



## APPENDIX Q MEETING NOTES

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Meeting Notes



I-10 / Barraza-Aviation Pkwy (SR 210)

Design Concept Report & Environmental Assessment

ARIZONA DEPARTMENT OF TRANSPORTATION  
205 S. 17<sup>th</sup> Avenue, Mail Drop 605E  
Phoenix, AZ 85007

ADOT/FHWA KICKOFF MEETING NOTES

I-10, I-19 to Kolb Road & SR 210, Golf Links to I-10  
Project No. 010 PM 260 H7825 01L

October 25, 2016

TO: Kickoff Meeting Attendees

Virgil Coxon, ADOT Chief Surveyor\*\*  
Sarah Karasz, ADOT Environmental Planning Group, Senior Environmental Planner  
Tom Kilargis, ADOT Roadway Engineering Group, Design Support\*\*  
Tammy Mivshek, ADOT Traffic Design\*\*  
Kimberly Noetzel, ADOT Community Relations, Assistant Communications Dir.\*\*  
Rudy Perez, ADOT Major Projects Group  
C.T. Revere, ADOT Communications  
Lynn (Ungyo) Sugiyama, ADOT - Trans. Programming\*\*  
James Gomes, ADOT Southcentral District Regional Traffic Engineer  
Rod Lane, ADOT Southcentral District Engineer  
Priscilla Thompson, ADOT Southcentral District Utility Engr, Coordinator  
Tremaine Wilson, FHWA Environmental Coordinator\*\*  
Sharon Gordon, FHWA Area Engineer\*\*  
Mike Dawson, EcoPlan Associates Senior Environmental Planner  
Marek Kasztalski, Ninyo & Moore Senior Geotechnical Engr  
Jeff Holzmeister, J2 Engineering Drainage, Project Manager\*\*  
Paul Black, Jacobs Roadway, Project Engineer\*\*  
Rob Brantley, Jacobs Structural, Project Engineer\*\*  
Shanthi Krishnan, Jacobs Traffic Modeling, Project Manager  
Brad Olbert, Jacobs Project Manager  
Shantala Ramaiah, Jacobs Structural, Engineer\*\*  
Anthony Scolaro, Jacobs Environmental, Project Manager  
Sandra Thoms, Jacobs Traffic, Project Engineer\*\*  
Abel Federico, ADOT ESS  
Anna Arce, ADOT Permits

\*\* Attended from Phoenix location

Not in Attendance

Bret Anderson, ADOT Priority Programming Section, Program Manager  
Scott Beck, ADOT Highway Safety  
David Benton, ADOT Bridge Group  
Leroy Brady, ADOT Roadside Development Section  
Paul Burch, ADOT Manager, Pavement Design  
Barry Crockett, ADOT Contracts and Specifications  
John Eckhardt, ADOT Right-of-Way Group



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Shajed Haque, ADOT Drainage Section  
Mark Hoffman, ADOT Multimodal Planning, Planning Program Manager  
Mohamad Jawhar, ADOT Engineering Survey Section  
Clem Ligocki, ADOT Planning and Programming, Planning and Programming Manager  
Joan Lovell, ADOT ITS  
Merrisa Marin, ADOT R/W Project Management Section Coordinator  
Paul O'Brien, ADOT Environmental Planning Group  
Scott Orrahood, ADOT State Traffic Design Manager  
Ashek Rana, ADOT Pavement Design Section  
Karim Rashid, ADOT Manager Traffic Design Team 2  
Annette Riley, ADOT Roadway Engineering Group, Assistant State Engineer  
Karen Williams, ADOT Attorney General Office Transportation Section  
Pe-Shen Yang, ADOT Bridge Design Service  
William Downes, ADOT Bridge Group Senior Bridge Designer  
Ayman Ghadban, ADOT Safford District Utility Engr. Coordinator  
Delores Crumbacher, ADOT Southcentral District Transportation Engr. Specialist  
Emily Dawson, ADOT Southcentral District Project Development  
Jerry James, ADOT Southcentral District Asst. District Engineer, Operations  
Paul Langdale, ADOT Southcentral District Environmental  
Richard La Pierre, ADOT Southcentral District Permits Supervisor  
Tom Martinez, ADOT Southcentral District Transportation Engr. Specialist  
Jeremy Moore, ADOT Southcentral District Assistant District Engineer, Construction

FROM:

Brad Olbert, Jacobs Project Manager

SUBJECT:

ADOT/FHWA KICKOFF MEETING NOTES  
I-10, I-19 to Kolb Road & SR 210, Golf Links to I-10  
Project No. 010 PM 260 H7825 01L  
PHASE II (I-10/SR 210) Design Concept Report and Environmental Assessment

INTRODUCTION

The Kickoff Meeting for this project was held at 2:00 PM October 25, 2016 at the ADOT Southcentral District Office Training Room. Videoconferencing was provided in the ADOT Admin Building Green Room for attendees in Phoenix. The meeting was scheduled to end at 4:00 PM but it adjourned at 3:00 PM.

The meeting was well represented by agencies interested in improving the I-10 corridor from junction I-19 to Kolb Road and providing a connection for SR 210 to I-10. Agencies included the Federal Highway Administration (FHWA) and ADOT. Stakeholders provided critical input for the success of the project.

SUMMARY

Rudy Perez, ADOT Project Manager opened the meeting at 2:00 PM. Introductions were held for all attendees.



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Brad Olbert, Jacobs Project Manager gave a safety minute and discussed Halloween safety. He then gave an overview of the meeting agenda which was dispersed to all attendees prior to the meeting and copies were available for those who did not print their own.

Brad briefed attendees on the study team organization and emphasized that the consulting staff that worked on Phase I of this project will be working on Phase II. Our subconsultant Ninyo and Moore is new to the team and will be providing geotechnical services. Our other subconsultant, J2, will be preparing the drainage report for the project.

Brad informed attendees of the project website. All documents related to this project from the very beginning are posted on the website including meeting minutes, exhibits, and project deliverables. This site is intended for use by the study team only. The login information is available in the meeting presentation slides. There is a separate website for public use with information related to the project. C.T. Revere (ADOT Communications) indicated that the content on the public website is out of date and they will be updating it soon.

- Study Team Website: [www.jacobsaz.com](http://www.jacobsaz.com)
  - Login: I-10 Corridor
  - Password: Empirita
- Public Project Website: <http://www.azdot.gov/projects/south-central/i-10-and-sr-210-feasibility-study>

Brad gave an overview of the project to date. Phase I was completed February 2015. Phase I included an update to the Feasibility Report, Environmental Overview, and the Traffic Report. The project is now in Phase II which includes the Design Concept Report (DCR), Environmental Assessment (EA), and other supporting documents.

The goals of the feasibility study were to decide how best to improve mobility along the I-10 corridor from the downtown Tucson area towards Vail, as well as identify the best alternatives for I-10 and the Barraza-Aviation (SR 210) corridors to carry forward for further evaluation in the Design Concept Study. The goals were reached and several alternatives were identified for further evaluation. However, the list of alternatives was further refined.

Brad gave a brief overview of each of the proposed system alternatives.

**System Alternative I:**

- SR 210 follows the Alvernon Way alignment and ties into I-10 with a system-to-system interchange at the current Alvernon Way interchange
- The interchange at Alvernon Way includes a service TI and a system TI
- I-10 will be widened from I-19 to SR 83 to accommodate future traffic plus improve all of the TIs

**System Alternative II:**

- SR 210 runs along the south side of Davis-Monthan AFB and then turns south to connect into I-10 with a system-to-system interchange at near the Valencia Road interchange
- SR 210 will be a depressed freeway along the air base to provide increased security for DMAFB, SR 210 will be elevated to cross over the UPRR and tie into I-10
- New ROW will need to be acquired along most of the SR 210 alignment. This alternative would require a significant amount of property from DMAFB and pass by US Customs and Border Protection facilities.
- I-10 will be widened from I-19 to SR 83 to accommodate future traffic plus improve all of the TIs



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**System Alternative IIIc:**

- SR 210 runs close to DMAFB and ties into I-10 with a system-to-system interchange near the current Wilmot Road interchange
- New ROW will need to be acquired along most of the SR 210 alignment. This alternative would require a significant amount of property from DMAFB.
- SR 210 will be a depressed freeway until Valencia Road to provide increased security for DMAFB, SR 210 will be elevated to cross over the UPRR and tie into I-10
- SR 210 will cross two floodplains
- I-10 will be widened from I-19 to SR 83 to accommodate future traffic plus improve all of the TIs
- This alternative was discontinued because there were many business and residential impacts, approximately 70 residential takes, potential hazmat issues through the industrial area south of DMAFB and issues with flight zones, blast zones, and unexploded ordinances

**System Alternative IV:**

- SR 210 follows the Alvernon Way alignment and ties into I-10 with a system-to-system interchange at the current Alvernon Way interchange
- I-10 will be widened from I-19 to SR 83 to accommodate future traffic plus improve all of the TIs
- A collector-distributor roadway (C-D) follows I-10 from the SR 210 connection to the Kolb Road TI
- The C-D is intended to separate regional and local traffic to minimize traffic weaving
- Mainline through traffic will stay on I-10 and local traffic will have access to interchanges via the C-D (drivers will be notified of this through signage)
- Mainline I-10 and the C-D will be at the same elevation but separated by a concrete Jersey barrier

Brad discussed the project progress to date. The Feasibility Report Update included System Alternatives I, II, and IV and was completed in February 2015. Jacobs met with agency stakeholders including FHWA, ADOT Southcentral District, Pima County, and the City of Tucson to discuss changing the east termini to Kolb Road and to discontinue System Alternative II. They collectively decided to eliminate System Alternative II from the list as it had the most challenges in terms of hazardous materials, unexploded ordinances, and strong opposition from the US Customs and Border Protection. The DCR will move forward with System Alternatives I and IV as well as a No Build scenario.

Brad brought up some of the project issues to be worked out. One of the key items is developing the I-10 vertical profiles. There are a handful of items that need to be looked into for this including:

- bridge structure configurations
- cross street widths and future widening
- possibility of accommodating future rail transit access under bridges

Additional project issues include developing drainage concepts to handle surface runoff, identifying the project footprint for the environmental work, utility conflicts with the system interchanges, as well as need to comply with the NEPA process regarding public involvement.

Brad briefly went over a list of project deliverables as well as the agency disciplines that will need to provide input as the project progresses.

Brad opened the floor for input from the attending departments and any questions.



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Sarah Karasz (ADOT Environmental) asked if the project is fiscally constrained. Lynn Sugiyama (ADOT Programming) said the project is not yet programmed but they will plan for it in the next phase.

Brad indicated there are a couple of projects currently programmed through the PAG TIP:

- Construction of a new TI at Country Club Road with I-10 improvements
- Reconstruction of the Kino Road TI with I-10 improvements, and
- Reconstruction of the Park Avenue TI with I-10 improvements

Paul Black (Jacobs Roadway) emphasized that this is a long corridor in which the projects will likely be programmed in many smaller projects based on funding.

Sharon Gordon (FHWA) asked how this project fits in with the Sonoran Corridor. She asked that teams for both projects maintain communication so they are on the same page with alternatives and tying into one another. Rudy agreed and assured there will be communication on this matter.

Shantala Ramaiah (Jacobs Structures) brought up the need to establish the roadway profile and that many decisions on the bridges need to be made prior to that. She did a preliminary analysis of the existing bridges along the corridor and determined those that need to be replaced or simply widened/modified. She noticed that all of the bridges needing to be replaced are already approximately 50 years old today and those needing modifications range from 25-50 years old. Shantala would like some direction from ADOT on whether the bridges needing modifications should be replaced if they are over a certain age, or if we should continue to try and retain them if possible.

Virgil Coxon (ADOT Survey) suggested doing a cost analysis of replacing them with new bridges versus modifying the existing. James Gomes (ADOT Southcentral District Traffic) indicated that all of these structures were recently analyzed as part of a corridor profile study through MPD. Jacobs should obtain the report recommendations. Mike Dawson (EcoPlan) asked that we continue to keep the project purpose and need in mind and not simply replace the bridges that are old or obsolete.

Shantala brought up a question regarding the abutment styles. There are many different abutments that can be used and they all affect the bridge width and the roadway profile. She can make recommendations on what to use, but would like to know if ADOT has a preference on style before she gets too far ahead in the design. Virgil suggested she contact Leroy Brady with ADOT Roadside Development with this question.

Shantala pointed out that some bridges along this corridor are in good condition but do not meet the minimum allowable vertical clearance. She would like some direction on how ADOT would like to proceed with these scenarios or who to contact about it.

Brad brought up that this project was originally planned to be two separate DCRs – one for the urban segment (I-19 to SR 83) and one for the rural segment (SR 83 to SR 90). The Feasibility Report analyzed the limits of the urban segment only. Due to funding limitations, it was decided that only the urban segment would be studied and that the urban limits along I-10 was reduced to I-19 to Kolb Road. ADOT felt the shorter limits could realistically be constructed by 2040.

Brad brought up the PAG population projections used for the traffic modeling. When the Feasibility Report Update was completed (February 2015), PAG was projecting a population of 1.4 million people for the Tucson Metropolitan area by the design year 2040. Since that time, PAG is now projecting a population of 1.4 million be reached in the year 2045. The growth allocation also shifted which caused more traffic to use Valencia Road



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to access I-10. He indicated that Jacobs is comfortable with the overall concept design since traffic volumes for 2040 are slightly less. However at the Valencia Road TI some modifications to the westbound on ramp and the eastbound off ramp will be made to accommodate the increased traffic volumes at this TI.

Sarah Karasz said that if we intend to have any public art features on the bridges that we need to begin the public input meetings early. Agencies in the area have experience with the public being very vocal about these kinds of art features. Brad indicated that this is something that would happen later on during final design phases and not during the DCR phase. In the DCR we may just state that art features are recommended. Anything more detailed than that would happen during the final design phase. Our focus will be more structural – ensuring the bridges are large enough to accommodate future growth to avoid revisiting them later on.

Rod Lane said that ADOT will fund bridge lengths that are sized to accommodate the number of cross street lanes needed to meet the 2040 traffic volumes. Additional lanes desired beyond the 2040 traffic volumes will need to be funded by local agencies like PAG or the City of Tucson.

