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Bureau of Land Management

Sonoran Valley Parkway Project

Arizona State Office, Lower Sonoran Field Office

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Record of Decision:

Appendix Volume



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SIGNED PROGRAMMATIC AGREEMENT

**PROGRAMMATIC AGREEMENT
AMONG THE
DEPARTMENT OF THE INTERIOR, BUREAU OF LAND MANAGEMENT, ARIZONA;
THE ARIZONA STATE HISTORIC PRESERVATION OFFICE;
REGARDING THE SONORAN VALLEY PARKWAY PROJECT THROUGH
RAINBOW VALLEY, MARICOPA COUNTY, ARIZONA,
FROM RAINBOW VALLEY ROAD TO STATE ROUTE 238**

WHEREAS, the City of Goodyear proposes to obtain a 250-foot-wide permanent right-of-way (ROW) across Bureau of Land Management (BLM) land, State Trust land administered by the Arizona State Land Department (ASLD), and private land in Maricopa County, Arizona, for the Sonoran Valley Parkway Project (“SVPP” or “Parkway”) (hereinafter referred to as the “Undertaking” as defined in 36 Code of Federal Regulations [CFR] 800.16[y]), which consists of the construction, operation, and maintenance of a phased two- to six-lane, approximately 15- to 18-mile-long parkway within the 250-foot-wide ROW; and

WHEREAS, the BLM proposes to serve as the lead Federal representative in carrying out the actions detailed for all Federal, State, and private lands in this Programmatic Agreement (PA) where a ROW grant is to be issued in compliance with Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations and the definitions provided at 36 CFR 800.16; and

WHEREAS, the BLM, as lead Federal agency, proposes to issue a Federal ROW grant for the project across land managed by the BLM Lower Sonoran Field Office and this grant would include stipulations for additional analysis if there are delays to the project or changes in scope to the project; and

WHEREAS, the BLM has determined that issuing a ROW grant and Notice to Proceed (NTP) for this Undertaking has the potential to affect historic properties both known and not yet identified, including the Butterfield Overland Stage Route, and intends to use this PA to comply with the regulations (36 CFR 800) implementing Section 106 of the NHPA (Public Law 89-665, as amended; 54 United States Code [USC] 306108) and Section 110(f) of the same Act (54 USC 306107), including implementing regulations; and

WHEREAS, the State Historic Preservation Office (SHPO) is authorized to enter into this PA in order to fulfill its role of advising and assisting Federal agencies in carrying out their Section 106 responsibilities pursuant to Sections 101 and 106 of the NHPA and 36 CFR 800.2(c)(1)(i) and 800.6(b); and

WHEREAS, SHPO is authorized to advise and assist Federal and State agencies in carrying out their historic preservation responsibilities and cooperate with these agencies under Arizona Revised Statutes (ARS) 41-511.04(D)(4); and

WHEREAS, the BLM has consulted with the SHPO about the effects of the undertaking on historic properties, pursuant to regulations 36 CFR 800.6 implementing Section 106 of the NHPA (54 USC 306108) and the SHPO is a Signatory to this PA; and

WHEREAS, the Undertaking will be constructed, and the ROW grant authorized, in three phases: Phase I will be a two-lane parkway, Phase II will be a four-lane parkway, and Phase III will be a six-lane parkway, for which the timing and funding of the phases is currently unknown and additional analysis may be needed if significant delays between phases occur; and

WHEREAS, the BLM in consultation with SHPO, has determined that effects of the Undertaking on historic properties cannot be fully determined prior to the issuance of a record of decision (ROD) for the ROW grant or NTP because phased construction is anticipated to be performed two lanes at a time, and construction could be separated by years between phases. As a result, the BLM in consultation with SHPO has determined that a phased process and preparation of a PA is appropriate for compliance with Section 106 of the NHPA; and

WHEREAS, the BLM is consulting with the ASLD, the City of Goodyear, the Arizona Department of Transportation (ADOT) to develop and execute this PA; and

WHEREAS, the BLM has consulted with the Advisory Council on Historic Preservation (ACHP) pursuant to 36 CFR 800.14(b) to develop and execute this PA and the ACHP has elected not to formally enter consultation on the development of this PA in a letter dated December 23, 2013; and

WHEREAS, the Arizona State Museum (ASM) has been invited to participate as an invited signatory pursuant to 36 CFR 800.3(f) as it has mandated authority under ARS 41-841 et seq. that applies to the portion of the Undertaking on State lands, and mandated authority under ARS 41-865 that applies to that portion of the project on private land; and

WHEREAS, ADOT has been invited to participate as an invited signatory pursuant to 36 CFR 800.3(f), and the BLM has consulted with ADOT, who may issue a ROW to the City of Goodyear for access to and construction of certain components of the Undertaking (e.g., connection to State Route 238); and

WHEREAS, ASLD has been invited to participate as an invited signatory pursuant to 36 CFR 800.3(f), and the BLM has consulted with ASLD, who may issue a ROW to the City of Goodyear for access to and construction of certain components of the Undertaking; and

WHEREAS, the ASLD and ADOT intend to use provisions of this PA to address the applicable requirements of the Arizona State Historic Preservation Act (ARS 41-861 et seq.) on State Trust lands or lands owned or controlled by ADOT; and

WHEREAS, the City of Goodyear as grantee of the ROW has participated in consultation per 36 CFR 800.2(c)(4) and is willing to carry out the stipulations of this PA under the oversight of the BLM, and is invited to sign this PA as an invited signatory; and

WHEREAS, any archaeological work performed on lands owned or controlled by the State will be conducted under an Arizona Antiquities Act (AAA) permit issued by the ASM; and

WHEREAS, the City of Maricopa, the Maricopa Association of Governments, Pinal County, Maricopa County, and the National Trust for Historic Preservation were invited to concur with this PA and elected not to participate; and

WHEREAS, the BLM has selected a Preferred Alternative consisting of Alternative A and Sub-alternative G. The alternatives and area of potential effects (APE) for the proposed project are depicted in Attachment A; and

WHEREAS, three historic properties may be affected by the BLM's Preferred Alternative: AZ T:15:11(ASM), a historical homestead; AZ T:15:32(ASM), a segment of the Butterfield Overland Stage Route; and AZ T:15:94(ASM), a prehistoric artifact scatter. The historical site, AZ T:15:11(ASM), is the Edison R. Lung homestead, which was associated with the railroad and homesteading in the early 1920s. The Butterfield Overland Stage Route (AZ T:15:32[ASM]) was a historic military travel and freight road dating from the 1840s to the 1850s. Site AZ T:15:94(ASM) is a prehistoric Hohokam resource processing and procurement site that may date from AD 750-1150; and

WHEREAS, the BLM is consulting with the Gila River Indian Community, the Ak-Chin Indian Community, the Salt River Pima-Maricopa Indian Community, the Tohono O'odham Nation, and the Hopi Tribe (collectively the "Tribes") pursuant to Section 101(d)(6)(B) of the NHPA, 36 CFR 800.2(c)(2)(ii), the American Indian Religious Freedom Act, Executive Order 13175, and if needed, Section 3(c) of the Native American Graves Protection and Repatriation Act (NAGPRA) and the Archaeological Resources Protection Act of 1979 (16 USC 470) (ARPA), to resolve the possible adverse effects of the Undertaking on historic properties; and

WHEREAS, the Tribes that may attach religious or cultural importance to affected properties have been consulted pursuant to 36 CFR 800.2(c)(2)(ii)(A-F), and the Gila River Indian Community, the Ak-Chin Indian Community, the Salt River Pima-Maricopa Indian Community, the Tohono O'odham Nation, and the Hopi Tribe have been invited to be concurring parties in this PA; and

WHEREAS, a Tribe's signature of this PA as a concurring party indicates participation as a Section 106 consulting party and acknowledgment that the Tribe's views were taken into consideration, but does not indicate approval of the outcome of the National Environmental Policy Act (NEPA) analysis for the Undertaking nor does it indicate a preference for a specific alternative; and

WHEREAS, a cultural resources inventory will be conducted for any portion of the ROW not previously inventoried once the City of Goodyear identifies a funding source and submits phase-specific Plans of Development (POD) that describe the construction of the Parkway at the time of each phase. A Historic Properties Treatment Plan (HPTP) will be developed which will outline the mitigation of adverse effects to historic properties and will include a discovery plan for unanticipated discoveries or effects; and

WHEREAS, important requirements regarding the treatment of resources in the ROW such as cultural resource stipulations, as identified in this PA, will be included in the ROD and further detail regarding implementation of these measures will be included in the POD for each phase; and

WHEREAS, human remains, funerary objects, sacred objects, and objects of cultural patrimony recovered on Federal lands will be treated accordance with the NAGPRA. A NAGPRA plan of action addressing the recovery of human remains, associated / unassociated funerary objects, sacred objects, and objects of cultural patrimony on Federal land will be developed; and

WHEREAS, any National Register of Historic Places (“National Register”) eligibility testing or data recovery performed on Federal lands must be permitted through an ARPA permit; and

WHEREAS, human remains, associated / unassociated funerary objects, sacred objects, and objects of tribal patrimony recovered on State-owned or State-controlled land and/or private land will be treated in accordance with ARS 41-844 and 41-865, respectively; and

WHEREAS, the BLM has provided the public opportunities to comment on the Undertaking and participate in the NEPA process for the proposed ROW request; and

NOW, THEREFORE, the Signatories and Invited Signatories agree that the Undertaking shall be administered in accordance with the terms of this PA to ensure that the effect of the Undertaking on historic properties are taken into account and to satisfy the Section 106 responsibilities of the BLM for the Undertaking.

Stipulations

I. Roles and Responsibilities

A. The Signatories agree that the BLM Lower Sonoran Field Office is the lead BLM Office for administering and implementing this PA. These responsibilities include but are not limited to consulting and coordinating with the consulting parties, including Tribes whose aboriginal territories include the APE; ensuring that all Signatories carry out their responsibilities; overseeing all cultural resource work including any additional cultural resources inventory work, and the drafting and implementation of the HPTP; assembling all submissions to the SHPO including the additional cultural resources inventory report (if needed), the HPTP, and the data recovery reports; and seeking SHPO concurrence with all agency compliance decisions. The BLM shall be responsible for determining effect on BLM, ASLD, and private land, reviewing the HPTP and data recovery reports, and developing any other needed treatment options in consultation with the consulting parties. A list of terms used in this PA can be found with the definitions in Appendix A.

B. Reporting and documenting the actions cited above shall conform to BLM Manual 8100 guidance as stipulated in the BLM Cultural Resources Use Permit and Field Authorizations for this Undertaking, and to every reasonable extent with the *Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation* (48 *Federal Register* 44716–44740) and the SHPO’s *Standards for Documents Submitted for SHPO Review in Compliance with Historic Preservation Laws* dated January 2015, as well as ARS 41-841 et seq. implementing rules and guidelines set forth by the ASM.

C. The BLM will ensure that the City of Goodyear completes any additional cultural resources survey in compliance with BLM Manual 8110, *Identifying and Evaluating Cultural Resources* or ARS 41-841 et seq., and guidelines set forth by the ASM, if needed. The City of Goodyear will fund and implement all cultural resources fieldwork, HPTP development, monitoring, data recovery, analysis, reporting, and curation, as well as all other developed mitigation that is required under this agreement.

II. Area of Potential Effects (APE)

A. Defining the APE

The City of Goodyear is proposing to build a 15- to 18-mile-long, two-lane Parkway with the future potential to expand up to a six-lane parkway from Rainbow Valley Road to State Route 238 across BLM, ASLD, and private lands. For this Undertaking, the City of Goodyear has requested a 250-foot ROW across BLM, ASLD, and private land through Rainbow Valley. The Undertaking will require temporary construction easements and access easements which will all be within the 250-foot ROW.

The BLM, in consultation with the SHPO and other consulting parties, has determined and documented the APE for direct effect to be the entire 250-foot ROW across BLM, ASLD, and private land, and has determined the APE for indirect and visual effect to be 3 miles on either side of the ROW centerline, as documented in Appendix A. The APE for direct effect, as defined and documented, is a baseline for additional survey and inventory if needed. The APE for indirect effect, as defined and documented, is the baseline for additional visual and other analyses. Where tribal consultation, additional field research or literature review, consultation with interested parties, or other factors indicate that the qualities and values of historic properties which lie outside the defined APEs may be affected directly or indirectly, the APEs may be modified in accordance with Stipulation II.B of this PA or through the development of the HPTP (Stipulation V.B) to provide for consideration of effects to these historic properties. In defining and documenting the APEs and conducting any additional inventory activities, unless otherwise agreed to and stipulated in the HPTP, the following conventions or standards will apply:

1. The APEs will apply to Federal, State, and private lands which include the 250-foot ROW APE for direct effect and the 6-mile-wide APE for indirect/visual effect.
2. The survey corridor used for the purposes of this PA is a 250-foot-wide corridor centered on the six-lane Parkway construction ROW centerline (i.e., 125 feet on either side of the centerline).
3. If needed, any temporary construction easements outside the 250-foot-wide corridor that are identified at a later date will be subjected to a cultural resources inventory.
4. Any additional survey will meet BLM Manual 8100 guidance for a comprehensive survey (BLM Class III Survey), and also be consistent with the guidance, standards, and permitting of the ASM.

B. Amending the APE

1. If BLM determines that unforeseen changes to the Undertaking may cause effects to historic properties beyond the extent of the established direct and indirect APEs, then BLM shall adjust the APE(s) using the process set forth in Stipulation II.B.2 (below).
2. Any consulting party to this PA may propose that the APE(s) be modified. BLM shall notify all the consulting parties of the proposal to modify the APE; the BLM will prepare a description and a map of the modification and provide it to all the consulting parties for review and comment. The review and comment period shall not exceed 30 calendar days. Agreement to amend the APE will not require an amendment to the PA. If the consulting parties cannot agree to a proposal for the modification of the APE, then they will resolve the dispute in accordance with Stipulation XI (Dispute Resolution).

III. Identification

Once the City of Goodyear obtains funding and submits an updated POD, the BLM shall ensure that the identification of historic properties occurs as follows:

A. The BLM, in consultation with the SHPO and other consulting parties, shall oversee and ensure that the City of Goodyear funds all appropriate cultural resources identification and mitigation activities including any additional cultural resource surveys, the development of an HPTP, data recovery, report preparation, curation, and the agreed-upon mitigation for all affected historic properties in a manner consistent with Section 106 of the NHPA and its implementing regulations (36 CFR 800) and State statutes (ARS 41-861 through 864 and 41-841 et seq. and implementing rules). The BLM shall ensure that the City of Goodyear funds a cultural resources professional that meets the Secretary of Interior's Professional Qualifications Standards for archaeology and historic preservation.

B. All actions prescribed by this PA that involve the identification, evaluation, analysis, recordation, treatment, monitoring, and disposition of historic properties and that involve the reporting and documentation of such actions in the form of reports, forms, or other records, shall be carried out by or under the direct supervision of a person or persons meeting, at a minimum, the Secretary of the Interior's Professional Qualifications Standards for archaeology or history, as appropriate (48 *Federal Register* 44739).

C. The BLM shall continue to consult with the Gila River Indian Community, the Ak-Chin Indian Community, the Salt River Pima-Maricopa Indian Community, the Tohono O'odham Nation, and the Hopi Tribe to identify properties of traditional religious and cultural importance within the APE(s), e.g., traditional cultural properties (TCPs), sacred sites, traditional use areas, etc. The BLM will consult with the SHPO on their eligibility for the National Register, and inform the SHPO of the tribe's preferred treatment for the mitigation of adverse effects, if needed. However, if the TCP has archaeological values, then BLM will also consult with SHPO and all consulting parties on the proposed treatment of the TCP.

IV. Eligibility

A. The BLM has consulted with the SHPO on the National Register eligibility of six sites within the APE for direct effect for Alternatives A and C: AZ T:15:11(ASM), AZ T:15:32(ASM), AZ T:15:37(ASM), AZ T:15:51(ASM), AZ T:15:94(ASM), and AZ T:15:95(ASM). The BLM recommended that AZ T:15:11(ASM) and AZ T:15:32(ASM) are eligible for the National Register, AZ T:15:94(ASM) is undetermined and requires eligibility testing, and AZ T:15:37(ASM), AZ T:15:51(ASM), and AZ T:15:95(ASM) are not eligible. The SHPO concurred with the eligibility recommendation of all six sites on March 26, 2013.

B. The BLM, in consultation with the SHPO, shall evaluate the National Register eligibility of all cultural resources located in the APEs for direct and visual/indirect effect for Sub-alternative G as part of the Preferred Alternative. Eligibility shall be determined in consultation with all consulting parties prior to the initiation of mitigation activities as proposed in the final HPTP.

C. If either Alternative H or Sub-alternative G is selected in the ROD, the BLM, in consultation with the SHPO and consulting parties, shall evaluate the National Register eligibility of all cultural resources

located in the APEs for direct and visual/indirect effect once the City of Goodyear obtains funding and submits an updated POD. Eligibility shall be determined in consultation with all consulting parties prior to the initiation of mitigation activities as proposed in the final HPTP.

D. The BLM, in consultation with the SHPO, shall consult with the Gila River Indian Community, the Ak-Chin Indian Community, the Salt River Pima-Maricopa Indian Community, the Tohono O'odham Nation, and the Hopi Tribe to evaluate the National Register eligibility of properties of traditional religious and cultural importance within the APEs for direct and visual/indirect effect for Sub-alternative G as part of the Preferred Alternative, once the City of Goodyear obtains funding and submits an updated POD.

E. If either Alternative H or Sub-alternative F is selected in the ROD, the BLM, in consultation with the SHPO, shall consult with the Gila River Indian Community, the Ak-Chin Indian Community, the Salt River Pima-Maricopa Indian Community, the Tohono O'odham Nation, and the Hopi Tribe to evaluate the National Register eligibility of properties of traditional religious and cultural importance within the APEs for direct and visual/indirect effect, once the City of Goodyear obtains funding and submits an updated POD.

F. If Alternative A is selected in the ROD, the BLM, in consultation with the SHPO and other consulting parties, shall develop a testing plan (as part of the HPTP) for AZ T:15:94(ASM) to determine if the site is eligible for the National Register (see Stipulation V.B below), once the City of Goodyear obtains funding and submits an updated POD. The results of the testing shall be documented in a testing report and submitted by the BLM to the SHPO and consulting parties for review and concurrence on the eligibility determination.

G. If Alternative H, Sub-alternative F, or Sub-alternative G is selected in the ROD and the cultural resources inventory results are inadequate to determine National Register eligibility of resources found within the APEs, the BLM, in consultation with the SHPO and other consulting parties, shall develop a testing plan to determine if the site(s) is/are eligible for the National Register. The results of the testing shall be submitted by the BLM to the SHPO and consulting parties for concurrence on the eligibility determination.

