

HDR Internal
Memorandum

To File

Date May 9, 1989

From Steve Miller Subject Meeting with Gila River
Indian Community

Location: HDR

Attendance: Tim Morrison - GRIC
Richard Narcia - GRIC
Jerry Zovne - HDR
Steve Miller - HDRTOPICS OF DISCUSSION

1. Southwest Loop Hydrology Sta 923 to 997

Flows were taken from Collar, Williams & White drainage report for Foothills Development. A copy of report and drainage map is available through City of Phoenix and CWW. Correlation between Master Drainage Plan Map (received by HDR, March 6, 1989) and S.W. Loop Design Concept Report discharges & locations was shown. A copy of the S.W. Loop Drainage Design Concept Report was given to GRIC. Jerry Zovne indicated that the GRIC had some input into the system in that the "level spreader" concept was design per GRIC concerns that discharging concentrated flows on reservation would not be acceptable. The GRIC desired sheet flows.

2. Southwest Loop Alignment and Schedule

Concern was expressed as to whether there might be a future alignment change, perhaps to Queen Creek, as the tribe had originally proposed. HDR has not been asked to analyze any other alignment or make any significant alignment adjustments. Construction scheduling for S.W. Loop was a GRIC concern. HDR suggested that GRIC return and talk with Woody Heaston, Project Manager, concerning proposed scheduling.

3. Interchange at South Mountain Park

The Tribe is planning an economic development area along Queen Creek and may be interested in an interchange with the Southwest Loop at South Mountain Park to accommodate access to the Queen Creek Road area. HDR referred to a pictorial of the S.W. Loop with interchanges (presently proposed) highlighted - no interchange is indicated at the South Mountain Park location, six (6) other interchanges are indicated.

4. GRIC asked if HDR had proposed on the Maricopa Road improvement. HDR indicated that we thought that we were in the process of doing so.

5. Gila Drain

GRIC indicated that the Tribe thought the Gila Drain was a stormwater conveyance option for the freeway system. HDR indicated that ADOT had requested a short study on that option. However the General Plan, which we are currently working under, is to pump water from I-10 to Price Road into the Carriage Lane detention basin and storm sewer outfall north to the Price Road Tunnel to the Salt River.

GRIC asked if there were cost savings with the Gila Drain Option. HDR indicated that ADOT would be better able to discuss that with them. HDR discussed the alternatives considered (in general terms) and depending upon the particular alternative and the specific items considered, there may be a net cost savings. Also, HDR is presently redefining the off-site hydrology to quantify stormwater runoff to be handled by the drainage system - this could influence the results of the Gila Drain study. GRIC concluded that if GRIC were to allow ADOT to use the Gila Drain, the decision would have to be made quickly. We confirmed that ADOT has placed a high priority on completing the Price Expressway. The Price Tunnel construction is nearly complete, and final design of Carriage Lane outfall is under way. GRIC also said that the Tribe might be willing to swap use of the Gila Drain for a Queen Creek intersection on S.W. Loop.



6. GRIC mentioned that the Corps of Engineers was beginning another study of drainage for the Reservation, but did not know the details. HDR discussed some of our observations about hydrology in the area and changes that had occurred since the Corps' 1977 study. Future development of the Price/Santan will essentially eliminate runoff contributions to the Reservation from the Tempe/Chandler/Gilbert areas (up to 100-year frequency). Present construction of Price Tunnel/Carriage Lane Outfall will also eliminate considerable stormwater from the Mesa area. The 1977 Corps plan was to route the stormwater from all of these areas out through Western Canal and the Gila Drain R.O.W.

\jm\aab

cc: George Wallace, ADOT
Steve Martin, ADOT
Ray Jordan, ADOT

August 2, 2001



Mr. Fred Ringlero
Land Use Planning and Zoning Director
Gila River Indian Community
P.O. Box E
Sacaton, Arizona 85247

RE: South Mountain Freeway DCR/EIS Study
ROE Permit Request

Dear Mr. Ringlero:

The referenced study, being conducted by HDR Engineering, Inc. on behalf of Arizona Department of Transportation (ADOT) and in cooperation with Gila River Indian Community (GRIC), was initiated July 9, 2001. This study will evaluate potential transportation improvements, including a potential new freeway, around South Mountain between the southeast valley and the northwest valley. The study will require entry onto GRIC lands over the study duration of three years for a variety non-destructive project tasks. We are requesting a blanket Right of Entry permit for the project team to enter GRIC lands for the project duration for the following general types of work:

1. To perform land surveying and temporary aerial target construction.
2. To conduct field investigations for a variety of non-disturbing environmental surveys including drainage, biological, cultural, land use, socio-economic, transportation, geological, visual, noise, air quality, utilities, and other environmental considerations.

Attached is a map showing the general GRIC limits expected to be included in the study. Also attached is a list of personnel, and a list vehicle makes, models, and license plate that may enter GRIC lands during the project. Please advise if there is anything else you need for approval of this Right of Entry request. Thank you for your help.

Sincerely,

HDR ENGINEERING, INC.

A handwritten signature in black ink, appearing to read 'Stephen A. Martin'.

Stephen A. Martin, P.E.
Project Manager

CC: Mary Viparina, ADOT
Sandra Shade, GRIC
File ✓

HDR Engineering, Inc.

Employee Owned

2141 East Highland Avenue
Suite 250
Phoenix, Arizona
85016-4736

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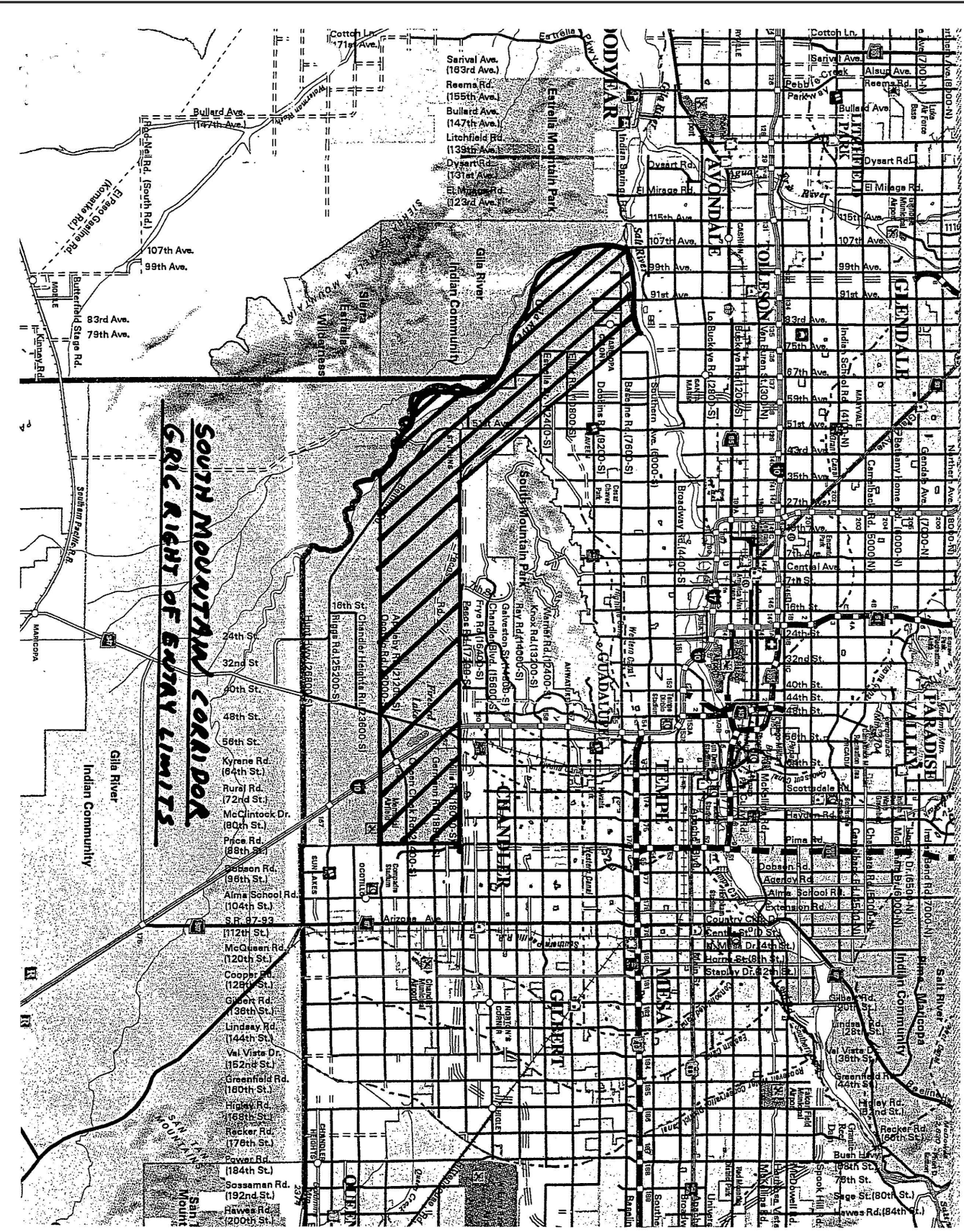
GILA RIVER INDIAN COMMUNITY RIGHT OF ENTRY LIST
SOUTH MOUNTAIN FREEWAY DCR/EIS

Personnel


Jack Allen
Jeff Anderson
Paul Basha
David Bender
Vaughn Bennett
Buzz Bond
Randy Bong
Mark Brodbeck
Sirena Brownlee
David Buras
Kelly Cairo
Geri Chavez
Julie Christoph
Bob Collier
Tom Cooney
Marty Craig
Mike Dennis
Chris Dicks
Debra Duerr
Amy Edwards
Celeste W. Daisy Eldridge
Jami Erickson
Bob Esposito
Shannon Evans
Kelly Fletcher
Robert Forest

Daniel Frechette
John Godec
Fiona Goodson
Ed Green
Theresa Gunn
Jackie Guthrie
Lawrence A. Hansen
Andrea Helmstetter
Pat Higgins
Ron Holmes
Cris Howard
Scott W. Johnson
Robert M. Jones
Michele Kogl
Larry Lacy
Owen Lindauer
Jeremy A. Lite
Eric Lovstad
Richard Mackey
Stephen Martin
Linda Meronek
Robert A. Mongrain
Anne Morris
Tracy Osborn
Dana Owsiany
Monica Perez

David E. Peterson
Danny Piemontesi
Bill Rawson
Steven A. Raye
Stephen R. Rouse
Dave Schettler
Gary N. Shepard
Wesley A. Shonerd
Tom Shreeve
Erick Skulstad
Jesse Sonnerville
Chuck Stroup
Michael A. Sussman
Ryan Tanner
Joe Todaro
Jewel Touchin
Darrell Truitt
Mary Vigarina
Mike Walz
Dustin Watson
Kurt Watzek
Karen Wigglesworth
Elijah Williams
Greg Wold



Vehicle Information			
Make and Model	AZ License Plate No.	Make and Model	AZ License Plate No.
1993 Honda Accord	549-GRA	2001 Chevrolet Silverado (SB,T)	074-FEF
2001 Jeep Grand Cherokee	881-GBD	2001 Chevrolet Silverado (SB,T)	073-FEF
2001 Jeep Sport Cherokee	883-GBD	2001 Chevrolet Silverado (SB,T)	118-FGC
Chevrolet S-10 Pickup, white	LCK-998	2001 Chevrolet Silverado (XC,4WD,V8,S)	CB-13734
Dodge Avenger, grey	MSS-043	2001 Chevrolet Silverado (SC,2WD,V8,C)	CB-13736
Chevrolet Tahoe, grey	892-GGM	2001 Nissan Sentra GXE	CB-61335
Honda Civic, black	014-CSB	2001 GMC Sierra (XC,2WD,V8,S)	CB-74325
VW Passat, beige	009-GNZ	1996 Chevrolet Suburban	332-FEE
Dodge Sport, green	361-CYM	Ford F-250 4WD	936-FKK
Chevrolet Celebrity Stationwagon	G88-4BZ	2000 Mercury Mountaineer	161-EHL
Ford Taurus	G29-5BA	1998 Toyota Pickup	CYCLONE
Mercury Cougar	LWE-411	1985 Chevrolet Silverado	1573-MN
1995 K-1500 4WD (S,SB)	5BA-590	1990 Oldsmobile Cutlass	954-BZL
1996 K-1500 (LB,S)	5BA-591	1994 Chevrolet Pickup	4WX-757
1996 Mazda Miata	NEW-104	GMC Sierra Pickup	AF7-41D
1996 Chevrolet S-10 P/U	5BZ-877	2001 Acura MDX	667-GGE
1997 Ford F-150 (LB,S)	5EF-353	2000 Honda Passport	975-FHD
1997 Ford F-150 (LB,T)	5EK-506	2000 Honda Accord	EX5-184
1997 Ford F-150 (LB,T)	5EF-302	2001 Nissan Frontier	605-GMF
1997 Ford F-150 (LB,T)	5EK-513	1987 Toyota 4-Runner	EHV-596
1997 Ford F-150 (LB,T)	5EF-303	1990 Isuzu Trooper	IUG-RAD
1997 Toyota Camry	5EF-572	1994 Isuzu Trooper	KZX-830
1997 Ford F-150 (LB,T)	5EF-480	Honda CRV	430-FZD
1997 Ford F-150 (XC,SB,T)	5EF-481	Ford Ranger Pickup	LWR-890
1997 Toyota Tacoma	CB-06402	Honda Accord	308-AWL
1998 K-1500 (XC,SB,C)	CA-03283	Honda Accord	DJV-393
1998 Ford F-150 (4WD,XC)	CA-07609	Nissan Pickup	110-BHH
1998 Ford F-150 (XC,SB,C)	CA-37990	Toyota Tacoma Pickup	509-DGB
1999 Ford F-150 (XC,C)	CA-46541	Nissan Pickup	766-KTR
1999 Ford F-150 (XC)	CA-42187	Chevrolet Astro Van (HDR)	J32-304
1999 Ford F-150 (SB,T)	CA-42186	Toyota Pickup	GVJ-669
1999 Ford F-150 (SB,T)	CA-42184	1996 Dodge Grand Caravan	NFL-406
1999 K-1500 (SB,T)	832-CXB	1997 Chrysler Sebring	868-BHH
1999 K-1500 (SB,T)	834-CXB	1988 Isuzu Trooper	ESV-904
1999 K-1500 (SB,T)	CA-72575	1995 Mazda Miata	MAE-123
1999 K-1500 (SB)	CA-72574	2000 Land Rover Discovery	452-FWT
1999 Ford F-150 (LB)	595-JZL (NV)	1995 Dodge Ram Pickup	MJZ-791
1999 Ford F-150 (LB,T)	756-JZJ (NV)	1999 Dodge Durango	060-DVP
2000 Ford F-150 (XC,SB,V8,S)	CB-02797	1998 Ford F-150	CA-13555
2000 Ford F-150 (XC,SB,V8,S)	CB-02798	1999 Ford F-250	CA-77781
2000 Ford F-150 (XLT, XC,SB)	CB-06555	1999 Ford F-250	CA-77780
2000 Chevrolet Silverado (SB,P)	CB-07832	1991 Ford F-350	4GV-807
2000 Chevrolet Silverado (SB,T)	CA-93575	2000 Chevrolet Blazer	CB-44975
2001 Chevrolet Silverado (SB,T)	CA-18355		
2001 Chevrolet Silverado (SB,P)	CB-05985		
2001 Chevrolet Silverado (SB,P)	CB-05986		



GILA RIVER INDIAN COMMUNITY

SACATON, AZ 85247

DEPARTMENT OF LAND & WATER RESOURCES

Land Use Planning & Zoning
Survey & Engineering
Facilities Maintenance
Pima-Maricopa Irrigation Project
Irrigation Rehabilitation

POST OFFICE BOX E

(520) 562-3301
(480) 899-0092
(520) 836-7291
FAX (520) 562-4008

Mr. Earl Lara, Chairman
Natural Resources Standing Committee
Gila River Indian Community
P.O. Box 97
Sacaton, Arizona 85247

Re: South Mountain Freeway DCR/EIS Study
ROE Permit Request

Dear Mr. Lara and Committee Members:

Our office has received a request for a Right of Entry (ROE) Permit for the South Mountain Freeway DCR/EIS Study submitted by Mr. Stephen Martin, Project Manager from HDR Engineering, Inc. a consultant for Arizona Department of Transportation (ADOT). We have attached a copy of request by HDR for your review and approval.


HDR/ADOT is seeking approval for a blanket ROE permit to cover the areas in District Four, District Six and District Seven. See the attached map for the areas that will be covered by ROE.

I have reviewed request and would like to recommend a smaller area of study, due to the fact that the tribe and districts have discussed this matter at length when the tribe and landowners were discussing the alignment of the proposed South Mountain Toll Road Development. Our office is recommending the alignment that was approved by the Tribal Councils action when approving the Gila Borderlands Study.

With your approval, HDR will immediately set up the process to set aerial targets in the approved areas in order to have aerial mapping to do the necessary designing and studies for the South Mountain Freeway.

Again, our office is recommending a smaller area of study. Our office and HDR will be present to make request and to answer any questions you and the committee members may have.

Respectfully,



Fred Ringlero, Director
Land Use Planning & Zoning

Cc: Richard Narcia, Lt. Governor
Lee Thompson, Director DLWR
Sandra Shade, Director GRDOT
Pat Mariella, Director GRDEQ
Mike Johnson, BIA Pima Agency Realty Specialist
Stephen A. Martin, HDR Project Manager

August 29, 2001

Mr. Fred Ringlero
Land Use Planning and Zoning Director
Gila River Indian Community
P.O. Box E
Sacaton, Arizona 85247

RE: South Mountain Freeway DCR/EIS Study
ROE Permit Request

Dear Mr. Ringlero:

Pursuant to the Natural Resources Committee Meeting this morning, I have attached a revised map of the proposed Right of Entry Permit boundary limits. This map is consistent with your recommendation for a more limited study area that will encompass the general alignment studies already approved for consideration through prior Council Resolution. The eastern area is a three-mile wide corridor south of Pecos Road from the eastern reservation boundary to the Gila River. The western area is bounded by the Gila River, the Salt River, and the eastern reservation boundary.

As we discussed, we have no problem with limiting the study area, however, we will need to eventually get an official Council Resolution or other official action requesting the study to be limited to a specific area. We do not need the official action to move forward with the Right of Entry and the study tasks, but we will need it before the study is concluded.

If you have any questions or need additional information, please contact me at 602-508-6642. Thank you for your assistance. We look forward to working with you and the Community on this important study

Sincerely,

HDR ENGINEERING, INC.