**ACTION ITEM LIST**

- The Jacobs team will continue to pursue bridge-related questions to help establish the roadway profiles as early as possible.

Signed:   
 Brad Olbert, PE, Project Manager

Attachments

Meeting Notes



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ARIZONA DEPARTMENT OF TRANSPORTATION  
205 S. 17<sup>th</sup> Avenue, Mail Drop 605E  
Phoenix, AZ 85007

AGENCY SCOPING MEETING NOTES

I-10, I-19 to Kolb Road & SR 210, Golf Links to I-10  
Project No. 010 PM 260 H7825 01L

December 1, 2016

TO: Meeting Attendees

Sarah Karasz, ADOT Environmental Planning Group, Senior Environmental Planner  
Kimberly Noetzel, ADOT Community Relations, Assistant Communications Director  
Rudy Perez, ADOT Major Projects Group  
C.T. Revere, ADOT Communications  
Emily Dawson, ADOT Southcentral District Project Development  
James Gomes, ADOT Southcentral District Regional Traffic Engineer  
Rod Lane, ADOT Southcentral District Engineer  
Sharon Gordon, FHWA Area Engineer  
Capt. Benjamin Buller, Arizona Department of Public Safety Tucson District 8 Region  
Kristin Terpening, Arizona Game & Fish Department Wildlife Habitat Specialist  
Mick Jensen, City of South Tucson Planning  
Robin Raine, City of Tucson Assistant Transportation Director  
Mike Garcia, City of Tucson Fire Department, Assistant Chief  
Scott Robidoux, Tucson Airport Authority Airport Planner  
Beth Abramovitz, Pima County Department of Transportation  
Robert Young, Pima County Trans. System Division Manager  
Bob Roggenthen, Pima County  
John Moffatt, Pima County  
Steve Wilson, Pima County Department of Transportation  
Manuel Guzman, Sun Tran  
James Tokishi, Pima Association of Governments  
Jamison Brown, Pima Assoc. of Governments Transportation Planning Manager  
Mike Dawson, EcoPlan Associates Senior Environmental Planner  
Maria Altemus, EcoPlan  
Jeff Holzmeister, J2 Engineering Drainage\*\*  
Paul Black, Jacobs Roadway\*\*  
Shanthi Krishnan, Jacobs Traffic Modeling, Project Manager\*\*  
Brad Olbert, Jacobs Project Manager  
Shantala Ramaiah, Jacobs Structural  
Jessica Rietz, Jacobs Environmental  
Sandra Thoms, Jacobs Traffic\*\*

\*\* Attended via teleconference



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FROM:

Brad Olbert, Jacobs Project Manager

SUBJECT:

ADOT/FHWA AGENCY STAKEHOLDER MEETING NOTES  
I-10, I-19 to Kolb Road & SR 210, Golf Links to I-10  
Project No. 010 PM 260 H7825 01L  
PHASE II (I-10/SR 210) Design Concept Report and Environmental Assessment

INTRODUCTION

The Agency Stakeholder Meeting for this project was held at 10:00 AM December 1, 2016 at the ADOT Southcentral District Office Training Room. The meeting was scheduled to end at 12:00 PM but it adjourned at 11:40 AM.

The meeting was well represented by agencies interested in improving the I-10 corridor from Junction I-19 to Kolb Road and providing a connection for SR 210 to I-10. Agencies included ADOT, FHWA, Arizona Department of Public Safety (DPS), Arizona Game and Fish Department, City of South Tucson, City of Tucson, Pima County, and Pima Association of Governments (PAG). Stakeholders provided critical input for the success of the project.

SUMMARY

Rudy Perez, ADOT Project Manager opened the meeting at 10:05 AM. Introductions were held for all attendees.

Brad Olbert, Jacobs Project Manager gave a safety minute and discussed winter visitors and the extra driving precautions associated with having unfamiliar drivers on the road. He also reminded everyone to stay calm and drive slowly in icy or cold conditions. Brad then gave an overview of the meeting agenda which was dispersed to all attendees prior to the meeting and copies were available for those who did not print their own.

Brad briefed attendees on the study team organization including the project manager, subconsultants, and key players on the team. Rudy Perez is the ADOT project manager. Brad will manage the consulting team in which J2 is handling drainage, Ninyo and Moore is handling geotechnical, and EcoPlan will work on portions of the environmental scope.

Related to project communications, Brad informed attendees of the project website. All documents related to this project from the very beginning are posted on the website including meeting minutes, exhibits, and project deliverables. This site is intended for use by the study team only. The login information is available in the meeting presentation slides. There is a separate website for public use with information related to the project. The content on the public website is out of date, however, ADOT will be updating it soon.

- Study Team Website: [www.jacobsaz.com](http://www.jacobsaz.com)
  - Login: I-10 Corridor
  - Password: Empirita
- Public Project Website: <http://www.azdot.gov/projects/south-central/i-10-and-sr-210-feasibility-study>



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Brad continued with the project communications discussion by announcing the quarterly progress meeting. This will take place in mid-January and will cover the public scoping meeting, ADOT/Agency scoping input, as well as discussion on I-10 profile and bridge structures.

Brad gave an overview of the project to date. Phase I was completed February 2015. Phase I included an update to the Feasibility Report, Environmental Overview, and the Traffic Report. The Feasibility Report was initially completed in 2012 and included very aggressive growth rates for population and traffic projections. The Feasibility Report Update utilized more realistic projections and can be found on the project website. The project is now in Phase II which includes the Design Concept Report (DCR), Environmental Assessment (EA), and other supporting documents.

Rod Lane asked if the modeling included the impact of the Sonoran Corridor (SR 410). Brad responded that the microsimulation modeling efforts did not specifically look at Sonoran Corridor. The Sonoran Corridor route was included in the regional PAG modeling and was labeled as a parkway instead of an interstate. This difference in designation equates to a minor speed difference in the modeled traffic which is expected to have minimal impact on the I-10 corridor. Any impacts this has on I-10 traffic volumes would not equate to adding or removing a whole lane on I-10.

Sharon Gordon from FHWA asked where the connection for the Sonoran Corridor will be. Rudy Perez indicated that the Sonoran Corridor Study has just begun and they do not want to start talking about connection points in this project that could preclude any other connection point.

John Moffatt asked if the traffic modeling differentiates between cars and trucks. One of the major changes seen is that more trucks would be taking the Sonoran Corridor and wants to know if the split was more heavily towards trucks on I-10 or on the Sonoran Corridor. Mike Dawson from EcoPlan emphasized that this input in the traffic model is key to performing the air quality and noise analyses. Brad indicated that the regional PAG model was used and the team drilled it down to get a handle on the traffic demands and number of lanes needed for the corridor and each interchange. Rudy assured everyone that this study team plans on coordinating closely with the Sonoran Corridor project team.

Brad continued discussing the project overview and indicated that Phase II of this project is currently under way and includes the Design Concept Report (DCR), Environmental Assessment (EA), and other supporting documents. Mike Dawson indicated that two environmental documents will be developed over the next few weeks including a Chapter Outline and a Purpose and Need Statement.

Brad discussed the project limits and indicated that originally this project was going to extend from I-19 to SR 90. It was broken into an urban segment (I-19 to SR 83) which would require a DCR and EA, and a rural segment (SR 83 to SR 90) which would require a DCR and PEL. However, recently it was decided that the DCR and EA will only extend from I-19 to Kolb Road. These limits were identified based on what ADOT believes can realistically be constructed by the design year 2040. The I-10 corridor extending east from Kolb Road to SR 90 has been eliminated from the DCR and EA studies for this project.

Brad reviewed the timeline for previous I-10 and SR 210 corridor studies. The first public meeting was held in October 2011. The Feasibility Report and EO were first submitted in October 2012 and updated in February 2015. The DCR and EA are starting now and should wrap up in March 2019.



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The goals of the feasibility study were to decide how best to improve mobility along the I-10 corridor from the downtown Tucson area towards Vail, as well as identify the best alternatives for I-10 and the Barraza-Aviation (SR 210) corridors to carry forward for further evaluation in the Design Concept Study. The goals were reached and several alternatives were identified for further evaluation. However, the list of alternatives was further refined.

Brad gave a brief overview of each of the proposed system alternatives.

System Alternative I:

- SR 210 follows the Alvernon Way alignment and ties into I-10 with a system-to-system interchange at the current Alvernon Way interchange
- The interchange at Alvernon Way includes a service TI and a system TI
- I-10 will be widened from I-19 to Kolb Road to accommodate future traffic plus improve all of the TIs

System Alternative II:

- SR 210 runs along the south side of Davis-Monthan AFB and then turns south to connect into I-10 with a system-to-system interchange at near the Valencia Road interchange
- I-10 will be widened from I-19 to Kolb Road to accommodate future traffic plus improve all of the TIs

System Alternative IIIc:

- SR 210 runs close to DMAFB and ties into I-10 with a system-to-system interchange near the current Wilmot Road interchange
- I-10 will be widened from I-19 to Kolb Road to accommodate future traffic plus improve all of the TIs
- This alternative was discontinued because there were many business and residential impacts, approximately 70 residential takes, potential hazmat issues through the industrial area south of DMAFB and issues with flight zones, blast zones, unexploded ordinances, and required steep grades to avoid existing infrastructure.

System Alternative IV:

- SR 210 follows the Alvernon Way alignment and ties into I-10 with a system-to-system interchange at the current Alvernon Way interchange
- I-10 will be widened from I-19 to Kolb Road to accommodate future traffic plus improve all of the TIs
- A collector-distributor roadway (C-D) follows I-10 from the SR 210 connection to the Kolb Road TI
- The C-D is intended to separate regional and local traffic to minimize traffic weaving
- Mainline through traffic will stay on I-10 and local traffic will have access to interchanges via the C-D (drivers will be notified of this through signage)
- Mainline I-10 and the C-D will be at the same elevation but separated by a concrete Jersey barrier

Brad discussed the project progress to date. The Feasibility Report Update included System Alternatives I, II, and IV and was completed in February 2015. Jacobs met with agency stakeholders including FHWA, ADOT Southcentral District, Pima County, and the City of Tucson to discuss changing the east termini to Kolb Road and to discontinue System Alternative II. They collectively decided to eliminate System Alternative II from the list as it had the most challenges in terms of hazardous materials, unexploded ordinances, and strong opposition from the US Customs and Border Protection. The DCR will move forward with System Alternatives I and IV as well as a No Build scenario. In addition, the east termini was agreed to end at Kolb Road.



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Brad discussed changes that occurred from submittal of the Feasibility Report to today. Previously, population projections showed 1.4 million residents by the year 2040. Now projections are showing a population of 1.4 million residents by the year 2045. This means the traffic modeling conducted is a little conservative, but the evaluation and results are still valid. Additionally, there was a shift in the future growth allocation which pushed approximately 45,000 residents closer to the east end of Valencia Road. This change means more traffic using Valencia Road; this will be analyzed during the study. It will likely require dual-lane ramps instead of the currently proposed single lane ramps at the Valencia Road TI. Overall, the traffic model is sound and should not require many changes during the study.

Brad brought up some of the project issues to be worked out. One of the key items is developing the I-10 vertical profiles. There are a handful of items that need to be looked into for this including:

- bridge structure configurations (approximately 70 structures on this project)
- cross street widths and future widening
- possibility of accommodating future rail transit access under or over bridges

Additional project elements include developing drainage concepts to handle surface runoff, identifying the project footprint for the environmental work, utility conflicts with the system interchanges, as well as the need to comply with the NEPA process regarding public involvement.

Shantala Ramaiah (Jacobs Structures) indicated that structural decisions made now will trickle down and affect many other disciplines. Therefore, early feedback on structural decisions would be greatly appreciated. She referenced a handout with structural considerations. There are 70 structures throughout the corridor and about half of those bridges are pretty new and do not require evaluation. Looking at the existing bridges, about half of those have to be replaced regardless because of proposed capacity increases on the cross roads, and the other half can be retained and simply widened. Shantala emphasized that the wider the bridge, the deeper the deck becomes which means it needs to be higher to allow the proper clearance and also have steeper slope paving. There will be an in-depth evaluation of each structure, beyond just the sufficiency rating, to determine which need to be replaced and which can be fixed. We are looking for input on information and preference on cross road capacity, vertical clearance, wall placement, etc.

Brad briefly went over a list of project deliverables which included design and environmental submittals (see slide 16 of the PowerPoint presentation).

Brad emphasized that close coordination will take place with the Sonoran Corridor team, of which Carlos Lopez is the project manager. Everything completed on this I-10 project to date will be available to the Sonoran Corridor team. The Sonoran Corridor will tie into I-10 somewhere between Kolb Road and SR 83 which is outside of this project's (Phase II) study limits.

Sharon Gordon asked about the configuration at the east end of Alternative IV where the C-D system would start and if that would be a system interchange. Brad indicated that Kolb Road would be a service traffic interchange and the system interchanges would be at SR 210 (Alvernon Way and I-10). There will also be a system interchange where Golf Links meets SR 210 since the ramps feed directly onto Golf Links. Sharon then stressed that this information would be useful to the Sonoran Corridor team.

Sharon asked if there would be an interchange at Valencia Road and what the distance would be from that to Alvernon Way. Brad assured that there would be a service TI at Valencia Road which is approximately two miles from the system TI at Alvernon Way.



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Brad discussed the service TI at Kolb Road and indicated that this will be a diverging diamond interchange (DDI) due to the large number of turning movements. This configuration is being proposed for both Alternatives I and IV.

Rod Lane asked where the C-D system would be located within Kolb Road in Alternative IV. Brad clarified that the C-D road ends just past the Kolb Road bridge. He indicated that if someone gets on the C-D road by mistake, they will be on that road for approximately 4.5 miles. It is unlikely that drivers will make this mistake more than once.

James Gomes (ADOT Southcentral District Regional Traffic Engineer) asked if there would be an amendment to the traffic report in response to the changed designation for the Sonoran Corridor. Rudy indicated that although the project limits do not overlap with the Sonoran Corridor study limits, the Sonoran Corridor is an influence. Attendees from ADOT were in agreement that they will need to evaluate how much of an influence the Sonoran Corridor is and how they want to address this.