H. If any of the consulting parties disagree with a decision regarding National Register eligibility, the BLM shall notify all Signatories of the dispute and seek a consensus determination of eligibility from the SHPO (if the SHPO has not already provided their concurrence on the determination). If the SHPO does not concur, the BLM shall seek a formal determination of eligibility from the Keeper of the National Register. The Keeper's determination shall be considered final.

V. Treatment of Historic Properties

A. To the extent possible, the City of Goodyear, with the assistance of the BLM, shall ensure that the Parkway design avoids effects to historic properties. If avoidance is not practicable or possible, the BLM shall consult with the consulting parties to develop appropriate mitigation for adverse effects.

B. The BLM, in consultation with the SHPO, shall determine the precise nature of effects of the Undertaking to AZ T:15:11(ASM), AZ T:15:32(ASM), and AZ T:15:94(ASM), as well as to any additional historic properties that are identified in the APE during future surveys. The BLM shall ensure that the City of Goodyear prepares a comprehensive HPTP describing how adverse effects will be avoided, minimized, or mitigated. The BLM shall submit the HPTP to the SHPO and all consulting parties for review. The HPTP shall contain the following components:

- 1) The properties or portions of properties where data recovery is to be carried out. The HPTP will also specify any property or portion of property that would be destroyed or altered without treatment along with the rationale for not treating the property or portion of property;
- 2) The results of previous research relevant to the Undertaking;
- 3) A historic context, or contexts, to guide the focus of the research;
- 4) A Research Design stipulating research questions to be addressed through data recovery, with an explanation of their relevance and importance within an appropriate historic context;
- 5) The field and laboratory analysis methods to be used, with an explanation of their relevance to the research questions;
- 6) The methods to be used in analysis, data management, and dissemination of data to the professional community and the public as defined in the public involvement plan (see “j” below);
- 7) The proposed disposition and curation of recovered materials, samples, and records in accordance with 36 CFR 79;
- 8) A Monitoring and Discovery Plan outlining the procedures for monitoring, evaluating, and treating discoveries of unexpected or newly identified properties during construction of the Undertaking, including consultation with other parties;
- 9) A protocol for the treatment of human remains, in the event that such remains are discovered, describing methods and procedures for the recovery, analysis, treatment, and disposition of human remains, associated / unassociated funerary objects, and objects of cultural patrimony. This protocol will reflect concerns and/or conditions identified as a result of consultations among parties to this PA and will be consistent with the ASM burial agreement for State and private lands and with NAGPRA for Federal lands;

- 10) A public involvement plan that includes benefits to the public;
- 11) A Termination Plan with provision for the following programs to be followed in the event that the Undertaking is terminated for any reason:
 - a. a program outlining the steps to be taken in order to complete any data recovery that is in progress at the time of project termination; and
 - b. a component outlining how analysis, interpretation, reporting, and curation for all historic properties will be completed.
- 12) A proposed schedule for Undertaking tasks, including a schedule for the submission of draft and final reports to consulting parties.

C. Mitigation for AZ T:15:32(ASM) (the Butterfield Overland Stage Route) may consist of but will not be limited to archival research and documentation, mapping, and/or development of interpretive media, and will be outlined in the HPTP. If appropriate, the HPTP shall include provisions for an educational publication about the historic trail that is suitable for release to the general public.

D. The BLM shall ensure that all data recovery described in the HPTP is consistent with Secretary of the Interior's *Standards and Guidelines for Archaeology and Historic Preservation* (48 *Federal Register* 44716-37), the ACHP's *Treatment of Historic Properties: A Handbook* (1980), ARS 41-841 et seq., and its implementing rules. The SHPO and other consulting parties will have 30 calendar days to review the draft HPTP. The revised HPTP will be submitted to all consulting parties for a 30-calendar day review period. All comments will be in writing and will be submitted to the BLM.

E. The HPTP shall contain at a minimum methods and procedures for the phasing of the project, as well as National Register eligibility testing for AZ T:15:94(ASM) and data recovery (if necessary), artifact analysis, reporting, a monitoring plan, discovery plan, and a NAGPRA plan of action. The HPTP will also contain mitigation measures for AZ T:15:32(ASM) (the Butterfield Overland Stage Route).

F. The BLM ROW grant shall stipulate that the City of Goodyear submit an updated POD for any proposed phase of the project and fully implements the requirements of the HPTP prior to issuance of an NTP from the BLM and the commencement of any ground-disturbing activities associated with the development of the proposed Parkway.

G. The BLM shall ensure that a draft preliminary data recovery treatment report resulting from actions pursuant to this PA be submitted to the consulting parties for a review and comment period of 30 calendar days. The BLM shall ensure that any comments provided by the consulting parties are addressed, and a revised preliminary data recovery treatment report be submitted to the consulting parties for a 20-calendar day comment period prior to finalization. The preliminary field report will contain the following information:

- 1) A discussion of the methods and treatments applied to each property, with an assessment of the degree to which these methods and treatments followed the direction provided by the HPTP along with a justification of all deviations, if any, from the approved HPTP;
- 2) Topographic site plans for the properties depicting all features and treatment areas;

- 3) General description of recovered artifacts and other data classes, including features excavated or sampled;
- 4) Discussion of further analyses to be conducted, including any proposed changes in the methods or levels of effort from those proposed in the HPTP.

H. The BLM shall ensure that a draft data recovery report resulting from treatment actions to historic properties pursuant to the HPTP be provided to all consulting parties for a minimum of a 30-calendar day review and comment period, subject to confidentiality limitations (see Stipulation XIX, Confidentiality of Records). The BLM shall ensure that any comments provided by the consulting parties are addressed, and a revised data recovery report be submitted to the consulting parties for a 30-calendar day comment period prior to finalization.

I. Unless otherwise agreed to, collections and records resulting from data recovery on Federal lands shall be curated at the ASM in accordance with the ARPA, 36 CFR 79, and NAGPRA.

J. Human remains will not be curated. If discovered during data recovery or during construction, human remains and associated funerary objects found on Federal land shall be handled according to the provisions of the NAGPRA and its implementing regulations (43 CFR 10). Human remains discovered on State or private lands will be handled according to ARS 41-844 and 865, respectively, and as per the burial agreement arranged by the ASM.

VI. Discovery Situations

A. If there is a discovery or unanticipated impact, the contractor for the City of Goodyear shall cease all activities within 100 feet of the discovery. The City of Goodyear through its cultural resources contractor shall notify the BLM Lower Sonoran Field Office Archaeologist, SHPO, and ASM immediately of the discovery or unanticipated effect. The City of Goodyear through its cultural resources contractor shall also notify the State repatriation coordinator at the ASM if the discovery includes human remains.

B. The BLM shall ensure that any human remains, funerary objects, objects of cultural or tribal patrimony, and sacred objects encountered during the Undertaking are treated with the respect due such materials. In coordination with this PA, Native American human remains and associated funerary objects found on Federal land shall be handled according to the provisions of the NAGPRA and its implementing regulations (43 CFR 10). Human remains and associated funerary objects on State or private land shall be handled according to the provisions of ARS 41-844 and ARS 41-865, as appropriate.

C. The BLM shall notify all consulting parties as appropriate within 5 calendar days of being notified of the discovery or unanticipated effect and shall consider their initial comments on the discovery or unanticipated effect.

D. In the event of a discovery on Federal land, the BLM shall determine the National Register eligibility of the discovery and the effect of the proposed project on the discovery. The BLM shall consult with the SHPO and consulting parties on the determination of eligibility and the finding of effect. The consulting parties shall have 14 calendar days to respond to the BLM. If after 14 calendar days, the SHPO has not

responded, the BLM will assume concurrence with the BLM's determination of eligibility and finding of effect.

E. In the event of a discovery on State-owned or State-controlled land, the BLM shall submit a report to the ASLD, the SHPO, and the ASM regarding the National Register eligibility of the discovery and the effect of the proposed project on the discovery. The report shall conform to ARS 41-841 et seq. rules for reporting and the SHPO Report Standards. The SHPO, ASLD, and the ASM shall review the report and respond to the BLM within 14 calendar days. If after 14 calendar days, the SHPO, ASLD, and/or ASM have not responded, the BLM will assume concurrence with the BLM's determination of eligibility and finding of effect.

F. In the event of a discovery on private land, the BLM shall submit a report to the SHPO regarding the National Register eligibility of the discovery and the effect of the proposed project on the discovery. The report shall conform to SHPO Report Standards. The SHPO, shall review the report and respond to the BLM within 14 calendar days. If after 14 calendar days, the SHPO, has not responded, the BLM will assume concurrence with the BLM's determination of eligibility and finding of effect.

G. In the event of a discovery or unanticipated effect, the BLM shall notify the City of Goodyear of the decision to allow the City of Goodyear to proceed or to require further evaluation and/or mitigation. The City of Goodyear may proceed 1 calendar day after receiving notification from the BLM, unless the BLM subsequently notifies the City of Goodyear not to proceed.

H. If, in consultation with the consulting parties, the BLM determines that mitigation for discoveries or unanticipated impacts is required, the BLM shall use the approved mitigation procedures in the HPTP. BLM will provide a scope of work based on the procedures of the HPTP to the consulting parties for review. The consulting parties shall be allowed 7 calendar days to provide BLM with comments to be considered by BLM regarding the nature and extent of mitigation efforts. Within 14 calendar days of initial consulting party notification of the need for mitigation, the BLM shall inform all consulting parties of the nature of the mitigation required following the approved mitigation measures in the HPTP and input from the consulting parties, and ensure that such mitigation actions are implemented before allowing the City of Goodyear activities to resume in the area of discovery.

I. If it is determined that mitigation is needed, all work in the area of the discovery or unanticipated effect will cease until mitigation is complete. The BLM Lower Sonoran Field Office will inform the City of Goodyear in writing when mitigation is complete and activities may resume.

J. The BLM shall ensure that reports of mitigation efforts for discovery situations are completed in a timely manner and conform to the BLM Manual 8100 Standards. BLM shall submit the draft and revised (if applicable) preliminary data recovery reports to the consulting parties for review and comment as set forth in Stipulation VIII (Time Frames) of this PA. BLM shall submit the draft data recovery report to all consulting parties for a 30-calendar day review and comment period; the revised data recovery report will be submitted to consulting parties for a 30-calendar day review period.

K. Any disputes or objections arising during a discovery situation that cannot be resolved by the BLM Lower Sonoran Field Office shall undergo additional consultation as per Stipulation XI (Dispute Resolution).

VII. Curation

A. On State and Federal lands, the City of Goodyear shall arrange a repository agreement with the ASM.

B. The BLM shall ensure that all artifacts and records from lands owned, controlled, or operated by the State of Arizona and/or BLM (including reports, photographs, maps, field notes, artifacts, samples, and other materials, but not including human remains or other objects regulated under NAGPRA or ARS 41-841) resulting from the inventory and treatment program are curated at the ASM.

C. Artifacts that are not associated with human remains recovered from private lands are the property of the private landowner. Materials and artifacts from private land that are not associated with a burial must be returned to the landowners if they do not wish to donate them to the ASM.

VIII. Time Frames

A. If any consulting party fails to respond to the BLM within 30 calendar days of the receipt of a submission, the BLM shall attempt additional consultation with the consulting parties. If these attempts are unsuccessful the BLM will presume that they do not object with the determinations and findings as detailed in the submission and will proceed accordingly.

B. Final Report: The final data recovery report resulting from the implementation of the data recovery portion of the HPTP shall be submitted by the cultural resource contractor for the City of Goodyear to the BLM and all cultural materials and records shall be submitted to the ASM for curation within 12 months of the completion of fieldwork. A lay version (suitable for the public to see) of the final report shall be prepared for the City Council of Goodyear also.

IX. Notices to Proceed

After compliance with Stipulation III (Identification), the BLM, in consultation with the other Signatories, may issue a NTP to the City of Goodyear for individual construction segments as defined by the City of Goodyear in its PODs for Phase I, Phase II, or Phase III of the Parkway construction, under any of the following conditions:

A. The BLM and consulting parties have determined that there are no cultural resources within the APE for direct effect for the construction segment; or

B. The BLM and consulting parties have determined that there are no historic properties within the APE for direct effect for the construction segment, or that historic properties will be avoided as agreed upon in the consultation process; or

C. The BLM after consultation with the consulting parties has implemented the treatment described in the HPTP for the construction segment, and:

1. The fieldwork phase of the treatment option that is required prior to construction has been completed; and
2. The BLM has accepted a preliminary data recovery report (after consultation as per Stipulation V.G) and a reporting schedule for the final report; and

3. If the signatories concur, the BLM shall issue the NTP. If the signatories do not respond within 10 calendar days of receipt, BLM shall attempt additional consultation; however, if no response is received within 10 calendar days, the BLM will assume concurrence and issue the NTP.

X. Other Considerations

A. The City of Goodyear, in cooperation with the BLM and the SHPO, shall ensure that all its personnel and all the personnel of its contractors and subcontractors (including the cultural resource contractor, E) are directed not to engage in the illegal collection of historic and prehistoric materials and will receive training on the protection of cultural materials. The City of Goodyear shall cooperate with the BLM and the ASLD and ASM to ensure compliance with the ARPA (16 USC 470) on Federal lands, and the Arizona Antiquities Act (ARS 41-841 through 41-845) on State land.

B. The City of Goodyear shall bear the expense of identification, evaluation, and treatment of all cultural resources directly or indirectly affected by the Undertaking. Such costs shall include, but not be limited to, pre-field planning, fieldwork, post-fieldwork analysis, research and report preparation, interim and summary report preparation, publications for the general public, the cost of curating Undertaking documentation and artifact collections, design modifications such as parking areas and crossovers, trailhead facility, access trails for AZ T:15:32(ASM), and interpretive signage.

C. The identification, evaluation, and treatment of cultural properties directly affected by the Undertaking shall be limited to the City of Goodyear 250-foot ROW. The identification, evaluation, and treatment of cultural properties indirectly affected by the Undertaking shall be limited to 3 miles on either side of the City of Goodyear 250-foot ROW centerline.

D. BLM, through consultation with appropriate Tribes, shall identify, evaluate, and mitigate properties of traditional religious and cultural importance within the APE for direct effect and the APE for indirect/visual effect. The City of Goodyear may contract for data gathering to assist the BLM in identifying, evaluating, and treating these properties. BLM will conduct any formal consultation, as needed, in consultation with the SHPO and other Signatories regarding properties of traditional religious and cultural importance and ensuring the identification, evaluation, and treatment efforts be consistent with Section 106 of the NHPA and its implementing regulations.

E. The City of Goodyear, under the direction, guidance, and approval of BLM in consultation with other consulting parties as appropriate, shall develop the HPTP as a condition of the ROW grant. The HPTP will include procedures to follow in the event of adverse effects to historic properties during routine operations and maintenance activities of the Parkway after construction is completed. The cultural resources stipulations of the ROW grant regarding adverse effects to historic properties during operation and maintenance will also be incorporated into the ROD. The PA and HPTP will be incorporated in the POD for reference.

XI. Dispute Resolution

A. Should any signatory, concurring party, or a member of the interested public object at any time to the manner in which the terms of this PA are implemented, the BLM shall immediately notify all signatories and concurring parties, consult with SHPO about the objection, and take the objection into account. The

other consulting parties may comment on the objection to the BLM. The BLM shall consult with the objecting party or parties for no more than 14 calendar days. Within 7 calendar days following closure of consultation, the BLM will render a decision regarding the objection and notify all parties of its decision in writing. In reaching its final decision, the BLM will take into account all comments from the parties regarding the objection. The BLM shall have the authority to make the final decision resolving the objection. Any dispute pertaining to the National Register eligibility of historic properties or cultural resources covered by this PA will be forwarded to the Keeper of the National Register.

B. If the objection can be resolved within the consultation period (see Stipulation XI.A. above for the time frame), the BLM may authorize the disputed action to proceed in accordance with the terms of such resolution, and shall notify the signatories and concurring parties of the resolution and its terms.

C. If there are any disagreements or objections that cannot be resolved through further consultation as stated in herein, the BLM will forward all documentation relevant to the objection to the ACHP. Any comments provided by the ACHP within 30 calendar days after its receipt of all relevant documentation will be taken into account by the BLM in reaching a final decision regarding the objection. The BLM will notify the Signatories, Invited Signatories, and Concurring Parties in writing of its final decision within 14 calendar days after it is rendered.

D. The BLM's responsibility to carry out all other actions under this PA that are not the subject of the objection will remain unchanged.

XII. Monitoring of Fieldwork

A. Although any PA Signatory may monitor the work in the field, to the extent practicable, all monitoring activities shall be done to minimize the number of monitors involved in the Undertaking. All monitors must comply with all applicable regulations and project training, safety, and mitigation requirements.

B. Any areas that the BLM, in consultation with the SHPO, Tribe, or other consulting party, identifies as sensitive shall be monitored during construction activities that may affect the area. Monitoring shall be conducted by an appropriate cultural resources professional who meets the standards described in Stipulation III.A and III.B (Identification) above, or tribal representative. The HPTP shall contain a Monitoring and Discovery Plan. Both archaeological monitors and tribal monitors shall be empowered to stop work in the specific area of concern to protect resources pursuant to the procedures outlined in the Monitoring and Discovery Plan.

XIII. Monitoring of Agreement

A. The BLM Lower Sonoran Field Office shall prepare an annual letter report of cultural resources activities pertaining to this Undertaking for review and comment by all consulting parties by December 31 of each year for the duration of this PA. The annual letter report will include an update on project schedule, status, and any ongoing relevant cultural resources monitoring or mitigation activities, discovery situations, or outstanding tasks to be completed under this PA or the HPTP. After a 30-calendar day review period, an annual meeting will be held and comments will be considered regarding an evaluation of the implementation and operation of this PA by the consulting parties.

B. The annual evaluation, to be conducted after receipt of the consulting parties' comments of the BLM letter report, may include in-person meetings or conference calls among all consulting parties, and includes suggestions for possible modifications or amendments to this PA.

XIV. Amending the Agreement

A. Any party to this PA may at any time propose amendments, whereupon all parties shall consult for no more than 30 calendar days to consider such amendments pursuant to 36 CFR 800.6(c)(7). This PA may be amended only upon written agreement of the Signatories and Invited Signatories.

B. Amendments to this PA shall take effect on the dates that they are fully executed by the Signatories.

C. Copies of the amendment(s) shall be provided to all consulting parties by BLM.

D. This PA will be updated if necessary during the planning for the four-lane and six-lane phases of the Undertaking. The BLM will consult with all consulting parties to reconsider the terms of the PA and amend it accordingly.

XV. Terminating the Agreement

A. Only Signatories and Invited Signatories may terminate this PA. If this PA is not amended as provided for in Stipulation XIV (Amending the Agreement) or if a Signatory or Invited Signatory proposes termination of this PA for other reasons (e.g., termination of the Undertaking), the Signatory or Invited Signatory proposing termination shall notify the other Signatories and Invited Signatories in writing, explain the reasons for proposing termination, and BLM shall consult for no more than 30 calendar days to seek alternatives to termination.

