



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

REGION IX
Arizona, California,
Hawaii, Nevada, Guam
American Samoa,
Northern Mariana Islands

90 Seventh Street
Suite 15-300
San Francisco, CA 94103-6701
415-734-9490
415-734-9489 (fax)

JAN 6 2017

Mr. Wulf Grote, P.E.
Director, Capital and Service Development
Valley Metro
101 North First Avenue, Suite 1300
Phoenix, AZ 85003

Re: Environmental Assessment and Finding of No
Significant Impact for the Proposed South
Central Avenue Light Rail

Dear Mr. Grote,

Based on our review of the Environmental Assessment, dated May 4, 2016, the Federal Transit Administration (FTA) has issued a Finding of No Significant Impact (FONSI) for the proposed South Central Avenue light rail extension project. A copy of the FONSI is enclosed.

The FONSI and supporting documentation should be made available to affected government agencies and the public and should be posted on the project website. A Notice of Availability for the FONSI should be published in local newspapers and should also be provided directly to affected government agencies, including State intergovernmental review contacts established under Executive Order 12372.

Please note that the standard terms and conditions of the grant contract will require Valley Metro to undertake the mitigation actions identified in the Environmental Assessment and FONSI.

Thank you for your cooperation in meeting the requirements of the National Environmental Policy Act. If you have any questions about our review, please contact Dominique Paukowits, FTA Region IX Community Planner, at (415) 734-9469 or dominique.paukowits@dot.gov.

Sincerely,


For Leslie T. Rogers
Regional Administrator

Enclosure

Finding of No Significant Impact

Grant Applicant: Valley Metro

Project: South Central Light Rail Extension

Project Location: City of Phoenix, Maricopa County, Arizona

The May 2016 Environmental Assessment (EA) for the South Central Light Rail Extension Project (the “Project”) was prepared by Valley Metro in cooperation with the Federal Transit Administration (FTA) pursuant to requirements of the National Environmental Policy Act (NEPA) of 1969 (42 United States Code [U.S.C.] 4321 et seq.), the Federal Public Transportation Law (49 U.S.C. Chapter 53), the Clean Air Act (42 U.S.C. 7401 et seq.), the Clean Water Act (33 U.S.C. 1250 et seq.), the National Historic Preservation Act (54 U.S.C. 300101 et seq.), Section 4(f) of the Department of Transportation Act of 1966 (49 U.S.C. 303 and 23 U.S.C. 138) and its implementing regulations in 23 C.F.R. 774, the Endangered Species Act of 1973 (16 U.S.C. 1531–1544); Executive Order (EO) 12898 (Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations); EO 13609 and EO 11988 (Floodplain Management); and EO 11990 (Protection of Wetlands). This Finding of No Significant Impact (FONSI) hereby incorporates the EA by reference.

Description of the Project

Valley Metro, in coordination with the City of Phoenix, proposes to construct the South Central Light Rail Extension Project. The Project would extend light rail service approximately 5 miles south from the existing Valley Metro light rail line in Downtown Phoenix to Baseline Road. It would serve South Central Avenue neighborhoods and activity centers and would provide a direct link to the existing regional Valley Metro Light Rail System by connecting with the existing line in the northbound direction at Central Avenue and Washington Street and in the southbound direction at 1st Avenue and Jefferson Street. The connections would use the Central Avenue/1st Avenue one-way couplet before converging at Hadley Street to operate within the Central Avenue median in two directions to its terminus at Baseline Road. The Project also includes the McKinley Street/Central Avenue and McKinley Street /1st Avenue turnaround loops and enhancements of the Operations and Maintenance Center (OMC).

The OMC enhancements would occur within the existing boundaries of the OMC and include modifications to the Maintenance of Equipment building, storage tracks and cleaning platform. The OMC is located in an industrial area, bounded by the Union Pacific Railroad tracks to the north, Loop 202 to the south, State Route 143 to the west and Priest Drive to the east. The building would be expanded by approximately 23,000-square-feet with improvements to the existing mezzanine, office space, inspection pits and cranes. Seven new storage tracks would be constructed north and south of the existing storage tracks to increase total storage capacity at the OMC from 50 to 100 vehicles.

The Project would build eight new light rail stations along the route: Lincoln Street/1st Avenue (southbound), Lincoln Street/Central Avenue (northbound), Buckeye Road/Central Avenue, Audubon Center/Central Avenue, Broadway Road/Central Avenue, Roeser Street/Central Avenue, Southern Avenue/Central Avenue and Baseline Road/Central Avenue (southern terminus). The

Project intends to use light rail vehicles, similar to those currently used in the Valley Metro system, powered by an overhead catenary system (overhead power lines).

The Project would reduce the travel lanes on Central Avenue from two in each direction to one in each direction, allowing light rail vehicles to operate in a semi-exclusive guideway separate from vehicular traffic. Exceptions to this would occur at signal-protected intersections, which would require changes in traffic lane configurations at several locations along the alignment. The Project would add roundabouts at Central Avenue at Victory Street and at Central Avenue just south of the Salt River near the Audubon Center to accommodate truck movements. The Interstate 17 (I-17) frontage roads would be shifted away from the I-17 bridge to allow adequate clearance for higher-profile vehicles crossing perpendicular to the light rail overhead catenary system (OCS).

The existing Central Avenue Bridge over the Salt River would be retrofitted to accommodate the additional weight of the light rail track and vehicles by thickening all pier footings, replacing the existing abutments, and adding a new bridge deck. The Western Canal Bridge would be replaced and widened from approximately 90 to 160 feet to accommodate the light rail and stations. Additionally, to accommodate southbound light rail vehicles and the overhead catenary system on 1st Avenue passing under Jackson Street, the Jackson Street Bridge deck spanning 1st Avenue would be narrowed by approximately 6 feet. The narrowed bridge would continue to accommodate two-way automobile, pedestrian and bicycle traffic after modifications.

The Project would include a new park-and-ride lot to accommodate 70 to 80 vehicles near Central Avenue and Broadway Road, adjacent to the Ed Pastor Transit Center, and a new park-and-ride lot near the Baseline Road/Central Avenue Station to accommodate approximately 365 parking spaces. This second lot would be on the western side of Central Avenue between the northern end of the station and Fremont Road.

The Project requires the acquisition of right-of-way (ROW), including relocation of one business (including demolition of the building) and modifications to two additional buildings. Additional ROW would be necessary to accommodate stations, traction power substations (TPSSs), and signal buildings. Section 2.2.2 of the EA provides a more detailed description of the Project.

Alternatives Considered

The EA evaluated two alternatives: a No-Build Alternative, which describes future transportation facilities and services in 2035 if the Project were not built, and a Build Alternative, described above. The Build Alternative is the Project. The EA identifies the Project as the Preferred Alternative.

The No-Build Alternative is defined as the existing transit and roadway/highway system plus programmed (committed) transportation improvement projects as part of the Maricopa Association of Governments (MAG) Regional Transportation Plan (RTP) and corresponding Transportation Improvement Program (TIP) by 2035, along with any City-programmed transportation or transportation infrastructure improvements. Under the No-Build Alternative, the Project corridor would remain in its current state for the foreseeable future, and no construction would occur other than what has been previously programmed.

Public Review

The EA was released for public review on May 10, 2016 and remained available for review until June 13, 2016. The Notice of Availability of the EA and notice for the public meeting was issued in local newspapers including the *Arizona Republic* and *La Voz* (Spanish language). The EA was also announced in news releases and media advisories in both Spanish and English, distribution of over 13,000 bilingual door hangers throughout the corridor, and broadcasts on local news programs. Copies of the EA were made available for viewing at the South Mountain Community Center and Nina Mason Pulliam Rio Salado Audubon Center in Phoenix. The EA was posted on the Valley Metro website at http://www.valleymetro.org/projects_and_planning/project_detail/south_central.

A public open house meeting was held at the Nina Mason Pulliam Rio Salado Audubon Center on May 25, 2016. During the review period, FTA and Valley Metro received one comment by email, sixteen written submissions at the public meeting and six letters via mail. A list of comments received during the public comment period and responses to those comments are included in an attachment to the EA.

Environmental Effects

Valley Metro, in cooperation with FTA, prepared an EA in May 2016 to evaluate the environmental impacts of the Project pursuant to requirements of NEPA, as codified in 23 Code of Federal Regulations [C.F.R.] Part 771.119 and 23 U.S.C. 139. FTA served as the federal lead agency under NEPA. The EA concluded that construction and operation of the Project, with the incorporation of mitigation and avoidance measures, would not result in a significant impact on the environment. This conclusion applies to all applicable environmental elements, including air quality and greenhouse gas emissions, biological resources, cultural and archaeological resources, energy, hazardous materials, water quality, land use, noise and vibration, safety and security, Section 4(f) resources, socioeconomics and environmental justice, traffic and transportation and visual resources. The findings required by Federal environmental laws and executive orders are outlined below. Since several comments were received on traffic and noise during the circulation of the EA, a summary of the findings for traffic and noise and vibration impacts is also provided.

Traffic

As discussed in Section 3.6 of the EA the Project would have no adverse traffic impacts on intersections along Central Ave or 1st Ave; however, with the lane reduction on Central Avenue, from two lanes in each direction to one in each direction, an increase in traffic delays would occur at three intersections: 7th Street/ I-17, 7th Avenue/ I-17, and 7th Avenue/Southern Avenue. These intersections would operate at an unacceptable level of service. With the implementation of mitigation measures identified in Section 3.6.4 of EA, the intersections would operate at an acceptable level of service and the measures would minimize impacts below a significant level.

Noise and Vibration. Potential noise impacts from the Project were assessed using noise assessment criteria outlined in FTA's Transit Noise and Vibration Impact Assessment (2006). Horns are only used in case of emergency. As a safety precaution for passengers riding light rail and pedestrians crossing the street or standing on the station platform, the light rail vehicles are required to sound their bells entering and exiting each light rail station. Noise modeling demonstrated that noise generated by the Project, including TPSSs, would exceed thresholds for moderate impact levels at two single-family homes on Central Avenue. Depending on where the TPSSs are

ultimately located, noise impacts could also occur at two additional single-family homes on East Raymond Street. The noise in the area of St. Catherine of Siena School and Church would be below FTA's moderate impact threshold. Additionally, there are several locations where noise impacts with less than a 1-decibel (dB) exceedance of a moderate impact level would occur but would not require mitigation (for example, train bells at low-level settings and safety-related). A less than 1-dB change in noise level with the Build Alternative is negligible, given that 3 dB is considered the threshold at which an average listener can detect a change. With implementation of mitigation measures identified in Section 3.8.4 of the EA, the Project would have no adverse noise impacts.

The Project would exceed FTA's vibration impact criteria at 12 locations. With implementation of mitigation measures identified in Section 3.8.4 of the EA, the measures would minimize impacts below a significant level and the Project would have no adverse vibration impacts.

Air Quality Conformity. The Project satisfies the U.S. Environmental Protection Agency's transportation conformity requirements for air quality under 40 C.F.R. Part 93. The MAG Regional Council approved an amendment to the MAG 2035 RTP for the Project in December 2014 and the associated update to the air quality conformity analysis in June 2015. The Project is consistent with the Fiscal Year 2014–2018 TIP, adopted in June 2015. The conformity analysis demonstrated that the regionally significant transportation projects in the evaluation, including the Project, would conform to the carbon monoxide (CO) and particulate matter emission budgets established in the State Implementation Plan (SIP) for each pollutant. The FTA and the Federal Highway Administration determined that the amended MAG 2035 RTP and Fiscal Year 20-14-2018 TIP conformed with the SIP in July 2015.

