor is responsible for implementation.

**Applicable mitigation measures for Chandler Blvd.: 27th Ave.–19th Ave.
from the South Mountain Freeway (Loop 202) Record of Decision**
City of Phoenix Project No. ST85100367

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CUL-11	All key personnel and those people involved in field work or ground disturbing activities during the design, construction, and operation of the project will attend cultural sensitivity training conducted by the Community prior to any ground disturbing activities.	5/26/15: COP Calvin Goode Building, 10 AM – GRIC cultural sensitivity training attended by staff associated with upcoming potholing/geotech activities 12/8/15: GRIC cultural sensitivity training held again at HDR Engineering for geotechnical and other project personnel	GRIC cultural sensitivity training will be attended by staff associated with upcoming construction. Per ADOT EP/Linda Davis, utility relocation contractors are not required to attend this training. Mitigation measure is included in the special provisions of the construction plans.
Prime and Unique Farmland: There are no active or fallow agricultural fields in the Chandler Blvd. project area; therefore, the mitigation measures do not apply.		N/A	N/A
Hazardous Materials			
HZM-1	A site-specific Phase I assessment would be performed prior to site acquisition for each of the high-priority sites.	N/A	N/A
HZM-7	If suspected hazardous materials are encountered during construction, work shall cease at that location and the City of Phoenix will arrange for proper assessment, treatment, or disposal of those materials.	Noted.	Mitigation measure is included in the special provisions of the construction plans. Contractor is responsible for implementation.

**Applicable mitigation measures for Chandler Blvd.: 27th Ave.–19th Ave.
from the South Mountain Freeway (Loop 202) Record of Decision**
City of Phoenix Project No. ST85100367

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Visual Resources: Chandler Blvd. will follow the existing dirt road; no bridges or deep cut/fill slopes, no cuts in South Mountain; therefore these measures do not apply.		N/A	N/A
Temporary Construction Impacts			
TMP-1	A traffic control plan will be developed and implemented to help reduce impacts of traffic congestion and associated emissions during construction.	N/A	Specifications have been provided as follows: A traffic control plan will be developed and implemented to help reduce impacts of traffic congestion and associated emissions during construction.
TMP-2	An approved “Application for Earth Moving Permit, Demolition, and Dust Control Plan” will be obtained prior to construction from the Maricopa County Air Quality Department for all phases of the proposed action. The permit will describe measures to control and regulate air pollutant emissions during construction.	N/A	Specs have been provided as follows: An approved “Application for Earth Moving Permit, Demolition, and Dust Control Plan” will be obtained prior to construction from the Maricopa County Air Quality Department for all phases of the proposed action. The permit will describe measures to control and regulate air pollutant emissions during construction. Any project that disturbs more than 1/10 acre of soil requires an earthmoving permit from Maricopa County. Information and forms can be found at: www.maricopa.gov/aq/divisions/permit_engineering/applications/Default.aspx To facilitate and encourage strict compliance with the Maricopa County Air Pollution Control Regulations pertaining to fugitive dust control, the Contractor shall submit the following documentation to the Engineer at the Pre-Construction meeting prior to conducting any earth moving or dust generating activities under the Contract.

**Applicable mitigation measures for Chandler Blvd.: 27th Ave.–19th Ave.
from the South Mountain Freeway (Loop 202) Record of Decision**
City of Phoenix Project No. ST85100367

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			<p>a. Copy of a valid Maricopa County Earth Moving (Dust Control) Permit applicable to the work or services under the Contract.</p> <p>b. Copy of the Dust Control Plan applicable to the work or services under the Contract.</p> <p>c. Documentation that all of the Contractor's on-site project managers have received the Comprehensive or Basic dust control training as required by Maricopa County Rule 310 based on project disturbed acres.</p> <p>The Contractor shall use a power pick-up broom as part of the dust control effort. No separate measurement or payment will be made for cleanup or dust control, or for providing a power pick-up broom on the job.</p>
TMP-5	Access will be maintained during construction, and construction activities that might substantially disrupt traffic will not be performed during peak travel periods. To minimize disruption, City of Phoenix will coordinate regarding traffic control and construction activities during special events. Requirements for the use of construction notices and bulletins will be identified as needed. The effectiveness of the traffic control measures will be monitored during construction and any necessary adjustments will be made.	N/A	<p>Specifications have been provided as follows:</p> <p>Access will be maintained during construction, and construction activities that might substantially disrupt traffic will not be performed during peak travel periods. To minimize disruption, City of Phoenix will coordinate regarding traffic control and construction activities during special events. Requirements for the use of construction notices and bulletins will be identified as needed. The effectiveness of the traffic control measures will be monitored during construction and any necessary adjustments will be made.</p>

**Applicable mitigation measures for Chandler Blvd.: 27th Ave.–19th Ave.
from the South Mountain Freeway (Loop 202) Record of Decision**
City of Phoenix Project No. ST85100367

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			<p>A traffic control plan will be developed and implemented to help reduce impacts of traffic congestion and associated emissions during construction.</p> <p>\$1,000 Sanction Per Day - Restricting traffic during peak traffic hours as described in the Traffic Barricade Manual without authorization</p> <p>Flagging of Traffic</p> <p>No flagging of traffic will be permitted during the peak traffic hours of 6:00 a.m. to 8:30 a.m. and 4:00 p.m. to 7:00 p.m. weekdays. If construction requires, intermittent flagging will be allowed from 8:30 a.m. to 4:00 p.m. if approved by the Engineer, to facilitate access for heavy construction equipment.</p> <p>Access will be maintained during construction, and construction activities that might substantially disrupt traffic will not be performed during peak travel periods.</p>
TMP-6	City of Phoenix will coordinate with the responsible local entities regarding the relocation of utilities, as appropriate.	N/A	The City of Phoenix is coordinating with the responsible local entities regarding relocation of utilities. Mitigation measure is included in the special provisions of the construction plans.
TMP-7	Disruptions to utility services, if necessary, will be restricted to being short-term and localized. The City of Phoenix and project contractors will continue to coordinate with utility providers during the design phase and project construction to identify potential problems and/or conflicts and to provide opportunities for their resolution prior to proposed actions. Replacement	N/A	<p>Specifications have been provided as follows:</p> <p>Disruptions to utility services, if necessary, will be restricted to being short-term and localized. The City of Phoenix and project contractors will continue to coordinate with utility providers during</p>

**Applicable mitigation measures for Chandler Blvd.: 27th Ave.–19th Ave.
from the South Mountain Freeway (Loop 202) Record of Decision**
City of Phoenix Project No. ST85100367

ROD code	Mitigation measures	Geotech notes	Construction notes (based on 100% construction plans). All mitigation measures are included in the special provisions of the 100% construction plans.
	and/or relocation of utilities will be coordinated with City construction activities and other projects in the area. Planning will include scheduling of disruptions and prior notification of adjacent property owners who will be affected by temporary service cut-offs. Emergency response procedures will be outlined by the City of Phoenix in consultation with local utility providers to ensure quick and effective repair of any inadvertent or accidental disruptions in service.		the design phase and project construction to identify potential problems and/or conflicts and to provide opportunities for their resolution prior to proposed actions. Replacement and/or relocation of utilities will be coordinated with City construction activities and other projects in the area. Planning will include scheduling of disruptions and prior notification of adjacent property owners who will be affected by temporary service cut-offs. Emergency response procedures will be outlined by the City of Phoenix in consultation with local utility providers to ensure quick and effective repair of any inadvertent or accidental disruptions in service.
TMP-8	Community access to the TCPs will be maintained during construction, but may temporarily involve detours.	N/A	Specifications have been provided as follows: Community access to the TCPs will be maintained during construction, but may temporarily involve detours.
Material Sources: The City would use their standard procedure for material source selection.		N/A	No specifications have been provided to dictate a procedure for material source selection so the contractor will coordinate and is coordinating with the City to select a borrow source.
Section 4(f): ADOT requested that the City do the following:			
	<i>Any excess material excavated from the Chandler Blvd. project area must remain in the project site vicinity.</i>	N/A. No excess material expected as a result of geotech activities.	Specification has been provided as follows: <i>Any excess material excavated from the Chandler Blvd. project area must remain in the project site vicinity.</i>
	<i>Avoid impacts, and maintain access, to the trailhead at Chandler Blvd. and 19th Ave.</i>	N/A	Specification has been provided as follows:

**Applicable mitigation measures for Chandler Blvd.: 27th Ave.–19th Ave.
from the South Mountain Freeway (Loop 202) Record of Decision**
City of Phoenix Project No. ST85100367

ROD code	Mitigation measures	Geotech notes	Construction notes (based on 100% construction plans). All mitigation measures are included in the special provisions of the 100% construction plans.
			Avoid impacts, and maintain access, to the trailhead at Chandler Blvd. and 19th Ave.
	<i>Coordinate with the City of Phoenix Parks & Recreation Department during the design and construction of Chandler Blvd.</i>	N/A	The City Street Transportation Dept. has coordinated with City Parks and Recreation Dept. throughout design and will continue coordination through construction. Mitigation measure is included in the special provisions of the construction plans.
	<i>Note: Additional mitigation measures/requirements may result from ADOT/FHWA coordination with other agencies, including the Community.</i>	N/A	The City is not aware of additional mitigation measures/requirements beyond those outlined in this document. Mitigation measure is included in the special provisions of the construction plans.

City of Phoenix Street Transportation
Department Sonoran Desert Tortoise
Awareness Flyer, AGFD's Guidelines
for Handling Sonoran Desert Tortoises
Encountered on Development Projects
(Revised September 22, 2014),
USFWS Migratory Bird Treaty Act
(MBTA) project-specific Special
Purpose Permit, MBTA Awareness
Flyer, USFWS Western Burrowing Owl
citywide Special Purpose Permit, and
Western Burrowing Owl Awareness
Flyer



Credit: Jeff Humphrey, USFWS



City of Phoenix
STREET TRANSPORTATION DEPARTMENT

Sonoran Desert Tortoise

(*Gopherus morafkai*)

The purpose of this flyer is to provide City of Phoenix employees and contractors working on City projects with basic knowledge to reduce the risk of impacting Sonoran Desert tortoise.

Legal Status:

As defined by the Arizona Game and Fish Department, the Sonoran Desert tortoise is classified as a *Species of Greatest Conservation Need* (Tier 1A).

Species Description:

- Length: 8-15 inches
- Bottom shell yellowish and not hinged
- Hind limbs stocky and elephantine
- High-domed, brownish shell with a pattern and prominent growth lines
- Flattened forelimbs for digging, covered with conical scales

Where are they found?

- Rocky, steep slopes and lower mountain slopes
- Native desert scrubland
- Between 904 and 4,198 feet in elevation
- Washes and valley bottoms may be used in dispersal

Where are they active?

- Sonoran Desert tortoise spend the bulk of time in burrows, which provide protection from heat and cold
- Emerge from burrows on rocky slopes, desert scrub or grassland to feed, bask and breed, mostly during the monsoon season

How to avoid impacting Sonoran Desert tortoise:

- Scan ahead as you work
- *If Sonoran Desert tortoise observed, STOP WORK, call one of the contacts below and allow the tortoise to leave under its own power*
- Do NOT pick up or handle the Sonoran Desert tortoise; improper handling can result in tortoise death
- When working in Sonoran Desert tortoise habitat, check for tortoises under parked vehicles before driving

Questions? Concerns? Think your project will impact Sonoran Desert tortoise? Contact a City of Phoenix Street Transportation Department Environmental Quality Specialist:

Ed Checkley (602) 534-3366, (602) 377-8943 (cell), ed.checkley@phoenix.gov

Greta Halle (602) 534-6030, (602) 628-7607 (cell), greta.halle@phoenix.gov

Sources: US Fish & Wildlife Service-Arizona Ecological Services Field Office, Sonoran Desert Tortoise, Document Library-Document by Species
<http://www.fws.gov/southwest/es/arizona/Documents/Redbook/Sonoran%20Tortoise%20RB.pdf>

Updated June 22, 2016

GUIDELINES FOR HANDLING SONORAN DESERT TORTOISES ENCOUNTERED ON DEVELOPMENT PROJECTS

Arizona Game and Fish Department
Revised September 22, 2014

The Arizona Game and Fish Department (Department) has developed the following guidelines to reduce potential impacts to desert tortoises, and to promote the continued existence of tortoises throughout the state. These guidelines apply to short-term and/or small-scale projects, depending on the number of affected tortoises and specific type of project.

The Sonoran desert tortoise occurs south and east of the Colorado River. Tortoises encountered in the open should be moved out of harm's way to adjacent appropriate habitat. If an occupied burrow is determined to be in jeopardy of destruction, the tortoise should be relocated to the nearest appropriate alternate burrow or other appropriate shelter, as determined by a qualified biologist. Tortoises should be moved less than 48 hours in advance of the habitat disturbance so they do not return to the area in the interim. Tortoises should be moved quickly, kept in an upright position parallel to the ground at all times, and placed in the shade. Separate disposable gloves should be worn for each tortoise handled to avoid potential transfer of disease between tortoises. Tortoises must not be moved if the ambient air temperature exceeds 40° Celsius (105° Fahrenheit) unless an alternate burrow is available or the tortoise is in imminent danger.

A tortoise may be moved up to one-half mile, but no further than necessary from its original location. If a release site or alternate burrow is unavailable within this distance, and ambient air temperature exceeds 40° Celsius (105° Fahrenheit), contact the Department for guidance. Tortoises salvaged from projects which result in substantial permanent habitat loss (e.g. housing and highway projects), or those requiring removal during long-term (longer than one week) construction projects, may be placed in the Department's tortoise adoption program. *Managers of projects likely to affect desert tortoises should obtain a [scientific collecting license](#) from the Department to facilitate handling or temporary possession of tortoises.* Likewise, if large numbers of tortoises (>5) are expected to be displaced by a project, the project manager should contact the Department for guidance and/or assistance.

Please keep in mind the following points:

- Use the Department's [Environmental On-Line Review Tool Department](#) during the planning stages of any project that may affect desert tortoise habitat.
- Unless specifically authorized by the Department, or as noted above, project personnel should avoid disturbing any tortoise.
- Take is prohibited by state law.
- These guidelines do not apply to Mojave desert tortoises (north and west of the Colorado River). Mojave desert tortoises are listed as threatened under the Endangered Species Act, administered by the U.S. Fish and Wildlife Service.
- These guidelines are subject to revision at the discretion of the Department.



DEPARTMENT OF THE INTERIOR
U.S. FISH AND WILDLIFE SERVICE
Migratory Bird Permit Office
P.O. Box 709 - Albuquerque, NM 87103
Tel: 505-248-7882 Fax: 505-248-7885
Email: permitsR2MB@fws.gov

FEDERAL FISH AND WILDLIFE PERMIT

1. PERMITTEE

CITY OF PHOENIX
PHOENIX CITY HALL
200 W. WASHINGTON STREET - 14TH FLOOR
PHOENIX, AZ 85003
U.S.A.

2. AUTHORITY-STATUTES
16 USC 703-712

REGULATIONS
50 CFR Part 13
50 CFR 21.27

3. NUMBER
MB99048B-0

4. RENEWABLE
☒ YES
☐ NO

5. MAY COPY
☒ YES
☐ NO

6. EFFECTIVE
06/08/2016

7. EXPIRES
03/31/2019

8. NAME AND TITLE OF PRINCIPAL OFFICER (If #1 is a business)

CHRIS TURNER-NOTEWARD
DEPUTY STREET TRANSPORTATION DIRECTOR OVER DCM

9. TYPE OF PERMIT

SPECIAL PURPOSE - MISCELLANEOUS

10. LOCATION WHERE AUTHORIZED ACTIVITY MAY BE CONDUCTED

**CHANDLER BLVD FROM 19TH AVE - 27TH AVE
MARICOPA COUNTY
PHOENIX AZ**

11. CONDITIONS AND AUTHORIZATIONS:

A. GENERAL CONDITIONS SET OUT IN SUBPART D OF 50 CFR 13, AND SPECIFIC CONDITIONS CONTAINED IN FEDERAL REGULATIONS CITED IN BLOCK #2 ABOVE, ARE HEREBY MADE A PART OF THIS PERMIT. ALL ACTIVITIES AUTHORIZED HEREIN MUST BE CARRIED OUT IN ACCORD WITH AND FOR THE PURPOSES DESCRIBED IN THE APPLICATION SUBMITTED. CONTINUED VALIDITY, OR RENEWAL, OF THIS PERMIT IS SUBJECT TO COMPLETE AND TIMELY COMPLIANCE WITH ALL APPLICABLE CONDITIONS, INCLUDING THE FILING OF ALL REQUIRED INFORMATION AND REPORTS.

B. THE VALIDITY OF THIS PERMIT IS ALSO CONDITIONED UPON STRICT OBSERVANCE OF ALL APPLICABLE FOREIGN, STATE, LOCAL, TRIBAL, OR OTHER FEDERAL LAW.

C. VALID FOR USE BY PERMITTEE NAMED ABOVE.

D. Permittee and agents (employees of permittee) are authorized to live-trap and relocate the contents of the nest of Various Migratory Bird Species since nests are in imminent danger due to road construction in a heavily driven area.

E. Permittee may not use this authority for situations in which migratory birds are merely causing a nuisance.

F. Permittee must receive written authorization prior to relocation of any Raptor species or Bird of Conservation Concern species. Additional permitting is required for Bald and Golden Eagles, and Threatened or Endangered Species.

G. Nestlings (injured or nestlings in captivity) may be possessed by approved subpermittees for conditioning and release. Release shall be at location agreed to by all parties involved. Permittee and agents assume all liability and responsibility, including financial costs, for the conduct of any associated activity, i.e., rehabilitation costs.

H. Permittee and agents (employees of permittee) designated in writing to issuing office as well as pre-approved State/Federal **REHAB Permittee's - Bob Fox dba Wild at Heart @480/595-5047 - MB775138, Liberty Wildlife Rehabilitation @ 480/998-0230 - MB699368 or Gloria Halesworth dba Wild Wings Rehabilitation 480/893-6660 - MB082995** (must comply with all conditions and restrictions.

I. Permittee and assistants shall carry a copy of this permit whenever exercising its authority.

J. Permittee shall maintain records as required in 50 CFR 13.46. Report shall be submitted at completion of project (including release).

K. Not authorized to take birds/eggs/nests of Federally listed endangered/threatened species and/or bald or golden eagles, or any protected species not listed above.

L. This permit does NOT authorize trespass and/or take on State and Federal wildlife refuges or Federal reserves, or other public and private property without written permit/permission from landowner or custodian.

☒ ADDITIONAL CONDITIONS AND AUTHORIZATIONS ALSO APPLY

12. REPORTING REQUIREMENTS

ANNUAL REPORT DUE: 01/31

You must submit an annual report to your Regional Migratory Bird Permit Office each year, even if you had no activity. Form: www.fws.gov/forms/3-202-7.pdf.

ISSUED BY
Katie Wade-Matthews

Digitally signed by Katie Wade-Matthews
Date: 2016.06.09 16:18:18 -06'00'

TITLE

ADMINISTRATOR, MIGRATORY BIRD PERMIT OFFICE - REGION 2

DATE

06/08/2016

M. If authorized to take (destroy) birds, nests and eggs, specimens must be completely destroyed by burning or burying or donated to a public educational or scientific institutions as specified in 50 CFR 21.12 (b) or as directed by issuing office.

N. Any injury to and/or death of a migratory bird or destruction of eggs shall be reported via email to issuing office within forty-eight (48) hours at **permitsr2mb@fws.gov**.

O. Authorities granted herein shall not be exercised contrary to the laws of the appropriate State agencies.

P. Acceptance of this permit authorizes inspection in accordance with 50 CFR 13.47.

Q. Authorities granted herein shall not be exercised contrary to the laws of the appropriate State or Tribal agencies.

R. Permittee will maintain records as required in 50 CFR 13.46. Report will be submitted annually and at project completion.

S. Failure to comply with the conditions of your permit is cause for suspension and/or revocation of the permit and permit authorizations.

For copies of the regulations and forms, or to obtain contact information for your migratory bird permit office, visit <http://www.fws.gov/migratorybirds/mbpermits.html>.

T. Prior to any permit activity (if applicable), a current copy of the State permit must accompany the Federal permit. Submit a copy of the State permit within 30 days to **permitsr2mb@fws.gov**.

For suspected illegal activity, immediately contact USFWS Office of Law Enforcement at: Albuquerque, NM 505/248-7889



Credit: DesertUSA.com/animals/cliff-swallow.html



City of Phoenix
STREET TRANSPORTATION DEPARTMENT

Migratory Bird Treaty Act

(Applies to many birds in Phoenix)

The purpose of this flyer is to provide City of Phoenix employees and contractors with basic knowledge to reduce the risk of impacting species protected by the Migratory Bird Treaty Act.

Migratory Bird Treaty Act (MBTA)

Under the Migratory Bird Treaty Act of 1918, as amended, listed birds and their parts (including eggs, feathers, and nests) are fully protected. They are also protected under Arizona State Law, Title 17-101, Title 17-235, and Title 17-236. The MBTA states that it is illegal to:

- Pursue, hunt, take, capture, kill, possess, sell, purchase, barter, import, export, or transport any migratory bird, or any part, nest, or egg of any such bird.
 - 'Take' is defined as to "pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to pursue, hunt, shoot, wound, kill, trap, capture, or collect."

More information regarding the MBTA can be found at:

- <http://www.fws.gov/birds/policies-and-regulations/laws-legislations/migratory-bird-treaty-act.php>
- <https://www.fws.gov/laws/lawsdigest/migtrea.html>

Where/When are they active?

- The nests of birds protected by the MBTA can be found in many places, including trees, shrubs, cacti, cattails, on the ground, in holes in the ground and on man-made structures including culverts, bridges, buildings, etc.
- The breeding cycle of most birds in Phoenix occurs between February 1 and August 31, although there are a few species that may nest outside that period. Some birds may be present year-round and others migrate, often during the late summer/early autumn period.

How to avoid impacting birds protected by the MBTA:

- If your project might impact active bird nests/burrows, work with one of the contacts below during the design process to make appropriate arrangements before the project activity begins. Necessary actions may include active nest surveys, seasonal restrictions, or obtaining a project-specific relocation permit from the U.S. Fish and Wildlife Service.
- When actively working, be aware of your surroundings. If you see a nest that appears active (chirping, aggressive or distracting adult bird behavior, eggs present, etc.) **STOP WORK** within 100 feet of the area and call one of the contacts below.

Questions? Work may impact birds protected by the MBTA? Contact a City of Phoenix Street Transportation Department Environmental Quality Specialist:

Ed Checkley (602) 534-3366, (602) 377-8943 (cell), ed.checkley@phoenix.gov

Greta Halle (602) 534-6030, (602) 628-7607 (cell), greta.halle@phoenix.gov

Updated April 25, 2016



DEPARTMENT OF THE INTERIOR
U.S. FISH AND WILDLIFE SERVICE
Migratory Bird Permit Office
P.O. Box 709 - Albuquerque, NM 87103
Tel: 505-248-7882 Fax: 505-248-7885
Email: permitsR2MB@fws.gov

2. AUTHORITY-STATUTES
16 USC 703-712

REGULATIONS
50 CFR PART 13
50 CFR 21.27

FEDERAL FISH AND WILDLIFE PERMIT

1. PERMITTEE

CITY OF PHOENIX
PHOENIX CITY HALL
14TH FLOOR
200 WEST WASHINGTON STREET
PHOENIX, AZ 85003
U.S.A.

3. NUMBER
MB93891A-0

4. RENEWABLE
☒ YES
☐ NO

5. MAY COPY
☒ YES
☐ NO

6. EFFECTIVE
01/01/2016

7. EXPIRES
12/31/2017

8. NAME AND TITLE OF PRINCIPAL OFFICER (If #1 is a business)

PHILIP A MCNEELY
ENVIRONMENTAL PROGRAMS MANAGER

9. TYPE OF PERMIT

SPECIAL PURPOSE - RELOCATE

10. LOCATION WHERE AUTHORIZED ACTIVITY MAY BE CONDUCTED

Property owned or in control of the City of Phoenix

11. CONDITIONS AND AUTHORIZATIONS:

A. GENERAL CONDITIONS SET OUT IN SUBPART D OF 50 CFR 13, AND SPECIFIC CONDITIONS CONTAINED IN FEDERAL REGULATIONS CITED IN BLOCK #2 ABOVE, ARE HEREBY MADE A PART OF THIS PERMIT. ALL ACTIVITIES AUTHORIZED HEREIN MUST BE CARRIED OUT IN ACCORD WITH AND FOR THE PURPOSES DESCRIBED IN THE APPLICATION SUBMITTED. CONTINUED VALIDITY, OR RENEWAL, OF THIS PERMIT IS SUBJECT TO COMPLETE AND TIMELY COMPLIANCE WITH ALL APPLICABLE CONDITIONS, INCLUDING THE FILING OF ALL REQUIRED INFORMATION AND REPORTS.

B. THE VALIDITY OF THIS PERMIT IS ALSO CONDITIONED UPON STRICT OBSERVANCE OF ALL APPLICABLE FOREIGN, STATE, LOCAL, TRIBAL, OR OTHER FEDERAL LAW.

C. VALID FOR USE BY PERMITTEE NAMED ABOVE.

D. Active Nest Relocation. When feasible and appropriate for the species, Permittee and Agents (employees of permittee) are authorized to relocate active migratory bird nests of the following species/number, including eggs, nestlings and recently fledged young located on land owned by the City of Phoenix. You may not use this authority for situations in which migratory birds are merely causing a nuisance.

Quantity authorized: Up to thirty (30) pair of Burrowing Owls and their nest contents.

E. Nestlings (injured or nestlings in captivity) may be possessed by approved Subpermittees for conditioning and release. Release shall be at location agreed to by all parties involved. Permittee and agents (employees of permittee) assume all liability and responsibility, including financial costs, for the conduct of any associated activity, i.e., rehabilitation costs.

F. Permittee and agents designated in writing to issuing office as well as preapproved State/Federal REHAB Permittee Bob Fox dba Wild at Heart - MB775138 @ 480/595-5047, must comply with all conditions and restrictions.

G. Permittee and assistants shall carry a copy of this permit whenever exercising its authority.

H. Permittee shall maintain records as required in 50 CFR 13.46. Report shall be submitted at completion of project (including release).

I. Permittee is not authorized to take birds/eggs/nests of Federally listed endangered/threatened species and/or bald or golden eagles, or any protected species not listed above

☒ ADDITIONAL CONDITIONS AND AUTHORIZATIONS ALSO APPLY

12. REPORTING REQUIREMENTS

ANNUAL REPORT DUE: 01/31

You must submit a report to your Regional Migratory Bird Permit Office even if you had no activity. Report form: www.fws.gov/forms/3-202-7.pdf.

ISSUED BY

TITLE

CHIEF, MIGRATORY BIRD PERMIT OFFICE - REGION 2

DATE

09/29/2015

J. This permit does NOT authorize trespass and/or take on State, Tribal and Federal wildlife refuges or Federal reserves, or other public and private property without written permit/permission from landowner or custodian.

K. If authorized to take (destroy) birds, nests and eggs, specimens must be completely destroyed by burning or burying or donated to a public educational or scientific institutions as specified in 50 CFR 21.12 (b) or as directed by issuing office.

L. Any injury to and/or death of a migratory bird or destruction of eggs shall be reported via email to issuing office within fortyeight (48) hours at permitsr2mb@fws.gov.

M. Authorities granted herein shall not be exercised contrary to the laws of the appropriate State or Tribal agencies.

N. Artificial burrow system (ABS):

Provide from 3 5 ABS for each burrowing owl pair prior to release with the following building material :

The tunnel from the surface to the nest box should have a slope of between 15 and 20 degrees.

12' of 4" corrugated flex drain pipe/flexible irrigation hose with a 90 degree horizontal turn between the entrance and the BUOW chamber.

The section from the burrow chamber to the bend should be at a 4foot depth. A minimum of two feet of dirt on top of the overturned bucket.

ABS installed should be within 5 10 meters of each other.

For protection a rigid 4" PVC pipe slipped over at the entrance of each ABS.. Rocks around the burrow entrances (for prevention of predators coyotes, dogs)

A wooden perch (for probable use of ABS by burrowing owls) placed in the middle of each cluster.

The perch must be visible from the burrow entrance to allow the owl to see if it is occupied by a predator before leaving the burrow

O. Release Site: Provide release site coordinates and property permission from landowner or custodian for the burrowing owls no later than April 30, 2016 to one of the following:

Email: permitsr2mb@fws.gov Fax: 505/2487885

Regular Mail: Migratory Bird Permit Office, PO Box 709, Albuquerque, NM 87103

P. Post Monitoring: Monitoring of success or rejection rate for the burrowing owls, when relocated. Report must be submitted each year by January 31 for the previous calendar year.

Reporting must be submitted by one of the following: Email: permitsr2mb@fws.gov

Fax: 505/2487885 Regular Mail: Migratory Bird Permit Office, PO Box 709, Albuquerque, NM 87103

Q. Prior to any permit activity (if applicable), a current copy of the State permit must accompany the Federal permit. Submit a copy of the State permit within 30 days to permitsr2mb@fws.gov.

For suspected illegal activity, immediately contact USFWS Office of Law Enforcement at: Albuquerque NM 505/248-7889



City of Phoenix
STREET TRANSPORTATION DEPARTMENT

Western Burrowing Owl

(*Athene cunicularia*)

The purpose of this flyer is to provide City of Phoenix employees and contractors working on City projects with basic knowledge to reduce the risk of impacting western burrowing owls.

Legal Status:

The western burrowing owl is protected under the Migratory Bird Treaty Act of 1918, as amended. All migratory birds and their parts (including eggs, feathers, and nests) are fully protected. They are also protected under Arizona State Law, Title 17-101, Title 17-235, and Title 17-236.

Species Description:

- Small, ground-dwelling owl (mass of approx. 5 oz.)
- Length: 7.6-9.9 inches, with long legs
- Wingspan: approx. 23 inches
- Round head, lacks ear tufts
- Distinct oval facial ruff, framed by a broad, puffy white eyebrow
- Bright yellow iris

Where are they found?

- Dry, open, short grass, treeless plains
- Human dominated landscapes such as:
 - Golf courses, airports
 - Agricultural fields, vacant lots
- Depends on other animals to construct burrows

Identifying an active burrow

- Western burrowing owls use burrows constructed by ground squirrels, badgers, coyotes, tortoises, etc, or may use pipes, culverts, and ditches.
- They may “decorate” the entrance to a burrow with cow, horse, or dog manure, feathers, vegetation, and trash items
- An active burrow may (not always) have owl excrement (“whitewash”) and/or pellets near the entrance

How to avoid impacting western burrowing owls:

- Scan ahead as you work
- ***If western burrowing owls or potentially active burrows observed, STOP WORK and MOVE at least 100 feet away from the owl or occupied burrow before resuming work***
 - Do not harass or “shoo” the owl away
- If the project cannot avoid or stay outside 100 feet of the owl or active burrow, call contact listed below

Questions? Need to work within 100 feet of a western burrowing owl or active burrow? Contact a City of Phoenix Street Transportation Department Environmental Quality Specialist:

Ed Checkley (602) 534-3366, (602) 377-8943 (cell), ed.checkley@phoenix.gov

Greta Halle (602) 534-6030, (602) 628-7607 (cell), greta.halle@phoenix.gov

Gila River Indian Community Letter of
Notice to Salvage Protected Native
Plants, Arizona Department of
Agriculture 60 Day Notice of Intent to
Clear Land, and Gila River Indian
Community Response



Director's Office

Douglas A. Ducey, Governor
John S. Halikowski, Director
Scott Omer, Deputy Director for Operations
Kevin Blesty, Deputy Director for Policy
Dallas Hammit, Deputy Director for Transportation

June 2, 2016

The Honorable Stephen Roe Lewis
Governor of the Gila River Indian Community
P.O. Box 97
Sacaton, AZ 85147

RE: Notice to Salvage Protected Native Plants on City of Phoenix-owned land
Chandler Boulevard: 27th Avenue to 19th Avenue
Federal project no. NH-202-D(ADY)
ADOT project no. 202L MA 054 H5764 01D
City of Phoenix project no. ST85100367

Honorable Governor Lewis:

The City of Phoenix (City) is constructing a roadway project that will connect Chandler Boulevard from 27th Avenue to 19th Avenue. See the attached Vicinity Map, Figure 1. This section of roadway has long been identified as part of the build-out of the City's street transportation grid. The project includes 1.2 miles of two-lane roadway with one travel lane and one bicycle lane in each direction. The new roadway will be built within City limits, on land owned by the City designated for transportation purposes, and generally follows the path of the City's existing waterline maintenance road. The north side of the new roadway will be fully developed with street lighting, drainage inlets, curb, gutter and sidewalk.

Construction of this section of Chandler Boulevard was included as part of the selected alternative in the South Mountain Freeway Final Environmental Impact Statement (FEIS)/Record of Decision (ROD). Therefore, specific mitigation measures from the FEIS/ROD will be adhered to by the City for construction of the Chandler Boulevard project.

The Arizona Department of Transportation (ADOT) is providing you with this letter of Notice to Salvage Protected Native Plants and plant inventory results for the Chandler Boulevard project area documenting whether the identified plants are to be salvaged, preserved in place, or removed. The inventory considered plant species that are protected under the state's Arizona Native Plant Law and the Gila River Indian Community's Native Plant Ordinance. See the attached Native Plant Inventory, Table 1, consisting of 18 pages.

A 45-day access period is provided to the Gila River Indian Community from the date of this letter for Gila River Indian Community personnel or their contractor to salvage and relocate the identified plants or to coordinate with the City's contractor to salvage and deliver requested plants from the list to a location on Gila River Indian Community land within 1 mile of the project area. This notice period ends 45 days after the date of this letter on July 19, 2016, at which time the City will determine the disposition of native plants.

For coordination and questions, please contact Tony Humphrey, Engineering Supervisor, Design and Construction Management Division, at (602) 319-5597, or by e-mail at anthony.humphrey@phoenix.gov, to finalize coordination efforts for protected native plants.

Thank you for your time, cooperation, and assistance on this matter.