B. Should such consultation result in an agreement on an alternative to termination, the BLM shall proceed in accordance with that agreement.

C. Should such consultation fail, the Signatory or Invited Signatory proposing termination may terminate this Agreement by promptly notifying the other Signatories and Invited Signatories in writing. The BLM shall also notify the concurring parties of the termination.

D. Should this PA be terminated, then the BLM shall either consult in accordance with 36 CFR 800.14(b) to develop a new Agreement or request the comments of the ACHP pursuant to 36 CFR 800.7(c).

E. Beginning with the date of termination, the BLM shall ensure that until and unless a new PA is executed for the actions covered by this PA, such undertakings shall be reviewed individually in accordance with 36 CFR 800.4–800.6.

XVI. Variances

It is understood that all construction needs cannot be anticipated in advance of project construction, and that areas required for additional work space, access roads, etc., may be identified at any time following the acceptance of an inventory report by the BLM, in consultation with the consulting parties. Any newly identified construction needs (hereafter “ancillary areas”) which would result in ground-disturbing

activities outside of the surveyed areas identified in the inventory report shall be subject to identification and evaluation to determine whether historic properties are present within the additional area.

A. The BLM shall determine the APEs of all ancillary areas.

B. BLM will not authorize use of any new ancillary areas until a Class III (100%, intensive) survey is completed and submitted to the BLM for review. BLM shall provide all consulting parties with copies of the completed inventory report for review and comment in accord with this PA (Stipulation IV).

C. Understanding that the need for new ancillary areas may be necessary in the midst of construction activities, the agencies shall provide an expedited review within 14 calendar days or less. If no objections to the use of the new ancillary area are received, and the ancillary area is on Federal or private lands, at the end of the 14-calendar day period, BLM shall provide the City of Goodyear with written approval of the variance via electronic mail. If the ancillary area is on State-owned or State-controlled lands, the ASLD, in consultation with BLM, will provide the City of Goodyear with written approval of the variance via electronic mail within 14 calendar days. If objections are received, additional consultation regarding the ancillary area shall ensue in accordance with the provisions of this PA.

XVII. Duration of this Agreement

A. Unless the PA is terminated pursuant to Stipulation XV (Terminating the Agreement), another agreement executed for the Undertaking supersedes it, or the Undertaking itself has been terminated, this PA will remain in full force and effect until BLM, in consultation with the other Signatories and Invited Signatories, determines that construction of all aspects of the Undertaking has been completed and that all terms of this PA have been fulfilled in a satisfactory manner. Upon a determination by BLM that construction of all aspects of the Undertaking has been completed and that all terms of this PA and any subsequent tiered agreements have been fulfilled in a satisfactory manner, BLM will notify the consulting parties of this PA in writing of the agency's determination. This PA will terminate and have no further force or effect on the date that BLM so notifies the other signatories to the PA.

B. This PA shall become effective on the date of the last signature below, and shall remain in effect for 10 years; or until terminated as provided in Stipulation XV (Terminating the Agreement), or until the completion of all actions associated with the Undertaking, whichever is longest.

XVIII. Withdrawal or Addition of Parties from/to the PA

A. Withdrawal of BLM: If for some reason BLM should decide to withdraw from the Undertaking or for some reason the Undertaking is altered to no longer require BLM action or involvement, BLM shall inform the other signatories to this PA of its intention to withdraw as soon as is practicable. Upon receipt of BLM's notification of its withdrawal from the Project, BLM will consult with the Signatories and Invited Signatories to determine whether there is still an undertaking as defined under 36 CFR 800, whether another Federal agency shall become the acting lead agency for the purpose of implementing this PA, or whether this PA should be terminated. The final decision to terminate this PA, or to initiate consultation under Stipulation XIV (Amending the Agreement) to amend this PA to designate another Federal agency as the lead agency, shall rest with the BLM and the new lead Federal agency. The

withdrawal consultation and decision process of this stipulation shall not exceed a period of 60 calendar days from the BLM's notification of the other signatories.

B. Withdrawal of Consulting Parties: After the selection of the alternative corridor or issuance of BLM's ROD, should an Invited Signatory or Concurring Party determine that its participation in the Undertaking and this PA is no longer warranted, the Party may withdraw from participation by informing the BLM of its intention to withdraw as soon as is practicable. BLM shall inform the other consulting parties to this PA of the withdrawal. No amendment to the PA will be required.

C. Addition of Consulting Parties: After the selection of the alternative corridor or issuance of BLM's ROD, should the scope of the Undertaking or APE change in such a way to involve lands managed by other State, Federal, or tribal entities not already party to this agreement, BLM will invite the new party to participate in this PA, notify the other consulting parties, and amend this PA as necessary pursuant to Stipulation XIV (Amending the Agreement) of this PA.

XIX. Confidentiality of Records

A. BLM will maintain the confidentiality of sensitive information regarding historic properties to which a Tribe attaches religious or cultural significance to the maximum extent allowed by Federal and State law. However, any documents or records the BLM has in its possession are subject to the Freedom of Information Act (FOIA) (5 USC 552 et seq.) and its exemptions, as applicable. In the event that a FOIA request is received for records or documents that relate to a historic property to which a Tribe attaches religious or cultural significance and/or that contains information that BLM is authorized to withhold from disclosure by other statutes, including Section 304 of the NHPA and ARPA, then the BLM will consult with such Tribe prior to making a determination in response to such a FOIA request not to withhold particular records and/or documents from disclosure.

B. The BLM agrees that, to the extent consistent with Section 304 of the NHPA, and the ARPA (16 USC 470aa-mm) (ARPA) 27 Section 9(a), cultural resource description and locational data from this project will be treated as confidential and are not to be released to any person, organization, or agency not a consulting party to this PA. The State will treat documents with cultural resources locational data as confidential as per A.R.S. 39-125.

XX. Effective Date

This PA shall take effect on the date that it has been fully executed by the Signatories. Any amendments or attachments to this PA shall take effect on the dates they are fully executed by the signatories.

EXECUTION AND IMPLEMENTATION of this PA evidences that the BLM has satisfied its Section 106 responsibilities for all actions associated with the Undertaking. The signatories to this PA represent that they have the authority to sign for and bind the entities on behalf of whom they sign.

APPENDIX A

DEFINITIONS

Adverse Effect – Alteration of the characteristics of a historic property that qualify it for inclusion in or eligibility for the National Register.

Area of Potential Effects (APE) – The geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. The APE is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking (36 CFR 800.16(d)).

Consultation – The process of seeking, discussing, and considering the views of other participants, and where feasible, seeking agreement with them regarding matters that arise in the Section 106 process. The Secretary of the Interior's *Standards and Guidelines for Federal Agency Preservation Programs pursuant to the National Historic Preservation Act* provide further guidance on consultation.

Consulting Party – This term applies to any party that has participated in the development of this PA and has indicated intent to participate in consultations during its implementation either by signing in concurrence or by written notification to the Agency Official. The refusal of any party invited to sign the PA, other than the Signatories, does not invalidate the PA. Consulting Parties include:

- **Signatory** – This term refers to parties who have legal or financial responsibilities for completions of stipulations of the PA. The signatories have sole authority to execute the PA, and together with the invited signatories, to amend or terminate the PA.
- **Invited Signatory** – The authorized official may invite additional parties to sign the PA and upon signing, they have the same rights with regard to amendments and termination as the signatories. These parties have legal responsibility in terms of the Undertaking, such as the issuance of a permit, license, or ROW, and they have a compliance responsibility under the NHPA or a State cultural resource statute, and/or they have agreed to do something under the terms of the agreement.
- **Concurring Party** – A party who signs this PA but is not legally or financially responsible for completion of stipulations set forth in the PA.

Construction – The construction phase begins only when BLM has issued a Notice to Proceed. This document follows the issuance of the ROW grant to the proponent for the Undertaking. It includes all surface disturbing activities associated with the project.

Cultural Resource – This term is applied to any location of human activity, occupation, or use identifiable through field inventory, historical documentation, or oral evidence. The term includes archaeological, historic, or architectural sites, landscapes, buildings, structures, objects, and places that possess historic and/or cultural significance as well as places with important public and scientific uses, and may include definite locations (sites or places) of traditional cultural or religious importance to specified social and/or cultural groups. Cultural resources may be but are not necessarily eligible for the National Register.

Cultural Resources Contractor – A qualified and permitted professional consultant in archaeological and cultural resources (archaeologist, historian, ethnographer, historic architect, architectural historian, or anthropologist) who is responsible for implementing cultural resource inventories and who prepares cultural resource documents, reports, analysis, records, and professional literature. Cultural resource

contractors must meet the Secretary of the Interior's Professional Qualification Standards and hold appropriate permits from land-managing agencies.

Class III Cultural Resource Inventory (from H-8100-1) – Intensive field survey: A complete surface inventory of a specific area involving a systematic field examination of an area to gather information regarding the number, location, condition, distribution, and significance of cultural resources present, typically requiring a systematic pedestrian review of an area with transect intervals that shall not exceed 65 feet (20 meters).

Discovery – A previously unknown cultural resource identified in the APE during construction, subsequent to the Class III Inventory.

Effects - Alterations to the characteristics of a historic property qualifying it for inclusion in or eligibility for the National Register.

- **Direct effects** -These are changes or impacts to historic properties caused by the activities associated with the Undertaking and occur at the same time and place.
- **Indirect effects** – These are changes or impacts caused by the Undertaking and are observed later in time or farther removed in distance, but are reasonably foreseeable. Changes in drainage and erosion, visual changes, or audible effects are common indirect effects.
- **Cumulative effects** – These are changes or impacts to historic properties when the effects of the Undertaking are taken into account with past, present, and foreseeable future effects of other projects and activities in the vicinity of the Undertaking.

Eligible (for inclusion in the National Register) – Includes both properties formally determined as such in accordance with regulations of the Secretary of the Interior and all other properties that meet the National Register criteria as determined by the Federal Agency in consultation with the SHPO, and if appropriate, with input from the consulting parties.

Historic Property – Any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register maintained by the Secretary of the Interior. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the National Register criteria.

Historic Property(ies) Treatment Plan (HPTP) – A document that details the procedures and techniques for resolving adverse effects to historic properties within the APE through avoidance, minimization, and/or mitigation.

Inventory Report – The inventory report documents the results of the cultural resources inventory detailing the areas surveyed, the methodologies used, the cultural framework of the project area, and the cultural resources discovered and documented. It includes assessments of direct, indirect, and cumulative effects within the APE of the Undertaking. It also provides recommendations on National Register eligibility of all of the cultural resources within the inventoried area.

Monitoring and Discovery Plan – The Monitoring and Discovery Plan is a component of the HPTP and (1) provides a detailed plan to monitor compliance with stipulations of the HPTP to avoid, minimize, or mitigate adverse effects of the Undertaking, (2) may include specific plans where monitoring is necessary to help resolve adverse effects to historic properties, (3) establishes procedures to follow in the event that previously undiscovered cultural resources are encountered during the Undertaking, and (4)

includes a plan of action developed specifically to address the handling of human remains pursuant to the NAGPRA and applicable State laws. All monitoring plans shall explicitly state the objectives of the monitoring and provide a methodology for attaining these objectives.

National Register of Historic Places – This is the official list of the Nation's prehistoric and historic places worthy of preservation; including districts, cultural resources, buildings, structures, and objects significant in American history, architecture, archaeology, engineering, and culture. The list is maintained by the Secretary of the Interior.

Plan of Development (POD) – The POD is a comprehensive document provided by the applicant that fully describes the scope and scale of the project. The purpose, location, design factors, auxiliary components, construction details, operational needs, maintenance requirements, rehabilitation plans, and comment and review requirements are examples of the elements required for a POD to be approved by BLM.

Programmatic Agreement (PA) – A document that records the roles, responsibilities, terms, and conditions agreed upon to resolve the potential adverse effects of a Federal agency program, complex project, or other situations in accordance with 36 CFR 800.14(b).

Right-of-Way (ROW) – A right-of-way is a land-use authorization needed to legally use or occupy public lands. A right-of-way authorization is granted only after specific requirements are met.

Record of Decision (ROD) – A record of decision is a concise public document that records a Federal agency's decision(s) concerning a proposed action for which the agency has prepared an environmental impact statement.

Section 106 – Section 106 of the National Historic Preservation Act of 1966 (NHPA) requires Federal agencies to take into account the effects of their undertakings on historic properties, and afford the ACHP a reasonable opportunity to comment. The historic preservation review process mandated by Section 106 is outlined in regulations issued by the ACHP. Revised regulations, "Protection of Historic Properties" (36 CFR 800), became effective August 5, 2004.

Significant Delay – The term "significant delay" indicates the time period in which circumstances or regulations have changed so that the current analysis is insufficient to address those changes.

State Historic Preservation Officer (SHPO) – The official appointed or designated pursuant to Section 101(b) (1) of the NHPA to administer the State Historic Preservation Program.

Treatment Report – A document that presents the complete results of the treatment activities performed on all historic properties (and any undetermined cultural resources for which additional studies were performed to determine National Register eligibility), addresses the research questions developed in the Treatment Plan, and synthesizes the results into a regional overview of the project area.

Tribe – Any Indian tribe, band, nation, or other organized group or community, including a native village, regional corporation, or village corporation, as those terms are defined in section 3 of the Alaska Native Claims Settlement Act (43 USC 1602), which is recognized as eligible for the special programs and services provided by the United States to Indians because of their status as Indians.

Undertaking – A project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a Federal agency, including those carried out by or on behalf of a Federal agency; those carried out with Federal financial assistance; and those requiring a Federal permit, license, or approval.

SIGNATURES

Signatories

U.S. Bureau of Land Management
Arizona State Historic Preservation Office

Invited Signatories

City of Goodyear
Arizona State Land Department
Arizona State Museum
Arizona Department of Transportation

Concurring Parties

Ak-Chin Indian Community
Gila River Indian Community
Salt River Pima-Maricopa Indian Community
Tohono O'odham Nation
The Hopi Tribe

SIGNATORIES:

U.S. BUREAU OF LAND MANAGEMENT, Arizona

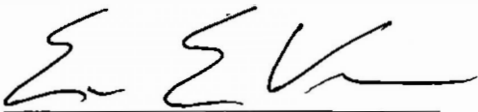
BY: 

Edward J. Kender
Field Manager, Lower Sonoran Field Office

DATE 5/17/16

SIGNATORIES;

ARIZONA STATE HISTORIC PRESERVATION OFFICE

BY: 

Eric Vondy
Acting State Historic Preservation Officer

DATE: 6/1/16

1 1 1 1 1

11 12 13 14

INVITED SIGNATORIES:

CITY OF GOODYEAR

BY: Brian Dalke

Brian Dalke
City Manager

DATE: 4/26/16

ATTEST:

Maureen Scott
City Clerk

Approved as to form:
[Signature]
City Attorney

INVITED SIGNATORIES:

ARIZONA STATE LAND DEPARTMENT

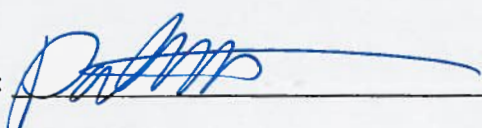
BY: *Lisa A. Atkins*

DATE: *4 March 16*

Lisa Atkins
State Land Commissioner

INVITED SIGNATORIES:

ARIZONA STATE MUSEUM

BY:  _____

Patrick D. Lyons
Director

DATE: 4 Feb 16

INVITED SIGNATORIES:

ARIZONA DEPARTMENT OF TRANSPORTATION

BY: Paul O'Brien

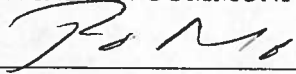
DATE: 1/20/16

Paul O'Brien

Environmental Planning Group

CONCURRING PARTIES:

AK-CHIN INDIAN COMMUNITY

BY: 

DATE: 4-7-16

TITLE:

GILA RIVER INDIAN COMMUNITY

BY: _____

DATE: _____

TITLE:

SALT RIVER PIMA-MARICOPA INDIAN COMMUNITY

BY: _____

DATE: _____

TITLE:

TOHONO O'ODHAM NATION

BY: _____

DATE: _____

TITLE:

THE HOPI TRIBE

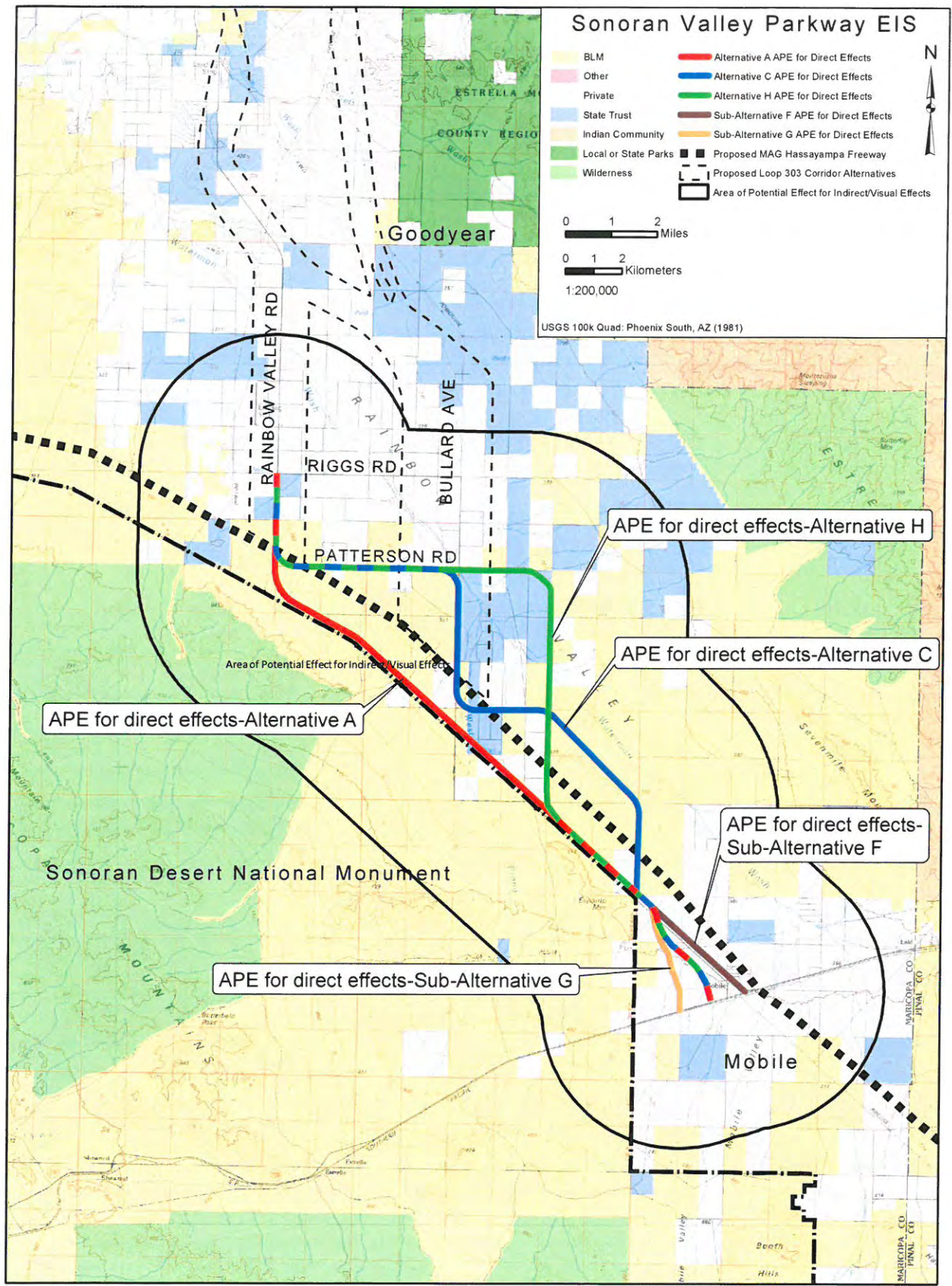
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TITLE:

ATTACHMENT A:

Proposed Project Alternatives and Area of Potential Effects (APE)



Appendix B

AGFD DESIGN RECOMMENDATIONS

ATTACHMENT

ARIZONA GAME AND FISH DEPARTMENT RECOMMENDATIONS FOR THE PROPOSED PARKWAY – WILDLIFE MITIGATION STRATEGIES

INTRODUCTION

Wildlife move across the landscape to meet their basic survival needs. Anthropogenic barriers to wildlife movement, such as roads, pose a significant threat to the long-term persistence of wildlife populations worldwide by fragmenting habitat (Noss 1983, Wilcox and Murphy 1985, Noss 1987). The rapid expansion of the U.S. road system to approximately 3.9 million miles (Forman et al. 2003) has exacerbated the effect of habitat fragmentation on wildlife populations by creating barriers to movement (Noss and Cooperrider 1994, Forman and Alexander 1998). Other impacts of roads on wildlife populations include habitat loss within the road's physical footprint, reduced habitat quality adjacent to the roadway, increased exploitation of wildlife resources by human populations, direct mortality (i.e., road kill), pollution, establishment of invasive species, increased development, and reduced landscape connectivity (Spellerberg 1998, Tombulak and Frissell 2000, Foreman et al. 2003).