Stephen A. Martin, P.E.
Project Manager

CC: Mary Viharina, ADOT
Sandra Shade, GRIC
Bill Vachon, FHWA
File

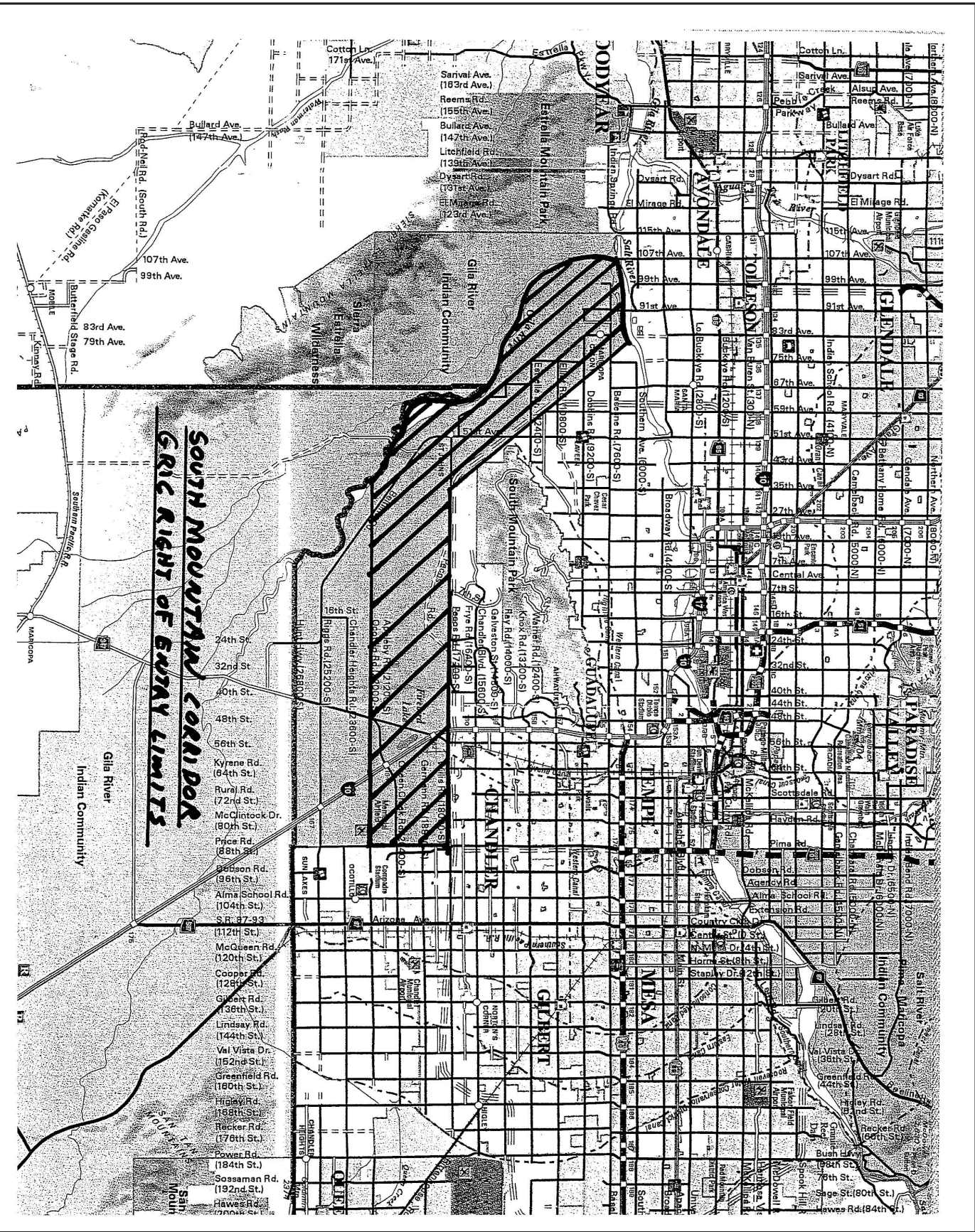
cc. Ralph Ellis, ADOT

HDR Engineering, Inc.

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August 30, 2001



Ms. Sandra Shade
Department of Transportation Director
GRIC
315 W. Casa Blanca Road
Post Office Box 97
Sacaton, AZ 85247

RE: South Mountain Corridor DCR/EIS Study

Dear Sandra:

The following information has been provided in response to questions raised during the August 29, 2001 Natural Resources Standing Committee.

NEPA-404 Integration Process and Section 404(b)(1)

The general intent of the NEPA-404 Integration Process as established among the FHWA, COE, EPA, and USFWS, was to ensure that provisions set forth in the Section 404(b)(1) of the Clean Water Act are considered in the development of the project purpose and need and the alternatives selection process for a FHWA-sponsored project. These provisions are the criteria used by the COE and EPA to evaluate alternatives that involve the discharge of dredged or fill material into waters of the U.S. Section 404(b)(1) is the U.S. Army corps of Engineers policy for environmental assessment of project alternatives and their impacts to waters of the U.S. when permits are required. The purpose of the Section 404(b)(1) policy is to restore and maintain the chemical, physical and biological integrity of the waters of the U.S.

These guidelines require the COE permit only the least environmentally damaging, practicable alternative. An alternative is practicable if it is available or capable of being done, taking into account cost, logistics and existing technology in light of the overall project purposes. Generally, this process is intended to integrate the FHWA NEPA process with the 404(b)(1) requirements to help ensure that at the end of the NEPA process the agencies concur with the recommended alternative.

Section 4(f)

It is national policy that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites. In the USDOT Act of 1966, a special provision was included to provide protection to these resources. It is known as Section 4(f) and it stipulates that the FHWA will not approve any program or project which requires the use of any publicly owned public park, recreation area, or wildlife or waterfowl refuge, or any land from an historic site of national, state or local significance unless:

- there is no feasible and prudent alternative to the use, and
- all possible planning to minimize harm resulting from such use is included.

HDR Engineering, Inc.

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Sandra Shade
GRIC
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Specifically, Section 4(f) of the U.S. Department of Transportation Act of 1966 states that the FHWA “may approve a transportation program or project requiring publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, state, or local significance, or land of a historic site of national, state, or local significance (as determined by the Federal, State, or local officials having jurisdiction over the park, area, refuge, or site) only if there is no prudent or feasible alternative to using that land and the program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use” (49 U.S.C. 303).

A ‘use’ of a Section 4(f) resource, as defined in 23 CFR 771.135 (p), occurs: (1) when land is permanently incorporated into a transportation facility, (2) when there is a temporary occupancy of land that is adverse in terms of the statute’s preservationist purposes, or (3) when there is a constructive use of land. A constructive use of a Section 4(f) resource occurs when the transportation project does not incorporate land from the Section 4(f) resource, but the project’s proximity impacts are so severe that the protected activities, features, or attributes that qualify a resource for protection under Section 4(f) are substantially impaired. For example, a constructive use can occur when:

- The projected increase in noise level attributable to the project substantially interferes with the use and enjoyment of a noise-sensitive facility of a resource protected by Section 4(f);
- The proximity of the proposed project substantially impairs aesthetic features or attributes or a resource protected by Section 4(f), where such features or attributes are considered important contributing elements to the value of the resource. An example of such an effect would be locating a proposed transportation facility in such proximity that it obstructs or eliminates the primary views of an architecturally significant historical building, or substantially detracts from the setting of a park or historic site which derives its value in substantial part due to its setting; and/or
- The project results in a restriction on access that substantially diminishes the utility of a significant publicly-owned park, recreation area, or historic site.

When FHWA is assessing the environmental effects of an action through the NEPA process, they include an evaluation of the use of land protected under Section 4(f). The environmental regulations for applying Section 4(f) to transportation project development can be found at 23 CFR 771.135. For other detailed guidance on applying the requirements of Section 4(f), the FHWA wrote the Section 4(f) Policy Paper, which discusses such topics as the history of Section 4(f), alternative analysis, mitigation and how Section 4(f) relates to other statutes and regulations which protect the same types of resources.



Sandra Shade
GRIC
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August 30, 2001

Section 4(f) Regulations and Guidance:

- Legislation: 23 U.S.C. Section 138 - Preservation of Parklands
- Regulation: 23 CFR 771.135
- 4(f) Policy Paper
- FHWA's *Environmental Guidebook*

Cumulative Impacts

NEPA requires that the potential direct, secondary, and cumulative impacts of a federally funded project be identified, evaluated and mitigated as appropriate. Within the context of NEPA, secondary effects are defined by the CEQ as impacts that are "caused by an action and are later in time or farther removed in distance but are still reasonably foreseeable" (40 CFR 1508.8). Cumulative effects are defined as "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions...." (40 CFR 1508.7). If a project does not *directly* impact a particular environmental resource, the project would not contribute to a *cumulative* impact on that resource.

Secondary and Cumulative Impacts Assessments are conducted in accordance with FHWA and CEQ regulations and guidance documents, including the January 1997 CEQ handbook titled *Considering Cumulative Effects Under the National Environmental Policy Act* and the April 1992 FHWA position paper titled *Secondary and Cumulative Impact Assessment in the Highway Project Development Process*.

"Cumulative impacts" is the impact on the environment which results from the incremental impact of the action when added to other past, present and reasonably foreseeable future actions regardless of what agency ... or person undertakes such other actions. 40 CFR 1508.7 (This is the effect on the resource from all the actions occurring in the area over time.)

Secondary (Indirect) Impacts

"Secondary (Indirect) impacts" are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth inducing effects and ... related effects on air and water and other natural systems, including ecosystems. 40 CFR 1508.8(b) (This is the indirect effect caused by our project alone. The focus is "but for our project" the effect would not occur.)

An accumulation of indirect effects can cause a cumulative impact. A cumulative impact is not a secondary impact. Many times secondary impacts are discussed with cumulative impacts because they both address the same reasonably and foreseeable future. However, each is distinctly different.

Sandra Shade
GRIC
Page 4
August 30, 2001

Drainage Impacts

Drainage is one of many engineering and environmental factors that will be considered in developing and selecting alternatives during the EIS process. All alternatives will consider hydrologic (runoff) and hydraulic (conveyance) impacts as well as water quality and biological impacts (Section 401, 404, 404(b)(1) requirements) to drainage and waterways. Specific impacts and potential mitigation measures will be determined during the study as part of the alternatives analysis process.

If you need additional information or have further questions, please do not hesitate to contact me.

Sincerely,

HDR ENGINEERING, INC.



Stephen A. Martin, P.E.
Project Manager

cc: Ralph Ellis, ADOT
Bill Vachon, FHWA
Mary Viparina, ADOT
File

December 27, 2001

Mr. Gary Cooper
President of the Board of Directors
Gila River Casinos
P.O. Box 6790
Chandler, AZ 85246

Via 520.796.7714 (fax)

Dear Mr. Cooper,

As we discussed in our telephone conversation yesterday, I was referred to you by Michael Harrison and referred to Mr. Harrison by Gary Bohnnee.

I am submitting this letter as a formal request for monthly use of a meeting facility at Vee Quiva casino for citizen advisory group meetings that will be held in conjunction with a three-year South Mountain Corridor Environmental Impact Statement (EIS) study. The citizen advisory group, made up of stakeholders from the area, will include several members of the Gila River Indian Community.

The Arizona Department of Transportation and Federal Highway Administration have given us the task of conducting an EIS in an area of the south and southwest Valley to explore the purpose and need and alternatives for possible transportation improvements in the area. The Gila River Indian Community (GRIC) is an active participant in this project. Our team meets monthly with a GRIC Task Force assigned to monitor this project led by Sandra Shade, Director of the GRIC Department of Transportation.

We will need a meeting room capable of holding approximately 40 people around tables set up in a horseshoe configuration. The first meeting of this group is planned for Saturday, January 26. We expect this first meeting to begin at approximately 8am and last most of the day. Subsequent monthly meetings will likely be scheduled on weekday evenings from approximately 6pm to 9pm on days when your facility could be made available to us.

If you have any specific questions about this study or our request I would be happy to answer them. As I mentioned in our telephone conversation we would also be happy to present the specifics of this project to the Board of Directors of Gila River Casinos at your convenience. The South Mountain Corridor Study website is at <http://www.dot.state.az.us/ROADS/SouthMtn/index.htm>.

Gary Cooper Letter
Page 2

Thank you for your time on the phone and your consideration of this request.

Sincerely,
South Mountain Project Team

John D. Godec
602.266.5556

cc:

Sandra Shade
Gary Bohnnee
Mary Viparina
Ralph Ellis
Steve Martin
Jack Allen
Theresa Gunn

January 10, 2002

Bob Broscheid
Project Evaluation Program Supervisor
Arizona Game and Fish Department
Habitat Branch
2221 W. Greenway Road WM-HB
Phoenix, AZ 85023



Re: South Mountain Corridor Study

Dear Mr. Broscheid:

HDR Engineering Inc., on behalf of the Arizona Department of Transportation (ADOT) and the Federal Highway Administration (FHWA), is preparing a South Mountain Corridor Study and an Environmental Impact Statement (EIS) for the proposed South Mountain Freeway. This investigation will take approximately three years to complete, and will include an examination of the transportation needs in the corridor and an evaluation of all reasonable ways to meet them. A conceptual design and state-level Environmental Assessment was prepared in 1988. As presented in this study, the freeway would connect Interstate 10 (I-10) south of Phoenix with I-10 west of the city, following an east-west alignment along Pecos Road, through the western tip of South Mountain Park, then north to I-10 between 55th and 63rd Avenues.

The legal location of the study area, not including locations that occur on the Gila River Indian Community, is: Township 2 North, Range 1 East, Sections 33-36; Township 2 North, Range 2 East, Sections 31-34; Township 1 North, Range 1 East, Sections 1-36; Township 1 North, Range 2 East, Sections 3-10, 15-22, and 27-34; Township 1 South, Range 1 East, Sections 1 and 12; Township 1 South, Range 2 East, Sections 17, 18, 20, 27, 28, 34, and 35; Township 1 South, Range 3 East, Sections 31-36; Township 1 South, Range 4 East, Sections 31-33.

An EIS will be prepared if it is determined that there is a need for a major transportation improvement required in the South Mountain area. It will be prepared to address increased development within the project area, changes in design standards and environmental regulations, and to qualify for federal funds. This new study will start from the beginning and will consider all reasonable alternatives. The corridor being considered can be generally described as: I-10 on the west between 43rd and 107th Avenues, between the Gila River and South Mountain, and I-10 on the east between Pecos and Queen Creek Roads (see attachment).

HDR, Inc. has been retained by ADOT to prepare a South Mountain Corridor Study and an Environmental Impact Statement for this project. On behalf of the ADOT and FHWA, HDR Engineering, Inc. requests a species list, critical habitat, or any additional information that would be pertinent to the proposed project. A response received by February 11, 2002 would be greatly appreciated. Comments should be addressed to Ms. Fiona Goodson, HDR, Inc., 2141 East Highland Avenue, Suite 250, Phoenix, Arizona 85016-4736.

Thank you for your assistance.

Sincerely,
HDR ENGINEERING, INC.

Fiona Goodson
Environmental Planner

Attachments Enclosed

HDR Engineering, Inc.

Employee Owned

Park One
2141 East Highland Avenue
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85016-4736

Telephone
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602 508-6606

January 10, 2002

Dr. George Brooks
PMIP
P.O. Box C
Sacaton, AZ 85247



Re: South Mountain Corridor Study

Dear Dr. Brooks:

HDR Engineering Inc., on behalf of the Arizona Department of Transportation (ADOT) and the Federal Highway Administration (FHWA), is preparing a South Mountain Corridor Study and an Environmental Impact Statement (EIS) for the proposed South Mountain Freeway. This investigation will take approximately three years to complete, and will include an examination of the transportation needs in the corridor and an evaluation of all reasonable ways to meet them. A conceptual design and state-level Environmental Assessment was prepared in 1988. As presented in this study, the freeway would connect Interstate 10 (I-10) south of Phoenix with I-10 west of the city, following an east-west alignment along Pecos Road, through the western tip of South Mountain Park, then north to I-10 between 55th and 63rd Avenues.

The legal location of the study area occurring on the Gila River Indian Community is: Township 1 North, Range 1 East, Sections 31-35; Township 1 South, Range 1 East, Sections 1-17 and 20-26; Township 1 South, Range 2 East, Sections 7, 17-21, and 27-35; Township 2 South, Range 2 East, Sections 1-17 and 22-24; Township 2 South, Range 3 East, Sections 1-24; and Township 2 South, Range 4 East, Sections 4-9, and 15-22.

An EIS will be prepared if it is determined that there is a need for a major transportation improvement required in the South Mountain area. It will be prepared to address increased development within the project area, changes in design standards and environmental regulations, and to qualify for federal funds. This new study will start from the beginning and will consider all reasonable alternatives. The corridor being considered can be generally described as: I-10 on the west between 43rd and 107th Avenues, between the Gila River and South Mountain, and I-10 on the east between Pecos and Queen Creek Roads (see attachment).

HDR, Inc. has been retained by ADOT to prepare a South Mountain Corridor Study and an Environmental Impact Statement for this project. On behalf of the ADOT and FHWA, HDR Engineering, Inc. requests a species list, critical habitat, or any additional information that would be pertinent to the proposed project. A response received by February 11, 2002 would be greatly appreciated. Comments should be addressed to Ms. Fiona Goodson, HDR, Inc., 2141 East Highland Avenue, Suite 250, Phoenix, Arizona 85016-4736.

Thank you for your assistance.

Sincerely,
HDR ENGINEERING, INC.

Fiona Goodson
Environmental Planner

Attachments Enclosed

HDR Engineering, Inc.

Employee Owned

Park One
2141 East Highland Avenue
Suite 250
Phoenix, Arizona
85016-4736

Telephone
602 508-6600
Fax
602 508-6606



May 30, 2002

Natural Resources Conservation Service (NRCS)
Mr. Jeff Schmidt
3003 N. Central Ave. #800
Phoenix, AZ. 85012

RE: Request for Prime and Unique Farmland (PUF) Determination; South Mountain Freeway Corridor Project

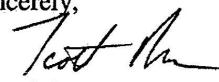
Dear Mr. Schmidt:

HDR Engineering Inc., on behalf of the Arizona Department of Transportation (ADOT) and the Federal Highway Administration (FHWA), is preparing an Environmental Impact Statement (EIS) for the proposed South Mountain Freeway Corridor Project, as required by the National Environmental Policy Act. This investigation include an examination of the transportation needs in the corridor and an evaluation of all reasonable ways to meet them. A conceptual design and state-level Environmental Assessment was prepared in 1988. As presented in this study, the freeway would connect Interstate 10 (I-10) south of Phoenix with I-10 west of the city, following an east-west alignment along Pecos Road, through the western tip of South Mountain Park, then north to I-10 between 55th and 63rd Avenues.

We are requesting a PUF determination from the NRCS, for the proposed study area. We understand that a PUF determination was completed in the past for part of the study area, but due to new scoping requirements and additional proposed alignments, we feel a new determination is warranted. Attached you will a Geographical Information System (GIS) map which includes the study area boundary, and potential PUF which were designated based upon NRCS soil mapping data. If possible, we would appreciate a response by June 28, 2002.

Please contact me at (602) 508-6620 if you have any questions, or need additional information.

Sincerely,


Scott Mars

HDR Engineering

C: Andrea Helmstetter, HDR Engineering

HDR Engineering, Inc.

2141 East Highland Avenue
Suite 250
Phoenix, Arizona
85016-4736

Telephone
602 508-6600
Fax
602 508-6606



Employee Owned



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October 28, 2002

Ms. Mary Viparina

Senior Project Manager
Arizona Department of Transportation
205 S. 17th Avenue, Mail Drop 614E
Phoenix, AZ 85007

RE: South Mountain Transportation Corridor EIS and L/DCR
Methodology Reports

Dear Ms. Viparina:

Please find attached a copy of the draft Methodologies Report for the above-referenced project. Pursuant to the consensus-based approach associated with the project, this report presents the methodologies proposed to analyze impacts for the National Environmental Policy Act topical environmental elements.

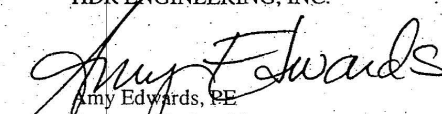
We cordially ask that the methodologies proposed be reviewed by the appropriate ADOT staff. Specific methodologies, geotechnical, hazardous waste, and utilities, have already been subject to ADOT review. Upon completion of ADOT review (and under the assumption that no substantial changes are warranted), we ask that the report then be forwarded to the FHWA Arizona Division for review. The goal of obtaining team consensus on the proposed methodologies is to minimize the chance of substantial changes to the studies once completed.

To facilitate the review process, we have forwarded three (3) copies of the draft Methodologies Report to Mr. Thor Anderson for distribution to the reviewers.

Please keep in mind that the attached has not been formatted per the project's style guide as it is considered a working document. If you should have questions, please call me at (602) 508-6648.

Sincerely,

HDR ENGINEERING, INC.


Amy Edwards, PE
Assistant Project Manager

cc: Thor Anderson (3 copies)

HDR Engineering, Inc.

Park One
2141 East Highland Avenue
Suite 250
Phoenix, AZ 85016-4732

Phone: (602) 508-6600
Fax: (602) 508-6606
www.hdrinc.com

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October 31, 2002

Andrew Darling
Project Director
GRIC Cultural Resource Mgmt. Program
P.O. Box 2140
Sacaton, AZ 85247

Re: South Mountain Transportation Corridor EIS and L/DCR

Dear Andrew:

On September 26, 2002, HDR, ADOT and FHWA participated in a Project Owners Team Meeting. The intent of the meeting was to discuss where we are now in the project and recommendations on where we go next.

To date, we are continuing to coordinate with the Gila River Indian Community (GRIC) regarding the potential for an alternative on their lands. While this coordination continues, the decision was made in the Project Owners Team Meeting to go forward with development and screening of all non-GRIC alignments. As such, alignments have been developed and are being reviewed with the stakeholder jurisdictions. Once this coordination is complete, the alternatives will be finalized for impacts screening. Impacts screening data will be acquired from the GIS database. Specific technical authors will be asked to confirm the impacts prior to a screening meeting. The screening meeting will be scheduled for mid-December.