Respectfully,



Carmelo Acevedo, PE
Project Manager
Major Projects Group

Attachments:

Figure 1 - Vicinity Map

Table 1 - Native Plant Inventory

cc:

Mr. Barnaby Lewis
Tribal Historic Preservation Officer
Gila River Indian Community
P.O. Box 2140
Sacaton, AZ 85147

Mr. Russell Benford
Wildlife Biologist
Wildlife and Ecosystems Management Program
Gila River Indian Community
P.O. Box 97
Sacaton, AZ 85147

Ms. Kimberly Antone
Director
Land Use Planning and Zoning
Gila River Indian Community
P.O. Box E
Sacaton, AZ 85147

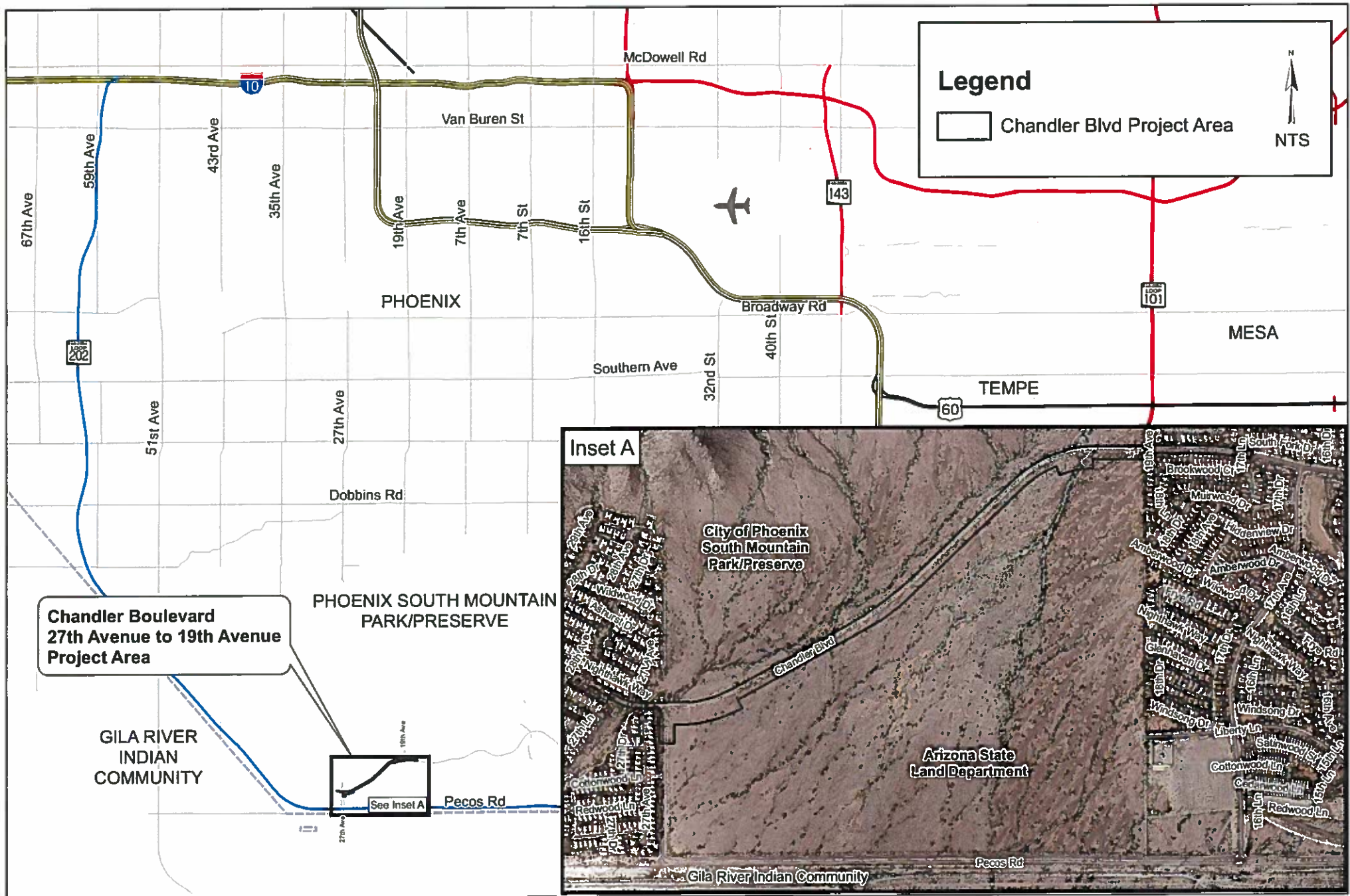


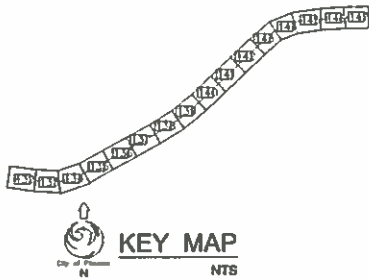
FIGURE 1. VICINITY MAP

CHANDLER BOULEVARD: 27TH AVENUE TO 19TH AVENUE
FEDERAL PROJECT NO. NH-202-D(ADY)
ADOT PROJECT NO. 202L MA 054 H5764 01D
CITY OF PHOENIX PROJECT NO. ST85100367

CHANDLER BOULEVARD
27TH AVENUE TO 19TH AVENUE
PHOENIX STREETS - MARICOPA CO

TABLE 1 - NATIVE PLANT INVENTORY FOR GRAC SALVAGE

TAG #	BOTANICAL NAME	COMMON NAME	HGT	WTH	CALIPER	CONDITION	S/WS	S	P	R	DESIGNATION REASON
1	CHLOPDS LINEARIS	DESERT WILLOW	10'	12"	6"	GOOD	S				
2	CHLOPDS LINEARIS	DESERT WILLOW	12'	15"	10"	GOOD	S				
3	CHLOPDS LINEARIS	DESERT WILLOW	15'	15"	10"	GOOD	S				
4	PARSONSONIA HYBRID	PALO VERDE	25'	20"	12"	GOOD	S				
5	PARSONSONIA HYBRID	PALO VERDE	25'	20"	12"	GOOD	S				
6	PARSONSONIA HYBRID	PALO VERDE	20'	15"	8"	GOOD	S				
7	PARSONSONIA HYBRID	PALO VERDE	20'	15"	12"	GOOD	S				
8	OLNEYA TESOTA	BROWNWOOD	15'	15"	8"	GOOD	S				
9	OLNEYA TESOTA	BROWNWOOD	20'	15"	12"	GOOD	S				
10	PARSONSONIA MICROPHYLLA	FOOTHILL PALO VERDE	12'	15"	12"	GOOD	S				
11	PARSONSONIA MICROPHYLLA	FOOTHILL PALO VERDE	15'	20"	15"	GOOD	S				
12	PARSONSONIA MICROPHYLLA	FOOTHILL PALO VERDE	12'	15"	12"	GOOD	S				
13	PARSONSONIA MICROPHYLLA	FOOTHILL PALO VERDE	15'	12"	10"	GOOD	S				
14	OLNEYA TESOTA	BROWNWOOD	16'	20"	12"	GOOD	S				
15	OLNEYA TESOTA	BROWNWOOD	15'	20"	20"	FAIR	NS				
16	OLNEYA TESOTA	BROWNWOOD	20'	20"	20"	FAIR	NS				
17	OLNEYA TESOTA	BROWNWOOD	15'	20"	12"	GOOD	S				
18	OLNEYA TESOTA	BROWNWOOD	10'	10"	6"	FAIR	NS				DECLINING
19	OLNEYA TESOTA	BROWNWOOD	10'	10"	5"	FAIR	NS				DECLINING
20	OLNEYA TESOTA	BROWNWOOD	12'	20"	24"	FAIR	NS				BASE CONDITION, AGE
21	OLNEYA TESOTA	BROWNWOOD	15'	15"	24"	FAIR	NS				BASE CONDITION, AGE
22	OLNEYA TESOTA	BROWNWOOD	20'	20"	24"	FAIR	NS				BASE CONDITION, AGE
23	PARSONSONIA MICROPHYLLA	FOOTHILL PALO VERDE	20'	25"	20"	FAIR	NS				LEARNING
24	OLNEYA TESOTA	BROWNWOOD	15'	20"	8"	FAIR	NS				BASE CONDITION, FORM
25	OLNEYA TESOTA	BROWNWOOD	15'	20"	8"	GOOD	S				
26	CARNEGIEA GIGANTEA	SAGUARO	12'	-	15"	GOOD	S				
27	CARNEGIEA GIGANTEA	SAGUARO	12'	-	15"	GOOD	S				
28	OLNEYA TESOTA	BROWNWOOD	15'	20"	12"	GOOD	S				
29	OLNEYA TESOTA	BROWNWOOD	20'	30"	48"	GOOD	NS				BASE CONDITION
30	OLNEYA TESOTA	BROWNWOOD	12'	20"	24"	FAIR	NS				AGE, DECLINING
31	OLNEYA TESOTA	BROWNWOOD	8'	12"	24"	FAIR	NS				AGE, DECLINING
32	CARNEGIEA GIGANTEA	SAGUARO	15'	-	15"	GOOD	S				
33	CARNEGIEA GIGANTEA	SAGUARO	24'	-	18"	GOOD	S				
34	OLNEYA TESOTA	BROWNWOOD	16'	20"	12"	FAIR	NS				
35	CARNEGIEA GIGANTEA	SAGUARO	3'	-	6"	POOR	NS				GROWING OUT OF BROWNWOOD
36	OLNEYA TESOTA	BROWNWOOD	15'	10"	8"	FAIR	NS				OLD GROWTH BASE/FORM, PROXIMITY
37	OLNEYA TESOTA	BROWNWOOD	20'	15"	14"	GOOD	NS				SURFACE ROOTS
38	OLNEYA TESOTA	BROWNWOOD	12'	20"	16"	FAIR	NS				SPLIT BASE
39	OLNEYA TESOTA	BROWNWOOD	10'	15"	6"	FAIR	NS				DECLINING
40	OLNEYA TESOTA	BROWNWOOD	20'	20"	24"	FAIR	NS				BASE CONDITION, SURFACE ROOTS
41	PARSONSONIA MICROPHYLLA	FOOTHILL PALO VERDE	12'	12"	4"	FAIR	NS				LEARNING, DECLINING
42	PARSONSONIA MICROPHYLLA	FOOTHILL PALO VERDE	30'	25"	18"	FAIR	NS				DECLINING, BASE CONDITION
43	PARSONSONIA MICROPHYLLA	FOOTHILL PALO VERDE	15'	15"	2"	GOOD	NS				DECLINING
44	OLNEYA TESOTA	BROWNWOOD	20'	20"	8"	GOOD	S				
45	OLNEYA TESOTA	BROWNWOOD	25'	30"	18"	GOOD	NS				BASE CONDITION
46	OLNEYA TESOTA	BROWNWOOD	25'	30"	18"	GOOD	NS				BASE CONDITION
47	CARNEGIEA GIGANTEA	SAGUARO	4'	-	12"	GOOD	S				
48	CARNEGIEA GIGANTEA	SAGUARO	2.5'	-	8"	FAIR	S				
49	CARNEGIEA GIGANTEA	SAGUARO	3'	-	16"	GOOD	S				TWIN SPLEIN
50	OLNEYA TESOTA	BROWNWOOD	15'	12"	15"	FAIR	NS				DECLINING
51	PARSONSONIA MICROPHYLLA	FOOTHILL PALO VERDE	15'	15"	12"	GOOD	S				
52	OLNEYA TESOTA	BROWNWOOD	20'	20"	15"	GOOD	S				
53	PARSONSONIA MICROPHYLLA	FOOTHILL PALO VERDE	12'	15"	12"	GOOD	S				
54	OLNEYA TESOTA	BROWNWOOD	15'	20"	15"	GOOD	S				
55	OLNEYA TESOTA	BROWNWOOD	20'	15"	20"	FAIR	NS				DECLINING
56	CARNEGIEA GIGANTEA	SAGUARO	15'	-	15"	GOOD	S				
57	PARSONSONIA MICROPHYLLA	FOOTHILL PALO VERDE	15'	20"	12"	GOOD	S				
58	OLNEYA TESOTA	BROWNWOOD	18'	15"	20"	FAIR	NS				BASE, DECLINING
59	CARNEGIEA GIGANTEA	SAGUARO	3'	-	12"	GOOD	S				
60	PARSONSONIA MICROPHYLLA	FOOTHILL PALO VERDE	30'	35"	12"	FAIR	NS				DECLINING
61	OLNEYA TESOTA	BROWNWOOD	12'	15"	10"	GOOD	S				
62	OLNEYA TESOTA	BROWNWOOD	15'	15"	12"	FAIR	NS				DECLINING
63	PARSONSONIA MICROPHYLLA	FOOTHILL PALO VERDE	20'	25"	24"	FAIR	NS				DECLINING, DAMAGED TRUNK
64	OLNEYA TESOTA	BROWNWOOD	12'	10"	10"	POOR	NS				



THE FOLLOWING PLANT LISTS WERE UTILIZED FOR
THE EXISTING PLANT INVENTORY:

- GILA RIVER INDIAN COMMUNITY NATIVE PLANT ORDINANCE
- ARIZONA DEPARTMENT OF AGRICULTURE PROTECTED NATIVE PLANTS

STATE	PROJ. NO.	SHT	TOTAL
ARIZ.	ST85100367	130	154
Kimley-Horn			
2740 N. 19TH STREET, SUITE 300 PHOENIX, ARIZONA 85020 Phone: 602-944-8800 Fax: 602-944-8820 www.kimley-horn.com			
DATE	DATE	DATE	DATE
05/18/18	05/18/18	05/18/18	05/18/18

LANDSCAPE ARCHITECT

KIMLEY-HORN AND ASSOCIATES, INC.
2740 NORTH 19TH STREET, SUITE 300
PHOENIX, ARIZONA 85020
(602) 944-8800
CONTACT: ANNE BEAVERS@KIMLEY-HORN.COM

*Available for GRAC Salvage (28 trees/8 cacti)

*S/N/S
THIS DESIGNATION EVALUATES THE VIABILITY
(SALVAGEABLE OR NON-SALVAGEABLE) OF THE
PLANT AND DOES NOT INDICATE THE FINAL
DESIGNATION.

*S/P/B
(SALVAGE/PRESERVE IN PLACE/PRIORITIZED)
FINAL DESIGNATION OF PLANT AS INDICATED.



*PER CITY OF PHOENIX ORDINANCE G-4396, THESE
PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE
SHARED WITH OTHERS EXCEPT AS REQUIRED TO
FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH
THE CITY OF PHOENIX.

NATIVE PLANT INVENTORY NOTES

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

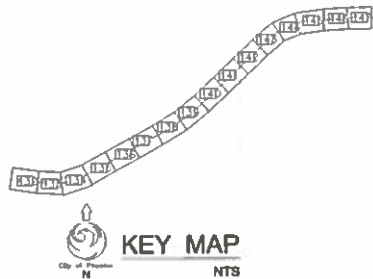
CHANDLER BOULEVARD
27TH AVENUE TO 19TH AVENUE
ST85100367

DATE	DATE	DATE	DATE	SHT	TOTAL
05/18/18	05/18/18	05/18/18	05/18/18	130	154

SCALE: 1" = 20' HORIZ, 1" = 2' VERT

CHANDLER BOULEVARD
27TH AVENUE TO 19TH AVENUE
PHOENIX STREETS - MARICOPA CO.

REVISION BY CITY OF PHOENIX
NO. 1
NO. 2
NO. 3
NO. 4
NO. 5
NO. 6
NO. 7
NO. 8
NO. 9
NO. 10
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NO. 122
NO. 123
NO. 124
NO. 125
NO. 126
NO. 127



THE FOLLOWING PLANT LISTS WERE UTILIZED FOR THE EXISTING PLANT INVENTORY:

- GILA RIVER INDIAN COMMUNITY NATIVE PLANT ORDINANCE
- ARIZONA DEPARTMENT OF AGRICULTURE PROTECTED NATIVE PLANTS

TABLE 1 - NATIVE PLANT INVENTORY FOR GRAC SALVAGE

TAG #	BOTANICAL NAME	COMMON NAME	HT	WTH	CALIPER	CONDITION	S/MS	S	P	R	DESIGNATION REASON
65	PARSONSONIA MICROPHYLLA	FOOTHILL PALO VERDE	12"	15"	6"	GOOD	S	+			
66	OLNEYA TESOTA	BROWNWOOD	15"	20"	12"	FAIR	MS				• DECLINING
67	PARSONSONIA MICROPHYLLA	FOOTHILL PALO VERDE	15"	20"	12"	FAIR	MS				• DECLINING
68	PARSONSONIA MICROPHYLLA	FOOTHILL PALO VERDE	15"	20"	18"	GOOD	S	+			
69	OLNEYA TESOTA	BROWNWOOD	15"	12"	8"	GOOD	S	+			
70	PARSONSONIA MICROPHYLLA	FOOTHILL PALO VERDE	12"	10"	6"	GOOD	S	+			
71	PARSONSONIA MICROPHYLLA	FOOTHILL PALO VERDE	12"	12"	7"	FAIR	MS				• BASE CONDITION
72	PROSOPIS VELUTINA	VELVET MESQUITE	15"	20"	10"	GOOD	S	+			
73	OLNEYA TESOTA	BROWNWOOD	20"	20"	24"	GOOD	S	+			
74	OLNEYA TESOTA	BROWNWOOD	25"	20"	12"	FAIR	MS				• SPLIT BASE; ON SLOPE
75	CARNEGIEA GIGANTEA	SAGUARO	20"	-	24"	GOOD	S	+			
76	PARSONSONIA MICROPHYLLA	FOOTHILL PALO VERDE	15"	12"	10"	FAIR	MS				• DECLINING; PROX TO SAGUARO
77	OLNEYA TESOTA	BROWNWOOD	12"	15"	10"	FAIR	MS				•
78	PARSONSONIA FLORIDA	BLUE PALO VERDE	10"	10"	4"	GOOD	S	+			
79	PROSOPIS VELUTINA	VELVET MESQUITE	12"	12"	4"	GOOD	S	+			
80	PROSOPIS VELUTINA	VELVET MESQUITE	10"	10"	4"	GOOD	S	+			
81	PROSOPIS VELUTINA	VELVET MESQUITE	10"	8"	4"	GOOD	MS				• UNDERSTORY INTERGROWTH
82	PROSOPIS VELUTINA	VELVET MESQUITE	10"	10"	6"	GOOD	S	+			
83	PARSONSONIA MICROPHYLLA	FOOTHILL PALO VERDE	10"	10"	6"	GOOD	S	+			
84	PARSONSONIA MICROPHYLLA	FOOTHILL PALO VERDE	20"	30"	18"	FAIR	MS				• DECLINING
85	PROSOPIS HYBRID	HYBRID MESQUITE	8"	8"	6"	GOOD	S	+			
86	PROSOPIS HYBRID	HYBRID MESQUITE	12"	15"	6"	GOOD	S	+			
87	PARSONSONIA FLORIDA	BLUE PALO VERDE	10"	12"	4"	GOOD	S	+			
88	PARSONSONIA FLORIDA	BLUE PALO VERDE	20"	20"	10"	GOOD	MS				• 3 TRUNKS
89	PROSOPIS VELUTINA	VELVET MESQUITE	8"	6"	4"	GOOD	S	+			
90	PARSONSONIA FLORIDA	BLUE PALO VERDE	20"	12"	12"	GOOD	MS				• IN DRAINAGE; SPRAWLING
91	OLNEYA TESOTA	BROWNWOOD	18"	15"	8"	GOOD	MS				• IN DRAINAGE CHANNEL
92	PARSONSONIA FLORIDA	BLUE PALO VERDE	10"	10"	6"	FAIR	MS				• LEANING
93	ACACIA SALICINA	WILLOW ACACIA	25"	20"	24"	GOOD	MS				• BASE; IN DRAINAGE CHANNEL
94	PARSONSONIA FLORIDA	BLUE PALO VERDE	8"	6"	4"	GOOD	S	+			
95	ACACIA SALICINA	WILLOW ACACIA	16"	22"	10"	GOOD	S	+			
96	OLNEYA TESOTA	BROWNWOOD	18"	12"	10"	GOOD	S	+			
97	OLNEYA TESOTA	BROWNWOOD	18"	20"	18"	GOOD	S	+			
98	OLNEYA TESOTA	BROWNWOOD	20"	12"	18"	GOOD	S	+			
99	FEROCACTUS WISLIZI	BARREL CACTUS	2"	-	12"	GOOD	S	+			
100	FEROCACTUS WISLIZI	BARREL CACTUS	3"	-	15"	GOOD	S	+			
101	FEROCACTUS WISLIZI	BARREL CACTUS	2"	-	12"	GOOD	S	+			
102	FEROCACTUS WISLIZI	BARREL CACTUS	18"	-	12"	GOOD	S	+			
103	ECINOCEBUS	HEGGENOS CACTUS	6"	2"	-	FAIR	S	+			
104	PARSONSONIA MICROPHYLLA	FOOTHILL PALO VERDE	15"	20"	12"	GOOD	S	+			
105	PARSONSONIA MICROPHYLLA	FOOTHILL PALO VERDE	12"	15"	5"	GOOD	S	+			
106	OLNEYA TESOTA	BROWNWOOD	20"	30"	15"	GOOD	S	+			
107	OLNEYA TESOTA	BROWNWOOD	15"	20"	20"	GOOD	S	+			
108	OLNEYA TESOTA	BROWNWOOD	15"	20"	24"	FAIR	MS				• FORM; BASE CONDITION
109	OLNEYA TESOTA	BROWNWOOD	25"	20"	24"	FAIR	MS				• FORM; BASE CONDITION
110	PARSONSONIA FLORIDA	BLUE PALO VERDE	12"	15"	5"	GOOD	S	+			
111	PARSONSONIA FLORIDA	BLUE PALO VERDE	12"	15"	6"	GOOD	S	+			
112	PARSONSONIA FLORIDA	BLUE PALO VERDE	12"	15"	6"	GOOD	S	+			
113	PARSONSONIA FLORIDA	BLUE PALO VERDE	15"	20"	12"	GOOD	S	+			
114	PARSONSONIA FLORIDA	BLUE PALO VERDE	20"	20"	12"	GOOD	S	+			
115	CARNEGIEA GIGANTEA	SAGUARO	12"	-	14"	GOOD	S	+			
116	CARNEGIEA GIGANTEA	SAGUARO	4"	-	14"	GOOD	S	+			
117	PARSONSONIA MICROPHYLLA	FOOTHILL PALO VERDE	15"	15"	12"	GOOD	S	+			
118	OLNEYA TESOTA	BROWNWOOD	15"	20"	12"	POOR	MS				• IN DRAINAGE
119	PARSONSONIA MICROPHYLLA	FOOTHILL PALO VERDE	12"	12"	10"	FAIR	MS				• ON SLOPE
120	PARSONSONIA MICROPHYLLA	FOOTHILL PALO VERDE	15"	15"	12"	FAIR	MS				• ON SLOPE
121	PARSONSONIA MICROPHYLLA	FOOTHILL PALO VERDE	12"	10"	18"	FAIR	MS				• ON SLOPE; EROSION; SURFACE ROOTS
122	PARSONSONIA MICROPHYLLA	FOOTHILL PALO VERDE	15"	20"	14"	FAIR	MS				• ON SLOPE; EROSION; SURFACE ROOTS
123	PARSONSONIA MICROPHYLLA	FOOTHILL PALO VERDE	20"	20"	20"	FAIR	MS				• ON SLOPE; EROSION; SURFACE ROOTS
124	PARSONSONIA MICROPHYLLA	FOOTHILL PALO VERDE	12"	10"	14"	POOR	MS				• CONDITION; ON SLOPE
125	PARSONSONIA MICROPHYLLA	FOOTHILL PALO VERDE	15"	20"	12"	FAIR	MS				• ON SLOPE; SURFACE ROOTS
126	PARSONSONIA MICROPHYLLA	FOOTHILL PALO VERDE	15"	15"	16"	FAIR	MS				• CONDITION
127	OLNEYA TESOTA	BROWNWOOD	20"	25"	36"	GOOD	MS				• DRAINAGE; LEANING; BASE CONDITION

STATE	PROJ. NO.	SHT	TOTAL
ARIZ.	ST85100387	131	154
Kimley-Horn 1740 N. 19TH STREET SUITE 200 PHOENIX, AZ 85020 Phone: 602.944.6000 Fax: 602.944.1420 kimley-horn.com			
REV. #2	12.5.2018	131	154

LANDSCAPE ARCHITECT

KIMLEY-HORN AND ASSOCIATES, INC.
7740 NORTH 19TH STREET, SUITE 300
PHOENIX, ARIZONA 85020
(602) 944-5500
CONTACT: AMIE BEAVERS, PLA
EMAIL: AMIE.BEAVERS@KIMLEY-HORN.COM

*Available for GRAC Salvage (28 trees/8 cacti)

*S/N/S
THIS DESIGNATION EVALUATES THE VIABILITY
(SALVAGEABLE OR NON-SALVAGEABLE) OF THE
PLANT AND DOES NOT INDICATE THE FINAL
DESIGNATION

*S/P/R
(SALVAGE, PRESERVE IN PLACE, REMOVE)
FINAL DESIGNATION OF PLANT AS INDICATED



*PER CITY OF PHOENIX ORDINANCE G-4396, THESE
PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE
SHARED WITH OTHERS EXCEPT AS REQUIRED TO
FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH
THE CITY OF PHOENIX.

NATIVE PLANT INVENTORY NOTES

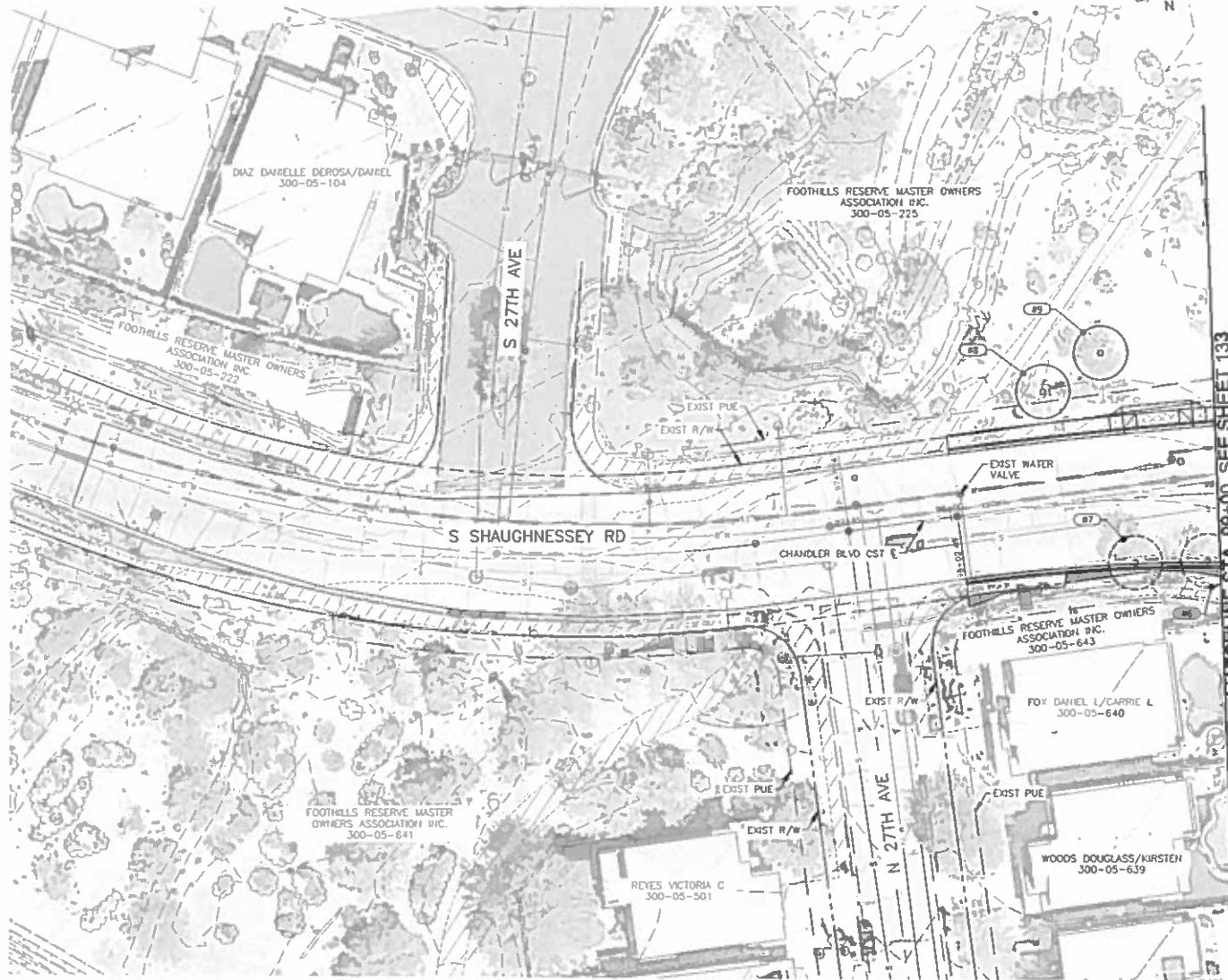
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

CHANDLER BOULEVARD
27TH AVENUE TO 19TH AVENUE
ST85100387

DATE	ISSUED	REV. #	BY	DATE	SHT	TOTAL
12/15/18	12/15/18	2	AM	12/15/18	131	154

SCALE: 1" = 20' HORIZ, 1" = 3' VERT

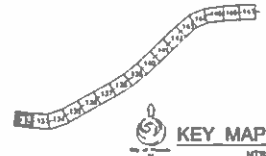
CHANDLER BOULEVARD
27TH AVENUE TO 19TH AVENUE
PHOENIX STREETS - MARICOPA CO.



MATCHLINE STA. 99+00 SEE SHEET 133

STATE	PROJ. NO.	SHT	TOTAL
ARIZ.	ST85100367	132	154
Kimley-Horn <small>7700 N 19TH STREET SUITE 200 PHOENIX, AZ 85028 www.kimley-horn.com</small>		<small>Phone: 602.944.6800 Fax: 602.944.7425 info@kimley-horn.com</small>	
BY: JF	DATE: 5/16		

INVENTORY LEGEND	
SYMBOL	DESCRIPTION
	EXIST TREE - PRESERVE IN PLACE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST SAGUARO - PRESERVE IN PLACE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST CACTUS - PRESERVE IN PLACE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST TREE - SALVAGE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST SAGUARO - SALVAGE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST CACTUS - SALVAGE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST TREE - REMOVE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST SAGUARO - REMOVE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST CACTUS - REMOVE # CORRESPONDS TO FIELD TAG NUMBER



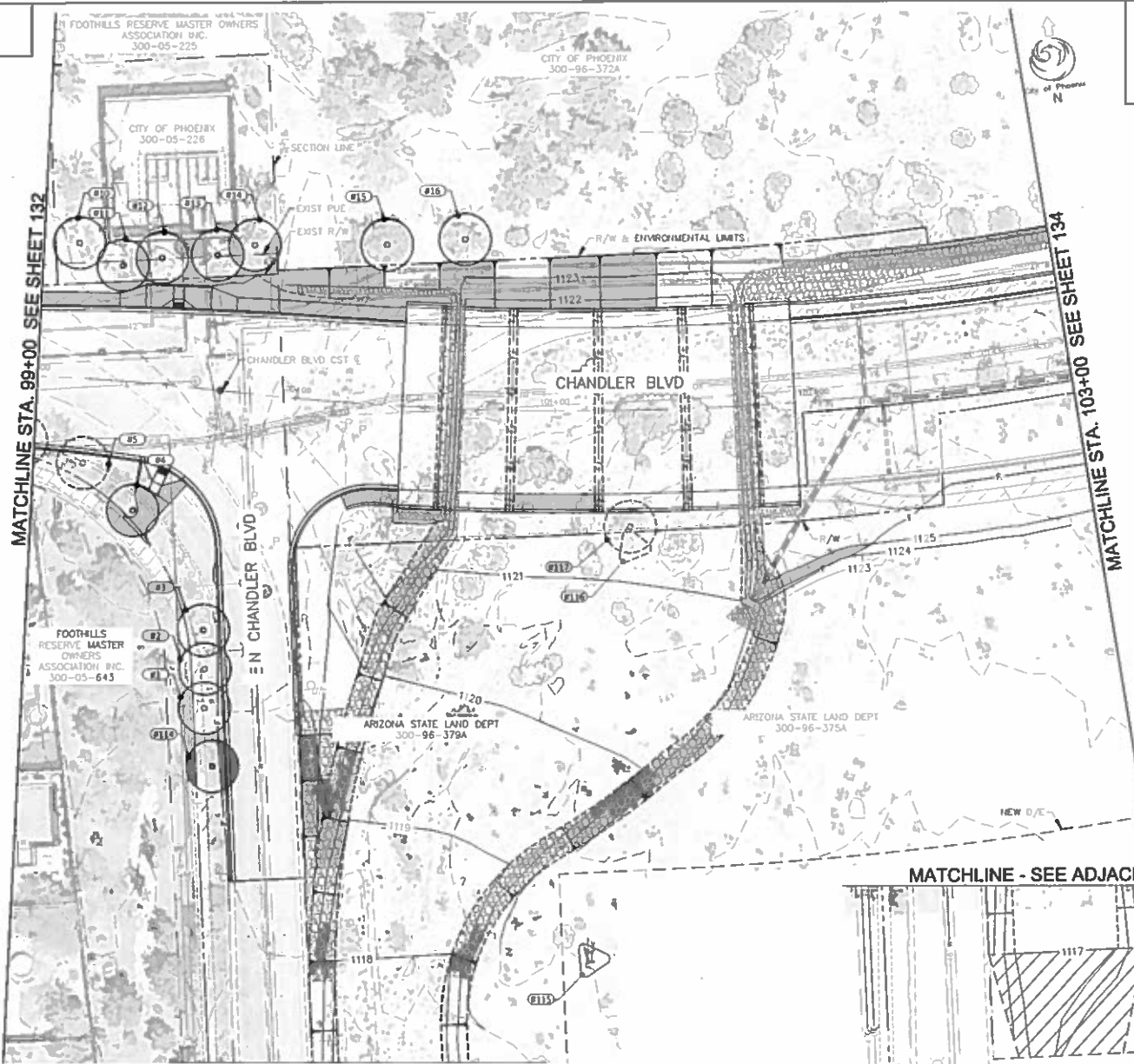
"PER CITY OF PHOENIX ORDINANCE C-4396, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX."

NATIVE PLANT INVENTORY PLAN
STA 97+61 TO 99+00
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
CHANDLER BOULEVARD
27TH AVENUE TO 19TH AVENUE
ST85100367

DATE: 5/16	DATE: 5/16	DATE: 5/16	SHT	TOTAL
132	133	134	132	154

SCALE: 1" = 20' HORIZ., 1" = 2' VERT.

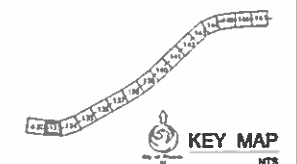
CHANDLER BOULEVARD
27TH AVENUE TO 19TH AVENUE
PHOENIX STREETS - MARICOPA CO.