Wildlife crossing structures with funnel fencing have the potential to make roads safer for motorists and wildlife by reducing wildlife-vehicle collisions and maintaining landscape connectivity (i.e., the degree to which a landscape facilitates or impedes the movement of organisms among distinct resource patches; Taylor et al. 1993). From a wildlife conservation perspective, effective wildlife crossing structures can reduce the impacts of habitat fragmentation resulting from the isolation of core habitat (e.g., decreased population numbers, loss of genetic variation, loss of population viability, extirpation/extinction). Effectiveness is dictated by the assemblage of species present, the types of crossing structures installed, and the placement of those structures relative to animal movements.

The City has identified the need for a new parkway in the Rainbow Valley to service future development in and around Mobile, Arizona, which was annexed by the City. The Rainbow Valley, located between the Sierra Estrella Mountains and the Sonoran Desert National Monument (SDNM), functions as a critical link for a variety of sensitive wildlife species, including desert bighorn sheep (*Ovis canadensis nelsoni*), desert mule deer (*Odocoileus hemionus*), and Sonoran desert tortoises (*Gopherus morafkai*), and provides habitat for numerous other species such as the Western shovel-nosed snake (*Chionactis occipitalis*).

Given the awareness of the planned Parkway's potential impacts on wildlife connectivity, a data-driven approach to maximizing the effectiveness of mitigation measures in terms of conservation benefit and financial resources is most desirable. A pilot-study was developed during July 2008 to provide preliminary information on wildlife movement across the El Paso Gas Pipeline Road. While this effort was brief, it indicated that wildlife move across the alignment in specific locations. This effort represents the only wildlife movement data available from Arizona Game and Fish Department (AGFD) in this area to date. Wildlife movement studies should be conducted to inform future design recommendations during parkway expansion projects that optimize wildlife passage, reduce wildlife/vehicle collisions and reduce wildlife mortality. Pre-construction and/or post-construction monitoring of wildlife movement across the two-lane parkway and within recommended bridge and culvert crossing structures could inform future recommendations for additional design features such as funnel fencing and escape ramps. Funnel fencing

is a critical component of crossing structure designs as traffic volumes increase and the Parkway is expanded to six lanes. Wildlife movement data should be incorporated into the pre-design phase of future expansion projects.

The recommended research approach includes road kill assessments, track surveys, and traffic volume analyses to finalize location and design of crossing structures and other fencing or flood control designs; followed by post-construction monitoring of crossing structures to evaluate effectiveness and apply adaptive management and design strategies if necessary.

At this time, the AGFD will not provide recommendations for locating wildlife crossing structures suitable for bighorn sheep as parkway mitigation. The modeled linkage design includes bighorn sheep. The only mitigation for Bighorn that will work is a wildlife overpass structure. However, AGFD does not believe we could accurately recommend siting for this mitigation without telemetry data to better understand movement patterns between suitable habitats in the mountainous terrain of the area. There is no source for telemetry research at this time. Therefore, AGFD is not recommending mitigation solutions for bighorn within the Linkage Zone at this time; however, we consider connectivity of bighorn sheep habitat between the Sierra Estrellas and Sonoran Desert National Monument (SDNM) a future priority that should be addressed prior to future interstate highway expansions in the area.

MITIGATION RECOMMENDATIONS

The AGFD recommends construction of a series design features along the proposed Parkway alignment that will facilitate wildlife movement within the Sierra Estrella-SDNM Linkage Zone (Maximum BLM alternative) and important natural wash movement corridors associated with Waterman Wash and larger tributaries. The overall connectivity goal is to provide multiple crossing structures, suitable for a variety of species (large and small mammals, reptiles and amphibians) and spaced at distances that accommodate species with small and large home range sizes, associated with washes and upland habitats. Decisions on the Parkway alignment should strive to minimize the distance traversed across the Linkage Zone in such a way as to consolidate future transportation and utility corridor ROWs and avoid excessive fragmentation of the Linkage Zone, thereby minimizing the need for mitigation.

Design features identified in project planning mitigation discussions include a variety of solutions including: bridges or span arch culverts, box and pipe culverts, crossing structure funnel fencing, wildlife permeable flood control features, wildlife friendly Right-of-Way (ROW) fencing, and reptile exclusion fencing where necessary for reducing impacts to special status species. Recommendations for the locations of structures have not been finalized and are contingent on which alignment alternative is chosen for implementation. The AGFD recommends coordination during the Parkway engineering and design phase to finalize site and design specifications of wildlife crossing structures. Recommendations will be based on findings from relevant wildlife research, site specific wildlife movement information, existing wildlife habitat values, field expertise from AGFD, wildlife habitat modeling and AGFD bridge, culvert and fence guidelines (<https://www.azgfd.com/wildlife/planning/wildlifeguidelines/>) for wildlife passage. Considerations will include future land use plans within the City and Maricopa County Flood Control District plans for future flood control designs within the Rainbow Valley area. Design specifications for wildlife crossing structures should optimize the movement of wildlife while not impeding the management of flood water.

Wildlife mitigation recommendations are based on a phased implementation approach; tiered to the phased construction approach proposed by the City. Initial construction will be for a two-lane road, with posted speeds of 55 mph, with plans for future expansion to a six-lane parkway.

DESIGN RECOMMENDATIONS FOR LARGE-SIZED MAMMAL (MULE DEER) CROSSING STRUCTURES

AGFD research indicates that deer are very adverse or sensitive to crossing roadways and need the largest underpass as possible (bridges). There has been some deer passage documented through culverts, and it is possibly enough to maintain gene flow and functional genetic connectivity; but not true permeability in the sense that resident populations would have the ability to move through home ranges for feeding, breeding, dispersal and in response to climatic or episodic events. The best case scenario within the Linkage Zone would be a wildlife overpass (land bridge type structure) that does not arch but remains at natural grade; with a roadway that tunnels underneath; a structure such as this would accommodate all species including bighorn. The City has stated this is not economically feasible.

The recommended solution is construction of multiple large arch span type culverts within the Linkage Zone and associated with priority wash corridors outside the linkage. Culverts should have clear visibility to the other side, large openness ratio, a 12-foot recommended minimum height to avoid a tunneling effect, and sloped walls as opposed to vertical. Wide cross-sectional areas should provide for out of channel wildlife movement when wash corridors are flowing, an important design consideration. Center grates on medians should be considered to enhance natural lighting.

This option should provide better passage than a box culvert 10 × 10 foot box type structure. Ongoing AGFD research in Twin Peaks, Arizona, to evaluate mule deer use of two-cell, 10-foot-high × 12-foot-wide × 130-foot-long culvert underpasses indicates deer come approach, but do not use it.

AGFD recommends a phased implementation approach, that utilizes designs that can be easily upgraded as opposed to reconstructed. There is potential to identify suitable locations within the Linkage Zone at the two-lane phase. However, in a buildout future, it may be best to site crossing structures towards the middle of the Linkage Zone away from the disturbances of the urban fringes, in addition/or in lieu of wash corridors. AGFD recommends further analysis for timing and location of structures during the engineering and design phases of the project. At a minimum, construction of large mammal crossing structures should occur when the Parkway is expanded to four or six lanes, and when traffic volume across the linkage increases. It may not be cost effective for the two-lane phase of the project.

AGFD recommends approaching bighorn sheep mitigations for the Linkage Zone as part of Phase 2 implementation of the project. This will require collaboration on bighorn sheep movement research with multiple stakeholders and project proponents including the Arizona Department of Transportation (ADOT); and in coordination with other local transportation projects including but not limited to the future SR 303, I-11 and/or Hassayampa freeway through the Linkage Zone.

DESIGN RECOMMENDATIONS FOR MEDIUM- AND SMALL-SIZED WILDLIFE CROSSING STRUCTURES

AGFD recommends maximizing the number and size of medium- and small-sized culverts within the Linkage Zone; and as required for roadway design outside of the linkage. AGFD research has demonstrated that culverts are used by mountain lions, bobcat, javelina and other medium to small mammals, reptiles and amphibians for passage under roadways. A study funded by the Pima County Transportation Authority (Grandmaison 2012) provides background on passage rates for small vertebrates (i.e., lizards, snakes, small mammals, meso-carnivores). Similar to large mammals, small critter fencing (e.g., tortoise fencing) can be used to funnel movement and as an additional safe-guard for special status species such as Desert tortoise (further discussion on tortoise fencing below).

Design culverts with at grade natural substrate bottoms and avoid use of large rip rap in front of or adjacent to culverts; and/or backfill with topsoil and stabilize with vegetation to optimize movement of barrier sensitive species such as Desert tortoise. Design culverts so as to avoid sharp drop offs and scour at the downstream end.

Structural dimensions for culverts suitable for medium-sized wildlife should have openness ratios >0.4 and heights of at least 3-6 feet. Structures should be placed frequently (*every 500-1,000 ft.*) to correspond with smaller home range sizes over roadway distances greater than ½ mile. For a six-lane or larger roadway, AGFD recommends a cross-sectional opening of >30 square feet for medium-sized mammal culvert locations. Installing a structure suitable for a six-lane road will require little to no retro-fitting and reduce the need to fully reconstruct crossing structures when the Parkway is expanded up to six lanes. Culverts should be easily accessible (at natural channel grade) with natural vegetation surrounding the approach and entrance. Avoid use of large rip rap at approach and entrance and/or design with ramps to facilitate movement if constructed above grade.

Small mammals, reptiles and amphibians will utilize small pipe, box culvert and/or pipe culvert designs. Structural dimensions should have smaller cross-sectional areas, 2-4 sq. feet, with heights of at least 1 foot.

SMALL-SIZED “UPLAND” CROSSING STRUCTURES SUITABLE FOR AMPHIBIANS AND REPTILES

There are several species of reptiles and amphibians that utilize habitat within the Rainbow Valley area. Small-sized crossing structures (above) in upland locations are suitable for these species and could be easily incorporated into parkway designs. AGFD recommends placing a few crossing structures for these species in upland locations to compliment the distribution of large, medium and small culverts and bridges within the Linkage Zone. However, additional structures would be beneficial further north, proximate to City open space plans, to maintain distribution and abundance of these species within open space areas fragmented by the Parkway. Optimum placement is every 150-300 feet. Small pipes or box culverts with natural substrates should be fitted with grated open top designs or slotted drain culverts that are flush with roadways and allow natural light, air and rain to infiltrate without water pooling. Crossing structures outside of floodplains would provide safe passage for species that don't typically use wash habitats and/or have small home ranges. Funnel fencing will be an important design component for these passage structures. We recommend further discussion on how these features could be incorporated into a connectivity strategy within the Linkage Zone. (discussion on tortoise fencing below.)

FUNNEL FENCING AND RIGHT-OF-WAY FENCING AND TORTOISE FENCING

AGFD strongly recommends funnel fencing at all wildlife crossing structures designed for wildlife mitigation to ensure they are effective; without funnel fencing research has shown wildlife will continue to cross the roadway at grade. Funnel fencing is a critical component of successful wildlife crossings. Fencing is generally placed to compliment natural topographic features and encourage wildlife to move through a crossing structure and to prevent entrapment along medians. Escape mechanisms (such as fencing that leads to a slope and allows an animal to jump down but not up) are often used to compliment funnel fencing objectives and prevent roadway entrapment. Fence heights will need to be a minimum of 7 ft. for deer and sheep and 3-6 ft. for medium to small mammals. Livestock can be excluded from funnel areas by placing ROW fencing across and setback from the funnel/wildlife crossing structure area.

AGFD recommends use of roadway exclusion fencing as an additional mitigation to minimize roadway mortality of Desert tortoise as a Linkage Zone design mitigation and outside the linkage where the parkway overlaps high quality Category I tortoise habitat identified in the EIS. Roads impede tortoise movements and have been identified as a significant threat to tortoise populations throughout their distribution (AGFD unpublished data, Arizona Interagency Desert Tortoise Team 2000, Berry 1986a, Berry 1986b, Boarman 1991, Boarman et al. 1993, Nicholson 1979, von Seckendorff Hoff and Marlow 2002). Desert tortoises occur at relatively low density, have low reproductive rates, and low mobility, three characteristics that heighten their sensitivity to road-induced habitat loss (Trombulak and Frissell 2000, Gibbs and Shriver 2002). Exclusion fencing could be co-located with ROW fencing and funnel fencing associated with culverts, pipes and reptile/amphibian upland crossing structures. Exclusion fencing is typically not more than 3 feet in height and constructed of heavy-gauge 1 × 2-foot horizontal welded wire; partially buried in the ground and with an angled lip at the top to prevent climbing (*Recommended Specifications for Desert Tortoise Exclusion Fencing* September 2005, USFWS).

Results from future wildlife movement monitoring should be used to inform where other fencing needs might become critical to minimize wildlife/vehicle collisions, wildlife mortality and enhance the use of the constructed wildlife crossing structures. Due to the flat topography of the Rainbow Valley, it will be difficult to predict the extent and/or location of fencing without current wildlife movement data. It is feasible that the entire Linkage Zone may require funnel fencing at build out conditions to safely move wildlife through crossing structures due to expected high volumes of traffic. We anticipate that as development and traffic volumes increases in the Rainbow Valley there will be a greater need to construct funnel fencing and escape ramp features along all transportation corridors within the Linkage Zone.

AGFD recommends monitoring/research on wildlife movement within Rainbow Valley to provide information necessary for placement of funnel fencing. AGFD recommends interim strategies to design arch span culvert crossings with a limited amount of funnel fencing, and monitoring/research discussed below to evaluate additional needs at all wildlife crossing structure locations.

ROW fencing becomes problematic to wildlife as a result of design and location. Wildlife friendly design recommendations (<http://www.azgfd.gov/hgis/pdfs/FencingGuidelines.pdf>) should be used for all ROW fencing. AGFD recommends ROW fences be setback as far from the roadway as practicable. Where ROW fences cross drainages and parallel wildlife crossing structures, fences should be set back as far as practical, but at least 50 yards from the entrance of the structure and retrofitted with PVC or alternate materials to create “jumps”.

Fence design recommendations for this area should meet requirements for desert bighorn:

- 3-strand barbed and barbless wire
- Bottom strand 20” from ground; middle 15” from bottom strand; top strand 4” above middle strand
- Maximum height of 39” with minimum of 18-20 inches ground clearance on bottom wire; top and bottom wire barbless and middle strands barbed
- T-posts should be space 20-25” apart and at least 3 stays equally space between

VEGETATION AND CROSSING STRUCTURE DESIGN RECOMMENDATIONS

Maintaining natural vegetation along the approach and exits of structures and natural substrates through culverts has demonstrated increased wildlife use. Vegetation provides wildlife with security cover. AGFD recommends a non-clear cut approach to wash habitats during construction and post-construction restoration.

Scouring is common on the downstream side of concrete or pipe culverts along washes. The changes in elevation from floodway bottom to culvert/pipe bottom often compromise wildlife access through the culverts/pipe. Tortoise have been shown to be particularly sensitive to this situation on Highway 87. AGFD recommends design solutions that prevent scour and promote access and safe passage by small mammals, reptiles and amphibians.

WILDLIFE MONITORING/RESEARCH RECOMMENDATIONS FOR PROJECT IMPLEMENTATION

AGFD recommends research on wildlife movement to optimize design and placement of crossing structures that fit the need of the local wildlife and their movement patterns and reduce impact to and address human health and safety issues; as part of the phased implementation approach to the project. Further evaluation is imperative to identify hotspots for roadway mortality and to evaluate if construction and future expansion of the Parkway and increasing traffic volumes merit the need for additional mitigation measures, what types and where; in order to be successful.

Evaluation of crossing structure utilization is critical to determine effectiveness and to identify if there are any design modifications that would increase the effectiveness, and suitability as a future mitigation measure for roadway expansions and new projects.

Information gained from evaluation should be used to help decide timing and future steps towards mitigating increasing levels of development and traffic volume in the planning area as it relates to managing the Linkage Zone for the long-term. There are several approaches that should be explored and partnerships should be developed to find the resources to accomplish through shared commitments.

Approaches to consider:

- Track, Scat and surveys to identify “hot spots” for mortality and vehicle collisions
- Wildlife movement studies (telemetry) to identify movement patterns
- Traffic Volume using traffic counters to examine the potential influence of traffic volume on wildlife movement and mortality across the Parkway and in response to phase implementation of wildlife crossing structures
- Post-construction monitoring of crossing structures using digital cameras and/or track plates to evaluate success and/or need for adaptive management measures.