Upon completion of the screening meeting, all project team members will be apprised of what alternatives were selected to move forward into the detailed analysis of the draft EIS.

We appreciate your assistance in making the recent project slow down productive. We look forward now to moving toward successful project completion. Attached is an updated project schedule.

Sincerely,

HDR ENGINEERING, INC.

Amy Edwards, P.E.
Assistant Project Manager

HDR Engineering, Inc.

Park One
2141 East Highland Avenue
Suite 250
Phoenix, AZ 85016-4792

Phone: (602) 508-6600
Fax: (602) 508-6606
www.hdrinc.com

This letter was also sent to John Ravesloot, Gila River Indian Community, Cultural Resource Management Program

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May 21, 2003

Ms. Cindy Lester
Arizona Section Chief
U.S. Army Corps of Engineers
3636 North Central Avenue, Suite 760
Phoenix, AZ 85012

RE: South Mountain EIS and L/DCR

Dear Ms. Lester:

The South Mountain Transportation Corridor Study Team will be combining Chapter 3 (affected environment) and Chapter 4 (impacts) into one chapter for the Environmental Impact Statement (EIS). In the past, these chapters typically have been separate; however, there has been a recent trend to combine the chapters into one. We have discussed the matter with the Federal Highway Administration (FHWA) and the Arizona Department of Transportation (ADOT) and have investigated where it has been done before and how it was received.

In general, there is support for combining the chapters from those we questioned who have used this approach. To avoid redundancy, some have shortened Chapter 3 to approximately a five page environmental setting overview and all the details have been put in Chapter 4, with the acceptance of the FHWA. It should be noted that the approach has been used for Environmental Assessments but is not recognized for an EIS because the Council on Environmental Quality guidelines clearly call out for a two chapter approach. Further coordination of this issue will occur with ADOT and FHWA. Assuming the issue is satisfactorily resolved in the view of FHWA and ADOT, we will combine Chapter 3 and Chapter 4 in the EIS. It is our belief that document readability and succinctness will be better achieved by doing so.

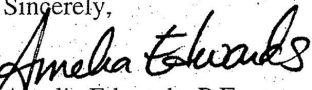
HDR Engineering, Inc.

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2141 East Highland Avenue
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Phone: (602) 508-6600
Fax: (602) 508-6606
www.hdrinc.com

Ms. Cindy Lester
Arizona Section Chief
U.S. Army Corps of Engineers May 21, 2003
Page 2 of 2

As a cooperating agency or an agency expressing interest in the process, we are notifying you of this intent. If you have any questions or comments regarding this matter, please do not hesitate to contact either me at 602-508-6648. Thank you.

Sincerely,

Amelia Edwards, P.E.
Deputy Project Manager

cc: Bill Vachon, FHWA Arizona Division
Floyd Roehrich, ADOT Project Manager

HDR Engineering, Inc.

Park One
2141 East Highland Avenue
Suite 250
Phoenix, AZ 85016-4792

Phone: (602) 508-6600
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ONE COMPANY | Many Solutions SM

August 5, 2003

Ms. Elaine Blackwater
Land Use Planning and Zoning Director
Gila River Indian Community
P.O. Box E
Sacaton, AZ 85247

RE: South Mountain Freeway DCR/EIS Study – Project Video
Right-of-Entry Permit Request

Dear Ms. Blackwater:

The referenced study, being conducted by HDR Engineering, Inc. on behalf of Arizona Department of Transportation (ADOT) and in cooperation with Gila River Indian Community (GRIC), was initiated in July 2001. As part of the study, we acquired a right-of-entry permit (RE-02-01) for surveying and environmental studies. A copy of this permit is attached.

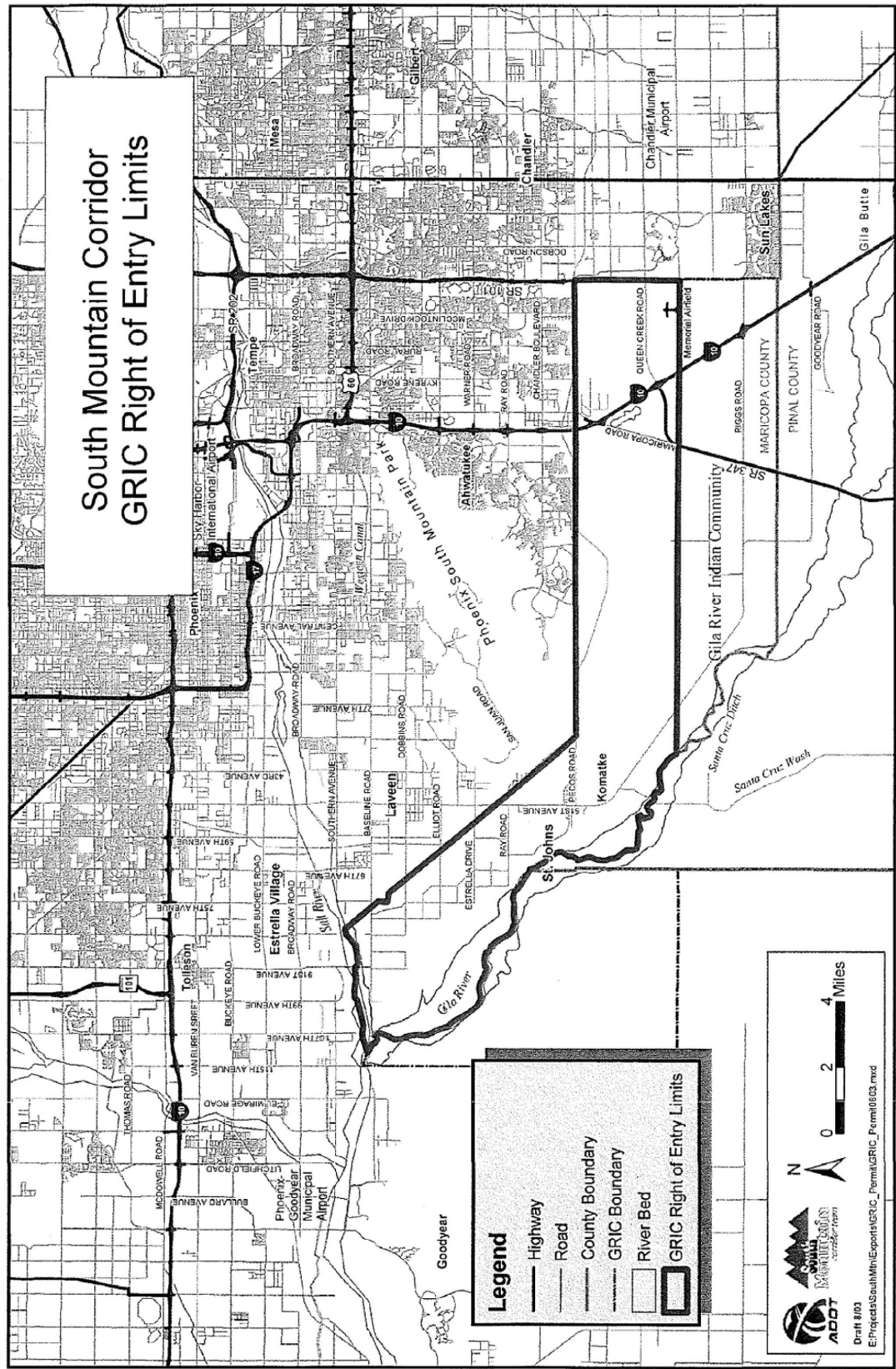
During a June meeting with Council representatives from Districts 4, 6 and 7, we were requested to create a project video for viewing by GRIC members. As part of this video creation, we would like to film several locations within GRIC. The areas we are requesting to film are located within the study area defined under our original permit and shown in the attached map. The areas include the following:

- South Mountain as seen from GRIC
- Kids playing at the school and Boys and Girls Club
- Artifacts in the Cultural Center
- People working at the farms
- Lone Butte Industrial Park
- Wild Horse Pass Resort
- Casinos

HDR Engineering, Inc.

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Phoenix, AZ 85016-4792

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www.hdrinc.com



Ms. Elaine Blackwater
Land Use Planning and Zoning Director
Gila River Indian Community
8/5/2003
Page 2

I have attached a list of personnel and a list of vehicle makes, models and license plates that may enter Community lands during the project. Upon receipt of a right-of-entry permit, those accessing Community lands will notify your office 24 hours in advance of their visit.

The filming effort will be undertaken immediately upon receipt of a right-of-entry permit and will be completed within 3 months time. Please advise me if there is any additional information you will need to aid in the approval of this right-of-entry. Thank you for your help with this matter.

Sincerely,
HDR ENGINEERING, INC.

Amelia Edwards
Amelia Edwards, P.E.
Project Manager

Attachments
Right-of-Entry Permit RE-02-01
GRIC Study Area Map
Personnel, vehicle list

cc:
Floyd Roehrich
John Godec
Project File

GILA RIVER INDIAN COMMUNITY
RIGHT-OF-ENTRY LIST
SOUTH MOUNTAIN FREEWAY EIS & DCR
PROJECT VIDEO

Personnel

Amy Edwards
John Godec
Theresa Gunn
Janet Nearhood
Jim Kent
Diana Cleland

Year, Make, Model and License Plate of Vehicles

2000	Land Rover Discovery	452-FWT
1999	Dodge Durango	060-DVP
1998	Honda CRV	430-FZD
1999	Chevy Suburban	728-DTP



December 16, 2003

Terry Leija
Maricopa County Board of Supervisor
301 W. Jefferson
10th Floor
Phoenix, AZ 85003-2148

Re: South Mountain Freeway Public Meeting

Dear Terry:

During the October 2, 2003 South Mountain Freeway Public Meeting sponsored by the Arizona Department of Transportation at Tolleson High School, Supervisor Wilcox read and provided the attached statement. At the request of Bob Woodring at the Maricopa County Department of Transportation and Floyd Roehrich at the Arizona Department of Transportation, we are providing this statement to you.

If you have any questions regarding this matter or the project in general, please do not hesitate to contact me at 602-522-7755.

Sincerely,

HDR ENGINEERING, INC.

Amy Edwards, PE

cc: Bob Woodring, MCDOT
Floyd Roehrich, ADOT

HDR Engineering, Inc.

3200 East Camelback Road
Suite 350
Phoenix, AZ 85018-2311

Phone: (602) 522-7700
Fax: (602) 522-7707
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Maricopa County
Board of Supervisors

Mary Rose Garrido Wilcox
District Five
301 W. Jefferson, 10th Floor
Phoenix, Arizona 85003-2148
Phone: 602.506.7092
Fax: 602.506.6524
TDD: 602.506.2000
mrwilcox@mail.maricopa.gov

ADOT
SOUTH MOUNTAIN FREEWAY
TOLLESON HIGH SCHOOL
October 2, 2003

My name is Mary Rose Wilcox. I represent District Five as a member of the Maricopa County Board of Supervisors. I am here tonight to comment on the South Mountain Corridor Study.

I support Alternative 1, which follows the GRIC boundary until halfway between 59th and 63rd Avenues.

In 1986, as a former Phoenix City Council member, I was instrumental in forming a multi-jurisdictional committee that developed the Estrella Comprehensive General Plan. This committee included the cities of Phoenix, Tolleson, Avondale, Maricopa County, private landowners and many other interested parties. After much discussion and planning, the Estrella General Plan was adopted by the Phoenix City Council in 1988, adopted in 1992 by the Maricopa County Board of Supervisors and also adopted by all participating jurisdictions.

I am submitting a copy of the Estrella Comprehensive General Plan, which plans for the Alternative 1 alignment. For almost 20 years, the westside has been making planning decisions based on the premise of the Alternate 1 alignment. I understand that planning must be flexible but major consideration must be given to what has been adopted already. This general plan has been the basis of so much development. For instance, the City of Tolleson has developed industrial parks based upon alternative 1 and mostly importantly, if the other alternatives are recommended, it would devastate the city's commercial tax base by rendering the city's primary commercial corridor useless.

I understand the City of Phoenix is supportive of the 59th Avenue alignment due to the land use development that has occurred in this area.

Changing the original alignment would be detrimental to the major development that has occurred in the cities of Tolleson, Avondale and Phoenix.

I look forward to continuing to work with ADOT as the process of public hearings and planning continues. Thank you.



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December 31, 2003

United States Army Corps of Engineers
L.A. District, Regulatory Branch
Attn: Ms. Dana Owsiany
3636 North Central Ave., Suite 900
Phoenix, AZ 85012

RE: South Mountain Transportation Corridor Project:
Jurisdictional Waters (Wetland Assessment)

Dear Ms. Owsiany:

Thank you for your time in reviewing the field investigation photographs of the potential wetland area (subject area) located at 83rd Avenue in the Salt River Channel. The subject area is located where three freeway alignments are being considered.

The subject area appeared to be a former gravel pit with wetland features on aerial photographs. Due to the wetland potential of this area, a field investigation of the area was conducted on December 4, 2003. During the field investigation, three soil pits were excavated using a shovel then photographed. In addition, several photographs were taken of the area to show vegetation types, standing water, and general site features. These photographs were given to you for review during our meeting on December 16, 2003. On December 17, 2003 you called to inform us of the results of your internal meeting with Ron Fowler and Robert Dumar. Your review of the site photographs yielded the opinion that the subject area is not a wetland, but the source of water must be confirmed.

HDR appreciates your review and your guidance with this issue. We will provide new information as the Clean Water Act (CWA) permitting process moves forward associated with the project. We will continue to coordinate with you to discuss issues and findings associated with jurisdictional waters.

Sincerely,

HDR ENGINEERING, INC.

Scott Mars, REM

c: Amy Edwards, HDR
Project File

HDR Engineering, Inc.

3200 East Camelback Road
Suite 350
Phoenix, Arizona 85018

Phone: (602) 522-7700
Fax: (602) 522-7707
www.hdrinc.com



ONE COMPANY
Many Solutions SM

Memo

To: Councilman Stanton and City of Phoenix Staff	
From: Amy Edwards	Project: South Mountain Freeway EIS & L/DCR
CC: Project File	
Date: January 10, 2005	Job No: 00173-525-044

RE: Potential Interchange Locations on Pecos Road Alternative

The HDR team is proceeding with detailed study of the Pecos Road alternative. As part of the process, we need to clearly identify the locations of potential interchanges along this route. In the original 1988 alternative, the interchange locations along Pecos Road were:

- 40th Street
- 24th Street
- 7th Street
- 7th Avenue
- 19th Avenue

As part of our study, we have evaluated where it is geometrically possible to construct interchanges given the development that has occurred within the area since the 1988 study. Our analysis has shown potential interchange locations along Pecos Road at (see attached figure):

- 40th Street
- 32nd Street
- 24th Street
- Desert Foothills Parkway
- 17th Avenue
- 25th Avenue

The differences in the lists are as follows:

- **32nd Street** - The current study shows this as a potential interchange location. This location has been included as it connects to the existing arterial system, is geometrically possible to construct and would serve the arterial street mobility need.
- **Desert Foothills Parkway** - The current study shows this as a potential interchange location. This location has been included as it connects to the existing arterial system, is geometrically possible to construct and would serve the arterial street mobility need.
- **7th Street** - The current study does not show this as a potential interchange location. This location was not included as it does not connect with the existing arterial system.
- **7th Avenue** - The current study does not show this as a potential interchange location. This location was not included as it does not connect with the existing arterial system.
- **17th Avenue** - The current study shows this as a potential interchange location. This location has been included as it connects to the existing arterial system, is geometrically possible to construct and would serve the arterial street mobility need.

HDR Engineering, Inc.

3200 E. Camelback Road
Suite 350
Phoenix, AZ 85018-2311

Phone (602) 522-7700
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Page 1 of 2

- **19th Avenue** - The current study does not show this as a potential interchange location. This location was not included as it does not connect with the existing arterial system.
- **25th Avenue** - The current study shows this as a potential interchange location. This location has been included as it connects to the existing arterial system, is geometrically possible to construct and would serve the arterial street mobility need.

At this time, these are only potential locations. We are soliciting input from the City of Phoenix regarding your views on each of these locations and if there are others that should be considered.



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January 17, 2005

Dr. Todd Bostwick
City Archaeologist
Pueblo Grande Museum
4619 East Washington Street
Phoenix, AZ 85034

Dr. Bostwick,

As requested here is a summary of the South Mountain Environmental Impact Statement project to date. Gila River Indian Community's Cultural Resource Management Program (GRIC-CRMP) is working on the project as subconsultant to HDR. The GRIC-CRMP was tasked with conducting a Class I overview of the study area and a Class III survey of alternative alignments. Attached is a summary of GRIC-CRMP's work to date. A few other key dates with regard to coordination with the City of Phoenix are as follows:

- July 9, 2001 - HDR received notice to proceed from ADOT/FHWA.
- August 8, 2003 - ADOT initiated Section 106 consultations with the City of Phoenix, provided a draft Class I report for review, and requested concurrence that a Programmatic Agreement be developed.
- September 8, 2003 - HDR sent fieldwork notification letter to City of Phoenix (the letter was sent to City Hall, not Pueblo Grande).
- September 17, 2003 - City of Phoenix sent ADOT a response letter concurring that a PA should be developed.
- December 9, 2003 - ADOT sent draft Pragmatic Agreement to the City of Phoenix for review.
- December 17, 2003 - City of Phoenix sent ADOT a response letter concurring with the adequacy of the draft Programmatic Agreement.

Clearly, there was a breakdown in communication between our team and your office. HDR fully understands the importance of coordinating with your office and our responsibility as consultants to adhere to the *City of Phoenix Guidelines for Archaeology*, including the Archaeological Fieldwork Protocol section (page 29) which details proper coordination procedures. Please be assured that HDR is fully committed to the proper and ethical management of cultural resources in Phoenix, Arizona, and beyond. To ensure this situation does not happen again, HDR will

require our subconsultants to provide written documentation that they have contacted your office prior to the commencement of a cultural resources project in Phoenix.

Currently, GRIC-CRMP is revising the draft Class III survey report per HDR's comments. The revised draft will be completed by early February and submitted to ADOT for their internal review. Assuming ADOT will have some comments, the GRIC-CRMP will provide a second revision, and the draft Class III report should be ready for distribution to the consulting parties (including your office) around mid-March.

If you have any further questions, would like additional information, or would like to meet to review some of the initial results, please do not hesitate to call me at (602) 522-4318.

Sincerely,

HDR Engineering, Inc.

Mark Brodbeck

Mark Brodbeck, Coordinator
Cultural Resources Section

cc Jon Shoemaker, ADOT HPT
Amy Edwards, HDR PM
Andy Darling, GRIC-CRMP

HDR Engineering, Inc.	3200 E. Camelback Road Suite 350 Phoenix, AZ 85018	Phone: (602) 522-7700 Fax: (602) 522-7707 www.hdrinc.com
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*Agency Letters and Communication Received
After Close of Comment Period of the Draft
Environmental Impact Statement*



U.S. Department
of Transportation
Federal Highway
Administration

RECEIVED
PHOENIX DISTRICT OFFICE

2013 JUL -5 PM 1:58

BUREAU OF LAND MANAGEMENT
PHOENIX, AZ

ARIZONA DIVISION

July 2, 2013

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

In Reply Refer To:
NH-202-D(ADY)
HOP-AZ

NH-202-D(ADY)
TRACS No. 202L MA 054 H5764 01L
South Mountain Freeway (Loop 202)
Request for Rio Salado Oeste status concurrence

Mr. Jim Andersen, Realty Specialist
Bureau of Land Management
21605 West 4th Avenue
Phoenix, Arizona 85027

Dear Mr. Andersen:

This letter summarizes the current information the South Mountain Freeway study team has compiled regarding the Rio Salado Oeste (RSO) project as it relates to the W59 Alternative of the South Mountain Freeway (Loop 202), Interstate 10 (Papago Freeway) to Interstate 10 (Maricopa Freeway), Draft Environmental Impact Statement and Section 4(f) Evaluation. It should be noted that most of the coordination between the Bureau of Land Management (BLM), City of Phoenix, and the U.S. Army Corps of Engineers (USACE) regarding RSO was in relation to the W55 Alternative. In 2009, the W55 Alternative was shifted to 59th Avenue and was renamed the W59 Alternative. The location of the Salt River/RSO crossing has not changed.