Brad indicated that the original traffic study assumed a 2040 Tucson region population of 2 million. That projection was later reduced to 1.4 million which prompted an update to the traffic modeling and allowed for a lane reduction on I-10. The LOS on I-10 improved slightly with this change, but we were able to reduce the number of lanes which had significant benefits. We do not anticipate the Sonoran Corridor will impact the currently proposed number of lanes on I-10 in 2040. However, the Sonoran Corridor will have a great benefit after 2040 as the area approaches saturation to the south of I-10 which can be seen in the earlier PAG model.

Rudy stated that coordination with the Sonoran Corridor team will be complicated as the I-10 DCR will be completed in about two years from now and the Sonoran Corridor team is not yet under contract and their study is on an 18-month schedule.

Brad emphasized that at the completion of the DCR there will be a number of projects going out for final design. There are a number of spots with major operational issues between I-19 and Alvernon Way, not necessarily on the mainline, but at the interchanges. This is supported by a crash analysis which shows a number of fatal crashes around Palo Verde Avenue, injury crashes at Kino Parkway, as well as numerous crashes on SR 210 at Ajo Way. As population and traffic volumes grow, these issues are just going to get worse. The No Build scenario is showing LOS F in most locations. This project is absolutely needed and needs to get under construction as soon as possible.

Capt. Benjamin Buller (Arizona DPS Tucson District 8 Region) confirmed Brad's statement indicating that he just completed a 3-year, 5-year, and 10-year crash analysis within the district and the Park Avenue interchange has the highest number of collisions in the district. The entire area has a lot of collisions and especially a lot of secondary collisions. He indicated that his team is very aggressive in responding to crashes and clearing crashes as soon as possible to try and minimize potential for secondary crashes. Capt. Buller also expressed concern for the rest of I-10 out towards Kolb Road which experiences heavy congestion and crashes westbound in the morning and eastbound at night. Brad pointed out this section of I-10 was one of the first built when they first started to build the interstate system, and the TI designs worked well back then, but they do not meet current standards – particularly the loop ramps. At the last public meeting, Brad heard feedback from members of the public that did not feel safe using the interchange at Park Avenue and they would detour one to two miles out of their way to avoid using that interchange.





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Brad indicated that the interchanges at Palo Verde Road and Alvernon Way are too close to one another. One of the first projects will be to upgrade the Alvernon Way TI to a full service interchange. The Palo Verde Road interchange will be removed and a TI will be added at Country Club Road which is approximately one mile from Alvernon Way. This will solve a lot of operational problems experienced around these interchanges.

Brad pointed to the provided figures showing the System Alternatives to see the currently proposed interchange designs. He reminded attendees that these will be available as PDFs on the project website.

Paul Black (Jacobs Roadway) added that unless the Sonoran Corridor team foresees a lot of traffic being dumped onto I-10, he does not see the need to add more lanes to I-10 in response to that. Sharon Gordon added that with the two project schedules, this will be difficult as the Sonoran Corridor study will not be complete until after this DCR. Rudy expressed that we will need to ask the Sonoran Corridor team whether their traffic data would be available sooner than the 18-24 month timeline and that this is one of the items this team will need to coordinate with the Sonoran Corridor team. He indicated that the Jacobs team is comfortable with their traffic projections because they did the evaluation so conservatively. The main point needing coordination with the Sonoran Corridor team is where the system interchange will tie in.

John Moffatt stated that development at Rita Road will bring more traffic into that area. He believes the model that moves the 45,000 residences near Valencia Road is a good one as they are trying to create an industrial area to the south. That is why he asked about the trucks and anticipates some of the traffic patterns to change in that area. They are starting to coordinate with City and County because they are seeing a new energy behind growth in that area. The Sonoran Corridor will help take some of the eastbound and westbound traffic off I-10. He shared that one of the reasons Sonoran Corridor was initially called a parkway was to carry traffic from the airport to the UofA Tech Park.

Sharon Gordon asked how much funding has been allocated for this project. Brad indicated that when the project limits extended out to SR 83, the estimated cost was about \$800 million. The estimate now that the project limits have reduced has yet to be determined.

Robin Raine asked what the programmed amount was for SR 210. Brad responded that the estimate is \$200 million dollars for construction only and does not include utility relocation or ROW acquisition.

Jamie Brown asked if the NEPA process has officially begun. Brad reassured that it has and that this meeting meets a requirement as a scoping session. The next meeting will be the public scoping meeting scheduled for late January. Rudy added that there will be quarterly progress meetings in which everyone in this meeting will be invited to attend.

Brad opened the floor for each agency to provide their comments thus far:

- **Arizona Game and Fish Department** is here to understand how all the planning works to make sure they are involved in an early stage. Mike Dawson pointed out a biological evaluation will be prepared for this project. There are no major drainages crossing I-10 so there will not be a lot of wildlife crossing in this segment, but there will be once you get east of Kolb Road. Brad noted the crash analysis identified three total crashes with animals, two of which were with pets.
- **Pima County** did not have any comments.
- **City of Tucson** did not have any comments.
- **Tucson Airport Authority** indicated that they are considering having the I-10 interchange at Country Club Road as a new entrance to the airport. They are also looking at doing a third parallel runway.



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although not anytime soon, and they would potentially abandon parts of Alvernon Way and Swan Road to accommodate this. They would be extending Country Club Road to go around the existing runway to connect in. This is shown in their master plan. They also recommended that we reach out to Davis Monthan Air Force Base (DMAFB) because this project would likely affect them. Brad pointed out that DMAFB was fully involved in the feasibility study and were invited to this meeting but chose not to attend. They have seen Alternative I but not Alternative IV. They had reservations about Alternative II as did Border Patrol. Tucson Airport Authority also expressed concern about the effect the I-10/SR 210 will have on future development of the airport. Also, the project team should be aware of the need to file FAA Form 7460 about 45 days prior to the start of construction.

- **City of South Tucson** did not have any comments.
- **Pima Association of Governments** appreciates being invited and they are ready to assist if they need to look at the Sonoran Corridor as a freeway. They are also currently working on a regional freight plan and the study team should let them know if we would like to reach out to some of the freight stakeholders. C.T. Revere (ADOT Communications) mentioned they have attempted to reach out to contacts at Raytheon to attend these meetings without much luck.
- **Federal Highway Administration** highlighted the importance of having both project teams (this team and the Sonoran Corridor team) in close coordination. Sharon has no further comments as of yet.
- **Department of Public Safety** indicated that under the proposed Alternative IV, they would need to increase forces in that area because getting emergency services to the express lanes would be really difficult. It would be a four-mile section that if something happened, you would get stuck on it. Capt. Benjamin Buller pointed out that traffic interchanges give them the option to nose debilitated vehicles off the freeway, but without a TI on the express lanes that would not be an option. They will have a harder time clearing incidents off the freeway corridor. Additionally, if there is an incident but no interchange for four miles, any vehicles in a backup behind an incident would have nowhere to go to relieve the congestion.
- **Tucson Fire Department** agreed with the comments by DPS as they would have a difficult time with customer service to any emergencies or breakdowns in that four-mile section. Brad clarified that there will be 12-foot inside and outside shoulders along the express lanes as well as the C-D roads. Robin Raine inquired whether there would be any allowance for emergency vehicle access in this section. Brad noted they can put breaks in the median so smaller emergency service vehicles can get around the median. Capt. Benjamin Buller (DPS) indicated that the 12-foot shoulders would alleviate a lot of potential problems.
- **ADOT Southcentral District** asked if the results of this project will include an implementation plan. Brad confirmed that it would. Rod Lane indicated that there is a good chance they cannot build this in one shot and that it would need to be broken out and built in smaller projects over time. James Gomes asked if there was a chance I-10 would be depressed rather than raised, and Brad reassured there was not as there are a number of drainage crossings.

Rudy asked if DMAFB or FAA need to approve the preferred alternative or anything about the project. Brad noted there are some property acquisitions and abandonments that involve DMAFB. Mike Dawson indicated this is something that will need to be discussed with FHWA to determine whether we want to invite these agencies to be a cooperating agency or just a coordinating agency.

Mike Dawson indicated that he has no huge concerns as there are no big cultural or biological issues or even neighborhood issues. However, emergency services should be aware we propose getting rid of the medians. Twenty to thirty businesses would be gone, and they have freight access. Making those people whole would be



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a big part of this project. Robin Raine pointed out that the multimodal component of the Sonoran corridor study would make business relocation not as tricky.


Paul Black stated we will have to coordinate closely with stakeholders to make sure we take care of first flush, and to make sure that roadway drainage does not overwhelm the existing system of drainage structures or channels. This is the type of input we need from our stakeholders, because that would affect the project's footprint. Robin Raine recommended we contact Pima County Flood Control District – Bill Zimmerman will not be in that position for much longer and the new contact is Eric Shepp.

Mr. Moffatt asked if the team needed their written comments on what was discussed today and comments on the alternatives. Rudy indicated it would be documented in the meeting minutes which can be found on the project website. He asked that everyone review them closely for accuracy.

Mike Dawson highlighted that they will be sending out formal agency scoping letters to go out at the same time as the public scoping effort in early 2017. Everyone invited and in attendance at the agency scoping meeting will get a letter, and that is an opportunity to review more detailed project information and submit written comments that would be appended to the environmental document.

**ACTION ITEM LIST**

- The Jacobs team will continue to pursue the key issues discussed in this meeting to define the critical elements of this study as early as possible.
- Stakeholders are encouraged to review and comment on the meeting minutes to ensure accuracy.

Signed:   
 Brad Olbert, PE, Project Manager

Attachments

**Meeting Notes**



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**ARIZONA DEPARTMENT OF TRANSPORTATION**  
 205 S. 17<sup>th</sup> Avenue, Mail Drop 605E  
 Phoenix, AZ 85007

**PROGRESS MEETING NOTES**

**I-10, I-19 to Kolb Road & SR 210, Golf Links to I-10**  
 Project No. 010 PM 260 H7825 01L

January 31, 2017

**TO: Meeting Attendees**

- Shajed Haque, ADOT Drainage Section\*\*
- Mark Hoffman, ADOT Multimodal Planning, Planning Program Manager\*\*
- Sarah Karasz, ADOT Environmental Planning Group, Senior Environmental Planner
- Joan Lovell, ADOT ITS Technical Reviewer\*\*
- Tammy Mivshak, ADOT Traffic Design\*\*
- Rudy Perez, ADOT Major Projects Group
- C.T. Revere, ADOT Communications
- Emily Dawson, ADOT Southcentral District Project Development
- Jeremy Moore, ADOT Southcentral District Assistant District Engineer, Construction
- Micah Horowitz, ASLD Planning and Engineering, Project Manager\*\*
- Andy McGovern, City of Tucson Dept. Of Transportation Engr. Manager
- Mike Garcia, City of Tucson Fire Department, Assistant Chief
- Rodney Mackey, U of A - Planning Design & Construction Associate Director
- Bruce Vaughan, U of A - Planning Design & Construction UA Strat Planning & Budget Adv Council
- Scott Robidoux, Tucson Airport Authority Airport Planner
- Nicholas Germanos, Davis-Monthan AFB 355th Civil Engineer Squadron
- Kacey Carter, Davis-Monthan AFB 355th Civil Engineer Squadron
- Kevin Wakefield, Davis-Monthan AFB
- Maria Altemus, EcoPlan Associates Environmental Planner
- Mike Dawson, EcoPlan Associates Senior Environmental Planner
- Paul Black, Jacobs Roadway, Project Engineer
- Joe D'onofrio, Jacobs Environmental, Air and Noise
- Brad Olbert, Jacobs Project Manager
- Shantala Ramaiah, Jacobs Structural, Engineer\*\*
- Sandra Thoms, Jacobs Traffic, Project Engineer\*\*
- Judah Cain, Jacobs Roadway, Project Engineer\*\*
- Karen Apple, HDR Senior Public Involvement Coordinator
- Jamison Brown, Pima Assoc. of Governments Transportation Planning Manager
- John Liosatos, Pima Assoc. of Governments Transportation Planning Director
- James Tokishi, Pima Assoc. of Governments
- Beth Abramovitz, Pima County Department of Transportation
- Priscilla Cornelio, Pima County Director, Dept. of Transportation\*\*
- John Moffatt, Pima County Economic Development\*\*
- Ammon Heier, FHWA Area Engineer
- Tremaine Wilson, FHWA Environmental Coordinator
- Ralph Ellis, ADOT Environmental Planning



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Shimin Zou, J2 Design Senior Project Manager\*\*  
 Edika Zarbroud, ADOT EIT\*\*  
 Taiping Tang, ADOT Bridge Engineer\*\*

\*\* Attended from Phoenix location

**FROM:**  
 Brad Olbert, Jacobs Project Manager

**SUBJECT:**  
 PROGRESS MEETING NOTES  
 I-10, I-19 to Kolb Road & SR 210, Golf Links to I-10  
 Project No. 010 PM 260 H7825 01L  
 PHASE II (I-10/SR 210) Design Concept Report and Environmental Assessment

**INTRODUCTION**

The Progress Meeting for this project was held at 1:00 PM January 31, 2017 at the ADOT Southcentral District Office Training Room. Videoconferencing was provided in the ADOT Admin Building Green Room for attendees in Phoenix. The meeting was adjourned around 3:00 PM.

The meeting was well represented by agencies interested in improving the I-10 corridor from Junction I-19 to Kolb Road and providing a connection for SR 210 to I-10. Representatives included ADOT, FHWA, City of Tucson, Pima County, and Pima Association of Governments (PAG), Davis-Monthan Air Force Base (DMAFB), and the University of Arizona. Stakeholders provided input for the success of the project.

**SUMMARY**

Rudy Perez, ADOT Project Manager opened the meeting at 1:05 PM. Introductions were held for all attendees.

Brad Olbert, Jacobs Project Manager, gave an overview of the project to date. Phase I was completed February 2015 and evaluated I-10 from I-19 to SR 83. Traffic projections from the Travel Demand Model (TDM) from Pima Association of Governments (PAG) were used to develop a VISSIM model which analyzed traffic operations along the corridor and the surrounding interchanges. This PAG model assumed that the population of the region would be 1.4 Million in the year 2040. More recent model projections are anticipating that population to be reached in 2045. This just means the traffic operational analysis is a bit more conservative and the proposed design will accommodate traffic demand a bit longer than anticipated.