The Project was determined not to be a project of air quality concern consistent with 40 C.F.R. 93.123(b)(1). Therefore, a hotspot analysis for particulate matter (PM_{2.5} and PM₁₀) was not required. A project-level CO screening (hot-spot analysis) was also completed for the Project, as documented in Section 3.7.3 of the EA. The Project involves an electrically powered light rail line and would not operate vehicles that contribute to diesel particulate matter. The Project would not cause or contribute to any new violation of any standard in any area; increase the frequency or severity of any existing violation of any standard in any area or delay timely attainment of any standard or any required interim emission reductions or other milestones in the area. FTA finds that the Project would not result in a significant impact on air quality.

National Historic Preservation Act Compliance. In accordance with Section 106 of the National Historic Preservation Act (54 U.S.C. 300101 et seq.) and its implementing regulations at 36 C.F.R. Part 800, FTA, in coordination with Valley Metro and the City of Phoenix Historic Preservation Office, defined an area of potential effect (APE). The State Historic Preservation Office (SHPO) concurred with the delineation of the APE on October 14, 2015 and the revised APE on June 6, 2016. FTA and Valley Metro initiated consultation with Native American groups and other parties on August 31, 2015 and continued consultation on May 10, 2016. Native American Tribes were provided an opportunity to share information or concerns regarding potential impacts on prehistoric sites, sacred sites and/or traditional cultural properties consistent with 36 C.F.R. 800.2 and 36 C.F.R. 800.4. Three consulting parties, the Gila River Indian Community, San Carlos Apache Tribe, and the Bureau of Reclamation provided comments on the EA, but none objected to the findings in

the EA. In their letter dated June 6, 2016 (Attachment 2), SHPO concurred on the determination of eligibility for the National Register of Historic Places.

The Project would require in partial property acquisitions of fifteen historic properties; however the partial acquisitions are limited to areas adjacent to parking lots, yards and landscaped areas. The Project would not adversely affect the architectural features or ability of the buildings and/or structures to convey their historical significance.

FTA determined that the Project would result in an adverse effect to historic resources, related to two properties: Pueblo Viejo/ AZ T:12:73 (ASM) and Canal Seven/ AZ T:12:187(ASM). There is a potential for construction to encounter cultural deposits and features of these sites. In their letter dated July 12, 2016 (Attachment 2), SHPO concurred with FTA's finding of adverse effect. With implementation of mitigation measures, as outlined in the Memorandum of Agreement (MOA) executed on January 3, 2017, in Attachment 1, the impact on these resources would be minimized. The MOA includes provisions for the development of a treatment plan, which includes archaeological testing and data recovery integrated with a program of public outreach, tribal participation and data gathering that would contribute to the collective traditional knowledge of culturally affiliated Native American Tribes.

Section 4(f) and Section 6(f) Compliance. As discussed in Section 3.11 of the EA, the Project is located near parks and other historic resources that qualify as Section 4(f) resources under Section 4(f) of the Department of Transportation Act of 1966, codified in 49 U.S.C. 303 and its implementing regulations at 49 C.F.R. Part 774. Archaeological sites Pueblo Viejo/ AZ T:12:73 (ASM) and Canal Seven/ AZ T:12:187(ASM) were determined to be eligible for the National Register of Historic Places based on their information potential (Criterion D). This criterion applies to properties that have yielded, or may be likely to yield, information important in prehistory or history and what can be gained through data recovery. These sites have minimal value for protection in place per 23 CFR 774.13(b)(2); therefore, Section 4(f) does not apply to them. As noted above, on June 6, 2016, SHPO concurred with the determination of eligibility for the National Register of Historic Places under Criterion D and with the finding that the sites have minimal value for protection in place.

The Project would result in a direct use of fifteen historic Section 4(f) resources through ROW takes. The acquisition of ROW within the 15 historic properties would not adversely affect the architectural features or ability of the buildings and/or structures to convey their historical significance. On July 12, 2016, SHPO concurred with the finding of effect to historic properties. Therefore, FTA has determined that the direct use of these Section 4(f) properties would be result in *de minimis* impacts, consistent with 23 CFR 774.17(5). FTA further finds that the Project would not result in constructive use, or temporary occupancy, of Section 4(f) resources.

Section 6(f) of the Land and Water Conservation Fund (LWCF) Act, administered by the Interagency Committee for Outdoor Recreation and the Department of the Interior's National Park Service, pertains to projects that would cause impacts on, or the permanent conversion of, outdoor recreational property acquired with LWCF assistance. Central Park, the closest Section 6(f) resource to the Project is approximately 0.10 mile away. The Project would not affect or result in the acquisition or conversion of any portion of any Section 6(f) resources.

Executive Orders 13609 and 11988: Floodplain Management. Portions of the Project are within the 100-year floodplain associated with the Salt River, Grand Canal and Western Canal. With the exception of the Central Avenue Bridge over the Salt River, the Project is in an area already developed with impervious surfaces with well-developed drainage infrastructure and would not increase the risk of flooding. The Salt River area would be graded to preconstruction elevations once construction is complete and, thus, the Project would not substantially modify topography. The Project would not cause an adverse effect to the 100-year water surface profile or result in any increase in flooding associated with the 100-year event on adjacent properties, including existing buildings, structures, or other beneficial uses. Therefore, FTA finds there would be no significant impact related to floodplains from the Project.

Waters of the United States, including Wetlands. As discussed in Section 3.17 of the EA and pursuant to Section 404 of the Clean Water Act of 1972 (33 U.S.C 1250 et seq. and 40 C.F.R. 230) and EO 11990 (Protection of Wetlands), the Project was evaluated for impacts on waters of the United States (WOUS) under the jurisdiction of the U.S. Army Corps of Engineers. The Project would cross the Salt River, a WOUS and the Rio Salado Habitat Restoration Area, which contains jurisdictional wetlands, a subset of WOUS. The Project would not result in permanent acreage loss of WOUS or wetlands. Impacts on WOUS would include the temporary discharge and fill into 0.16 acre of wetlands and 0.60 acre of open water. With implementation of mitigation measures as discussed in Section 3.17.4 of the EA, the Project would have no adverse effect on WOUS and wetlands.

Endangered Species Act Compliance. The Project contains suitable habitat or is in proximity to suitable habitat for the Southwestern willow flycatcher (endangered species), Yuma clapper rail (endangered species), yellow-billed cuckoo (threatened species) and bald eagle (protected under the Bald and Golden Eagle Protection Act). A Biological Assessment (BA) was prepared and concluded that the Project “may affect, but is not likely to adversely affect” the Southwestern willow flycatcher and the Yuma clapper rail through temporary loss of habitat and would result in “no effect” to the yellow-billed cuckoo. Additionally, the Project would not result in a “take” under the Bald and Golden Eagle Protection Act. Migratory birds may occur in the Project area. Some displacement of these species and their nests could occur because of temporary loss of habitat and increased activity in the area.

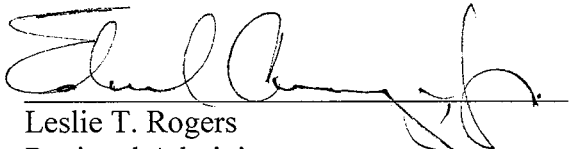
On March 3, 2016, the BA was submitted to U.S. Fish and Wildlife Service (USFWS) for informal consultation pursuant to Section 7 of the Endangered Species Act of 1973 (16 U.S.C 1531-1544), as amended. In their letter dated April 14, 2016 (Attachment 2), USFWS concurred with the findings in the BA. FTA finds that with the implementation of mitigation as outlined in Table ES-2 of the Executive Summary and Section 3.19.4 of the EA, the Project would not result in a significant impact on federally listed threatened or endangered species.

Executive Order 12898 (Environmental Justice) Compliance. The potential for disproportionately high and adverse human health or environmental effects on minority and low-income populations was evaluated in the EA in accordance with Executive Order 12898, U.S. Department of Transportation Order 5610.2(a) and FTA’s Environmental Justice Circular 4703.1. Environmental justice populations occur throughout the study area. Effects resulting from Project construction and operations related to ROW, traffic, air quality and noise would occur equally in all neighborhoods

adjacent to the alignment. Mitigation measures to reduce these effects are identified in Table ES-2 in the Executive Summary and are discussed in Section 3.14.2 of the EA. The communities near the Project corridor are anticipated to benefit from increased transit accessibility and decreased congestion on many local streets, improved air quality and improved connectivity and travel times between neighborhoods and businesses within the study area. FTA finds that the Project would not have disproportionately high and adverse human health or environmental effects on minority or low-income populations.

Environmental Findings

In accordance with 23 C.F.R. 771.121(a), FTA finds, based on the analysis, reviews, concurrence letters from applicable resource agencies and mitigation measures described in the EA, that no significant adverse impacts on the environment would result from implementation of the Project. Valley Metro shall implement the mitigation measures and measures to avoid and minimize environmental impacts as listed in Table ES-2 in the Executive Summary.



Leslie T. Rogers
Regional Administrator
Federal Transit Administration, Region IX

Date: 1/6/2017

Attachments

Attachment 1: Memorandum of Agreement

Attachment 2: Relevant Correspondence

- Letter from SHPO regarding concurrence on the determination of eligibility for the National Register of Historic Places (June 6, 2016)
- Letter from SHPO regarding concurrence with FTA’s finding of adverse effect (July 12, 2016)
- Letter from USFWS regarding concurrence with the findings of the Biological Assessment (April 14, 2016)

ATTACHMENT 1:

Memorandum Of Agreement
Among the Federal Transit Administration, Valley Metro,
City Of Phoenix, the Arizona State Historic Preservation Office, the Bureau Of Reclamation, the
Salt River Project, and the Arizona Department Of Transportation
Regarding the
South Central Light Rail Extension Project,
Phoenix, Arizona

**MEMORANDUM OF AGREEMENT
AMONG THE FEDERAL TRANSIT ADMINISTRATION, VALLEY METRO,
CITY OF PHOENIX, THE ARIZONA STATE HISTORIC PRESERVATION OFFICE,
THE BUREAU OF RECLAMATION, THE SALT RIVER PROJECT, AND THE
ARIZONA DEPARTMENT OF TRANSPORTATION
REGARDING THE
SOUTH CENTRAL LIGHT RAIL EXTENSION PROJECT,
PHOENIX, ARIZONA**

WHEREAS, the Valley Metro, the regional public transit agency for the greater Phoenix, Arizona area, proposes to construct the South Central Light Rail Extension Project (Undertaking) within the City of Phoenix and is seeking financial assistance from the U.S. Department of Transportation, Federal Transit Administration (FTA) for the South Central Light Rail Extension Project; the City of Phoenix will be the direct recipient of FTA funds, which funds will be transferred to Valley Metro for the Undertaking; and,

WHEREAS, by virtue of this Federal assistance, the South Central Light Rail Extension Project is an undertaking subject to Section 106 of the National Historic Preservation Act of 1966 (NHPA), as amended (54 U.S. Code [U.S.C.] 300101, formerly 16 U.S.C. Section 470(f)) and its implementing regulations at 36 Code of Federal Regulations [CFR] 800; and