STATE	PROJ. NO.	SHT	TOTAL
ARIZ.	ST85100387	133	154
Kimley-Horn			
1740 N. 19TH STREET SUITE 200 PHOENIX, AZ 85028 Phone: 602-944-1100 Fax: 602-944-1105 www.kimley-horn.com			
DATE: 5/1/10	DATE: 5/1/10	DATE: 5/1/10	DATE: 5/1/10

INVENTORY LEGEND










SYMBOL	DESCRIPTION
	EXIST TREE - PRESERVE IN PLACE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST SAGUARO - PRESERVE IN PLACE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST CACTUS - PRESERVE IN PLACE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST TREE - SALVAGE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST SAGUARO - SALVAGE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST CACTUS - SALVAGE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST TREE - REMOVE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST SAGUARO - REMOVE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST CACTUS - REMOVE # CORRESPONDS TO FIELD TAG NUMBER

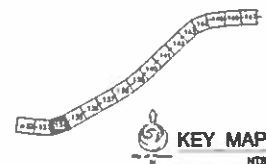


PER CITY OF PHOENIX ORDINANCE 15-4396, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX.			
NATIVE PLANT INVENTORY PLAN STA 99+00 TO 103+00			
CITY OF PHOENIX, ARIZONA STREET TRANSPORTATION DEPARTMENT			
CHANDLER BOULEVARD 27TH AVENUE TO 19TH AVENUE ST85100387			
DATE: 5/1/10	DATE: 5/1/10	DATE: 5/1/10	DATE: 5/1/10
SCALE: 1" = 20' HORIZ, 1" = 2' VERT	SHT	TOTAL	
	133	154	

DIVISION BY CITY OF PATIENT NO. _____ OCCURRENCE _____ REV. P. 100 BY DATE _____		DIVISION BY CITY OF PATIENT NO. _____ OCCURRENCE _____ REV. P. 100 BY DATE _____		DIVISION BY CITY OF PATIENT NO. _____ OCCURRENCE _____ REV. P. 100 BY DATE _____	
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INVENTORY LEGEND	
SYMBOL	DESCRIPTION
	EXIST TREE - PRESERVE IN PLACE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST SAGUARO - PRESERVE IN PLACE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST CACTUS - PRESERVE IN PLACE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST TREE - SALVAGE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST SAGUARO - SALVAGE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST CACTUS - SALVAGE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST TREE - REMOVE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST SAGUARO - REMOVE CORRESPONDS TO FIELD TAG NUMBER
	EXIST CACTUS - REMOVE # CORRESPONDS TO FIELD TAG NUMBER

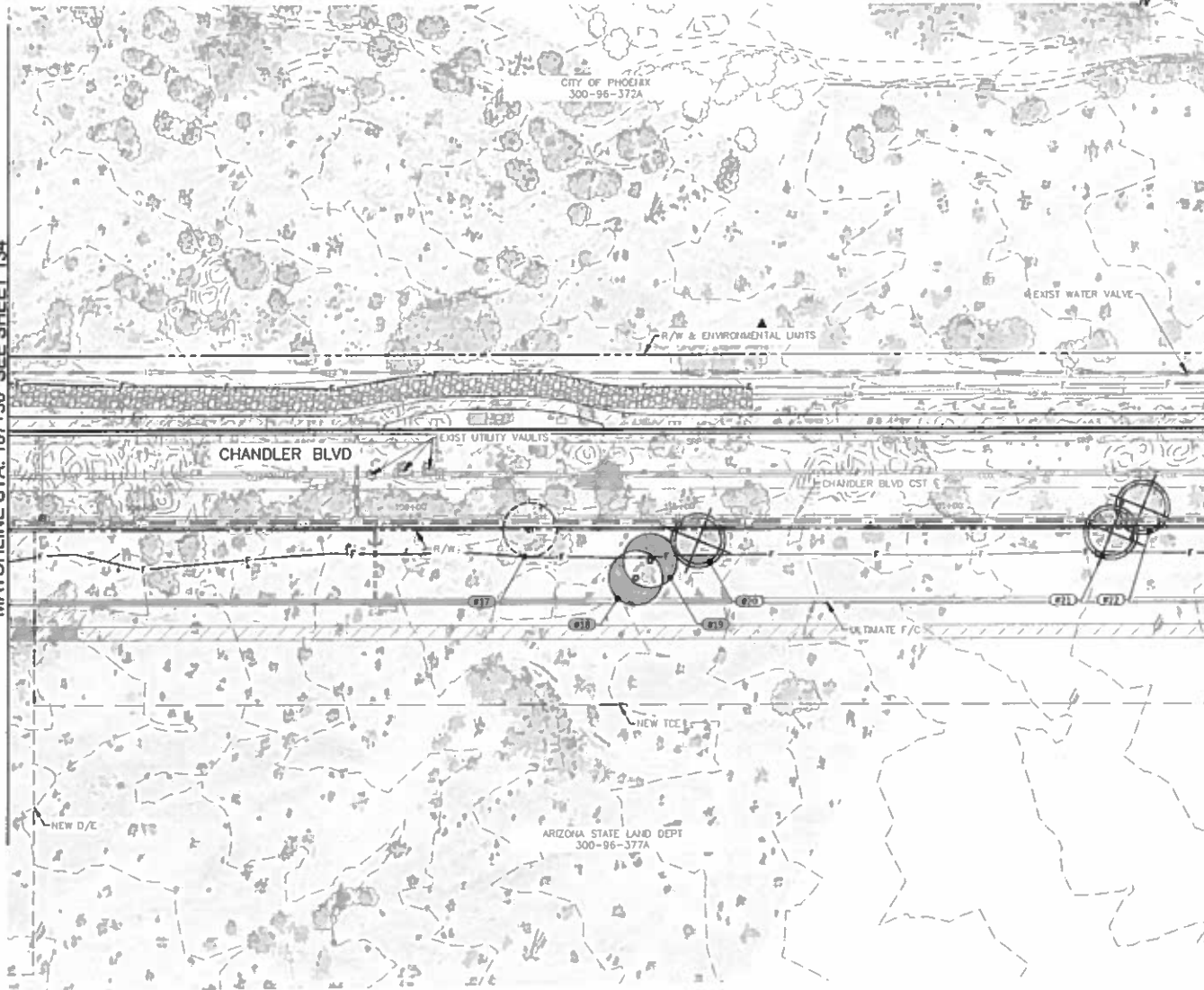


NATIVE PLANT INVENTORY PLAN
STA 103+00 TO 107+50
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
CHANDLER BOULEVARD
27TH AVENUE TO 19TH AVENUE
ST85100367

101.57	125.454	12.450	SHT	TOTAL
101.5716	125.4516	12.4516		
SCALE: 1" = 20' HORIZ, 1" = 2' VERT			134	154

CHANDLER BOULEVARD
27TH AVENUE TO 19TH AVENUE
PHOENIX STREETS - MARICOPA CO.

MATCHLINE STA. 107+50 SEE SHEET 134

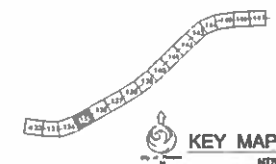


MATCHLINE STA. 112+00 SEE SHEET 136

STATE	PROJ. NO.	SHT	TOTAL
ARIZ.	ST85100367	135	154
Kimley-Horn			
<small>700 N. 15TH STREET SUITE 200 PHOENIX, AZ 85003 Phone 602-944-8800 Fax 602-944-1420 www.kimley-horn.com</small>			
DR. BY	DATE	CHK. BY	DATE
	4/1/06	CR. APP.	5/2/06

INVENTORY LEGEND

SYMBOL	DESCRIPTION
	EXIST TREE - PRESERVE IN PLACE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST SAQUARO - PRESERVE IN PLACE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST CACTUS - PRESERVE IN PLACE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST TREE - SALVAGE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST SAQUARO - SALVAGE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST CACTUS - SALVAGE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST TREE - REMOVE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST SAQUARO - REMOVE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST CACTUS - REMOVE # CORRESPONDS TO FIELD TAG NUMBER



"PER CITY OF PHOENIX ORDINANCE G-6396, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX."

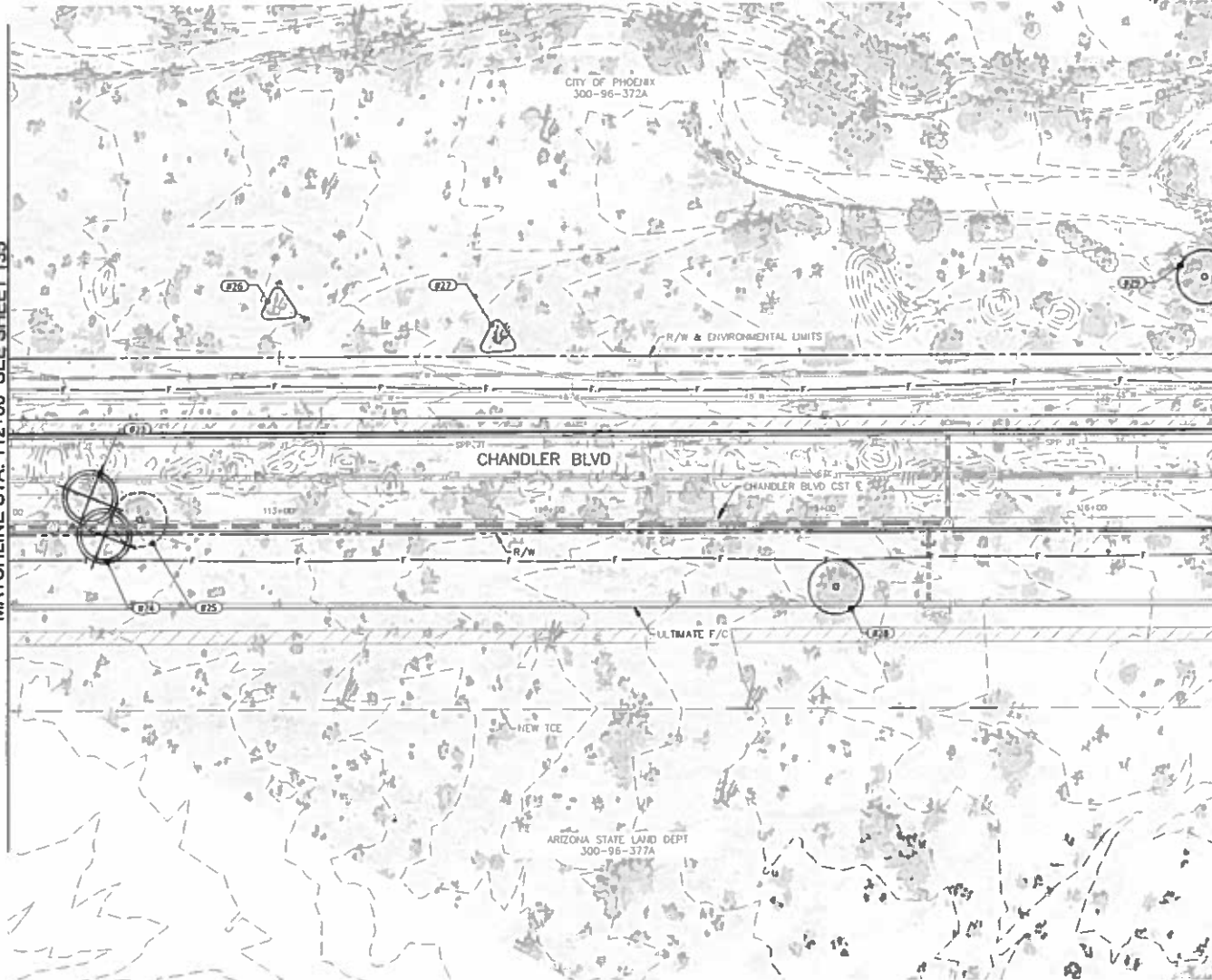
NATIVE PLANT INVENTORY PLAN
STA 107+50 TO 112+00
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
CHANDLER BOULEVARD
27TH AVENUE TO 19TH AVENUE
ST85100367

DATE	DATE	DATE	SHT	TOTAL
DATE 5/2/06	DATE 5/2/06	DATE 5/2/06	135	154

SCALE: 1" = 20' HORIZ, 1" = 2' VERT

CHANDLER BOULEVARD
27TH AVENUE TO 19TH AVENUE
PHOENIX STREETS - MARICOPA CO.

MATCHLINE STA. 112+00 SEE SHEET 135

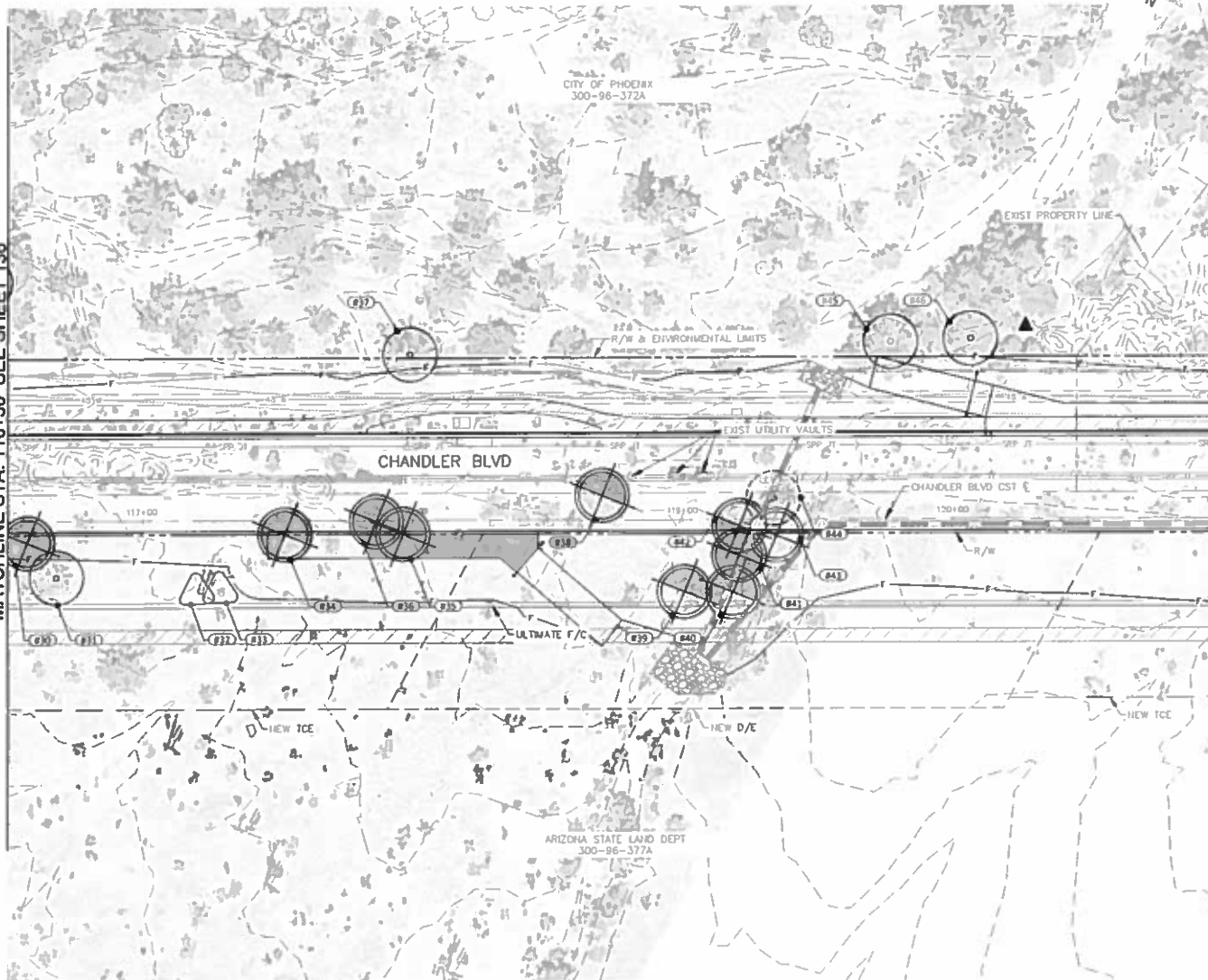


MATCHLINE STA. 116+50 SEE SHEET 137

STATE	PROJ. NO.	SHT	TOTAL
ARIZ.	SR85100367	136	154
Kimley-Horn 700 N. 19TH STREET SUITE 200 PHOENIX, AZ 85003 Phone 602.644.1400 Fax 602.644.1403 www.kimley-horn.com			
NO. 47	DATE: 4/24	1/3, 2/3	DATE: 5/16
INVENTORY LEGEND			
SYMBOL	DESCRIPTION		
	EXIST TREE - PRESERVE IN PLACE # CORRESPONDS TO FIELD TAG NUMBER		
	EXIST SAGUARO - PRESERVE IN PLACE # CORRESPONDS TO FIELD TAG NUMBER		
	EXIST CACTUS - PRESERVE IN PLACE # CORRESPONDS TO FIELD TAG NUMBER		
	EXIST TREE - SALVAGE # CORRESPONDS TO FIELD TAG NUMBER		
	EXIST SAGUARO - SALVAGE # CORRESPONDS TO FIELD TAG NUMBER		
	EXIST CACTUS - SALVAGE # CORRESPONDS TO FIELD TAG NUMBER		
	EXIST TREE - REMOVE # CORRESPONDS TO FIELD TAG NUMBER		
	EXIST SAGUARO - REMOVE # CORRESPONDS TO FIELD TAG NUMBER		
	EXIST CACTUS - REMOVE # CORRESPONDS TO FIELD TAG NUMBER		
 KEY MAP N75			
PER CITY OF PHOENIX ORDINANCE 0-1396, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX.			
NATIVE PLANT INVENTORY PLAN STA 112+00 TO 116+50			
CITY OF PHOENIX, ARIZONA STREET TRANSPORTATION DEPARTMENT			
CHANDLER BOULEVARD 27TH AVENUE TO 19TH AVENUE SR85100367			
NO. 47	DATE: 4/24	1/3, 2/3	SHT TOTAL
DATE: 5/16	DATE: 5/16	DATE: 5/16	136 154
SCALE: 1" = 20' HORIZ, 1" = 2' VERT			

CHANDLER BOULEVARD
27TH AVENUE TO 19TH AVENUE
PHOENIX STREETS - MARICOPA CO.

MATCHLINE STA. 116+50 SEE SHEET 136



MATCHLINE STA. 121+00 SEE SHEET 138

STATE	PROJ. NO.	SHT	TOTAL
ARZ.	ST85100367	137	154
Kimley-Horn			
2701 N. 19TH STREET SUITE 200 PHOENIX, AZ 85016		Phone 602-944-8900 Fax 602-944-7455 www.kimley-horn.com	
DR. - JF	DES. - ASB	CR. - JEP	DATE - 5/16

INVENTORY LEGEND

SYMBOL	DESCRIPTION
	EXIST TREE - PRESERVE IN PLACE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST SAGUARO - PRESERVE IN PLACE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST CACTUS - PRESERVE IN PLACE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST TREE - SALVAGE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST SAGUARO - SALVAGE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST CACTUS - SALVAGE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST TREE - REMOVE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST SAGUARO - REMOVE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST CACTUS - REMOVE # CORRESPONDS TO FIELD TAG NUMBER



"PER CITY OF PHOENIX ORDINANCE C-4396, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX."

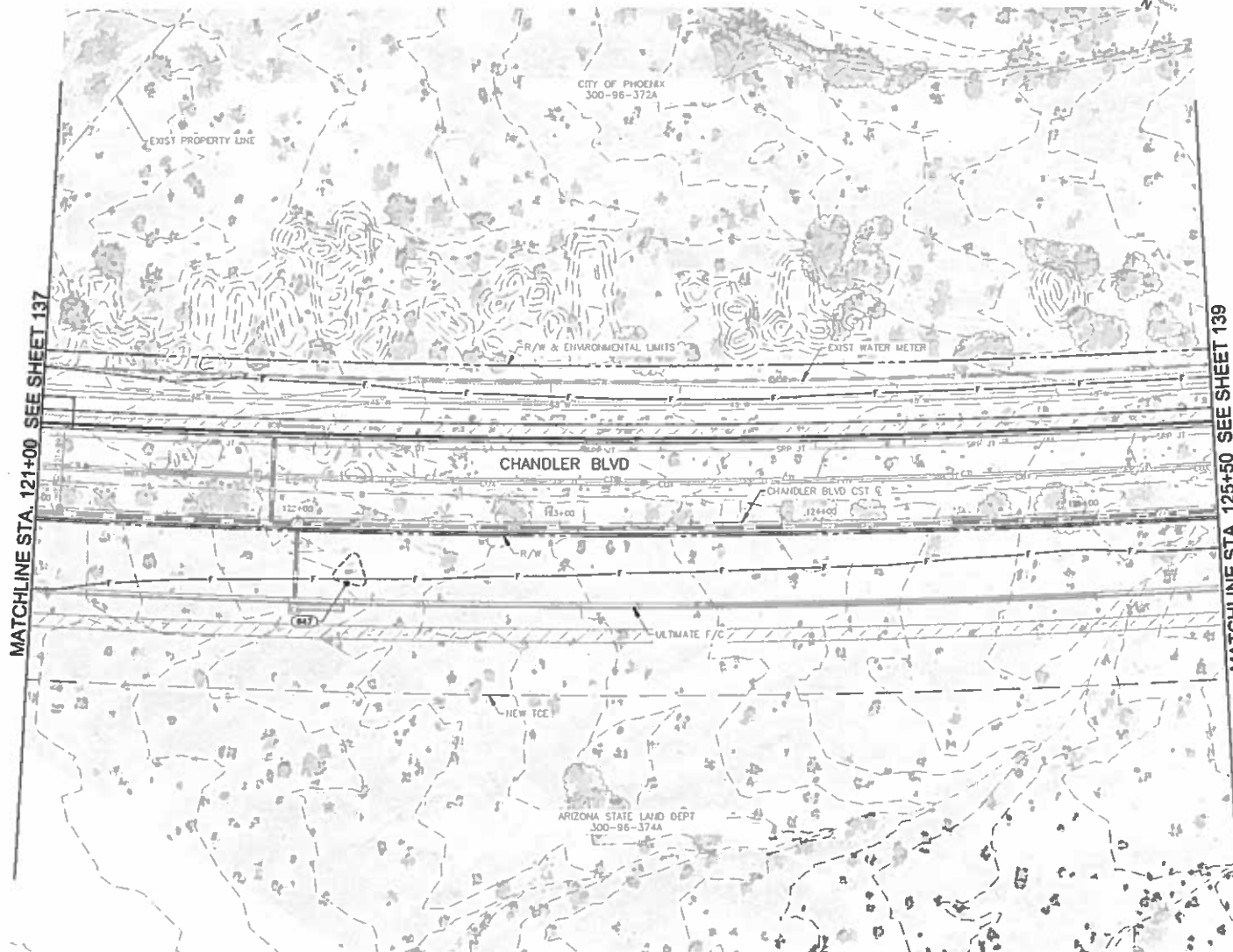
NATIVE PLANT INVENTORY PLAN
STA 116+50 TO 121+00

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

CHANDLER BOULEVARD
27TH AVENUE TO 19TH AVENUE
ST85100367

DATE	DES. ASB	CR. JEP	SHT	TOTAL
5/16	5/16	5/16	137	154
SCALE: 1" = 20' HORIZ, 1" = 2' VERT				

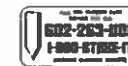
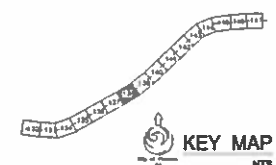
CHANDLER BOULEVARD
27TH AVENUE TO 19TH AVENUE
PHOENIX STREETS - MARICOPA CO.



STATE	PROJ. NO.	SHT	TOTAL
ARIZ.	ST85100367	138	154
Kimley-Horn 1740 N. 19TH STREET SUITE 200 PHOENIX, AZ 85016 Phone: 602-944-6800 Fax: 602-944-7420 www.kimley-horn.com			
BY: KAH	DATE: 5/1/16	CA: ALP	

INVENTORY LEGEND

SYMBOL	DESCRIPTION
	EXIST TREE - PRESERVE IN PLACE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST SAQUARO - PRESERVE IN PLACE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST CACTUS - PRESERVE IN PLACE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST TREE - SALVAGE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST SAQUARO - SALVAGE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST CACTUS - SALVAGE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST TREE - REMOVE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST SAQUARO - REMOVE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST CACTUS - REMOVE # CORRESPONDS TO FIELD TAG NUMBER



PER CITY OF PHOENIX ORDINANCE G-4-190, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX.

NATIVE PLANT INVENTORY PLAN
STA 121+00 TO 125+50
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
CHANDLER BOULEVARD
27TH AVENUE TO 19TH AVENUE
ST85100367

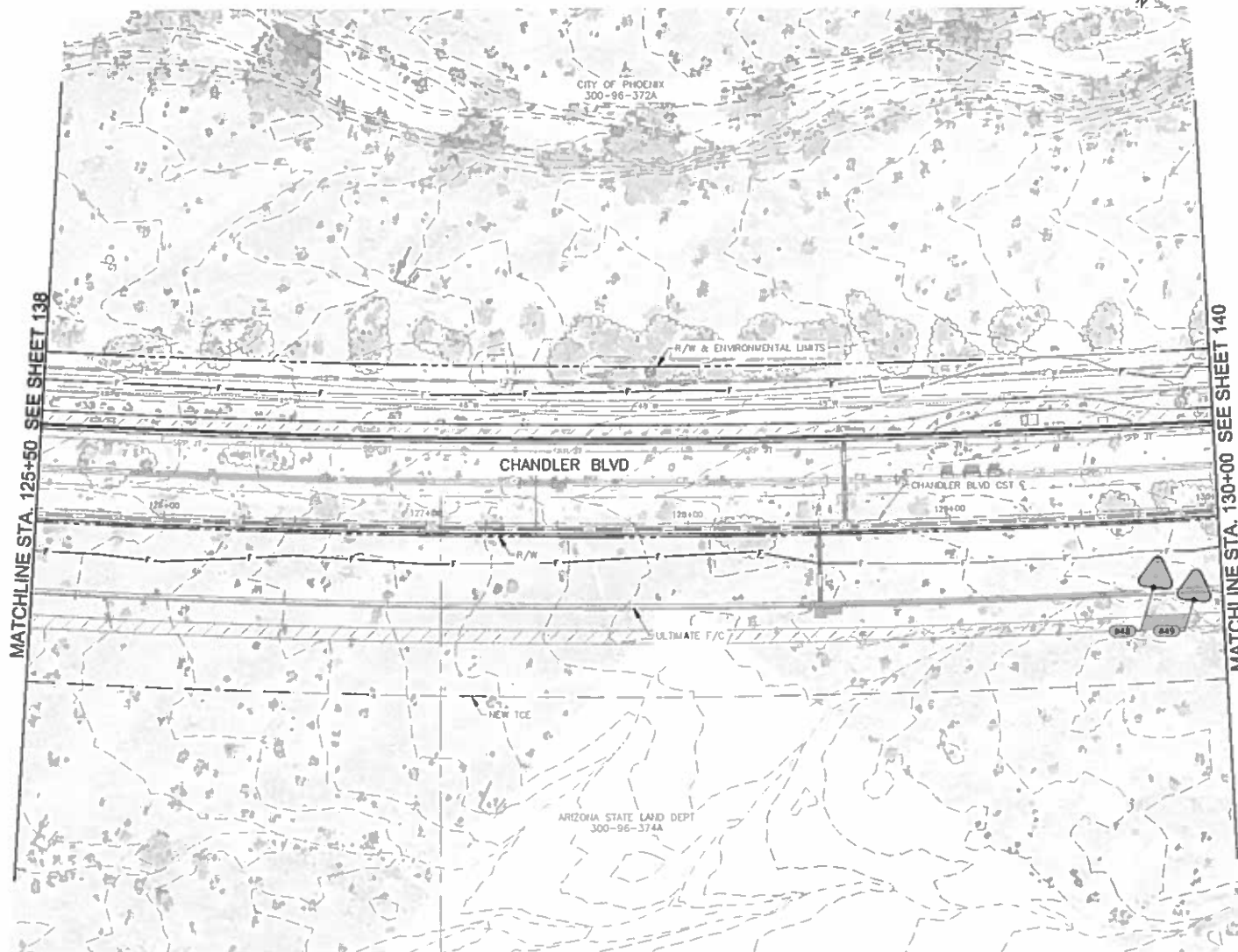
SCALE: 1" = 20' HORIZ., 1" = 2' VERT.	SHT	TOTAL
	138	154

CHANDLER BOULEVARD
27TH AVENUE TO 19TH AVENUE
PHOENIX STREETS - MARICOPA CO.

SECTION BY CITY OF PHOENIX
DESCRIPTION
SHEET NO. 138 OF 154

SECTION BY CITY OF PHOENIX
DESCRIPTION
SHEET NO. 138 OF 154

SECTION BY CITY OF PHOENIX
DESCRIPTION
SHEET NO. 138 OF 154



STATE	PROJ. NO.	SHT	TOTAL
ARIZ.	ST85100367	138	154

Kimley-Horn
700 N. DEW STREET
SUITE 200
PHOENIX, AZ 85004
Phone: 602-944-6880
Fax: 602-944-1423
www.kimley-horn.com

INVENTORY LEGEND	
SYMBOL	DESCRIPTION
	EXIST TREE - PRESERVE IN PLACE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST SAQUARO - PRESERVE IN PLACE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST CACTUS - PRESERVE IN PLACE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST TREE - SALVAGE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST SAQUARO - SALVAGE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST CACTUS - SALVAGE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST TREE - REMOVE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST SAQUARO - REMOVE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST CACTUS - REMOVE # CORRESPONDS TO FIELD TAG NUMBER



602-253-6000
1-800-670-0277
PHOENIX, ARIZONA

"PER CITY OF PHOENIX ORDINANCE G-6396, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX."

NATIVE PLANT INVENTORY PLAN
STA 125+50 TO 130+00
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

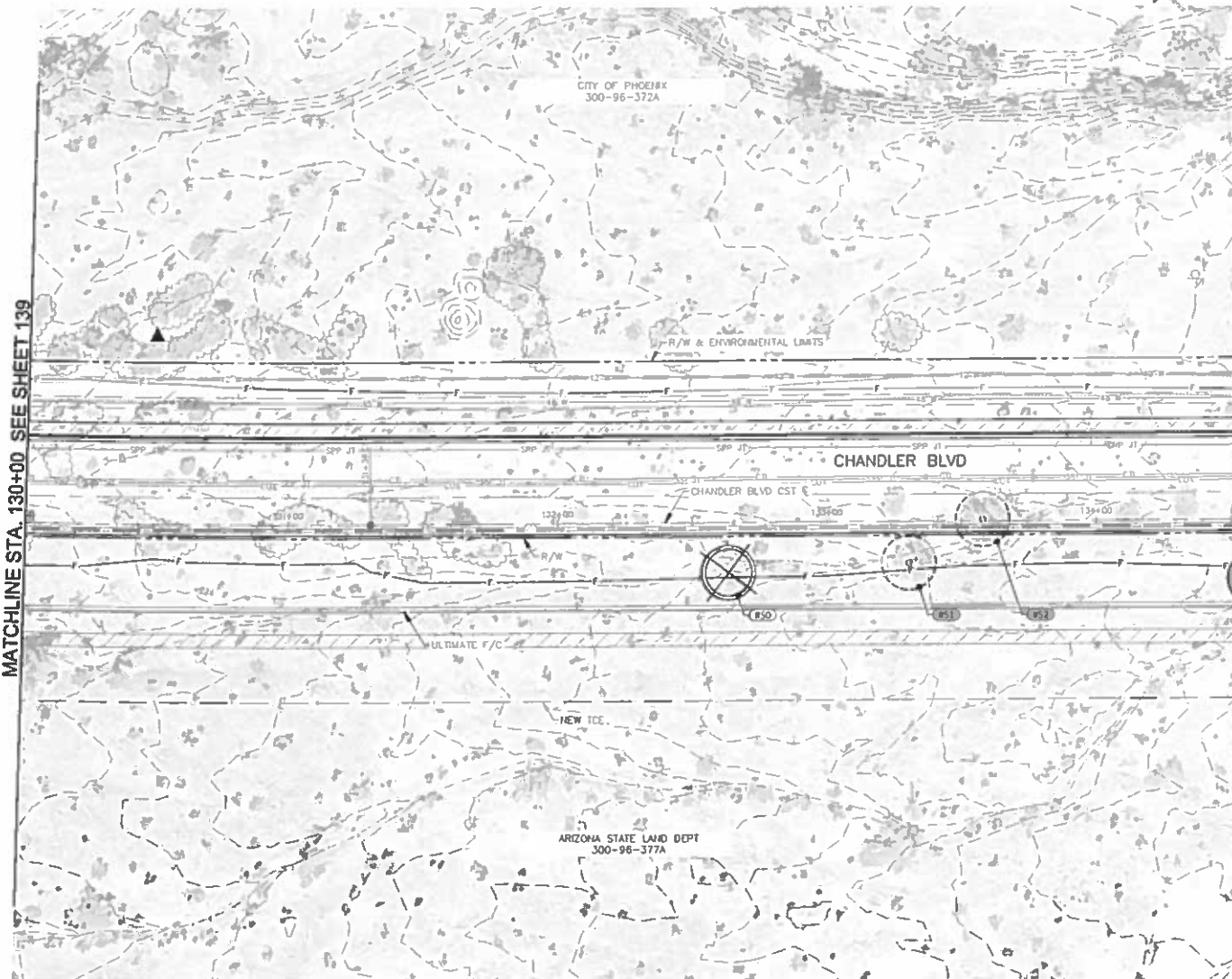
CHANDLER BOULEVARD
27TH AVENUE TO 19TH AVENUE
ST85100367

DATE	BY	CHECKED	DATE	BY	SHT	TOTAL
DATE: 8/1/14	DATE: 8/1/14	DATE: 8/1/14	DATE: 8/1/14	DATE: 8/1/14	138	154

SCALE: 1" = 20' HORIZ, 1" = 2' VERT

CHANDLER BOULEVARD
27TH AVENUE TO 19TH AVENUE
PHOENIX STREETS - MARICOPA CO.

MATCHLINE STA. 130+00 SEE SHEET 139



MATCHLINE STA. 134+50 SEE SHEET 141

STATE	PROJ. NO.	SHT	TOTAL
ARIZ.	STB5100387	140	154
Kimley-Horn		7700 N. 19TH STREET SUITE 200 PHOENIX, AZ 85028	Phone: 602-955-8800 Fax: 602-955-8801 www.kimley-horn.com
DR. BY	D.L.S. ASB	CR. BY	DATE: 5/16

INVENTORY LEGEND

SYMBOL	DESCRIPTION
	EXIST TREE - PRESERVE IN PLACE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST SAGUARO - PRESERVE IN PLACE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST CACTUS - PRESERVE IN PLACE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST TREE - SALVAGE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST SAGUARO - SALVAGE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST CACTUS - SALVAGE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST TREE - REMOVE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST SAGUARO - REMOVE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST CACTUS - REMOVE # CORRESPONDS TO FIELD TAG NUMBER



KEY MAP
NTS



*PER CITY OF PHOENIX ORDINANCE G-4.396, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX.