The majority of the population growth will be to the east around Houghton Road and south of I-10 between the Tucson International Airport and Houghton Road. These residents will want to use I-10 from I-19 to Houghton Road and SR 210 to travel to employment areas located downtown. The SR 210 corridor is included in the study to provide better access into downtown Tucson.

Brad emphasized that this stretch of I-10 dates back to the 1960s. The interchange designs may have worked with the traffic demands back then, but they are underperforming now. They also do not meet today's design standards. With this project, the team wants to build interchanges that will last another 50 years.



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Brad briefly went over the crash analysis and referenced the handout material which provided a summary and heat map of the crash data. This corridor experienced approximately 1,800 crashes in the last five years, 19 of which resulted in fatalities. The heat map of crashes indicates that the majority of crashes are congregated around the closely spaced interchanges. The first table in the handout shows that the number of crashes has increased each year over the last five years as the traffic volumes have increased.

In the following table, if you add the EB and WB crash rates together, the crash rate for the I-10 study area is approximately 1.5 crashes per million vehicle miles, slightly above the statewide average crash rate of 1.3. The crash rate for SR 210 is similar to the statewide average. Brad encouraged everyone to look at the crash data and summaries in detail on their own.

Paul Black of Jacobs discussed the different system alternative concept plans for Alternatives I and IV. He started by stating that the project can be broken into three distinct segments:

- Segment 1: I-10 from I-19 to Alvernon Way
- Segment 2: I-10 from Alvernon Way to Kolb Road
- Segment 3: SR 210

Segments 1 and 3 are the same for both of the alternatives while the differences between the two alternatives are in Segment 2.

Segment 1: I-10 from I-19 to Alvernon Way

Paul briefly discussed the segment between I-19 and Kino Parkway. In order to meet future traffic demand, this stretch of I-10 needs four lanes in each direction. The issue arises between I-19 and 6<sup>th</sup> Avenue, where right-of-way is tight and the bridges would require sliver widening. The City of South Tucson has already expressed their opposition to giving up more right-of way in this vicinity. Additionally, sliver widening to bridges can be extremely costly. Therefore, the team is currently evaluating whether this short segment can still operate at an acceptable level of service (LOS) with only three lanes in each direction, matching existing conditions. If the VISSIM model results in poor operations, then other solutions will be evaluated as widening in that segment should be avoided if possible.

The traffic interchange (TI) at 6<sup>th</sup> Avenue is currently adequate as it is and does not require major re-work.

The Park Avenue interchange is currently an incomplete interchange. The plan is to provide full access at this interchange and replace the loop ramps.

Kino Parkway is currently a partial cloverleaf interchange. The plan here is to keep only one of the loop ramps and convert the rest to a standard diamond interchange. The one remaining loop ramp will be modified to increase the radius to meet current design standards. The bridge will also be widened and ramps will be realigned to avoid impacting new businesses.

The interchange at Palo Verde Road is too close to the interchange at Alvernon Way. The plan is to remove the interchange at Palo Verde Road and replace it with a new interchange at Country Club Road. This will provide better spacing between interchanges which will help with traffic weaving maneuvers. Removing the interchange at Palo Verde Road will also allow the Alvernon Way interchange to be built out to be a full access interchange. Palo Verde Road is currently too close to Alvernon Way to allow a westbound on-ramp from Alvernon Way.



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Segment 3: SR 210

Paul discussed the improvements along SR 210 and indicated that the plan is to have it elevated but as low as possible to avoid conflict with DMAFB flight paths.

The intersection at Golf Links Road will be rebuilt, but all ramp connections and service locations will remain in place.

Irvington Road is located too close to I-10 to provide an interchange, so it will not have a service connection to SR 210. There will be an interchange at Ajo Way which will connect to Contractors Way.

John Moffatt of Pima County asked if there would be access to SR 210 from Irvington Road. Paul clarified that there would not be due to the proximity to the system interchange at I-10. Traffic will have to use alternative routes to access SR 210 or I-10. The new Ajo Way TI would provide access to both SR 210 and I-10. The new Country Club Road TI will provide access to I-10.

Segment 2: I-10 from Alvernon Way to Kolb Road

Paul reiterated out that the segment from Alvernon Way to Kolb Road differs between Alternatives I and IV.

Alternative I

The interchange at I-10 and SR 210 will be a diamond interchange within a system interchange. Some ramps of the system interchange duplicate movements of the diamond interchange, but both are needed to serve future traffic demand.

Valencia Road and Craycroft Road will each be diamond interchanges. If needed, frontage road right-in and out access can be provided to the TTT trucking businesses along the west side of Craycroft Road.

Wilmot Road will be a diamond interchange. There will be no business access allowed onto the ramps as they will no longer be frontage roads, but service ramps. Business access will be on Wilmot Road only.

As Kolb Road is the first north-south street east of DMAFB, it carries a substantial amount of traffic – particularly in the year 2040. Therefore, this interchange is proposed to be a diverging diamond interchange (DDI). Traffic in a DDI can make free-left and free-right movements which eliminates much of the signal delay experienced at other interchange types. DDIs operate at high efficiency and work well if they are signed properly. As there is heavy traffic anticipated on Kolb Road, there will be two overpass bridges for northbound and southbound traffic on Kolb Road for bypassing the I-10 interchange entirely. This will significantly reduce the amount of traffic circulating through the interchange.

Beth Abramovitz, with Pima County, mentioned that a lot of growth is expected to happen in the vicinity of Houghton Road and asked why that is not included in this project. Brad indicated that Houghton Road is currently in ADOT's five-year plan for construction and is currently in final design. The Houghton Road interchange will be a DDI and Houghton Road to the south of I-10 will be a future parkway.

To better elaborate on his answer to the last question, Brad gave a brief history of the project limits. The Feasibility Study looked at I-10 from I-19 to SR 83. However, for the DCR/EA, FHWA asked ADOT to match



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the project limits with the funding availability. The available funding limited the project along I-10 from I-19 to Kolb Road. Further study of the remainder of the I-10 corridor can commence once funding is available to implement the improvements.

John Moffatt mentioned that eastbound I-10 to northbound Kolb Road experiences heavy truck traffic. He expressed concern that northbound trucks at the northern signal of the DDI may block the free-left movement onto westbound I-10. Paul responded that since through traffic on Kolb Road will be on separate bypass ramps, the queue should not be too bad in this area. However, he will look into providing some sort of turn lane to allow for the free-left movement in the event of a backup at the signal. Paul was unaware of the substantial truck presence on this interchange, and appreciated the input. John shared that he likes the idea of the bypass bridges and thinks the concept could work well.

Alternative IV

Alternative IV utilizes Express Lanes and Collector-Distributor (C-D) lanes to separate regional through traffic from the weaving movements of local traffic on I-10. The interchanges within the C-D road segment are generally the same as in Alternative I with slight modifications to account for the C-D road.

Paul and the design team searched for examples of C-D systems nationwide. Their research showed that typical access spacing between the express lanes and the C-D road is five miles. They found stretches of C-D systems that extended 20 miles or more, and even those systems had access connections approximately every five miles. Since this project's proposed C-D system is approximately 5 miles long, the study team does not feel that an access connection is needed at any midpoints in the system. Eastbound traffic wanting to exit at Valencia Road, Craycroft Road, Wilmot Road, or Kolb Road will have to take a ramp to the C-D just east of Alvernon Way. Westbound traffic will have a similar scenario where they will access the C-D on a ramp as they pass under Kolb Road, and that will provide them access to Wilmot Road, Craycroft Road, Valencia Road, and Alvernon Way/SR 210.

A question was raised asking if southbound traffic on SR 210 wanting to head eastbound on I-10 had to get on the C-D. Paul clarified that yes, they will be routed directly onto the C-D as most of that traffic will be local commuter traffic.

Rudy Perez asked if FHWA's previous comment during the Agency Scoping Meeting concerning emergency vehicle usage of express lanes had been considered yet. Paul responded that the design team understands the importance of this and will provide methods for emergency access points soon.

Ammon Heier from FHWA asked if the C-D roads will be built to interstate standards and if they will have sufficient shy distance to the concrete barrier. Paul indicated that yes, they will be built to freeway standards and will have a 10 foot shoulder with a 2 foot shy distance to the barrier.

Sarah Karasz from ADOT Environmental Planning asked if there had been any coordination with truck stops, especially at Craycroft Road regarding use of C-D roads for getting on and off I-10. Paul indicated that to date there has not been any direct coordination but added this is best accomplished through signage. Brad noted that preparing a signage plan will one of our next steps. The plan will be reviewed and approved by ADOT and FHWA. How trucks get on and off I-10 will be addressed by the plan.



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A question was asked how many lanes the C-D will have. Paul responded that there will be two lanes plus an auxiliary lane, which will operate around LOS B and C in the year 2040.

The question was raised about whether there will be overhead dynamic message signs (DMSs) to divert traffic to I-10 express lanes in case there is a major collision on the C-D roads. Paul indicated that this can be investigated but DMS placement would likely be included in the signage plan.

John Moffatt asked if traffic traveling eastbound on I-10 wanted to access Valencia Road, Craycroft Road, or Wilnot Road would have to exit at Alvernon Way to get there. Paul clarified that they would not. They could access the C-D via a slip ramp connection just east of Alvernon Way which will allow them access to those interchanges.

Paul continued discussing the design features of this segment of Alternative IV. He indicated that Kolb Road will have a two-lane exit ramp due to traffic volume demand. The interchange will be the same as it was in Alternative I.

The C-D lanes and express lanes end under Kolb Road. From here, I-10 will continue east as normal.

The question was raised if more traffic is expected on Kolb Road than on Houghton Road. Paul responded that he did not have the projected volumes immediately with him right now, but this project ends at Kolb Road.

Ralph Ellis from ADOT Environmental Planning asked if there are plans for a visual simulation of DDI operation at the public meeting. He expressed that since the concept is still so new and may be hard for people to grasp, visual aids may help them understand it better. Brad indicated that a visual simulation is not currently planned, but they could look into seeing if a generic DDI operational video is available that can be shown. Creating a site-specific simulation video was not included in the scope of work for the project.

A representative from DMAFB asked if the project team is aware of the location of the Port of Tucson. Brad responded that yes, they are.

Paul then discussed the bike routes planned for the vicinity, which would apply to both proposed alternatives. Meeting attendees were provided a handout showing the current bike routes with the proposed changes.

There are currently bike lanes on Palo Verde Road that do not extend south due to the I-10 loop ramps. With the removal of the interchange, the bike lanes can continue south to the Benson Highway. To provide another north-south bike route, existing Contractors Way can be utilized from Golf Links Road to Ajo Way. A new bike facility from Ajo Way to Irvington Road can complete the bike route connectivity.

Sarah Karasz asked if the bike paths will be added to existing roads or will they be independent standalone paths. Paul indicated that paths will be evaluated individually, with local stakeholder input, to determine how best to accomplish bike path connectivity within the corridor. Mike Dawson of EcoPlan noted that the bike paths are an added value of the project and are not mitigation for bike path removal, which will not occur due to this project.

Micah Horowitz from ASLD asked if the study team could provide GIS shape files or CADD files for the project so they could look at it with their system. Brad indicated that those could be provided. Roadway GIS shape files were forwarded to Micah Horowitz (ASLD) and to James Tokishi (PAG).



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Karen Apple from HDR gave a brief overview of the public involvement activities including details on the public scoping meeting. She reported that banners have been developed for the public meeting presentation. There will be roll plots available at information stations after the general presentation. The PI team will look into obtaining a DDI simulation video and setting up a viewing station. Bilingual fact sheets and comment forms are available for team review prior to production.

Karen discussed the methods used for getting the word out for the public meeting. It was advertised on Tucson.com, the Daily Star newspaper, and the Sell Tucson website. Door hangers were distributed to 7,000 homes and businesses within a half-mile of the project limits. People will be able to comment via mail, email, or telephone hotline. Notices to YMCAs and community centers have been distributed. Distribution to churches has not been accomplished due to issues with access to those properties. An email blast will also be sent to the distribution list from the 2011 Feasibility Study.

Ralph Ellis asked why the area to the southeast of the project limits (where most of the traveling public comes from) were not included in the door hanger distribution. C.T. Revere from ADOT Communications indicated that these areas have been targeted via news releases, websites, etc.

Brad went over the project schedule, reiterating the public scoping meeting on February 15<sup>th</sup>, 2017. The public gets 30 days to comment, after which the traffic model can be finalized based on public/agency feedback on the proposed design.

Brad mentioned the drainage study is underway and will have an impact on the final project footprint including potential new ROW impacts. The preliminary drainage concept will be presented at the next progress meeting.

Brad also brought up the signage concept, which will be developed after input is received from the public meeting. This will need FHWA approval.

Rudy Perez announced that the progress meetings for this project will be held quarterly. The next meeting is scheduled for April. He would like to set a tentative day and time for every quarterly progress meeting so that it can be on everyone's calendar. After input from meeting attendees, a consensus was reached to hold the quarterly progress meetings on the third Wednesday of the month from 1:00 – 3:00 PM. The next meeting is tentatively scheduled for April 19<sup>th</sup>.

Related to project communications, Brad reminded attendees of the project website. All documents related to this project from the very beginning are posted on the website including meeting minutes, exhibits, and project deliverables. This site is intended for use by the study team only. The login information is available in the meeting presentation slides. There is a separate website for public use with information related to the project. The content on the public website is out of date, however, ADOT will be updating it soon.

- Study Team Website: [www.jacobsaz.com](http://www.jacobsaz.com)
  - Login: I-10 Corridor
  - Password: Empirita
- Public Project Website:  
<http://www.azdot.gov/planning/transportation-studies/i-10-and-sr-210-feasibility-study>

Mike Dawson provided the environmental update. He noted that this Environmental Assessment will be slightly unique in that the proposed alternatives, Alternative I, Alternative IV, and the No Build Alternative, will not be



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distinguished primarily on the variation in potential environmental/social/built environment impacts but rather based on the operational attributes of each.

Brad opened the meeting to comments or questions from attendees.