WHEREAS, the Undertaking consists of an approximately 5-mile-long southern extension of the existing Valley Metro light rail line along Central and 1st Avenues in central Phoenix with roadway modifications at 7th Avenue and Interstate 17 (I-17), 7th Street and I-17 and 7th Avenue and Southern Avenue to accommodate light rail operations; park-and ride lots near Central Avenue/Broadway Road and Baseline Road/Central Avenue; and an expansion of the existing Operations and Maintenance Center; and includes federal, state, and private land owned and/or administered by the Bureau of Reclamation, the Arizona Department of Transportation, the Salt River Project (SRP), the City of Phoenix, and private owners; and

WHEREAS, FTA, is the lead Federal agency for the Undertaking and a Signatory to this Agreement; and

WHEREAS, FTA, in consultation with Arizona State Historic Preservation Officer (SHPO), has defined the area of potential effects (APE) as the following: the street right-of-way (ROW) and adjacent property parcels along the alignment for the Undertaking; the street ROW and new ROW at the intersections of 7th Street and Interstate 17 (I-17) and 7th Avenue and I-17; land necessary for staging areas, traction power substations, park-and-ride facilities, and signal buildings; intersections crossed by the alignment where road improvements are proposed; land adjacent to the current Central Phoenix/East Valley starter line at Central Avenue and McKinley Street for special trackwork; the Operations and Maintenance Center property; and, for archaeological resources only, a vertical depth of 20 feet for ground-disturbing construction activities; all of the foregoing, the APE, is more specifically depicted in Exhibit A; and

WHEREAS, FTA has determined, in consultation with the SHPO, that the Undertaking would have an adverse effect on archaeological sites AZ T:12:73(ASM)/Pueblo Viejo and AZ T:12:187(ASM)/Canal Seven, which are eligible for the National Register of Historic Places (National Register) under Criterion D (36 CFR Part 63); and

WHEREAS, after consideration of comments submitted by Consulting Parties, although the Undertaking would not adversely affect archaeological site AZ T:12:70(ASM), Pueblo Patricio, which is eligible for the National Register under Criterion D (36 CFR Part 63), Valley Metro will provide monitoring by an archaeologist during construction near the site; and

WHEREAS, the boundaries for sites AZ T:12:73(ASM)/Pueblo Viejo, AZ T:12:187(ASM)/Canal Seven, and AZ T:12:70/Pueblo Patricio have been defined in "*Cultural Resource Inventory and Evaluation, South Central Light Rail Extension Report*" (Brodbeck and others 2016) which has been provided to the Consulting Parties along with the draft Environmental Assessment and draft Memorandum of Agreement; and SHPO concurred with the adequacy of the report and the finding of effect for the Undertaking on July 12, 2016; and

WHEREAS, in accordance with 36 CFR Part 800.6(a)(1), FTA has notified the Advisory Council on Historic Preservation (ACHP) of the adverse effect finding, provided the documentation specified at 36 CFR Part 800.11, and on June 27, 2016, ACHP chose not to participate in consultation pursuant to 36 CFR Part 800.6(a)(1)(iii), as shown in the attached letter (Exhibit B); and

WHEREAS, Valley Metro is the Undertaking sponsor, has participated in the consultation, and has been invited to sign this Agreement as an Invited Signatory; and

WHEREAS, FTA has consulted with known Native American tribes that may attach religious or cultural importance to affected properties pursuant to 36 CFR § 800.2 (c)(2)(ii)(A-F) (Consulting Parties) and these tribes (the Ak-Chin Indian Community, the Fort McDowell Yavapai Nation, the Gila River Indian Community, the Hopi Tribe, the Pascua Yaqui Tribe, the Salt River Pima-Maricopa Indian Community, the San Carlos Apache Tribe, the Tohono O'odham Nation, the Tonto Apache Tribe, the White Mountain Apache Tribe, the Yavapai-Apache Nation, and the Yavapai-Prescott Indian Tribe) have been invited to be Concurring Parties to this Agreement; and Concurring Parties shall be defined as Consulting Parties who have signed this Agreement; and

WHEREAS, the Concurring Parties, the Invited Signatories, and the Signatories are the Parties to this Agreement (hereinafter "Parties"); and

WHEREAS, the White Mountain Apache Tribe deferred further participation with the Undertaking on July 7, 2016, and no comments were received from the other Consulting Parties; and

WHEREAS, the SHPO is authorized to enter into this Agreement as a Signatory in order to fulfill its role of advising and assisting Federal agencies in carrying out their Section 106 responsibilities under the NHPA and its implementing regulations at 36 CFR Parts 800.2(c)(1)(i) and 800.6(b), and the SHPO is a Signatory to this Agreement; and

WHEREAS, the SHPO is also 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 (A.R.S.) § 41-511.04(D)(4); and

WHEREAS, the City of Phoenix owns the street right-of-way and land at the Operations and Maintenance Center; as a property owner and the direct Federal funding recipient, the City of Phoenix, on behalf of all City of Phoenix departments, has been invited to participate in this Agreement as an Invited Signatory; and

WHEREAS, the Arizona State Museum (ASM) has defined authorities and responsibilities under A.R.S. § 41-841 *et seq.* for portions of the Undertaking on State lands (defined as including state, county, city and municipal lands) and under A.R.S § 41-865 for portions of the Undertaking on private lands, and the ASM has been invited to participate in the consultation and to concur in this Agreement as a Concurring Party; and

WHEREAS, the Arizona Department of Transportation owns and maintains the ROW at the I-17 and has been invited to participate in the consultation and to concur in this Agreement as an Invited Signatory; and

WHEREAS, the Undertaking will cross the Western Canal and lateral canal easements operated by SRP and administered by the Bureau of Reclamation, which are located on federal land and are components of a larger SRP historic district; SRP and Bureau of Reclamation have been invited to concur in this Agreement as Invited Signatories; and

WHEREAS, FTA has used the National Environmental Policy Act (NEPA) public participation requirements to assist the agency in satisfying the public involvement requirements under Section 106 pursuant to 36 CFR part 800.2(d)(3), which has included public meetings, community stakeholder meetings, community working group meetings, the NEPA Environmental Assessment, the Cultural Resource Report and Draft Memorandum of Agreement (MOA) being made available for public and agency comment on May 10, 2016 and a public meeting on the Environmental Assessment being held on May 25, 2016; and

NOW, THEREFORE, the FTA, the SHPO, the City of Phoenix, and Valley Metro agree that the Undertaking shall be implemented in accordance with the following stipulations in order to take into account any effects of the Undertaking on historic properties.

STIPULATIONS

The FTA shall ensure that the following measures are carried out as a condition of any approval or disbursement of Federal funding for the Undertaking:

I. Historic Properties Treatment Plan

- A. Valley Metro shall develop a Historic Properties Treatment Plan (HPTP). The HPTP will define the specific field methodologies to be utilized, including procedures to be followed for: archaeological monitoring of the Undertaking's construction activities; archaeological data recovery for sites AZ T:12:73(ASM), Pueblo Viejo, AZ T:12:187(ASM), and Canal Seven as described in Stipulation 1B; and unanticipated discovery, during construction, of

additional historic properties or human remains within the APE that may be affected by the Undertaking, as described in Stipulation 4.

The HPTP shall be developed consistent with the Secretary of Interior's Standards and Guidelines for Archaeological Documentation (48 *Federal Register* 44734–37, September 29, 1983) and the ACHP's *Treatment of Archaeological Properties: A Handbook*. Procedures for reporting, and procedures for the disposition of materials and records in the HPTP shall also be developed in accordance with A.R.S. § 41-844.

- B. Valley Metro shall submit a draft HPTP to FTA sixty (60) calendar days prior to issuance of a Notice to Proceed (NTP) to a Design Consultant and shall submit a revised draft HPTP to FTA within fourteen (14) days of receipt of FTA comments. The HPTP shall include all of the following:
1. The results of previous research relevant to the Undertaking and a research design that lists the research questions to be addressed through data recovery, archival research, analysis and interpretation, with an explanation of each question's relevance and relative importance;
 2. The results of Tribal consultation regarding the incorporation of Tribal perspectives into the cultural history, research design, and data recovery/methodology sections of the HPTP;
 3. An identification of the properties or portions of properties where data recovery is to be carried out; and for any property or portion of property that would be affected by the Undertaking without treatment, a rationale for why such portions can remain untreated (e.g., discussion of the sampling strategy);
 4. The archival, field, and laboratory methods to be used, with an explanation of their relevance to the research questions;
 5. A Data Recovery Program, which includes:
 - a. A Phase I Data Recovery Program, including but not limited to surface collections and exploratory excavations, for sites AZ T:12:73(ASM), Pueblo Viejo, and AZ T:12:187(ASM), Canal Seven, to locate significant archaeological deposits within the APE, including level of effort specifications at each site;
 - b. Provisions for site visit(s) for Parties upon completion of Phase I data recovery, which will allow for Parties to review the results of the Phase I program and to provide comment on the need and methodology for any further work, as part of a Phase II program;
 - c. A Phase II Data Recovery Program for archaeological excavations for sites AZ T:12:73(ASM), Pueblo Viejo, and AZ T:12:187(ASM), Canal Seven, to the extent that such data may exist in the APE and may be affected by the Undertaking, including level of effort specifications at each site;

- d. Specification of the level of effort (in text and on site maps) to be expended on the treatment of the sites, including treatment locations and methods of sampling, sample size, and procedures for selection of specific sample units;
 - e. The methods to be used in the management and dissemination of the resulting data to the professional community and the public, including a proposed schedule for Undertaking tasks, and a schedule for the submittal of draft and final reports (Preliminary Data Recovery Reports and Data Recovery Reports) to all Parties for review and comment;
 - f. A discussion of permits and personnel qualifications for archaeological crews, as well as cultural and archaeological sensitivity training for construction personnel;
 - g. The proposed disposition and curation of recovered materials and records in accordance with the relevant federal and state laws and municipal ordinances: NHPA; Native American Graves Protection and Repatriation Act (NAGPRA) (25 U.S.C. §§ 3001 et seq.); Arizona Antiquities Act (Arizona Revised Statutes §§ 41-841 through 41-847; State Historic Preservation Act (Arizona Revised Statutes §§ 41-861 et seq.; State Burial Law for Private Land (Arizona Revised Statutes §§ 41-865; City of Phoenix historic preservation ordinance (City Code, Chapter 8, Sections 801 through 816);
6. A Monitoring and Discovery Plan (MDP), consistent with Stipulation 4, which shall include:
- a. Procedures for monitoring, evaluating, and treating discoveries of unanticipated or newly identified cultural resources during construction of the Undertaking; such procedures shall include the consultation process and timelines for Concurring Parties, as further described in Stipulation 4.
 - b. Procedures for monitoring for construction activities within the APE in the vicinity of site AZ T:12:70(ASM), Pueblo Patricio. In the unlikely event that any such cultural deposits associated with the site are encountered, Valley Metro will follow the discovery procedures in the MDP;
 - c. A protocol for the treatment of human remains, consistent with the Burial Agreement (as defined in Stipulation IV.D below), in the event that such remains are discovered, describing methods and procedures for the recovery, inventory, treatment, and disposition of human remains, associated funerary objects, and objects of cultural patrimony (as per the relevant state and city laws cited in Stipulation I.B.5.f.).
7. A public outreach program, which shall include: a strategy for public information on the evaluation and findings of unexpected discoveries during construction; a discussion on the public benefit of mitigation and recommendations for enhancing public education about, and interpretation of, the affected property; proposed means to involve the public during fieldwork and/or in the future; and a strategy for a public outreach program with the goal of disseminating information about the results of the cultural resources investigations to the general public. Valley Metro must implement this program

concurrent with the Data Recovery Program to inform and educate target audiences of the importance of archaeological research. In addition to the above, the Program may include the following:

- interpretive signage at the property, as appropriate;
 - print media (a short report written specifically for the public, an education brochure and/or pamphlet, short reports for public magazines and/or journals);
 - electronic media (websites and various social media venues, and/or the production of a video of the fieldwork and analysis), as appropriate;
 - public outreach, such as, museum exhibits, traveling exhibits, presentations or lectures at local venues such as libraries, meetings of avocational organizations, conferences, special presentations given during Arizona Archaeology and Heritage Awareness Month, participant booths at the Arizona Archaeology Expo, laboratory and/or collections tours, and public tours during fieldwork, as appropriate;
 - ways to enhance local heritage education curriculum; and/or
8. A Project Suspension/Termination Plan (PS/TP) that stipulates the procedures that Valley Metro must follow, if the project is halted during data recovery for any reason. The PS/TP shall include:
- A program outlining the steps that Valley Metro must take in order to complete any data recovery or other treatment measures that are in progress at the time of project termination; and
 - A description of how analysis, interpretation, reporting, and curation of remains obtained during treatment measures at all historic properties shall be completed by Valley Metro and timeframes for such completion.
- C. Valley Metro shall submit the draft HPTP to the FTA. Upon Valley Metro's submission, FTA will submit the draft HPTP to the Signatories, Invited Signatories, and Concurring Parties to this Agreement for a thirty (30) calendar day review period.
1. If any Party fails to respond with comments within thirty (30) calendar days of receipt of the initial submission of the HPTP, FTA and Valley Metro may follow up with the Party. If a Party does not respond within seven (7) calendar days of FTA and Valley Metro's follow-up, FTA's responsibility under this Stipulation is fulfilled.
 2. If, as a result of this review, FTA determines that revisions to the HPTP are necessary, Valley Metro shall revise the HPTP. FTA will provide the revised plan to all Parties for their review. The Parties will have twenty (20) calendar days from receipt of the revised plan to comment on any revisions proposed. If any Party does not respond within twenty (20) calendar days, FTA and Valley Metro may follow up with the Party. If a Party does not respond within seven (7) calendar days of FTA and Valley Metro's follow-up, FTA's responsibility under this Stipulation is fulfilled.

3. Valley Metro, in coordination with FTA, shall ensure that any written comments received are taken into account during the preparation of the final HPTP.
4. FTA will provide the final HPTP to all Parties to this Agreement.

II. Data Recovery Reports and Construction Initiation

- A. Upon completion of data recovery for each Phase described in Stipulation I.B.5 at each site, a Preliminary Data Recovery Report (Preliminary Report) will be prepared by Valley Metro incorporating the results of the Data Recovery Program and any comments received during the site visit(s).
- B. The FTA shall distribute the Preliminary Report for each Phase to all Parties to this Agreement for review. All Parties will have seven (7) calendar days from receipt to review and provide written comments to FTA. If any Party does not respond within this review period, FTA and Valley Metro will follow up with the Party to see if they have any comments. If a Party does not respond within seven (7) calendar days of FTA or Valley Metro's follow-up, FTA's responsibility under this Stipulation is fulfilled.
- C. Following fulfillment of Stipulation II.B, resolution of comments from the Parties in the Preliminary Report, and concurrence from SHPO on the completion of the Phase I and Phase II Data Recovery Program (where applicable), the FTA may authorize Valley Metro to begin construction in the vicinity of sites AZ T:12:73(ASM), Pueblo Viejo, and AZ T:12:187(ASM), Canal Seven.
- D. After the completion of the data recovery and completion of Stipulation II.C, Valley Metro shall have the archaeological consultant prepare a draft Data Recovery Report that summarizes all analyses, interpretations, and syntheses. The FTA shall distribute the draft Data Recovery Report to all Parties to this Agreement for review and comment within a thirty (30) calendar day review period.
- E. Valley Metro, in coordination with FTA, will ensure that the Parties' comments on the draft Data Recovery Report are addressed in a revised report. If revisions to the draft Data Recovery Report are made, all Parties to the Agreement shall have twenty (20) calendar days from receipt to review the revisions and provide written comments to FTA and Valley Metro. If any Party does not respond within twenty (20) calendar days, FTA and Valley Metro may follow up with the Party. If a Party does not respond within seven (7) calendar days of FTA or Valley Metro's follow-up, FTA's responsibility under this Stipulation is fulfilled.
- F. Valley Metro, in coordination with FTA, shall ensure that any written comments received are taken into account during the preparation of the Final Data Recovery Report.
- G. FTA shall distribute the Final Data Recovery Report to all Parties to the Agreement.

III. Design Modification

- A. Valley Metro, in consultation with all Parties to this agreement, shall ensure that supplemental inventory surveys are performed for any design modifications that alter the

APE and that the results will include recommendations of eligibility that are made in accordance with 36 CFR § 800.4. Pursuant to 36 CFR Part 800.4(c), the FTA shall, in consultation with the SHPO, Valley Metro, and the City of Phoenix, make a determination of National Register eligibility for any additional resources identified by supplemental survey as within the APE. Should a dispute arise over the eligibility of any resources, the FTA shall submit the dispute to the Keeper of the National Register for a formal determination of eligibility.

- B. Pursuant to 36 CFR § 800.4 – 800.5 and the HPTP, the FTA will determine, in consultation with the SHPO, Valley Metro, and the City of Phoenix, if the additional project developments will adversely affect any new historic properties identified within the supplemental survey areas. Valley Metro shall make reasonable efforts to avoid and/or minimize adverse effects on properties. If mitigation is required, it shall follow the procedures laid out in the final HPTP and in this Agreement.

IV. Unanticipated Discoveries

- A. Procedures for treating, evaluating, and monitoring unanticipated or newly identified historic properties, or unanticipated impacts to known historic properties, within the APE during construction of the Undertaking shall be included in the Monitoring and Discovery Plan component of the HPTP, as outlined in Stipulation I herein, and shall require consultation with Signatories, Invited Signatories, and Concurring Parties to this Agreement.
- B. If potential historic or prehistoric archaeological materials or properties are discovered after construction begins, the person in charge of the construction shall require construction to immediately cease within 100 feet of the discovery, take steps to protect the discovery, and promptly report the discovery to Valley Metro. Valley Metro will report the discovery to the FTA, SHPO, and the City of Phoenix within 48 hours of the discovery. If the discovery is on SRP ROW, Valley Metro will also report the discovery to the Bureau of Reclamation. FTA will consult with the Parties on the determination of eligibility (as per §800.13(b)(3)(c)) and the appropriate treatment following the final HPTP. The HPTP shall then be implemented by Valley Metro. If the HPTP is not appropriate to the discovery, FTA, in consultation with SHPO and the City of Phoenix, and the Bureau of Reclamation if in SRP ROW, shall ensure that Valley Metro develops an alternate plan for the resolution of adverse effects pursuant to 36 CFR Part 800.6 and that such alternate plan is circulated to the Parties to this Agreement for review and comment, pursuant to Stipulation I.
- C. If human remains or funerary objects are discovered, Valley Metro shall require construction to immediately cease within 100 feet of the discovery, take steps to protect the discovery, and FTA shall notify the Director of the ASM. ASM shall consult with the appropriate Native American tribes to determine treatment and disposition measures in accordance with the Burial Agreement (see Stipulation IV.D below). Valley Metro, on behalf of FTA, shall inform the SHPO and the City of Phoenix of the discovery.
- D. Valley Metro shall ensure that the institution, firm, or consultant responsible for the work obtains a Burial Agreement from the ASM in accordance with A.R.S § 41-844 and A.R.S. § 41-865 and thereafter adheres to the terms of that Burial Agreement in the event Human

Remains, Funerary Objects, Sacred Objects, and Objects of Cultural Patrimony are encountered during the investigation. ASM shall implement the Burial Agreement to treat and repatriate any American Indian remains and cultural items that may be encountered during construction of the Undertaking on local government, state, and private land within the APE. If human remains or cultural items are discovered on federal land, Valley Metro shall advise the appropriate federal agency, in coordination with FTA, of the discovery and coordinate with the federal agency managing the land to treat the human remains and cultural items in accordance with the NAGPRA.

V. Confidentiality

Information about the location of cultural resources shall be treated as confidential and not released to the public or other unauthorized entity consistent with applicable sections of A.R.S. 39-125, Section 304 of the NHPA, Section 9 of the Archaeological Resources Protection Act (16 U.S.C. 470hh), and 36 CFR Section 800.11(c).

VI. Amendments

If any Signatory or Invited Signatory determines an amendment to its terms is needed, that Party shall immediately notify FTA and request an amendment. The proposed amendment shall be submitted in draft form with the request. The Signatories and Invited Signatories to this MOA will consult to review and consider such an amendment. If the Signatories and Invited Signatories agree to the amendment, the amendment will become effective on the date it is signed by all the Signatories. FTA shall file any amendments with the ACHP and provide copies of the amendment to the Parties to this MOA.

VII. Annual Review of Agreement; Annual Report and Annual Meeting

- A. The implementation and operation of this Agreement shall be evaluated on an annual basis by all Parties. Valley Metro, in coordination with FTA, shall be responsible for convening an annual meeting on behalf of FTA among all Parties, at the request of a Party to this Agreement, on or near the anniversary date of the execution of this Agreement. Such Annual Meeting shall review the effectiveness and application of this Agreement.
- B. Prior to the annual meeting, Valley Metro shall provide a summary report (Annual Report) to all Parties which details work undertaken pursuant to its terms. Such report shall include information on the project schedule, ongoing and completed public education activities, inadvertent discoveries during construction, progress of data recovery, any design modifications, any disputes and objections received on Valley Metro's or FTA's efforts to carry out the terms of this Agreement, and any proposed plans (including any new design modifications) for next year's activities. Such summary report shall be made available to all Parties and, upon request, to any member of the public (per Stipulation 1.B.7).

VIII. Coordination with Other Federal Reviews

In the event any other federal agency provides funding, permits, licenses, or other assistance to Undertaking as it was planned at the time of the execution of this Agreement, such funding or approving agency may comply with Section 106 by agreeing in writing to the terms of this

Agreement and so notifying and consulting SHPO and ACHP. This process will require an amendment with signature by the new federal agency, as per Stipulation VI.