The W59 Alternative would cross the Salt River through the eastern half of a 192-acre BLM parcel. The City of Phoenix has a lease on this parcel under provisions of the Recreation and Public Purposes Act (Lease A-31292). The leased land would be included in the proposed RSO project, which is cosponsored by USACE. Although the lease does not include a reference to the proposed freeway, BLM and the City of Phoenix, in an August 2005 letter, indicated they would work together to amend the lease to show the proposed freeway passing through the parcel if the W55 Alternative was identified as the selected alternative in the environmental impact statement (EIS) and Record of Decision.

In July 2010, the City of Phoenix and USACE completed the *Rio Salado Oeste Conceptual Design Documentation Report*. This report incorporates the location of the proposed South Mountain Freeway as it passes through RSO (see enclosure). According to USACE, the RSO project lacks funding to proceed. As a result, the proposed construction of the South Mountain Freeway in this area would precede RSO. Although traffic noise could affect some species, any wildlife that would inhabit the area after habitat improvements would experience the freeway as



an existing condition and become habituated to traffic noise. The City of Phoenix and USACE view the South Mountain Freeway crossing as an opportunity to use stormwater runoff from the proposed freeway to “irrigate” the river habitat. The study team will continue to consult with BLM, USACE, and the City of Phoenix to coordinate design efforts to minimize impacts on the proposed uses of this land.

If this summary is accurate and reflects the most currently available information, please sign the concurrence line below. If you or others in your organization have additional information, please provide it to the Federal Highway Administration by July 14, 2013, so that it can be incorporated into the Final EIS. If you have any questions, please contact Rebecca Yedlin, FHWA Environmental Coordinator, at (620) 382-8979 or Rebecca.Yedlin@dot.gov.

Thank you for your time and assistance.

Sincerely,

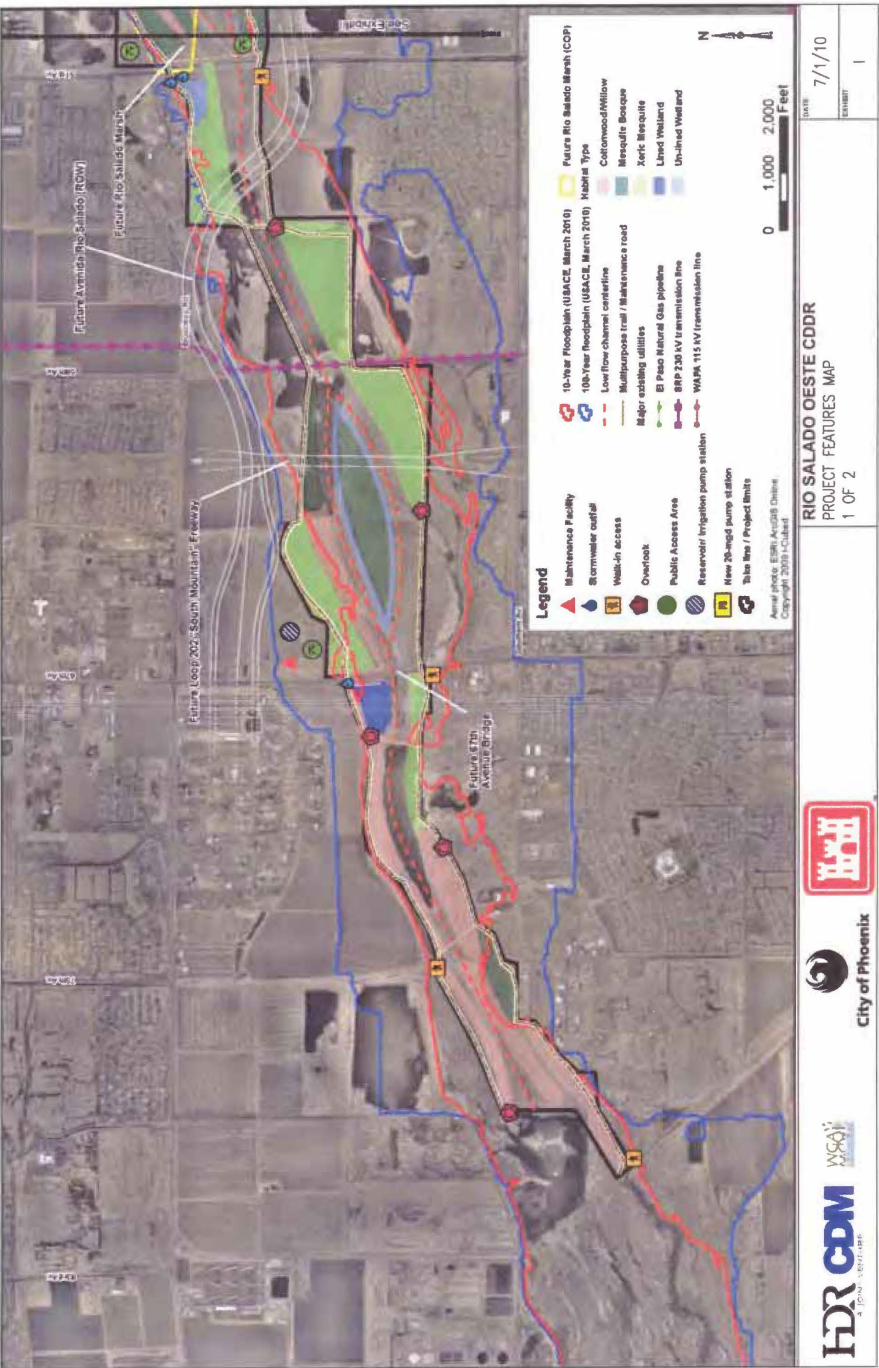
Karla S. Petty
Karla S. Petty
Division Administrator

Rebecca Yedlin (BLM-Wildlife)
Signature for Bureau of Land Management Concurrence
NH-202-D(ADY)

07/09/2013
Date

Enclosure

cc:
Karen Williams, City of Phoenix, 200 West Washington Street, 12th Floor, Phoenix, AZ 85003
Brian Kenny, U.S. Army Corps of Engineers, 3636 North Central Avenue, Phoenix, AZ 85012
Ben Spargo, HDR Engineering, Inc. , 3200 E. Camelback Rd., Suite 350, Phoenix, AZ 85018
Scott Stapp, HDR Engineering, Inc. , 3200 E. Camelback Rd., Suite 350, Phoenix, AZ 85018





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

ARIZONA DIVISION

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

July 2, 2013

In Reply Refer To:
NH-202-D(ADY)
HOP-AZ

NH-202-D(ADY)
TRACS No. 202L MA 054 H5764 01L
South Mountain Freeway (Loop 202)
Request for Rio Salado Oeste status concurrence

Ms. Karen Williams, Rio Salado Coordinator
City of Phoenix
200 West Washington Street, 12th Floor
Phoenix, Arizona 85003

Dear Ms. Williams:

This letter summarizes the current information the South Mountain Freeway study team has compiled regarding the Rio Salado Oeste (RSO) project as it relates to the W59 Alternative of the *South Mountain Freeway (Loop 202), Interstate 10 (Papago Freeway) to Interstate 10 (Maricopa Freeway), Draft Environmental Impact Statement and Section 4(f) Evaluation*. It should be noted that most of the coordination between the Bureau of Land Management (BLM), City of Phoenix, and the U.S. Army Corps of Engineers (USACE) regarding RSO was in relation to the W55 Alternative. In 2009, the W55 Alternative was shifted to 59th Avenue and was renamed the W59 Alternative. The location of the Salt River/RSO crossing has not changed.

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2

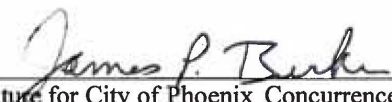
an existing condition and become habituated to traffic noise. The City of Phoenix and USACE view the South Mountain Freeway crossing as an opportunity to use stormwater runoff from the proposed freeway to "irrigate" the river habitat. The study team will continue to consult with BLM, USACE, and the City of Phoenix to coordinate design efforts to minimize impacts on the proposed uses of this land.

If this summary is accurate and reflects the most currently available information, please sign the concurrence line below. If you or others in your organization have additional information, please provide it to the Federal Highway Administration by July 14, 2013, so that it can be incorporated into the Final EIS. If you have any questions, please contact Rebecca Yedlin, FHWA Environmental Coordinator, at (620) 382-8979 or Rebecca.Yedlin@dot.gov.

Thank you for your time and assistance.

Sincerely,


for
Karla S. Petty
Division Administrator

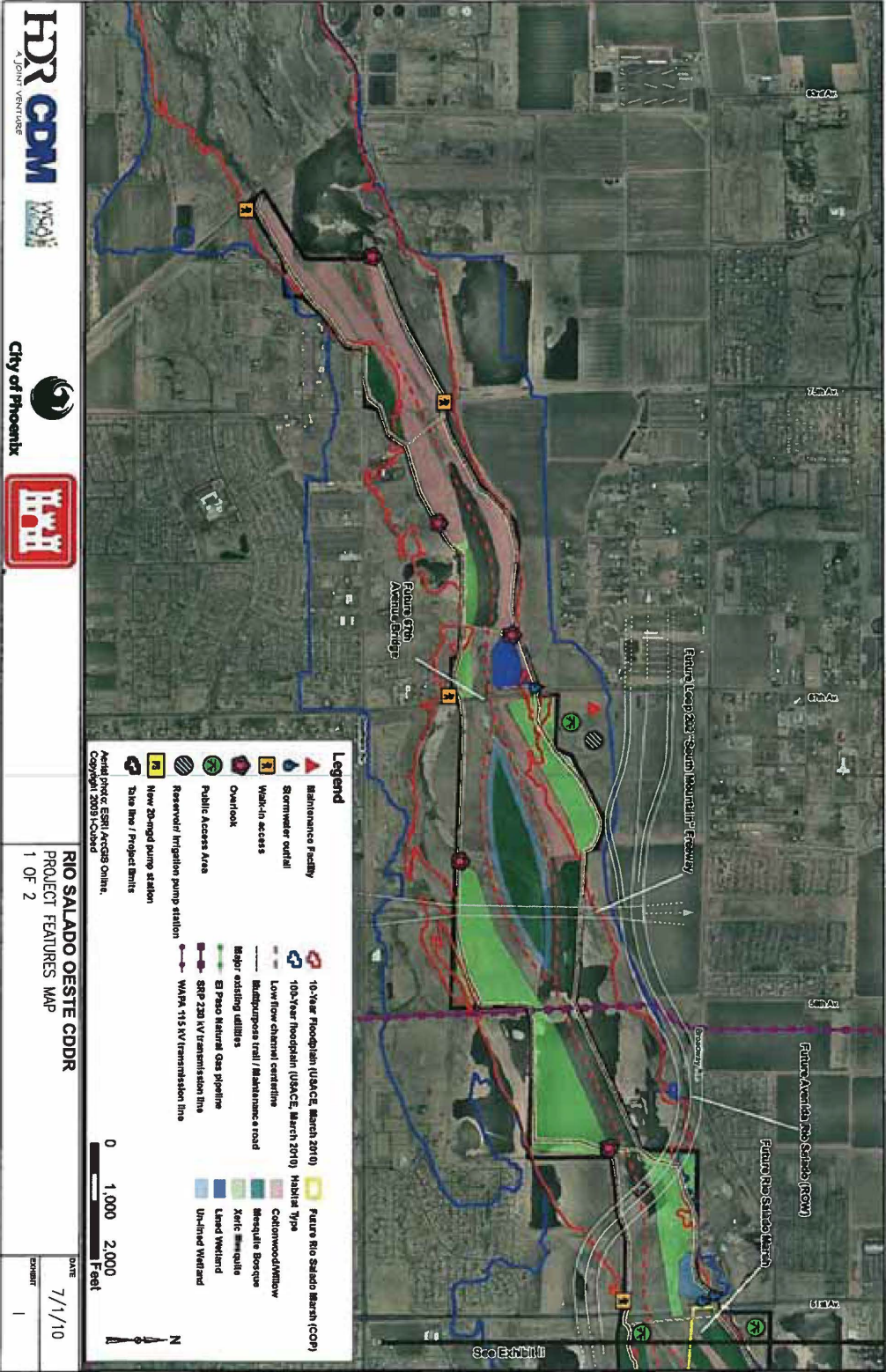

Signature for City of Phoenix Concurrence
NH-202-D(ADY)

8/8/13
Date

Enclosure

cc:

Jim Andersen, Bureau of Land Management, 21605 West 4th Avenue, Phoenix, AZ 85027
Brian Kenny, U.S. Army Corps of Engineers, 3636 North Central Avenue, Phoenix, AZ 85012
Ben Spargo, HDR Engineering, Inc., 3200 E. Camelback Rd., Suite 350, Phoenix, AZ 85018
Scott Stapp, HDR Engineering, Inc., 3200 E. Camelback Rd., Suite 350, Phoenix, AZ 85018



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July 8, 2013

In Reply Refer To:
NH-202-D(ADY)
HOP-AZ

NH-202-D(ADY)
TRACS No. 202L MA 054 H5764 01L
South Mountain Freeway (Loop 202)
Request for Rio Salado Oeste status concurrence

Mr. Brian Kenny, Rio Salado Project Manager
U.S. Army Corps of Engineers
3636 North Central Avenue
Phoenix, Arizona 85012

Dear Mr. Kenny:

The study team is updating information within the *South Mountain Freeway (Loop 202), Interstate 10 (Papago Freeway) to Interstate 10 (Maricopa Freeway), Draft Environmental Impact Statement and Section 4(f) Evaluation (Draft EIS)* for the production of the Final EIS for the project. Although the team has had informal telephone communications with you regarding the status of the Rio Salado Oeste (RSO) project, the Federal Highway Administration (FHWA) wishes to formally document the status within the Final EIS.

This letter summarizes the current information the team has compiled regarding the RSO project as it relates to the W59 Alternative of the South Mountain Freeway. It should be noted that much of the prior coordination between the Bureau of Land Management (BLM), City of Phoenix, and the U.S. Army Corps of Engineers (USACE) regarding RSO was in relation to the W55 Alternative. In 2009, the W55 Alternative was shifted to 59th Avenue and was renamed the W59 Alternative. The location of the Salt River/RSO crossing has not changed.

The W59 Alternative would cross the Salt River through the eastern half of a 192-acre BLM parcel. The City of Phoenix has a lease on this parcel under provisions of the Recreation and Public Purposes Act (Lease A-31292). The leased land would be included in the proposed RSO project, which is cosponsored by USACE. Although the lease does not include a reference to the proposed freeway, BLM and the City of Phoenix, in an August 2005 letter, indicated they would work together to amend the lease to show the proposed freeway passing through the parcel if the W55 Alternative was identified as the selected alternative in the EIS and Record of Decision.

In July 2010, the City of Phoenix and USACE completed the *Rio Salado Oeste Conceptual Design Documentation Report*. This report incorporates the location of the proposed South Mountain Freeway as it passes through RSO (see enclosure). According to USACE, the RSO project lacks funding to proceed. As a result, the proposed construction of the South Mountain Freeway in this area would precede RSO. Although traffic noise could affect some species, any wildlife that would inhabit the area after habitat improvements would experience the freeway as an existing condition and become habituated to traffic noise. The City of Phoenix and USACE view the South Mountain Freeway crossing as an opportunity to use stormwater runoff from the proposed freeway to "irrigate" the river habitat. The study team will continue to consult with BLM, USACE, and the City of Phoenix to coordinate design efforts to minimize impacts on the proposed uses of this land.

If this summary is accurate and reflects the most currently available information, please sign the concurrence line below. If you or others in your organization have additional information, please provide it to FHWA by July 29, 2013, so that it can be incorporated into the Final EIS. If you have any questions, please contact Rebecca Yedlin, FHWA Environmental Coordinator, at (620) 382-8979 or Rebecca.Yedlin@dot.gov.

Thank you for your time and assistance.

Sincerely,

Rayon

Karla S. Petty
Division Administrator

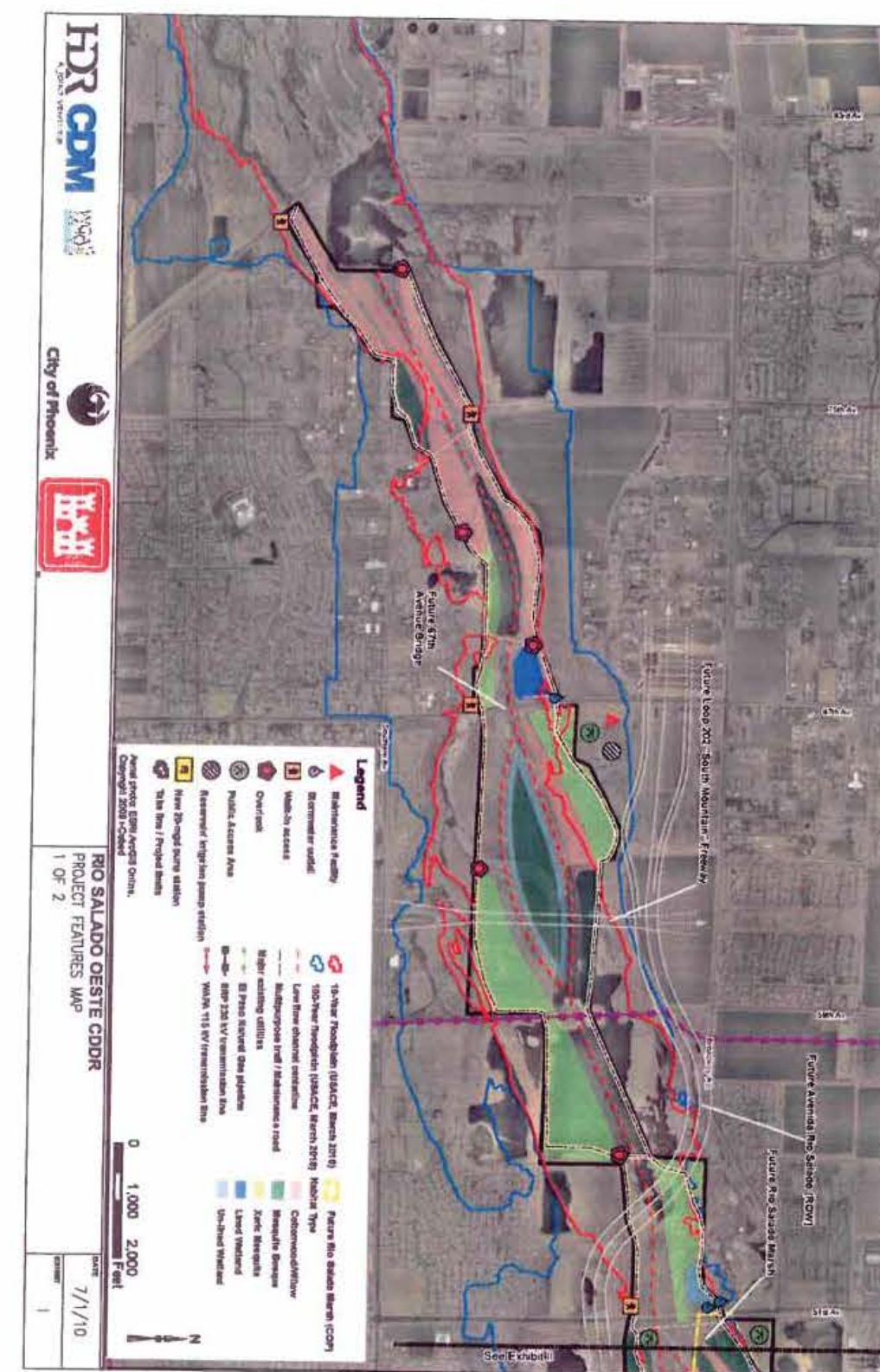
Brian W. Kearney
Signature for USACE Concurrence
NH-202-D(ADY)

24 October 2013
Date

Enclosure

CC:

Jim Andersen, Bureau of Land Management, 21605 West 4th Avenue, Phoenix, AZ 85027
Karen Williams, City of Phoenix, 200 West Washington Street, 12th Floor, Phoenix, AZ 85003
Ben Spargo, HDR Engineering, Inc., 3200 E. Camelback Rd., Suite 350, Phoenix, AZ 85018
Scott Stapp, HDR Engineering, Inc., 3200 E. Camelback Rd., Suite 350, Phoenix, AZ 85018





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August 15, 2013

In Reply Refer To:
NH-202-D(ADY)
HOP-AZ

NH-202-D(ADY)
TRACS No. 202L MA 054 H5764 01L
South Mountain Freeway (Loop 202)
Receipt of Comments on the South Mountain DEIS

Ms. Patricia Sanderson Port, Regional Environmental Officer
United States Department of the Interior
Office of the Secretary
Pacific Southwest Region
333 Bush Street, Suite 515
San Francisco, California 94104

RE: Comments on the Draft Environmental Impact Statement for the South Mountain Freeway (Loop 202), I-10 (Papago Freeway) to I-10 (Maricopa Freeway), TRACS No. 202L MA 054 H5764 01L, Federal Project No. NH-202-D(ADY)

Dear Ms. Port:

The Arizona Department of Transportation (ADOT) and the Federal Highway Administration (FHWA) have received your July 24, 2013, comments on the South Mountain (Loop 202), I-10 (Papago Freeway) to I-10 (Maricopa Freeway) Draft Environmental Impact Statement (DEIS).