MITIGATION FOR LOSS OF WATER SOURCES

Local wildlife is extremely dependent on stock tanks in the area as an ephemeral and/or semi-permanent source of water. If Parkway construction would eliminate existing stock tanks along the project alignment we recommend replacement of in-kind values and redevelopment at the nearest alternate location.

ROADWAY GRADING

Research suggests that road kill of small terrestrial vertebrate species decreased by 93% on roads raised on embankments compared to roads at natural grades (Clevenger et al. 2003). This roadway design may be beneficial to small mammals, reptiles and amphibians throughout Rainbow Valley and through the Linkage Zone. Used in combination with wildlife friendly bridge and culvert designs, this design strategy may be an effective way to minimize impacts, while enhancing permeability.

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Appendix C

CONSTRUCTION

INITIAL CONSTRUCTION, CONSTRUCTION ACTIVITIES, AND MAINTENANCE

Initial Construction

The initial phase of construction (two lanes) includes building the outside curb and gutter and constructing the traffic lanes with the appropriate edge treatments and shoulders. The two bidirectional lanes would be constructed on the westernmost portion of the corridor. No U-turn crossovers would be constructed at this time. The two-lane Parkway would remain in place and functional until additional phases of construction occur. (Figure 2-10)

Earthwork and Paving

Construction activities would include earthwork grading; excavation; installation of drainage structures; placement of asphalt pavement, gravel, and decomposed granite; cleanup; and site reclamation. Heavy equipment would be used during construction to; clear the site, build the lanes, and haul and lift materials.

After removal of topsoil and initial grading, areas within the ROW may require additional fill as crews begin construction of the Parkway subgrade. Graders, scrapers, and bulldozers will employed to place road base along the established Parkway and graded to plan to obtain the necessary grade and alignment. Once the prescribed grade and centerline of travel is constructed, pavement would be placed.

Earthwork for each phase would be designed so the amount of earth excavated from the high points would be used to fill in the low points; additional fill to build the roadbed would be purchased from local material source brokers and trucked to the site. No borrow pits are planned for any Federal lands; specific material source brokers have not been identified at this time. All excess dirt generated would be stored on-site within the ROW for use during future phases.

Construction Access

Access to the construction site would be from the intersection of Rainbow Valley and Riggs Roads, or from the proposed intersection of the proposed Parkway and SR 238. Access to the project area from Rainbow Valley Road and Riggs Road would be via a 20-foot-wide construction road located in the north and east halves of the ROW. Access to the project area from SR 238 would be via the same 20-foot-wide construction road located in the north and east halves of the ROW. This temporary roadway will be reclaimed after the initial phase of construction. During construction, measures to minimize unauthorized public use of the 20-foot-wide construction road would include gates and signage posting that the construction road is “Closed to Public Use.”

To prevent the spread of invasive or noxious weeds, all seed mixtures would be certified as noxious weed-free, as specified in DOI-BLM-AZ-P000-2011-001-EA in coordination with the BLM, prior to the start of construction. Noxious weed control would be incorporated into the POD. After all phases have been completed, the construction road would be hydroseeded with a mixture of mulch and native seed mix. The goal is to allow the temporary roadway to return to a natural state.

During construction, legal access to all BLM and private roadways would be maintained through construction timing, phasing, and signage. Implementation of BMPs would be used to maintain industry safety standards while maintaining all existing access.

Construction Staging

Because of the length of the project corridor, construction would be phased into 3- to 4-mile-long segments. Assuming that construction starts at SR 238, working north, the construction staging areas would be located at the north end of each phase and will be reclaimed after the all phases of construction. Placement of temporary-use construction staging areas at the ends of each phase would allow the staging areas to be used for two phases at one location.

Preparation of the construction corridor would involve topographic survey of the ROW to establish final roadbed grade and staking of the centerline of travel. The clearing of some natural vegetation may be required; selective clearing would be performed only when necessary for surveying, construction, and maintenance operations. Construction staging would avoid or minimize impacts within the wildlife linkage areas. Additionally, construction staging areas would include design features intended to minimize impacts to wildlife, such as exclusion fencing, pit and open trench avoidance, and employee awareness. The contractor would not disturb areas outside the ROW without prior written permission from the appropriate land managing agency or individual owner. A Native Plant Removal/Restoration Plan detailing native plant identification, removal, and restoration would be prepared prior to the start of construction and be implemented during all phases of construction.

Construction Activities

Construction sites, material storage yards, and access roads would be kept in an orderly condition throughout the construction period. Refuse and trash, would be disposed of at an approved refuse facility, such as the Butterfield Station Landfill. Totally enclosed containment would be provided for all trash and hazardous materials. All construction waste, including trash, litter, garbage, other solid waste, petroleum products, and other potentially hazardous materials would be disposed of at a disposal facility authorized. To prevent the spread of invasive or noxious weeds, the project would comply with the *Phoenix District Integrated Weed Management Environmental Assessment* (BLM 2011).

No construction equipment oil, antifreeze, or fuel would be drained on the ground. Oils or chemicals would be hauled to an approved site for disposal. No open burning of construction trash would be allowed on BLM-administered lands. No unauthorized use would be permitted on the construction access road.

Following construction and cleanup, reclamation would be completed. The disturbed surfaces would be restored to the original contour of the land surface to the extent determined by BLM. During rehabilitation, the topsoil material would be spread evenly over the disturbed areas.

Restoration and Landscaping

A Native Plant Removal/Restoration Plan detailing native plant identification, removal, and restoration would be prepared in coordination with the BLM. Salvaged native plants will be used for revegetation of disturbed areas, along with seeding using BLM-recommended seed mixes. Preferably, seed would be planted between the months of November and January following the Parkway construction. Seed would be planted using straw mulching or hydromulching as directed by BLM; mulch would need to be sterilized or certified “weed free” to prevent increased spread or establishment of non-native weed species.

A construction contingency plan would be prepared prior to the start of construction. The plan would include methods for soil screening, segregation of potentially contaminated soil, soil sampling and

analysis, soil disposal and reuse, and a site health and safety plan. The construction contingency plan would minimize removal of xeroriparian vegetation during construction within the wildlife linkage areas at wash crossings. Restoration and revegetation of xeroriparian vegetation will be conducted post-construction at the approaches to wildlife crossing structures.

Additional Lane Construction

The second phase of construction (up to four lanes) would be added as warranted by funding and would include two additional lanes of traffic that functioned as an arterial roadway. Funding would become available as community growth, expansion, and increased traffic volume furthers the need for an expanded Parkway. The four-lane scenario includes the addition of two lanes and a median. Construction of this portion of the Parkway would be on the opposing side of the median and the existing two-lane roadway. The four-lane roadway configuration would include a space for the median, but intersection U-turn crossovers would not be completed until the final (six-lane) construction.

The third and final phase of construction (six lanes), would be three lanes in each direction, with a center median and non-signalized U-turns spaced along the corridor. Determination of placement of the left-turn movements would be dependent on traffic patterns and access at that time. The fifth and sixth lanes would be added to the inside of the existing four lanes adjacent to the median sides of the Parkway. Access management for traffic on the Parkway would be implemented to maintain a high level of roadway safety, reduce vehicle stops, and increase traffic capacity. Currently, there is no timeframe for build-out of the four- or six-lane Parkway. The construction process for earthwork, excavation, grading, and installation of drainage structures would be the same as used for the construction of the two-lane scenario.

Parkway Operation and Maintenance

The City would be responsible for the operation and maintenance of the proposed Parkway. An intergovernmental agreement for operation and maintenance responsibilities between the City and MCDOT may be necessary. The City would exercise their option to contract with MCDOT or conduct operation and maintenance responsibilities themselves.

Operations

The City would be responsible for the Parkway operation, including information dissemination regarding; road closures, delays, or detours, traffic management, temporary incident management, lane control, variations in speed, and road closures. Additionally, MCDOT has incorporated a variety of Intelligent Transportation Society (ITS) innovations into roads throughout the valley, such as vehicle-to-infrastructure communications that relay traffic information to control the phase and timing of traffic signals in order to avoid vehicle congestion at intersections. ITS innovations improve Parkway safety and efficiency and would be considered during final design and engineering of the two-lane Parkway based on the final Parkway configuration.

Maintenance

City Public Works staff would be responsible for periodically maintaining and monitoring the condition of the Parkway. The City is responsible for landscaping, continuous treatment of invasive & replanting of native plants, street sweeping, curb and gutter maintenance, signage, storm drains, and emergency cleanup. Routine maintenance will include; regrading gravel shoulders, cleaning the paved Parkway surface, periodic maintenance of the Parkway surface, seal coating, and paint markings.

Occupational Safety and Health Administration (OSHA) safety regulations would be enforced for this project. The City is responsible for ensuring compliance with OSHA regulations.

The City would manage the handling of industrial waste and toxic substances in full accordance with all applicable federal, state, and local regulations. Regulated hazardous materials would be managed in an appropriate manner that protects workers and the public and prevents accidental releases to the environment. In the event any such materials are released into the environment in excess of the reportable quantities defined under any relevant federal or state regulations; the required notifications would be made, and required reports would be completed and submitted to the appropriate agencies, including the BLM.

Any wildland fires along the Parkway within the project ROW, natural and human-caused, resulting in exposed soils that are susceptible to erosion would be responded to by the City Fire Department.

Appendix D

DESIGN FEATURES

The following table (Table R-1) presents voluntary, City-committed design features developed by the City, with input from the BLM, to ensure that Parkway construction and operation does not result in unnecessary or unreasonable environmental degradation. These are a part of all action alternatives and would be implemented by the proponent (the City). These design features are organized by applicable resource.

Table D-1. Design Features

TOPOGRAPHY AND SOIL RESOURCES	
Topography	Once the appropriate grade is reached, the road would be paved. A geotechnical engineer would develop specifications for this effort during the final design. Cut and fill slopes would be designed such that the maximum slope will be 3:1 (3 horizontal feet for each 1 vertical foot).
Soils	According to the NRCS (2007), soils within the project area limits have a low to medium shrink-swell potential; therefore, no special design considerations would be needed to stabilize the subgrade. Subgrade stabilization would consist of over-excavating 14 inches measured from rough grade, adding water, and compacting the soil. Erosion control on slopes would be achieved by "cat tracking." This process would be conducted by driving a bulldozer perpendicular to the slope, leaving track impressions in the soil; impressions would fill with water and reduce stormwater runoff and erosion. Cat tracks would be treated to prevent the spread of noxious weeds in accordance with BLM and state policy, as they are known vectors for noxious weeds since they are disturbed soils that hold water and attract vehicles as pull-offs. Other erosion and sediment control activities can include use of straw wattles, silt fences, or similar methods to prevent erosion and sediment loading, as necessary. The BLM would be consulted on the specific techniques and materials to be used for soil stabilization. Many of these controls would likely be left in place until full stabilization of the Parkway is complete. A stormwater pollution prevention plan (SWPPP) would be developed prior to construction and would more fully elaborate erosion, sediment control, and stabilization methods and would be included in the POD. The basic principle of a SWPPP is that construction project operators must identify areas and activities that may contribute pollutants to stormwater and must implement BMPs to minimize those pollutants. The primary pollutant from construction sites is sediment discharges from increased erosion. Adequate and effective erosion and sediment control BMPs must be used to aid in identifying the seed species, seeding rates, the time and method of planting the soil, and fertilizer and mulch requirements. The soil reclamation and salvage plan would also describe mitigating the loss of biological soil crusts and enhancing vegetation establishment by inoculating soils with native soil crusts during vegetation restoration. Lastly, the plan would outline the requirements for long-term monitoring of success.
AIR RESOURCES	
	Dust abatement using an approved dust suppression coating and other air quality protection measures would be implemented during construction, according to BLM, the City, and County Air Quality Control Districts, to ensure compliance with federal and regional air quality standards. Rules 310 and 310.01 of the MCAQR include work practice standards to ensure that emissions from fugitive dust sources, such as open areas, vacant lots, unpaved parking lots, and unpaved roadways, are minimized to the extent practicable. An earthmoving permit and a dust control plan are required for any operations that disturb a total surface area equal to or greater than 0.10 acre. As the specific construction activity equipment roster is unknown at this time, emissions of criteria pollutants and MSATs cannot be quantified. As such, it is also unknown whether or not measures of construction emissions would need to be undertaken. The possible need for addressing construction equipment measures would be evaluated when actual construction activities are known.

Table D-1. Design Features (Continued)

CULTURAL AND HERITAGE RESOURCES	
	Measures will be incorporated to avoid sites through project design. Because the timing and effects under Section 106 of the NHPA (36 CFR 800) are currently unknown, a signed PA was prepared in consultation with interested parties to address potential effects and mitigation measures (see Appendix C). Mitigation measures for each phase of construction will be outlined in a historic properties treatment plan (HPTP) specific to that phase. The HPTP will conform to the Secretary of the Interior's Standards and Guidelines and current BLM LSFO RMP (BLM 2012a) BMPs and SOPs. Design features to reduce adverse impacts to AZ T:15:94(ASM) and the Lung Homestead would consist of a data recovery program. The data recovery may include but is not limited to surface artifact analysis, excavations, oral history, and archival research. Data recovery may also apply to the Butterfield Overland Stage Route. Artifacts removed during data recovery would be stored at a designated facility such as the ASM. Design features to reduce adverse impacts to the Butterfield Overland Stage Route and the Anza NHT may include crossovers or other pedestrian crossings of the Parkway for hikers, parking areas along the Parkway to allow access to the trails, access trails from the parking areas, and informative signage about the history and importance of the trails. Additional design features, if appropriate, shall be identified as each set of lanes is designed, to assure public access. Because the Komatke Trail travel corridor has no physical remnants within the project area, there are no mitigation measures identified. If a historic corridor for this trail is identified, additional design features would be considered to assure safe pedestrian access.
PALEONTOLOGICAL RESOURCES	Construction workers responsible for ground-disturbing activities shall be trained to recognize paleontological resources and the protocol to enact upon discovery. Any discoveries would be treated in accordance with the Paleontological Resources Protection Act of 2009.
WATER RESOURCES	
Stormwater	Stormwater flows for the Proposed Action, action alternatives, and sub-alternatives are based on the FCDMC <i>Rainbow Valley Area Drainage Master Plan</i> (Rainbow Valley Drainage Study) (FCDMC 2011). Major stormwater flows, greater than 500 cubic feet per second, were used to design Parkway crossings that used either box culverts or a depressed, or dipped, pavement profile. Minor stormwater flows would be addressed during final design. Arch span-type culverts are typically located in incised washes, while dipped profiles are located in areas where the existing ground is flat. Dipped crossings are designed so that the depth is less than 6 inches to accommodate safe crossing by emergency vehicles.
Final Design	Because permanent erosion control features only mitigate the immediate local impacts, final design must also account for the potential of concentrated flows to create longer-term impacts with incising of channels downstream.
Clean-up and site reclamation	Construction sites, material storage yards, and access roads would be kept in an orderly condition throughout the construction period. Approved enclosed refuse containers would be used throughout the proposed Parkway. Refuse and trash would be removed from the sites and disposed of in an approved manner. Oils or chemicals would be hauled to a disposal facility authorized to accept such materials. Open burning of construction trash would not be acceptable. All post-construction ROWs would be restored, as required by the BLM. All practical means would be made to restore the land to its original natural drainage patterns. Since revegetation would be difficult in many areas of the proposed Parkway because of low amounts of precipitation, all practicable measures would be taken to minimize disturbance during construction.
VEGETATION RESOURCES	
Reclamation of temporary disturbance	All temporarily disturbed areas would be reclaimed to as close to their pre-construction conditions as possible. Seed mixes (as determined through consultation with the BLM) and/or transplants would be applied to temporarily disturbed areas. Use of fertilizer is not expected during stabilization or rehabilitation activities. When construction of stormwater management structures is complete, contours would be carefully restored to the extent feasible.

Table D-1. Design Features (Continued)

VEGETATION RESOURCES (Continued)	
	Blading and removal of vegetation over the entire road bed and the temporary construction access road would be required for each phase of the construction (two lanes, four lanes, and six lanes). Rehabilitation and reclamation of the disturbed areas would consist of recontouring these areas to blend into the surrounding terrain, or as requested by the BLM. The area would be reseeded using seed mixtures that are created through consultation with the BLM; all seed mixtures would be certified as noxious weed-free, as specified in <i>DOI-BLM-AZ-P000-2011-001-EA</i>. All rehabilitation and reclamation would be conducted to BLM standards. The use of fertilizer is not expected at this time. Transplants of native species may occur. All earth-moving equipment, hauling equipment, and other machinery shall be inspected and washed with compressed air to remove any attached seeds, roots and rhizomes, and soil or other debris prior to entering or leaving the construction site. Verify that any soils or other materials imported for fill or restoration activities are certified as free of noxious and invasive plant species. In accordance with ADOT BMPs and the ANPL, a native plant salvage and vegetation restoration plan would be developed. According to ADOT BMPs, soil stabilization and vegetation control and management is encouraged on slopes and within the median, shoulder, and road ROW (ADOT 2008b). As part of the plan, all ground disturbances outside of the road bed, such as construction staging areas and shoulder work, would be top-soiled in accordance with the soil reclamation and salvage plan and revegetated with native vegetation to restore native plant communities, wildlife habitat and/or connectivity between habitat areas crossing the Parkway. ADOT guidance encourages professional judgment to be used to achieve an appearance similar to the surrounding area while simultaneously using self-sustainable vegetation that can thrive with naturally occurring moisture (ADOT 2013). The Native Plant Salvage and Vegetation Restoration Plan would address the salvage and replanting of native trees, shrubs, and cactuses. Native plant salvage would occur in conformance with the ANPL and the ADOT Native Plant Salvage and Replanting Evaluation guidance. The plan would include measures regarding the makeup of the native seed mixture to be used.
WILDLIFE AND SPECIAL STATUS SPECIES	
	Pre-construction surveys of the ROW shall be conducted by a qualified biologist (pre-construction indicates after a ROW has been granted but before the Plan of Development has been implemented). These surveys shall focus on burrowing species, such as the Sonoran desert tortoise and the western burrowing owl, raptor nests, and other species identified with the potential to occur in the area. From the results of these pre-construction surveys, the BLM may suggest that a biological construction monitor also be present during the initial clearing phases to help protect wildlife from harm and/or that relocation plans be developed for any species requiring relocation from the project area. During design, consultation with AGFD, on wildlife designs features and siting during the development of the final engineering plans and construction phases shall be conducted. During construction, vehicle speeds within the ROW and access roads will not exceed 25 miles per hour in order to protect wildlife during construction. All construction personnel shall attend a wildlife awareness training conducted by a qualified biologist prior to commencement of construction activities in order to educate the construction crew of potential wildlife and how to protect the species from harm. To the extent practicable, design and construction shall try to minimize the construction staging areas and associated impacts within the designated wildlife linkage areas. In addition, minimizing removal of vegetation during construction at washes crossings within the designated wildlife linkage areas and restoration post construction to restore cover on approaches to wildlife crossing structures shall be considered to increase the overall success of wildlife using the crossing structures. During design, the Rainbow Valley ADMP drainage plan and crossing structure recommendations for designated Sonoran Wash Corridors within the project area shall be consulted and implemented to the extent practicable. Fences installed along the perimeter of the ROW shall be constructed with the BLM standard mule deer wire configuration, i.e., four strands with smooth wire on the bottom. Signage shall be placed along the Parkway, especially in the southern portions where designated wildlife linkages are present, to warn motorists to drive carefully and watch for wildlife. This may help reduce wildlife mortality. The exact locations and wording shall be developed in consultation with the BLM.