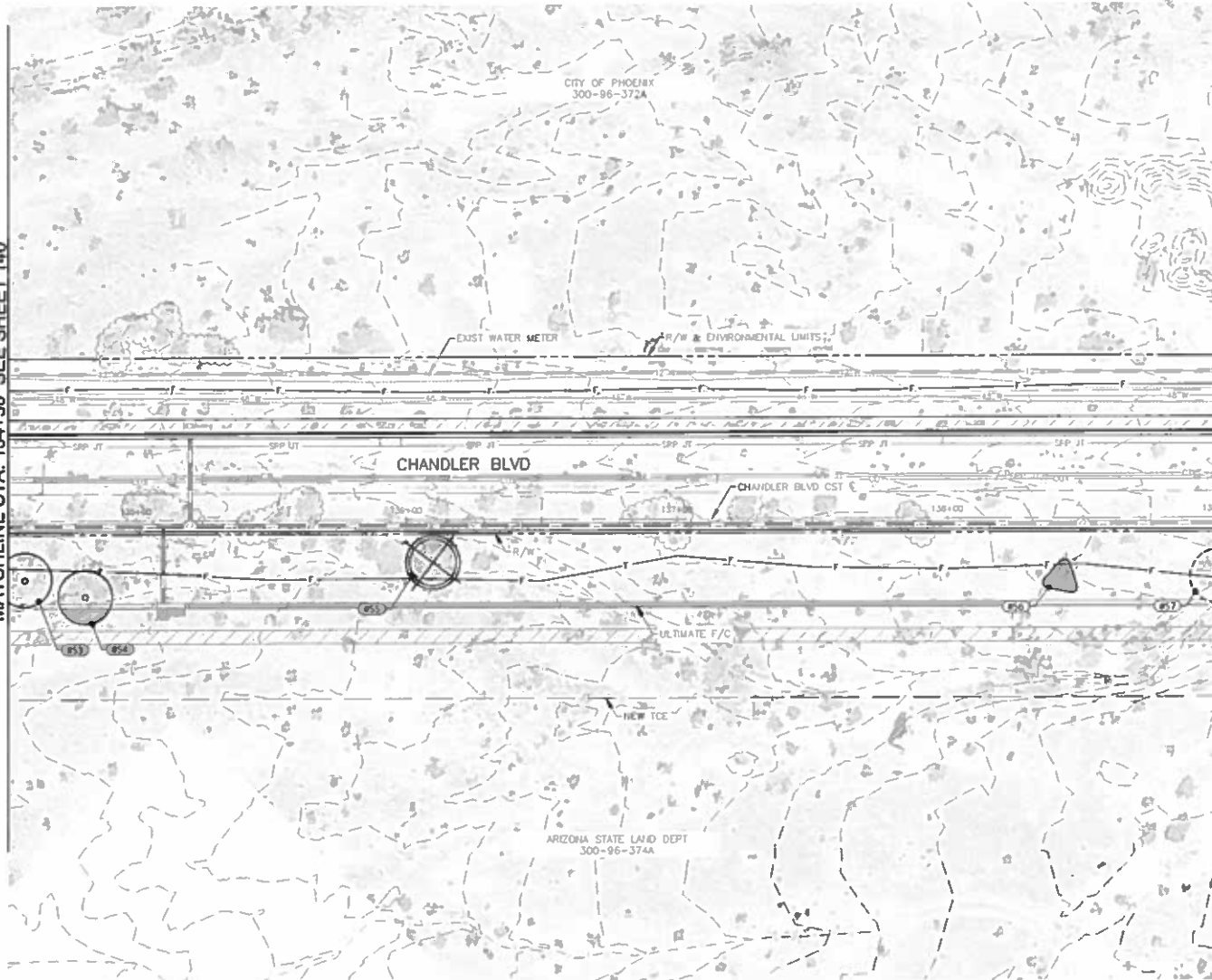
NATIVE PLANT INVENTORY PLAN
STA 130+00 TO 134+50
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
CHANDLER BOULEVARD
27TH AVENUE TO 19TH AVENUE
STB5100387

DATE: 5/16	DATE: 5/16	DATE: 5/16	SHT	TOTAL
SCALE: 1" = 20' HORIZ.	1" = 2' VERT		140	154

CHANDLER BOULEVARD
27TH AVENUE TO 19TH AVENUE
PHOENIX STREETS - MARICOPA CO.

NO.	REVISION BY	DATE	DESCRIPTION
1	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
2	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
3	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
4	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
5	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
6	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
7	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
8	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
9	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
10	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
11	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
12	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
13	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
14	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
15	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
16	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
17	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
18	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
19	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
20	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
21	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
22	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
23	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
24	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
25	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
26	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
27	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
28	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
29	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
30	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
31	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
32	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
33	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
34	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
35	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
36	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
37	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
38	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
39	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
40	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
41	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
42	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
43	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
44	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
45	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
46	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
47	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
48	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
49	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
50	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
51	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
52	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
53	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
54	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
55	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
56	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
57	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
58	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
59	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
60	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
61	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
62	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
63	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
64	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
65	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
66	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
67	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
68	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
69	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
70	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
71	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
72	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
73	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
74	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
75	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
76	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
77	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
78	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
79	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
80	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
81	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
82	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
83	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
84	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
85	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
86	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
87	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
88	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
89	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
90	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
91	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
92	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
93	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
94	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
95	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
96	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
97	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
98	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
99	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD
100	CHANDLER BOULEVARD	08/09/2009	CHANDLER BOULEVARD

MATCHLINE STA. 134+50 SEE SHEET 140



MATCHLINE STA. 139+00 SEE SHEET 142

STATE	PROJ. NO.	SHT	TOTAL
ARIZ.	STB5100367	141	154

Kimley-Horn
7700 N. 19TH STREET
SUITE 200
PHOENIX, AZ 85028
Phone: 602-944-8800
Fax: 602-944-1929
www.kimley-horn.com

DATE: 08/09/2009
BY: J. ALP
CHECKED: J. ALP
SCALE: 1" = 2' VERT

INVENTORY LEGEND

SYMBOL	DESCRIPTION
	EXIST TREE - PRESERVE IN PLACE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST SAQUARO - PRESERVE IN PLACE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST CACTUS - PRESERVE IN PLACE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST TREE - SALVAGE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST SAQUARO - SALVAGE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST CACTUS - SALVAGE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST TREE - REMOVE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST SAQUARO - REMOVE CORRESPONDS TO FIELD TAG NUMBER
	EXIST CACTUS - REMOVE # CORRESPONDS TO FIELD TAG NUMBER

KEY MAP
M75

602-263-8800
1-800-878-8717

*PER CITY OF PHOENIX ORDINANCE G-4396, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX.

NATIVE PLANT INVENTORY PLAN
STA 134+50 TO 139+00

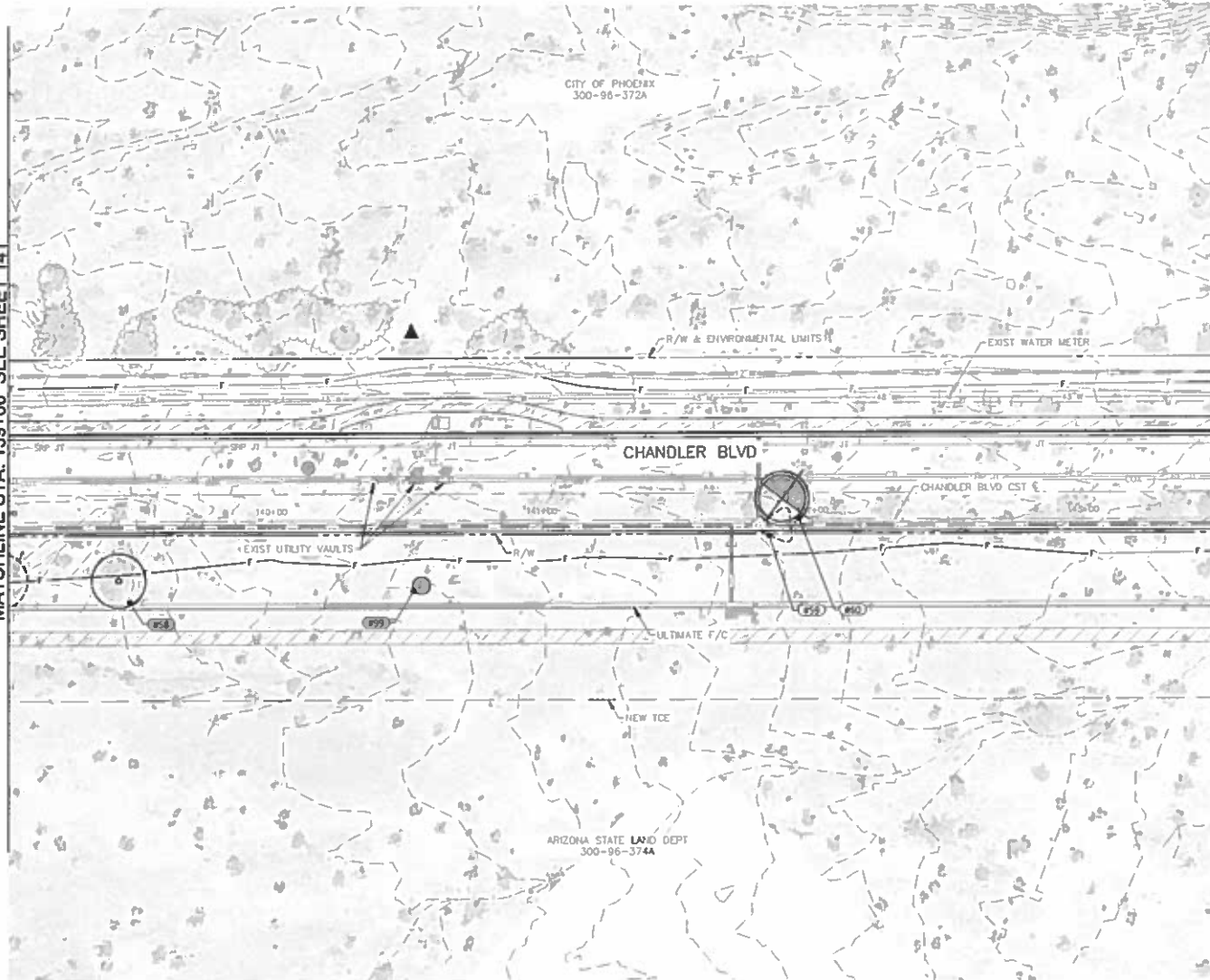
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

CHANDLER BOULEVARD
27TH AVENUE TO 19TH AVENUE
STB5100367

DATE: 08/09/2009	BY: J. ALP	CHECKED: J. ALP	SHT	TOTAL
SCALE: 1" = 20' HORIZ, 1" = 2' VERT			141	154

CHANDLER BOULEVARD
27TH AVENUE TO 19TH AVENUE
PHOENIX STREETS - MARICOPA CO.

MATCHLINE STA. 139+00 SEE SHEET 141



MATCHLINE STA. 143+50 SEE SHEET 143

STATE	PROJ. NO.	SHT	TOTAL
ARIZ.	ST85100367	142	154
Kimley-Horn			
700 N. 19TH STREET SUITE 200 PHOENIX, AZ 85016		Phone (602) 944-8800 Fax (602) 944-1420 www.kimley-horn.com	
Dr. P.F.	Dr. A.S.B.	Dr. A.P.P.	Dr. M.T.T.

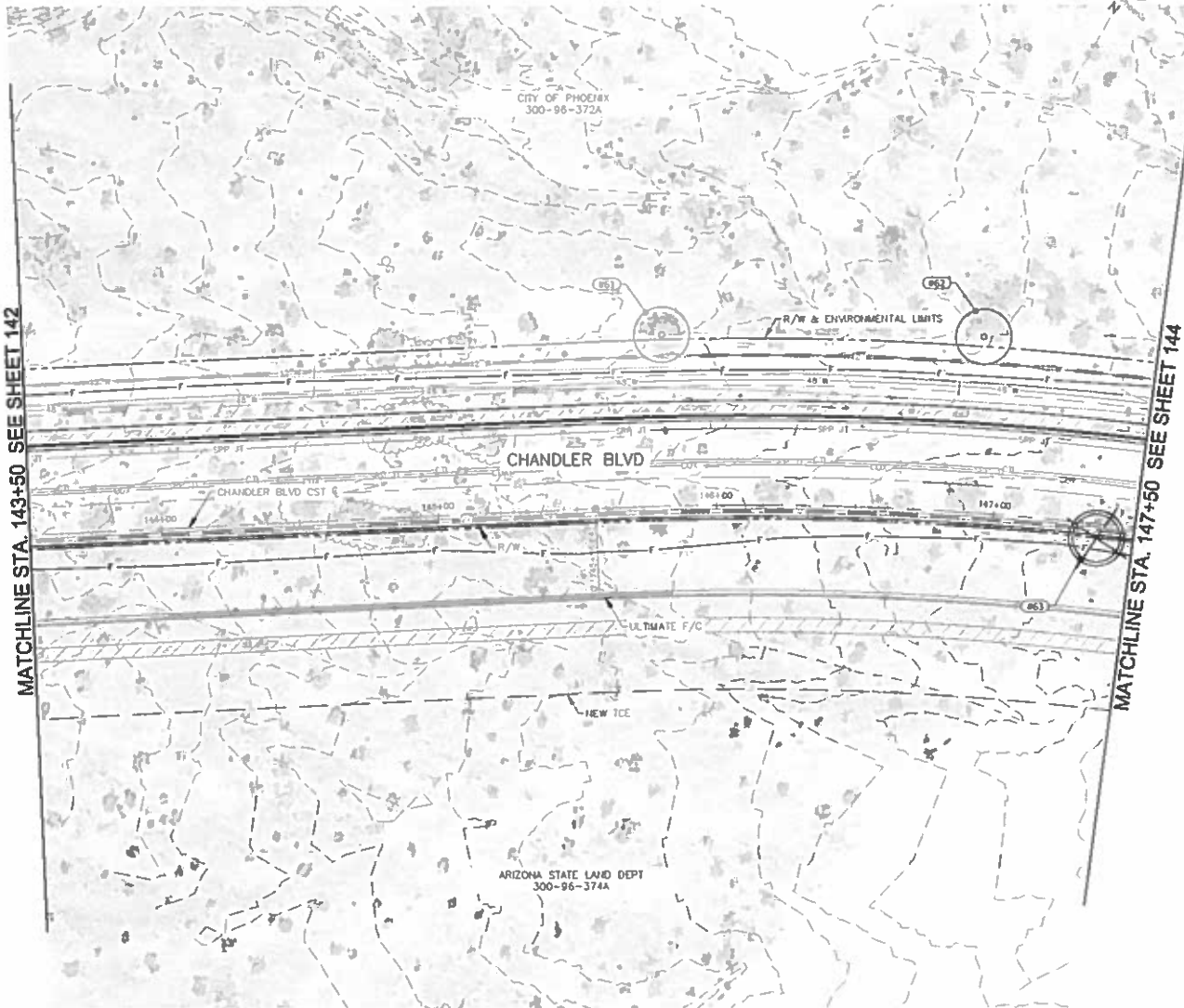
INVENTORY LEGEND	
SYMBOL	DESCRIPTION
	EXIST TREE - PRESERVE IN PLACE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST SAGUARO - PRESERVE IN PLACE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST CACTUS - PRESERVE IN PLACE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST TREE - SALVAGE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST SAGUARO - SALVAGE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST CACTUS - SALVAGE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST TREE - REMOVE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST SAGUARO - REMOVE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST CACTUS - REMOVE # CORRESPONDS TO FIELD TAG NUMBER



*PER CITY OF PHOENIX ORDINANCE G-4396, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX.			
NATIVE PLANT INVENTORY PLAN STA 139+00 TO 143+50			
CITY OF PHOENIX, ARIZONA STREET TRANSPORTATION DEPARTMENT			
CHANDLER BOULEVARD 27TH AVENUE TO 19TH AVENUE ST85100367			
Dr. P.F.	Dr. A.S.B.	Dr. A.P.P.	Dr. M.T.T.
Dr. P.F.	Dr. A.S.B.	Dr. A.P.P.	Dr. M.T.T.
SCALE: 1" = 20' HORIZ, 1" = 2' VERT		SHT	TOTAL
		142	154

CHANDLER BOULEVARD
27TH AVENUE TO 19TH AVENUE
PHOENIX STREETS - MARICOPA CO.

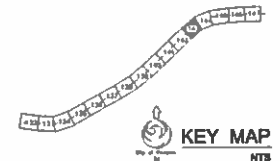
MATCHLINE STA. 143+50 SEE SHEET 142



STATE	PROJ. NO.	SHT	TOTAL
ARIZ.	ST85100367	143	154
Kimley-Horn <small>1740 N. 26TH STREET SUITE 200 PHOENIX, AZ 85016 Phone 602-944-0900 Fax 602-944-1425 www.kimley-horn.com</small>			
DR. A.P.	DR. A.S.P.	DR. A.P.	DATE 5/1/10

INVENTORY LEGEND

SYMBOL	DESCRIPTION
	EXIST TREE - PRESERVE IN PLACE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST SAGUARO - PRESERVE IN PLACE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST CACTUS - PRESERVE IN PLACE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST TREE - SALVAGE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST SAGUARO - SALVAGE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST CACTUS - SALVAGE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST TREE - REMOVE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST SAGUARO - REMOVE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST CACTUS - REMOVE # CORRESPONDS TO FIELD TAG NUMBER



"PER CITY OF PHOENIX ORDINANCE G-4396, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX."

NATIVE PLANT INVENTORY PLAN
STA 143+50 TO 147+50
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
CHANDLER BOULEVARD
27TH AVENUE TO 19TH AVENUE
ST85100367

DR. A.P.	DR. A.S.P.	DR. A.P.	SHT	TOTAL
DATE 5/1/10	DATE 5/1/10	DATE 5/1/10	143	154

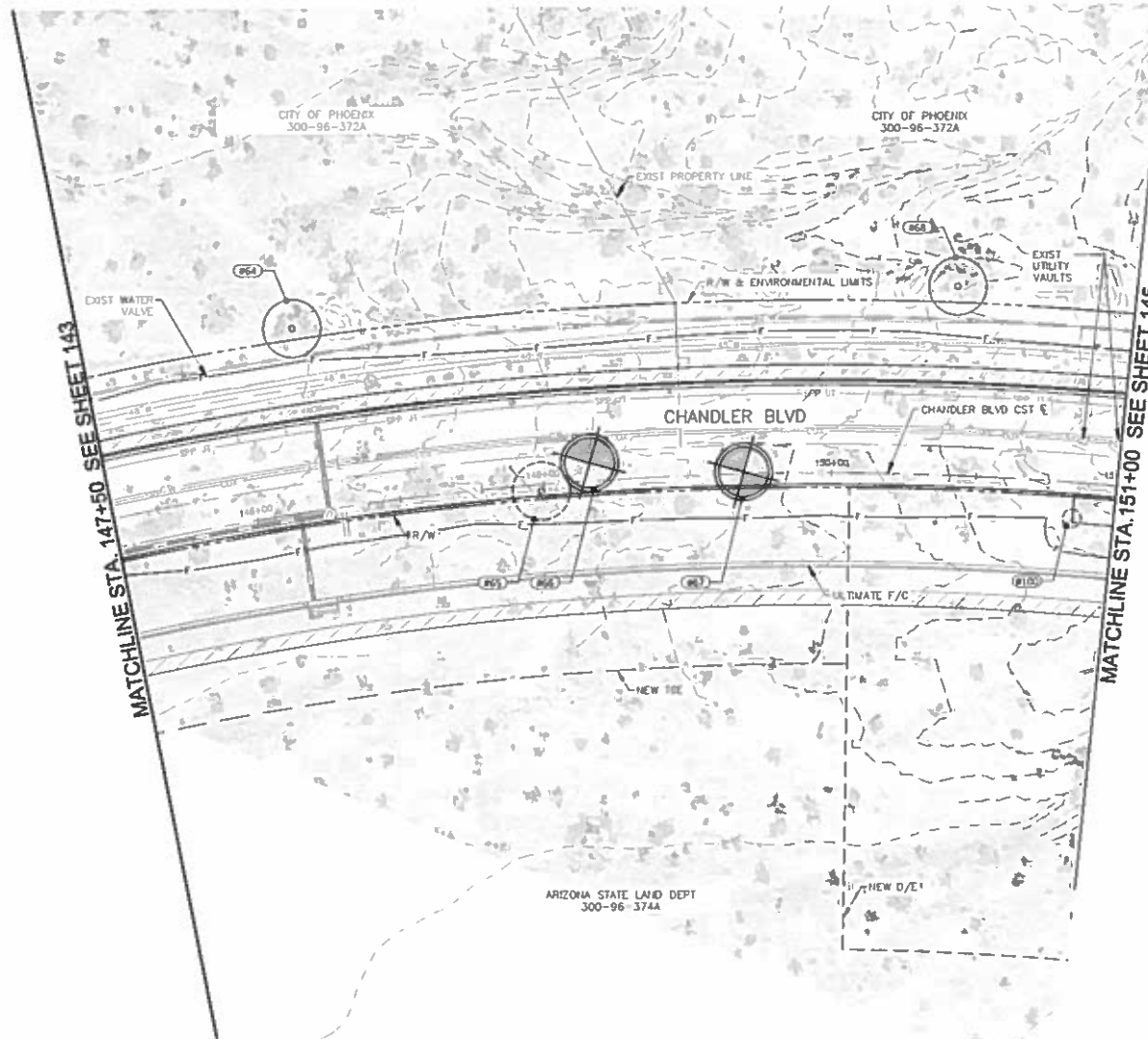
SCALE: 1" = 20' HORIZ, 1" = 2' VERT

CHANDLER BOULEVARD
27TH AVENUE TO 19TH AVENUE
PHOENIX STREETS - MARICOPA CO.

REVISION BY CITY OF PHOENIX
NO. DESCRIPTION DATE

REVISION BY CITY OF PHOENIX
NO. DESCRIPTION DATE

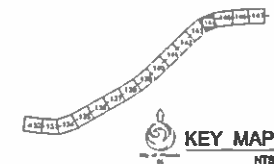
REVISION BY CITY OF PHOENIX
NO. DESCRIPTION DATE



STATE	PROJ. NO.	SHT	TOTAL
ARIZ.	STB5100367	144	154
Kimley-Horn		1748 N. 19TH STREET SUITE 200 PHOENIX, AZ 85016 Phone: 602-944-6800 Fax: 602-944-6825 www.kimley-horn.com	
DATE	DATE	DATE	DATE
1/16/16	1/16/16	1/16/16	1/16/16

INVENTORY LEGEND

SYMBOL	DESCRIPTION
	EXIST TREE - PRESERVE IN PLACE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST SAGUARO - PRESERVE IN PLACE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST CACTUS - PRESERVE IN PLACE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST TREE - SALVAGE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST SAGUARO - SALVAGE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST CACTUS - SALVAGE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST TREE - REMOVE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST SAGUARO - REMOVE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST CACTUS - REMOVE # CORRESPONDS TO FIELD TAG NUMBER



KEY MAP
NTS



*PER CITY OF PHOENIX ORDINANCE C-4396, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX.

NATIVE PLANT INVENTORY PLAN
STA 147+50 TO 151+00
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
CHANDLER BOULEVARD
27TH AVENUE TO 19TH AVENUE
STB5100367

DATE	DATE	DATE	DATE	SHT	TOTAL
1/16/16	1/16/16	1/16/16	1/16/16	144	154

SCALE: 1" = 20' HORIZ, 1" = 2' VERT

REVISION BY CITY OF PHOENIX
 NO. _____ DESCRIPTION _____ REV. BY DOB SSN DATE _____

REVISION BY CITY OF PHOENIX
 NO. _____ DESCRIPTION _____ REV. BY DOB SSN DATE _____

REVISION BY CITY OF PHOENIX
 NO. _____ DESCRIPTION _____ REV. BY DOB SSN DATE _____

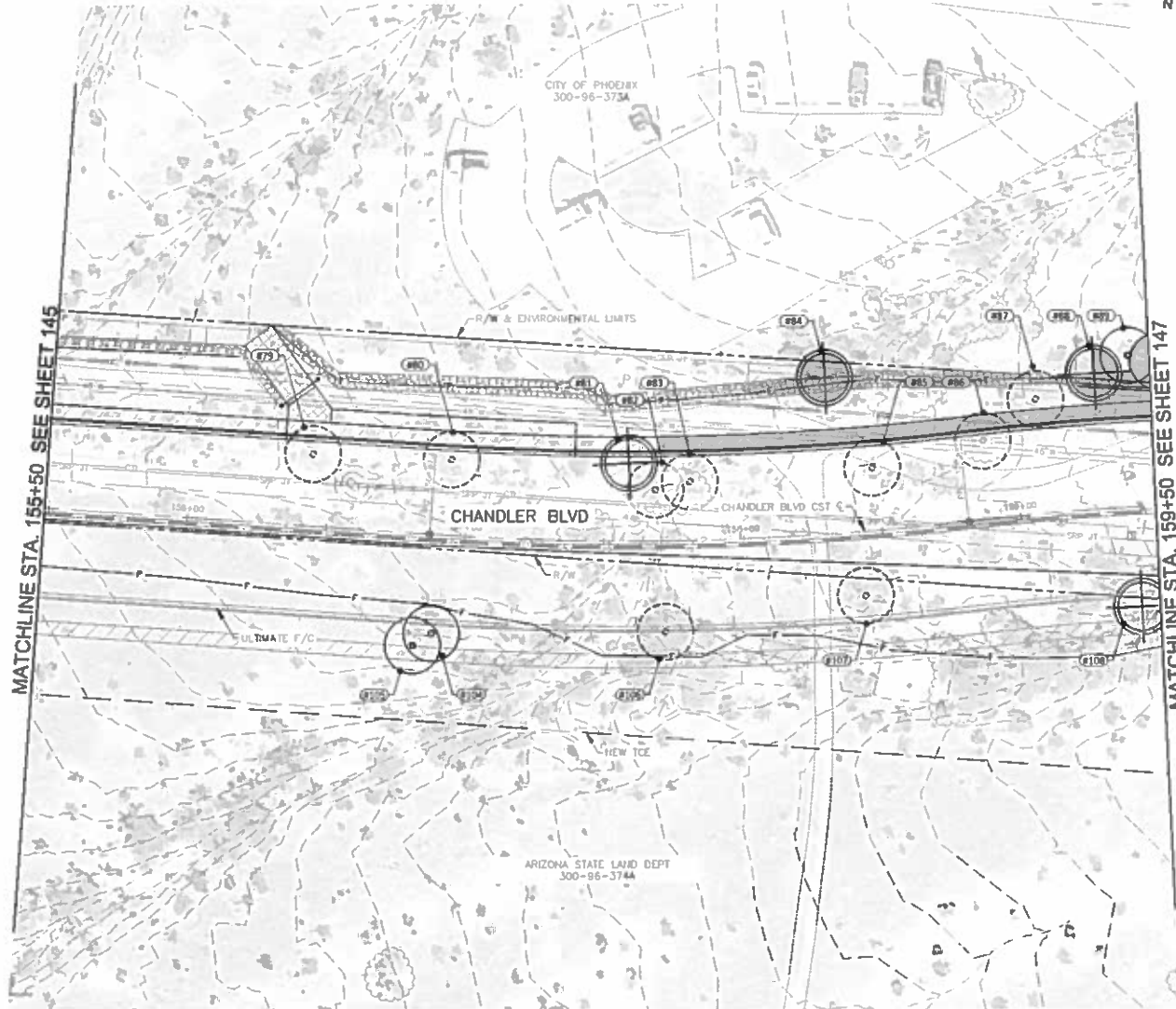
CONST 6
Δ= 45°59'43" LT
D= 4°55'20"
R= 1164 00"
L= 893.79"
T= 470.23"
EXT= 91.39"



602-263-0000
1-800-875-8777

20' x 6'	10' x 4'	10' x 4'	SHT	TOTAL
10' x 4'	10' x 4'	10' x 4'		
SCALE: 1" = 20' HORIZ, 1" = 2' VERT			145	154

CHANDLER BOULEVARD
27TH AVENUE TO 19TH AVENUE
PHOENIX STREETS - MARICOPA CO.



STATE	PROJ. NO.	SHT	TOTAL
ARIZ.	ST85100367	148	154
Kimley-Horn 1740 N. 10TH STREET SUITE 200 PHOENIX, AZ 85006 Phone: 602.553.8000 Fax: 602.553.1425 www.kimley-horn.com			
DR. & F.	DES. ASS.	CHK. ACOP	DATE: 5/1/16

INVENTORY LEGEND

SYMBOL	DESCRIPTION
	EXST TREE - PRESERVE IN PLACE # CORRESPONDS TO FIELD TAG NUMBER
	EXST SAGUARO - PRESERVE IN PLACE # CORRESPONDS TO FIELD TAG NUMBER
	EXST CACTUS - PRESERVE IN PLACE # CORRESPONDS TO FIELD TAG NUMBER
	EXST TREE - SALVAGE # CORRESPONDS TO FIELD TAG NUMBER
	EXST SAGUARO - SALVAGE # CORRESPONDS TO FIELD TAG NUMBER
	EXST CACTUS - SALVAGE # CORRESPONDS TO FIELD TAG NUMBER
	EXST TREE - REMOVE # CORRESPONDS TO FIELD TAG NUMBER
	EXST SAGUARO - REMOVE # CORRESPONDS TO FIELD TAG NUMBER
	EXST CACTUS - REMOVE # CORRESPONDS TO FIELD TAG NUMBER



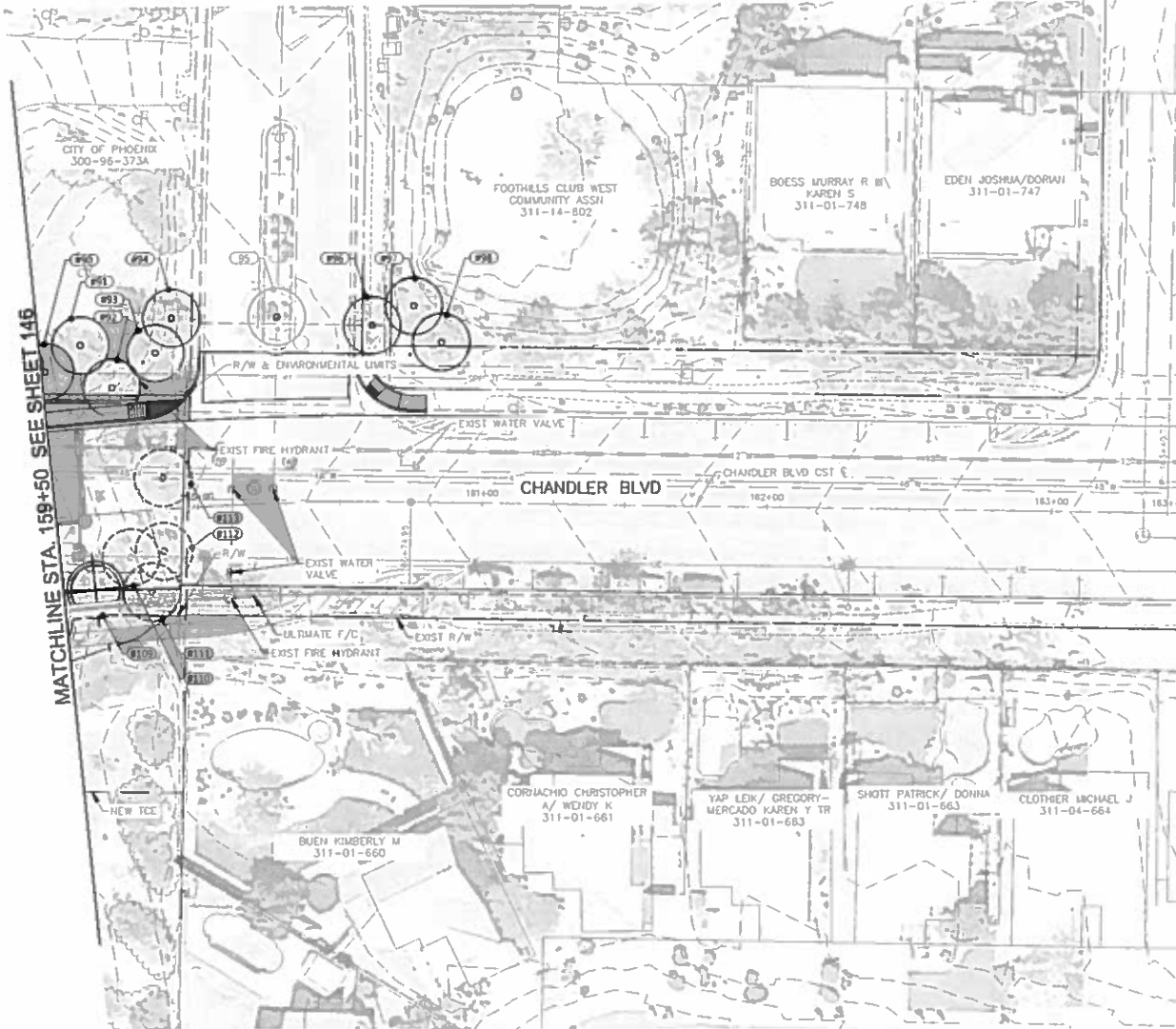
"PER CITY OF PHOENIX ORDINANCE C-4396, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX."

NATIVE PLANT INVENTORY PLAN
STA 155+50 TO 159+50
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

CHANDLER BOULEVARD
27TH AVENUE TO 19TH AVENUE
ST85100367

DATE: 5/1/16	DATE: 5/1/16	DATE: 5/1/16	SHT	TOTAL
SCALE: 1" = 20' HORIZ. 1" = 2' VERT			148	154

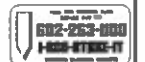
CHANDLER BOULEVARD
27TH AVENUE TO 19TH AVENUE
PHOENIX STREETS - MARICOPA CO.



STATE	PROJ. NO.	SMT	TOTAL
ARIZ.	ST85100367	147	154
Kimley-Horn 1740 N. 19TH STREET, SUITE 200, PHOENIX, AZ 85016 Phone: 602-944-8800 Fax: 602-944-1423 www.kimley-horn.com			
30' x 47'	1/4" = 40'	1/4" = 40'	1/4" = 40'

INVENTORY LEGEND

SYMBOL	DESCRIPTION
	EXIST TREE - PRESERVE IN PLACE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST SAGUARO - PRESERVE IN PLACE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST CACTUS - PRESERVE IN PLACE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST TREE - SALVAGE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST SAGUARO - SALVAGE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST CACTUS - SALVAGE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST TREE - REMOVE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST SAGUARO - REMOVE # CORRESPONDS TO FIELD TAG NUMBER
	EXIST CACTUS - REMOVE # CORRESPONDS TO FIELD TAG NUMBER



"PER CITY OF PHOENIX ORDINANCE G-4394, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHAPED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX."

NATIVE PLANT INVENTORY PLAN
STA 159+50 TO 163+50

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

CHANDLER BOULEVARD
27TH AVENUE TO 19TH AVENUE
ST85100367

DATE	BY	CHK	APP	SMT	TOTAL
NOV 14/16	NOV 14/16	NOV 14/16	NOV 14/16	147	154



Arizona Department of Agriculture (ADA)
Licensing and Registration Section
1688 West Adams, Phoenix, Arizona 85007
Phone: (602) 542-6408
Fax: (602) 542-0466

Notice of Intent to Clear Land by State Agency*

ARS § 3-905

"State Agency" means any agency or political subdivision of the state.