IX. Dispute Resolution

- A. Should any Party to this Agreement object to any actions proposed pursuant to this Agreement, the FTA shall consult with the objecting Party to resolve the objection. If the FTA determines that the objection cannot be resolved, FTA will:
1. Forward all documentation relevant to the dispute, including the FTA's proposed resolution, to the ACHP. The ACHP shall provide the FTA with its opinion on the resolution of the objection within thirty (30) calendar days of receiving adequate documentation. The FTA shall prepare a final decision that takes into account any timely opinion or comments, regarding the dispute, from the ACHP, Signatories, Invited Signatories and Concurring Parties, and provide them with a copy of the final decision. The FTA will then proceed according to its final decision.
 2. If the ACHP does not provide comments regarding the dispute within the thirty (30) calendar day time period, the FTA may make a final decision on the dispute and proceed accordingly. Prior to reaching such a final decision, the FTA shall prepare a written response that takes into account any timely comments regarding the dispute from the Signatories, Invited Signatories and Concurring Parties to the Agreement, and provide them and the ACHP with a copy of such written response.
- B. Any recommendation or comment provided by the Council will be understood to pertain only to the subject of the dispute. FTA's responsibility to carry out all action under this Agreement that is not the subject of the dispute will remain unchanged.

X. Curation

FTA shall ensure that all artifacts, samples and records resulting from the Undertaking, shall be curated in accordance with the following:

- A. Valley Metro, after coordination with FTA, shall ensure that all artifacts, samples and records resulting from the treatment program are curated in accordance with 36 CFR Part 79, except as determined through consultations with Indian tribes carried out in accordance with federal and state laws pertaining to the treatment and disposition of Native American human remains and funerary objects.
- B. If artifacts and samples, including associated records and documentation, recovered from municipal or state land are to be curated at the Pueblo Grande Museum, Valley Metro shall follow Pueblo Grande Museum standards and guidelines. Any artifacts and samples, including associated records and documentation, found on Bureau of Reclamation administered lands will be curated at the Arizona State University's Center for Archaeology and Society (CSA), following CSA standards and guidelines.

XI. Professional Qualifications and Permits

All historic preservation work carried out pursuant to this Agreement shall be conducted by or under the direct supervision of an individual or individuals who meet, at a minimum, 36 CFR Section 800.2(a)(1) and the Secretary of Interior's Professional Qualifications Standards (48 *Federal Register* 44738-9, September 1983). All historic preservation work carried out on state, city, or land pursuant to this Agreement shall be conducted by individuals who meet the professional qualifications of the Arizona Antiquities Act (Arizona Revised Statutes §§ 41-841 through 41-847). Valley Metro shall ensure that its cultural resources contractor obtains an AAA Permit from the ASM prior to conducting archaeological activities on state or city lands pursuant to A.R.S. §41-841 et. seq. Valley Metro shall ensure that its cultural resources contractor obtains an Archaeological Resource Protection Act Permit, issued through the Bureau of Reclamation, prior to conducting archaeological activities on SRP ROW pursuant to 16 U.S.C. § 470aa-mm.

XII. Duration

This Agreement shall commence upon execution by FTA, and the SHPO. This Agreement shall remain in effect until completion of the construction of all aspects of the Undertaking, or for ten (10) years from the date of its execution, whichever is earlier and subject to the below paragraph.

At least six (6) months prior to the tenth (10) anniversary of the Agreement execution date, the Signatories and Invited Signatories shall consult to determine whether this Agreement shall be extended. If the Signatories and Invited Signatories agree to extend the Agreement, the FTA update the Agreement as needed, in consultation with all Signatories and Invited Signatories. Unless otherwise agreed by and between the Signatories, the extended Agreement must be signed and executed by all Signatories and Invited Signatories prior to the tenth (10) anniversary of the Agreement execution date.

XIII. Termination

In the event that any Signatory or Invited Signatory determines that its terms will not or cannot be carried out, that party shall immediately consult with the other Signatories and Invited Signatories to attempt to develop an amendment per Stipulation VI. If within 30 days (or another time period agreed to by all Signatories and Invited Signatories), an amendment cannot be reached, any Signatory or Invited Signatory may terminate the Agreement upon written notification to the other Signatories.

Once the Agreement is terminated, and prior to work continuing on the Undertaking, the FTA must either (a) execute an Agreement pursuant to 36 CFR § 800.6 or (b) request, take into account, and respond to the comments of the ACHP under 36 CFR § 800.7. The FTA shall notify the Signatories and Invited Signatories as to the course of action it will pursue.

XIV. Counterpart Signatures

This Agreement may be executed in multiple counterparts, each of which, when assembled to include an original signature for each Party contemplated to sign this Agreement, will constitute a complete and fully executed original. All such fully executed original counterparts will collectively

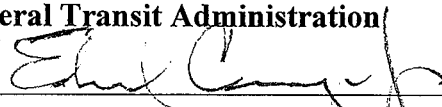
constitute a single agreement. Signatures transmitted by fax or electronic mail (in portable data format (PDF)) are also permitted as binding signatures to this Agreement.

XV. Evidence

Execution of this Agreement by the Signatories and Invited Signatories, and implementation of its terms serve as evidence that FTA has taken into account the effects of the Undertaking on historic properties and has afforded the ACHP its opportunity to comment.

SIGNATORIES

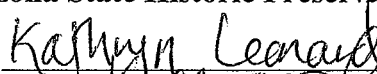
Federal Transit Administration

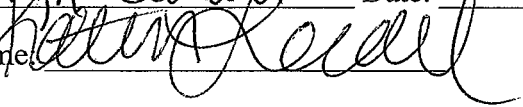
By:  Date: 12/27/2016

Printed Name: EDWARD CARRANZA, JR

Title: DEPUTY REGIONAL ADMINISTRATOR

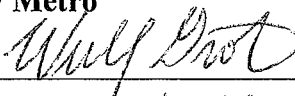
Arizona State Historic Preservation Officer

By:  Date: Jan 3 2017

Printed Name: 

INVITED SIGNATORIES

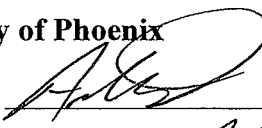
Valley Metro

By:  Date: 12/21/16

Printed Name: Wulf Grote

Title: Director, Capital & Service Development

City of Phoenix

By:  Date: 12/22/16

Printed Name: Albert Santans

Title: Director of High Capacity transit

Bureau of Reclamation

By: _____ Date: _____

Printed Name: _____

Title: _____

Salt River Project

By: _____ Date: _____

Printed Name: _____

Title: _____

Arizona Department of Transportation

By: _____ Date: _____

Printed Name: _____

Title: _____

CONCURRING PARTIES

Arizona State Museum

By: _____ Date: _____

Printed Name: _____

Title: _____

Ak-Chin Indian Community

By: _____ Date: _____

Printed Name: _____

Title: _____

Fort McDowell Yavapai Nation

By: _____ Date: _____

Printed Name: _____

Title: _____

SIGNATORIES

Federal Transit Administration

By: _____ Date: _____

Printed Name: _____

Title: _____

Arizona State Historic Preservation Officer

By: _____ Date: _____

Printed Name: _____

INVITED SIGNATORIES

Valley Metro

By: _____ Date: _____

Printed Name: _____

Title: _____

City of Phoenix

By: _____ Date: _____

Printed Name: _____

Title: _____

Bureau of Reclamation

By: Leslie A. Meyers Date: 12/23/16

Printed Name: Leslie A. Meyers

Title: Area Manager, Phoenix Area Office

Salt River Project

By: _____ Date: _____

Printed Name: _____

Title: _____

Arizona Department of Transportation

By: Paul O'Brien Date: 12/22/16

Printed Name: Paul O'Brien

Title: Manager Environmental Planning

CONCURRING PARTIES

Arizona State Museum

By: _____ Date: _____

Printed Name: _____

Title: _____

Ak-Chin Indian Community

By: _____ Date: _____

Printed Name: _____

Title: _____

Fort McDowell Yavapai Nation

By: _____ Date: _____

Printed Name: _____

Title: _____

Salt River Project

By: _____ Date: _____

Printed Name: _____

Title: _____

Arizona Department of Transportation

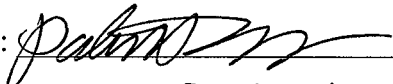
By: _____ Date: _____

Printed Name: _____

Title: _____

CONCURRING PARTIES

Arizona State Museum

By:  Date: 22 Dec 16

Printed Name: Patrick D. Lyons

Title: Director

Ak-Chin Indian Community

By: _____ Date: _____

Printed Name: _____

Title: _____

Fort McDowell Yavapai Nation

By: _____ Date: _____

Printed Name: _____

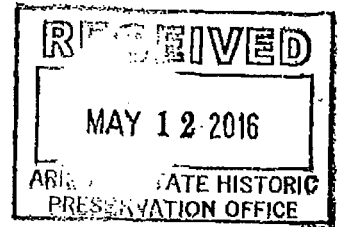
Title: _____

ATTACHMENT 2:
RELEVANT CORRESPONDENCE

- Letter from SHPO regarding concurrence on the determination of eligibility for the National Register of Historic Places (June 6, 2016)
- Letter from SHPO regarding concurrence with FTA's finding of adverse effect (July 12, 2016)
- Letter from USFWS regarding concurrence with the findings of the Biological Assessment (April 14, 2016)



SHPO - 2015-1001 (13/003)
ARIZONA STATE HISTORIC PRESERVATION OFFICE



U.S. Department
of Transportation
Federal Transit
Administration

REGION IX
Arizona, California,
Hawaii, Nevada, Guam
American Samoa,
Northern Mariana Islands

90 7th Street
Suite 15-300
San Francisco, CA 94103-6701
(415) 734-9490
(415)-734-9489 (fax)

Mr. James Garrison
State Historic Preservation Officer
Arizona State Parks
1100 W. Washington Street
Phoenix, Arizona 85007

MAY 12 2016

Re: South Central Avenue Light Rail Extension
Project Revised Area of Potential Effect
and Eligibility Determination - Request for
Concurrence

Dear Mr. Garrison:

The Federal Transit Administration (FTA), in coordination with Valley Metro and the City of Phoenix, is updating its consultation with the State Historic Preservation Office (SHPO) under Section 106 of the National Historic Preservation Act (NHPA), as amended (36 CFR 800), for the South Central Light Rail Extension Project (Project) in South Phoenix, Arizona. Your office concurred with the delineation of the area of potential effects (APE) on October 14, 2015. Since that time, the APE has been revised to include refinements to the design. In accordance with 36 CFR §800.4, the FTA is requesting your concurrence with the revised APE and the determination of eligibility for the National Register of Historic Places (NRHP) for the properties described below.

Project Description

The Environmental Assessment (EA) has been prepared for this federally-funded project pursuant to the National Environmental Policy Act and includes a Build Alternative and a No-Build Alternative. The Build Alternative would consist of an approximately 5-mile-long southern extension of the existing Valley Metro light rail line along Central and 1st Avenues in central Phoenix. The extension tracks would connect to the existing light rail system at Central Avenue and Washington Street in the northbound direction and at 1st Avenue and Jefferson Street in the southbound direction. The track would continue south along 1st and Central Avenues to Hadley Street, where the southbound track would follow the 1st Avenue one-way couplet curve to the east to rejoin Central Avenue. From Hadley Street to the extension's southern terminus at Baseline Road, the tracks would operate bi-directionally along Central Avenue. Light rail stations are proposed at or near Lincoln Street, Buckeye Road, Nina Mason Pulliam Audubon Center, Broadway Road, Southern Avenue, Roeser Street, and Baseline Road.