Joan Lovell from ADOT ITS noted that the signing concept should include consideration for DMS signs. She also asked that ramp meter warrants be considered with this project. She indicated that there is an active FMS that runs from I-19 to Valencia Road and this will need to be maintained or relocated, and a new fiber system will need to extend along the remainder of the project corridor. Rudy Perez also suggested that wrong way driving and dust storm mitigation measures be considered for this project.

DMAFB asked about the DCR/EA completion deadline. Brad indicated a completion date of March 2019, after which the project will be advertised for design and then construction. Construction will be accomplished in approximately \$70M phases out of an anticipated \$500M budget.


DMAFB asked why the project will be completed at the west end first rather than the east end. Paul said that this approach addresses the worst inefficiencies first. The operational problems at the interchanges directly affect the capacity of the I-10 mainline.

Tremaine Wilson from FHWA asked if the project is located in an air quality nonattainment or maintenance area. Joe D'Onofrio from Jacobs responded indicating, yes, for Maintenance of Carbon Monoxide but the project limits are outside the Pima County PM10 Nonattainment area.

Tremaine Wilson asked if FAA and EPA had been considered as potential cooperating agencies. Mike Dawson responded that they have not, and that generally they are not in support of projects that primarily address highway operational performance with increased capacity and tend to focus on transit-focused solutions. Joe indicated that EPA will be included in the Interagency Consultation Process for the air quality model, along with FHWA/ADEQ and ADOT.

**ACTION ITEM LIST**

- The Jacobs team will continue to pursue the key issues discussed in this meeting to define the critical elements of this study as early as possible.
- The Jacobs team will provide GIS shape files or CADD files to Micah Horowitz of ASLD and to James Tokishi with PAG.
- PI team will look into obtaining a DDI simulation video and setting up a viewing station at the public meeting.
- Stakeholders are encouraged to review the proposed concept plans and crash data in detail.
- Stakeholders are encouraged to review and comment on the meeting minutes to ensure accuracy.

Signed:   
 Brad Olbert, PE, Project Manager

Attachments

**Meeting Notes**



**I-10 / Barraza-Aviation Pkwy (SR 210)**  
 Design Concept Report & Environmental Assessment

ARIZONA DEPARTMENT OF TRANSPORTATION  
 205 S. 17<sup>th</sup> Avenue, Mail Drop 605E  
 Phoenix, AZ 85007

**PROGRESS MEETING NOTES**

**I-10, I-19 to Kolb Road & SR 210, Golf Links to I-10**  
 Project No. 010 PM 260 H7825 01L

April 19, 2017

TO: Meeting Attendees  
 Sayeed Hani, ADOT Railroad and Utility Section\*\*  
 Mark Hoffman, ADOT Multimodal Planning\*\*  
 Sarah Karasz, ADOT Environmental Planning  
 Joan Lovell, ADOT ITS\*\*  
 Rudy Perez, ADOT Project Manager  
 Paki Rico, ADOT Communications  
 Sharmina Shireen, ADOT Drainage\*\*  
 Micah Horowitz, ASLD\*\*  
 Joel Gastelum, City of South Tucson Planning and Zoning Director  
 Sixto Molina, City of South Tucson City Manager  
 Robin Raine, City of Tucson Assistant Transportation Director  
 Jesse Soto, City of Tucson  
 Mike Dawson, EcoPlan Environmental Planner  
 Evan Grace, J2 Engineering Drainage\*\*  
 Jeff Holzmeister, J2 Engineering Drainage\*\*  
 Paul Black, Jacobs Roadway\*\*  
 Judah Cain, Jacobs Roadway\*\*  
 Joe D'Onofrio, Jacobs Environmental  
 Brad Olbert, Jacobs Project Manager  
 Shantala Ramaiah, Jacobs Structures\*\*  
 Sandy Thoms, Jacobs Traffic\*\*  
 Karen Apple, HDR Public Involvement\*\*  
 David Adler, Pima Association of Governments  
 Beth Abramovitz, Pima County Department of Transportation  
 Priscilla Cornelio, Pima County Director of Transportation\*\*  
 Steve Wilson, Pima County Project Manager  
 Robert Young, Pima County Transportation System Division Manager  
 Bill Zimmerman, RSCD

\*\* Attended via teleconference

FROM:  
 Brad Olbert, Jacobs Project Manager



**I-10 / Barraza-Aviation Pkwy (SR 210)**  
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**SUBJECT:**

PROGRESS MEETING NOTES  
 I-10, I-19 to Kolb Road & SR 210, Golf Links to I-10  
 Project No. 010 PM 260 H7825 01L  
 PHASE II (I-10/SR 210) Design Concept Report and Environmental Assessment

**INTRODUCTION**

The Progress Meeting for this project was held at 1:00 PM April 19, 2017 at the ADOT Southcentral District Conference Room. Teleconferencing was available via WebEx for attendees offsite. The meeting was adjourned at 3:05 PM.

The meeting was well represented by agencies interested in improving the I-10 corridor from Junction I-19 to Kolb Road and providing a connection for SR 210 to I-10. Representatives included ADOT, Arizona State Land Department (ASLD), City of Tucson, City of South Tucson, Pima County, and Pima Association of Governments (PAG). Stakeholders provided input for the success of the project.

**SUMMARY**

Rudy Perez, ADOT Project Manager opened the meeting at 1:02 PM. Introductions were held for all attendees. Rudy introduced Paki Rico who is replacing C.T. Revere as the ADOT Communications representative.

Brad Olbert, Jacobs Project Manager, started the meeting with a safety minute and pointed out the emergency exits for the meeting room. He also reminded attendees that as temperatures rise, so will the tire pressure in your vehicle tires. He advised everyone to check their tire pressure and adjust it accordingly to reduce the risk of a blowout.

A public meeting for the project was held on February 15, 2017. Karen Apple shared details of the public meeting and referenced a summary handout that was provided to attendees. The scoping period for the project was between February 15<sup>th</sup> and March 21<sup>st</sup>, during which they received a total of 111 comments. Many of the comments pertained to alignments and interchanges, environmental impacts, relieving traffic congestion, scheduling and timing, as well as project cost and funding. They are still in the process of sorting through the comments, but the Draft Scoping Summary Report should be ready around the end of April or early May. Brad added that there were many questions about the collector-distributor (CD) system during the public meeting. He recalled that attendees familiar with the concept liked it and those that had not heard of it or driven on one were more skeptical.

Brad shared that he, Mike Dawson and Rudy Perez met with the Director of Transportation for the Sunnyside Unified School District to discuss their concerns with the project in relation to Los Niños Elementary School. Alvernon Way will be a six-lane parkway in the future, and busses already have difficulty exiting the school today. Brad proposed the installation of a traffic signal for vehicles and busses exiting the school. The school district also expressed their concerns with the current noise levels in and around the school due to I-10 and Alvernon Way. Brad indicated that the project team will look into the noise levels and the possibility of noise walls.

Paul Black, Jacobs roadway design lead, discussed the adjustments that have been made to the alternative concept plans since they were last presented:



**I-10 / Barraza-Aviation Pkwy (SR 210)**  
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- The study team was asked to provide an at-grade access between 6<sup>th</sup> Avenue and Park Avenue. Since an at-grade rail crossing may not be feasible, a compromise is to provide a connecting ramp from the westbound on-ramp from Park Avenue to 6<sup>th</sup> Avenue. The ramp goes over the railroad but still provides an at-grade roadway between 4<sup>th</sup> Avenue and 6<sup>th</sup> Avenue for future development access. This access will be right-in, right-out only, as it is a one-way frontage road.
  - Sixto Molina from the City of South Tucson expressed the City's desire for a two-lane road paralleling I-10, similar to what exists in Green Valley near Continental Road. Paul pointed out that a ramp is being added to connect the eastbound frontage road south of I-10 to Park Avenue, but an eastbound road north of I-10 may not be feasible. Brad added that the proposed system will work like a couplet on the north and south sides of I-10. Sixto stressed that if the road north of I-10 is not provided now, the 60-70 acres of empty parcels north of I-10 will always be empty, and that this is the lifeline that the City of South Tucson needs to continue to be a City. Paul indicated he will look into a possible solution for this.
- The bridge for SR 210 crossing over the railroad tracks is too close to the Ajo Way TI. Due to issues with vertical profiles, the exit ramps had to be separated from the mainline with separate bridges. This results in a very short weave distance for traffic exiting at Ajo Way. Therefore, a separate ramp will be provided for traffic traveling eastbound/southbound on SR 210 wanting to exit at Ajo Way. Southbound traffic from Alvernon Way will also utilize this ramp to access Ajo Way, or continue straight through to get on SR 210. Southbound traffic on Golf Links Road that wishes to exit at Ajo Way will also have access to this ramp. This new ramp will serve traffic wanting to access Ajo Way from all possible approaches, eliminating Ajo Way weaving maneuvers on SR 210.
- Valencia Road was recently reconstructed and included widening under the existing I-10 bridge. Unfortunately, the existing bridge cannot accommodate the future need for dual left-turn lanes for traffic accessing I-10. The study team tried to work around this by utilizing single left-turn lanes, but the necessary vehicle storage length for this cannot be accommodated due to the bridge pier locations. Dual left turn lanes are needed; therefore, the bridge will need to be replaced. To maximize construction efficiency, I-10 was realigned to allow I-10 to remain open during this construction.
- An auxiliary lane could not be provided between Valencia Road and Craycroft Road due to their close proximity. Therefore, a separate ramp will extend between the interchanges to provide access between the two.
  - Micah Horowitz indicated that there is state trust land in this vicinity and asked that it be shown on these figures and all future figures for reference.
  - Sixto Molina indicated that Swan Road will eventually connect into the Town of Sahuarita, and asked if anything will be done at the intersection of Swan Road and Valencia Road. Brad responded it was his understanding that in the future Swan Road will shift to the west and connect to Alvernon Way north of the Tucson International Airport. Alvernon Way/Swan Road will be a future north-south parkway.
- Craycroft Road is a tight interchange due to nearby businesses and homes. Since this project will be removing the existing frontage road which provides access to homes in the southeast quadrant, an access road will be provided from the homes to Craycroft Road.
  - Sixto Molina shared that the intersection at the eastbound frontage road and Craycroft Road operates poorly. He indicated that school busses are sometimes late to school because it takes them so long to turn left (northbound) onto Craycroft Road. Paul reassured that this intersection



**I-10 / Barraza-Aviation Pkwy (SR 210)**  
 Design Concept Report & Environmental Assessment  
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will be signalized in the future, so traffic will be provided better opportunity to turn left. Sixto then asked that two eastbound left-turn lanes be provided at this intersection. Paul responded that the traffic volume projections will dictate that decision, and that the traffic analysis will evaluate and recommend the lane configurations.

- The Wilmot Road TI is currently very tight due to existing businesses. Where the space is available, the new ramps will flare out to meet Wilmot Road at a more perpendicular angle. A southbound right-turn lane was added from Wilmot Road to Diablo Sunrise Road to match the existing street width.
- Kolb Road is proposed to be a Diverging Diamond Interchange (DDI) with bypass express lanes. The study team received comments regarding heavy truck traffic utilizing this TI and concern for queuing backing up within the TI and blocking access points. To remedy this, a lane was added northbound and approaching the signals after the bridge to minimize the queue distance. A right-turn lane was also added southbound to westbound so that queue does not block access to I-10. Additionally, the two signals within the DDI will be coordinated with one another as to not allow much traffic to back up.
  - Micah Horowitz pointed out the driveway connector on the south side of I-10 that gives access to the east side of Kolb Road. He would like a similar access to be provided for the west side of Kolb Road, as that is state trust land. Paul indicated he will provide that access.

Jeff Holzmeister, J2 Engineering drainage design lead, gave an overview of the on-site drainage plan for the project corridor. The team looked at previous studies which showed flow patterns and there is not a substantial amount of offsite drainage in the area. I-10 parallels most of the existing drainage in the project area. Right-of-way is tight and a search of remnant parcels for first flush and detention basins is being conducted. The team may need to consider a storm drain system rather than parallel channels due to limited right-of-way. Small washes break out diagonally from the freeway, and current design would prefer to maintain that pattern. On-site facilities will have curb and gutter, piggybacking onto existing systems.

Jeff continued discussing the drainage elements unique to Alternative IV, indicating that right-of-way is even tighter with this alternative due to the CD roads. This makes off-site drainage more of a challenge. Catch basins will discharge into existing channels; more catch basins and pipe may be needed due to retaining walls. There may be some issues with fitting pipes between the CD road edge of pavement and the right-of-way, but this will be looked at more closely as design progresses.

Mike Dawson asked if the drainage design was being driven by the new roadway design or if they are just fixing existing issues. Jeff indicated that the new design is the driving factor. The corridor is being converted from a rural to an urban section so new facilities are needed, and there is also the need to maintain the existing system connections.

Sixto Molina asked what drainage improvements are being proposed at the interchange at 6<sup>th</sup> Avenue. Jeff responded that the current plan is to maintain the existing drainage pattern that is there now. He asked if there are any issues in that location which would spark the need for improvements. Sixto responded that he has no specific concerns, but just wanted to see if any changes were being made.

Paul Black began to go over the list of comments that the study team received from Pima County, as well as the team's responses to the comments. However, Priscilla Cornelio from Pima County indicated that the County has not adequately reviewed the study team's responses and will need to get back to everyone about it after she



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can meet with John Moffatt. It was agreed to skip this agenda item and Priscilla will get back to the study team with the County's responses within a couple of weeks.

Paul Black then discussed the option of providing periodic access between the express lanes and the CD in Alternative 4. He showed four possible locations where access points could be located based on geometry, right-of-way, and interchange locations. These access slip ramps are called "bubbles" since the CD will have to bulge outward like a bubble to provide enough separation such that a vehicle can only access the ramp in one direction. If the ramp is intended to allow traffic from the CD onto the express lanes, we do not want a vehicle to be able to access the CD from the express lanes using that same ramp.

Kolb Road experiences heavy northbound and southbound traffic wanting to go westbound on I-10. The study team looked into the possibility of allowing them onto the westbound express lanes via a slip ramp shortly after Kolb Road. Similarly, access could also be provided from the eastbound express lanes to the CD west of Wilmot Road to allow Kolb Road traffic to exit. Two other possible slip ramp access points are just west of Valencia Road which would allow access for truckstop traffic at Craycroft Road.