With the closing of the DEIS public comment period on July 24, 2013, we will now begin addressing the comments received. As required by the National Environmental Policy Act (NEPA), all comments on the DEIS will be carefully considered and responses to these comments will undergo a rigorous preparation, review, and vetting process through ADOT and FHWA as we advance the project through the NEPA process. We anticipate completion of this effort in 2014. Based on our current schedule, after publication of the Final Environmental Impact Statement (FEIS), the document will be subject to a 60-day public review. A Record of Decision on the proposed project would follow.

We appreciate the involvement of the United States Department of the Interior on this project and look forward to continuing our partnership with the Department.

Sincerely,
Karla S. Petty

Karla S. Petty
Division Administrator

cc:
Rebecca Yedlin, Chaun Hill (EM02), Ralph Ellis (EM02), Ben Spargo, HDR Engineering, Inc. 3200 E. Camelback Rd., Suite 350, Phoenix, AZ 85018



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August 15, 2013

In Reply Refer To:
NH-202-D(ADY)
HOP-AZ

NH-202-D(ADY)
TRACS No. 202L MA 054 H5764 01L
South Mountain Freeway (Loop 202)
Receipt of Comments on the South Mountain DEIS

Mr. Jared Blumenfeld
United States Environmental Protection Agency
Office of the Regional Administration, Region IX
75 Hawthorne Street
San Francisco, California 94105-3901

RE: Comments on the Draft Environmental Impact Statement for the South Mountain Freeway (Loop 202), I-10 (Papago Freeway) to I-10 (Maricopa Freeway), TRACS No. 202L MA 054 H5764 01L, Federal Project No. NH-202-D(ADY)

Dear Mr. Blumenfeld:

The Arizona Department of Transportation (ADOT) and the Federal Highway Administration (FHWA) have received your June 20, 2013, comments on the South Mountain (Loop 202), I-10 (Papago Freeway) to I-10 (Maricopa Freeway) Draft Environmental Impact Statement (DEIS).

With the closing of the DEIS public comment period on July 24, 2013, we will now begin addressing the comments received. As required by the National Environmental Policy Act (NEPA), all comments on the DEIS will be carefully considered and responses to these comments will undergo a rigorous preparation, review, and vetting process through ADOT and FHWA, as we advance the project through the NEPA process. We anticipate completion of this effort in 2014. Based on our current schedule, after publication of the Final Environmental Impact Statement (FEIS), the document will be subject to a 60-day public review. A Record of Decision on the proposed project would follow.

We appreciate the involvement of the United States Environmental Protection Agency Region IX Office on this project and look forward to continuing our partnership with the Agency.

Sincerely,
Karla S. Petty

Karla S. Petty
Division Administrator

cc:
Rebecca Yedlin, Chaun Hill (EM02), Ralph Ellis (EM02), Ben Spargo, HDR Engineering, Inc. 3200 E. Camelback Rd., Suite 350, Phoenix, AZ 85018



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August 15, 2013

In Reply Refer To:
NH-202-D(ADY)
HOP-AZ

NH-202-D(ADY)
TRACS No. 202L MA 054 H5764 01L
South Mountain Freeway (Loop 202)
Receipt of Comments on the South Mountain DEIS

Mr. Gregory Mendoza, Governor
Gila River Indian Community
P.O. Box 97
Sacaton, Arizona 85147

RE: Comments on the Draft Environmental Impact Statement for the South Mountain Freeway (Loop 202), I-10 (Papago Freeway) to I-10 (Maricopa Freeway),
TRACS No. 202L MA 054 H5764 01L, Federal Project No. NH-202-D(ADY)

Dear Governor Mendoza:

The Arizona Department of Transportation (ADOT) and the Federal Highway Administration (FHWA) have received your July 11, 2013, comments on the South Mountain (Loop 202), I-10 (Papago Freeway) to I-10 (Maricopa Freeway) Draft Environmental Impact Statement (DEIS).

With the closing of the DEIS public comment period on July 24, 2013, we will now begin addressing the comments received. As required by the National Environmental Policy Act (NEPA), all comments on the DEIS will be carefully considered and responses to these comments will undergo a rigorous preparation, review, and vetting process through ADOT and FHWA as we advance the project through the NEPA process. We anticipate completion of this effort in 2014. Based on our current schedule, after publication of the Final Environmental Impact Statement (FEIS), the document will be subject to a 60-day public review. A Record of Decision on the proposed project would follow.

We appreciate the involvement of the Gila River Indian Community on this project and look forward to continuing our partnership with the Community.

Sincerely,
Karla S. Petty

Karla S. Petty
Division Administrator

cc:
Rebecca Yedlin, Chaun Hill (EM02), Ralph Ellis (EM02), Ben Spargo, HDR Engineering, Inc. 3200 E. Camelback Rd., Suite 350, Phoenix, AZ 85018



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August 15, 2013

In Reply Refer To:
NH-202-D(ADY)
HOP-AZ

NH-202-D(ADY)
TRACS No. 202L MA 054 H5764 01L
South Mountain Freeway (Loop 202)
Receipt of Comments on the South Mountain DEIS

Ms. Diane Enos, President
Salt River Pima-Maricopa Indian Community
10005 East Osborn Road
Scottsdale, Arizona 85256-9722

RE: Comments on the Draft Environmental Impact Statement for the South Mountain Freeway (Loop 202), I-10 (Papago Freeway) to I-10 (Maricopa Freeway),
TRACS No. 202L MA 054 H5764 01L, Federal Project No. NH-202-D(ADY)

Dear President Enos:

The Arizona Department of Transportation (ADOT) and the Federal Highway Administration (FHWA) have received your June 12, 2013, comments on the South Mountain (Loop 202), I-10 (Papago Freeway) to I-10 (Maricopa Freeway) Draft Environmental Impact Statement (DEIS).

With the closing of the DEIS public comment period on July 24, 2013, we will now begin addressing the comments received. As required by the National Environmental Policy Act (NEPA), all comments on the DEIS will be carefully considered and responses to these comments will undergo a rigorous preparation, review, and vetting process through ADOT and FHWA as we advance the project through the NEPA process. We anticipate completion of this effort in 2014. Based on our current schedule, after publication of the Final Environmental Impact Statement (FEIS), the document will be subject to a 60-day public review. A Record of Decision on the proposed project would follow.

We appreciate the involvement of the Salt River Pima-Maricopa Indian Community on this project and look forward to continuing our partnership with the Community.

Sincerely,

Karla S. Petty

Karla S. Petty
Division Administrator

cc:
Rebecca Yedlin, Chaun Hill (EM02), Ralph Ellis (EM02), Ben Spargo, HDR Engineering, Inc. 3200 E. Camelback Rd., Suite 350, Phoenix, AZ 85018



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August 15, 2013

In Reply Refer To:
NH-202-D(ADY)
HOP-AZ

NH-202-D(ADY)
TRACS No. 202L MA 054 H5764 01L
South Mountain Freeway (Loop 202)
Receipt of Comments on the South Mountain DEIS

Ms. Joyce Francis, Habitat Branch Chief
The State of Arizona
Game and Fish Department
5000 West Carefree Highway
Phoenix, Arizona 85007

RE: Comments on the Draft Environmental Impact Statement for the South Mountain Freeway (Loop 202), I-10 (Papago Freeway) to I-10 (Maricopa Freeway),
TRACS No. 202L MA 054 H5764 01L, Federal Project No. NH-202-D(ADY)

Dear Ms. Francis:

The Arizona Department of Transportation (ADOT) and the Federal Highway Administration (FHWA) have received your July 24, 2013, comments on the South Mountain (Loop 202), I-10 (Papago Freeway) to I-10 (Maricopa Freeway) Draft Environmental Impact Statement (DEIS).

With the closing of the DEIS public comment period on July 24, 2013, we will now begin addressing the comments received. As required by the National Environmental Policy Act (NEPA), all comments on the DEIS will be carefully considered and responses to these comments will undergo a rigorous preparation, review, and vetting process through ADOT and FHWA as we advance the project through the NEPA process. We anticipate completion of this effort in 2014. Based on our current schedule, after publication of the Final Environmental Impact Statement (FEIS), the document will be subject to a 60-day public review. A Record of Decision on the proposed project would follow.

We appreciate the involvement of the State of Arizona Game and Fish Department on this project and look forward to continuing our partnership with the Department.

Sincerely,
Karla S. Pett

Karla S. Petty
Division Administrator

cc:
Rebecca Yedlin, Chaun Hill (EM02), Ralph Ellis (EM02), Ben Spargo, HDR Engineering, Inc. 3200 E. Camelback Rd., Suite 350, Phoenix, AZ 85018



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November 1, 2013

In Reply Refer To:
NH-202-D(ADY)
HOP-AZ

NH-202-D(ADY)
TRACS No. 202L MA 054 H5764 01L
South Mountain Freeway (Loop 202)
PM₁₀ Hotspot Analysis

HDR
RECEIVED

NOV 04 2013

PROJ: _____
FILE: _____
DIST: _____

Mr. Jared Blumenfeld
United States Environmental Protection Agency
Office of the Regional Administration
Region IX
75 Hawthorne Street
San Francisco, CA 94105-3901

RE: Request to review the PM₁₀ Hotspot Modeling Protocol for the South Mountain Freeway (Loop 202), I-10 (Papago Freeway) to I-10 (Maricopa Freeway),
TRACS No. 202L MA 054 H5764 01L, Federal Project No. NH-202-D(ADY)

Dear Mr. Blumenfeld:

The Arizona Department of Transportation (ADOT) and the Federal Highway Administration (FHWA) received your July 23, 2013 comments on the South Mountain (Loop 202), I-10 (Papago Freeway) to I-10 (Maricopa Freeway) Draft Environmental Impact Statement (DEIS). One of the major comments received requested completion of an assessment of potential PM₁₀ hotspot impacts.

The project team drafted the PM₁₀ modeling framework or protocol, updated with new traffic estimates based on the 2010 Census. It was reviewed and approved by the air quality specialists within ADOT, Arizona Department of Environmental Quality, and FHWA.

FHWA now requests the Environmental Protection Agency (EPA) review the protocol and let us know if you have any comments. We would appreciate any comments you have submitted to us by November 15, 2013.

We appreciate the involvement of the EPA Region IX Office on this project and look forward to continuing our partnership. Please submit your comments to Rebecca Yedlin, FHWA

Environmental Coordinator, 4000 N. Central Ave., Suite 1500, Phoenix, AZ 85012; or
Rebecca.Yedlin@dot.gov. If you have any questions, contact Rebecca at 602-382-8979.

Sincerely,

Rebecca Yedlin

Karla S. Petty
Division Administrator

Enclosure

cc:
Colleen McKaughan, USEPA Region 9, mckaughan.colleen@epa.gov
Clifton Meek, USEPA Region 9,, 75 Hawthorne St., San Francisco, CA 94105
Ben Spargo, HDR Engineering, Inc., 3200 E. Camelback Rd., Suite 350, Phoenix, AZ 85018
Darcy Anderson (EM02)
Brent Cain (EM01)
Jeff Houk
Rebecca Yedlin
RYedlin:cdm

November 1, 2013

South Mountain Freeway DEIS PM₁₀ Quantitative Hotspot Analysis Protocol

Project Description

The proposed South Mountain Transportation Corridor (SMTC) will link the Interstate 10 (I-10) corridor west of Phoenix to the I-10 corridor south of Phoenix and consists of three north-south alternative alignments that will connect with an east-west alignment adjacent to the Ahwatukee Foothills. The proposed freeway would serve to provide additional access to I-10 and other Valley locations for residents in the southwest Valley, ease congestion on arterial streets in the southwest Valley and provide a direct link between I-10 to the south and I-10 to the west. The roadway would consist of a divided 8-lane roadway (6 general-purpose lanes and 2 high-occupancy vehicle lanes) with grade-separated interchanges.

The South Mountain Freeway Draft EIS included a qualitative evaluation for PM₁₀. This analysis was conducted for NEPA purposes for the development of the DEIS (a formal draft conformity determination is not required until the FEIS). In March 2006, EPA and FHWA issued a joint guidance document on performing qualitative hotspot analyses in PM_{2.5} and PM₁₀ nonattainment and maintenance areas. Projects that are of "air quality concern" as defined by 40 C.F.R. § 93.123(b)(1) require a hot-spot analysis. The proposed action is such a project. In December 2010, EPA established transportation conformity guidance for performing quantitative PM_{2.5} and PM₁₀ hot-spot analyses for transportation projects and established a 2-year grace period. EPA conformity guidance continues to allow qualitative PM₁₀ hot-spot conformity analyses for analyses that were started before or during the grace period and if the final environmental document for the project is issued no more than 3 years after issuance of the draft environmental document [40 C.F.R. § 93.111(c)]. A PM₁₀ qualitative analysis was performed for this project because the initial air quality technical analysis report was produced in October of 2005. Although the qualitative hotspot analysis would be sufficient under the conformity grace period guidance, the Arizona Department of Transportation (ADOT) plans to update the qualitative analysis to a quantitative analysis for the FEIS to ensure that a state-of-the-art analysis is completed for the proposed project.

Process to Determine Project of Air Quality Concern

Determining whether a project is of air quality concern and requires a PM₁₀ quantitative hot-spot analysis is based on the ADOT Checklist for Project Level Conformity – Particulate Matter Nonattainment Area Screening Process. The following sections address the multiple criteria for determining the need for quantification. These criteria are consistent with those listed in the conformity regulations (40 CFR 93.123(a)).

November 1, 2013

New Highway Capacity Expansion

1. Are the design year total Build condition traffic volumes $\geq 125,000$ annual average daily traffic (AADT) and truck volumes $\geq 10,000$ heavy-trucks per day (8%) in the project vicinity?
- YES – Projected 2035 AADT ranges from 117,000 to 190,000 and projected heavy-trucks range from 3,800 to 17,000. (MAG 9/20/2013)
2. Does the project cause $\geq 6,250$ and ≥ 500 increases in AADT and truck volumes, respectively between the Build and No-Build conditions?
- YES – Because this is a new facility, projected increases between the Build and No-Build AADT range from 117,000 to 190,000 and 3,800 to 17,000 additional trucks. (MAG 9/20/2013)

If yes to either of the above questions, it is potentially a project of air quality concern (POAQC) and may require interagency consultation; if no on both, it is not.

Other Considerations:

1. Does the project affect intersections that are of Level-of-Service (LOS) D, E, or F with a significant number of diesel vehicles?
- YES
2. Does the project affect locations, areas or categories of sites that are identified in the PM₁₀ or PM_{2.5} applicable implementation plan or implementation plan submissions, as appropriate, as sites of violation or potential violation?
- YES – PM₁₀ Not applicable – PM_{2.5}
3. Is the project considered significant or environmentally controversial with respect to future impact on localized pollutant concentrations (e.g., evaluated using environmental impact statement (EIS) or environmental assessment (EA)? (www.epa.gov/compliance/basics/nepa.html)
- YES – The FHWA considers the potential impact on the project area to be controversial and to generate a great deal of public interest. The project currently has a completed Draft EIS (DEIS).
4. Is the project in a conforming plan and/or TIP?
- YES

Completing a Quantitative Particulate Matter Hot-Spot Analysis

November 1, 2013

(EPA Office of Transportation and Air Quality EPA-420-F-10-052, December 2010)

1. Determine the need for analysis – is this a project of local air quality concern?
- YES – Both ADOT and the Arizona Department of Environmental Quality (ADEQ) consider this project a POAQC.
2. Determine the approach, models, and data.
- a. Define the project area (area substantially affected by the project, 58 FR 62212) and emission sources.
- The project area encompasses more than 156 square miles. The project area includes the alternative alignments:
- The north-south alternative alignments area is bordered approximately by McDowell Road to the north, Elliot Road to the south, 51st Avenue to the east, and 107th Avenue to the west. The three highest volume interchanges along the Preferred Alternative will be modeled.
 - The east-west alternative alignment area is bordered approximately by South Mountain Park to the north, the Gila River Indian Community to the south, I-10 to the east, and 51st Avenue to the west.
- b. Determine general approach for modeling the preferred alternative (the W59/E1 Alternatives) and analysis year(s) – year(s) of peak emissions during the time frame of the transportation plan (69 FR 40056).

Emission rates in 2015, 2025 and 2035 will be estimated using EPA’s MOVES2010b program. These analysis years are included in the most recent update to the Maricopa Association of Governments (MAG) regional conformity analysis. Under the Build Alternative emission rates will be developed for the three highest volume interchanges. Each location will be modeled for morning (AM) peak, Midday hours, afternoon (PM) peak, and overnight. PM₁₀ emissions will be modeled incorporating operating conditions included in EPA’s *Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM_{2.5} and PM₁₀ Nonattainment and Maintenance Areas*, publication number EPA-420-B-10-040, December 2010. Based on the most recent MAG Conformity Analysis, the peak year of emissions will be determined and used to quantify PM₁₀ emissions associated with the project.

November 1, 2013

Following the development of peak year emission rates, the three worst-case interchanges and locations expected to have the highest concentrations under the Build Alternative will be selected in consultation with FHWA for detailed dispersion modeling with CAL3QHCR. Traffic projections by link will be used the analysis. CAL3QHCR dispersion modeling will incorporate a 5 year meteorological data set and other guidelines suggested by EPA guidance for quantitative PM₁₀ analyses.

As noted in EPA's "Transportation Conformity Guidance for Quantitative Hot-Spot Analyses in PM_{2.5} and PM₁₀ Nonattainment and Maintenance Areas" (December 2010), to avoid unnecessary work, EPA recommends modeling the build scenario (including background concentrations) first. In those instances if the design values under the build scenario are less than or equal to the relevant PM₁₀ NAAQS, then the project conforms and no additional modeling is required.

In the event that the design value for the build scenario exceeds the PM₁₀ NAAQS, the no-build scenario (without the South Mountain project) will be modeled. Under that scenario (and following EPA guidance), if the design values for the build scenario are less than or equal to the design values for the no-build scenario, then the project meets the conformity rule's hot-spot requirements.

In either instance if the project fails to meet conformity requirements, mitigation and/or control measures will be considered and additional modeling will be completed to ensure that the build scenario is less than or equal to the PM₁₀ NAAQS or the no-build scenario, as applicable.

Vehicle PM₁₀ exhaust emissions are expected to decrease substantially over time; however, brake and tire wear, and re-entrained road dust emissions are not expected to decrease. Re-entrained road dust will be incorporated into model results using emission rates provided by MAG in its most recent Conformity Analysis.

Roadway configurations will be based on available information, comparable freeway designs such as the San Tan Freeway, and will be consistent among the alternatives.

- c. Determine National Ambient Air Quality Standards (NAAQS) and Particulate Matter types to be evaluated.

The evaluation will be performed for PM₁₀ with the applicable PM₁₀ 24-Hour standard (150 µg/m³).

November 1, 2013

- d. Select emissions and dispersion models and methods to be used.

The PM₁₀ emission factor model to be used in this analysis is the EPA model MOVES2010b (revised) released on October 30, 2012. Re-entrained road dust will be incorporated into model results using emission rates provided by MAG. PM₁₀ background concentrations will be determined in consultation with MAG, ADOT and FHWA and included with model results. The analysis of PM₁₀ impacts will follow the guidelines established by the EPA in *Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM_{2.5} and PM₁₀ Nonattainment and Maintenance Areas*, publication number EPA-420-B-10-040, December 2010.

- e. Obtain project-specific data (e.g., fleet mix, peak-hour volumes and average speed).

New socioeconomic subarea projections based on the 2010 U.S. Census and Arizona Department of Administration (ADOA) county-level projections have been approved by the MAG Regional Council. Based on these new projections, revised traffic data were provided by MAG following completion of the updated traffic projection models; new projections were also provided for truck traffic.