Table D-1. Design Features (Continued)

WILDLIFE (Continued)	
	A Post-Construction Wildlife Crossing Monitoring Plan shall be prepared and implemented, particularly within designated wildlife corridors as stated in the LSFO BMPs (BLM 2012a). The goal would be to gather data, such as road kill occurrences in terms of numbers and locations, culvert use by wildlife to assess whether the opening ratio is sufficient for wildlife, wildlife-friendly fence structure and layout effectiveness, monitoring cameras, and sign placement effectiveness. These data would then be used to assess if any additional modifications are necessary in order to reduce wildlife mortality along the Parkway and provide safer routes for wildlife across the Parkway. Parkway roadside lighting shall be designed and installed to minimize wildlife disturbance. Future wildlife studies may be conducted by the BLM or AGFD while the two lanes are present to determine the use of the project area by wildlife (i.e., Sonoran Desert tortoise, bighorn sheep) in order to determine whether future design features for bighorn would be suggested and where these features would be located upon expansion to four or six lanes in accordance with the LSFO BMPs (BLM 2012a). These wildlife studies would support the Notice to Proceed that BLM would issue prior to the proposed Parkway being expanded to four or six lanes. Consultation on wildlife design feature and siting during development of the final engineering plans and construction phases will be conducted with AGFD, in coordination with the BLM. In terms of designing for wildlife crossings for larger mammals, recommendations in <i>Arizona Missing Linkages: Gila Bend–Sierra Estrella Linkage Design</i> (Beier et al. 2008) indicate that wildlife crossings would be needed in three distinct corridors. As a result, fill slopes adjacent to the wildlife crossings would extend beyond the proposed ROWs, and temporary construction easements would be needed in these locations. Dimensions and measurements of the wildlife-enabled arch span-type culverts would be determined during final design. The selection of an action alternative will determine the precise location within the Estrella Mountains to SDNM Wildlife Movement Corridor.
	Design culverts and dip sections with at-grade natural substrate bottoms and avoid use of large riprap in front of or adjacent to culverts and dip sections; and/or backfill with topsoil and stabilize with vegetation to optimize movement of barrier sensitive species such as Desert tortoise. Design culverts and dip sections to avoid sharp drop-offs and scour at the downstream end. Outside the Linkage Zone use box culvert designs for medium-sized mammals at additional locations that will facilitate wildlife movement into future plans for open space within the City. Use small pipe, box culvert, and/or pipe culvert designs for small mammals, at a minimum, for all other drainage crossings that will need flood control structures within and outside the Linkage Zone. Refer to Appendix D for AGFD wildlife crossing design specifications.
	Construction staging and temporary construction easements would avoid or minimize impacts within the wildlife linkage areas.
	Minimize removal of xeroriparian vegetation during construction within the wildlife linkage areas at wash crossings. Restoration and revegetation of xeroriparian vegetation will be conducted post-construction at the approaches to wildlife crossing structures.
Sonoran desert tortoise	Survey and relocation of desert tortoises in Category 1 habitat adjacent to the construction area during and immediately preceding construction to minimize unintended mortality (<i>Desert Tortoise Survey Guidelines for Consultants</i>).
Sonoran desert tortoise	Follow the recommendations of the Arizona Interagency Desert Tortoise Team to minimize impacts to Desert tortoise and prevent conflicts during construction and reclamation activities (<i>Guidelines for Handling Sonoran Desert Tortoises Encountered on Development Projects and Recommended Standard Mitigation Measures for Projects in Sonoran Desert Tortoise Habitat</i>).
Sonoran desert tortoise	Provide information and education of project personnel in worker education program regarding Sonoran desert tortoise.
Sonoran desert tortoise	Designate a Desert Tortoise Coordinator who will be responsible for overseeing compliance with the mitigation program, coordination with permitting agencies, land managers, and AGFD; and as a contact point for personnel that encounter Sonoran desert tortoises.
Sonoran desert tortoise	Sonoran desert tortoises found on the work site will be moved off-site by the Desert Tortoise Coordinator or qualified, authorized personnel.

Table D-1. Design Features (Continued)

VISUAL RESOURCES	
Visual Design and Scenic Quality	Design features specific to the project and environment would be employed to reduce visual disturbance and impacts on visual resources, where feasible and in accordance with the BLM LSFO RMP (BLM 2012a) BMPs and SOPs. This includes the use of tinted or painted concrete (used in culverts, bridge crossings, or sidewalks) muted in standard desert colors from the BLM Standard Color Chart, in hues of olive, tan, and browns, to blend with the surrounding environment, which would reduce the degree of contrast to the surrounding landscape. The proposed Parkway would be designed in keeping with Arizona Standards for Parkway Design, and, in addition, BLM BMPs for scenic quality would be integrated into the design and construction of the Parkway. Color treatment of signage along the Parkway to reduce and remove glare from standard stainless steel sign backing. Vertical concrete color treating of surfaces such as outside edges of concrete box culverts and wildlife crossings, wing walls stemming off of concrete culverts, and any other retaining walls and bridges. Design detail of the concrete box culverts and wildlife crossings shall include wing walls that taper gradually with fill slope as the Parkway is elevated over the landscape. Guardrails, ROW fencing, and light poles shall be CorTen self-weathering steel or shall be treated with a weathering agent resulting in a similar visual effect to reduce the visual contrast of traditional galvanized metal guardrail. Parkway roadside lighting shall be designed and installed to minimize aesthetic disturbance.
Lighting system	Lighting would be designed to provide the minimum illumination needed to achieve safety and security objectives and would be shielded and oriented to focus illumination on the desired areas and minimize additional nighttime illumination in the site vicinity.
Signs/Billboards	Signage would be designed to comply with BLM Visual Resource Management objectives as identified in the Lower Sonoran RMP. Signage would also be required to comply with the City's Zoning Ordinance, Article 7: Sign Regulations.
Road maintenance	Road maintenance would be performed as needed. Paved roads would be swept, sealed, and/or overlaid as needed. Grading and drainage would be maintained for gravel and earth roads. Dust palliatives would be applied, as required, to limit fugitive dust.
Access to existing primitive roads	Public access to primitive roads that are currently open for motorized use would be maintained and would include either a traffic interchange, cattle guard, or gate.
Final Design and Landscaping	Final engineering and design of this Parkway and would be in keeping with Arizona Standards for Parkway Design as published by Maricopa County and BLM BMPs.
LIVESTOCK GRAZING	
Cattle Infrastructure	The contractor would install temporary fencing along the ROW in order to limit off-road access and keep cattle and wildlife from gaining access to the Parkway during construction. No construction vehicle movement shall occur on BLM-administered lands outside the approved project ROW limits. When the initial two-lane highway is complete, the City would install permanent fencing and crossings. A corral and shipping pen located on ASLD lands at the corner of Bullard and Patterson would be compensated and relocated. Cattle guards would be installed at the following locations/intersections for the Beloit allotment: • Rainbow Valley Road and Germann Road on the east side • Rainbow Valley Road and Queen Creek Road on both sides • Rainbow Valley Road and Ocotillo Road on both sides • Rainbow Valley Road and Riggs Road on both sides The following design features would occur if Alternative A, the BLM Preferred Alternative, is implemented: • Gates would be installed at the following locations/intersections for the Beloit allotment: - o Alternative A alignment and Patterson Road - o Alternative A alignment and Bullard Avenue - o Between the Patterson Road and Bullard Avenue gates on the east side - o Near the intersection of the Alternative A alignment and the southern allotment boundary fence

Table D-1. Design Features (Continued)

LIVESTOCK GRAZING (Continued)	
Cattle Infrastructure (Continued)	The following design features would occur if Alternative C or Alternative H are implemented: - Any wildlife crossing intended for large mammals would be compatible for livestock. - Relocate or compensate the Beloat permittee for shipping pens, Ranch Headquarters, corrals, well, dirt tanks, and pasture fence that would be lost. - Provide livestock water at South Well on both sides of alignment for the Beloat allotment. - Provide livestock water at Yonker Tank on both sides of alignment for the Beloat allotment. - Gates would be installed at the following locations/intersections for the Beloat allotment: - Alternative C alignment and Patterson Road - Alternative C alignment at Yonker tank - Alternative C north and south of South Well
Livestock Waters	If it is determined that one or both livestock waters would be affected by Alternative A, the City would install an alternative water source for livestock, or for modifications to the current tanks for continued use. South Well on 115th Avenue (BLM) would be mitigated by developing of waters on each side of the Parkway.
Range Improvements	Any range improvements, such as fences, wells, stock tanks, etc., will be mitigated appropriately at the expense of the City. The City shall reimburse the grazing permittee for any range improvements that would be removed, rendered inaccessible, or require modification as a result of the proposed Parkway.
SPECIAL DESIGNATIONS	
Obstacles for preventing illegal access into SDNM	Raised curb with breaks or gaps to allow for wildlife movement off of the roadway: Discourages users from pulling off the shoulder of the proposed road. Fencing: Discourages users from crossing into undeveloped land located outside the designated ROW. Guardrails: Discourages users from crossing into undeveloped land located outside the designated ROW. Locked gate: Helps prevent unauthorized users from entering SDNM. Concrete pedestals at washes: Prevents small OHVs or all-terrain vehicles from driving into SDNM via wash crossings.
Provide hiking and equestrian access to the Anza NHT	The City will provide public hiking and equestrian access to the Anza NHT and historic trail corridor. This may be an overpass, underpass, or access route to a trailhead.
HAZARDOUS MATERIALS	
Hazardous materials	All hazardous materials used during construction and operation would be stored on-site in storage tanks/vessels/containers that are specifically designed for the characteristics of the materials to be stored; as appropriate, the storage facilities would include the needed secondary containment in case of tank/vessel failure. All secondary containment would meet OSHA requirements and would be sized to contain 110% of full tank/vessel volume.
Hazardous materials	An update to the Phase I Environmental Site Assessment (SWCA 2007, 2009c, 2009d) would be required as per American Society for Testing and Materials 1527.00, an additional Phase I ESA upon the approval of the POD.
Hazardous waste recycling	To the extent possible, construction-phase hazardous wastes would be recycled (oil and grease). Transport of the wastes and contaminated containers would be contracted to a qualified waste transporter, and the wastes would be taken, under manifest, to a permitted local landfill or treatment and disposal facility.
SOCIAL AND ECONOMIC CONDITIONS	
Socioeconomic and Environmental Justice Conditions	Grazing Resource design features are recommended for socioeconomic and environmental justice conditions for reimbursement to allotment permittees for lost range improvements.

Table D-1. Design Features (Continued)

SOCIAL AND ECONOMIC CONDITIONS (Continued)	
Workforce	Where possible, the City would hire local construction workers for the construction of the Parkway.
PUBLIC SAFETY	
Construction access restriction	In order to protect human health and safety, temporary construction easements would be fenced appropriately to restrict public access during construction.
RECREATION MANAGEMENT	
Traffic Control	Traffic control measures would be implemented on existing access roads adjacent to the project area during construction to direct traffic and ensure safe and continual access to the adjacent public lands.
NOISE	The Zoning Ordinance, Article 9 Special Districts (City 2006) contains language found in the ADOT NAP regarding noise minimum noise reduction (5 dBA or more) and suggested maximum noise wall heights (20 feet above grade). Due to the uncertainties of future community development timing, noise wall requirements are unknown at this time. The City standards for interior noise levels apply the HUD 45 dBA interior noise level threshold. The proposed Parkway shall use rubberized pavement to reduce road noise and the subsequent effects to the silence and solitude SDNM affords to visitors.
WILDLAND FIRE	
Emergency response	The City Fire Department would respond to any wildland fires along the Parkway, within the project ROW.

APPENDIX E

RELATIONSHIP TO POLICES, PERMITS, LICENSES, AND OTHER ENTITLEMENTS

This was prepared in accordance with NEPA and in compliance with CEQ implementing regulations (40 CFR 1500–1508) and DOI requirements (43 CFR 1600, Department Manual 516, guidelines listed in the BLM NEPA Handbook H-1790-1 [BLM 2008a], and the BLM Land Use Planning Handbook H-1601-1 [BLM 2005a]).

Conformance with Existing BLM Resource Management Plans

The Proposed Action would be located in the Lower Sonoran Planning Area. The original ROW application was filed in 2008, at which time the Lower Gila South RMP/EIS was the managing RMP for the LSFO. Currently, this planning area is managed under the BLM 2012a. Certain lands in the vicinity of the project area (e.g., SDNM) are managed under a separate RMP.

BLM Best Management Practices

BMPs are land and resource management techniques determined to be the most effective and practical means of maximizing beneficial results and minimizing conflicts and negative environmental impacts from management actions. SOPs are procedures carried out daily during proposal implementation that are based on laws, regulations, EOs, BLM planning manuals, policies, instruction memoranda, and applicable planning documents. These are described in Table P-1. These stipulations would be included in the conditions of approval for any ROW approved by BLM and would be binding in the event that the Parkway is transferred to or operated by another entity.

Table E-1. Lower Sonoran RMP Best Management Practices and Standard Operating Procedures

Cultural and Heritage Resources	SOP: Ensure that all proposed undertakings and authorizations are reviewed and conducted in compliance with Section 106 of the NHPA, the Archaeological Resources Protection Act, and the Native American Graves Protection and Repatriation Act. SOP: Comply with Section 106 of the NHPA: 1. All undertakings will be subject to thorough cultural resources inventory in order to identify all cultural resources that lie within the APE. 2. All identified cultural resources within the APE will be evaluated for NRHP eligibility. 3. All undertakings shall be scrutinized for ways to design or redesign proposed projects to avoid cultural resources. SOP: Mitigate those cultural resources within the APE that have characteristics that would make them eligible for the NRHP using appropriate treatment strategies, in order to reduce the intensity of the impacts to the lowest level possible. SOP: Complete Class II (sample) and Class III (intensive) field inventories to identify cultural resources and evaluate the conditions of sites, in accordance with Section 110 of the NHPA. Use the information obtained through these surveys to allocate sites to proper use categories, develop protection measures, and integrate survey results into research designs and interpretation efforts. Determine priorities for inventory based on resource use and area's or site's protection priority.
Paleontological Resources	SOP: For all authorized surface-disturbing activities, conduct inventories on a case-by-case basis, as deemed necessary by the authorized officer, for each proposed surface-disturbing activity to ensure maintenance or integrity of paleontological values.

Table E-1. Lower Sonoran RMP Best Management Practices and Standard Operating Procedures (Continued)

Soil Resources	BMP: BMPs would be applied to vegetative or surface disturbances to limit soil loss and erosion and protect water quality. BMP: Minimize disturbance to surface resources when constructing new developments or reconstructing existing facilities. Mitigation plans would be developed, disturbed surfaces would be restored, and soils would be stabilized in accordance with restoration objectives.
Visual Resources	SOP: Scenic Quality: Employ measures to mitigate potential visual impacts, such as the use of natural materials, screening, painting, project design, location sighting, and restoration.
Wildlife Resources	BMP: Construct fences to comply with applicable wildlife fence standards (Fences – BLM Manual Handbook H-1741-1). Existing fences that impede big-game movement or that otherwise conflict with wildlife may be modified to comply with applicable wildlife fence standards on a case-by-case basis. BLM Manual 6840 is a federal guidance document that outlines the criteria for listing species as Sensitive on BLM-administered lands and provides direction on management of these species.
Lands and Realty	SOP: Collocate transportation routes, whether interstate, intrastate, or local, with utilities in designated corridors to the maximum degree possible to minimize impacts to public lands.
Livestock Grazing	SOP: Compensate for a loss of range improvements in accordance with 43 CFR 4120.3-6. SOP: Construct and maintain fences following guidance provided in BLM Handbook 1741-1, Fencing.
Travel Management	BMP: Emphasize the use of existing roads (through continued use or reconstruction) to minimize new road construction. The BLM OHV management regulations are guided by 43 CFR 8341.1(a). Hunting in the area of analysis is managed and enforced by the AGFD. The recreation management area of analysis includes GMU 39.
Special Designations	SOP: Areas of Critical Environmental Concern: Design all authorized uses with mitigation to minimize surface disturbance. SOP: Areas of Critical Environmental Concern: Design fences to reduce adverse impacts to wildlife movement using specifications in BLM Manual 1747, local directives, or subsequent guidance. Existing fences in wildlife habitat that do not meet BLM specifications would be modified appropriately when scheduled for replacement maintenance. National Trails System manual series—BLM Manuals 6250, 6280, and 8353 (BLM 2012c, 2012d, 2012e). These manuals provide administrative and management guidance in accordance with the National Trails System Act of 1968
Socioeconomics	SOP: Evaluate all actions for hazardous materials, waste minimization, and pollution prevention. Appropriate mitigation will be identified for surface-disturbing and disruptive activities associated with all types of hazardous materials and waste management and all types of fire management.

Source: Lower Sonoran RMP (BLM 2012a).

ENVIRONMENTAL PROTECTION MEASURES

The following environmental protection measures were developed by BLM and the City to ensure that Parkway construction does not result in unnecessary or unreasonable environmental degradation. Environmental protection measures are actions, practices, or design features that are part of all action alternatives and would be implemented by the proponent (the City). Under all alternatives, the environmental protection measures listed in Table P-2 would be implemented to minimize adverse impacts of the proposed Parkway to sensitive environmental resources. These would be included as conditions of approval and would be binding in the event that the proposed Parkway were transferred to or operated by another entity.

The ROD will summarize the requirements for mitigation monitoring and enforcement to ensure compliance with the decision, in accordance with BLM NEPA Handbook H-1790-1 and 40 CFR 1502.2(c).