Pursuant to A.R.S. § 3-905 the undersigned, as agent of the Property described herein, gives this Notice of Intent to Clear Land of protected native plants.

1. **Owner/landowner's agent.** The owner or landowner's agent of the Property upon which protected native plants will be affected:

Owner's Name City of Phoenix Street Transportation Department Phone 602-495-2050
Address 1034 E. Madison St., Phoenix, AZ 85034
Agent's Name Anthony Humphrey, P.E. Phone 602-319-5597
Address 1034 E. Madison St., Phoenix, AZ 85034

2. **Property.** The description and location of the Property upon which protected native plants will be affected:

Name of Property/Project Chandler Boulevard, 27th Avenue to 19th Avenue
Address N/A
Physical Location (attach map) refer to attached map

(Note: Map must also show surrounding land for 1/2 mile in each direction)

Tax Parcel ID Nos. 300-96-372A, 300-96-373A, 300-96-379A, 300-96-375A, 300-96-374A, 300-96-377A
Legal Description (or attach copy) N/A
Number of Acres to be Cleared 22.2 acres

3. **Owner's Intent.** Landowner's intentions when clearing private land of protected native plants.

☒ Owner intends to allow salvage of the plants, and agrees to be contacted by native plant salvagers.
☐ Owner intends to transplant the plants onto the same property, or to another property he also owns.
☐ Owner has already arranged for salvage of the plants.
☐ Owner does not intend to allow salvage of the plants.
☒ Other City of Phoenix shall allow Gila River Indian Community initial selection of salvageable plants through 7/19/16.

4. **Approximate starting date.** August 15, 2016
(See notice period listed on reverse side)

The information contained in this application is true and accurate to the best of my knowledge. I understand that providing false information is a felony in Arizona

Signature Anthony K. Humphrey Date 6/15/16

Notice to salvagers: Consent of the landowner is required before entering any lands described in this notice.

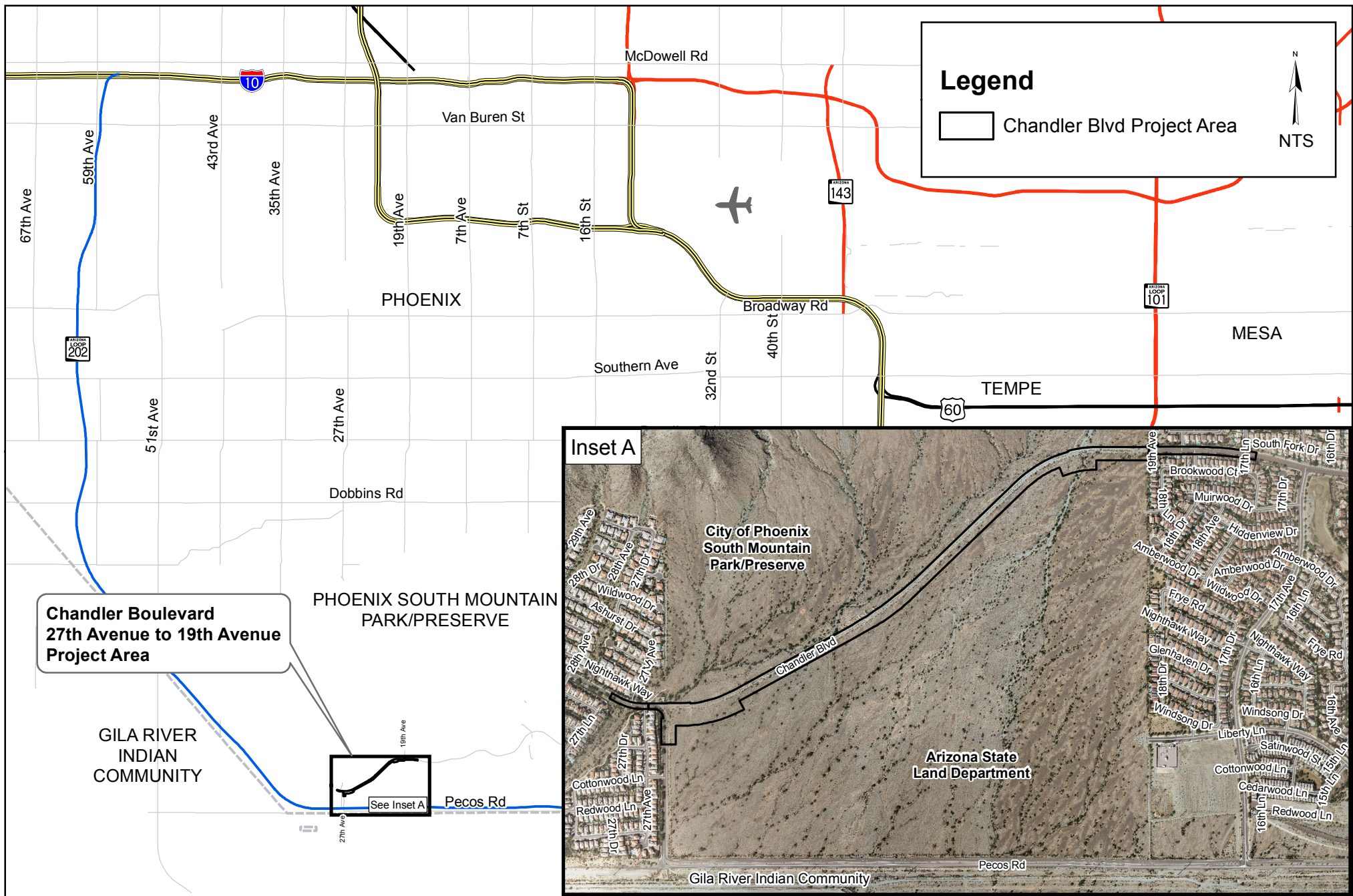


FIGURE 1. VICINITY MAP

CHANDLER BOULEVARD: 27TH AVENUE TO 19TH AVENUE
FEDERAL PROJECT NO. HN-202-D(ADY)
ADOT PROJECT NO. 202L MA 054 H5764 OID
CITY OF PHOENIX PROJECT NO. ST85100367



GILA RIVER INDIAN COMMUNITY

POST OFFICE BOX 2140, SACATON, AZ 85147

TRIBAL HISTORIC PRESERVATION OFFICE

(520) 562-7162

Fax: (520) 562-5083

July 18, 2016

Linda Davis
Historic Preservation Specialist
Environmental Planning Group
Arizona Department of Transportation
1611 W. Jackson Street, MD EM02
Phoenix, Arizona 85007

RE: Arizona Department of Transportation (ADOT) Notice to Salvage Protected Native Plants on City of Phoenix-owned land, Chandler Boulevard: 27th Avenue to 19th Avenue, Phoenix, Maricopa County, Arizona

Dear Ms. Davis,

The Gila River Indian Community Tribal Historic Preservation Office (GRIC-THPO) has received an ADOT notification letter dated June 2, 2016. The letter advises that the City of Phoenix will be salvaging and boxing vegetation which are protected by the Arizona Native Plant Law and the GRIC Native Plant Ordinance. These cacti, trees, and plants will be adversely impacted by construction of the South Mountain Freeway 202 Loop. The ADOT and the City of Phoenix are providing the opportunity to the GRIC to use these plants for landscaping projects on Community lands. The GRIC cordially accepts this invitation to collect the cacti, trees and plants for Community use. The ADOT indicates that the plants can be housed at an onsite nursery to be picked up by GRIC personnel. Pick-up of plants at the onsite nursery is acceptable to the GRIC and we will make the necessary arrangements with Mr. Tony Humphrey, Engineering Supervisor, City of Phoenix.

Thank you for contacting the GRIC-THPO regarding plant salvage recovery of protected vegetation. The proposed project area is within the ancestral lands of the Four Southern Tribes (Gila River Indian Community; Salt River Pima-Maricopa Indian Community; Ak-Chin Indian Community and the Tohono O'Odham Nation). If you have any questions please do not hesitate to contact me or Archaeological Compliance Specialist Larry Benallie, Jr. at 520-562-7162.

Respectfully,

Barnaby V. Lewis
Tribal Historic Preservation Officer
Gila River Indian Community

Archaeology Assessment Result



Archaeology Assessment Result

Project Name: Chandler Boulevard Extension

ST85100367

Project Location: Chandler Blvd.: 19th Ave. – 27th Ave.

Project Sponsor: Streets (Greta Halle)

Review Agencies: City of Phoenix

Survey Monitoring Testing Data Recovery

Comments:

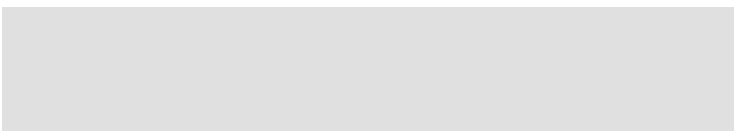
Because this project has federal U.S. Army Corps of Engineers (Corps) involvement, it is a federal undertaking subject to Section 106 of the National Historic Preservation Act. This project is also partially located on Arizona State Trust land administered by the Arizona State Land Department. AZ T:12:111(ASM), a historic archaeological mining site, was previously identified within the area of potential effects (APE), but was not encountered by the recent Brodbeck (2012) archaeological survey:

Brodbeck, Mark

2012 *A Class III Cultural Resources Survey for the Chandler Boulevard Extension, 202L, South Mountain Freeway EIS & L/DCR Project, Maricopa County, Arizona.* HDR Cultural Resource Report No. 11-01. HDR, Phoenix.

The Brodbeck (2012) survey only identified a single isolated occurrence, and no further recommendations for archaeological work were made. Site AZ T:12:111(ASM) is believed to have been destroyed by construction of the waterline that follows the planned alignment of Chandler Boulevard. The Brodbeck (2012) survey also located sites AZ T:12:286 and 287(ASM), which may represent O'Odham Traditional Cultural Places and should be avoided. However, both sites are beyond the APE for this project and should not be affected by construction.

Recommendations:



March 25, 2015

Page 2

The City of Phoenix Archaeology Office (CAO) recommends that no further archaeological work is needed for this project. If previously unidentified cultural resources are identified during construction,

ground-disturbing activities must cease within 10 meters of the discovery and the CAO must be contacted and allowed time to assess the discovery.

The Corps will need to consult with the Arizona State Historic Preservation Office in compliance with the National Historic Preservation Act, as appropriate. This consultation must be conducted prior to any ground-disturbing activities, and ideally as soon as possible in the planning process.

Both the Salt River Pima-Maricopa Indian Community and Gila River Indian Community should also be consulted about this project due to the presence of sites AZ T:12:286 and 287(ASM), as part of the Section 106 process.

Reviewed By: April Carroll for

Date: 3/25/2015

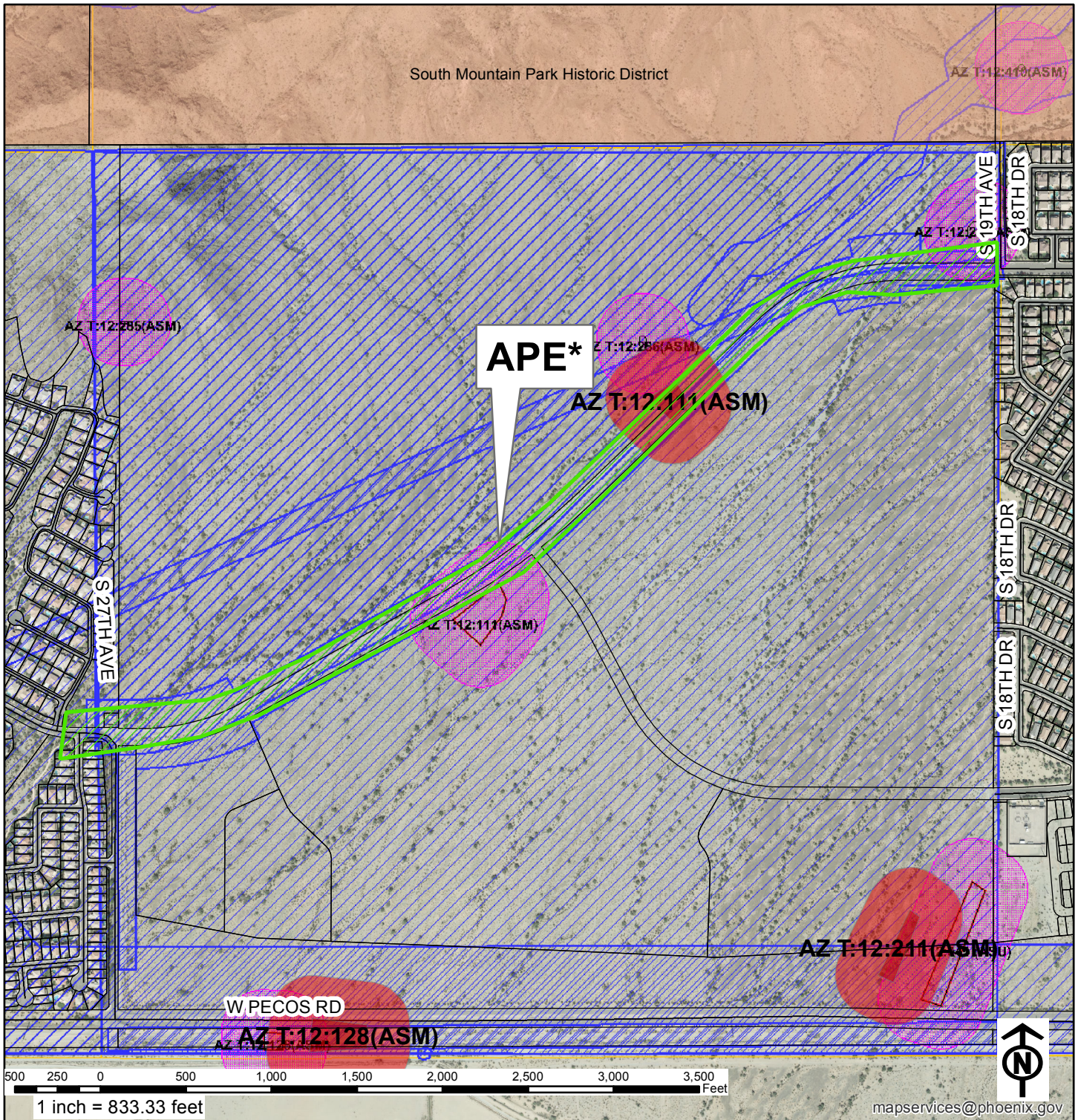
Laurene Montero, M.A. *LGM*

Streets

Chandler Boulevard Extension

Chandler Blvd.: 19th Ave. - 27th Ave.

ST85100367



*APE is approximate

**This map contains restricted information.
Do not release to the general public.**

City of Phoenix, Pueblo Grande Museum

Legend

- | | |
|--------------------------|----------------------|
| Historic Districts | Archaeological Sites |
| Petroglyphs | Projects |
| PGM Archaeological Sites | Howard Canal Maps |
| Approximated Sites | |

South Mountain Freeway Preliminary
Jurisdictional Delineation (Corps file
no. SPL-2002-00055-KAT) Sheets
Applicable to Chandler Blvd.

***** PRELIMINARY (RGL 08-02)*****

SECTION 404 JURISDICTIONAL DELINEATION

U.S. Army Corps of Engineers, Los Angeles District

Application No. SPL - 2002 - 00055 - KAT

Boundary of area surveyed for jurisdictional waters of the United States (12.20 acres)

Ordinary High Water Mark

Waters of the United States (0.07 acres)

Wetlands (If legend is blank no wetlands occur with survey area.)

1"= 200' Scale 2013 Date of Photograph

Site Visit by Corps(✓/N) Date: 11.19.13

3.10.14 Date Delineation issued by Corps

Sheet 16 of 50 TUCKER Corps Project Manager

Aerial imagery: Landiscor July 2013
Prepared by: Kurt Watzek, HDR Engineering, Inc., September 2013

USGS 7.5' Quadrangle boundary: Lone Butte, AZ (1972)
Projection: NAD 1983 State Plane Arizona Central FIPS 0202 Feet
Township 1S, Range 2E; Sections 35 and 36

➡ # XX'

Arrow indicates flow direction

#

Watercourse number

XX'

Wash width (feet)

➡ #

Ground photo number and direction

Aerial of area surveyed

202L MA 054 H5764 01L
NH-202-D(ADY)
South Mountain Transportation Corridor

**** PRELIMINARY (RGL 08-02)****

SECTION 404 JURISDICTIONAL DELINEATION

U.S. Army Corps of Engineers, Los Angeles District
Application No. SPL - 2002 - 00055 - KAT

- Boundary of area surveyed for jurisdictional waters of the United States (10.66 acres)
- ~ Ordinary High Water Mark
- Waters of the United States (0.19 acres)
- Wetlands (If legend is blank no wetlands occur with survey area.)

1"= 200' Scale 2013 Date of Photograph
Site Visit by Corps(✓/N) Date: 11.19.13
3.10.14 Date Delineation issued by Corps
TUCKER Corps Project Manager
Sheet 17 of 50

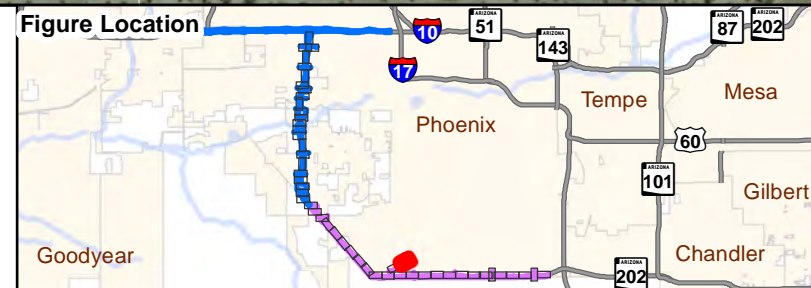
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Aerial imagery: Landiscor July 2013
Prepared by: Kurt Watzek, HDR Engineering, Inc., September 2013
USGS 7.5' Quadrangle boundary: Lone Butte, AZ (1972)
Projection: NAD 1983 State Plane Arizona Central FIPS 0202 Feet
Township 1S, Range 2E; Section 36



0 50 100 200
1 inch = 200 feet



- ← # XX' Arrow indicates flow direction
- # Watercourse number
- XX' Wash width (feet)
- ◀ # Ground photo number and direction

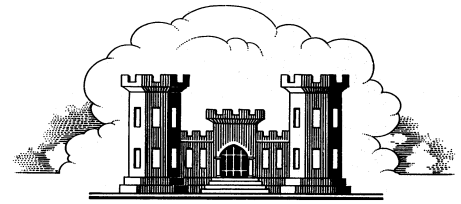
Aerial of area surveyed

202L MA 054 H5764 01L
NH-202-D(ADY)
South Mountain Transportation Corridor

NWP No. 14. Linear Transportation Projects

NATIONWIDE PERMIT NUMBER 14

LINEAR TRANSPORTATION PROJECTS



US Army Corps of Engineers
Los Angeles District
Regulatory Division/Arizona Branch

A. General Information

This document is an aid to understanding the terms and conditions of your nationwide permit (NWP) by bringing together information issued separately in; (1) the Federal Register (77 FR 10184-10290)*, (2) the Special Public Notice for NWP "Reissuance of the Nationwide Permits and Issuance of Final Regional Conditions for the Los Angeles District"*, and (3) the Clean Water Act Section 401 water quality certification decisions (401 WQCs)* issued by the White Mountain Apache Tribe, Hopi Tribe, Hualapai Tribe, Navajo Nation, U.S. Environmental Protection Agency, and Arizona Department of Environmental Quality. Please note that website addresses enclosed herein may have been changed and updated since publication of the original document.

- 1) Pursuant to Section 404 of the Clean Water Act (33 U.S.C. 1344) and/or Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 401 et seq) the U.S. Army Corps of Engineers (Corps) published the "Reissuance of Nationwide Permits" in the Federal Register (77 FR 10184-10290) on February 21, 2012. These NWPs are in effect from March 19, 2012 through March 18, 2017 unless modified, reissued, or revoked before that time. It is incumbent upon the permittee to remain informed of changes to the NWPs.
- 2) The Los Angeles District of the Corps issued a Special Public Notice (March 15, 2012) announcing final regional conditions for NWPs to ensure protection of high value waters within the State of Arizona.
- 3) The Los Angeles District of the Corps requested and obtained for the entire State of Arizona the 401 WQC decision for all NWPs on all tribal lands from the White Mountain Apache Tribe, Hopi Tribe, Hualapai Tribe, Navajo Nation, and U.S. Environmental Protection Agency and on all non-tribal lands from the Arizona Department of Environmental Quality.

A description of all NWPs and 401 WQCs can be found in the "Nationwide Permits for Arizona" Special Public Notice.*

***Note:** For online availability see section "F. Document Availability" of this enclosure.

Key Sections: B. Nationwide Permit Terms (page 1) C. Nationwide Permit General Conditions (page 1)
D. Nationwide Permit Regional Conditions (page 6) E. 401 Water Quality Certifications (page 7)

B. Nationwide Permit Terms

14. Linear Transportation Projects. Activities required for the construction, expansion, modification, or improvement of linear transportation projects (e.g., roads, highways, railways, trails, airport runways, and taxiways) in waters of the United States. For linear transportation projects in non-tidal waters, the discharge cannot cause the loss of greater than 1/2-acre of waters of the United States. For linear transportation projects in tidal waters, the discharge cannot cause the loss of greater than 1/3-acre of waters of the United States. Any stream channel modification, including bank stabilization, is limited to the minimum necessary to construct or protect the linear transportation project; such modifications must be in the immediate vicinity of the project.

This NWP also authorizes temporary structures, fills, and work necessary to construct the linear transportation project. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate.

This NWP cannot be used to authorize non-linear features commonly associated with transportation projects, such as vehicle maintenance or storage buildings, parking lots, train stations, or aircraft hangars.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if: (1) the loss of waters of the United States exceeds 1/10-acre; or (2) there is a discharge in a special aquatic site, including wetlands. (See general condition 31.) (Sections 10 and 404)

Note: Some discharges for the construction of farm roads or forest roads, or temporary roads for moving mining equipment, may qualify for an exemption under Section 404(f) of the Clean Water Act (see 33 CFR 323.4).

C. Nationwide Permit General Conditions

Note: To qualify for NWP authorization, the prospective permittee must comply with the following general conditions, as applicable, in addition to any regional or case-specific conditions imposed by the division engineer or district engineer. Prospective permittees should contact the appropriate Corps district office to determine if regional conditions have been imposed on an NWP. Prospective permittees should also contact the appropriate Corps district office to determine the status of Clean Water Act Section 401 water quality certification and/or Coastal Zone Management Act consistency for an NWP. Every person who may wish to obtain permit authorization under one or

more NWPs, or who is currently relying on an existing or prior permit authorization under one or more NWPs, has been and is on notice that all of the provisions of 33 CFR §§ 330.1 through 330.6 apply to every NWP authorization. Note especially 33 CFR § 330.5 relating to the modification, suspension, or revocation of any NWP authorization.

1. Navigation. (a) No activity may cause more than a minimal adverse effect on navigation. (b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States. (c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

2. Aquatic Life Movements. No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. All permanent and temporary crossings of waterbodies shall be suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species.

3. Spawning Areas. Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.

4. Migratory Bird Breeding Areas. Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.

5. Shellfish Beds. No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and 48, or is a shellfish seeding or habitat restoration activity authorized by NWP 27.

6. Suitable Material. No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see Section 307 of the Clean Water Act).

7. Water Supply Intakes. No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.

8. Adverse Effects from Impoundments. If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.

9. Management of Water Flows. To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization and storm water management activities, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

10. Fills Within 100-Year Floodplains. The activity must comply with applicable FEMA-approved state or local floodplain management requirements.

11. Equipment. Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.

12. Soil Erosion and Sediment Controls. Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow.

13. Removal of Temporary Fills. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.

14. Proper Maintenance. Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable NWP general conditions, as well as any activity-specific conditions added by the district engineer to an NWP authorization.

15. Single and Complete Project. The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.

16. Wild and Scenic Rivers. No activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status. Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency responsible for the designated Wild and Scenic River or study river (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service).

17. Tribal Rights. No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

18. Endangered Species. (a) No activity is authorized under any NWP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify the critical habitat of such species. No activity is authorized under any NWP which "may affect" a listed species or critical habitat, unless Section 7 consultation addressing the effects of the proposed activity has been completed. (b) Federal agencies should follow their own procedures for complying with the requirements of the ESA. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will review the documentation and determine whether it is sufficient to address ESA compliance for the NWP activity, or whether additional ESA consultation is necessary. (c) Non-federal permittees must submit a pre-construction notification to the district engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, and shall not begin work on the activity until notified by the district engineer that the requirements of

the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species or designated critical habitat, the pre-construction notification must include the name(s) of the endangered or threatened species that might be affected by the proposed work or that utilize the designated critical habitat that might be affected by the proposed work. The district engineer will determine whether the proposed activity "may affect" or will have "no effect" to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps' determination within 45 days of receipt of a complete pre-construction notification. In cases where the non-Federal applicant has identified listed species or critical habitat that might be affected or is in the vicinity of the project, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification the proposed activities will have "no effect" on listed species or critical habitat, or until Section 7 consultation has been completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps. (d) As a result of formal or informal consultation with the FWS or NMFS the district engineer may add species-specific regional endangered species conditions to the NWP. (e) Authorization of an activity by a NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the U.S. FWS or the NMFS, The Endangered Species Act prohibits any person subject to the jurisdiction of the United States to take a listed species, where "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word "harm" in the definition of "take" means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering. (f) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the U.S. FWS and NMFS or their world wide web pages at <http://www.fws.gov/> or <http://www.fws.gov/ipac> and <http://www.noaa.gov/fisheries.html> respectively.

(Note: Arizona endangered species information is available at <http://www.fws.gov/southwest/es/arizona/Threatened.htm#CountyList>)

19. Migratory Birds and Bald and Golden Eagles. The permittee is responsible for obtaining any "take" permits required under the U.S. Fish and Wildlife Service's regulations governing compliance with the Migratory Bird Treaty Act or the Bald and Golden Eagle Protection Act. The permittee should contact the appropriate local office of the U.S. Fish and Wildlife Service to determine if such "take" permits are required for a particular activity.

20. Historic Properties. (a) In cases where the district engineer determines that the activity may affect properties listed, or eligible for listing, in the National Register of Historic Places, the activity is not authorized, until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied. (b) Federal permittees should follow their own procedures for complying with the requirements of Section 106 of the National Historic Preservation Act. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will review the documentation and determine whether it is sufficient to address section 106 compliance for the NWP activity, or whether additional section 106 consultation is necessary. (c) Non-federal permittees must submit a pre-construction notification to the district engineer if the authorized activity may have the potential to cause effects to any historic properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties may be affected by the proposed work or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of or potential for the presence of historic resources can be sought from the State Historic Preservation Officer or Tribal Historic Preservation Officer, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). When reviewing pre-construction notifications, district engineers will comply with the current procedures for addressing the requirements of Section 106 of the National Historic Preservation Act. The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts, which may include background research, consultation, oral history interviews, sample field investigation, and field survey. Based on the information submitted and these efforts, the district engineer shall determine whether the proposed activity has the potential to cause an effect on the historic properties. Where the non-Federal applicant has identified historic properties on which the activity may have the potential to cause effects and so notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects or that consultation under Section 106 of the NHPA has been completed. (d) The district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA Section 106 consultation is required. Section 106 consultation is not required when the Corps determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR §800.3(a)). If NHPA section 106 consultation is required and will occur, the district engineer will notify the non-Federal applicant that he or she cannot begin work until Section 106 consultation is completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps. (e) Prospective permittees should be aware that section 110k of the NHPA (16 U.S.C. 470h-2(k)) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of Section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.

21. Discovery of Previously Unknown Remains and Artifacts. If you discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by this permit, you must immediately notify the district engineer of what you have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, Tribal and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

22. Designated Critical Resource Waters. Critical resource waters include, NOAA-managed marine sanctuaries and marine monuments, and National Estuarine Research Reserves. The district engineer may designate, after notice and opportunity for public comment, additional waters officially designated by a state as having particular environmental or ecological significance, such as outstanding

national resource waters or state natural heritage sites. The district engineer may also designate additional critical resource waters after notice and opportunity for public comment.

(a) Discharges of dredged or fill material into waters of the United States are not authorized by NWP 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, 50, 51, and 52 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.

(b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, and 38, notification is required in accordance with general condition 31, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after it is determined that the impacts to the critical resource waters will be no more than minimal.

23. Mitigation. The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that adverse effects on the aquatic environment are minimal: (a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).

(b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating for resource losses) will be required to the extent necessary to ensure that the adverse effects to the aquatic environment are minimal. (c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse effects of the proposed activity are minimal, and provides a project-specific waiver of this requirement. For wetland losses of 1/10-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in minimal adverse effects on the aquatic environment. Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR part 332. (1) The prospective permittee is responsible for proposing an appropriate compensatory mitigation option if compensatory mitigation is necessary to ensure that the activity results in minimal adverse effects on the aquatic environment. (2) Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, wetland restoration should be the first compensatory mitigation option considered. (3) If permittee-responsible mitigation is the proposed option, the prospective permittee is responsible for submitting a mitigation plan. A conceptual or detailed mitigation plan may be used by the district engineer to make the decision on the NWP verification request, but a final mitigation plan that addresses the applicable requirements of 33 CFR 332.4(c)(2) – (14) must be approved by the district engineer before the permittee begins work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation (see 33 CFR 332.3(k)(3)). (4) If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan only needs to address the baseline conditions at the impact site and the number of credits to be provided. (5) Compensatory mitigation requirements (e.g., resource type and amount to be provided as compensatory mitigation, site protection, ecological performance standards, monitoring requirements) may be addressed through conditions added to the NWP authorization, instead of components of a compensatory mitigation plan. (d) For losses of streams or other open waters that require pre-construction notification, the district engineer may require compensatory mitigation, such as stream rehabilitation, enhancement, or preservation, to ensure that the activity results in minimal adverse effects on the aquatic environment. (e) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2-acre, it cannot be used to authorize any project resulting in the loss of greater than 1/2-acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that a project already meeting the established acreage limits also satisfies the minimal impact requirement associated with the NWPs. (f) Compensatory mitigation plans for projects in or near streams or other open waters will normally include a requirement for the restoration or establishment, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, riparian areas may be the only compensatory mitigation required. Riparian areas should consist of native species. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. If it is not possible to establish a riparian area on both sides of a stream, or if the waterbody is a lake or coastal waters, then restoring or establishing a riparian area along a single bank or shoreline may be sufficient. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses. (g) Permittees may propose the use of mitigation banks, in-lieu fee programs, or separate permittee-responsible mitigation. For activities resulting in the loss of marine or estuarine resources, permittee-responsible compensatory mitigation may be environmentally preferable if there are no mitigation banks or in-lieu fee programs in the area that have marine or estuarine credits available for sale or transfer to the permittee. For permittee-responsible mitigation, the special conditions of the NWP verification must clearly indicate the party or parties responsible for the implementation and performance of the compensatory mitigation project, and, if required, its long-term management. (h) Where certain functions and services of waters of the United States are permanently adversely affected, such as the conversion of a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse effects of the project to the minimal level.

24. Safety of Impoundment Structures. To ensure that all impoundment structures are safely designed, the district engineer may require non-Federal applicants to demonstrate that the structures comply with established state dam safety criteria or have been designed by qualified persons. The district engineer may also require documentation that the design has been independently reviewed by similarly qualified persons, and appropriate modifications made to ensure safety.

25. Water Quality. Where States and authorized Tribes, or EPA where applicable, have not previously certified compliance of an NWP with CWA Section 401, individual 401 Water Quality Certification must be obtained or waived (see 33 CFR 330.4(c)). The district engineer or State or Tribe may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.

26. Coastal Zone Management. In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of

concurrence must occur (see 33 CFR 330.4(d)). The district engineer or a State may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.

27. Regional and Case-By-Case Conditions. The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.

28. Use of Multiple Nationwide Permits. The use of more than one NWP for a single and complete project is prohibited, except when the acreage loss of waters of the United States authorized by the NWP does not exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-acre.

29. Transfer of Nationwide Permit Verifications. If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature:

"When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below."

(Transferee)

(Date)

30. Compliance Certification. Each permittee who receives an NWP verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and any required compensatory mitigation. The success of any required permittee-responsible mitigation, including the achievement of ecological performance standards, will be addressed separately by the district engineer. The Corps will provide the permittee the certification document with the NWP verification letter. The certification document will include:

(a) A statement that the authorized work was done in accordance with the NWP authorization, including any general, regional, or activity-specific conditions; (b) A statement that the implementation of any required compensatory mitigation was completed in accordance with the permit conditions. If credits from a mitigation bank or in-lieu fee program are used to satisfy the compensatory mitigation requirements, the certification must include the documentation required by 33 CFR 332.3(l)(3) to confirm that the permittee secured the appropriate number and resource type of credits; and (c) The signature of the permittee certifying the completion of the work and mitigation.

31. Pre-Construction Notification. (a) Timing. Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, if the PCN is determined to be incomplete, notify the prospective permittee within that 30 day period to request the additional information necessary to make the PCN complete. The request must specify the information needed to make the PCN complete. As a general rule, district engineers will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either: (1) He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or (2) 45 calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 18 that listed species or critical habitat might be affected or in the vicinity of the project, or to notify the Corps pursuant to general condition 20 that the activity may have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that there is "no effect" on listed species or "no potential to cause effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or Section 106 of the National Historic Preservation (see 33 CFR 330.4(g)) has been completed. Also, work cannot begin under NWPs 21, 49, or 50 until the permittee has received written approval from the Corps. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee may not begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2). (b) Contents of Pre-Construction Notification: The PCN must be in writing and include the following information: (1) Name, address and telephone numbers of the prospective permittee; (2) Location of the proposed project; (3) A description of the proposed project; the project's purpose; direct and indirect adverse environmental effects the project would cause, including the anticipated amount of loss of water of the United States expected to result from the NWP activity, in acres, linear feet, or other appropriate unit of measure; any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity. The description should be sufficiently detailed to allow the district engineer to determine that the adverse effects of the project will be minimal and to determine the need for compensatory mitigation. Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the project and when provided results in a quicker decision. Sketches should contain sufficient detail to provide an illustrative description of the proposed activity (e.g., a conceptual plan), but do not need to be detailed engineering plans); (4) The PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams, on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters on the project site, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many waters of the United States. Furthermore, the 45 day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate; (5) If the proposed activity will result in the loss of greater than 1/10-acre of wetlands and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied, or explaining why the adverse effects are minimal and why

compensatory mitigation should not be required. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan. (6) If any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, for non-Federal applicants the PCN must include the name(s) of those endangered or threatened species that might be affected by the proposed work or utilize the designated critical habitat that may be affected by the proposed work. Federal applicants must provide documentation demonstrating compliance with the Endangered Species Act; and (7) For an activity that may affect a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, for non-Federal applicants the PCN must state which historic property may be affected by the proposed work or include a vicinity map indicating the location of the historic property. Federal applicants must provide documentation demonstrating compliance with Section 106 of the National Historic Preservation Act (c) Form of Pre-Construction Notification: The standard individual permit application form (Form ENG 4345) may be used, but the completed application form must clearly indicate that it is a PCN and must include all of the information required in paragraphs (b)(1) through (7) of this general condition. A letter containing the required information may also be used. (d) Agency Coordination: (1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the project's adverse environmental effects to a minimal level. (2) For all NWP activities that require pre-construction notification and result in the loss of greater than 1/2-acre of waters of the United States, for NWP 21, 29, 39, 40, 42, 43, 44, 50, 51, and 52 activities that require pre-construction notification and will result in the loss of greater than 300 linear feet of intermittent and ephemeral stream bed, and for all NWP 48 activities that require pre-construction notification, the district engineer will immediately provide (e.g., via e-mail, facsimile transmission, overnight mail, or other expeditious manner) a copy of the complete PCN to the appropriate Federal or state offices (U.S. FWS, state natural resource or water quality agency, EPA, State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Office (THPO), and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will have 10 calendar days from the date the material is transmitted to telephone or fax the district engineer notice that they intend to provide substantive, site-specific comments. The comments must explain why the agency believes the adverse effects will be more than minimal. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the pre-construction notification. The district engineer will fully consider agency comments received within the specified time frame concerning the proposed activity's compliance with the terms and conditions of the NWPs, including the need for mitigation to ensure the net adverse environmental effects to the aquatic environment of the proposed activity are minimal. The district engineer will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each pre-construction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5. (3) In cases of where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by Section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act. (4) Applicants are encouraged to provide the Corps with either electronic files or multiple copies of pre-construction notifications to expedite agency coordination.