The southbound track would be side-running from its connection with the existing light rail system on 1st Avenue south of Jefferson Street to Lincoln Street, where it would transition to median-running and continue along the curved 1st Avenue segment of the one-way couplet before rejoining Central Avenue at Hadley Street. On Central Avenue, it would continue running in the median southbound to its terminus at Baseline Road. The northbound track would be median-running along Central Avenue from Baseline Road north to Buchanan Street. Then it would transition to side-running and continue north to Madison Street. At Madison Street, the track would shift from the left side of the roadway to the right side and continue northward. The track would then shift back to the left side of the street as it approaches Washington Street to connect into the existing system.

The alignment is primarily at-grade, with the exception of where Central and 1st Avenues go under the Union Pacific Railroad (UPRR) and Jackson Street overpasses between Buchanan and Madison Streets. The track guideway would be exclusively reserved for light rail vehicles, physically separated from automobile traffic by a barrier such as a trackway curb.

The South Central Light Rail Extension would entail some roadway modifications to accommodate light rail operations. This includes improvements to intersections at 7th Avenue and Interstate 17 (I-17), 7th Street and I-17, and 7th Avenue and Southern Avenue, where traffic patterns would be affected by the reduction of lanes on Central Avenue. Additionally, a park-and-ride lot would be built to accommodate 70 to 80 vehicles near Central Avenue and Broadway Road, west of and adjacent to the existing Ed Pastor Transit Center. Parking for the end-of-line station at Baseline Road/Central Avenue would be provided by a new park-and-ride lot and enhanced bus service between the end-of-line station and two existing park-and-ride facilities along Baseline Road. The new park-and-ride lot near the Baseline Road/Central Avenue station would accommodate approximately 365 parking spaces and would be located on the western side of Central Avenue between the northern end of the station and Fremont Road.

In conjunction with the project, Valley Metro plans to expand the existing Operations and Maintenance Center (OMC), east of Sky Harbor International Airport and southwest of the intersection of the Grand Canal and Loop 202. The expansion would include modifications to the Maintenance of Equipment building, storage tracks and cleaning platform.

Area of Potential Effect

Your office concurred with the delineation of the APE on October 14, 2015. Since that time, the APE has been revised. The APE was expanded to include the intersections of 7th Street and I-17 and 7th Avenue and I-17. Improvements are needed at these intersections to accommodate changes in traffic volumes resulting from the lane reduction on Central Avenue. The APE for the 7th Street and I-17 intersection includes the street rights-of-way (ROWs). The APE for the 7th Avenue and I-17 intersection includes the street ROWs and one parcel of new ROW on the northwestern corner. The APE has not been expanded to include the intersection of 7th Avenue and Southern Avenue because no ground disturbing activity or alterations to the visual setting would take place at that location. In addition, the APE was reduced to because one traction power substation and one proposed staging area were removed from the project. Additionally, another staging area of approximately 4.75 acres was reduced in size by approximately 50 percent.

For archaeological resources, the previously defined APE included a vertical depth of approximately 10 feet. However, Project construction will require excavations to a depth of 20 feet for the installation of catenary poles; therefore, the vertical APE is now defined as a depth of 20 feet below ground surface.

National Register of Historic Places Eligibility Recommendations

As shown on Table 1 in the Cultural Resources Inventory and Evaluation Report, the records review provided information on 31 recorded archaeological sites. However, only four archaeological sites within the APE are eligible for the NRHP:

- AZ T:12:42(ASM), original Phoenix townsite
- AZ T:12:70(ASM)/Pueblo Patricio, a prehistoric Hohokam village site
- AZ T:12:73(ASM)/Pueblo Viejo, a prehistoric Hohokam village site
- AZ T:12:187(ASM)/Canal Seven, a prehistoric Hohokam canal

The first three sites were previously determined eligible for the NRHP under Criterion D for their potential to yield important information about the area's prehistory and history. The last site, AZ T:12:187(ASM)/Canal Seven was recommended as eligible for the NRHP under Criterion D. These archeological resources are considered important chiefly because of what can be learned by data recovery and has minimal value for preservation in place.

Regarding built-environment historic resources, within the APE 143 buildings constructed prior to 1973 were evaluated for NRHP eligibility. Four buildings are listed on the NRHP. The records review identified two historic districts (Maricopa County Complex Historic District and Roosevelt Place Historic District) and 29 previously recorded historic buildings and structures in the APE. These resources were previously determined eligible for the NRHP and their eligibility remains unchanged. Based on the Cultural Resources Inventory and Evaluation Report, 29 newly recorded properties were determined eligible for the NRHP and 114 historic buildings and structures were evaluated as ineligible. The Historic Property Inventory Forms are included in the Cultural Resources Inventory and Evaluation Report for properties within the APE recommended as eligible or ineligible for the NRHP. The Site Management Summary in the Cultural Resources Inventory and Evaluation Report provides a list of the listed and eligible properties.

Request for Concurrence

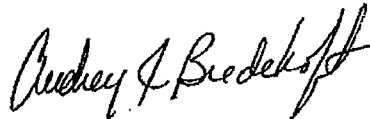
In accordance with 36 CFR § 800.4, the FTA is requesting your concurrence with the revised APE and with finding that the properties mentioned above are eligible for the NRHP, which you can indicate by signing below, or by providing us your comments. We would appreciate receiving your comments within 30 days of the date of this letter.

The Cultural Resources Inventory and Evaluation Report is enclosed for your review. The report provides the additional information on the APE, surveys conducted, historic properties evaluation, and consultations with Native American Groups and others. The report also includes a preliminary finding of effect upon which you may comment; however, the finding of effect is expected to be submitted to your office following the public review of the EA in an effort to

involve the public in accordance with 36 CFR § 800(a)(4) and 36 CFR § 800.8. The EA was released for public review May 10, 2016.

Please contact FTA Region IX Community Planner Dominique M. Paukowits at (415) 734-9469, or dominique.paukowits@dot.gov if you have any questions.

Sincerely,

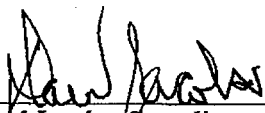


for Leslie T. Rogers
Regional Administrator

Enclosures: Revised APE Maps
Cultural Resources Inventory and Evaluation Report

cc: Robert Forrest, Environmental Program Manager, Valley Metro

Concurrence:



David Jacobs, Compliance Specialist
SHPO Concurrence

6 JUNE 16

Date

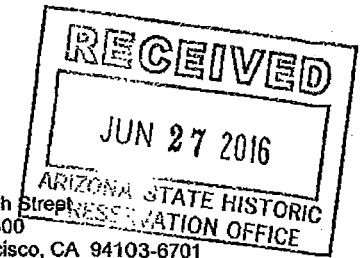


U.S. Department
of Transportation
**Federal Transit
Administration**

SHPO - 2015-1001 (131716)
ARIZONA STATE HISTORIC PRESERVATION OFFICE

REGION IX
Arizona, California,
Hawaii, Nevada, Guam
American Samoa,
Northern Mariana Islands

90 Seventh Street
Suite 15-300
San Francisco, CA 94103-6701
415-734-9490
415-734-9489 (fax)



JUN 16 2016

James Garrison
State Historic Preservation Officer
Arizona State Parks
1100 West Washington
Phoenix, Arizona 85007

Re: South Central Light Rail Extension Project
Section 106 Finding of Effect, Section 4(f)
Determination, and Memorandum of Agreement

Dear Mr. Garrison:

The Federal Transit Administration (FTA), in consultation with Valley Metro and the City of Phoenix, is continuing its consultation with the State Historic Preservation Office (SHPO) under Section 106 of the National Historic Preservation Act (NHPA), as amended (36 CFR 800), for the South Central Light Rail Extension Project (Project) in South Phoenix, Arizona. This letter requests your concurrence on the finding of effect per 36 CFR § 800.5 and your review of the enclosed draft Memorandum of Agreement to treat adverse effects of the Project. This letter also serves to notify you of determinations under Section 4(f) of the U.S. Department of Transportation Act of 1966, as amended (49 USC 303).

Project Description

The Build Alternative would consist of an approximately 5-mile-long southern extension of the existing Valley Metro light rail line along Central and 1st Avenues in central Phoenix. The extension tracks would connect to the existing light rail system at Central Avenue and Washington Street in the northbound direction and at 1st Avenue and Jefferson Street in the southbound direction. The track would continue south along 1st and Central Avenues to Hadley Street, where the southbound track would follow the 1st Avenue one-way couplet curve to the east to rejoin Central Avenue. From Hadley Street to the extension's southern terminus at Baseline Road, the tracks would operate bidirectionally along Central Avenue.

The South Central Light Rail Extension Project would serve eight planned stations along the route. It could be interlined with the existing light rail line so that those passengers destined as far north as the light rail line terminus at Dunlap Avenue/19th Avenue could do so without transferring to another train.

The proposed light rail alignment would serve the South Central Avenue neighborhoods and activity centers and provide a direct link to the existing regional Valley Metro Light Rail System and the major transit center at Central Station in Downtown Phoenix. In addition to the many neighborhoods, the proposed project would also serve St. Vincent de Paul, Nina Mason Pulliam Rio Salado Audubon Center, Ed Pastor Transit Center, Travis L. Williams Family Services Center and Jesse Owens Memorial Medical Center.

The southbound track would be side-running from its connection with the existing light rail system on 1st Avenue south of Jefferson Street to Lincoln Street, where it would transition to median-running and

continue along the curved 1st Avenue segment of the one-way couplet before rejoining Central Avenue at Hadley Street. On Central Avenue, it would continue running in the median southbound to its terminus at Baseline Road. The northbound track would be median-running along Central Avenue from Baseline Road north to Buchanan Street, where it would transition to side-running and continue north to Madison Street. At Madison Street, the track shifts from the left side of the roadway to the right side and continues northward. The track then shifts back to the left side of the street as it approaches Washington Street to connect into the existing system.

The alignment is primarily at grade, with the exception of where Central and 1st Avenues go under the Union Pacific Railroad (UPRR) and Jackson Street overpasses between Buchanan and Madison Streets. The track guideway would be exclusively reserved for light rail vehicles, physically separated from automobile traffic by a barrier such as a trackway curb.

The South Central Light Rail Extension would entail some roadway modifications to accommodate light rail operations. This includes improvements to intersections at 7th Avenue and I-17, 7th Street and I-17, and 7th Avenue and Southern Avenue, where traffic patterns would be affected by the reduction of lanes on Central Avenue. Additionally, a park-and-ride lot would be built to accommodate 70 to 80 vehicles near Central Avenue and Broadway Road, west of and adjacent to the Ed Pastor Transit Center. Parking for the end-of-line station at Baseline Road/Central Avenue would be provided by a new park-and-ride lot and enhanced bus service between the end-of-line station and two existing park-and-ride facilities along Baseline Road. The new park-and-ride lot near the Baseline Road/Central Avenue station would accommodate approximately 365 parking spaces and would be located on the western side of Central Avenue between the northern end of the station and Fremont Road.

In conjunction with the project, Valley Metro plans to expand the existing Operations and Maintenance Center (OMC), east of Sky Harbor International Airport and southwest of the intersection of the Grand Canal and Loop 202. The expansion would include modifications to the Maintenance of Equipment building, storage tracks and cleaning platform.