Table E-2. Environmental Protection Measures and Best Management Practices

TOPOGRAPHY AND SOIL RESOURCES	
Topography	Once the appropriate grade is reached, the road would be paved. A geotechnical engineer would develop specifications for this effort during the final design. Cut and fill slopes would be designed such that the maximum slope will be 3:1 (3 horizontal feet for each 1 vertical foot).
Soils	According to the Natural Resources Conservation Service (2007), soils within the project area limits have a low to medium shrink-swell potential; therefore, no special design considerations would be needed to stabilize the subgrade. Subgrade stabilization would consist of over-excavating 14 inches measured from rough grade, adding water, and compacting the soil. Erosion control on slopes would be achieved by "cat tracking." This process would be conducted by driving a bulldozer perpendicular to the slope, leaving track impressions in the soil; impressions would fill with water and reduce stormwater runoff and erosion. Cat tracks would be treated to prevent the spread of noxious weeds in accordance with BLM and state policy, as they are known vectors for noxious weeds since they are disturbed soils that hold water and attract vehicles as pull-offs. Other erosion and sediment control activities can include use of straw wattles, silt fences, or similar methods to prevent erosion and sediment loading, as necessary. The BLM would be consulted and have final approval on the specific techniques and materials to be used for soil stabilization. Many of these controls would likely be left in place until full stabilization of the Parkway is complete. A stormwater pollution prevention plan would be developed prior to construction and would more fully elaborate erosion, sediment control, and stabilization methods and would be included in the POD. A variety of safety-related plans and programs would be developed and implemented to ensure safe handling, storage, and use of hazardous materials (e.g., Hazardous Material Business Plan). Project personnel would be supplied with appropriate personal protective equipment (PPE) and would be properly trained in the use of PPE and the handling, use, and cleanup of hazardous materials used during the project, as well as procedures to be followed in the event of a leak or spill. Adequate supplies of appropriate cleanup materials would be stored on-site.
AIR RESOURCES	
Dust abatement	Dust abatement using an approved dust suppression coating and other air quality protection measures would be implemented during construction, according to BLM, the City, and County Air Quality Control Districts, to ensure compliance with federal and regional air quality standards.
CULTURAL AND HERITAGE RESOURCES	
Cultural and/or historic sites	Measures will be incorporated to avoid sites through project design.
WATER RESOURCES	
Stormwater	Stormwater flows for the Proposed Action, action alternatives, and sub-alternatives are based on the FCDMC <i>Rainbow Valley Area Drainage Master Plan</i> (Rainbow Valley Drainage Study) (FCDMC 2011). Major stormwater flows, greater than 500 cubic feet per second, were used to design Parkway crossings that used either box culverts or a depressed, or dipped, pavement profile. Minor stormwater flows would be addressed during final design. Arch span-type culverts are typically located in incised washes, while dipped profiles are located in areas where the existing ground is flat. Dipped crossings are designed so that the depth is less than 6 inches to accommodate safe crossing by emergency vehicles.
Clean-up and site reclamation	Construction sites, material storage yards, and access roads would be kept in an orderly condition throughout the construction period. Approved enclosed refuse containers would be used throughout the proposed Parkway. Refuse and trash would be removed from the sites and disposed of in an approved manner. Oils or chemicals would be hauled to a disposal facility authorized to accept such materials. Open burning of construction trash would not be acceptable. All post-construction ROWs would be restored, as required by the BLM. All practical means would be made to restore the land to its original natural drainage patterns. Since revegetation would be difficult in many areas of the proposed Parkway because of low amounts of precipitation, all practicable measures would be taken to minimize disturbance during construction.
Reclamation of temporary disturbance	All temporarily disturbed areas would be reclaimed to as close to their pre-construction conditions as possible, as required by the BLM. BLM-approved seed mixes and/or transplants would be applied to temporarily disturbed areas, as required. No fertilizer would be used during stabilization or rehabilitation activities unless authorized by the BLM. When construction of stormwater management structures is complete, contours would be carefully restored to the extent feasible.

Table E-2. Environmental Protection Measures and Best Management Practices (Continued)

VEGETATION AND WILDLIFE , INCLUDING SPECIAL STATUS SPECIES	
Vegetation	Blading and removal of vegetation over the entire roadbed and the temporary construction access road would be required for each phase of the construction (two lanes, four lanes, and six lanes). Rehabilitation and reclamation of the disturbed areas would consist of recontouring these areas to blend into the surrounding terrain, or as requested by the BLM. The area would be reseeded using seed mixtures approved by the BLM; all seed mixtures would be certified as noxious weed-free, as specified in <i>DOI-BLM-AZ-P000-2011-001-EA</i> . All rehabilitation and reclamation would be conducted to BLM standards. The use of fertilizer is not expected at this time. Transplants of native species may be required by BLM.
Wildlife	Consultation on wildlife mitigation designs and siting during development of the final engineering plans and construction phases will be conducted with AGFD, in coordination with the BLM.
Wildlife	In terms of designing for wildlife crossings for larger mammals, recommendations in <i>Arizona Missing Linkages: Gila Bend–Sierra Estrella Linkage Design</i> (Beier et al. 2008) indicate that wildlife crossings would be needed in three distinct corridors. As a result, fill slopes adjacent to the wildlife crossings would extend beyond the proposed ROWs, and temporary construction easements would be needed in these locations. Dimensions and measurements of the wildlife-enabled arch span-type culverts would be determined during final design. The selection of an action alternative will determine the precise location within the Estrella Mountains to SDNM Wildlife Movement Corridor.
Wildlife	Design culverts and dip sections with at-grade natural substrate bottoms and avoid use of large riprap in front of or adjacent to culverts and dip sections; and/or backfill with topsoil and stabilize with vegetation to optimize movement of barrier sensitive species such as Desert tortoise. Design culverts and dip sections to avoid sharp drop-offs and scour at the downstream end. Outside the Linkage Zone use box culvert designs for medium-sized mammals at additional locations that will facilitate wildlife movement into future plans for open space within the City. Use small pipe, box culvert, and/or pipe culvert designs for small mammals, at a minimum, for all other drainage crossings that will need flood control structures within and outside the Linkage Zone. Refer to Appendix D for AGFD wildlife crossing design specifications.
Wildlife	Construction staging and temporary construction easements would avoid or minimize impacts within the wildlife linkage areas.
Wildlife	Minimize removal of xeroriparian vegetation during construction within the wildlife linkage areas at wash crossings. Restoration and revegetation of xeroriparian vegetation will be conducted post-construction at the approaches to wildlife crossing structures.
Sonoran desert tortoise	Survey and relocation of desert tortoises in Category 1 & 2 habitat adjacent to the construction area during and immediately preceding construction to minimize unintended mortality (see <i>Desert Tortoise Survey Guidelines for Consultants</i> http://www.azgfd.gov/hgis/guidelines.aspx).
Sonoran desert tortoise	Follow the mitigation process and measures recommended by the Arizona Interagency Desert Tortoise Team to minimize impacts to Desert tortoise and prevent conflicts during construction and reclamation activities. See <i>Guidelines for Handling Sonoran Desert Tortoises Encountered on Development Projects and Recommended Standard Mitigation Measures for Projects in Sonoran Desert Tortoise Habitat</i>
Sonoran desert tortoise	Provide information and education of project personnel in worker education program regarding Sonoran desert tortoise.
Sonoran desert tortoise	Designate a Desert Tortoise Coordinator who will be responsible for overseeing compliance with the mitigation program, coordination with permitting agencies, land managers, and AGFD; and as a contact point for personnel that encounter Sonoran desert tortoises.
Sonoran desert tortoise	Sonoran desert tortoises found on the work site will be moved off-site by the Desert Tortoise Coordinator or qualified, authorized personnel.
VISUAL RESOURCES	
Lighting system	Lighting would be designed to provide the minimum illumination needed to achieve safety and security objectives and would be shielded and oriented to focus illumination on the desired areas and minimize additional nighttime illumination in the site vicinity.

Table E-2. Environmental Protection Measures and Best Management Practices (Continued)

VISUAL RESOURCES (Continued)	
Signs/Billboards	Signage would be designed to comply with BLM Visual Resource Management objectives as identified in the Lower Sonoran RMP. Signage would also be required to comply with the City's Zoning Ordinance, Article 7: Sign Regulations.
TRAVEL MANAGEMENT	
Road maintenance	Road maintenance would be performed as needed. Paved roads would be swept, sealed, and/or overlaid as needed. Grading and drainage would be maintained for gravel and earth roads. Dust palliatives would be applied, as required, to limit fugitive dust.
Access to existing primitive roads	Public access to primitive roads that are currently open for motorized use would be maintained and would include either a traffic interchange, cattle guard, or gate.
LIVESTOCK GRAZING	
Fencing	The contractor would install temporary fencing along the ROW in order to limit off-road access and keep cattle and wildlife from gaining access to the Parkway during construction. No construction vehicle movement shall occur on BLM-administered lands outside the approved project ROW limits. When the initial two-lane highway is complete, the City would install permanent fencing and crossings, in accordance with BLM stipulations.
Range Improvements	Any range improvements, such as fences, wells, stock tanks, etc., will be mitigated appropriately at the expense of the City.
SPECIAL DESIGNATIONS	
Obstacles for preventing illegal access into SDNM	Raised curb with breaks or gaps to allow for wildlife movement off of the roadway: Discourages users from pulling off the shoulder of the proposed road. Fencing: Discourages users from crossing into undeveloped land located outside the designated ROW. Guardrails: Discourages users from crossing into undeveloped land located outside the designated ROW. Locked gate: Helps prevent unauthorized users from entering SDNM. Concrete pedestals at washes: Prevents small OHVs or all-terrain vehicles from driving into SDNM via wash crossings.
Provide hiking and equestrian access to the Anza NHT	The City will provide public hiking and equestrian access to the Anza NHT and historic trail corridor. This may be an overpass, underpass, or access route to a trailhead.
HAZARDOUS MATERIALS	
Hazardous materials	All hazardous materials used during construction and operation would be stored on-site in storage tanks/vessels/containers that are specifically designed for the characteristics of the materials to be stored; as appropriate, the storage facilities would include the needed secondary containment in case of tank/vessel failure. All secondary containment would meet OSHA requirements and would be sized to contain 110% of full tank/vessel volume.
Hazardous materials	An update to the Phase I Environmental Site Assessment (SWCA 2007, 2009c, 2009d) would be required as per American Society for Testing and Materials 1527.00, an additional Phase I ESA upon the approval of the POD.
Hazardous waste recycling	To the extent possible, construction-phase hazardous wastes would be recycled (oil and grease). Transport of the wastes and contaminated containers would be contracted to a qualified waste transporter, and the wastes would be taken, under manifest, to a permitted local landfill or treatment and disposal facility.
SOCIAL AND ECONOMIC CONDITIONS	
Workforce	Where possible, the City would hire local construction workers for the construction of the Parkway.
PUBLIC HEALTH	
Construction access restriction	In order to protect human health and safety, temporary construction easements would be fenced appropriately to restrict public access during construction.

Table E-2. Environmental Protection Measures and Best Management Practices (Continued)

WILDLAND FIRE	
Emergency response	The City Fire Department would respond to any wildland fires along the Parkway, within the project ROW.

Conformance with Statutes and Regulations

The following is a summary of selected statutes, regulations, and executive orders (EOs) applicable to a project such as the proposed Parkway.

American Antiquities Act of 1906. This act seeks to protect historic and prehistoric ruins, monuments, and objects of antiquity and scientific interest on lands owned or controlled by the federal government by imposing misdemeanor-level criminal penalties.

American Indian Religious Freedom Act. The American Indian Religious Freedom Act (AIRFA) says that on and after August 11, 1978, “it shall be the policy of the United States to protect and preserve for American Indians their inherent right of freedom to believe, express, and exercise the traditional religions of the American Indian, including but not limited to access to sites, use and possession of sacred objects, and the freedom to worship through ceremonials and traditional rites.” This law is designed to protect American Indians’ rights of religious freedom. It does not mandate that American Indian concerns are paramount but requires that the federal government consider such concerns in its decisions.

Arizona Native Plant Law. The Arizona Native Plant Law (ANPL) states that “a person shall not take, transport or possess any protected native plant taken from the original growing site in this state without possessing a valid permit issued by the Arizona Department of Agriculture [ADA]” (Arizona Revised Statutes [ARS] 3-906). The ANPL applies to listed plants that are naturally occurring, but not to landscaped or planted individuals. Native plants that are protected by the ANPL include all cacti, yucca, agave, and many leguminous tree species such as paloverde, mesquite, and ironwood.

Archaeological and Paleontological Salvage (USC 305) states that funds from federal highway projects can be used to salvage paleontological resources.

Archaeological Resources Protection Act of 1979, as amended. This act provides for protection of archaeological resources on federal lands. The act requires permits for the excavation or removal of federally administered archaeological resources and encourages cooperation between federal agencies and private individuals in identifying and protecting important resources. In addition, the act invokes penalties for excavating, removing, damaging, or defacing any archeological resources older than 100 years on public or Indian lands.

The proposed project is subject to a number of laws, regulations, and/or policies implemented by the federal government. As discussed in Chapter 1, decisions on the use and management of BLM-administered lands is guided by FLPMA (43 USC 1701–1784), which requires that “public lands be managed in a manner that will protect the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource, and archaeological values.” Therefore, protection of cultural resources on public lands, which includes BLM-administered land, is to be considered by the BLM for most proposed projects. Several acts and policies specific to cultural resources must also be taken into account for the proposed project. These include the following:

The Bald and Golden Eagle Protection Act of 1940 (16 USC 668–668c), as amended, prohibits “taking” bald and golden eagles, including their parts, nests, or eggs, without a permit from the USFWS.

Birds of Conservation Concern, the 1988 amendment to the Fish and Wildlife Conservation Act, mandates the USFWS to “identify species, subspecies, and populations of all migratory nongame birds that, without additional conservation actions, are likely to become candidates for listing under the ESA.”

Clean Air Act of 1963, as amended. The Clean Air Act (CAA) requires any federal entity engaged in an activity that may result in the discharge of air pollutants to comply with all applicable air pollution control laws and regulations (federal, state, or local). This act directs the attainment and maintenance of the National Ambient Air Quality Standards (NAAQS) for six different criteria pollutants: carbon monoxide (CO), ozone (O₃), particulate matter (PM), sulfur oxides, nitrogen oxides (NO_x), and lead. Maricopa County Air Quality Rules (MCAQR) outline measures to be incorporated into construction specifications to minimize potential dust emissions. Rules 310 and 310.01 of the MCAQR include work practice standards to ensure that emissions from fugitive dust sources, such as open areas, vacant lots, unpaved parking lots, and unpaved roadways, are minimized to the extent practicable. An earthmoving permit and a dust control plan are required for any operations that disturb a total surface area greater than or equal to 0.10 acre.

Clean Water Act of 1977, as amended. Section 404 of the Clean Water Act (CWA) identifies conditions under which a permit is required for construction projects that result in the discharge of fill or dredged material into waters of the U.S. (WUS). There are some jurisdictional WUS within the project area; once an alternative is selected by the BLM, the City will submit the necessary jurisdictional delineations to the U.S. Army Corps of Engineers (USACE) and obtain the required permits prior to any discharge into WUS. Section 402 of the CWA identifies conditions under which a permit is required for the discharge of pollutants from a point source into WUS. The National Pollutant Discharge Elimination System (NPDES) stormwater permitting rule requires all operators of construction activity that disturbs 5 or more acres of land to apply for an NPDES stormwater permit.

The Clean Water Act (33 USC 1251–1376), as amended by the Water Quality Act of 1987, is the major federal legislation governing water quality. The objective of the CWA is “to restore and maintain the chemical, physical, and biological integrity of the nation’s waters.”

The Community Environmental Response Facilitations Act of 1992 (42 USC 9620[h]) is an amendment to CERCLA. The 1992 act expands on the risk assessment requirements for land transfers and disposal.

Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA). The EPA’s rule increased the burdens on prospective purchasers of property to investigate past uses and possible releases of hazardous substances.

The Emergency Planning and Community Right-to-Know Act of 1986 (42 USC 11001–11050) (EPCRA) requires the private sector to inventory chemicals and chemical products, to report those in excess of threshold planning quantities, to inventory emergency response equipment, to provide annual reports and support to local and state emergency response organizations, and to maintain a liaison with the local and state emergency response organizations and the public.

Endangered Species Act of 1973, as amended. Section 7 of the ESA requires federal agencies to consult with the U.S. Fish and Wildlife Service (USFWS) to ensure that undertaking, funding, permitting, or authorizing an action is not likely to jeopardize the continued existence of listed species or destroy or adversely modify designated critical habitat. Critical habitat, as defined under the act, exists only after USFWS officially designates it. Critical habitats are 1) areas within the geographic area that have features essential to the conservation of the species and that may require special management consideration or protection; and 2) those specific areas outside the geographic area occupied by a species at the time it is listed that are essential to the conservation of the species.

Energy Policy Act of 2005, Public Law (PL) 109-58 (House Rule 6), enacted August 8, 2005.

The Energy Policy Act of 2005 directs the Secretaries of Agriculture, Commerce, Defense, Energy, and the Interior to designate under their respective authority's **federal land for oil, gas, and hydrogen pipelines and electricity transmission and distribution facilities** (energy corridors).

Executive Order 11593, Protection and Enhancement of the Cultural Environment (36 CFR 8921), states that a permit is needed to remove paleontological resources from lands under federal jurisdiction.

Executive Order 11988, Floodplain Management, May 24, 1977. EO 11988 requires federal agencies to avoid to the extent possible both long- and short-term adverse impacts associated with occupancy and modification of floodplains and to avoid direct and indirect support of floodplain development wherever there is a practicable alternative.

Executive Order 11990, Protection of Wetlands, May 24, 1977. EO 11990 requires federal agencies or federally funded projects to restrict uses of federal lands for the protection of wetlands through avoidance or minimization of adverse impacts. The EO was issued to “avoid to the extent possible the long- and short-term adverse impacts associated with the destruction or modification of wetlands and to avoid direct or indirect support of new construction in wetlands whenever there is a practicable alternative.”

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, February 11, 1994. This EO directs federal agencies to identify and address, as appropriate, disproportionately high and adverse human health and environmental effects of their programs, policies, and activities on minority populations and low-income populations.

Executive Order 13007, Indian Sacred Sites, May 24, 1996. This EO requires that all Executive Branch agencies (including BLM) having responsibility for the management of federal lands will, where practicable, permitted by law, and not clearly inconsistent with essential agency functions, provide access to and ceremonial use of Indian sacred sites by Indian religious practitioners and will avoid adversely affecting the integrity of such sacred sites. The EO also requires that federal agencies, when possible, maintain the confidentiality of sacred sites.

Executive Order 13112, Invasive Species, February 3, 1999. This EO seeks to improve coordination between federal agencies in efforts to combat invasive plant and animal species. EO 13112 established the National Invasive Species Council as a high-level, interdepartmental federal advisory panel to provide leadership and planning in the prevention and control of invasive species nationwide.

Executive Order 13274, Environmental Stewardship and Transportation Infrastructure Project Reviews, September 18, 2002. The goal of this EO is to promote environmental stewardship in the nation's transportation system and to streamline the environmental review and development of transportation infrastructure projects. An interagency task force monitors the environmental reviews of certain high-priority projects.