Fleet mix, vehicle hours travelled (VHT), travel speeds by link and hour, Inspection/Maintenance (I/M) Programs, fuel formulation, fuel supply, age distribution, and other MOVES inputs will be based on MAG data for years 2015, 2025 and 2035 (MAG personal communication from Taejoo Shin 10-17-13).

Meteorological inputs to MOVES will be based on data from the Phoenix Sky Harbor Airport (surface) and Tucson International Airport (upper air) and be consistent with MAG inputs to MOVES.

- 3. Estimate on-road motor vehicle emissions using MOVES.

Using data discussed in Step 2, MOVES PM₁₀ emission factors will be calculated for the various roadway variables, using MOVES at the Project scale, and used for input to CAL3QHCR.

- 4. Estimate emissions from road dust, construction, and additional sources.
 - a. Estimate road dust emissions using AP-42 Paved Roads (13.2.1, 2011)

Re-entrained road dust will be estimated using emission rates provided by MAG. Fugitive dust PM₁₀ emission factors for paved roads were calculated using the AP-42 equation and the MAG

November 1, 2013

region approved silt loading values and other MAG-approved input parameters.

- b. Do emissions from other sources need to be considered?

NO - This was agreed to during interagency consultation. Construction dust does not need to be modeled, and there are no major freight terminals or other facilities that need to be included in the model.

- 5. Select air quality dispersion model, data inputs, and receptors.

- a. Obtain and input required site data (e.g., meteorological).

Five years of surface meteorological data (2008 – 2012) from the Phoenix Sky Harbor Airport and five years of upper air data (2008 – 2012) from the Tucson International Airport will be provided by ADOT and used with CAL3QHCR.

- b. Input MOVES and AP-42 outputs (emission factors).

Emission factors from MOVES and AP-42 re-entrained road dust emissions will be incorporated into CAL3QHCR model inputs.

- c. Determine number and location of receptors, roadway links, and signal timing.

Receptors will be selected to estimate maximum impacts associated with the roadway and will follow EPA guidance recommendations for receptor placement in CAL3QHCR; receptor height will be set to 1.8 meters. Wind distribution patterns will be reviewed to assist in the selection of receptor locations impacted during stable atmospheric conditions; additional receptors will be located downwind of the modeled roadway. Receptor placement will be based on guidance in EPA-420-B-10-040, Section 7.6.2.

Roadway links will be defined by common characteristics; signal times will be used for queue links and will be based on applicable guidelines.

- d. Run air quality dispersion model and obtain concentration results.

CAL3QHCR will be run for each quarter and year of meteorological data for the build, no-build and alternative locations selected for detailed dispersion analysis. Model results will be used to estimate maximum 24-hour PM₁₀ concentrations.

- 6. Determine background concentration using existing monitors in the nonattainment or maintenance area representative of the project area.

November 1, 2013

Ambient monitoring data will be evaluated and selected carefully to determine appropriate background concentrations for the project area. Although the South Mountain project area includes monitoring stations with some of the highest PM₁₀ concentrations in the valley (West 43rd Avenue Site), these concentrations are directly related to industrial and resource mining activities near the monitoring stations and are not representative of the ambient PM₁₀ concentrations for the project area. To obtain representative background concentrations, data from a monitoring station in the region that is not impacted by local sources should be used. Data from all monitoring stations in the region will be reviewed to determine the most appropriate value through interagency consultation. The MAG 2012 Five Percent Plan (Plan) demonstrates attainment of the 24-hour PM₁₀ standard for three areas, including portions of the project area. The background values used in the Plan were 14.9 µg/m³ for wind speeds less than or equal to 12 miles per hour (mph) (5.4 meters per second [m/s]) and 21.9 µg/m³ for wind speeds greater than 12 mph (5.4 m/s). These values were based on data collected at a remote location approximately 30 miles west of the boundary of the project area.

At this time, a background concentration has not been determined; the selection of a background concentration will require coordination and consultation with ADOT, FHWA, and ADEQ. If EPA takes action on the 5% plan before the release of the FEIS, the MAG background value will be used. This approach was agreed to under interagency consultation.

- 7. Calculate design values and determine conformity.

- a. Add step 5 results to background concentrations to obtain values for the Build scenario.

The 6th highest 24-hour concentration obtained over the 5 years of data for each receptor will be identified. Of these, the highest will be identified. This value will be added to the background concentration and rounded to the nearest 10µg/m³; this is the highest design value in the Build scenario.

- b. Do the design values allow the project to conform?

The design values will be compared with the 24-hour NAAQS. If the highest build design value is less than or equal to the NAAQS, the project is in conformity. If the build design value is over the NAAQS, the No-build scenario will also be evaluated and compared to the build scenario.

- 8. Consider mitigation or control measures if the design values are above the NAAQS.

November 1, 2013

Ambient monitoring data will be evaluated and selected carefully to determine appropriate background concentrations for the project area. Although the South Mountain project area includes monitoring stations with some of the highest PM₁₀ concentrations in the valley (West 43rd Avenue Site), these concentrations are directly related to industrial and resource mining activities near the monitoring stations and are not representative of the ambient PM₁₀ concentrations for the project area. To obtain representative background concentrations, data from a monitoring station in the region that is not impacted by local sources should be used. Data from all monitoring stations in the region will be reviewed to determine the most appropriate value through interagency consultation. The MAG 2012 Five Percent Plan (Plan) demonstrates attainment of the 24-hour PM₁₀ standard for three areas, including portions of the project area. The background values used in the Plan were 14.9 µg/m³ for wind speeds less than or equal to 12 miles per hour (mph) (5.4 meters per second [m/s]) and 21.9 µg/m³ for wind speeds greater than 12 mph (5.4 m/s). These values were based on data collected at a remote location approximately 30 miles west of the boundary of the project area.

At this time, a background concentration has not been determined; the selection of a background concentration will require coordination and consultation with ADOT, FHWA, and ADEQ. If EPA takes action on the 5% plan before the release of the FEIS, the MAG background value will be used. This approach was agreed to under interagency consultation.

7. Calculate design values and determine conformity.

- a. Add step 5 results to background concentrations to obtain values for the Build scenario.

The 6th highest 24-hour concentration obtained over the 5 years of data for each receptor will be identified. Of these, the highest will be identified. This value will be added to the background concentration and rounded to the nearest 10µg/m³; this is the highest design value in the Build scenario.

- b. Do the design values allow the project to conform?

The design values will be compared with the 24-hour NAAQS. If the highest build design value is less than or equal to the NAAQS, the project is in conformity. If the build design value is over the NAAQS, the No-build scenario will also be evaluated and compared to the build scenario.

8. Consider mitigation or control measures if the design values are above the NAAQS.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

December 4, 2013

Rebecca Yedlin
Federal Highway Administration, Arizona Division
4000 North Central Avenue, Suite 1500
Phoenix, Arizona 85012-3500

Subject: EPA Comments on the PM10 Hot Spot Modeling Protocol for the South Mountain Freeway (Loop 202), I-10 (Papago Freeway) to I-10 (Maricopa Freeway), TRACS No. 202L MA 054 H5764 01L, Federal Project No. NH-202-D(ADY)

Dear Ms. Yedlin:

The U.S. Environmental Protection Agency has reviewed the PM10 Hot Spot Modeling Protocol for the South Mountain Freeway, submitted to our agency on November 1, 2013. The submittal of the modeling protocol for review, and our comments on this document provided below, represent the first interagency coordination between our agencies to partially address the bases for EPA's adverse rating and recommendations provided in our formal comment letter on the DEIS prepared for the South Mountain Freeway (July 23, 2013). The comments provided below provide recommendations for the PM10 Hot Spot Modeling Protocol only, and we note that there are remaining, substantive issues as outlined in the DEIS comment letter that we would like to discuss with FHWA and ADOT once a strategy for addressing the remaining issues has been prepared.

Overall Comment

Based on EPA's review of the South Mountain PM10 hot-spot protocol, we have concerns that the protocol and many of the criteria referenced in the protocol are not consistent with the transportation conformity rule. The document contains many references to decisions made through interagency consultation; however, EPA was not included in this consultation. EPA must also be consulted for evaluating and choosing a model and associated methods and assumptions to be used in hot-spot analysis under 40 CFR 93.105(c)(1)(i). By including EPA earlier, concerns about the "screening process" and the modeling proposed for projects can be resolved earlier in the project timeline. See Section 2.3 of our quantitative hot-spot guidance for more information on interagency consultation requirements for these analyses.

ADOT Checklist for Project Level Conformity

Page 1: The last paragraph mentions the "ADOT Checklist for Project Level Conformity – Particulate Matter Nonattainment Area Screening Process."

Comment: Please provide a copy of this checklist so that we can determine if the checklist's decision criteria are consistent with EPA's conformity rule, preamble and our quantitative hot-spot guidance. Based on our review of the South Mountain PM10 hot-spot protocol, we have concerns that the checklist may not be consistent with the conformity rule. For example, the title of the checklist mentions PM nonattainment areas, but hot-spot analyses also apply in PM maintenance areas.

Determining Whether the Project Needs an Analysis

Page 2: The protocol indicates two questions to consider in determining whether the project must have a hot-spot analysis:

1. Are the build volumes $\geq 125,000$ AADT and truck volumes $\geq 10,000$? and
2. Does the project cause an increase in AADT $\geq 6,250$, and an increase in truck volumes ≥ 500 trucks?
The protocol states that if the answer is yes to these questions, it is potentially a project of air quality concern, and if the answer is no to both, it is not.

Comment: While EPA agrees this project should have a hot-spot analysis, there are no specific AADT or truck volume thresholds that alone determine whether or not a project must have a hot-spot analysis. Are these decision criteria included in the ADOT checklist? The questions listed under “Other Considerations” are also important in making this decision, even if the answer is no to these first two questions. For example, under “Other Considerations,” the protocol asks if the project affects locations identified in the SIP. If the answer is yes, then a hot-spot analysis is required based on the regulation at 40 CFR 93.123(b)(1)(v), regardless of the traffic volumes on the project.

While the decision criteria listed in questions #1 and #2 are levels found in the conformity rule preamble and Appendix B of EPA’s quantitative PM hot-spot guidance¹, the levels are only intended as an example rather than a specific threshold. Regular interagency consultation, including EPA, FHWA, ADOT, ADEQ and MAG should be used to determine if a project is of air quality concern and requires a PM hot-spot analysis.

Other Considerations for Determining Whether the Project Needs an Analysis

Page 2: The protocol states, “Other Considerations: 1. Does the project affect intersections that are of Level-of-Service (LOS) D, E, or F with a significant number of diesel vehicles? Yes”

Comment: It is unclear to EPA why the answer to this question is yes, as this is a freeway project. The modeling protocol does not address intersections, and it would need to if this answer is yes. See similar comments below regarding “Determining the Project to be Modeled.”

Page 2: The protocol states, “2. Does the project affect locations, areas or categories of sites that are identified in the ...[SIP] as sites of violation or potential violation? Yes – PM10”

Comment: EPA does not agree that there are specific locations, areas or categories of sites that are identified in the PM10 SIP as sites of violation that should be considered as potential hot-spots. Therefore the answer to this question should be no. To clarify, this criterion isn’t automatically determined to be a yes if the SIP shows there is air quality worse than the NAAQS in the entire nonattainment area.

Defining the Project Area

Page 3, 2a: “The project area encompasses more than 156 square miles. The project area includes the alternative alignments.”

Page 4, 2b: “Roadway configurations will be based on available information, comparable freeway designs such as the San Tan Freeway, and will be consistent among the alternatives.”

Comment : The protocol and hot-spot analysis need to be more specific about what the project area is. It is unclear how the project area will encompass more than 156 square miles. Since the protocol states that only the Preferred Alternative will be modeled, why does the protocol mention that roadway configurations for the other alternatives will be consistent and included?

¹ The complete name of this guidance is “Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas,” EPA-420-B-13-053, November 2013, found on the web at: <http://www.epa.gov/otaq/stateresources/transconf/projectlevel-hotspot.htm>.

Section 3.3.2 of EPA’s quantitative PM hot-spot guidance states, “...it is necessary to define the project, determine where it is to be located, and ascertain what other emission sources are located in the project area.” It is reasonable to model one alternative, but an analysis for the preferred alternative would not serve as the analysis for any other alternative alignment. Therefore, if an alternative alignment other than the preferred is chosen, another analysis would need to be conducted.

Defining the Project to be Modeled

Page 3, 2a: “The three highest volume interchanges along the Preferred Alternative will be modeled.”

Page 4, 2b: “... the three worst-case interchanges and locations expected to have the highest concentrations under the Build Alternative will be selected in consultation with FHWA for detailed dispersion modeling with CAL3QHCR.”

Comment: The protocol and hot-spot analysis need to be more specific about what will be modeled and EPA requests to also be consulted on the selection of the three worst-case interchanges, consistent with the conformity rule’s consultation requirements at 40 CFR 93.105(c)(1)(i).

The protocol and/or the analysis should refer to Section 3.3.2 of EPA’s quantitative PM hot-spot guidance to validate the approach of modeling the three highest volume interchanges, as this section states: “For large projects, it may be necessary to analyze multiple locations that are expected to have the highest air quality concentrations and, consequently, the most likely new or worsened PM NAAQS violations. If conformity is demonstrated at such locations, then it can be assumed that conformity is met in the entire project area.”

Please clarify how the effects of the project on nearby links would be considered in the modeling, if just the links for the worst interchanges are modeled. EPA’s quantitative PM hot-spot guidance states, “The air quality modeling for nearby sources that would be affected by the project must include any reasonable expected changes in operation of the nearby source between the build and no-build scenarios when both scenarios are necessary to demonstrate conformity.”

Analysis Years

Page 3, 2b: The protocol says “emission rates in 2015, 2025, and 2035 will be estimated using EPA’s MOVES2010b program.” It also says “Based on the most recent MAG Conformity Analysis, the peak year of emissions will be determined and used to quantify PM10 emissions associated with the project.”

Comment: It is not clear from the protocol whether all three of the years mentioned will be analyzed, or if only one of them will be chosen. There is no explanation in the protocol of why these three years are the *only* ones being considered as the year or years of peak emissions. EPA’s conformity regulations and hot-spot guidance do not indicate that the year of peak emissions could be chosen based on the area’s regional conformity analysis.

The protocol needs to be clear about what year or years are being analyzed, as well as why the chosen analysis year or years are expected to be years in which peak emissions will occur. Section 2.8 of EPA’s quantitative PM hot-spot guidance states: “Areas should analyze the year(s) within the transportation plan... during which peak emissions from the project are expected; and a new NAAQS violation or worsening of an existing violation would most likely occur due to the cumulative impacts of the project and background concentration in the project area.” Section 3.10 states that the documentation of the analysis should include “a description of the analysis year(s) examined and the factors considered in determining the year(s) of peak emissions.”

The protocol does not mention when the project will be open to traffic. Will the project be opened in 2015, or would this be a construction year? The next year mentioned by the protocol is 2025. However, if the project is opened to traffic several years before 2025, then 2025 may not be the year of peak emissions. The peak may occur before 2025 or may occur during a year of construction. Please provide more rationale on what year the peak emissions could be occurring and consult with EPA on that determination.

CAL3QHCR Version

Page 4, 2b: "... the three worst-case interchanges and locations expected to have the highest concentrations under the Build Alternative will be selected in consultation with FHWA for detailed dispersion modeling with CAL3QHCR."

Comment: What version of CAL3QHCR will be used? Please see EPA's website at http://www.epa.gov/ttn/scram/dispersion_prefrec.htm#cal3qhc for the currently approved version of the model.

Background Concentrations

Page 5, 2d: "PM10 background concentrations will be determined in consultation with MAG, ADOT, and FHWA..."

Comment 1: Background concentrations must be chosen through the process established by the area's interagency consultation procedures (40 CFR 93.105(c)(1)(i)). EPA must also be consulted on the selection of background concentrations for this project under 40 CFR 93.105(c)(1)(i). Based on our review, we have concerns regarding the protocol's discussion about background concentrations. Our overall recommendation is that a nearby monitor be used to determine a representative background concentration for hot spot monitoring.

In Section 8.3.1 of the guidance, EPA discusses factors for "Using a Single Monitor" in a PM hot-spot analysis, e.g., "Background concentrations data should be as representative as possible for the project area examined by the PM hot-spot analysis. In most cases, the simplest approach will be to use data from the monitor closest to and upwind of the project area." EPA's guidance further discusses considerations for choosing a monitor on which to base background concentrations, including whether there are similar characteristics between the monitor location and the project area (the density and mix of emission sources around the monitor location, how well the monitor captures the influence of nearby sources not affected by the project, land use and terrain, height of the monitor probe, purpose and geographic scale of the monitor), distance of the monitor from the project area, and wind patterns between the monitor and the project area.

Page 7, 6: "To obtain representative background concentrations, data from a monitoring station in the region that is not impacted by local sources should be used."

Comment 2: It is unclear what is meant by "local sources," but this statement is of concern. Section 8.3 of EPA's quantitative PM hot-spot guidance states, "PM hot-spot analyses should also include background concentrations from "other sources" as well as any nearby sources that are not included in modeling." The guidance defines "nearby sources" as those which would be reflected in the background concentrations unless affected by the project, in which case they would be modeled, and "other sources" as those in the project area not from the project or any nearby sources.

Page 7, 6: The protocol states that if EPA takes action on the 5% plan before the release of the FEIS, the MAG background value will be used, and that this approach was agreed to under interagency consultation.

The protocol also states that the background values used in the plan "were based on data collected at a remote location approximately 30 miles west of the boundary of the project area."

Comment 3: It is not clear that the background concentrations calculated for SIP modeling, which reflects air quality without the influence of any sources in the nonattainment area, would adequately represent background concentrations at the project area. We do not agree that data 30 miles west of the boundary of the project area would be representative of the project area and meet the criteria described in EPA's quantitative PM hot-spot guidance. We were not included in the interagency consultation on this issue, as is required. We are not aware of any data in the 5% plan that would be adequate for use for hot spot background data for this analysis.

Page 7, 6: The protocol states "The MAG 2012 Five Percent Plan (Plan) demonstrates attainment of the 24-hour PM10 standard for three areas, including portions of the project area."

Comment 4: Please explain how this is relevant to the hot-spot analysis? Are you suggesting that the modeling for the 5% plan could provide background concentrations rather than AQ monitoring data?

Construction Dust

Page 6, 4b: The protocol indicates that through interagency consultation, it has been decided that construction dust does not need to be modeled.

Comment: Please provide more background on the construction period of this project? Is it 5 years or less? EPA consultation must be included in this protocol for such decisions (40 CFR 93.105(c)(1)(i)), therefore this issue should be re-examined. If the construction period will be greater than five years, construction-related emissions must be included in the hot-spot analysis.

Meteorological Data

Comment 1: This is another part of the analysis where interagency consultation that includes ADEQ and EPA should be used to ensure that meteorological data is selected that is representative of the project location and appropriate for use with the selected air quality model. EPA requests additional information for why the Phoenix Sky Harbor Airport meteorological station is considered representative of the project area for the proposed project based on the factors described in Section 7.5.1. of EPA's quantitative hot-spot guidance. We also request additional information on how selected meteorological data is proposed to be used for emissions and air quality modeling, as described below.

Page 5, 2e: "Meteorological inputs to MOVES will be based on data from the Phoenix Sky Harbor Airport (surface) and Tucson International Airport (upper air) and be consistent with MAG inputs to MOVES."

Comment 2: For MOVES, temperature and humidity data will be needed; MOVES does not need upper air data, but this data will be needed for air quality modeling. Please confirm specifically how the temperature/humidity data for the hot-spot analysis are consistent with those used for the area's regional emissions analysis (40 CFR 93.123(c)(3)).

Page 6, 5a: The protocol states, "Five years of surface meteorological data (2008-2012) ... will be provided by ADOT and used with CAL3QHCR."

Comment 3: Please provide additional information regarding the proposed method for pre-processing the meteorological data for these years for use with CAL3QHCR. Please note that our guidance does not include a technically supported method for using AERMET pre-processed data with CAL3QHCR.

Receptor Locations

Page 6, 5c: The protocol includes the statement, “Wind distribution patterns will be reviewed to assist in the selection of receptor location impacted during stable atmospheric conditions; additional receptors will be placed downwind of the modeled roadway.”

Comment: Section 7.6 of EPA’s quantitative PM hot-spot guidance provides general guidance that should be followed when placing receptors. Receptors need to be placed around the entire project being modeled. Interagency consultation must be used, including EPA, to determine the placement of receptors.