The question was raised if these bubbles will require new right-of-way. The answer is yes, they cannot be accommodated within the existing right-of-way. The question was also asked if these bubbles solve the emergency access concerns with the CD system. They do not, but the study team has come up with a solution utilizing emergency access gates. See more below.

The intent of the CD is to separate local and regional traffic. The more local traffic that is accommodated on the express lanes, the less effective the CD becomes, which defeats its purpose. The study team does not want to negate the intent of the CD by allowing too many access points to the express lanes. The study team and stakeholders will look further into these access bubbles to determine which ones, if any, will be proposed. Mike Dawson asked if the "bubble areas" would require additional ROW. Paul said yes it would and that is why the "bubble area" locations shown are in vacant parcels.

Paul discussed the emergency access gates for the CD system, which will need to be provided at least every mile. He showed some images of concepts in which the concrete median barrier is replaced with a long gate that can be pushed open from either direction, and be hinged on either side. This can allow emergency vehicle access between the CD and the express lanes, and could also be used to divert traffic from one roadway to the other in the case of a more serious incident. Robin Raine suggested that this concept be presented to first responders to get their input. Brad will send this information to Robin so she can pass it on to the appropriate personnel for review.

Brad briefly went over the project schedule which was included in the agenda. The draft highway signage concept, draft drainage concept, and the draft initial drainage report are slated for completion in mid-May. The evaluation of public input as well as the updated traffic operations model should be ready around late May. The next progress meeting is scheduled for July 19<sup>th</sup>, 2017 from 1:00-3:00pm.

Related to project communications, Brad reminded attendees of the project website. All documents related to this project from the very beginning are posted on the website including meeting minutes, exhibits, and project deliverables. This site is intended for use by the study team only. The login information is available in the meeting presentation slides. There is a separate website for public use with information related to the project. The content on the public website is out of date, however, ADOT will be updating it soon.





**I-10 / Barraza-Aviation Pkwy (SR 210)**  
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- Study Team Website: [www.jacobsaz.com](http://www.jacobsaz.com)
  - Login: I-10 Corridor
  - Password: Empirita
- Public Project Website:  
<http://www.azdot.gov/planning/transportation-studies/i-10-and-sr-210-feasibility-study>


A question was raised regarding construction detours and it was expressed that options are needed for when Alvernon Way is constructed. Brad responded that these items will need to be discussed with the County and other stakeholders (like Davis-Monthan AFB and TEP) and that options will need to be evaluated. Detour routes will need to meet the needs of local businesses, as well as the public.

Joan Lovell indicated that there are a lot of FMS elements that need to be considered on this project. She cautioned that the CADD drawings she provided of existing FMS features are not as-builts, and in-place equipment may vary from the design files. She indicated that Reza Karimvand wants to install fiber along every freeway in the State, so this project is no exception. Another meeting is needed to discuss and coordinate this.

Steve Wilson asked if a traffic report has been prepared. Brad responded that a detailed traffic report was conducted as part of the Feasibility Study and that report will be updated to reflect the roadway configurations that have changed since then. It was asked if Alvernon Way was modeled in the Feasibility Study the same as it is currently proposed. Brad responded that the basic Alvernon Way concept has not changed since the Feasibility Study.

**ACTION ITEM LIST**

- The Jacobs team will continue to pursue the key issues discussed in this meeting to define the critical elements of this study as early as possible.
- Priscilla Cornelio will present the study team's comment responses to appropriate personnel at the County and provide concurrence or further comments.
- Stakeholders are encouraged to review and comment on the meeting minutes to ensure accuracy.

Signed:   
 Brad Olbert, PE, Project Manager

Attachments

**Meeting Notes**



**I-10 / Barraza-Aviation Pkwy (SR 210)**  
 Design Concept Report & Environmental Assessment

ARIZONA DEPARTMENT OF TRANSPORTATION  
 205 S. 17<sup>th</sup> Avenue, Mail Drop 605E  
 Phoenix, AZ 85007

**COORDINATION MEETING NOTES**

**I-10, I-19 to Kolb Road & SR 210, Golf Links to I-10**  
 Project No. 010 PM 260 H7825 01L

March 16, 2017

**TO: Meeting Attendees**  
 Sixto Molina, City Manager, City of South Tucson  
 Mick Jensen, Planner, City of South Tucson  
 Joel Gastelum, Planning and Zoning Director, City of South Tucson  
 Rudy Perez, ADOT Major Projects Group  
 Brad Olbert, Jacobs Project Manager

**FROM:**  
 Brad Olbert, Jacobs Project Manager

**SUBJECT:**  
 COORDINATION MEETING NOTES  
 I-10, I-19 to Kolb Road & SR 210, Golf Links to I-10  
 Project No. 010 PM 260 H7825 01L  
 PHASE II (I-10/SR 210) Design Concept Report and Environmental Assessment

**INTRODUCTION**

This coordination meeting was held 10:45 AM March 16, 2017 at the City of South Tucson, City Hall Conference Room. The purpose of the meeting was to review the proposed planning concepts for I-10 through the limits of the City of South Tucson for the new city manager.

**SUMMARY**

Brad Olbert, Jacobs Project Manager, gave a brief overview of the project.

Our traffic analysis of 2011 traffic volumes showed that the traffic interchange (TI) at 6<sup>th</sup> Avenue was operating adequately. The TI did not require major re-work to meet the projected 2040 traffic volumes. However, we recently received correspondence from the VA Hospital. The VA Hospital mentioned that 6<sup>th</sup> Avenue is very congested during rush hour periods and requested capacity improvements for the westbound I-10 on-ramp. We are revisiting traffic operations at the interchange and are looking into possibly adding dual left-turn lanes. The City of South Tucson staff liked the idea of having dual left-turns to help reduce the queue lengths and congestion in the area.

One other item is a PAG transit study on routes for transit (modern street car or Bus rapid transit). PAG is looking for a route over I-10 at either 6<sup>th</sup> Avenue or Kino Boulevard. Mick said South Tucson prefers having the route along 6<sup>th</sup> Avenue. The bus route along 6<sup>th</sup> Avenue has one of the highest riderships in the Tucson area.



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Having a transit line route along 6<sup>th</sup> Avenue will provide development opportunities for the City. The UofA prefers the route over Kino Boulevard.

Mr. Molina was interested in providing improved access to the area north of I-10, south of 36<sup>th</sup> Street, east of 6<sup>th</sup> Avenue, and west of Park Avenue. This area has suffered from a lack of good access ever since I-10 was constructed. The area has a lot of empty buildings and vacant lots. The owners of the area are interested in removing the old structures and rebuilding as long as better access can be obtained.


Mr. Olbert said the existing Park Avenue interchange is difficult for visitors to Tucson to navigate. The plan is to provide full access at this interchange and replace the loop ramp. The traffic interchanges of 6<sup>th</sup> Avenue/Park Avenue/Kino Boulevard are too close together to provide adequate weaving distances. Access to the Park Avenue and 6<sup>th</sup> Avenue interchanges in the westbound direction will utilize braided ramps to separate cars and reduce the weaving on I-10. The current I-10 concept does not allow westbound traffic originating from Park Avenue to have access to 4<sup>th</sup> and 6<sup>th</sup> Avenues. This would restrict access north of I-10 and is not desirable from South Tucson's point of view.

To provide better access to the area north of I-10, Jacobs will add a westbound slip ramp that will allow cars from the Park Avenue on-ramp to merge with the 6<sup>th</sup> Avenue off-ramp. The slip ramp will allow access to 4th and 6th Avenues. In the eastbound direction getting off and on eastbound I-10 will be very similar except the connection to Park Avenue will be changed providing a perpendicular connection to Park Avenue. Vehicles at 6<sup>th</sup> Avenue TI will be able to loop around I-10 using either the undercrossing at the UPRR railroad crossing or the Park Avenue TI. The ramp adjustment was acceptable to the City of South Tucson.

The meeting adjourned around 12:00 PM.

**ACTION ITEM LIST**

- The Jacobs team will look into the possibility of adding dual left-turn lanes at the 6<sup>th</sup> Avenue TI.
- Jacobs will contact PAG about the location of the future transit crossing of I-10.
- The Jacobs team will add a westbound slip ramp that will allow cars from the Park Avenue on-ramp to merge with the 6th Avenue off-ramp.

Signed:   
 Brad Olbert, PE, Project Manager

**Meeting Notes**



**I-10 / Barraza-Aviation Pkwy (SR 210)**  
 Design Concept Report & Environmental Assessment

ARIZONA DEPARTMENT OF TRANSPORTATION  
 205 S. 17<sup>th</sup> Avenue, Mail Drop 605E  
 Phoenix, AZ 85007

**COORDINATION MEETING NOTES**

**I-10, I-19 to Kolb Road & SR 210, Golf Links to I-10**  
 Project No. 010 PM 260 H7825 01L

March 16, 2017

**TO: Meeting Attendees**  
 Carlos Valdez, Transportation Manager, Sunnyside Unified School District  
 Mike Dawson, EcoPlan  
 Rudy Perez, ADOT Major Projects Group  
 Brad Olbert, Jacobs Project Manager

**FROM:**  
 Brad Olbert, Jacobs Project Manager

**SUBJECT:**  
 COORDINATION MEETING NOTES  
 I-10, I-19 to Kolb Road & SR 210, Golf Links to I-10  
 Project No. 010 PM 260 H7825 01L  
 PHASE II (I-10/SR 210) Design Concept Report and Environmental Assessment

**INTRODUCTION**

This coordination meeting was held at 1:30 PM March 16, 2017 at the Sunnyside Unified School District Conference Room located at 2300 E. Ginter Road, Tucson. The purpose of the meeting was to review the impacts of the proposed I-10/SR 210 (Alvernon Way) interchange improvements on the Los Ninos Elementary School and identify solutions if needed.

**SUMMARY**

Brad Olbert, Jacobs Project Manager, gave a brief overview of the project to widen I-10 from I-19 to Kolb Road and to extend the Barraza-Aviation Parkway (SR 210) south along the Alvernon Way corridor to connect with I-10. Existing Alvernon Way is a 4-lane divided roadway south of I-10 and in front of the Los Ninos Elementary School.

The proposed system improvements located at I-10 and Alvernon Way will widen Alvernon Way to the north side of the Los Ninos Elementary School. Alvernon Way will be widened to a 6-lane divided roadway at the eastbound ramps to I-10. In the future, the Regional Transportation Plan shows Alvernon Way to the south of I-10 being a 6-lane divided parkway.

Carlos Valdez mentioned that twice a day, parents and bus drivers drive to the school to drop off or pick up 700 students (kindergarten through 5<sup>th</sup> grade). Buses have a location where they unload/load students. In the afternoon, after the buses are loaded with children the buses line up at the north exit from the school where they



**I-10 / Barraza-Aviation Pkwy (SR 210)**  
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wait for an opportunity to make a left on-to Alvernon Way or if Alvernon Way is busy will make a right turn onto Alvernon Way and go north to the nearest traffic signal to make a U-turn to head south on Alvernon Way. Parents have a separate location where they can unload or park and wait for their children. In the afternoon, parents wait in an area that is three lanes across to pick up children. The waiting area frequently queues up onto Alvernon Way blocking one northbound travel lane down to Drexel Road.

The proposed improvements for the I-10 project will widen Alvernon Way south to the northernmost parking lot exit used by the buses to exit the school property. In the future when the rest of Alvernon Way is widened to 6-lanes divided as a parkway, these improvements will match the Alvernon Way section to the north. Heavy traffic conditions will make exiting the school property difficult for buses and cars. To facilitate the left turn out of the school parking lot it was recommended that a signal be installed to stop northbound and southbound traffic to enable buses loaded with students to exit the property. The signal would be activated only after all of the buses have queued up to make the left turn. Mr. Valdez felt the signal would take care of buses leaving the school property. Parents leaving the school make a right turn and queue up in a left-turn pocket located across from the bus exit. Parents then make a U-turn to head south on Alvernon Way. Further analysis will be needed to determine if the parents can utilize the bus exit after the buses have left the property.

The meeting adjourned around 2:30 PM.

**ACTION ITEM LIST**

- The Jacobs team will propose a new signal to be located at the northernmost bus exit point.

Signed:   
 Brad Olbert, PE, Project Manager

**Meeting Notes**



**I-10 / Barraza-Aviation Pkwy (SR 210)**  
 Design Concept Report & Environmental Assessment

ARIZONA DEPARTMENT OF TRANSPORTATION  
 205 S. 17<sup>th</sup> Avenue, Mail Drop 605E  
 Phoenix, AZ 85007

**PROGRESS MEETING NOTES**

**I-10, I-19 to Kolb Road & SR 210, Golf Links to I-10**  
 Project No. 010 PM 260 H7825 01L

May 15, 2017

**TO: Meeting Attendees**

Rudy Perez, ADOT Project Manager  
 Abdulkarim Rashid, ADOT Lighting  
 Reza Karimvand, ADOT Systems Technology  
 Joan Lovell, ADOT Systems Technology  
 Tammy Mivshek, ADOT Traffic Design  
 Shanthi Krishnan, Jacobs Traffic  
 Brad Olbert, Jacobs Project Manager  
 Anil Mudigonda, Jacobs Traffic-ITS  
 Marie Baginski, Jacobs Lighting-ITS

**FROM:**

Shanthi Krishnan, Jacobs

**SUBJECT:**

Signing Concept, Lighting, and ITS Design Discussion  
 I-10, I-19 to Kolb Road & SR 210, Golf Links to I-10  
 Project No. 010 PM 260 H7825 01L  
 PHASE II (I-10/SR 210) Design Concept Report and Environmental Assessment

**INTRODUCTION**

The Progress Meeting for this project was held at 1:00 PM May 15, 2017 at the ADOT Traffic Design Conference Room. The meeting was adjourned at 2:30 PM.

Brad Olbert presented a brief history of the project and the progress of work achieved so far and the next steps towards the completion of the project.

**SUMMARY**

- Safety Minute: Brad Olbert, Jacobs Project Manager started the meeting with a safety minute. He mentioned that with the rising temperatures, the tire pressures in your vehicle tires will also rise. He advised that everyone check their tire pressures and adjust accordingly to reduce the risk of a blowout.