D. Nationwide Permit Regional Conditions

Of the ten regional conditions effective within the Los Angeles District of the Corps, six apply to projects within Arizona (1-4, 9 and 10). The remaining four regional conditions apply to specific geographic areas, resources, or species not located in Arizona.

The following regional conditions must be complied with for any authorization by a NWP to be valid in the State of Arizona:

Regional Condition 1: For all activities in waters of the U.S. that are suitable habitat for federally listed fish species, the permittee shall design all road crossings to ensure that the passage and/or spawning of fish is not hindered. In these areas, the permittee shall employ bridge designs that span the stream or river, including pier- or pile-supported spans, or designs that use a bottomless arch culvert with a natural stream bed, unless determined to be impracticable by the Corps.

Regional Condition 2: Nationwide Permits (NWP) 3, 7, 12-15, 17-19, 21, 23, 25, 29, 35, 36, or 39-46, 48-52 cannot be used to authorize structures, work, and/or the discharge of dredged or fill material that would result in the "loss" of wetlands, mudflats, vegetated shallows or riffle and pool complexes as defined at 40 CFR Part 230.40-45. The definition of "loss" for this regional condition is the same as the definition of "loss of waters of the United States" used for the Nationwide Permit Program. Furthermore, this regional condition applies only within the State of Arizona and within the Mojave and Sonoran (Colorado) desert regions of California. The desert regions in California are limited to four USGS Hydrologic Unit Code (HUC) accounting units (Lower Colorado -150301, Northern Mojave-180902, Southern Mojave-181001, and Salton Sea-181002).

Regional Condition 3: When a pre-construction notification (PCN) is required, the appropriate U.S. Army Corps of Engineers (Corps) District shall be notified in accordance with General Condition 31 using either the South Pacific Division PCN Checklist or a signed application form (ENG Form 4345) with an attachment providing information on compliance with all of the General and Regional Conditions. The PCN Checklist and application form are available at: <http://www.spl.usace.army.mil/Missions/CivilWorks/Regulatory.aspx>. In addition, the PCN shall include: A written statement describing how the activity has been designed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States; drawings, including plan and cross-section views, clearly depicting the location, size and dimensions of the proposed activity as well as the location of delineated waters of the U.S. on the site. The drawings shall contain a title block, legend and scale, amount (in cubic yards) and area (in acres) of fill in Corps jurisdiction, including both permanent and temporary fills/structures. The ordinary high water mark or, if tidal waters, the mean high water mark and high tide line, should be shown (in feet), based on National Geodetic Vertical Datum (NGVD) or other appropriate referenced elevation. All drawings for projects located within the boundaries of the Los Angeles District shall comply with the most current version of the Map and Drawing Standards for the Los Angeles District Regulatory Division (available on the Los Angeles District Regulatory Division website at: <http://www.spl.usace.army.mil/Missions/CivilWorks/Regulatory.aspx>); and numbered and dated pre-project color photographs showing a representative sample of waters proposed to be impacted on the project site, and all waters proposed to be avoided on and immediately adjacent to the project site. The compass angle and position of each photograph shall be documented on the plan-view drawing required in subpart b of this regional condition.

Regional Condition 4: Submission of a PCN pursuant to General Condition 31 and Regional Condition 3 shall be required for all regulated activities in the following locations: a) All perennial waterbodies and special aquatic sites within the State of Arizona and within the Mojave and Sonoran (Colorado) desert regions of California, excluding the Colorado River in Arizona from Davis Dam to River Mile 261 (northern boundary of the Fort Mojave Indian Tribe Reservation). The desert region in California is limited to four USGS HUC accounting units (Lower Colorado -150301, Northern Mojave-180902, Southern Mojave-181001, and Salton Sea-181002). b) All areas designated as Essential Fish Habitat (EFH) by the Pacific Fishery Management Council (i.e., all tidally influenced areas - Federal Register dated March 12, 2007 (72 FR 11092)), in which case the PCN shall include an EFH assessment and extent of proposed impacts to EFH. Examples of EFH habitat assessments can be found at: <http://www.swr.noaa.gov/efh.htm>. c) All watersheds in the Santa Monica Mountains in Los Angeles and Ventura counties bounded by Calleguas Creek on the west, by Highway 101 on the north and east, and by Sunset Boulevard and Pacific Ocean on the south. d) The Santa Clara River watershed in Los Angeles and Ventura counties, including but not limited to Aliso Canyon, Agua Dulce Canyon, Sand Canyon, Bouquet Canyon, Mint Canyon, South Fork of the Santa Clara River, San Francisco Canyon, Castaic Creek, Piru Creek, Sespe Creek and the main-stem of the Santa Clara River.

Regional Condition 9: Any requests to waive the 300 linear foot limitation for intermittent and ephemeral streams for NWP 29, 39, 40 and 42, 43, 44, 51 and 52 or to waive the 500 linear foot limitation along the bank for NWP 13, must include the following: a) A narrative description of the stream. This should include known information on: volume and duration of flow; the approximate length, width, and depth of the waterbody and characters observed associated with an Ordinary High Water Mark (e.g. bed and bank, wrack line, or scour marks); a description of the adjacent vegetation community and a statement regarding the wetland status of the associated vegetation community (i.e. wetland, non-wetland); surrounding land use; water quality; issues related to cumulative impacts in the watershed, and; any other relevant information. b) An analysis of the proposed impacts to the waterbody in accordance with General Condition 31 and Regional Condition 3; c) Measures taken to avoid and minimize losses, including other methods of constructing the proposed project; and d) A compensatory mitigation plan describing how the unavoidable losses are proposed to be compensated, in accordance with 33 CFR Part 332.

Regional Condition 10: The permittee shall complete the construction of any compensatory mitigation required by special condition(s) of the NWP verification before or concurrent with commencement of construction of the authorized activity, except when specifically determined to be impracticable by the Corps. When mitigation involves use of a mitigation bank or in-lieu fee program, the permittee shall submit proof of payment to the Corps prior to commencement of construction of the authorized activity.

E. 401 Water Quality Certification (401 WQC)

A 401 WQC is mandatory for any activity that requires a Clean Water Act Section 404 permit. A 401 WQC is required prior to discharging any dredged or fill material into a water of the United States. Only one of the following 401 WQCs listed below will apply to your project. The geographical location of your project will determine which 401 WQC is applicable. The 401 WQCs issued for this NWP will remain in effect through March 18, 2017.

On all "Non-Tribal Lands", lands that are not part of federally recognized Indian Reservation, the Arizona Department of Environmental Quality (ADEQ) is the agency responsible for issuing the 401 WQC.

On all "Tribal Lands", lands that are part of a federally recognized Indian Reservation, the U.S. Environmental Protection Agency (EPA) is responsible for issuing the 401 WQC except where EPA has delegated the 401 WQC authority to the White Mountain Apache Tribe (Fort Apache Indian Reservation), Hopi Tribe (Hopi Indian Reservation), Hualapai Tribe (Hualapai Indian Reservation), or Navajo Nation (Navajo Indian Reservation).

If "Individual Certification" is required you must apply for, receive, and comply with the 401 WQC issued by ADEQ, EPA, or the appropriate Tribe.

Non-tribal Lands - 401 WQCs

The 401 WQCs issued by ADEQ are summarized in Table 1. For projects that can be conditionally certified the project must comply with all of the applicable ADEQ 401 General Conditions that follow Table 1.

Tribal Lands - 401 WQCs

Fort Apache Indian Reservation (White Mountain Apache Tribe):	Individual Certification required for all projects.*
Hopi Indian Reservation (Hopi Tribe):	Individual Certification required for all projects.*
Hualapai Indian Reservation (Hualapai Tribe):	Individual Certification required for all projects.*
Navajo Indian Reservation (Navajo Nation):	Individual Certification required for all projects.*
All other Indian Reservations (EPA):	401 WQCs issued by EPA are summarized in Table 2. EPA's General and Permit-Specific Conditions follow Table 2.*

***Note:** For online availability see section "F. Document Availability" of this enclosure.

401 WQC Contact Information

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Hopi Tribe
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Tara Chief
Water Quality Officer
White Mountain Apache Tribe
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Fax: 928-338-3933
E-mail: tarachief@wmat.us

Lee Anna Silversmith
Water Quality Program
Navajo Nation Environmental Protection Agency
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Telephone: 928-871-7700
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Alex Cabillo
Water Resource Program Manager
Hualapai Dept. of Natural Resources
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Peach Springs, Arizona 86434
Telephone: 928-769-2254
Fax: 928-769-2309
E-mail: acabillo@hotmail.com

Robert Scalamera
Surface Water Section, 401 Certifications
Arizona Department of Environmental Quality
110 West Washington Street (Mailstop 5415A-1)
Phoenix, Arizona 85007
Telephone: 602-771-4502
Fax: Not available
E-mail: rs3@azdeq.gov

F. Document Availability

Reissuance of Nationwide Permits, 77 FR 10184-10290
Special Public Notice for Regional Conditions
EPA 401 WQC for NWP
White Mountain Apache Tribe 401 WQC for NWP
Hopi Tribe 401 WQC for NWP
Havasupai Tribe 401 WQC for NWP
Navajo Nation 401 WQC for NWP
ADEQ 401 WQC for NWP

<http://www.gpo.gov/fdsys/pkg/FR-2012-02-21/pdf/2012-3687.pdf>
Contact Corps project manager for copy of document.
Contact Corps project manager for copy of document.
Contact Corps project manager for copy of document.
Contact Corps project manager for copy of document.
Contact Corps project manager for copy of document.
Contact Corps project manager for copy of document.
Contact Corps project manager for copy of document.

Table 1 - ADEQ 401 WQCs for all Non-Tribal Lands

NWP	303(d) impaired waters ¹ & Tributaries to 303(d)-impaired waters ²	OAW ³ & Tributaries to OAW	Lakes ⁴	Other Waters ⁵	Comments
1 - Aids to Navigation	-	-	-	-	N/A
2 - Structures in Artificial Canals	-	-	-	-	N/A
3 - Maintenance	I	I	I	C	
4 - Fish and Wildlife Harvesting, Enhancement, and Attraction Devices and Activities	I	I	I	C	
5 - Scientific Measurement Devices	I	I	I	C	
6 - Survey Activities	I	I	I	C	
7 - Outfall Structures and Associated Intake Structures	I	I	I	C	
8 - Oil and Gas Structures on the Outer Continental Shelf	-	-	-	-	N/A
9 - Structures in Fleeting and Anchorage Areas	-	-	-	-	N/A
10 - Mooring Buoys	-	-	-	-	N/A
11 - Temporary Recreational Structures	-	-	-	-	N/A
12 - Utility Line Activities	I	I	I	C	
13 - Bank Stabilization	I	I	I	C	
14 - Linear Transportation Projects	I	I	I	C	
15 - U.S. Coast Guard Approved Bridges	I	I	I	C	
16 - Return Water From Upland Contained Disposal Areas	I	I	I	C	
17 - Hydropower Projects	I	I	I	C	
18 - Minor Discharges	I	I	I	C	
19 - Minor Dredging	I	I	I	C	
20 - Response Operations for Oil and Hazardous Substances	I	I	I	T	If work begins within 14 days of event.
21 - Surface Coal Mining Activities	I	I	I	I	
22 - Removal of Vessels	I	I	I	C	
23 - Approved Categorical Exclusion	I	I	I	C	
24 - Indian Tribe or State Administered Section 404 Programs	-	-	-	-	N/A
25 - Structural Discharges	I	I	I	C	
26 - [Reserved]	-	-	-	-	
27 - Aquatic Habitat Restoration, Establishment, and Enhancement Activities	I	I	I	I	
28 - Modifications of Existing Marinas	-	-	-	-	N/A
29 - Residential Developments	I	I	I	C	
30 - Moist Soil Management for Wildlife	I	I	I	C	
31 - Maintenance of Existing Flood Control Facilities	I	I	I	C	
32 - Completed Enforcement Actions	I	I	I	C	
33 - Temporary Construction, Access, and Dewatering	I	I	I	C	
34 - Cranberry Production Activities	I	I	I	I	
35 - Maintenance Dredging of Existing Basins	-	-	-	-	N/A
36 - Boat Ramps	I	I	I	C	
37 - Emergency Watershed Protection and Rehabilitation	I	I	I	T	If work begins within 30 days of event.
38 - Cleanup of Hazardous and Toxic Waste	I	I	I	T	If work begins within 2 days of discovery.
39 - Commercial and Institutional Developments	I	I	I	C	
40 - Agricultural Activities	I	I	I	C	
41 - Reshaping Existing Drainage Ditches	I	I	I	C	
42 - Recreational Facilities	I	I	I	C	
43 - Stormwater Management Facilities	I	I	I	C	
44 - Mining Activities	I	I	I	I	
45 - Repair of Uplands Damaged by Discrete Events	I	I	I	T	If work begins within 14 days of event.
46 - Discharges in Ditches	I	I	I	C	
47 - [Reserved]	-	-	-	-	Reserved
48 - Commercial Shellfish Aquaculture Activities	I	I	I	C	
49 - Coal Remining Activities	I	I	I	I	
50 - Underground Coal Mining Activities	I	I	I	I	
51 - Land-Based Renewable Energy Generation Facilities	I	I	I	C	
52 - Water-Based Renewable Energy Generation Pilot Projects	I	I	I	C	

C = Conditionally certified in Other waters, all applicable CWA 401 General Conditions listed on following pages apply.

T = Conditionally certified only if work begins within designated time of event, otherwise individual 401 certification required.

I = Individual certification required. N/A = Not Available/Not Applicable.

¹ 303(d)-listed Impaired Waters list available at <http://www.azdeq.gov/index.html>. For projects on an impaired surface water, if the project is within 1600 meters (or 1 mile) upstream and/or 800 meters (½ mile) downstream of an impaired surface water.

² Tributaries to 303(d)-impaired waters. For projects on a tributary to an impaired surface water, or if the tributary mouth is to an impaired surface water and the project is within 1600 meters (or 1 mile) of its mouth.

³ Outstanding Arizona Waters (OAW) are the surface waters of exceptional quality listed at <http://www.azdeq.gov/index.html>. For projects on a designated Outstanding Arizona Water OAW, if the project is within 1600 meters (or 1 mile) upstream and/or 800 meters (½ mile) downstream of a designated OAW. Also, Tributaries to Outstanding Arizona Waters: For projects on a tributary to a designated Outstanding Arizona Water, or if the tributary mouth is to an impaired surface water and the project is within 1600 meters (or 1 mile) of its mouth.

⁴ Lakes are lakes and reservoirs listed at <http://www.azdeq.gov/index.html>

⁵ Other Waters are all WUS that are not otherwise designated as a 303(d) Impaired, OAW, or a lake.

ADEQ 401 General Conditions applicable to Other Waters of the United States (WUS) on all Non-Tribal Lands

- 1) Any discharge occurring as a result of activities certified for the subject project shall not cause an exceedence of any Water Quality Standard (WQS). Applicability of this condition is as defined in A.A.C. R18-11-102.
- 2) This certification does not authorize the discharge of wastewater, process residues or other waste to any WUS.
- 3) Work shall be conducted and monitored to ensure that pollution from the activities certified herein does not cause an exceedence of Arizona WQS in any WUS.
- 4) Activities herein certified shall be performed during periods of low flow (baseflow or less) in any WUS, or no flow in the case of ephemeral and intermittent WUS. No work shall be done, nor shall any equipment or vehicles enter any WUS while flow is present, unless all applicable conditions in this certification are met.
- 5) The effectiveness of all pollution control measures, including erosion and sedimentation, shall be reevaluated after each flow event and repaired/modified as needed.
- 6) Applicant must minimize clearing, grubbing, scraping or otherwise limit exposure of erodible surface to the minimum necessary for each construction phase or location.
- 7) If activities certified herein are likely to cause or contribute to an exceedence of WQS, or create an impediment to the passage of fish or other aquatic life - operations shall cease until the problem is resolved or until control measures have been undertaken.
- 8) Erosion control, sediment control and/or bank protection measures shall be installed before construction and pre-operation activities, and shall be maintained during construction and post-construction periods to minimize channel or bank erosion, soil loss and sedimentation. Control measures shall not be constructed of uncemented or unconfined imported soil, or other materials easily transported by flow.
- 9) For portions of the project utilizing potable water or groundwater for irrigation or dust control, direct runoff of such water shall be limited to the extent practicable and shall not cause downstream erosion or flooding.
- 10) The applicant is responsible for ensuring construction material and/or fill (other than native fill or that necessary to support revegetation) placed in any WUS, shall not include materials that can cause or contribute to pollution of the WUS. Examples of prohibited fill include pollutant-contaminated soil and materials defined as pollutants or hazardous in Arizona Revised Statutes (A.R.S.) § 49-201. Fill used to support vegetation rooting or growth shall be protected from erosion.
- 11) Any washing of fill material must occur outside of any WUS prior to placement and the rinseate from such washing shall be settled, filtered or otherwise treated to prevent migration of pollutants (including sediment) or from causing erosion to any WUS. Other than replacement of native fill or material used to support vegetation rooting or growth, fill placed in locations subject to scour must resist washout whether such resistance is derived via particle size limits, presence of a binder, vegetation, or other armoring.
- 12) Any dredged material or waste material is to be placed and retained in areas outside any WUS. Runoff from this material/area is to be settled, filtered or otherwise treated to prevent migration of pollutants (including sediment) to any WUS.
- 13) Acceptable construction materials that will or may contact water in any WUS are: untreated logs and lumber, crushed stone, crushed clean concrete (recycled concrete), native fill, precast, sprayed or cast-in-place concrete (including soil cement and unmodified grouts), steel (including galvanized), plastic and aluminum. Use of other materials may be allowed, but require application for an individual 401 certification.
- 14) Upon completion of construction the applicant shall ensure no adverse change, due to the subject project, has occurred in the stability with respect to stream hydraulics, erosion and sedimentation, of any WUS including upstream and downstream from the project. If such change has occurred, the applicant shall take steps to restore the pre-project stability of any impacted segments.
- 15) Except where the activities certified herein are intended to permanently alter any WUS, all disturbed areas shall be restored and (re)vegetated as soon as physically practicable. Vegetation shall be maintained on unarmored banks and slopes to stabilize soil and prevent erosion.
- 16) If retention/detention basins are included in the project, applicant will complete the grading necessary to direct runoff towards retention/detention basins no later than immediately following initial land clearing or rough grading. Retention/detention basins shall be sized to accept storm runoff and capture sediment prior to it entering or moving downstream in any WUS. Detention basins will provide detention by controlling outflow and shall cause no significant change to the hydraulic conditions of the upstream or downstream WUS outside of the project boundaries. The basins shall be maintained; e.g., have sediment removed, as required to maintain their function.
- 17) Unless specifically permitted to do so when flow is present in any WUS within the project area, the applicant and any contractor will not alter the flow by any means except to prevent erosion or pollution of any WUS.
- 18) Silt laden or turbid water resulting from activities certified herein shall be settled, filtered or otherwise treated to ensure no violation of Arizona WQS in any WUS.
- 19) When flow in any WUS in the work area is sufficient to erode, carry or deposit material, activities certified herein shall cease until: The flow decreases below the point where sediment movement ceases, or control measures have been undertaken; e.g., equipment and materials easily transported by flow are protected with non-erodible barriers or moved outside the flow area.
- 20) The applicant will erect any barriers, covers, shields and other protective devices as necessary to prevent any construction materials, equipment or contaminants/pollutants from falling, being thrown or otherwise entering any WUS.
- 21) The applicant must designate area(s) for equipment staging and storage located entirely outside of any WUS. In addition, the applicant must designate areas, located entirely outside of any WUS, for fuel, oil and other petroleum product storage and for solid waste containment. All precautions shall be taken to avoid the release of wastes, fuel or other pollutants to any WUS. Any equipment maintenance, washing or fueling that cannot be done offsite will be performed in the designated area with the following exception: equipment too large or unwieldy to be readily moved; e.g., large cranes, may be fueled and serviced in the WUS (but outside of standing or flowing water) as long as material specifically manufactured and sold as spill containment is in place during fueling/servicing. All equipment shall be inspected for leaks, all leaks shall be repaired and all repaired equipment will be cleaned to remove any fuel or other fluid residue prior to use within (including crossing) any WUS. The applicant shall have a spill containment plan onsite to ensure that pollutants are prevented from entering any WUS. Any pollutant generated by activities certified herein shall be properly disposed of in accordance with applicable regulations. A spill response kit will be maintained in this (these) area(s) to mitigate any spills. The kit will include material specifically manufactured and sold as spill adsorbent/absorbent and spill containment. The applicant will ensure that whenever there is activity on the site, that there are personnel on site trained in the proper response to spills and the use of spill response equipment.
- 22) Permanent and temporary pipes and culverted crossings shall be adequately sized to handle expected flow and properly set with end section, splash pads, or headwalls that dissipate water energy to control erosion.

- 23) All temporary structures, within any WUS, constructed of imported materials and all permanent structures within any WUS, including but not limited to, access roadways; culverted and uncultivated crossings; staging areas; material stockpiles; berms, dikes and pads, shall be constructed so as to accommodate overtopping and must resist washout of the feature by streamflow.
- 24) Any temporary crossing, other than fords on native material, shall be constructed in such a manner so as to provide armoring of the stream channel. Materials used to provide this armoring shall not include anything easily transportable by flow. Examples of acceptable materials include steel plates, wooden planks, pre-cast concrete planks or blocks; examples of unacceptable materials include clay, silt, sand and gravel finer than cobble (roughly fist-sized). The armoring must, via mass, anchoring systems or a combination of the two, resist washout. Any ford shall be designed, and maintained as necessary, to carry the proposed traffic without causing erosion or sedimentation of the stream channel while dry or during a flow event equal to or less than the crossing's design event; i.e., the flow event which closes the ford to traffic. No unarmored ford shall be subject to heavy-truck or equipment traffic after a flow event until the stream bed is dry enough to support the traffic without disturbing streambed material to a greater extent than in dry conditions. Light vehicles (less than 14,000 pounds gross weight) are not restricted by this condition. Applicant will take measures necessary to prevent approaches to any WUS crossing from causing erosion or contributing sediment to any WUS.
- 25) Temporary structures constructed of imported materials are to be removed no later than upon completion of the permitted activity.
- 26) Temporary structures constructed of native materials, if they provide an obstacle to flow or can contribute to or cause sedimentation or erosion, are to be removed no later than upon completion of the permitted activity.
- 27) Upon completion of the activities certified herein (except as noted in condition 28 -concrete curing), areas within any WUS shall be promptly cleared of all forms, piling, construction residues, equipment, debris or other obstructions.
- 28) If fully, partially or occasionally submerged structures are constructed of cast-in-place concrete instead of pre-cast concrete, applicant will take steps; e.g., sheet piling or temporary dams, to prevent contact between water (instream and runoff) and the concrete until it cures and until any curing agents have evaporated or otherwise cease to be available; i.e., are no longer a pollutant threat. Where practicable, construction work will be during extreme low water conditions or at a time and season with the highest probability of ensuring work is done in "the dry".
- 29) Any permanent WUS crossings other than fords, shall not be equipped with gutters, drains, scuppers or other conveyances that allow untreated runoff (due to events equal to or lesser in magnitude than the design event for the crossing structure) to directly enter a WUS if such runoff can be directed to a local stormwater drainage, containment and/or treatment system.
- 30) Applicant will clear debris as needed from culverts, ditches, dips and other drainage structures in any WUS to prevent clogging or conditions that may lead to washout.

Table 2 - EPA 401 WQC for Tribal Lands (All Indian Reservations except Fort Apache, Hopi, Hualapai and Navajo Indian Reservations)

NWP	Conditional Certification		Notification	Impact Limits	Notes
	General Conditions	Specific Conditions			
1 - Aids to Navigation	X		MPCN	None	
2 - Structures in Artificial Canals	X		MPCN	None	
3 - Maintenance	X	X	PCN or MPCN	Generally no increase in fill footprint	1,2
4 - Fish and Wildlife Harvesting, Enhancement, and Attraction Devices and Activities	X		MPCN	None	
5 - Scientific Measurement Devices	X		MPCN	25 cyds	
6 - Survey Activities	X		MPCN	25 cyds	
7 - Outfall Structures and Associated Intake Structures	X		PCN	None	
8 - Oil and Gas Structures on the Outer Continental Shelf	X		PCN	None	
9 - Structures in Fleeting and Anchorage Areas	X		MPCN	None	
10 - Mooring Buoys	X		MPCN	None	
11 - Temporary Recreational Structures	X		MPCN	None	
12 - Utility Line Activities	X	X	PCN or MPCN	**1/2 acre or 300'	3,4
13 - Bank Stabilization	X	X	PCN or MPCN	**1/2 acre or 300'	5
14 - Linear Transportation Projects	X	X	PCN or MPCN	**1/2 acre or 300' nontidal, 1/3 acre or 300' tidal	3
15 - U.S. Coast Guard Approved Bridges	X		MPCN	None	
16 - Return Water From Upland Contained Disposal Areas	X		MPCN	None	
17 - Hydropower Projects	X		PCN	None	
18 - Minor Discharges	X		PCN or MPCN	1/10 acre or 25 cyds	
19 - Minor Dredging	X		MPCN	25 cyds	
20 - Response Operations for Oil and Hazardous Substances	X		MPCN	None	
21 - Surface Coal Mining Activities	X	X	PCN	1/2 acre or 300'	6
22 - Removal of Vessels	X		PCN or MPCN	None	
23 - Approved Categorical Exclusion	X		PCN or MPCN	None	
24 - Indian Tribe or State Administered Section 404 Programs	X		MPCN	None	
25 - Structural Discharges	X		MPCN	None	
26 - [Reserved]					
27 - Aquatic Habitat Restoration, Establishment, and Enhancement Activities	X	X	PCN or MPCN	None	7
28 - Modifications of Existing Marinas	X		MPCN	None	
29 - Residential Developments	X	X	PCN or MPCN	**1/4 acres for single house, 1/2 acres or 300' for multi-unit	8, 9
30 - Moist Soil Management for Wildlife	X		MPCN	None	
31 - Maintenance of Existing Flood Control Facilities	X	X	PCN	None	10
32 - Completed Enforcement Actions	X		MPCN	5 acres non-tidal or 1 acre tidal	
33 - Temporary Construction, Access, and Dewatering	X		PCN	None	
34 - Cranberry Production Activities	X		PCN	10 acres	
35 - Maintenance Dredging of Existing Basins	X		MPCN	Lesser of previously authorized or controlling depths	
36 - Boat Ramps	X		PCN or MPCN	50 cyds, 20'-wide ramp	8
37 - Emergency Watershed Protection and Rehabilitation	X		PCN or MPCN	None	
38 - Cleanup of Hazardous and Toxic Waste	X		PCN	None	
39 - Commercial and Institutional Developments	X	X	PCN or MPCN	1/2 acre or 300' non-tidal	8
40 - Agricultural Activities	X	X	PCN or MPCN	1/2 acre or 300' non-tidal	8
41 - Reshaping Existing Drainage Ditches	X	X	PCN or MPCN	**1/2 acre or 300' non-tidal	8
42 - Recreational Facilities	X	X	PCN	1/2 acre or 300' non-tidal	
43 - Stormwater Management Facilities	Individual Certification Required		MPCN	Not Applicable	
44 - Mining Activities	X	X	PCN or MPCN	1/2 acre or 300' non-tidal	8
45 - Repair of Uplands Damaged by Discrete Events	X	X	PCN or MPCN	**1/2 acre or 300'	8
46 - Discharges in Ditches	X	X	PCN or MPCN	**1/2 acre or 300' non-tidal	8
47 - [Reserved]					
48 - Commercial Shellfish Aquaculture Activities	X	X	PCN or MPCN	**Impacts of submerged aquatic veg. prohibited	
49 - Coal Remining Activities	X	X	PCN or MPCN	**1/2 acre or 300' non-tidal	8
50 - Underground Coal Mining Activities	X	X	PCN or MPCN	1/2 acre or 300' non-tidal	8
51 - Land-Based Renewable Energy Generation Facilities	X	X	PCN or MPCN	1/2 acre or 300' non-tidal	8
52 - Water-Based Renewable Energy Generation Pilot Projects	X	X	PCN or MPCN	1/2 acre or 300'	

X=Conditional Certification requires compliance with General and Specific Conditions on following pages.

MPCN=Modified Pre-Construction (MPCN) must be submitted to EPA even though Corps notification is not required.

PCN=Pre-Construction Notification (PCN) submitted to Corps must also be submitted to EPA.

** Impacts limits are modified by EPA

- Notes:
1. No undersized structures
 2. Bioengineering used whenever practicable
 3. Only once per single and complete project with independent utility
 4. Waiver approval required from EPA for 300"
 5. Waiver approval required from EPA
 6. EPA approves mitigation plan first
 7. Approval required from EPA
 8. Waiver approval required from EPA
 9. No recreational impacts authorized
 10. Approval for levee vegetation removal required from EPA

EPA 401 WQC General and Specific Nationwide Permit Conditions for Tribal Lands

(All Indian Reservations except Fort Apache, Hopi, Hualapai and Navajo Indian Reservations)

General Conditions

Projects that are unable to comply with the general conditions of this programmatic certification are denied certification without prejudice and the applicant must apply to EPA for an individual certification. Applicants can apply for an individual certification by providing the same content required in a MPCN described in General Condition 01. *Notification*, of this programmatic certification, but EPA may request additional project information for individual certifications after receiving notification materials. When an individual certification is required, EPA will strive to issue, deny, or waive certification within sixty days of receipt of complete project information, but our review shall not exceed one year, the statutory limit beyond which certification is considered waived.¹

01. Notification - To improve the government's ability to demonstrate whether the NWP program has minimal adverse impacts to the aquatic environment, individually and cumulatively, all NWP-authorized projects proceeding on tribal lands within Region 9 shall submit a form of notification to EPA Region 9 as described below.² Notification is required in order to be eligible for any NWP under this certification.

Projects seeking authorization under this certification will fall under one of the following two notification categories:

Pre-Construction Notification (PCN):

The Corps already requires a PCN, subject to criteria in the Corps' General Condition 31, because the project proposes use of a NWP that requires a PCN automatically or for specific activities authorized by the NWP. Applicants must simply forward a second copy of the PCN already required by the Corps to EPA Region 9 for notification. If a PCN is already required by the Corps and a waiver of impact limits is proposed beyond what is approved under this certification, applicants must include written determinations specified in General Condition 02. *Waivers* for EPA approval.

Modified Pre-Construction Notification (MPCN):

a) The Corps does not require a PCN for any activities authorized under the NWP proposed for use, or for impacts below limits identified in the NWP for a PCN. Applicants must forward a MPCN to EPA Region 9 for notification, subject to the criteria below. If a waiver of impact limits is proposed beyond what is approved under this certification, applicants must include written determinations specified in General Condition 02. *Waivers* for EPA approval. 1) **Timing**. Applicants shall submit an MPCN to EPA Region 9 as early as possible, and in advance of any authorization letter from the Corps allowing the applicant to proceed under a given NWP. When an EPA approval is required by condition of this certification, EPA will act within sixty days of receiving a complete MPCN. 2) **Content**. MPCNs must be in writing (electronic mail submittal is acceptable) and include the following information: a) Name, address and telephone numbers of the applicant and any agents or representatives. If available, the electronic mail address and fax numbers for these persons; b) Location of the proposed project; c) A description of the proposed project and impacts including i) the project's purpose; ii) direct and indirect adverse environmental effects the project would cause, including the proposed acreages and linear feet (for streams) of waters impacted, avoided, and where applicable, created or otherwise mitigated; iii) any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity. The description should be sufficiently detailed to determine compliance with NWP and EPA 401 conditions and to determine whether compensatory mitigation may be necessary. Maps, drawings and/or photographs of the project area and aquatic resources are not mandatory, but usually help to clarify the project and allow for quicker review. At minimum, a narrative description of any special aquatic sites and other waters of the United States on the project site must be included; b) Consistent with General Condition 02. *Waivers*, a written demonstration that any proposed impact limit waiver that may be allowable under this certification will result in minimal impacts to aquatic resource functions; c) Consistent with General Condition 03. *Avoidance, Minimization, and Mitigation*, a written statement documenting measures taken to avoid and minimize temporary and permanent impacts to waters of the U.S.; d) Consistent with General Condition 04. *Prohibition on the Multiple Use of One NWP for a Single Project*, for proposed utility or transportation projects where the same NWP is proposed at multiple locations, a written determination will be provided describing independent utility of each impact location and how the project will not contribute to more than minimal direct, indirect and cumulative impacts to waters of the U.S., either at the impact site or to upstream, downstream, or adjacent aquatic resources. e) The name(s) of any species listed as endangered or threatened under the Endangered Species Act which may be adversely affected by the proposed work, either directly or by impacting designated critical habitat; f) Identification of any cultural or historic properties listed in, or eligible for listing in, the National Register of Historic Places that may be adversely affected by the proposed work. Written notification should be mailed to USEPA Region 9, WTR-8, 75 Hawthorne Street, San Francisco, CA 94105.