Public Participation and Native American Consultation

The Environmental Assessment was circulated for public and agency review and comment from May 10, 2016 through June 13, 2016. In addition, the EA and all the appendices including the Cultural Resources Inventory and Evaluation Report and the Draft Memorandum of Agreement were attached to the EA. A public meeting was held on May 25, 2016 to solicit input on the EA and cultural resources. Valley Metro also sent letters to the following Native American Tribes requesting their review and comment of the EA, the Cultural Resources Inventory and Evaluation Report and the Draft Memorandum of Agreement:

Ak-Chin Indian Community
Fort McDowell Tavapai Nation
Gila River Indian Community
Hopi Tribe
Pascua Yaqui Tribe
Salt River Pima-Maricopa Indian Community

San Carlos Apache Tribe
Tohono O'odham Nation
Tonto Apache Tribe
White Mountain Apache Tribe
Yavapai-Apache Nation
Yavapai-Prescott Indian Tribe

Valley Metro received a letter from the Gila River Indian Community stating that they concur with the recommendation for the preparation of Historic Property Treatment Plan for the sites which will be adversely affected and that they will continue to participate in the Section 106 process. The San Carlos

Apache Tribe responded with a letter stating that they concurred with the report findings and that they defer to Tribes located closest to the project area.

Archaeological Sites

Your office concurred with the delineation of the area of potential effects (APE) on October 14, 2015 and the revised APE on June 6, 2016. Your office also concurred on the National Register eligibility determinations for properties within the APE on June 6, 2016. Four archaeological sites, two historic districts and 58 buildings and structures were determined eligible for listing on the NRHP and 114 buildings were determined ineligible for listing.

The four archaeological sites in the APE were determined eligible for the National Register under Criterion D for their potential to yield important information about the area's prehistory and history:

- AZ T:12:42(ASM), Original Phoenix Townsite
- AZ T:12:70(ASM)/Pueblo Patricio, a prehistoric Hohokam village site
- AZ T:12:73(ASM)/Pueblo Viejo, a prehistoric Hohokam village site
- AZ T:12:187(ASM)/Canal Seven, a prehistoric Hohokam canal

Based on the Cultural Resources Inventory and Evaluation Report, FTA has determined that the proposed Build Alternative would result in adverse effects on Pueblo Viejo/AZ T:12:73(ASM) and Canal Seven/AZ T:12:187(ASM) because ground-disturbing activities would affect cultural deposits with the potential to yield important information on prehistory. Furthermore, FTA has determined that the Project would have no adverse effect on the Original Phoenix Townsite/AZ T:12:42(ASM) and Pueblo Patricio/AZ T:12:70(ASM) because the potential to encounter intact archaeological deposits in the street right-of-way (ROW) is low in the Downtown area and because of the extent of prior disturbance for street construction and installation of buried utilities.

To resolve the adverse effects to Pueblo Viejo/AZ T:12:73(ASM) and Canal Seven/AZ T:12:187(ASM), FTA and Valley Metro would work with the SHPO, City of Phoenix Historic Preservation Office, Native American Tribes and other consulting parties to develop and execute a Memorandum of Agreement (MOA). Native American Tribes would be included in the development and implementation of the MOA and Treatment Plan, and subsequent research, fieldwork and interpretations of results, especially at it pertains to the collection and dissemination of data that will contribute to the collective traditional knowledge of Native American Tribes culturally affiliated with the Project area. The Treatment Plan would include:

- Archaeological testing and data recovery at Pueblo Viejo/AZ T:12:73(ASM) and Canal Seven/AZ T:12:187(ASM)
- Procedures for any discovery situations, including the treatment of human remains

The site boundary for Pueblo Patricio/AZ T:12:70(ASM) is adjacent to the proposed Build Alternative alignment; therefore, monitoring during construction will be required and will be included in the Treatment Plan.

Historic Districts, Buildings and Structures

Two historic districts and 58 buildings and structure properties were listed in or determined eligible for listing in the National Register under Criteria A, B and/or C for their associations with historical events,

people and architectural design. These properties are summarized in the attached Table 1, *Assessment of Impacts on National Register-Listed and Eligible Properties*.

Prior assessments of the effects of light rail transit projects in the Phoenix metropolitan area have concluded that installation of trackways, catenary systems and stations are generally not adverse as long as the features are installed between the existing street curbs. Modification of streets, curbs, gutters and sidewalks within existing ROWs to accommodate the tracks and combinations of features such as traffic lanes, turn lanes and bicycle lanes in front of historic properties that do not require acquisition of additional ROW from those properties generally would result in no adverse impact on the adjacent historic properties, particularly if the features in the ROW are not of historic age. Based on the assessment of historic properties documented, FTA has determined that the proposed Build Alternative would have no adverse effect on the two historic districts and 43 historic buildings and structures that do not involve new ROW acquisition.

The Build Alternative would require ROW acquisitions from 15 historic building properties. The ROW acquisitions are minor and would not affect architectural features or the ability of the properties to convey historical significance. Therefore, FTA has determined that the Build Alternative would have no adverse effect on the following 15 historic properties:

- Hughes/Fazio House
- Firpo House
- Phoenix Pipe and Supply
- Fullerform Irrigation & Waterworks
- Globe Furniture Factory Showroom
- Kachina Moving and Storage
- South Plaza Shopping Center
- St. Catherine of Siena Roman Catholic Church
- Corral Drive-In
- Kentucky Fried Chicken
- St. Catherine of Siena Catholic School
- Lutheran Church of Hope
- Tudor Revival House
- Goemmer House
- Baseline Medical Building

Section 106 Determination

FTA has determined that a finding of “adverse effect” is appropriate for the undertaking. FTA has also determined the Build Alternative would not have adverse effects on the NRHP-eligible historic districts, buildings and structures documented within the APE; this includes the 15 properties that require ROW acquisitions where FTA intends to make a *de minimis* impact determination under Section 4(f).

Per 36 CFR § 800.5, FTA requests your concurrence on the finding of effect, which you can indicate by signing below, or provide us your comments. FTA has prepared a Draft MOA that is currently being circulated to the Native American Tribes and other consulting parties for their review and comment. FTA also requests your review and comment on the Draft MOA.

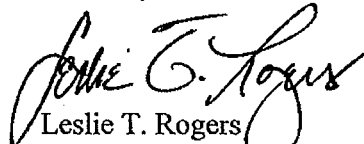
Notification of Section 4(f) De Minimis Determination

In addition to Section 106 of the NHPA, FTA must comply with Section 4(f), which is codified at both 49 United States Code (USC) § 303 and 23 USC § 138. The identified archaeological resources within the APE were determined eligible for inclusion on the NRHP and is important chiefly because of what can be learned by data recovery and has minimal value for preservation in place. Therefore, these resources were not considered Section 4(f) resources per 23 Code of Federal Regulations (CFR) § 774.13(b).

Consistent with 23 CFR § 774.3(b), 23 CFR § 774.5(b) and 23 CFR § 774.17, FTA intends to make a *de minimis* impact determination for the 15 historic properties that require minor ROW acquisitions and are found to have no adverse effect under Section 106. Under those regulations, FTA can make a *de minimis* impact determination based on your written concurrence that the undertaking would have no adverse effect on these historic properties under Section 106.

We would appreciate receiving your comments within 30 days of the date of this letter. Please contact Dominique M. Paukowits, FTA Region 9 Community Planner, at (415) 734-9469, if you have any questions.

Sincerely,

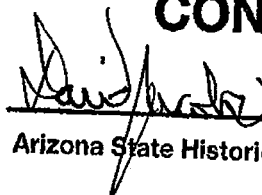

Leslie T. Rogers
Regional Administrator

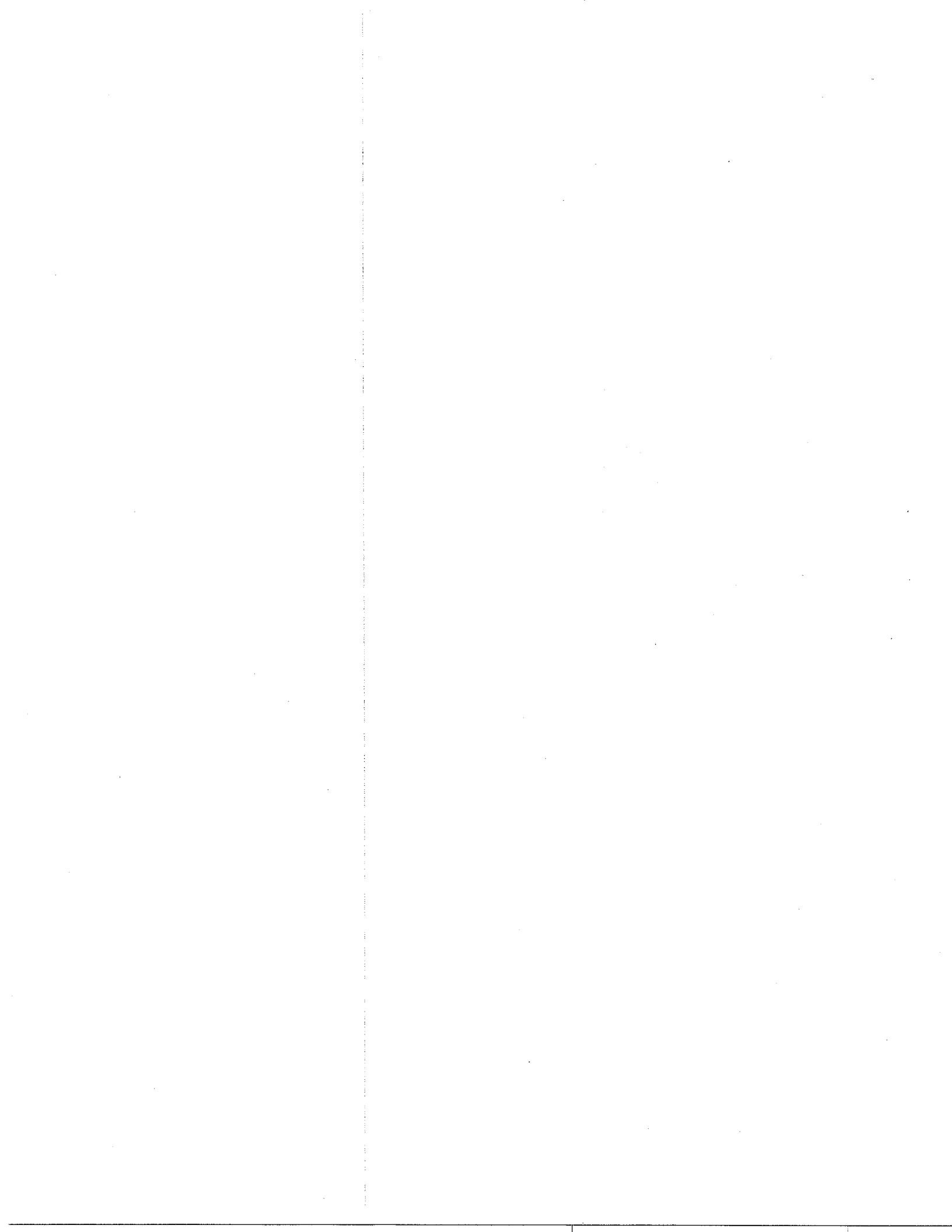
Enclosures:

- Table 1: Summary Of Impacts On National Register-Listed And Eligible Properties
- Draft Memorandum of Agreement
- Cultural Resources Inventory and Evaluation Report

cc: Robert Forrest, Environmental Program Manager, Valley Metro

CONCUR

 12 JULY 16
Arizona State Historic Preservation Office





United States Department of the Interior

Fish and Wildlife Service

Arizona Ecological Services Office

2321 West Royal Palm Road, Suite 103

Phoenix, Arizona 85021-4951

Telephone: (602) 242-0210 Fax: (602) 242-2513

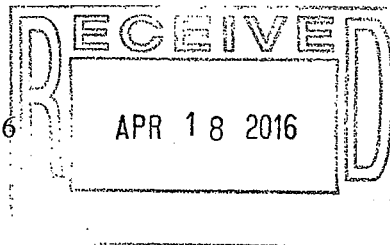


In reply refer to:

AESO/SE

02EAAZ00-2015-I-0673

April 14, 2016



Leslie T. Rogers, Regional Administrator
Federal Transit Administration
Region IX
90 Seventh Street, Suite 15-300
San Francisco, California 94103-6701

Dear Mr. Rogers:

Thank you for your March 3, 2016, request for informal consultation with the U.S. Fish and Wildlife Service (FWS) pursuant to section 7 of the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.) as amended. We received your request and the Environmental and Biological Assessment on March 7, 2016. This letter documents our review of the proposed South Central Light Rail Extension Project located in central Phoenix, Maricopa County, Arizona. Your letter concluded that the proposed project may affect, but is not likely to adversely affect the endangered southwestern willow flycatcher (*Empidonax traillii extimus*) and the endangered Yuma clapper rail (*Rallus longirostris yumanensis*). We concur with your determinations and provide our rationales below. You also concluded the proposed action would have no effect on the threatened yellow-billed cuckoo (*Coccyzus americanus occidentalis*). Species with "no effect" determinations do not require review from the FWS, and are not addressed further.