**I-10 / Barraza-Aviation Pkwy (SR 210)**

Design Concept Report & Environmental Assessment

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- Introductions: All meeting invitees introduced and stated their role on the project.
- Project Overview: Brad Olbert presented the project overview to the group
  - Project limits for feasibility study
  - Project limits for DCR/EA
  - Project constraints:
    - Davis Monthan AFB
    - Kino Sports Complex and regional park
    - Location of UPRR Railroad
    - Other residential/commercial developments
- Lighting Design
  - LED vs. High-pressure Sodium (HPS): Karim Rashid (ADOT Lighting) mentioned LED fixtures to be considered since the project is a few years away from construction.
  - Median lighting preference? → Karim Rashid mentioned that Jacobs need to evaluate the options for lighting. He mentioned that he had to go through FAA evaluation for high-mast lighting on one of his previous projects at the Palo Verde interchange due to the proximity of the project to Davis Monthan AFB, and the Tucson International Airport. He mentioned that Jacobs need to evaluate high-mast lighting and smaller side-mount poles for the highway system.
  - For Texan U-turn underpass at 6<sup>th</sup>/4<sup>th</sup> St, Karim mentioned to check the lighting requirements for daytime lights (10:1 ratio). Jacobs will evaluate the underpass lighting with the new design elements.
  - Karim also mentioned to consider the dark skies in the region during the lighting evaluation process. He mentioned that the team should consider 3000K LED fixtures in the Tucson limits.
  - Marie Baginski, Jacobs Lighting-ITS mentioned that Jacobs team will perform lighting analysis for typical roadway sections to evaluate the luminaire spacing and provide a typical spacing recommendation for each section of roadway for the project. Jacobs will also provide recommendations for network control lighting at the LED fixtures along with lighting shielding for the residential areas in close proximity of the ADOT right-of-way.
  - No more sign lighting to be considered for the project
- Traffic Signals
  - Jacobs will estimate a lump sum cost estimate for the affected TI traffic signals for the project
- Karim Rashid also mentioned that the DCR discuss provisions for future wrong-way detection systems to be included as part of the design elements for the project.
- ITS Design
  - Jacobs asked about the lifespan of the existing ITS elements for the project. Joan Lovell (ADOT Systems Technology) stated that the lifespan of the ITS elements is generally about 15 years and that the existing DMS structures within the project limits have been installed around 2012.
  - DMS location requirements: One DMS within 1 mile of system TI and max. DMS spacing of 3 miles on the freeway system. Joan mentioned that Jacobs is not restricted to look into just the Type I (walk-in) DMS but also can consider Type II DMS on butterfly structure if there are issues locating a full sign structure span on the freeway.
  - Joan suggested adding one DMS on each approach of SR-210 between I-10 and Golf Links Road. Joan also suggested adding one DMS for the eastbound approach of I-10, around the Country Club Road TI so the system can meet the DMS location requirements.
  - Joan mentioned that Jacobs should consider color display DMS versus the amber display since the cost-differential is very minor.
  - CCTV camera pole requirements: One CCTV at each TI to cover the freeway and the cross street. Maximum spacing for CCTV cameras not to exceed 1 mile, but additional cameras to be



**I-10 / Barraza-Aviation Pkwy (SR 210)**

Design Concept Report & Environmental Assessment

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- added for full freeway coverage and/or curvature on the freeways. All new CCTV cameras, poles and cabinets will be considered for the project.
- Mainline and ramp detectors and count stations
  - Standard in-pavement loop detectors at 1-mile spacing along the freeway
  - All ramp meter infrastructure will be estimated for cost purposes
- FMS Load Centers
  - FMS load center at each TI and at each DMS location. Joan suggested only adding Type IV modified load centers for the project.
- Trunkline conduit
  - 3-3" trunkline conduits for both sides of the freeway for I-10 and SR-210 for the length of the project. Consider only No. 9 pull boxes with torsion-assisted lids at ADOT recommended spacing. Do not show No. 7 pull boxes as there is no locking mechanism for the No. 7 pull box.
- Node building
  - Joan suggested adding a new node building at Kolb Road TI towards the end of project. A rough cost estimate for a new node building is approximately \$50,000.
  - She mentioned that there is an existing node building at I-19 TI/TOC.
- Pump station connectivity
  - Pump stations existing/proposed along the project will be connected to the ADOT FMS system.
- Any other FMS considerations
  - Joan mentioned adding estimates for future wrong-way detection systems to the project costs.
  - Joan to provide Jacobs with 60% plans and estimate on a current pilot project being implemented on the I-17 corridor in the Phoenix metro area.
- Signing
  - Tammy Mivshek, ADOT Traffic Design said she is ok with a PDF Submittal roll plot but also prefers to have the submittal on 11x17 format so she can mark/provide comments on the submittal.
  - Tammy mentioned to accommodate Grand Canyon logo signs as part of the signing package
  - Tammy asked that the cost estimate to include in-lane pavement markings in the vicinity of a system interchange to augment the messages shown on the guide signs.

**ACTION ITEM LIST**

- The Jacobs team will update the design per the meeting notes and will submit a signing concept review submittal to the review team and stakeholders
- Joan Lovell to provide a copy of the wrong-way detection progress plans and estimates to Jacobs team so the cost estimates could be included in the overall DCR estimates.

*Shanthi Krishnan*

Signed: \_\_\_\_\_  
Shanthi Krishnan, PE, PTOE, Jacobs Traffic/ITS

Meeting Notes



I-10 / Barraza-Aviation Pkwy (SR 210)  
Design Concept Report & Environmental Assessment

ARIZONA DEPARTMENT OF TRANSPORTATION  
205 S. 17<sup>th</sup> Avenue, Mail Drop 605E  
Phoenix, AZ 85007

COORDINATION MEETING NOTES

I-10, I-19 to Kolb Road & SR 210, Golf Links to I-10  
Project No. 010 PM 260 H7825 01L

May 16, 2017

TO: Meeting Attendees

Shannon Breslin, Land Resource Manager, Tucson Electric Power  
Cherly Eamick, Land Resource Environmental Planning Supervisor, Tucson Electric Power  
Cory Pintor, Land Resources Right-of-Way Supervisor, Tucson Electric Power  
Liza Castillo, Land Resources Right-of-Way Agent, Tucson Electric Power  
Rick Burrows, Compliance & Special Project Manager, Tucson Electric Power  
Jason Saline, Environmental Land Use Planner, Tucson Electric Power  
Paki Rico, ADOT Senior Community Relations Officer  
Rudy Perez, ADOT Major Projects Group  
Brad Olbert, Jacobs Project Manager  
Judah Cain, Jacobs  
Cassandra Smith, Jacobs

FROM:

Brad Olbert, Jacobs Project Manager

SUBJECT:

COORDINATION MEETING NOTES  
I-10, I-19 to Kolb Road & SR 210, Golf Links to I-10  
Project No. 010 PM 260 H7825 01L  
PHASE II (I-10/SR 210) Design Concept Report and Environmental Assessment

INTRODUCTION

This coordination meeting was held at 10:00 am May 16, 2017 at the Tucson Electric Power (TEP) Conference Room located at 88 E. Broadway Blvd. 85701, Tucson. The purpose of the meeting was to review and discuss the impact of the proposed I-10/SR 210 (Alvernon Way) Traffic Interchange and Corridor improvements on the power distribution system and generating station located on Irvington Rd east of Alvernon Way and identify potential solutions if needed.

SUMMARY

Jason Saline, Tucson Electric Power, gave a brief overview of the TEP facilities in the area including the Sundt Generating Station and 138/146 kV overhead power lines that run parallel to the east and west side of Contractors Way. TEP is concerned the improvements to the Alvernon Way corridor and the I-10 and Alvernon Way traffic interchange will impact and limit their accessibility to the Sundt Generating Station as well as other facilities in the area particularly in emergency situations.



I-10 / Barraza-Aviation Pkwy (SR 210)  
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Shannon Breslin led the discussion portion of the meeting. The two entrances to the Sundt Generating Station are located on Irvington Rd east of Contractors Way. Three primary routes provide access to the Generating Station: to/from the west, crossing the Union Pacific Railroad (UPRR) tracks are Irvington Rd and Ajo Way and to/from the north, Contractors Way. Valencia Rd, to/from the southeast, is an unused route that is circuitous, narrow, and not all weather. Currently, eastbound I-10 is accessible from southbound Alvernon Way at Irvington Rd while access to westbound I-10 is provided from Irvington Rd just east of Palo Verde Rd. Northbound Alvernon Way provides the connectivity to Downtown Tucson via Golf Links Rd and Aviation Pkwy.

TEP is presently in a two year process of modernizing the Sundt Generating Station campus which includes a traffic study to establish a baseline estimate of traffic volumes and congestion. Sundt Generating Station was previously a coal fired power plant and now is primarily a natural gas facility with a small mix of solar heated assisted power and methane gas power from a regional landfill located to the south. Maintenance crews from Sundt Generating Station respond to service issues and they need quick access to routes that provide connectivity to the different TEP distribution service areas.


Brad Olbert, Jacobs Project Manager, gave a brief overview of the project schedule and history including constraints and eliminated alternatives, and highlighted improvements of the revised Alternative I in the area. Access to I-10 would be provided at the new interchange at Country Club Rd and connectivity to the north would be provided at Ajo Way traffic interchange on the extended Barraza-Aviation Pkwy (SR 210). Judah Cain, Jacobs, noted that the extended SR 210 in Alternative I and IV were the same.

Ms. Breslin said that Contractor Way in the revised concept of Alternative 1 would restrict access to the north especially if UPRR crossings at Irvington Rd and Ajo Way are blocked by a train derailment. Maintaining power lines during events when power is down is essential to the community. Multiple access points are needed to provide TEP with options to get service crews to outage locations. TEP has internally discussed the possibility of utilizing the access to the east to Valencia Rd but noted the need to have accessible connection to the north especially during the outage/emergency scenarios. TEP needs a signalized intersection on Valencia Road to provide safe access for their large trucks. Potential connections to the extended freeway were discussed. Jacobs team will review design schematics to determine accessibility to the extended SR 210. Jacobs requested information on the size of TEP's large service trucks. Jacobs can run turning movement software to verify the accessibility to interchanges by their trucks. TEP recommended additional coordination meetings and requested flight path information be incorporated into plan sheets for TEP and Jacobs to identify potential conflicts with alternative design schematics.

The meeting adjourned around 11:30 AM.

ACTION ITEM LIST

- Jacobs team will re-examine additional access to the north including potential connection to/from Contractors Way to the extended SR 210.
- Jacobs team will contact Davis Monthan Air Force Base to obtain flight paths information. The information will be included as part of the plan sheets for TEP's review.
- TEP engineers will review roadway concepts and provide comments.
- TEP will provide information on the size of their service trucks to Jacobs.

Signed:   
Brad Olbert, PE, Project Manager

Meeting Notes



I-10 / Barraza-Aviation Pkwy (SR 210)  
Design Concept Report & Environmental Assessment

ARIZONA DEPARTMENT OF TRANSPORTATION  
205 S. 17<sup>th</sup> Avenue, Mail Drop 605E  
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COORDINATION MEETING NOTES

I-10, I-19 to Kolb Road & SR 210, Golf Links to I-10  
Project No. 010 PM 260 H7825 01L

May 16, 2017

TO: Meeting Attendees

Nanette Slusser, Assistant County Administrator, Pima County  
Nancy Cole, Program Manager, Public Works Project Management Office, Pima County  
Robert Young, Transportation System Division Manager, Pima County  
Rod Lane, District Engineer, ADOT Southcentral District  
Rudy Perez, ADOT Major Projects Group  
Brad Olbert, Jacobs Project Manager  
Judah Cain, Jacobs  
Cassandra Smith, Jacobs

FROM:

Brad Olbert, Jacobs Project Manager

SUBJECT:

COORDINATION MEETING NOTES  
I-10, I-19 to Kolb Road & SR 210, Golf Links to I-10  
Project No. 010 PM 260 H7825 01L  
PHASE II (I-10/SR 210) Design Concept Report and Environmental Assessment

INTRODUCTION

This coordination meeting was held at 1:00 PM May 16, 2017 at the Pima County Administration Conference Room located at 130 W. Congress, 10<sup>th</sup> Floor, 85701, Tucson. The purpose of the meeting was to discuss the impact of the proposed I-10 roadway widening improvements and Kino Pkwy traffic interchange reconfiguration on key Pima County economic development initiatives in the area and identify potential solutions if needed.

SUMMARY

Nanette Slusser, Pima County, led the discussion. Pima County owns lands east of Kino Pkwy in the vicinity of the I-10 corridor, Kino Stadium District, Kino Environmental Restoration Project (KERP), and Banner-University Medical Center South Campus are major activity centers located on the north side of the interstate. The County is currently in the process of finalizing initial concept plans for a public private partnership to develop a sports complex on 170 acres south of I-10 between Kino Pkwy and Country Club Rd. The development will also include three hotels, restaurants, and several retail shops.

Pima County was interested in the estimated timing of widening improvements along I-10 and re-construction of the Kino Pkwy traffic interchange. The County has identified two potential crossings that would provide

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Design Concept Report & Environmental Assessment

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connectivity between the existing facilities on the north side of I-10 and the future developments on the south side; Tucson Diversion Channel crosses under I-10 roughly 1,400 feet east of Kino Pkwy while the second crossing would be located approximately 4,100 feet east of Kino Pkwy. Similar to the west side of the Tucson Diversion channel, the east side of the channel would be depressed to allow for a pathway for maintenance carts, pedestrians, and bicyclists. The second crossing would consist of a two box cell structure approximately 14 feet high and 20 feet wide, to accommodate cars and small trucks. In addition, if the median on I-10 is closed in would it be possible to add a skylight in the center creating a gap using the median barrier for both crossings?


The County also noted that the eastbound on-ramp at the reconfigured Kino Pkwy traffic interchange in the Alternative I schematics would encroach on the parking lot of one of the proposed hotels (260 rooms, 7 stories).