02. Waivers - For certain NWPs, Corps District Engineers may waive impact thresholds for intermittent and ephemeral drainages by making a written determination that the discharge will result in minimal adverse effects. To ensure that these waters, commonly found on tribal lands in the arid southwest, receive an adequate level of protection, and to prevent the NWP Program from having more than minimal adverse impacts to the aquatic environment, all proposed impact limit waivers are denied under this certification unless EPA approves a written determination that the waiver will not exceed minimal impacts to aquatic resource functions. For some NWPs where the Corps does not include an impact limit, EPA has added an impact limit as a permit-specific condition. Some of these NWPs also include a condition that a waiver may be provided when EPA approves a written determination that the waiver will not exceed minimal impacts to aquatic resource functions. Impacts to special aquatic sites are not permitted under this certification unless EPA approves a written determination that impacts to aquatic resource functions will be minimal. "Special aquatic sites" include sanctuaries and refuges, wetlands, mud flats, vegetated shallows, coral reefs and riffle pool complexes. When EPA approval is required for a waiver, EPA will act within sixty days of receiving a complete PCN or MPCN.

03. Avoidance, Minimization, and Mitigation - To protect water quality and beneficial uses of U.S. waters on tribal lands, all projects using NWPs must avoid discharges to the maximum extent practicable, and utilize the best available and practicable means of minimizing the adverse impact of discharges that cannot be avoided. A written statement documenting measures taken to avoid and minimize temporary and permanent impacts to waters of the U.S. will be provided to EPA and the Corps with each PCN or MPCN. To the extent practicable, temporary impact sites will be returned to pre-construction contours and substrate. Where applicable, banks shall be reseeded or replanted with native vegetation. EPA shall make a written determination, within sixty days of receipt of a complete PCN or MPCN, whether compensatory mitigation measures are required to ensure the activity will have only minimal adverse effects, but no such determination is required for a project to begin work if otherwise in compliance with the NWP, this programmatic certification, and any applicable tribal or local authorities' requirements. Nevertheless, should compensatory mitigation be determined necessary by EPA, the mitigation becomes a condition of water quality certification and thus a condition of the Corps' permit. Failure to address an EPA mitigation requirement would therefore place a permittee out of compliance with their NWP and potentially subject to a range of

¹ Clean Water Act Section 401 Certification (a): <http://water.epa.gov/lawsregs/guidance/wetlands/sec401.cfm>

² NOTE: this requirement does not modify or eliminate existing Corps requirements regarding PCNs for projects proceeding on tribal lands (or elsewhere).

Corps and EPA enforcement actions. The need for post-project performance and/or mitigation monitoring and reporting (if applicable) will be determined by EPA on a case-by-case basis.

04. Prohibition on the Multiple Use of One NWP for a Single Project - Permittees may not use the same NWP multiple times (more than once) for one single and complete project at locations that do not have independent utility; to do so circumvents acreage limitations of the NWPs and may result in more than minimal adverse impacts to water quality and other ecosystem services. For example, under this certification, linear transportation projects on tribal lands must sum the impacts of each proposed crossing of individual waters of the U.S. and use that total to determine eligibility for NWP 14 (Linear Transportation Projects). If the acreage or linear foot impacts exceed the limits of the applicable NWP (or combination of applicable different NWPs), minimal adverse impacts to water quality may be exceeded and the project is not eligible for 401 certification under this programmatic action. Under these circumstances, projects must seek individual certification from EPA, and EPA may grant, grant with conditions, waive, or deny 401 certification of the project under the NWP. In the event of a denial, the NWP would not be available to the project proponent and therefore applicants may need to apply to the Corps for authorization under a different General Permit, Letter of Permission, or Individual Permit as appropriate and determined by the Corps. EPA would review these other proposed permit actions for case-by-case certification. Note that, on a case-by-case basis, EPA may waive this General Condition and allow the use of multiple NWPs if the applicant so appeals, and demonstrates in their PCN or MPCN that authorization under the NWP will result in minimal and/or completely mitigated impacts to the aquatic environment, individually and cumulatively.

05. Use of Appropriate Fill Material - To the extent practicable, local, native materials should be used as fill material. (e.g., soil, sand, or rock from the site or near the site; clean building materials or clean imported earthen fill). Inappropriate and unauthorized fill materials include, but are not limited to: tires, junked or abandoned vehicles, appliances, or other equipment; garbage; debris; oil drums or other chemically contaminated vessels; artificial turf; non-native vegetation; etc. If an applicant has any doubts or questions about the suitability of a proposed fill material, they should consult with the Corps and/or EPA prior to discharging into waters of the U.S. Such consultation may be via phone, or written letter, fax or electronic mail.

06. Dewatered Conditions - Discharges below the ordinary high water mark or within jurisdictional wetlands are not approved under this certification unless the discharge site is naturally dewatered (e.g., seasonally dry), or dewatering has been authorized by the Corps, thereby avoiding direct discharge of pollutants into the water column. If the site is artificially dewatered, permittees shall, to the extent practicable, avoid dewatering techniques that require additional temporary or permanent discharges of fill material within jurisdictional waters (e.g., coffer dams).

07. Fills Within Floodplains - Projects requiring NWP authorization for discharges of fill material within 100-year floodplains shall include in their PCN or MPCN a statement of compliance with Executive Order 11988 (Floodplain Management). However, discharges within the FEMA-mapped 100-year floodplain associated with residential and commercial development are not certified for use under the NWP program on tribal lands. The 100-year floodplain is based on hydrologic conditions prior to permit issuance.

08. Best Management Practices - Except as specified in the application, no debris, silt, sand, cement, concrete, oil or petroleum, organic material, or other construction related materials or wastes shall be allowed to enter into or be stored where it may be washed by rainfall or runoff into waters of the U.S. Silt fences, straw wattles, and other techniques shall be employed as appropriate to protect waters of the U.S. from sedimentation and other pollutants. Water used in dust suppression shall not contain contaminants that could violate surface water or aquifer standards. Permittees and their contractors shall take necessary steps to minimize channel and bank erosion within waters of the United States during and after construction. A copy of the permit conditions shall be provided to all contractors and subcontractors, and will be posted visibly at project construction sites.

09. Transportation Projects - Permittees shall implement State transportation agencies' guidelines for construction sites to protect water quality and aquatic habitat. In California, CALTRANS has guidance in the *CALTRANS Stormwater Quality Manuals and Handbooks*³; in Nevada NDOT has guidance in their *NDOT Water Quality Manuals*⁴; and in Arizona, ADOT has guidance in their *Erosion and Pollution Control Manual*⁵.

10. Inspections - The permittee shall allow EPA representatives to inspect the authorized activity and any mitigation areas at any time deemed necessary to determine compliance with the terms and conditions of the NWP verification.

11. Buffers - Unless specifically determined to be impracticable by the Corps and EPA, for NWPs 29, 39, 40, and 42, the permittee shall establish and maintain upland buffers in perpetuity between upland structures constructed as part of the project approved by the NWP and all preserved open waters, streams and wetlands, including created, restored, enhanced or preserved waters of the U.S. Buffers should be vegetated whenever practicable. Plantings in buffers should be dominated by native species, and not include any federal or state listed invasive or noxious weed species⁶. Except in unusual circumstances, as determined by the Corps and EPA, buffers shall be at least 50 feet in width from the lateral limits of the Corp's jurisdiction⁷.

12. Protected Lands - The permittee shall record the NWP verification with the Registrar of Deeds or other appropriate official charged with the responsibility for maintaining records of title of interest in real property for areas designated to be preserved as part of compensatory mitigation for authorized impacts, including any associated covenants or restrictions.

13. Impaired Water Bodies - If a proposed activity would result in dredge or fill in water bodies listed as impaired under Section 303(d) of the CWA, the PCN or MPCN must include specific measures that will be used to avoid exacerbating the impairment(s).⁸

³ <http://www.dot.ca.gov/hq/construc/stormwater/manuals.htm>

⁴ http://www.nevadadot.com/About_NDOT/NDOT_Divisions/Engineering/Hydraulics/Water_Quality_BMP_Manuals.aspx

⁵ http://www.azdot.gov/inside_adot/OES/Water_Quality/Stormwater/Manuals.asp

⁶ <http://plants.usda.gov/java/noxiousDriver>

⁷ Ordinary high water mark in non-tidal and the mean higher high water line in tidal waters

⁸ EPA Region 9 lists of impaired water bodies: <http://www.epa.gov/region9/water/tmdl/303d.html>

Specific Nationwide Permits

NWP-01 Aids to Navigation - Subject to the General Conditions (GCs) above, this NWP is hereby programmatically certified.

NWP-02 Structures in Artificial Canals - Subject to the GCs above, this NWP is hereby programmatically certified.

NWP-03 Maintenance - Subject to the GCs above, and the following permit-specific conditions, this NWP is hereby programmatically certified. "Currently serviceable structures" which may be maintained under this permit do not include undersized culverts or structures that cause or exacerbate channel incision, bank destabilization, and/or prevent fish and wildlife passage due to inadequate design or construction standards. Certification of this permit is granted only if the existing structure proposed to be maintained demonstrably preserves (via design, flow modeling or other information in the PCN) the natural functions of the affected aquatic resource when the structure is fully operational. Otherwise, an alternative permit should be utilized as appropriate (e.g., NWP 13 Bank Stabilization). Where existing bank stabilization structures are to be maintained, bioengineered methods shall be utilized to the extent practicable in lieu of "rip-rap" or other hardscape engineered materials. This permit shall not authorize the enlargement of, or increase in, the footprint of a structure within waters of the U.S., unless that enlargement consists of the replacement of existing artificial channel armoring materials (e.g., rip-rap, soil cement, etc.) with low-impact bioengineered natural channel design structures (e.g., log revetments, geotextile rolls/mats, root wads, brush mattresses, willow wattling, etc.)

NWP-04 Fish and Wildlife Harvesting, Enhancement, and Attraction Devices and Activities

Subject to the GCs above, this NWP is hereby programmatically certified.

NWP-05 Scientific Measurement Devices - Subject to the GCs above, this NWP is hereby programmatically certified.

NWP-06 Survey Activities - Subject to the GCs above, this NWP is hereby programmatically certified.

NWP-07 Outfall Structures and Associated Intake Structures - Subject to the GCs above, this NWP is hereby programmatically certified.

NWP-08 Oil and Gas Structures on the Outer Continental Shelf - Subject to the GCs above, this NWP is hereby programmatically certified.

NWP-09 Structures in Fleeting and Anchorage Areas - Subject to the GCs above, this NWP is hereby programmatically certified.

NWP-10 Mooring Buoys - Subject to the GCs above, this NWP is hereby programmatically certified.

NWP-11 Temporary Recreational Structures - Subject to the GCs above, this NWP is hereby programmatically certified.

NWP-12 Utility Line Activities - Subject to the GCs above, and the following permit-specific conditions, this NWP is hereby programmatically certified. Impacts under this permit are limited to the greater of 1/2 acre or 300 linear feet of waters of the U.S., including intermittent and ephemeral streams. Only the 300 linear foot limit may be waived by EPA upon approval, consistent with General Condition 02. *Waivers*. Under this certification, NWP 12 can only be used once for a single and complete project having independent utility. When NWP 12 is proposed for multiple locations a written determination will be provided describing independent utility of each impact location for approval by EPA, consistent with General Condition 01. *Notification*. Permittees are required to ensure that the construction of utility lines does not result in the draining of any water of the U.S., including wetlands. This may be accomplished through the use of clay blocks, bentonite, or other suitable material (as approved by EPA) to seal the trench. For utility line trenches, during construction, the permittee shall remove and stockpile, separately, the top 6 – 12 inches of topsoil. Following installation of the utility line(s), the permittee shall replace the stockpiled topsoil on top and seed the area with native vegetation.

NWP-13 Bank Stabilization - Subject to the GCs above, and the following permit-specific conditions, this NWP is hereby programmatically certified. Unless approved by EPA, consistent with General Condition 02. *Waivers*, impacts under this permit are limited to the greater of 1/2 acre or 300 linear feet of waters of the U.S., including intermittent and ephemeral streams. All bank stabilization activities under this permit shall involve either the sole use of native vegetation or other bioengineered design techniques (e.g. willow plantings, root wads, large woody debris, etc.) or a combination of hard-armoring (e.g. rock) and native vegetation or bioengineered design techniques, unless specifically determined to be impracticable by the EPA.

NWP-14 Linear Transportation Projects - Subject to the GCs above, and the following permit-specific conditions, this NWP is hereby programmatically certified. Impacts under this permit are limited to the greater of 1/2 acre or 300 linear feet of non-tidal waters of the U.S., including intermittent and ephemeral streams, and 1/3 acre or 300 linear feet of tidal waters of the U.S. NWP 14 can only be used once for a single and complete project having independent utility. When NWP 14 is proposed for multiple locations a written determination will be provided describing independent utility of each impact location for approval by EPA, consistent with General Condition 01. *Notification*. All bank stabilization activities under this permit shall involve either the sole use of native vegetation or other bioengineered design techniques (e.g. willow plantings, root wads, large woody debris, etc.) or a combination of hard-armoring (e.g. rock) and native vegetation or bioengineered design techniques, unless specifically determined to be impracticable by the EPA.

NWP-15 U.S. Coast Guard Approved Bridges - Subject to the GCs above, this NWP is hereby programmatically certified.

NWP-16 Return Water from Upland Contained Disposal Areas - Subject to the GCs above, this NWP is hereby programmatically certified.

NWP-17 Hydropower Projects - Subject to the GCs above, this NWP is hereby programmatically certified.

NWP-18 Minor Discharges - Subject to the GCs above, this NWP is hereby programmatically certified.

NWP-19 Minor Dredging - Subject to the GCs above, this NWP is hereby programmatically certified.

NWP-20 Response Operations for Oil and Hazardous Substances - Subject to the GCs above, this NWP is hereby programmatically certified.

NWP-21 Surface Coal Mining Activities - Subject to the GCs above, and the following permit-specific conditions, this NWP is hereby programmatically certified. Before an applicant may use this permit, EPA must approve a compensatory mitigation plan sufficient to ensure impacts to aquatic resource functions are minimal.

NWP-22 Removal of Vessels - Subject to the GCs above, this NWP is hereby programmatically certified.

NWP-23 Approved Categorical Exclusions - Subject to the GCs above, this NWP is hereby programmatically certified.

NWP-24 Indian Tribe or State Administered Section 404 Programs - Subject to the GCs above, this NWP is hereby programmatically certified.

NWP-25 Structural Discharges - Subject to the GCs above, this NWP is hereby programmatically certified.

NWP-26 [Reserved]

This NWP is no longer in use. No certification is necessary.

NWP-27 Aquatic Habitat Restoration, Establishment, and Enhancement Activities - Subject to the GCs above, and the following permit-specific condition, this NWP is hereby programmatically certified. Upon review of a PCN or MPCN, consistent with General Condition 01. *Notification*, EPA will approve or deny on a case-by-case basis whether the proposed project will result in a net increase in aquatic resource functions and services, consistent with the NWP. An individual certification may be required in the event EPA denies approval of a waiver for this NWP.

NWP-28 Modifications of Existing Marinas - Subject to the GCs above, this NWP is hereby programmatically certified.

NWP-29 Residential Developments - Subject to the GCs above, and the following permit-specific conditions, this NWP is hereby programmatically certified. Unless approved by EPA, consistent with General Condition 02. *Waivers*, impacts under this permit are limited to 1/4 acre of impacts to non-tidal waters of the U.S. for single family houses, and the greater of 1/2 acre or 300 linear feet of impact to waters of the U.S. for multi-unit residential developments. Under this certification, this permit will not be used to approve residential developments and their attendant features within the 100-year floodplain. The 100-year floodplain is determined based on hydrologic conditions at the time of the NWP application. Recreational facilities such as playgrounds, playing fields, and golf courses are not authorized under this certification. These projects are separate and distinct from residential developments, are not required to be included in a residential development project for it to be practicable, and their construction within waters is normally avoidable.

NWP-30 Moist Soil Management for Wildlife - Subject to the GCs above, this NWP is hereby programmatically certified.

NWP-31 Maintenance of Existing Flood Control Facilities - Subject to the GCs above, and the following permit-specific conditions, this NWP is hereby programmatically certified. Upon review of a PCN, consistent with General Condition 01. *Notification*, EPA will approve or deny on a case-by-case basis whether the proposed project will result in minimal impacts to waters of the U.S. for projects that include removal of levee vegetation.

NWP-32 Completed Enforcement Actions - Subject to the GCs above, this NWP is hereby programmatically certified.

NWP-33 Temporary Construction, Access, and Dewatering - Subject to the GCs above, this NWP is hereby programmatically certified.

NWP-34 Cranberry Production Activities - Subject to the GCs above, this NWP is hereby programmatically certified.

NWP-35 Maintenance Dredging of Existing Basins - Subject to the GCs above, this NWP is hereby programmatically certified.

NWP-36 Boat Ramps - Subject to the GCs above, and the following permit-specific conditions, this NWP is hereby programmatically certified. Unless approved by EPA, consistent with General Condition 02. *Waivers*, impacts under this permit are limited to 50 cubic yards of fill and ramps that are 20 feet wide or less.

NWP-37 Emergency Watershed Protection and Rehabilitation - Subject to the GCs above, this NWP is hereby programmatically certified.

NWP-38 Cleanup of Hazardous and Toxic Waste - Subject to the GCs above, this NWP is hereby programmatically certified.

NWP-39 Commercial and Institutional Developments - Subject to the GCs above, and the following permit-specific conditions, this NWP is hereby programmatically certified. Under this certification, this permit will not be used to approve commercial and institutional developments and their attendant features within the 100-year floodplain. The 100-year floodplain is determined based on hydrologic conditions at the time of the NWP application. Recreational facilities such as playgrounds, playing fields, and golf courses are not authorized under this certification. These projects are separate and distinct from commercial and institutional development, are not required to be included in such developments to be practicable, and their construction within waters is normally avoidable.

NWP-40 Agricultural Activities - Subject to the GCs above, and the following permit-specific conditions, this NWP is hereby programmatically certified. Construction of farm ponds under this certification is limited to those that do not qualify for the Clean Water Act section 404(f)(1)(C) exemption because of the recapture provision at section 404(f)(2). Under this certification, no discharges are authorized which would impact hydrological connectivity between jurisdictional waters to such an extent as to convert waters of the U.S. to uplands, or otherwise isolate waters and eliminate federal regulatory jurisdiction. Unless approved by EPA, consistent with General Condition 02. *Waivers*, impacts under this permit are limited to the greater of 1/2 acre or 300 linear feet of impacts to non-tidal waters of the U.S., including intermittent and ephemeral streams.

NWP-41 Reshaping Existing Drainage Ditches - Subject to the GCs above, and the following permit-specific conditions, this NWP is hereby programmatically certified. Unless approved by EPA, consistent with General Condition 02. *Waivers*, impacts under this permit are limited to the greater of 1/2 acre or 300 linear feet of impacts to non-tidal waters of the U.S., including intermittent and ephemeral streams. All sidecast materials from excavation must be stored and/or disposed of within non-jurisdictional uplands under this certification. A statement must be included in the notification as to how the applicant's activities will improve water quality. Under this certification, no discharges are authorized which would impact hydrological connectivity between jurisdictional waters to such an extent as to convert waters of the U.S. to uplands, or otherwise isolate waters to eliminate federal regulatory jurisdiction.

NWP-42 Recreational Facilities - Subject to the GCs above, this NWP is hereby programmatically certified.

NWP-43 Stormwater Management Facilities - Use of this NWP is not covered by this programmatic certification, and prospective users on tribal lands must seek individual project certification from EPA in all cases. NWP authorization of constructing stormwater facilities within waters of the U.S. discourages applicants from using practicable construction options that locate stormwater retention and detention facilities "off line" from streams. For example, retention facilities are often built as sediment (or debris) basins within a stream. This practice includes constructing a dam in the stream, excavating out a basin, and regular sediment removal to maintain the structure. These facilities cause considerable and unnecessary damages to stream functions as retention facilities can be located "off line" by constructing a high flow diversion channel above the ordinary high water mark. If applicants can continue to use the traditional, more damaging practices that are sanctioned by this NWP, there is no incentive for these management practices to improve. We do not believe NWP-43 for new facilities complies with the CWA Section 404(b)(1) Guidelines. CWA section 401 certification for this NWP is denied without prejudice. Applicants for projects on tribal lands must apply to EPA for individual certification if this NWP is proposed to be used. Applicants can apply for an individual certification by providing the same content required in a MPCN described in General Condition 01. *Notification*, of this certification.

NWP-44 Mining Activities - Subject to the GCs above, and the following permit-specific conditions, this NWP is hereby programmatically certified. Applicants must ensure that mining activities (e.g., aggregate mining) approved by this NWP will not cause upstream head cutting or downstream incision. Notification to EPA shall include a narrative description and design drawing, when applicable, of any measure that will be implemented to comply with the condition. When used for in-stream aggregate mining activities, compensatory mitigation is likely to be required due to extensive indirect impacts and temporal losses typical of this type of impact.

NWP-45 Repair of Uplands Damaged by Discrete Events - Subject to the GCs above, and the following permit-specific conditions, this NWP is hereby programmatically certified.

Unless approved by EPA, consistent with General Condition 02. *Waivers*, impacts under this permit are limited to the greater of 1/2 acre or 300 linear feet of impacts to non-tidal waters of the U.S., including intermittent and ephemeral streams.

NWP-46 Discharges in Ditches

Subject to the GCs above, and the following permit-specific conditions, this NWP is hereby programmatically certified.

Unless approved by EPA, consistent with General Condition 02. *Waivers*, impacts under this permit are limited to the greater of 1/2 acre or 300 linear feet of impacts to non-tidal waters of the U.S., including intermittent and ephemeral streams.

NWP-47 [Reserved] - This NWP is no longer in use. No certification is necessary.

NWP-48 Commercial Shellfish Aquaculture Activities - Subject to the GCs above, and the following permit-specific conditions, this NWP is hereby programmatically certified. Under this certification, impacts to submerged aquatic vegetation are prohibited, consistent with NWP 19. *Minor Dredging*, and NWP 36. *Boat Ramps*.

NWP-49 Coal Remining Activities - Subject to the GCs above, and the following permit-specific conditions, this NWP is hereby programmatically certified. Unless approved by EPA, consistent with General Condition 02. *Waivers*, impacts under this permit are limited to the greater of 1/2 acre or 300 linear feet of impacts to non-tidal waters of the U.S., including intermittent and ephemeral streams. Applicants must provide information in the PCN illustrating that activities authorized under NWP-49 will result in a net increase in aquatic resource functions.

NWP-50 Underground Coal Mining Activities - Subject to the GCs above, this NWP is hereby programmatically certified.

NWP-51 Land-Based Renewable Energy Generation Facilities - Subject to the GCs above, this NWP is hereby programmatically certified.

NWP-52 Water-Based Renewable Energy Generation Pilot Projects - Subject to the GCs above, this NWP is hereby programmatically certified.

Appendix C – Continuing Section 106 Consultation Responses and Concurrence Letters

Tremayne, Jennifer

From: Linda Davis <LDavis2@azdot.gov>
Sent: Wednesday, July 06, 2016 7:47 AM
To: Yedlin, Rebecca (FHWA); laurene.montero@phoenix.gov; april.carroll@phoenix.gov
Subject: FW: NH-202-D(ADY) H5764 Chandler Boulevard Extension

FYI - from SRP-MIC regarding Chandler Boulevard.

Linda

From: Garcia-Lewis, Angela [mailto:Angela.Garcia-Lewis@SRPMIC-nsn.gov]
Sent: Tuesday, July 05, 2016 4:48 PM
To: Linda Davis
Subject: RE: NH-202-D(ADY) H5764 Chandler Boulevard Extension

Hi Linda,
As usual SRP-MIC defers consultation to the GRIC.

From: Linda Davis [<mailto:LDavis2@azdot.gov>]
Sent: Wednesday, June 22, 2016 7:35 AM
To: Garcia-Lewis, Angela <Angela.Garcia-Lewis@SRPMIC-nsn.gov>; Martinez, Martha <Martha.Martinez@SRPMIC-nsn.gov>; Anton, Shane <Shane.Anton@SRPMIC-nsn.gov>
Cc: laurene.montero@phoenix.gov
Subject: NH-202-D(ADY) H5764 Chandler Boulevard Extension

Good Morning,

On behalf of the City of Phoenix, please find attached Section 106 consultation and enclosures for the Chandler Boulevard Extension.

Contact me or Laurene Montero (copied on this email) if you need additional information.

Thank-you,

Linda

Linda Davis
Historic Preservation Team Leader
Environmental Planning Group
Arizona Department of Transportation
1611 W. Jackson Street, MD EM02
Phoenix, Arizona 85007
(602)712-8636 (voice)
(602)712-3066 (fax)

 Please consider the environment before printing this email.
REDUCE, REUSE, RECYCLE, RESPECT.

Tremayne, Jennifer

From: Linda Davis <LDavis2@azdot.gov>
Sent: Wednesday, June 22, 2016 4:41 PM
To: Yedlin, Rebecca (FHWA)
Subject: FW: ATTN: Jesse Rice NH-202-D(ADY) H5764 Chandler Boulevard Extension (UNCLASSIFIED)

FYI -

-----Original Message-----

From: Rice, Jesse M SPL [mailto:Jesse.M.Rice@usace.army.mil]
Sent: Wednesday, June 22, 2016 2:54 PM
To: Linda Davis
Cc: laurene.montero@phoenix.gov; Julia Manfredi
Subject: FW: ATTN: Jesse Rice NH-202-D(ADY) H5764 Chandler Boulevard Extension (UNCLASSIFIED)

CLASSIFICATION: UNCLASSIFIED

Hi Linda,

I wanted to follow up with you on the subject concurrence request. As you know, I am new to the project so I am still trying to get up to speed with it. Anyway, it appears that the Corps is not participating in the Programmatic Agreement and that the change is occurring in an area outside of any jurisdiction the Corps may have. As such, I just wanted to follow up to let you know that we received the letter and will file it for the record but that we will not be concurring or sending an official response.

Please let me know if you have any questions or if you feel this is in error.

Thank you,

Jesse Rice
Regulatory Project Manager
U.S. Army Corps of Engineers
Los Angeles District
Regulatory Division, Arizona Branch
3636 N. Central Avenue Suite 900
Phoenix, AZ 85012-1939
Office: 602-230-6854
Cell: 602-908-8028

Assist us in better serving you! Please complete our brief customer survey, located at the following link:
http://corpsmapu.usace.army.mil/cm_apex/f?p=regulatory_survey

-----Original Message-----

From: Diebolt, Sallie SPL
Sent: Wednesday, June 22, 2016 8:18 AM
To: Rice, Jesse M SPL <Jesse.M.Rice@usace.army.mil>
Cc: Tucker, Kathleen A SPL <Kathleen.A.Tucker@usace.army.mil>
Subject: FW: ATTN: Jesse Rice NH-202-D(ADY) H5764 Chandler Boulevard Extension

FYI.

-----Original Message-----

From: Linda Davis [mailto:LDavis2@azdot.gov]

Sent: Wednesday, June 22, 2016 7:42 AM

To: Diebolt, Sallie SPL <Sallie.Diebolt@usace.army.mil>

Cc: laurene.montero@phoenix.gov

Subject: [EXTERNAL] ATTN: Jesse Rice NH-202-D(ADY) H5764 Chandler Boulevard Extension

Good Morning,

On behalf of the City of Phoenix, please find attached Section 106 consultation and enclosures for the Chandler Boulevard Extension.

Contact me or Laurene Montero (copied on this email) if you need additional information.

Thank-you,

Linda

Linda Davis

Historic Preservation Team Leader

Environmental Planning Group

Arizona Department of Transportation

1611 W. Jackson Street, MD EM02

Phoenix, Arizona 85007

(602)712-8636 (voice)

(602)712-3066 (fax)

P Please consider the environment before printing this email.

REDUCE, REUSE, RECYCLE, RESPECT.

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CLASSIFICATION: UNCLASSIFIED



ARIZONA DIVISION

4000 North Central Avenue
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Phoenix, Arizona 85012-3500
Phone: (602) 379-3646
Fax: (602) 382-8998
<http://www.fhwa.dot.gov/azdiv/index.htm>

June 21, 2016

In Reply Refer To:

NH-202-D(ADY)
TRACS No. 202L MA 054 H5764 01C
South Mountain Freeway, Chandler Boulevard Extension
Continuing consultation – additions to APE

Mr. Robert B. Stevens, Environmental Program Manager
Project and Planning Management
Flood Control District of Maricopa County
2801 West Durango Street
Phoenix, Arizona 85009

Dear Mr. Stevens:

The City of Phoenix is planning construction of the Chandler Boulevard Extension project in Ahwatukee, in association with the South Mountain Freeway project. Because the projects are interrelated the Federal Highway Administration (FHWA) and the Arizona Department of Transportation (ADOT), in coordination with the City of Phoenix (City), are conducting a reevaluation of the South Mountain Freeway, Interstate 10 (I-10, Papago Freeway) to I-10 (Maricopa Freeway) Final Environmental Impact Statement (FEIS) and Record of Decision (ROD) per 23 Code of Federal Regulations (CFR) § 771.129 to address modifications to the Chandler Boulevard: 27th Avenue to 19th Avenue project footprint. Since the approval of the ROD on March 5, 2015, additional sections of Chandler Boulevard at each end of the project have been identified that require minor alterations to connect with the new alignment.

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Consulting parties for this undertaking include FHWA, ADOT, City, the State Historic Preservation Office (SHPO), Arizona State Land Department, the Arizona State Museum, the U.S. Army Corps of Engineers, the Bureau of Land Management, the Bureau of Indian Affairs, the Bureau of Reclamation, the Western Area Power Administration, the Salt River Project, the Flood Control District of Maricopa County, the Maricopa County Department of Transportation, the Roosevelt Irrigation District, the City of Avondale, the City of Chandler, the City of Glendale, the City of Tolleson, the Ak-Chin Indian Community, the Chemehuevi Tribe, the Colorado River Indian Tribes, the Fort McDowell Yavapai Nation, the Fort Mojave Tribe, the Fort Yuma-Quechan Tribe, the Gila River Indian Community, the Havasupai Tribe, the Hopi Tribe, the Hualapai Tribe, the Kaibab-Paiute Tribe, the Navajo Nation, the Pascua Yaqui Tribe, the Pueblo of Zuni, the Salt River Pima-Maricopa Indian Community, the San Juan Southern Paiute, the Tohono O'odham Nation, the Tonto Apache Tribe, and the Yavapai-Apache Nation.

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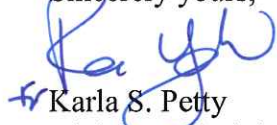
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Sincerely yours,


Karla S. Petty
Division Administrator


Signature for FCDMC Concurrence
NH-202-D(ADY)

6-30-2016
Date

Enclosures

cc:

RYedlin

JElsner

LMontero

LDavis (EM02)

RYedlin:cdm



U.S. Department
of Transportation

Federal Highway
Administration

ARIZONA DIVISION

4000 North Central Avenue
Suite 1500
Phoenix, Arizona 85012-3500
Phone: (602) 379-3646
Fax: (602) 382-8998
<http://www.fhwa.dot.gov/azdiv/index.htm>



June 21, 2016

In Reply Refer To:

NH-202-D(ADY)
TRACS No. 202L MA 054 H5764 01C
South Mountain Freeway, Chandler Boulevard Extension
Continuing consultation – additions to APE

Mr. Matthew Behrend, Archaeology Cultural Affairs Specialist
Arizona State Land Department
1616 West Adams Street
Phoenix, Arizona 85007

Dear Mr. Behrend:

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Consulting parties for this undertaking include FHWA, ADOT, City, the State Historic Preservation Office (SHPO), Arizona State Land Department, the Arizona State Museum, the U.S. Army Corps of Engineers, the Bureau of Land Management, the Bureau of Indian Affairs, the Bureau of Reclamation, the Western Area Power Administration, the Salt River Project, the Flood Control District of Maricopa County, the Maricopa County Department of Transportation, the Roosevelt Irrigation District, the City of Avondale, the City of Chandler, the City of Glendale, the City of Tolleson, the Ak-Chin Indian Community, the Chemehuevi Tribe, the Colorado River Indian Tribes, the Fort McDowell Yavapai Nation, the Fort Mojave Tribe, the Fort Yuma-Quechan Tribe, the Gila River Indian Community, the Havasupai Tribe, the Hopi Tribe, the Hualapai Tribe, the Kaibab-Paiute Tribe, the Navajo Nation, the Pascua Yaqui Tribe, the Pueblo of Zuni, the Salt River Pima-Maricopa Indian Community, the San Juan Southern Paiute, the Tohono O'odham Nation, the Tonto Apache Tribe, and the Yavapai-Apache Nation.