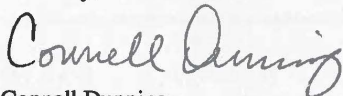
No-build Assumptions

Page 8, 7b: “If the build design value is over the NAAQS, the No-build scenario will also be evaluated and compared to the build scenario.”

Comment: The protocol does not describe the process that will be used to evaluate the no-build scenario. The build and no-build analysis should not have the same assumptions about population and trip making in the project area. New socioeconomic projections will be needed to reflect future conditions without the project being built. Please see comments in the EPA letter on the projects DEIS in regard to this point. MAG’s sub-regional socioeconomic forecasting model, UrbanSim, has been used for similar “what if scenarios” in past applications in other locations (e.g., Salt Lake City). Consultation with EPA will be necessary when defining the no-build scenario.

EPA appreciates the opportunity to review the protocol and we are available to discuss all comments and recommendations provided. If you have any questions, please contact Karina O’Connor at (775) 434-8176;oconnor.karina@epa.gov, or Clifton Meek, the lead reviewer for the DEIS, at (415) 972-3370; meek.clifton@epa.gov. Please also contact Clifton Meek to schedule an interagency meeting to discuss the entirety of the recommendations provided from EPA to FHWA following our review of the South Mountain DEIS.

Sincerely,



Connell Dunning
Transportation Team Supervisor
Environmental Review Office

United States Department of Agriculture



Natural Resources Conservation Service
U.S. Courthouse – Federal Building
230 N. First Avenue, Suite 509
Phoenix, Arizona 85003-1733
(602) 280-8801

JAN 31 2014

Audrey Unger
HDR Engineering
3200 East Camelback Road, Suite 350
Phoenix, Arizona 85018

RE: Updated NRCS-CPA-106 FPPA Farmland Conversion Impact Rating
South Mountain Freeway

Dear Audrey Unger:

The Natural Resources Conservation Service (NRCS) has general responsibility, nationwide, for implementing the Farmland Protection Policy Act (FPPA) and reviewing projects that may affect prime and unique important farmland and/or wetlands associated with agriculture. This is an update to the NRCS-CPA-106 form for the South Mountain Freeway.

After reviewing information you provided, the following is noted:

1. The proposed project is subject to the FPPA because they are funded by a Federal agency or program (United States Code 4201 and 7 Code of Federal Regulations 658).
2. Analysis of 2013 NAIP Imagery for Arizona, along with the updated prime and unique farmland designation, reveals that the proposed project area has been changed since the previous evaluation.

Because this area is prime and unique farmland, we have modified the original NRCS-CPA-106 form (Farmland Conversion Impact Rating for Corridor Type Projects), which includes alternative corridors for the South Mountain Transportation Corridor (W59, W71, W101WFR, W101CPR, W101EPR, W101WPR, W101CFR, E1, W101EFR). Please select your preferred alternative by completing and returning the enclosed NRCS-CPA-106 form at your earliest convenience.

Should you have any questions, please contact Andrew Burnes, GIS Specialist, at 602-280-8840, or via email at andrew.burnes@az.usda.gov. Thank you for the opportunity to review the proposed project.

Sincerely,



KEISHA L. TATEM
State Conservationist

Enclosure

Helping People Help the Land
An Equal Opportunity Provider and Employer



U.S. DEPARTMENT OF AGRICULTURE Natural Resources Conservation Service		NRCS-CPA-106 (Rev. 1-91)			
FARMLAND CONVERSION IMPACT RATING FOR CORRIDOR TYPE PROJECTS					
PART I (To be completed by Federal Agency)		3. Date of Land Evaluation Request 11/18/13		4. Sheet 1 of 3	
1. Name of Project South Mountain Transportation Corridor		5. Federal Agency Involved Federal Highway Administration			
2. Type of Project EIS/LDCR		6. County and State Maricopa County, Arizona			
PART II (To be completed by NRCS)		1. Date Request Received by NRCS 11/18/13		2. Person Completing Form Andrew Burnes	
3. Does the corridor contain prime, unique statewide or local important farmland? (If no, the FPPA does not apply - Do not complete additional parts of this form).		YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>		4. Acres Irrigated Average Farm Size 267,295 302	
5. Major Crop(s) alfalfa, cotton, grains	6. Farmable Land in Government Jurisdiction Acres: 267,295 % 3.2		7. Amount of Farmland As Defined in FPPA Acres: 190,182 % 3.2		
8. Name Of Land Evaluation System Used N/A	9. Name of Local Site Assessment System N/A		10. Date Land Evaluation Returned by NRCS		
PART III (To be completed by Federal Agency)		Alternative Corridor For Segment - Western Section			
		W59	W71	W101WFR	W101CPR
A. Total Acres To Be Converted Directly		588	501	779	746
B. Total Acres To Be Converted Indirectly, Or To Receive Services					
C. Total Acres In Corridor		588	501	779	746
PART IV (To be completed by NRCS) Land Evaluation Information					
A. Total Acres Prime And Unique Farmland		588	501	779	746
B. Total Acres Statewide And Local Important Farmland					
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted					
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value		24	25	25	23
PART V (To be completed by NRCS) Land Evaluation Information Criterion Relative value of Farmland to Be Serviced or Converted (Scale of 0 - 100 Points)		85	87	87	81
PART VI (To be completed by Federal Agency) Corridor Assessment Criteria (These criteria are explained in 7 CFR 658.5(c))		Maximum Points			
1. Area in Nonurban Use	15	10	9	10	9
2. Perimeter in Nonurban Use	10	7	7	7	6
3. Percent Of Corridor Being Farmed	20	12	12	12	11
4. Protection Provided By State And Local Government	20	0	0	0	0
5. Size of Present Farm Unit Compared To Average	10	5	5	5	5
6. Creation Of Nonfarmable Farmland	25	10	10	10	10
7. Availability Of Farm Support Services	5	3	3	3	3
8. On-Farm Investments	20	15	15	15	15
9. Effects Of Conversion On Farm Support Services	25	8	8	8	8
10. Compatibility With Existing Agricultural Use	10	4	4	4	4
TOTAL CORRIDOR ASSESSMENT POINTS		160	74	73	74
PART VII (To be completed by Federal Agency)					
Relative Value Of Farmland (From Part V)		100	85	87	87
Total Corridor Assessment (From Part VI above or a local site assessment)		160	74	73	74
TOTAL POINTS (Total of above 2 lines)		260	159	160	161
1. Corridor Selected:	2. Total Acres of Farmlands to be Converted by Project:	3. Date Of Selection:		4. Was A Local Site Assessment Used? YES <input type="checkbox"/> NO <input type="checkbox"/>	
5. Reason For Selection:					
Signature of Person Completing this Part: DATE					
NOTE: Complete a form for each segment with more than one Alternate Corridor					

U.S. DEPARTMENT OF AGRICULTURE Natural Resources Conservation Service		NRCS-CPA-106 (Rev. 1-91)			
FARMLAND CONVERSION IMPACT RATING FOR CORRIDOR TYPE PROJECTS					
PART I (To be completed by Federal Agency)		3. Date of Land Evaluation Request 11/18/13		4. Sheet 2 of 3	
1. Name of Project South Mountain Transportation Corridor		5. Federal Agency Involved Federal Highway Administration			
2. Type of Project EIS/LDCR		6. County and State Maricopa County, Arizona			
PART II (To be completed by NRCS)		1. Date Request Received by NRCS 11/18/13		2. Person Completing Form Andrew Burnes	
3. Does the corridor contain prime, unique statewide or local important farmland? (If no, the FPPA does not apply - Do not complete additional parts of this form).		YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>		4. Acres Irrigated Average Farm Size 267,295 302	
5. Major Crop(s) alfalfa, cotton, grains	6. Farmable Land in Government Jurisdiction Acres: 267,295 % 3.2		7. Amount of Farmland As Defined in FPPA Acres: 190,182 % 3.2		
8. Name Of Land Evaluation System Used N/A	9. Name of Local Site Assessment System N/A		10. Date Land Evaluation Returned by NRCS		
PART III (To be completed by Federal Agency)		Alternative Corridor For Segment - Western Section			
		W101EPR	W101WPR		W101CFR
A. Total Acres To Be Converted Directly		744	788		737
B. Total Acres To Be Converted Indirectly, Or To Receive Services					
C. Total Acres In Corridor		744	788		737
PART IV (To be completed by NRCS) Land Evaluation Information					
A. Total Acres Prime And Unique Farmland		744	788		737
B. Total Acres Statewide And Local Important Farmland					
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted					
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value		21	23		25
PART V (To be completed by NRCS) Land Evaluation Information Criterion Relative value of Farmland to Be Serviced or Converted (Scale of 0 - 100 Points)		88	85		85
PART VI (To be completed by Federal Agency) Corridor Assessment Criteria (These criteria are explained in 7 CFR 658.5(c))		Maximum Points			
1. Area in Nonurban Use	15	9	10		9
2. Perimeter in Nonurban Use	10	6	7		7
3. Percent Of Corridor Being Farmed	20	11	12		12
4. Protection Provided By State And Local Government	20	0	0		0
5. Size of Present Farm Unit Compared To Average	10	5	5		5
6. Creation Of Nonfarmable Farmland	25	10	10		10
7. Availability Of Farm Support Services	5	3	3		3
8. On-Farm Investments	20	15	15		15
9. Effects Of Conversion On Farm Support Services	25	8	8		8
10. Compatibility With Existing Agricultural Use	10	4	4		4
TOTAL CORRIDOR ASSESSMENT POINTS		160	71	74	73
PART VII (To be completed by Federal Agency)					
Relative Value Of Farmland (From Part V)		100	88	85	85
Total Corridor Assessment (From Part VI above or a local site assessment)		160	71	74	73
TOTAL POINTS (Total of above 2 lines)		260	159	159	158
1. Corridor Selected:	2. Total Acres of Farmlands to be Converted by Project:	3. Date Of Selection:		4. Was A Local Site Assessment Used? YES <input type="checkbox"/> NO <input type="checkbox"/>	
5. Reason For Selection:					
Signature of Person Completing this Part: DATE					
NOTE: Complete a form for each segment with more than one Alternate Corridor					

U.S. DEPARTMENT OF AGRICULTURE Natural Resources Conservation Service		NRCS-CPA-106 (Rev. 1-91)	
FARMLAND CONVERSION IMPACT RATING FOR CORRIDOR TYPE PROJECTS			
PART I (To be completed by Federal Agency)		3. Date of Land Evaluation Request	
1. Name of Project South Mountain Transportation Corridor		4. Sheet 3 of 3	
2. Type of Project EIS		5. Federal Agency Involved Federal Highway Administration	
6. County and State Maricopa County, Arizona			
PART II (To be completed by NRCS)		1. Date Request Received by NRCS 11/18/13	
2. Person Completing Form Andrew Burnes			
3. Does the corridor contain prime, unique statewide or local important farmland? (If no, the FPPA does not apply - Do not complete additional parts of this form).		4. Acres Irrigated Average Farm Size 267,295 302	
YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>			
5. Major Crop(s) alfalfa, cotton, grains		6. Farmable Land in Government Jurisdiction Acres: 267,295 % 3.2	
7. Amount of Farmland As Defined in FPPA Acres: 190,182 % 3.2			
8. Name Of Land Evaluation System Used N/A		9. Name of Local Site Assessment System N/A	
10. Date Land Evaluation Returned by NRCS			
PART III (To be completed by Federal Agency)		Alternative Corridor For Western & Eastern Sections	
		W101EFR E1	
A. Total Acres To Be Converted Directly		735 135	
B. Total Acres To Be Converted Indirectly, Or To Receive Services			
C. Total Acres In Corridor		735 135	
PART IV (To be completed by NRCS) Land Evaluation Information			
A. Total Acres Prime And Unique Farmland		735 135	
B. Total Acres Statewide And Local Important Farmland			
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted			
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value		22 22	
PART V (To be completed by NRCS) Land Evaluation Information Criterion Relative value of Farmland to Be Serviced or Converted (Scale of 0 - 100 Points)		88 88	
PART VI (To be completed by Federal Agency) Corridor Assessment Criteria (These criteria are explained in 7 CFR 658.5(c))		Maximum Points	
1. Area in Nonurban Use		15 9 6	
2. Perimeter in Nonurban Use		10 6 5	
3. Percent Of Corridor Being Farmed		20 12 0	
4. Protection Provided By State And Local Government		20 0 0	
5. Size of Present Farm Unit Compared To Average		10 5 0	
6. Creation Of Nonfarmable Farmland		25 10 0	
7. Availability Of Farm Support Services		5 3 0	
8. On-Farm Investments		20 15 0	
9. Effects Of Conversion On Farm Support Services		25 8 0	
10. Compatibility With Existing Agricultural Use		10 4 4	
TOTAL CORRIDOR ASSESSMENT POINTS		160 72 15	
PART VII (To be completed by Federal Agency)			
Relative Value Of Farmland (From Part V)		100 88 88	
Total Corridor Assessment (From Part VI above or a local site assessment)		160 72 15	
TOTAL POINTS (Total of above 2 lines)		260 160 103	
1. Corridor Selected:		2. Total Acres of Farmlands to be Converted by Project:	
3. Date Of Selection:		4. Was A Local Site Assessment Used?	
		YES <input type="checkbox"/> NO <input type="checkbox"/>	
5. Reason For Selection:			
Signature of Person Completing this Part: DATE			
NOTE: Complete a form for each segment with more than one Alternate Corridor			

NRCS-CPA-106 (Reverse)

CORRIDOR - TYPE SITE ASSESSMENT CRITERIA

The following criteria are to be used for projects that have a linear or corridor - type site configuration connecting two distant points, and crossing several different tracts of land. These include utility lines, highways, railroads, stream improvements, and flood control systems. Federal agencies are to assess the suitability of each corridor - type site or design alternative for protection as farmland along with the land evaluation information.

(1) How much land is in nonurban use within a radius of 1.0 mile from where the project is intended?

More than 90 percent - 15 points
90 to 20 percent - 14 to 1 point(s)
Less than 20 percent - 0 points

(2) How much of the perimeter of the site borders on land in nonurban use?

More than 90 percent - 10 points
90 to 20 percent - 9 to 1 point(s)
Less than 20 percent - 0 points

(3) How much of the site has been farmed (managed for a scheduled harvest or timber activity) more than five of the last 10 years?

More than 90 percent - 20 points
90 to 20 percent - 19 to 1 point(s)
Less than 20 percent - 0 points

(4) Is the site subject to state or unit of local government policies or programs to protect farmland or covered by private programs to protect farmland?

Site is protected - 20 points
Site is not protected - 0 points

(5) Is the farm unit(s) containing the site (before the project) as large as the average - size farming unit in the County ? (Average farm sizes in each county are available from the NRCS field offices in each state. Data are from the latest available Census of Agriculture, Acreage or Farm Units in Operation with \$1,000 or more in sales.)

As large or larger - 10 points
Below average - deduct 1 point for each 5 percent below the average, down to 0 points if 50 percent or more below average - 9 to 0 points

(6) If the site is chosen for the project, how much of the remaining land on the farm will become non-farmable because of interference with land patterns?

Acreage equal to more than 25 percent of acres directly converted by the project - 25 points
Acreage equal to between 25 and 5 percent of the acres directly converted by the project - 1 to 24 point(s)
Acreage equal to less than 5 percent of the acres directly converted by the project - 0 points

(7) Does the site have available adequate supply of farm support services and markets, i.e., farm suppliers, equipment dealers, processing and storage facilities and farmer's markets?

All required services are available - 5 points
Some required services are available - 4 to 1 point(s)
No required services are available - 0 points

(8) Does the site have substantial and well-maintained on-farm investments such as barns, other storage building, fruit trees and vines, field terraces, drainage, irrigation, waterways, or other soil and water conservation measures?

High amount of on-farm investment - 20 points
Moderate amount of on-farm investment - 19 to 1 point(s)
No on-farm investment - 0 points

(9) Would the project at this site, by converting farmland to nonagricultural use, reduce the demand for farm support services so as to jeopardize the continued existence of these support services and thus, the viability of the farms remaining in the area?

Substantial reduction in demand for support services if the site is converted - 25 points
Some reduction in demand for support services if the site is converted - 1 to 24 point(s)
No significant reduction in demand for support services if the site is converted - 0 points

(10) Is the kind and intensity of the proposed use of the site sufficiently incompatible with agriculture that it is likely to contribute to the eventual conversion of surrounding farmland to nonagricultural use?

Proposed project is incompatible to existing agricultural use of surrounding farmland - 10 points
Proposed project is tolerable to existing agricultural use of surrounding farmland - 9 to 1 point(s)
Proposed project is fully compatible with existing agricultural use of surrounding farmland - 0 points



Environmental Services

Janice K. Brewer, Governor
John S. Halikowski, Director
John H. Nichols, Deputy Director

May 13, 2014

Dr. Joyce Francis
Habitat Branch Chief
Arizona Game and Fish Department
5000 West Carefree Highway
Phoenix, Arizona 85086-5000

Subject: Transmittal of Courtesy Copy of Biological Evaluation for South Mountain Transportation Corridor; ADOT Project No. 202L MA 054 H5764 01L; Federal-aid Project No. NH-202-D(ADY)

Dear Dr. Francis:

The Federal Highway Administration (FHWA), as the lead federal agency, in conjunction with the Arizona Department of Transportation (ADOT), as the project sponsoring agency, propose to build an approximately 22-mile long freeway, on new alignment, connecting Interstate 10 (I-10) (Maricopa Freeway) south of Phoenix with I-10 (Papago Freeway) west of Phoenix, following an east-to-west alignment along Pecos Road through the western tip of the South Mountains, then north to I-10 between 57th and 63rd avenues. The project is located within the City of Phoenix and the communities of the Estrella Village, Laveen Village, and Ahwatukee Foothills Village in Maricopa County. The project would consist of an eight-lane facility (four in each direction of traffic), would span the 100-year floodplain of the Salt River with bridges, and would pass through the west end of the South Mountains including a small portion of South Mountain Park and Preserve.

The enclosed Biological Evaluation (BE) describes the proposed project and addresses the current Maricopa County list of threatened, endangered, and candidate species and the bald eagle in reference to the Bald and Golden Eagle Protection Act. The Arizona Species of Greatest Conservation Need were also assessed in Table A-1 in the appendix. The species listed below were evaluated in detail due to known occurrences and presence of suitable habitat within or near the project area:

Yuma clapper rail	<i>Rallus longirostris yumanensis</i>	Endangered
Western yellow-billed cuckoo	<i>Coccyzus americanus occidentalis</i>	Proposed Threatened
Bald eagle	<i>Haliaeetus leucocephalus</i>	Bald and Golden Eagle Protection Act
Sonoran desert tortoise	<i>Gopherus morafkai</i>	Candidate
Tucson shovel-nosed snake	<i>Chionactis occipitalis klauberi</i>	Candidate

Based on the analyses presented in the BE, FHWA has determined that the proposed project would have no effect on the Yuma clapper rail and no effect on the Western yellow-billed cuckoo. FHWA has also determined that the proposed project will not result in “take” under the Bald and Golden Eagle Protection Act. FHWA has concluded that the proposed project may impact individual Sonoran desert tortoises and individual Tucson shovel-nosed snakes, both Candidate species under the Endangered Species Act.

At this time, FHWA is transmitting the BE to the Gila River Indian Community for review and to the US Fish and Wildlife Service to request technical assistance regarding minimizing impacts to the Sonoran

desert tortoise and the Tucson shovel-nosed snake as well as review of the “no effect” determinations for the Yuma clapper rail and Western yellow-billed cuckoo and the “no take” finding for the Bald eagle.

ADOT is transmitting this copy of the BE to Arizona Game and Fish Department (AGFD) to provide information related to questions raised in the comments provided by AGFD on the Draft Environmental Impact Statement for the South Mountain Freeway. I would like to thank both Kelly Wolff-Krauter and Scott Sprague for discussing the project and general concerns as the BE was developed. ADOT is looking forward to further participation and input from AGFD personnel in the final project design process if the decision is made to move forward. Please contact me either by phone (602-292-0301) or e-mail (kgade@azdot.gov) if you have questions or concerns regarding the South Mountain Freeway project or coordination with ADOT in general. I would also be happy to provide a paper copy of the BE upon request.