Description of the Proposed Action

A complete description of the proposed action is found in your January 2016, Environmental Assessment and Biological Assessment. Valley Metro, in cooperation with the City of Phoenix, and the Federal Transit Administration proposes a 5-mile long extension of the existing light rail line along Central Avenue and 1st Avenue to its terminus at Baseline Road. Specifically, the extension tracks would connect to the existing light rail system at Central Avenue and Washington Street in the northbound direction and at 1st Avenue and Jefferson Street in the southbound direction. The track would continue south along Central and 1st Avenues to Hadley Street, where the southbound track would follow the 1st Avenue one-way couplet curve to the east to rejoin Central Avenue. From Hadley Street to the extension's southern terminus at Baseline Road, the tracks would operate bi-directionally along Central Avenue.

Leslie T. Rogers

The proposed extension will require upgrades to the Central Avenue Bridge over the Salt River. The Central Avenue Bridge would remain in place with the following activities proposed to accommodate the light rail load:

- Remove and replace the center portion of the Central Avenue bridge deck and concrete girders. The retrofitted bridge will include the light rail guideway and one vehicular travel lane, one bicycle lane, and a sidewalk in each direction.
- Excavate an area around each of the nine bridge piers to access the bridge's foundation, then each footing would be thickened vertically with additional concrete. For the two piers situated in open water, the work would occur well below the streambed and the area above it restored to pre-construction conditions. No permanent acreage loss of jurisdictional waters or wetlands would occur.
- Construct a temporary access road for construction vehicles that will be adjacent (west side of the bridge) to the entire bridge and within the Salt River channel and Rio Salado Habitat Restoration. Construction of the temporary road will require fill-in, and the subsequent restoration, of wetlands and water created by the Rio Salado Habitat Restoration Project.
- Temporarily remove the open water located at the two center piers by installing cofferdams or sandbags or by pumping water to limit surface water within the work areas around two bridge piers.

Construction in this area will result in 1.6 acres of temporary ground disturbance to riparian and wetland areas within the Salt River channel adjacent to and underneath the bridge. Construction is expected to occur over a period of six months, after which the temporary fill pads would be removed and riparian vegetation would be reestablished in disturbed areas within the Salt River. Temporary disturbance would also affect 0.6 acre of open water, which would be reclaimed and restored to preconstruction conditions following completion of bridge construction. The proposed project is anticipated to begin in May 2019 with the South Central Light Rail Extension Project scheduled to begin operations in 2023.

The Federal Transit Administration and Valley Metro propose the following mitigation measures to minimize project impacts on biological resources, including the southwestern willow flycatcher and Yuma clapper rail:

- The project would minimize disturbance to riparian vegetation by only removing vegetation that would interfere with the proposed construction activities.
- The limits of the work area in wetlands and other waters of the U.S. (WOTUS) shall be clearly identified in the field prior to ground-disturbing activities.
- The project contractor shall avoid all flagged and/or otherwise designated sensitive resource areas within or adjacent to the project area.

Leslie T. Rogers

- The project contractor shall not conduct any clearing, grubbing or tree/limb removal from March 1 to August 31 unless a qualified biologist has conducted a bird nest search of the affected vegetation and has determined that no active bird nests are present. Vegetation removal may occur if the area has been surveyed within five days prior to removal as long as only inactive bird nests, if any, are present. During the nonbreeding season (September 1 to February 28), vegetation removal is not subject to this restriction.
- Temporary storage, staging, materials lay down and other work areas would be sited in uplands or previously disturbed areas to the extent possible.
- Bridge abutments would be restored to match preconstruction conditions.
- Equipment shall remain inside the identified project limits, and shall not be stored, maintained or repaired in areas mapped as wetlands or other WOTUS.
- A vegetation planting and habitat improvement plan would be developed using plant species used for the Rio Salado Habitat Restoration Area to replace vegetation removed within the Salt River channel.
- Water flow and circulation patterns of the Salt River would be restored following construction.
- The contractor would develop and implement a Spill Prevention and Containment Measures Plan for working within and adjacent to the Salt River channel.
- The contractor would also develop and implement a Stormwater Control Plan for all areas not covered in the Spill Prevention and Containment Measures Plan.

DETERMINATION OF EFFECTS

Southwestern Willow Flycatcher

We concur with your determination that the proposed action may affect, but is not likely to adversely affect the southwestern willow flycatcher for the following reasons:

- No flycatcher nesting habitat occurs along the Salt River within the project area at the Central Avenue Bridge and as a result, we do not anticipate adverse effects to flycatchers from the proposed habitat removal. The footprint of the project and adjacent areas consist of various riparian and non-riparian plants that do not have the width, density, or abundance of vegetation preferred by nesting flycatchers. On both banks of the Salt River at the Central Avenue Bridge, the habitat consists of one to two Goodding's willow trees in depth, with a sparse to unvegetated understory. The short active floodplain, steep banks of five to six feet in height, and upland terraces prevents the development of broad widths of vegetation that nesting flycatchers prefer. Upstream and downstream of the bridge, the habitat is sparse with large open areas of large cobble, gravel, and sand and more arid desert scrub plants that are in contrast to the densely vegetated, wet, and moist soil areas preferred by nesting

Leslie T. Rogers

flycatchers. As a result of the lack of flycatcher habitat at the project area, we anticipate that the removal of 0.07 acre of riparian and shrub vegetation will have an insignificant effect to flycatchers.

- Although no protocol-level surveys have occurred in the project area, the Audubon Society has conducted informal surveys for birds in the Rio Salado Habitat Restoration Area and the area is frequented by experienced birders on a regular basis. There have not been any confirmed sightings of flycatchers in the Rio Salado Habitat Restoration Area. Because of the lack of nesting habitat within the Salt River channel near the Central Avenue Bridge and the subsequent lack of informal detections, we do not anticipate nesting flycatchers would be present during implementation of the proposed action. Therefore, we do not anticipate any direct effects to nesting flycatchers from the proposed action.
- The project area could provide habitat for migrating southwestern willow flycatchers, because of the long distances flycatchers travel and their use of riparian habitat of broad quality. Because of the small amount of habitat being removed, the similar types of vegetation available to migrants immediately upstream and downstream of the Central Avenue Bridge, and the low likelihood that migrants would use the area during construction (based upon negative detections), we expect that any disturbance or direct effects to migrant flycatchers from removal of 0.07 acre of vegetation will be insignificant.
- Mitigation measures such as reclaiming and restoring disturbed areas to preconstruction conditions, implementation of a vegetation planting and habitat improvement plan, and measures to control spills will minimize effects to riparian habitat that may be used by migrant flycatchers.

Yuma Clapper Rail

We concur with your determination that the proposed action may affect, but is not likely to adversely affect the Yuma clapper rail for the following reasons:

- Marsh bird surveys from 2005 to 2014 along the Salt River from the Central Avenue Bridge to 15th Avenue have been conducted each year and no Yuma clapper rails have been detected in this area. Therefore we anticipate the proposed action would not affect nesting clapper rails.
- Although suitable habitat for the Yuma clapper rail exists immediately adjacent to the Central Avenue Bridge, the quality of the habitat has been degraded from recreational trails, human disturbances (e.g., trash and campfire rings), and traffic noise making the habitat likely unsuitable for the clapper rail. We anticipate potential effects to clapper rails will be discountable because individuals are unlikely to be present in the project area during construction.
- Retrofitting the existing Central Avenue Bridge would temporarily alter a 0.6 acre area of open water habitat and an adjoining 0.09-acre area of emergent wetland. Mitigation measures such as reclaiming and restoring disturbed areas to preconstruction conditions,

Leslie T. Rogers

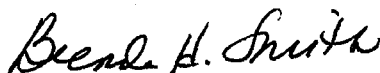
implementation of a vegetation planting and habitat improvement, and measures to control spills would help improve the Yuma clapper rail habitat in this area.


Certain project activities may also affect species protected under the Migratory Bird Treaty Act (MBTA) of 1918, as amended (16 U.S.C. sec. 703-712) and/or bald and golden eagles protected under the Bald and Golden Eagle Protection Act (Eagle Act). The MBTA prohibits the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests, except when authorized by the FWS. The Eagle Act prohibits anyone, without a FWS permit, from taking (including disturbing) eagles, and including their parts, nests, or eggs. If you think migratory birds and/or eagles will be affected by this project, we recommend seeking our Technical Assistance to identify available conservation measures that you may be able to incorporate into your project.

For more information regarding the MBTA and Eagle Act, please visit the following websites. More information on the MBTA and available permits can be retrieved from <http://www.fws.gov/migratorybirds> and <http://www.fws.gov/migratorybirds/mbpermits.html>. For information on protections for bald eagles, please refer to the FWS's National Bald Eagle Management Guidelines (72 FR 31156) and regulatory definition of the term "disturb" (72 FR 31132) published in the Federal Register on June 5, 2007 (<http://www.fws.gov/southwest/es/arizona/BaldEagle.htm>), as well at the Conservation Assessment and Strategy for the Bald Eagle in Arizona (SWBEMC.org).

Thank you for your efforts to conserve threatened and endangered species. If project plans change or information on the abundance or distribution of species changes, this determination may need to be reconsidered. In future correspondence on this project, please refer to consultation number 22410-2015-I-0673. We encourage you to coordinate review of the proposed action with the Arizona Game and Fish Department. Should you require further assistance or if you have any questions, please contact Kathy Robertson (x232) or Mike Martinez (x224).

Sincerely,



 Steven L. Spangle
Field Supervisor

cc: (electronic)

Environmental Program Manager, Valley Metro, Phoenix, AZ (Attn: Robert Forrest)
Chief, Habitat Branch, Arizona Game and Fish Department, Phoenix, AZ