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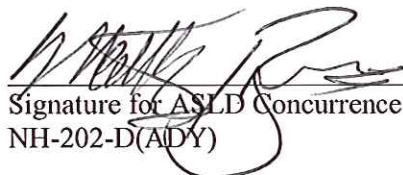
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Sincerely yours,



Karla S. Petty
Division Administrator



Signature for ASLD Concurrence
NH-202-D(ADY)

6/28/2011
Date

Enclosures

cc:

Mr. Ruben Ojeda, Manager, Right-of-way Section (same as addressee)

RYedlin

LMontero

JElsner

LDavis (EM02)

RYedlin:cdm

ecc:

Matthew Behrend, mbehrend@azland.gov (with enclosures)

April Sewequaptewa-Tutt, asewequaptewa-tutt@azland.gov (with enclosures)

Crystal Carrancho, ccarrancho@azland.gov (with enclosures)

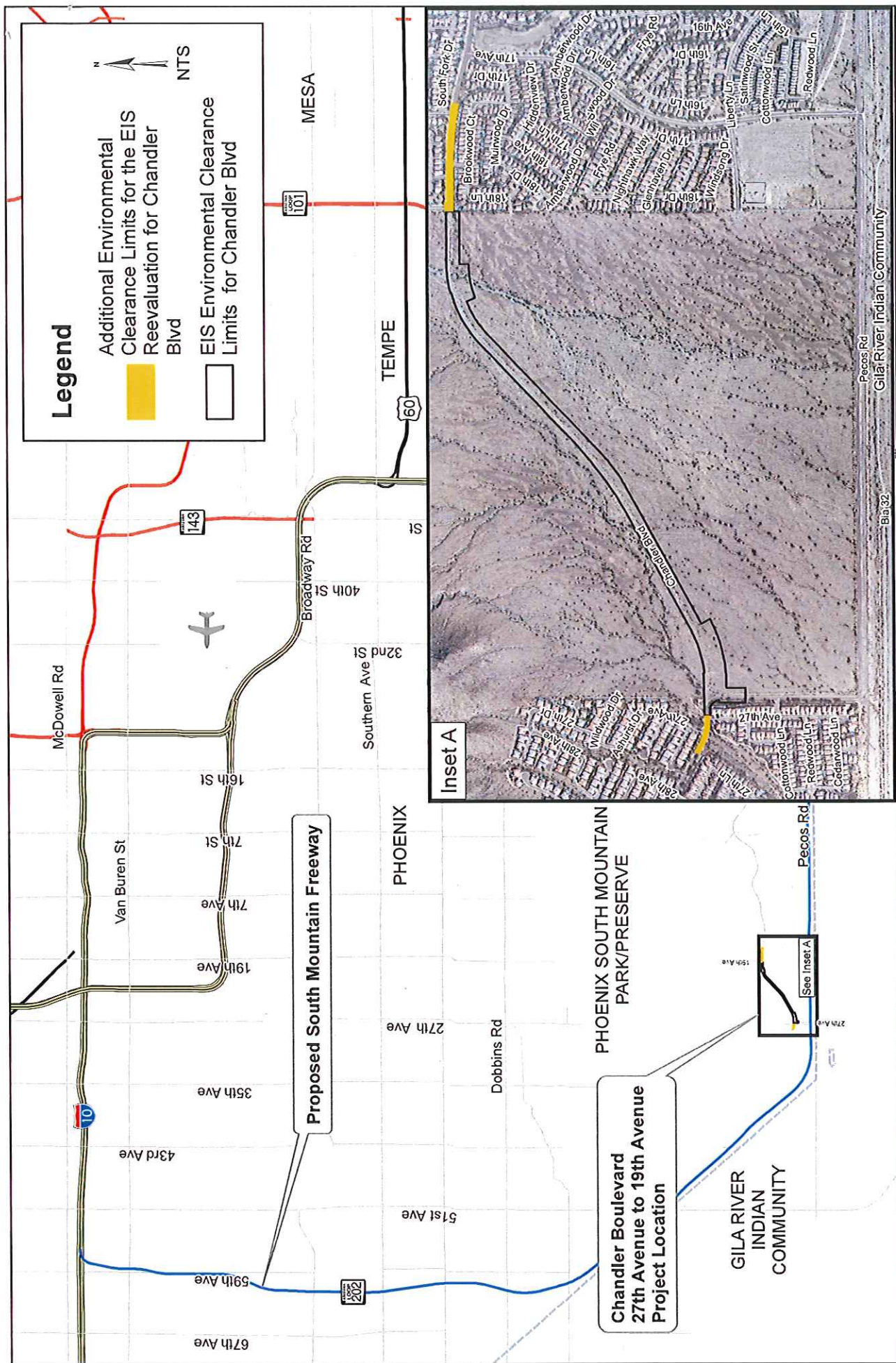


FIGURE 1



U.S. Department
of Transportation
**Federal Highway
Administration**

SHPO - 2003-1890 (131678)
ARIZONA STATE HISTORIC PRESERVATION OFFICE
ARIZONA DIVISION

4000 North Central Avenue
Suite 1500
Phoenix, Arizona 85012-3500
Phone: (602) 379-3646
Fax: (602) 382-8998
<http://www.fhwa.dot.gov/azdiv/index.htm>

June 21, 2016

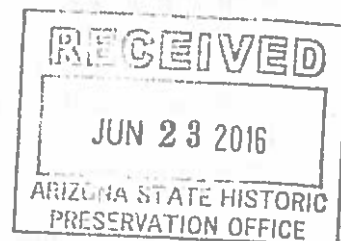
In Reply Refer To:

NH-202-D(ADY)
TRACS No. 202L MA 054 H5764 01C
South Mountain Freeway, Chandler Boulevard Extension
Continuing consultation – additions to APE

Dr. David Jacobs, Compliance Specialist/Archaeologist
State Historic Preservation Office
1100 West Washington Street
Phoenix, Arizona 85007

SHPO-2003-1890

Dear Dr. Jacobs:



The City of Phoenix is planning construction of the Chandler Boulevard Extension project in Ahwatukee, in association with the South Mountain Freeway project. Because the projects are interrelated the Federal Highway Administration (FHWA) and the Arizona Department of Transportation (ADOT), in coordination with the City of Phoenix (City), are conducting a reevaluation of the South Mountain Freeway, Interstate 10 (I-10, Papago Freeway) to I-10 (Maricopa Freeway) Final Environmental Impact Statement (FEIS) and Record of Decision (ROD) per 23 Code of Federal Regulations (CFR) § 771.129 to address modifications to the Chandler Boulevard: 27th Avenue to 19th Avenue project footprint. Since the approval of the ROD on March 5, 2015, additional sections of Chandler Boulevard at each end of the project have been identified that require minor alterations to connect with the new alignment.

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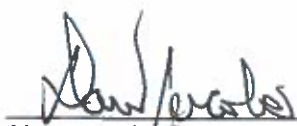
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Sincerely yours,



Karla S. Petty
Division Administrator



Signature for SHPO Concurrence
NH-202-D(ADY)

24 JUNE 16

Date

Enclosures

cc:
RYedlin
LMontero
JElsner
LDavis (EM02)
RYedlin:cdm

cc: Linda Davis, ADOT



U.S. Department
of Transportation
**Federal Highway
Administration**

ARIZONA DIVISION

4000 North Central Avenue
Suite 1500
Phoenix, Arizona 85012-3500
Phone: (602) 379-3646
Fax: (602) 382-8998
<http://www.fhwa.dot.gov/azdiv/index.htm>

June 21, 2016

In Reply Refer To:

NH-202-D(ADY)
TRACS No. 202L MA 054 H5764 01C
South Mountain Freeway, Chandler Boulevard Extension
Continuing consultation – additions to APE

Ms. Linda Marianito, Environmental Manager
Western Area Power Administration
615 South 43rd Avenue
Phoenix, Arizona 85009

Dear Ms. Marianito:

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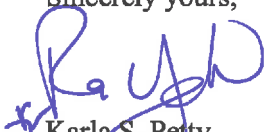
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Sincerely yours,


Karla S. Petty
Division Administrator

JUN 30 2016


Signature for Western Area Power Administration
Concurrence
NH-202-D(ADY)

6-27-16
Date

Enclosures

cc:

Mr. Sean Berry, Regional Preservation Official/Archaeologist, P.O. Box 6457, Phoenix, Arizona, 85005
(with enclosures)

RYedlin

JElsner

LMontero

LDavis (EM02)

RYedlin:cdm



U.S. Department
of Transportation
**Federal Highway
Administration**

ARIZONA DIVISION

4000 North Central Avenue
Suite 1500
Phoenix, Arizona 85012-3500
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June 21, 2016

In Reply Refer To:

NH-202-D(ADY)
TRACS No. 202L MA 054 H5764 01C
South Mountain Freeway, Chandler Boulevard Extension
Continuing consultation – additions to APE

Mr. Leigh Kuwanwisiwma, Director
Cultural Preservation Office
Hopi Tribe
P.O. Box 123
Kykotsmovi, Arizona 86039

Dear Mr. Kuwanwisiwma:

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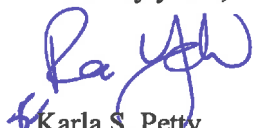
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Sincerely yours,


 Karla S. Petty
 Division Administrator

JUN 30 2016


 Signature for Hopi Tribe Concurrence
 NH-202-D(ADY)

Date

6-29-16

Enclosures

cc:
 RYedlin
 JElsner
 LMontero
 LDavis (EM02)
 RYedlin:cdm



U.S. Department
of Transportation
**Federal Highway
Administration**

ARIZONA DIVISION

4000 North Central Avenue
Suite 1500
Phoenix, Arizona 85012-3500
Phone: (602) 379-3646
Fax: (602) 382-8998
<http://www.fhwa.dot.gov/azdiv/index.htm>

June 21, 2016

In Reply Refer To:

NH-202-D(ADY)
TRACS No. 202L MA 054 H5764 01C
South Mountain Freeway, Chandler Boulevard Extension
Continuing consultation – additions to APE

Ms. Laurene Montero, Archaeologist
City of Phoenix
4619 East Washington
Phoenix, Arizona 85034

Dear Ms. Montero:

The City of Phoenix is planning construction of the Chandler Boulevard Extension project in Ahwatukee, in association with the South Mountain Freeway project. Because the projects are interrelated the Federal Highway Administration (FHWA) and the Arizona Department of Transportation (ADOT), in coordination with the City of Phoenix (City), are conducting a reevaluation of the South Mountain Freeway, Interstate 10 (I-10, Papago Freeway) to I-10 (Maricopa Freeway) Final Environmental Impact Statement (FEIS) and Record of Decision (ROD) per 23 Code of Federal Regulations (CFR) § 771.129 to address modifications to the Chandler Boulevard: 27th Avenue to 19th Avenue project footprint. Since the approval of the ROD on March 5, 2015, additional sections of Chandler Boulevard at each end of the project have been identified that require minor alterations to connect with the new alignment.

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Consulting parties for this undertaking include FHWA, ADOT, City, the State Historic Preservation Office (SHPO), Arizona State Land Department, the Arizona State Museum, the U.S. Army Corps of Engineers, the Bureau of Land Management, the Bureau of Indian Affairs, the Bureau of Reclamation, the Western Area Power Administration, the Salt River Project, the Flood Control District of Maricopa County, the Maricopa County Department of Transportation, the Roosevelt Irrigation District, the City of Avondale, the City of Chandler, the City of Glendale, the City of Tolleson, the Ak-Chin Indian Community, the Chemehuevi Tribe, the Colorado River Indian Tribes, the Fort McDowell Yavapai Nation, the Fort Mojave Tribe, the Fort Yuma-Quechan Tribe, the Gila River Indian Community, the Havasupai Tribe, the Hopi Tribe, the Hualapai Tribe, the Kaibab-Paiute Tribe, the Navajo Nation, the Pascua Yaqui Tribe, the Pueblo of Zuni, the Salt River Pima-Maricopa Indian Community, the San Juan Southern Paiute, the Tohono O'odham Nation, the Tonto Apache Tribe, and the Yavapai-Apache Nation.

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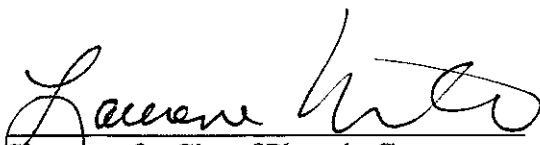
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Sincerely yours,



Karla S. Petty
Division Administrator



Signature for City of Phoenix Concurrence
NH-202-D(ADY)

8/2/2016
Date

Enclosures

cc:

RYedlin

JElsner

LDavis (EM02)

RYedlin:cdm



U.S. Department
of Transportation
**Federal Highway
Administration**

ARIZONA DIVISION

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Suite 1500
Phoenix, Arizona 85012-3500
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June 21, 2016

In Reply Refer To:

NH-202-D(ADY)
TRACS No. 202L MA 054 H5764 01C
South Mountain Freeway, Chandler Boulevard Extension
Continuing consultation – additions to APE

Ms. Jodey Elsner, Historian
City of Phoenix, Historic Preservation Office
200 West Washington Street, 3rd floor
Phoenix, Arizona 85003

Dear Ms. Elsner:

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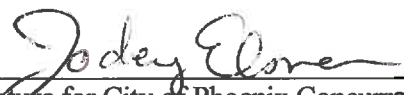
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Sincerely yours,



Karla S. Petty
Division Administrator

JUL 18 2016


Signature for City of Phoenix Concurrence
NH-202-D(ADY)

7-08-2016
Date

Enclosures

cc:

Ms. Michelle Dodds, CLG Contact, Historic Preservation Office (same as addressee)
RYedlin
JElsner
LMontero
LDavis (EM02)
RYedlin:cdm



ARIZONA DIVISION

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June 21, 2016

In Reply Refer To:

NH-202-D(ADY)
TRACS No. 202L MA 054 H5764 01C
South Mountain Freeway, Chandler Boulevard Extension
Continuing consultation – additions to APE

Mr. Jon M. Froke, AICP, Historic Preservation Officer
City of Glendale
5850 West Glendale Avenue, #212
Glendale, Arizona 85301

Dear Ms. Froke:

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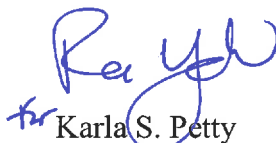
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Sincerely yours,


for Karla S. Petty
Division Administrator


Signature for City of Glendale Concurrence
NH-202-D(ADY)

07.12.16
Date

Enclosures

cc:

RYedlin

JElsner

LMontero

LDavis (EM02)

RYedlin:cdm

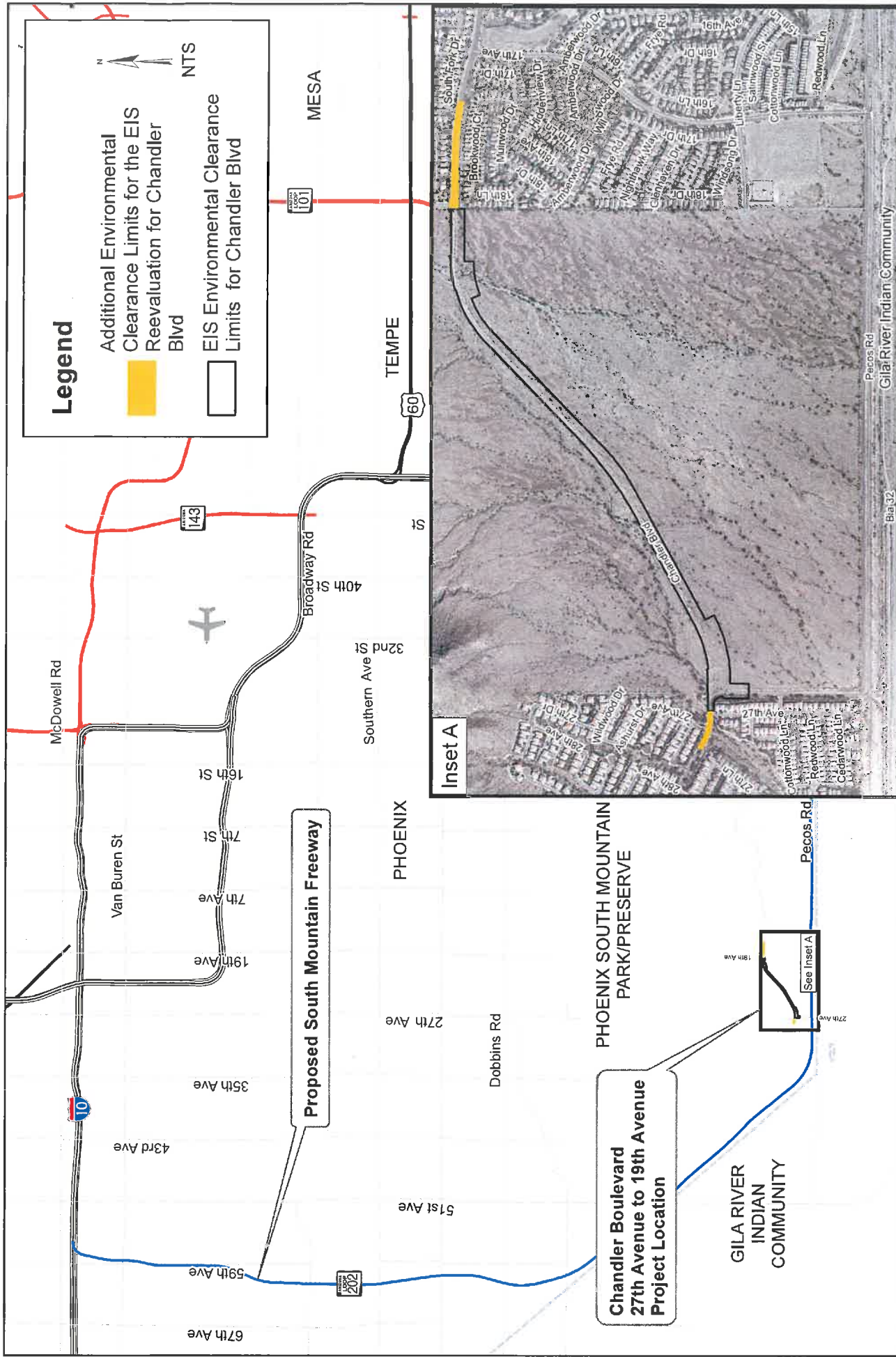


FIGURE 1

CHANDLER BOULEVARD
27TH AVENUE TO 19TH AVENUE
ST85100367
VICINITY MAP



ARIZONA DIVISION

4000 North Central Avenue
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June 21, 2016

In Reply Refer To:

NH-202-D(ADY)
TRACS No. 202L MA 054 H5764 01C
South Mountain Freeway, Chandler Boulevard Extension
Continuing consultation – additions to APE

Ms. Marsha Reed, Acting City Manager
City of Chandler
Mail Stop 605 / P.O. Box 4008
Chandler, Arizona 85244-4008

Dear Ms. Reed:

The City of Phoenix is planning construction of the Chandler Boulevard Extension project in Ahwatukee, in association with the South Mountain Freeway project. Because the projects are interrelated the Federal Highway Administration (FHWA) and the Arizona Department of Transportation (ADOT), in coordination with the City of Phoenix (City), are conducting a reevaluation of the South Mountain Freeway, Interstate 10 (I-10, Papago Freeway) to I-10 (Maricopa Freeway) Final Environmental Impact Statement (FEIS) and Record of Decision (ROD) per 23 Code of Federal Regulations (CFR) § 771.129 to address modifications to the Chandler Boulevard: 27th Avenue to 19th Avenue project footprint. Since the approval of the ROD on March 5, 2015, additional sections of Chandler Boulevard at each end of the project have been identified that require minor alterations to connect with the new alignment.

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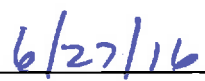
Sincerely yours,



Karla S. Petty
Division Administrator

JUN 29 2016


Signature for City of Chandler Concurrence
NH-202-D(ADY)


Date

Enclosures

cc:
RYedlin
JElsner
LMontero
LDavis (EM02)



U.S. Department
of Transportation
**Federal Highway
Administration**

ARIZONA DIVISION

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June 21, 2016

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TRACS No. 202L MA 054 H5764 01C
South Mountain Freeway, Chandler Boulevard Extension
Continuing consultation – additions to APE

Ms. Gina Montes, Assistant City Manager
City of Avondale
11465 West Civic Center Drive
Avondale, Arizona 85323

Dear Ms. Montes:

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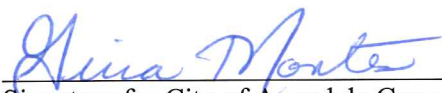
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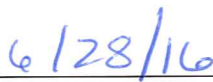
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Sincerely yours,


Karla S. Petty
Division Administrator


Signature for City of Avondale Concurrence
NH-202-D(ADY)


Date

Enclosures

cc:

David Janover, City Engineer (with enclosures) (same as addressee)

Tracy Stevens, Planning and Development Services Director (with enclosures) (same as addressee)

RYedlin

JElsner

LMontero

LDavis (EM02)

RYedlin:cdm

Appendix D – Preliminary Initial Site Assessment (PISA) Approved 06/23/16

Preliminary Initial Site Assessment

Chandler Boulevard: 27th Avenue to 19th Avenue

Approved

Ed Green

23 Jun 16

**NH-202-D(ADY)
202L MA 054 H5764 01D
ST85100367**



No additional assessment for
Hazardous Material is recommended
under the current project scope.

**June 22, 2016
Submittal Number 1**

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Preliminary Initial Site Assessment
FOR
Chandler Boulevard: 27th Avenue to 19th Avenue

**NH-202-D(ADY)
202L MA 054 H5764 01D
ST85100367**

Prepared for:

City of Phoenix
Street Transportation Department
200 W. Washington St., 5th floor
Phoenix, AZ 85003

Prepared by:

Kimley-Horn and Associates, Inc.
7740 N. 16th Street, Suite 300
Phoenix, AZ 85020
Kimley-Horn Project No. 191784003

June 22, 2016

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Preliminary Initial Site Assessment (PISA)				
Federal Project No. NH-202-D(ADY) ADOT Project No. 202L MA 054 H5764 01D City of Phoenix Project No. ST85100367			Project Name: Chandler Boulevard: 27th Avenue to 19th Avenue	
Section I: Site Location Information				
Assessor Parcel No.: N/A, City of Phoenix (City) right-of-way (ROW) and City easement			ADOT Parcel No.: N/A	
<u>Address/Route & Milepost</u> <p>The City is the sponsor of the Chandler Boulevard project which is located within the City's limits that will connect Chandler Boulevard from 19th Avenue to 27th Avenue. Construction of the Chandler Boulevard roadway project was included in the Selected Alternative for the South Mountain Freeway Final Environmental Impact Statement (FEIS) and Record of Decision (ROD). Lengthening the project limits for the construction of the Chandler Boulevard roadway was identified during the design process due to the need to perform restriping of the existing roadway sections tying into the project at both ends (referred to as the additional environmental clearance limits).</p> <p>This PISA was conducted to assess potential hazardous materials concerns for the additional environmental clearance limits for the Chandler Boulevard project that have been identified since the approval of the ROD on March 5, 2015. The additional clearance limits consist of approximately 2.7 acres of additional area within City ROW and City easement, but beyond the FEIS footprint for Chandler Boulevard, are required to allow for tying in to the existing pavement on Shaughnessy Road on the west end of the project (approximately 410 feet in length by 60 feet in width) and Chandler Boulevard at the east end of the project (approximately 1,135 feet in length by 85 feet in width). The only improvements that will occur in these areas are tying into existing pavement, adding a new curb ramp, microsealing existing pavement, striping, and signage all of which are located within existing roadway ROW and easement. The project is within City ROW and easement. No new ROW or temporary construction easements (TCEs) will be required for the additional clearance limits.</p>				
<u>Township, Range, Section</u>				
Township 1 South, Range 2 East, Section 35 and Township 1 South, Range 3 East, Section 31				
<u>Location</u>				
Latitude/Longitude (Decimal Degrees)				
Shaughnessy Road Segment: 33.295747/-112.119135 (west), 33.295539/-112.117821 (east) Chandler Blvd. Segment: 33.303074/-112.100491 (west), 33.302872/-112.096657 (east)				
<u>Site Characteristics: Past Land Use</u>				
NOTE: Historical aerial photograph review was not conducted as part of this PISA.				
Agriculture: N/A	Residential: X	Commercial: N/A	Industrial: N/A	Natural: N/A
Vehicle Maintenance: N/A	Chemical Storage: N/A	UST System: N/A		
Septic System: N/A	Water/Dry Well: N/A		Pesticide/Herbicide: N/A	
Other:	None			
Section II: Site Surface Conditions				
The project area consists of roadway, curb and gutter, sidewalk, road signage, and landscaping.				
<u>Dimensions:</u>	Length: Shaughnessy Road (approximately 410 feet		Area: 2.7 AC	

	in length by 60 feet in width) and Chandler Boulevard (approximately 1,135 feet in length by 85 feet in width)		
Topography:	The project area is approximately 1,280 feet above mean sea level (AMSL) at the northeastern project limits and 1,120 feet AMSL at the southwestern project limits. The project area slopes/drains to the southwest.		
Geology:	The following soils occur within the project area: Antho-Carrizo complex, 0 to 1 percent slopes; Ebon gravelly loam, 0 to 8 percent slopes; and Torrifluents. ¹ Information from the Arizona Department of Water Resources (ADWR) website was reviewed for water wells located in the vicinity of the project area. According to well registration records, groundwater depth is greater than 50 feet below ground surface in the project area. ² However, groundwater levels can fluctuate due to seasonal variations, groundwater withdrawal or injection, and other factors.		
Vegetation:	There is no protected native vegetation in the additional clearance limits. Landscaped vegetation consists of shrubs, trees and groundcover. No stained or stressed vegetation was observed during field reconnaissance.		
Structures/ Improvements:	Structures and improvements associated with the roadway are present within the project area and include: roadway, curb and gutter, sidewalk, and road signage.		
Utilities:	The existing utilities within the roadway alignment include 12-inch and 48-inch water lines, and a joint trench for Salt River Project (SRP), Cox Communications, and CenturyLink.		
Section III: <u>Results of Database Review</u>			
No concerns on project: X Concerns on project: None from database review (Complete Section IV)			
Kimley-Horn reviewed the Arizona Department of Environmental Quality (ADEQ) eMaps website to conduct a search of regulated facilities within and in the immediate vicinity of the project area. ³ Information provided by ADEQ is conveyed as reported and Kimley-Horn assumes no responsibility for the inaccuracies of the data or the various local, state, and federal databases from which ADEQ compiles data.			
Kimley-Horn’s review of the referenced databases also considered the potential or likelihood of contamination from adjoining and nearby sites. To evaluate which of the adjoining and nearby sites identified on the ADEQ eMaps website present an environmental risk to the subject property, Kimley-Horn considered the following criteria:			
The type of database on which the adjoining/nearby property is identified.			
<ul style="list-style-type: none">• The topographic position of the property relative to the subject property.• The direction and distance of the identified facility from the subject property.• Local soil conditions in the subject property area.• The known and/or inferred groundwater flow direction and depth in the subject property area.			

¹ U.S. Department of Agriculture (USDA), Natural Resources Conservation Service. 2016. Custom Soil Resource Report for Maricopa County, Arizona, Central Part.

² Arizona Department of Water Resources. 2016. Accessed at <http://gisweb.azwater.gov/gwsi>

³ ADEQ eMaps, <http://gisweb.azdeq.gov/arcgis/emaps/?topic=places>

- The status of the respective regulatory agency-required investigations and/or cleanup associated with the identified facility.
- Surface and subsurface obstructions and diversions (e.g., buildings, roads, sewer systems, utility service lines, rivers, lakes, and ditches) located between the identified site and the subject property

Only those sites that are judged to present a potential environmental risk to the subject property and/or warrant additional clarification are further evaluated. Using the referenced criteria, and based upon a review of readily available information contained on the eMaps website, Kimley-Horn did not identify adjoining (i.e., bordering) or nearby sites listed in the regulatory database report that were judged to present a potential environmental risk to the subject property.

Section IV: Environmental Concerns

Observed: None

Unusual Conditions: No unusual conditions were identified during the course of this PISA.

Section V: Recommendations

High Priority Phase 1: N/A

Medium Priority Phase 1: N/A

Low Priority Phase 1: N/A

Aerial Photograph Review: N/A

Additional testing required: See below.

- Concrete curb ramp and curb and gutter will be removed on the east end of the project limits. These materials have the potential to contain asbestos; however, this is a City project and the City does not typically sample these types of materials.

Section VI: Comments

Kimley-Horn has conducted a PISA for the project area. Assessments made during this PISA represent a reasonable attempt to identify environmental concerns for the project area. There is always the possibility that environmental concerns have escaped detection due to the limitations of this PISA, the incompleteness or inaccuracy of governmental records, or the presence of undetected and unreported environmental incidents.

Environmental Commitments

The following mitigation measures are required per the ROD hazardous materials mitigation measures, specifically HZM-7:

Contractor Responsibility:

- **If suspected hazardous materials are encountered during construction, work shall cease at that location and the City of Phoenix will arrange for proper assessment, treatment, or disposal of those materials.**
-

Consultant Name	JENNIFER TREMAYNE, REP Senior Environmental Scientist Kimley-Horn and Associates, Inc.	Signature		Date	6/22/2016
ADOT Name	<u>Ed Green</u>	Signature		Date	23 Jun 16

Attachments:

Figure 1. Vicinity Map

Figure 2. Proposed Improvements Beyond FEIS Clearance for Chandler Blvd.

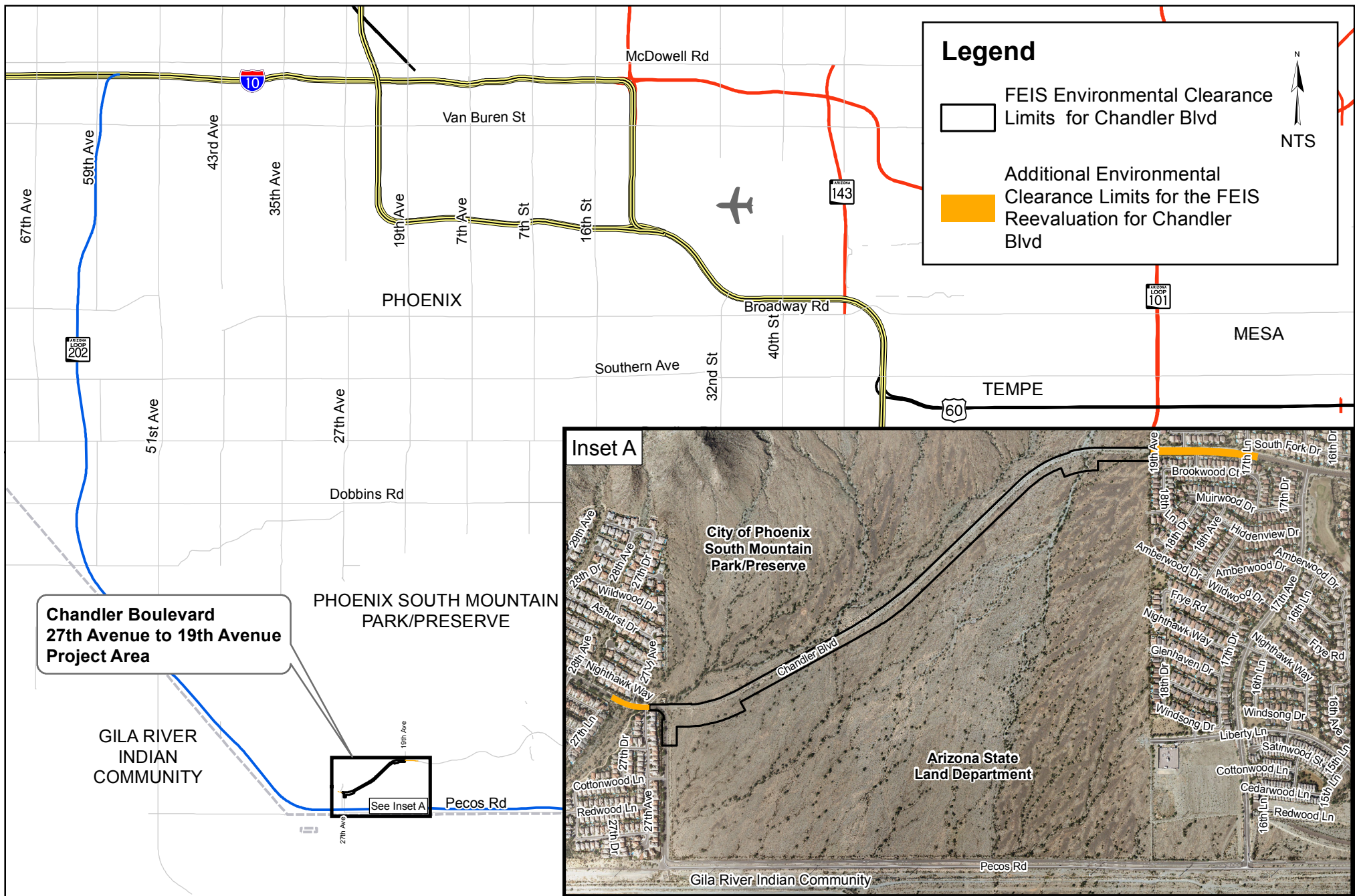


FIGURE 1

CHANDLER BOULEVARD
27TH AVENUE TO 19TH AVENUE
ST85100367
NH-202-D(ADY)
VICINITY MAP

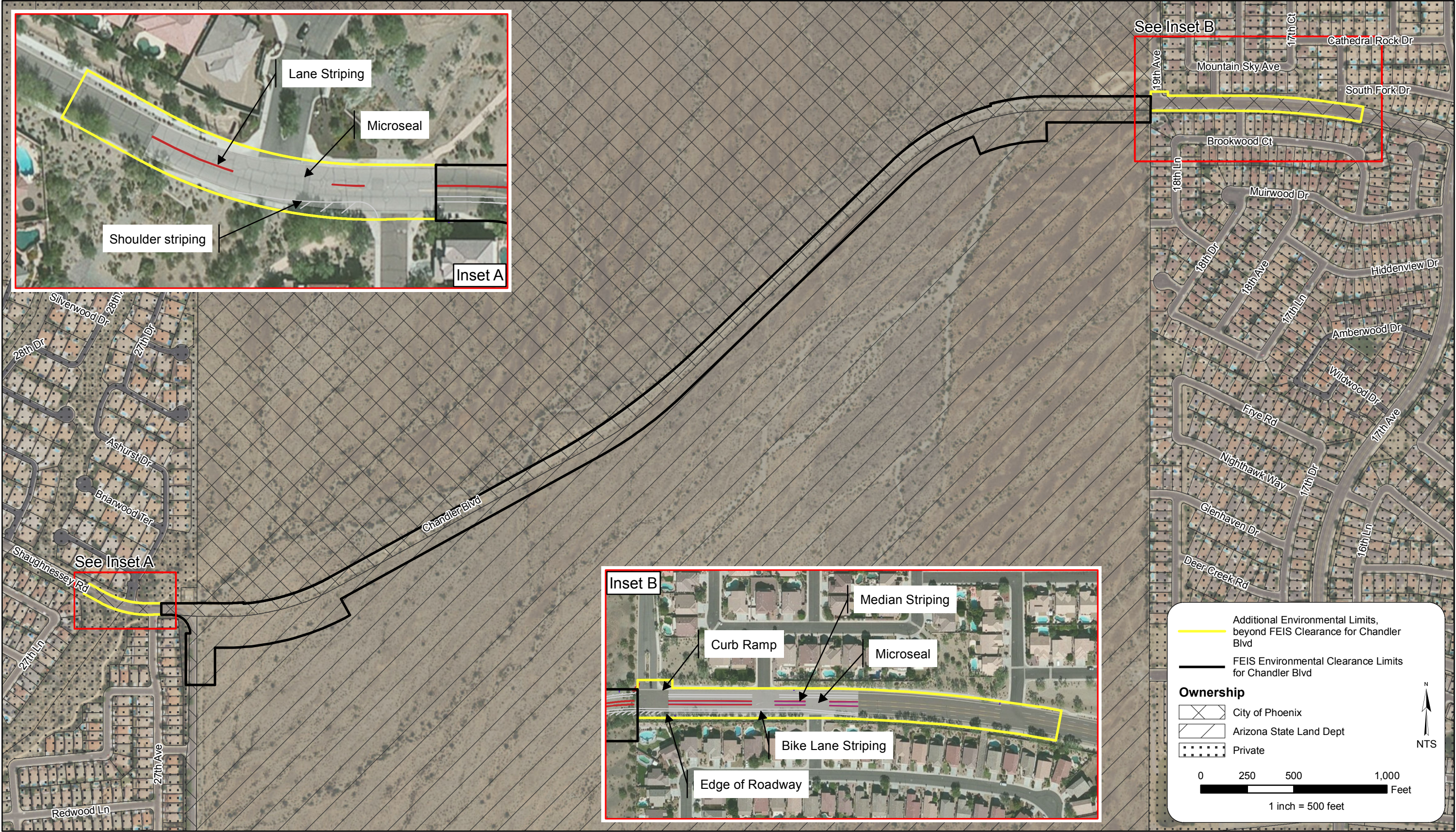


FIGURE 2

CHANDLER BOULEVARD
27TH AVENUE TO 19TH AVENUE
ST85100367
NH-202-D(ADY)
PROPOSED IMPROVEMENTS BEYOND FEIS CLEARANCE FOR CHANDLER BLVD