Sincerely,

Kris Gade
Roadside Resources Specialist
ADOT Environmental Services
1611 W. Jackson St, MD EM04
Phoenix, AZ 85007

Enclosure

cc with enclosure (via email):
Kelly Wolff-Krauter, AGFD
Cristina Jones, AGFD
Scott Sprague, AGFD
Ray Schweinsburg, AGFD

cc (via email):
Steve Spangle, USFWS
Rebecca Yedlin, FHWA



ARIZONA DIVISION

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

May 14, 2014

In Reply Refer To:
202-D(ADY)
HOP-AZ

202-D(ADY)
202L MA 054 H5764 01L
South Mountain Transportation Corridor
USFWS File Number AESO/SE 2-21-02-I-005
Request for Technical Assistance

Mr. Steve Spangle, Field Supervisor
U.S. Fish and Wildlife Service
Arizona Ecological Services Field Office
2321 West Royal Palm Road, Suite 103
Phoenix, Arizona 85021-4951

Dear Mr. Spangle:

The Federal Highway Administration (FHWA), as the lead federal agency, in conjunction with the Arizona Department of Transportation (ADOT), as the project sponsoring agency, propose to build an approximately 22-mile long freeway, on new alignment, connecting Interstate 10 (I-10) (Maricopa Freeway) south of Phoenix with I-10 (Papago Freeway) west of Phoenix, following an east-to-west alignment along Pecos Road through the western tip of the South Mountains, then north to I-10 between 57th and 63rd avenues. The project is located within the City of Phoenix and the communities of the Estrella Village, Laveen Village, and Ahwatukee Foothills Village in Maricopa County. The project would consist of an eight-lane facility (four in each direction of traffic), would span the 100-year floodplain of the Salt River with bridges, and would pass through the west end of the South Mountains including a small portion of South Mountain Park and Preserve.


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At this time, FHWA is requesting technical assistance with minimizing impacts to the Sonoran desert tortoise and the Tucson shovel-nosed snake as well as review of the "no effect" determinations for the Yuma clapper rail and Western yellow-billed cuckoo and the "no take" finding for the Bald eagle. A response is requested by June 16, 2014; any comments will be included in the Final Environmental Impact Statement for the project. If there are any questions or concerns, please contact Rebecca Yedlin, FHWA Environmental Coordinator at (602) 382-8979 or e-mail at rebecca.yedlin@dot.gov, or Kris Gade, ADOT Roadside Resources Specialist at (602) 292-0301 or e-mail at kgade@azdot.gov. Thank you for your assistance.

Sincerely,


for
Karla S. Petty
Division Administrator

Enclosure

cc:
Mr. Gregory Mendoza, Governor, Gila River Indian Community, P.O. Box 97, Sacaton, AZ 85147
Mr. Charles Enos, Department of Environmental Quality, Gila River Indian Community, P.O. Box 97, Sacaton, AZ 85147



ARIZONA DIVISION

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

May 14, 2014

In Reply Refer To:
NH-202-D(ADY)
HOP-AZ

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

Mr. Charles Enos
Department of Water Quality
Gila River Indian Community
Post Office Box 97
Sacaton, Arizona 85147

Dear Mr. Enos:

The Federal Highway Administration (FHWA), as the lead federal agency, in conjunction with the Arizona Department of Transportation (ADOT), as the project sponsoring agency, propose to build an approximately 22-mile long freeway, on new alignment, connecting Interstate 10 (I-10) (Maricopa Freeway) south of Phoenix with I-10 (Papago Freeway) west of Phoenix, following an east-to-west alignment along Pecos Road through the western tip of the South Mountains, then north to I-10 between 57th and 63rd avenues. The project is located within the City of Phoenix and the communities of the Estrella Village, Laveen Village, and Ahwatukee Foothills Village in Maricopa County. The project would consist of an eight-lane facility (four in each direction of traffic), would span the 100-year floodplain of the Salt River with bridges, and would pass through the west end of the South Mountains including a small portion of South Mountain Park and Preserve.

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Tucson shovel-nosed snake	<i>Chionactis occipitalis klauberi</i>	Candidate

Based on the analyses presented in the BE, FHWA has determined that the proposed project would have no effect on the Yuma clapper rail and no effect on the Western yellow-billed cuckoo. FHWA has also determined that the proposed project will not result in "take" under the Bald and Golden Eagle Protection Act. FHWA has concluded that the proposed project may impact individual Sonoran desert tortoises and individual Tucson shovel-nosed snakes, both Candidate species under the Endangered Species Act.

2

FHWA is providing the BE for review by the Gila River Indian Community and respectfully requests that comments on the document be provided by June 16, 2014. The BE is also being submitted to the United Fish and Wildlife Service with a request for technical assistance with minimizing impacts to the Sonoran desert tortoise and the Tucson shovel-nosed snake as well as review of the "no effect" determinations for the Yuma clapper rail and Western yellow-billed cuckoo and the "no take" finding for the Bald eagle. Comments received on the BE will be included in the Final Environmental Impact Statement for the project. If there are any questions or concerns, please contact Rebecca Yedlin, FHWA Environmental Coordinator at (602) 382-8979 or rebecca.yedlin@dot.gov, or Kris Gade, ADOT Roadside Resources Specialist at (602) 292-0301 or kgade@azdot.gov. Thank you for your cooperation.

Sincerely,

Karla S. Petty
Division Administrator

Enclosure

cc:
Mr. Gregory Mendoza, Governor, Gila River Indian Community, P.O. Box 97, Sacaton, AZ 85147

Gregory Mendoza
Governor



JUN 2 - 2014 Stephen Roe Lewis
Lieutenant Governor

GILA RIVER INDIAN COMMUNITY
Executive Office

"A New Generation of Leadership Serving the People"

May 30, 2014

Karla S. Petty, Arizona Division Administrator, FHWA
4000 North Central Avenue
Suite 1500
Phoenix, AZ 85012-3500

Re: Request for Comment Period Extension - South Mountain Transportation Corridor Biological Evaluation (HN-202-D(ADY))

Dear Ms. Petty,

The Gila River Indian Community (the Community) has received your May 14, 2014 letter and Biological Evaluation (BE) concerning the South Mountain Transportation Corridor project (Project). You have requested that the Community provide comments on the BE by June 16, 2014. As a stakeholder with a significant interest in the Project, the Community appreciates the opportunity to review and comment on the BE, and intends to do so. In order to allow the Community to properly review and prepare adequate comments, the Community requests an extension of the comment period until August 15, 2014.

The BE is a comprehensive, voluminous (close to 100 pages) and highly technical report that addresses the Project's potential impacts to threatened and endangered species in addition to culturally significant plant and animal life, which are issues of great importance to the Community. Preparing BE comments will require technical and legal reviews of the BE by the Community's Department of Environmental Quality, Cultural Resource Management Program, and Office of General Counsel. Once prepared, comments must be approved by the Tribal Council's Natural Resources Standing Committee (NRSC), the Cultural Resources Standing Committee, and the Government and Management Resources Standing Committee and the Tribal Council itself. The Community requires an extension of the comment deadline, to August 15, 2014, in order to allow for adequate time to review the BE, prepare comments, and secure the required Standing Committees and Tribal Council approvals.

Please respond to me at your earliest convenience regarding this comment period extension request. Thank you for the opportunity to review and comment on the BE.

Sincerely,

Gregory Mendoza, Governor
Gila River Indian Community

525 West Gu u Ki • Post Office Box 97 • Sacaton, Arizona 85147 • Telephone: (520) 562-9841 • Fax Line: (520) 562-9849
web: www.gilariver.org



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June 3, 2014

In Reply Refer To:
202-D(ADY)
HOP-AZ

202-D(ADY)
202L MA 054 H5764 01L
South Mountain Transportation Corridor
Timeframe for Review of Biological Evaluation

Mr. Gregory Mendoza, Governor
Gila River Indian Community Executive Office
525 West Gu u Ki
P.O. Box 97
Sacaton, Arizona 85147

Dear Governor Mendoza:

The Federal Highway Administration (FHWA) has received the Gila River Indian Community's (the Community) request dated May 30, 2014, for a time extension to complete review of the Biological Evaluation prepared for the proposed South Mountain Transportation Corridor Project. FHWA requested comments by June 16, 2014 in the transmittal of the report. Your letter requests a review extension to August 15, 2014 in order to complete the technical and legal reviews of the document and to receive the approvals required by the Community.

We understand and appreciate the complexity of the Community's review and approval process. However, the standard time for review and comment provided to the Community and to other consulting parties is 30 days. In light of your internal process, FHWA will double the standard time period to 60 days and request to receive comments from the Community no later than July 15, 2014.

We appreciate the involvement of the Community with this project and look forward to continuing our partnership. If there are any questions or concerns, please contact Rebecca Yedlin, FHWA Environmental Coordinator, at (602) 382-8979. Please submit your comments by mail to Rebecca Yedlin, 4000 N. Central Ave., Suite 1500, Phoenix, AZ 85012; or by email to Rebecca.Yedlin@dot.gov. Thank you for your assistance.

Sincerely,

Karla S. Petty
Division Administrator

cc:

Mr. Charles Enos, Department of Environmental Quality, Gila River Indian Community, P.O. Box 97, Sacaton, AZ 85147



ARIZONA DIVISION

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

June 2, 2014

In Reply Refer To:
NH-202-D(ADY)
HOP-AZ

NH-202-D(ADY)
TRACS No. 202L MA 054 H5764 01L
South Mountain Freeway (Loop 202)
Air Quality Technical Report

Mr. Jared Blumenfeld
U.S. Environmental Protection Agency
Office of the Regional Administration
Region IX
75 Hawthorne Street
San Francisco, California 94105-3901

Dear Mr. Blumenfeld:

The Arizona Department of Transportation and the Federal Highway Administration (FHWA) have completed the updated air quality analyses for the proposed South Mountain Freeway (Loop 202), Interstate 10 (Papago Freeway) to Interstate 10 (Maricopa Freeway), for inclusion in the Final Environmental Impact Statement (FEIS). These analyses, documented in the enclosed Air Quality Technical Report, address some of the U.S. Environmental Protection Agency's major comments on the Draft Environmental Impact Statement (DEIS) dated July 23, 2013. The updated analyses are described in the following paragraphs.

The Maricopa Association of Governments adopted new socioeconomic projections in July 2013. Those revised projections were used to develop new traffic projections for the proposed freeway, which were, in turn, used to update the air quality analyses. In addition, the qualitative particulate matter (PM₁₀) hot-spot analysis performed in the DEIS was updated to a quantitative PM₁₀ analysis to ensure that a state-of-the-art analysis was completed for the proposed action. Also, the quantitative mobile source air toxics (MSATs) inventory analysis and the carbon monoxide (CO) evaluation presented in the DEIS were updated to reflect the U.S. Environmental Protection Agency's updates in modeling methodology.

Based on the PM₁₀ and CO analyses conducted for the Recommended Alternative, it has been determined that the proposed action would not cause an exceedance of the PM₁₀ or CO National Ambient Air Quality Standards. The project would comply with transportation conformity regulations at 40 Code of Federal Regulations Part 93 and with conformity provisions of Section 176(c) of the Clean Air Act.

2

The proposed action is included in the Maricopa Association of Governments *Regional Transportation Plan* for 2035, which was found to conform to the State's air quality implementation plan by FHWA on February 12, 2014. It is also included in the Fiscal Year 2014–2018 Transportation Improvement Program. The design concept and scope of the project as modeled in the hot-spot analyses are consistent with those used in the regional emissions analysis for the *Regional Transportation Plan* and Transportation Improvement Program conformity determinations.

The regional emissions modeling demonstrated that future-year MSAT emissions in the Study Area (assuming build-out of the Recommended Alternative) would be lower than the 2012 emission estimates, even with a 47 percent increase in regional vehicle miles traveled in 2035. In the Study Area, constructing the Recommended Alternative would have a marginal effect on annual emissions in 2025 (less than a 1 percent difference in total annual emissions in 2025 and in 2035 between the Recommended Alternative and No-Action Alternative). With the Recommended Alternative in 2035, modeled MSAT emissions would decrease by 57 to 93 percent, with a 47 percent increase in vehicle miles traveled in the regional area compared with 2012 conditions.

FHWA now requests that the U.S. Environmental Protection Agency review the updated Air Quality Technical Report and provide any comments. A conference call between your Office and FHWA to discuss your agency's comments on the Report is scheduled for June 17, 2014.

We appreciate the involvement of the Region IX Office with this project and look forward to continuing our partnership. If you have any questions, contact Rebecca Yedlin, FHWA Environmental Coordinator at (602) 382-8979; or by email at Rebecca.Yedlin@dot.gov.

Sincerely,


for
Karla S. Petty
Division Administrator

Enclosure

cc:
Ms. Colleen McKaughan (same as addressee)
Mr. Clifton Meek (same as addressee)
Mr. Ben Spargo, HDR Engineering, Inc., 3200 E. Camelback Rd., Suite 350, Phoenix, AZ 85018



United States Department of the Interior

U.S. 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
02EAAZ00-2013-TA-0365
02EAAZ00-2010-CPA-0056

June 10, 2014

Karla S. Petty, Division Administrator
Federal Highway Administration
Arizona Division
4000 North Central Avenue, Suite 1500
Phoenix, Arizona 85012-3500

From: Field Supervisor

Subject: South Mountain Transportation Corridor, City of Phoenix, Maricopa County, Arizona
(ADOT Project No. 202L MA 054 H5764 01L)

Thank you for your correspondence requesting technical assistance from the U.S. Fish and Wildlife Service (FWS) in accordance with section 7 of the Endangered Species Act (Act) of 1973 (16 U.S.C 1531-1544), as amended. Your correspondence was dated May 14, 2014, and was received in this office on May 20, 2014. Your letter and Biological Evaluation (BE) described the proposed South Mountain Transportation Corridor project to take place in the City of Phoenix, Maricopa County, Arizona. This technical assistance is provided based on the information given in the BE. The Federal Highway Administration (FHWA) concluded that the proposed construction would have no effect on the Yuma clapper rail (*Rallus longirostris yumanensis*), and the Western yellow-billed cuckoo (*Coccyzus americanus occidentalis*). You also concluded the proposed action may impact the Tucson shovel-nosed snake (*Chionactis occipitalis klauberi*) and Sonoran Desert tortoise (*Gopherus morafkai*), both of which are candidates for listing under the Act, and requested our technical assistance. Please note that "no effect" determinations by Federal action agencies do not require concurrence or further comments from the FWS.

The proposed project includes the construction of an eight-lane divided freeway. The freeway would run through suburban, rural-agricultural, and undeveloped land, and cross over 49 ephemeral washes and the Salt River. In the area where it crosses the Salt River, the freeway would include a pier-supported bridge that would span the 100-year floodplain. Blasting would occur through the western end of South Mountain, resulting in ground disturbance of more than one acre of land. This project has been a part of the *Maricopa Association of Governments (MAG) Freeway/Expressway Plan* since 1985 when it was placed on the state highway system by the State Transportation Board. The corridor would connect Interstate 10 (I-10) (Maricopa Freeway) which is south of Phoenix, with

Karla Petty, Division Administrator

I-10 (Papago Freeway) which is west of the city. A more complete description of the proposed action can be found in the South Mountain Freeway Draft Environmental Impact Statement (DEIS).

Given the information provided in the letter and the nature of the project, we provide the following technical assistance for the Tucson shovel-nosed snake and Sonoran desert tortoise. If plans for this project change, or if new information becomes available on the distribution or abundance of a listed species in the area, this technical assistance and the need for section 7 consultation may need to be reconsidered.

Tucson shovel-nosed snake
The proposed project site is within the range of the Tucson shovel-nosed snake. The snake is more likely to be most active in April and May. If a construction action that may harm the snake (i.e., surface disturbance such as grading) could be performed during cool and cold weather months, this timing would help to minimize effects. For revegetation, we recommend using native shrubs, grasses and forbs that have a high value to rodents (which provide burrows for the snake) as well as insect and arachnid production (which provide food for the snake). Roads are a significant source of mortality for snakes because roads retain heat that snakes use for thermoregulation; therefore, we recommend that you refer to the Arizona Department of Transportation's Wildlife Funneling document (http://www.azdot.gov/docs/default-source/planning/wildlife_funnel_fencing_summary.pdf?sfvrsn=2) where funnel fencing for reptiles is described. Wildlife crossing are planned to be integrated into the construction, and we recommend that relevant funnel fencing techniques be incorporated in the design of these crossings.

Sonoran desert tortoise
We understand that your proposed project occurs within the distribution of the Sonoran desert tortoise. The corridor area is located within suitable habitat for the tortoise; therefore it is likely that the tortoise may occur in the action area. We recommend coordination with the Arizona Game and Fish Department, and incorporation of their *Guidelines for Handling Sonoran Desert Tortoises Encountered on Development Projects* (<http://www.azgfd.gov/hgis/pdfs/Tortoisehandlingguidelines.pdf>) into the proposed project. Surveying the ROW, prior to construction, for burrows, and avoidance of those sites is suggested. Minimization measures to reduce the invasion of potential nonnative plant species are also recommended.

Eagles and Migratory Birds
We encourage you to be aware of compliance with the Bald and Golden Eagle Protection Act (Eagle Act) and also the Migratory Bird Treaty Act (MBTA) when planning and implementing your project. Due to their wide-ranging wintering and foraging behavior, both eagle species could briefly occur within your project area. For information on protections under the Eagle Act, please refer to the regulatory definition of the term "disturb" (72 FR 31132) published in the Federal Register on June 5, 2007, and FWS's National Bald Eagle Management Guidelines (72 FR 31156) <http://www.fws.gov/MississippiES/pdf/Eagle%20Guidelines.pdf>. Additional information regarding eagles is available at: <http://www.fws.gov/migratorybirds/BaldAndGoldenEagleMangaement.htm>. Also, information specific to Arizona bald eagle conservation and recommended measures can be retrieved at: <http://swbemc.org/pdf/NGTR173%20BaldEagleConservationAgreement.pdf>.

Karla Petty, Division Administrator

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Burrowing owls (*Athene cunicularia*) are another species known to occur along roadways, and are also protected under the MBTA. The Burrowing Owl Project Clearance Guidance for Landowners, a document put together by the Arizona Burrowing Owl Working Group, can be found at http://www.azgfd.gov/pdfs/w_c/owl/burrowingowclearanceprotocol.pdf. For more information regarding the MBTA and permitting process, please visit the following web site: <http://www.fws.gov/migratorybirds/mbpermits.html>.

We recommend that you evaluate the project area to determine if surveys for eagles or owls are needed. If these birds are present, we encourage you to implement the guidelines and protocols described above for both eagles and owls.


For a more in-depth report of potentially protected species in the project area we recommend a review of the Arizona Game and Fish Department's Environmental Review On-Line Tool, found at <http://www.azgfd.gov/hgis/>.

In keeping with our trust responsibilities to American Indian Tribes, by copy of this memorandum, we will notify the Ak-Chin, Gila River Indian, Pascua Yaqui, Hopi, and Salt River Pima-Maricopa Indian Communities which may be affected by this proposed action and encourage you to invite the Bureau of Indian Affairs to participate in the review of your proposed action. We also encourage you to coordinate the review of this project with the Arizona Game and Fish Department.

Thank you again for your efforts to conserve endangered species. Please refer to consultation number 02EAAZ00-2013-TA-0365 for any further correspondence on this project. If you require further assistance or if you have any questions, contact Nichole Engelmann (ext. 237) or Mike Martinez (ext. 224).

Sincerely,



 Field Supervisor
Steven L. Spangle

cc (electronic):

Ron Tipton, Bureau of Land Management, Lower Sonoran Field Office, Phoenix, AZ Regional Supervisor, Arizona Game and Fish Department, Phoenix, AZ
Branch Chief, Environmental Quality Services, Western Regional Office, Bureau of Indian Affairs, Phoenix, AZ
Manager Cultural Resources, Ak-Chin Indian Community, Maricopa, AZ
Tribal Historic Preservation Officer, Gila River Indian Community, Sacaton, AZ
Natural Resources Department, Hopi Tribe, Kykotsmobi, AZ
Land Department, Pascua Yaqui Tribe, Tucson, AZ
Cultural Resources Department, Salt River Pima-Maricopa Indian Community, Scottsdale, AZ

Karla Petty, Division Administrator

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Assistant Field Supervisor, Fish and Wildlife Service, Flagstaff, AZ
Assistant Field Supervisor, Fish and Wildlife Service, Tucson, AZ
Biologists, Fish and Wildlife Service, Flagstaff, Phoenix, Tucson, AZ
(Attn: M. Alanen, J. Servoss, G. Beatty, B. Wooldridge, K. Robertson, J. Nystedt)

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