Farmland Protection Policy Act of 1994. This act is intended to minimize the impact federal programs have on the unnecessary and irreversible conversion of farmland to nonagricultural uses. For the purpose of the act, farmland includes prime farmland, unique farmland, and land of statewide or local importance. Farmland does not have to be currently used for cropland to be subject to the act's requirements. It can be forestland, pastureland, cropland, or other land, but not water or urban built-up land.

Federal Land Policy and Management Act of 1976. Section 102 of the FLPMA mandates that the BLM manage federally administered public lands on the basis of multiple use and sustained yield. The FLPMA recognizes ROW grants as a valid use of the federally administered public lands and requires BLM to manage ROWs in the context of public use.

Fish and Wildlife Coordination Act of 1934, as amended. This act requires coordination with federal and state wildlife agencies (USFWS and AGFD) for the purpose of mitigating losses of wildlife resources caused by a project that impounds, diverts, or otherwise modifies a stream or other natural body of water.

Historic Sites Act of 1935, which created a national policy for the protection of “historic sites, buildings, and objects of national significance.

Migratory Bird Treaty Act of 1918, as amended. The Migratory Bird Treaty Act (MBTA) provides for the protection of migratory birds and prohibits their unlawful take or possession. The act bans “taking” any native birds; “taking” can mean killing a wild bird or possessing parts of a wild bird, including feathers, nests, or eggs. Exceptions are allowed for hunting game birds and for research purposes, both of which require permits.

National Environmental Policy Act of 1969, as amended. NEPA requires federal agencies to take into consideration the environmental consequences of proposed actions as well as input from state and local governments, Indian tribes, the public, and other federal agencies during their decision-making process. The CEQ was established under NEPA to ensure that all environmental, economic, and technical considerations are given appropriate consideration in this process.

National Historic Preservation Act of 1966, as amended. Major federal projects must comply with Section 106 of the NHPA, which mandates that potential impacts to significant historic properties be considered prior to approval of such projects. Significant historic properties are defined as sites, districts, buildings, structures, and objects eligible for the National Register of Historic Places (NRHP). Consideration of these resources is to be made in consultation with the relevant State Historic Preservation Office (SHPO) and other interested agencies and parties.

National Trails System Act of 1968 (PL 90-543, as amended through PL 111-11). The National Trails System Act authorizes the designation of a network of scenic, historic, and recreation trails. These trails provide for outdoor recreation needs; promote the enjoyment, appreciation, and preservation of outdoor areas and historic resources; and encourage public access and citizen involvement. The National Trails System includes National Historic, Scenic, and Recreation Trails for public use. BLM is one of several Federal agencies that manage trails within the National Trails System.

Native American Graves Protection and Repatriation Act of 1990. This act requires protection and repatriation of Native American cultural items found on, or taken from, federal or tribal lands and requires repatriation of cultural items controlled by federal agencies or museums receiving federal funds. Should previously unidentified cultural resources, especially human remains, be encountered during construction, work will stop immediately at that location and BLM’s cultural resources staff will be notified to ensure proper treatment of these resources.

Noise Control Act of 1972 (42 USC 4901 *et seq.*) established a requirement that all federal agencies must administer their programs in a manner that promotes an environment free from noise that jeopardizes public health or welfare.

Noise Pollution and Abatement Act. This act requires that all federal agencies establish mechanisms for setting emission standards for source of noise, including motor vehicles, aircraft, etc. The act also enables local governments to address noise mitigation in land use planning efforts.

The Pollution Prevention Act of 1990 (42 USC 13101–13109) requires and encourages prevention and reduction of waste streams and other pollution through minimization, process change, and recycling.

Public Range Improvement Act of 1978. This act established a federal grazing fee formula.

The Plant Protection Act of 2000 (PL 106-224) replaced the Federal Noxious Weed Act of 1975 (PL 93-629) and is administered by the Animal and Plant Health Inspection Service of the U.S. Department of Agriculture. This federal program was enacted to protect the health and value of American agriculture and natural resources.

The Resource Conservation and Recovery Act, as amended by Federal Facility Compliance Act of 1992 (42 USC 6901–6992) (RCRA), authorizes the EPA to manage, by regulation, hazardous wastes on active disposal operations.

Safe Drinking Water Act of 1974, as amended. Section 1424 of this act regulates underground injection into an aquifer that is the sole or principal drinking water source for an area.

The Soil and Water Resources Conservation Act of 1977 (16 USC 2001) provides for conservation, protection, and enhancement of soil, water, and related resources.

Taylor Grazing Act of 1934, as amended. Section 315 and 315b of this act established grazing districts and grazing permits and fees. The act recognizes grazing as a valid use of the federally administered public lands and requires BLM to manage livestock grazing in the context of public use.

Title 43 CFR Part 4100. This governs regulations for grazing administration on federally administered public lands.

Wild and Scenic Rivers Act of 1968. This act requires consideration of wild and scenic rivers in planning water resource projects. Developing water resource projects is prohibited on any river designated for study as a potential component of the national wild and scenic river system.

The Wilderness Act of 1964 (PL 88-577). The Wilderness Act of 1964 was passed to “establish a National Wilderness Preservation System.” The Act defines wilderness as “an area where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain. An area of wilderness is further defined to mean in this Act an area of undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions and which (1) generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable; (2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation; (3) has at least five thousand acres of land or is of sufficient size as to make practicable its preservation and use in an unimpaired condition; and (4) may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value.”

Conformance with State Plans

ADWR implements the Groundwater Management Code of 1980 and manages groundwater supplies throughout the state. The goal of the Groundwater Management Code is to control groundwater depletion and provide a means for allocation.

The AGFD's *Arizona State Wildlife Action Plan: 2012–2022* (SWAP) (AGFD 2012) facilitates adaptive management of wildlife. Wildlife linkages prescribed in the LSFO RMP include SWAP management considerations. The BLM and AGFD have worked cooperatively on this project to incorporate consideration of the SWAP.

The AGFD manages wildlife in the public trust, under the oversight of the Arizona Game and Fish Commission; and that mandate, for stewardship and responsibility, under ARS Title 17, embraces all

wildlife, including mammals, birds, reptiles, amphibians, mollusks, crustaceans, and fish. The AGFD has developed *Arizona's State Wildlife Action Plan: 2012–2022* (SWAP), a comprehensive wildlife conservation strategy for the State, to meet federal requirements for conservation funding eligibility.

The MAG RTP (2010) indicated a need to establish a major arterial road (or Parkway) corridor to meet future needs in the newly annexed portion of the MPA. The 2035 MAG RTP (2014a, 2015) identifies the need for one general-purpose lane in each direction from I-10 to SR 238.

The Arizona Administrative Code (AAC) Title 18, Environmental Quality, Chapter 2, Department of Environmental Quality, Air Pollution Control, Section R18-2-614, effective July 18, 2005.

Soil erosion in Arizona is addressed by the NPDES program, a permitting system for the discharge of any pollutant (except for dredged or fill material) into WUS. This program is administered by the ADEQ under the Arizona Pollutant Discharge Elimination System (AZPDES) program.

ARS 9-471 promulgates the responsibilities of Arizona municipalities for serving newly annexed land. It requires roads to be provided, basic municipal services to be offered, and public health and safety to be enforced on the annexed lands.

Title 28 ARS 16, Section 955, regulates the use of mufflers on equipment and motor vehicles including motorcycles. State regulations focus primarily on noise from motor vehicles and aircraft, as well as equipment operation.

ARS 49-99, 49-929, and 49-930, the State refers to the requirements to establish a hazardous waste program equivalent to and consistent with the federal hazardous waste program promulgated under RCRA Subtitle C. This subtitle establishes reporting requirements for the generation, storage, handling, transport, and disposal of hazardous waste.

ASLD State Trust land is also available for dispersed recreation; however, a recreation permit is required to camp, hike, or travel; or a hunting license if actively hunting on State Trust land that is designated as open for recreation (ASLD 2009).

Because the south end of the proposed action alternative connects to SR 238, the legal responsibilities of ADOT, as established under 28 ARS 7, would apply. It is within the framework of these statutes that ADOT plans, constructs, and maintains a safe, efficient, and modern transportation system.

Conformance with County and Local Plans

The *Sonoran Valley Planning Area Proposed Major General Plan Amendment: City of Goodyear, Arizona* (City of Goodyear 2007); *City of Maricopa General Plan* (City of Maricopa 2006); *2035 Regional Transportation Plan* (MAG 2014a); *I-8/I-10 Hidden Valley Transportation Framework Study* (MAG 2009); *Pinal County Regionally Significant Routes for Safety and Mobility, Access Management Manual* (Pinal County 2008); and *Rainbow Valley Area Drainage Master Plan* (FCDMC 2011) were reviewed to determine the conformance of the proposed project with local planning goals and objectives. Applicable land use planning documents for the ASLD also were reviewed to determine project conformance. Throughout the study process, representatives from state and local jurisdictions and agencies have been actively involved with the project through monthly stakeholder meetings. Overall, the proposed project is in conformance with established county and local land use plans.

The MAG *2035 Regional Transportation Plan* (MAG 2014a, 2015) (MAG RTP) includes the proposed ROW location as a ROW area of preservation. Construction of up to a four-lane parkway is included in

the 2035 MAG RTP (MAG 2014a, 2015). Coordination with MAG would continue throughout the design and implementation of the proposed project.

MCAQR Rule 310 and 310.01, the owner and/or operator of any dust-generating operation is required to conduct the following:

- Obtain an MCAQD Dust Control Permit for all projects that will disturb more than 0.1 acre (4,356 square feet) of soil prior to beginning construction (Rule 310, Section 401).
- Submit to the Control Officer a dust control plan for approval with any application for a Dust Control Permit. Applicants shall describe, in a dust control plan, all control measures to be implemented before, after, and while conducting any dust-generating operation, including on weekends, after work hours, and on holidays (Rule 310, Section 402).
- For all areas with a Dust Control Permit that are larger than 5 acres, the owner, and/or operator shall erect and maintain a project information sign (Rule 310, Section 308).
- Comply with the Dust Control Training Requirements (Rule 310, Section 309).
- For any site of 5 acres or more of disturbed surface area, at least one Dust Control Coordinator must be present at all times during primary dust-generating operations (Rule 310, Section 310).
- Implement contingency dust control measures when primary control measures are ineffective (Rule 310, Section 305).
- Require the owner/operator to maintain a daily written log recording the actual application or implementation of the control measures described in the approved dust control plan (Rule 310, Section 502).

The Floodplain Regulations for Maricopa County were adopted in 1986 and as amended comply with the directives in Sections 48-3603 and 48-3609 of the ARS pertaining to the National Flood Insurance Program.

Maricopa County Noise Ordinance P-23 (adopted February 15, 2006) states that noise at and above certain levels is detrimental to the health and welfare of Maricopa County citizens.

The City has proposed a major amendment to the *City of Goodyear General Plan 2003–2013* (City General Plan) (City 2003). The City General Plan Amendment (City 2007) guides future development of the SVPA area north of the community of Mobile.

The City's Engineering Department is responsible for the design, review, and inspection of the City's capital infrastructure, including grading and drainage, water, sewer, storm drains, stormwater retention, and streets. The City Engineering Department reviews site plans, preliminary and final plats, rezoning requests, special use permits, construction drawings, and water, sewer, traffic, and drainage master plans. It also issues construction permits and easements and assigns street names and addresses (City 2009c).

The City Chapter 15, Section 4-4P of the City Municipal Code, Required Improvements—Subdivisions, Freeway Development Standards, directs all development located within 500 feet of the I-10 and Loop 303 alignment ROWs to develop a sound attenuation plan

Article 7-4 of the City Code, it is unlawful for livestock or other large animals to roam at large within the city limits north of Patterson Road. South of Patterson Road is open range, where livestock may roam freely, where permitted. An animal that is restrained within a fence is not considered at large. Therefore, areas used for livestock around the City should be fenced.

The MCDOT (2004) *Roadway Design Manual* contains the design standards that govern all construction and reconstruction of transportation facilities in the Maricopa County ROW.

FEDERAL PERMITS, LICENSES, AND OTHER ENTITLEMENTS

Issuance of the proposed Parkway ROW would be authorized under the FLPMA (Title V [43 USC 1761–1771]). Table P-3 lists all permits and approvals required for the proposed Parkway; this list includes permits and approval for federal and non-federal agencies. Table P-4 lists all permits, laws, and regulatory codes related to hazardous materials in Arizona.

Table E-3. Summary of Permits and Approvals Required for the Proposed Parkway Project

Permit/Approval	Granting Agency
Permits Required by the ROD	
ROW grant issued to the City	BLM
Short-term ROW grant issued to the City (for temporary construction areas)	BLM
CWA Section 404 Permit	USACE
Section 7 Consultation	USFWS
Cultural Resource Concurrence (Section 106 Consultation)	Arizona SHPO
Permits Required for Road Construction	
ROW acquisition	Private landowners
ROW easement	ASLD
Arizona Pollutant Discharge Elimination System (AZG2013-001)	Arizona Department of Environmental Quality
Dust Control Permit	Maricopa County Air Quality Department
Construction Permit (for ROW within City limits)	City
Construction Permit (for ROW in unincorporated areas)	Maricopa County Department of Transportation
Floodplain Use Permit (for ROW within City limits)	City (FCDMC outside of City limits)
Construction Permit (for ROW in unincorporated areas)	County

Table E-4. Permits, Laws, and Regulatory Codes Related to Facilities that Produce, Transport, Store, or Dispose of Toxic or Hazardous Materials in Arizona

Permit or Regulatory Action	Regulation
Hazardous Waste Permit	• ARS 49-921 • AAC R18-8-260
EPA Identification Number	• ARS 49-922
Pollution Prevention Plan	• ARS 49-961 through 49-973
Hazardous Waste Management Facility—Annual Registration	• ARS 49-929 • ARS 49-930
Emergency and Community Right to Know	• 42 USC 11001 <i>et seq.</i> • 42 USC 11023 (EPCRA 313) • 40 CFR 372
Toxic Data Report	• ARS 49-963 • ARS 49-964 • ARS 49-971 • ARS 49-973

Permit or Regulatory Action	Regulation
Solid Waste Annual Report	• ARS 49-860
Solid Waste Special Waste Facilities Plan Approval	• ARS 49-761 et seq. for Solid Waste • ARS 49-851 et seq. for Special Waste • ARS 49-857.01 • ARS 49-241 et seq. governs the Aquifer Protection Permit Program

Appendix F

Appeal Procedures

INFORMATION ON TAKING APPEALS TO THE INTERIOR BOARD OF LAND APPEALS

DO NOT APPEAL UNLESS

This decision is adverse to you, AND You believe it is incorrect

IF YOU APPEAL, THE FOLLOWING PROCEDURES MUST BE FOLLOWED

1. **NOTICE OF APPEAL** A person served with the decision being appealed must transmit the Notice of Appeal in time for it to be filed in the office where it is required to be filed within 30 days after the date of service. If a decision is published in the FEDERAL REGISTER, a person not served with the decision must transmit a Notice of Appeal in time for it to be filed within 30 days after the date of publication (43 CFR 4.411 and 4.413).
2. **WHERE TO FILE NOTICE OF APPEAL** Bureau of Land Management Phoenix District Office, 21605 North 7th Avenue, Phoenix, Arizona 85027
 - a. **WITH COPY TO SOLICITOR** Office of the Field Solicitor, USDOl; Sandra Day O'Connor U.S Courthouse, Suite 404, 401 West Washington Street, SPC 404, Phoenix, Arizona 85003-2151
3. **STATEMENT OF REASONS** Within 30 days after filing the Notice of Appeal, file a complete statement of the reasons why you are appealing. This must be filed with the United States Department of the Interior, Office of Hearings and Appeals, Interior Board of Land Appeals, 801 N. Quincy Street, MS 300-QC, Arlington, Virginia 22203. If you fully stated your reasons for appealing when filing the Notice of Appeal, no additional statement is necessary (43 CFR 4.412 and 4.413).
 - a. **WITH COPY TO SOLICITOR** Office of the Field Solicitor, USDOl; Sandra Day O'Connor U.S Courthouse, Suite 404, 401 West Washington Street, SPC 404, Phoenix, Arizona 85003-2151
4. **ADVERSE PARTIES** Within 15 days after each document is filed, each adverse party named in the decision and the Regional Solicitor or Field Solicitor having jurisdiction over the State in which the appeal arose must be served with a copy of: (a) the Notice of Appeal, (b) the Statement of Reasons, and (c) any other documents filed (43 CFR 4.413). If the decision concerns the use and disposition of public lands, including land selections under the Alaska Native Claims Settlement Act, as amended, service will be made upon the Associate Solicitor, Division of Land and Water Resources, Office of the Solicitor, United States Department of the Interior, Washington, D.C. 20240. If the decision concerns the use and disposition of mineral resources, service will be made upon the Associate Solicitor, Division of Mineral Resources, Office of the Solicitor, United States Department of the Interior, Washington, D.C. 20240.
5. **PROOF OF SERVICE** Within 15 days after any document is served on an adverse party, file proof of that service with the United States Department of the Interior, Office of Hearings and Appeals, Interior Board of Land Appeals, 801 N. Quincy Street, MS 300-QC, Arlington, Virginia 22203. This may consist of a certified or registered mail "Return Receipt Card" signed by the adverse party (43 CFR 4.401(c)).
6. **REQUEST FOR STAY** Except where program-specific regulations place this decision in full force and effect or provide for an automatic stay, the decision becomes effective upon the expiration of the time allowed for filing an appeal unless a petition for a stay is timely filed together with a Notice of

Appeal (43 CFR 4.21). If you wish to file a petition for a stay of the effectiveness of this decision during the time that your appeal is being reviewed by the Interior Board of Land Appeals, the petition for a stay must accompany your Notice of Appeal (43 CFR 4.21 or 43 CFR 2801.10 or 43 CFR 2881.10). A petition for a stay is required to show sufficient justification based on the standards listed below. Copies of the Notice of Appeal and Petition for a Stay must also be submitted to each party named in this decision and to the Interior Board of Land Appeals and to the appropriate Office of the Solicitor (43 CFR 4.413) at the same time the original documents are filed with this office. If you request a stay, you have the burden of proof to demonstrate that a stay should be granted.

Standards for Obtaining a Stay. Except as otherwise provided by law or other pertinent regulations, a petition for a stay of a decision pending appeal shall show sufficient justification based on the following standards: (1) the relative harm to the parties if the stay is granted or denied, (2) the likelihood of the appellant's success on the merits, (3) the likelihood of immediate and irreparable harm if the stay is not granted, and (4) whether the public interest favors granting the stay.

Unless these procedures are followed, your appeal will be subject to dismissal (43 CFR 4.402). Be certain that **all** communications are identified by serial number of the case being appealed.

NOTE: A document is not filed until it is actually received in the proper office (43 CFR 4.401(a)). See 43 CFR Part 4, subpart b for general rules relating to procedures and practice involving appeals.