Brad Olbert, Jacobs Project Manager, gave a brief overview of the project schedule and the project development phases (Design Concept Report, Programming, Design, and Construction). The DCR would establish a preliminary implementation plan for the corridor and interchange improvements; currently it is too early to identify the prioritization of the projects. In future alternative design schematics prepared for the I-10/SR 210 DCR and EA the Jacobs team will show work to be done by others for the two sports complex crossings. Regarding the loss of the acres at the parking lot site of the proposed hotel due to the eastbound on ramp, a potential land swap could be made with some of the excess right-of-way in that quadrant of the interchange.

The meeting adjourned around 2:00 AM.

ACTION ITEM LIST

- Jacobs Team will notify Pima County of Public Information Meetings and Progress Meetings.
- Jacobs will look into adjusting the I-10 typical section to include a median skylight at each of the two crossings
- Nancy Cole, Pima County, is leading the coordinating efforts on the property and is the contact for the sports complex project.

Signed:   
Brad Olbert, PE, Project Manager

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**Meeting Summary**  **I-10 / Barraza-Aviation Pkwy (SR 210)**  
Design Concept Report & Environmental Assessment

ARIZONA DEPARTMENT OF TRANSPORTATION  
205 S. 17<sup>th</sup> Avenue, Mail Drop 605E  
Phoenix, AZ 85007

**COORDINATION MEETING SUMMARY**

**I-10, I-19 to Kolb Road & SR 210, Golf Links to I-10**  
Project No. 010 PM 260 H7825 01L

**June 27, 2017**

**TO: Meeting Attendees**

Alexander Popovici, Union Pacific Railroad  
Sayeed Hami, ADOT Railroad Liaison  
Rudy Perez, ADOT Planning Program Manager, Major Projects Group  
Jorge Vasquez, ADOT Construction Development Manager  
Shantala Ramaiah, Jacobs Bridge Group  
Michael Okamoto, Jacobs Roadway Group  
Andrea Gao, Jacobs Bridge Group

**FROM:**

Shantala Ramaiah, Jacobs

**SUBJECT:**

UPRR Coordination Meeting Summary - Bridge Concept  
I-10, I-19 to Kolb Road & SR 210, Golf Links to I-10  
Project No. 010 PM 260 H7825 01L  
PHASE II (I-10/SR 210) Design Concept Report and Environmental Assessment

**INTRODUCTION**

This coordination meeting was held at 9:00AM, June 27, 2017 at the Roadway Conference Room (Room 113) located at 205 South 17th Ave. The purpose of the meeting was to review and discuss potential implications of the proposed structures and identify potential solutions, if needed. Recommendations currently proposed by Jacobs where I-10 and SR-210 will be crossing existing Union Pacific Railroad [UPRR] tracks were introduced. The Design Team sought early input in regards to the current UPRR guidelines including Right-of-Way encroachment, horizontal clearance, and vertical clearance in light of project constraints and the fact new structures would be replacing existing structures along the same alignment.

**SUMMARY**

**Safety Minute** – Sayeed Hami informed all attendees of evacuation exits in the event of a fire emergency.

**Introductions** – All meeting invitees introduced and stated their role on the project.

**Project Summary** – Shantala Ramaiah gave an overview of the project, identifying Jacobs' role in development of a planning stage Design Concept Report featuring infrastructure widening to accommodate 2040 traffic flows. Shantala Ramaiah discussed there are over 50 bridges in this project and this meeting will focus on the four bridges crossing UPRR tracks.

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**Individual Bridge Discussions** - The bridges discussed include:

- UPRR Westbound Frontage Road Overpass (I-10 Milepost 261.41),
- UPRR Eastbound Frontage Road Overpass (I-10 Milepost 261.41),
- Veteran's UPRR Overpass (I-10 Milepost 261.41), and
- UPRR Southbound Frontage Road Overpass (SR-210/Contractor's Way 1,000ft north of E Ajo Way)

Shantala Ramaiah stated that current Union Pacific Railroad [UPRR] guidelines have been reviewed and the exceptions being sought consist primarily of right-of-way and vertical clearance. Shantala discussed that the bridges will only go into final design in many years, and as such official written approval of exceptions is not being sought at this time; Only initial review and input on the needs of the railroad are requested at this time. Each bridge was discussed in the following order, with feedback on the proposed design by Alexander Popovici shown in bullets.

**UPRR Westbound Frontage Road (UPRR FR RD OP WB)**

Shantala Ramaiah described that for this bridge the only modification being requested is a relocation of the barrier on top of deck, yielding a narrowed clear roadway width.

- Alex Popovici found no issue with this modification.

**UPRR Eastbound Frontage Road (UPRR FR RD OP EB)**

Shantala Ramaiah described that no modifications will be required at this location. Shantala noted that the minimum vertical track clearance for the three bridges occur at this bridge. Alex stated that the vertical clearances of bridges need to be considered independently of each other, as discussed below in VETERAN'S UPRR OP.

**Veteran's UPRR Overpass (VETERAN'S UPRR OP)**

Shantala Ramaiah described that at this location the expansion of I-10 would require the addition of one (1) lane in each Eastbound and Westbound directions including additional widening for Westbound on-ramp, and that these could be achieved via a bridge widening; The bridge has sufficient load capacity and is of sufficient structural condition to continue its service life beyond 2040. Shantala discussed the structure does not meet horizontal and vertical clearances required of new structures, but that the proposed widening would maintain existing clearances. Existing vertical clearances would be maintained via continuing the deck cross slope but continuing the pier cap level, with the difference absorbed via reduced girder depth and tighter spacing compared to the existing structure. Alex Popovici's comments on this proposed concept included:

- Alex Popovici affirmed maintaining existing vertical and horizontal clearances is acceptable since the proposal is a widening. The deviation from UPRR Guidelines in vertical clearance is acceptable as this line does not service double-deck trains. If the structure is to be replaced, vertical and horizontal clearances would have to meet current guidelines, regardless of the clearances of adjacent structures. Alex stated that as adjacent structures get replaced, the clearance of the section will ultimately be met.
- Alex Popovici suggested that a different type of girder may be considered in order to satisfy the vertical clearance requirement.

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**I-10 / Barraza-Aviation Pkwy (SR 210)**

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- Alex Popovici commented that pier protection (“crash walls”) may be required by the UPRR reviewer when this project goes to the final design. Shantala Ramaiah mentioned that the substructure may not be able to support derailment loads, and this would require further evaluation.

**UPRR Southbound Frontage Road (UPRR SB FR RD)**

Shantala discussed that at this location the expansion of SR 210 would require the addition of one (1) lane in each direction, in addition to two flanking ramp structures accessing Ajo Way. Shantala also discussed that bridge will require replacement due to its low load rating, and that it does not meet current vertical and horizontal clearance requirements.

The proposed structure replaces the existing bridge at the same skew and alignment, with piers spaced further apart to enable one additional future track east of the existing tracks. The two piers, slope paving, and west abutment are within the UPRR right-of-way. A maintenance path is provided for Tucson Electric Power along the east abutment under the last span. The bicycle path is relocated to beyond the UPRR right-of-way.

- Alex Popovici clarified that for new structures design should not be based on number of tracks. For this location, UPRR will request providing minimum vertical clearance throughout the UPRR right-of-way. UPRR has large yards to the northwest and southeast of the proposed bridge and sees the potential for full usage of its right-of-way.
- Alex Popovici affirmed Shantala Ramaiah’s statement regarding the difficulty of spanning the entire right-of-way without piers, and that this difficulty is further exaggerated by the large skew. Alex Popovici requested the number of piers be limited to two (2), but prefers one (1) if possible. Alex guided that there is no strong preference in the location of piers; However the piers should be placed in effective locations considering track usage and bridge configuration.
- Alex Popovici also requested that future tracks be removed from plans.
- The only exception to the UPRR guidelines in terms of right-of-way encroachment that would likely be entertained is that of piers. Abutments and slope paving must stay out of the right-of-way.
- The group agreed unanimously that an underpass is the least viable option due to the presence of significant underground utilities (e.g. Kinder Morgan and Century Link) as well as the high cost of a shoofly track.
- Shantala Ramaiah requested confirmation that UPRR would not allow cast-in-place concrete construction on falsework over the railroad, in case this structure type showed promising in the re-evaluation of what will now be long, possibly curved spans. Alex Popovici clarified that cast-in-place reinforced concrete structures type have often been accepted and may be a consideration for this location, but that acceptance occurs at final design during plan approval by UPRR.
- Alex Popovici and Sayeed Hani cautioned that utility relocation can take a significant amount of time and suggested that requests for relocation occur as soon as possible. It was also stated utility companies will only look at relocation when final design plans are at 95%.
- Shantala Ramaiah conveyed that at the east span of the existing bridge, Contractor’s Way will be terminated and a gate installed for utility maintenance access. Alex stated that for the new bridge replacement, Tucson Electric Power can use an existing permit to continue access in the railroad right-of-way. A gate with two locks, or similar intrusion protection means, should be put into place.
- Alex Popovici conveyed that all bike paths should be located beyond the UPRR right-of-way.



**I-10 / Barraza-Aviation Pkwy (SR 210)**

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The meeting adjourned around 9:40 AM.

**ACTION ITEM LIST**

- Jacobs team will re-evaluate structure types and span configuration at the SR-210 crossing to keep the abutment and slope paving out of the right-of-way. Roadway vertical profile and alignments as well as environmental assessment limits will be re-evaluated in tandem.

Signed:   
Shantala Ramaiah



Meeting Notes



I-10 / Barraza-Aviation Pkwy (SR 210)  
Design Concept Report & Environmental Assessment

ARIZONA DEPARTMENT OF TRANSPORTATION  
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PROGRESS MEETING NOTES

I-10, I-19 to Kolb Road & SR 210, Golf Links to I-10  
Project No. 010 PM 260 H7825 01L

July 19, 2017

TO: Meeting Attendees

Patrice Brun, ADOT Geotechnical\*\*\*  
Virgil Coxon, ADOT Chief Surveyor\*\*\*  
Mark Hoffman, ADOT Multimodal Planning  
Sarah Karasz, ADOT Environmental Planning  
Carlos Lopez, ADOT Major Projects Group\*\*\*  
Joan Lovell, ADOT ITS\*\*\*  
Merrisa Marin, ADOT R/W Project Management Section Coordinator\*\*\*  
Tammy Mivshek, ADOT Traffic Design\*\*\*  
Rudy Perez, ADOT Project Manager  
Sebastian Tonazzi, ADOT Community Relations  
Jim Walcutt, ADOT R/W Review Appraiser  
Emily Dawson, ADOT Southcentral District  
James Gomes, ADOT Southcentral District Regional Traffic Engineer  
Rod Lane, ADOT Southcentral District Engineer  
Priscilla Thompson, ADOT Southcentral District Utility Engineering Coordinator  
Ammon Heier, FHWA Area Engineer  
Mick Jensen, City of South Tucson Planning  
Andy McGovern, City of Tucson Engineering Manager  
Scott Robidoux, Tucson Airport Authority Planner  
Mike Dawson, EcoPlan Environmental Planner  
Paul Black, Jacobs Roadway\*\*\*  
Judah Cain, Jacobs Roadway\*\*\*  
Joe D'Onofrio, Jacobs Environmental  
Andrea Gao, Jacobs Structures\*\*\*  
Brad Olbert, Jacobs Project Manager  
Sandy Thoms, Jacobs Traffic\*\*\*  
Chris Blue, Pima Association of Governments Transportation Planner  
Priscilla Comelio, Pima County Department of Transportation Director\*\*\*  
Robert Young, Pima County Transportation System Division Manager

\*\*\* Attended via teleconference

FROM:

Brad Olbert, Jacobs Project Manager



I-10 / Barraza-Aviation Pkwy (SR 210)  
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SUBJECT:

PROGRESS MEETING NOTES  
I-10, I-19 to Kolb Road & SR 210, Golf Links to I-10  
Project No. 010 PM 260 H7825 01L  
PHASE II (I-10/SR 210) Design Concept Report and Environmental Assessment

INTRODUCTION

The Progress Meeting for this project was held at 1:00 PM July 19, 2017 at the ADOT Southcentral District Conference Room. Teleconferencing was available via WebEx for attendees offsite. The meeting was adjourned at 2:25 PM.

The meeting was well represented by agencies interested in improving the I-10 corridor from Junction I-19 to Kolb Road and providing a connection for SR 210 to I-10. Representatives included ADOT, Federal Highway Administration (FHWA), City of Tucson, City of South Tucson, Tucson Airport Authority, Pima County, and Pima Association of Governments (PAG).

SUMMARY

Rudy Perez, ADOT Project Manager opened the meeting at 1:00 PM. Introductions were held for all attendees.

Brad Olbert, Jacobs Project Manager, started the meeting with a safety minute and discussed the impacts that recent fires have had on the surrounding environment. These fires exacerbate flash flood situations causing water to rise much quicker than normal and also provide debris to be carried away by the water causing it to be much more dangerous. There was a recent tragedy near Payson in which a storm nearby caused a debris flow to tear through the canyon and take the lives of 10 people.

Brad shared that a lot has been done on the project since the last progress meeting, including coordination with many different agencies. Notes and figures from these meetings are posted on the study team project website. The following coordination took place:

- Davis-Monthan Airforce Base (DMAFB): Email correspondence regarding airspace clearance
- Tucson Electric Power (TEP): Met to discuss their facilities and access as one of their power plants is very close to this project
- Union Pacific Railroad (UPRR): Met to discuss two crossings on this project and their requirements for the crossings
- ADOT Signing, ITS, and Lighting: Met to discuss the signing, ITS, and lighting concept. Jacobs provided a draft concept package and expect their comments back this week. Once those comments are incorporated, the plans will be sent to FHWA for their input as well as be posted on the project team website.
- Pima County: Met to discuss the Kino South Sports Complex to be located south of the existing Kino Sports Complex
- City of Tucson, City of South Tucson, Pima County: Distributed some cross-street information to solicit input on roadway and intersection configuration, as that has an impact on bridge structures.



**I-10 / Barraza-Aviation Pkwy (SR 210)**  
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Brad provided a status of the project to date:

- Horizontal and vertical alignments have been developed for Alternative I and Alternative IV. Alternative IV now has a connector between the CD road and the express lanes in both the eastbound and westbound directions.
- The signing and ITS concept is currently under review by ADOT.
- J2 Design is working on the offsite drainage concept and that should be finalized and distributed sometime next month.
- Basic concepts for onsite drainage have been developed for converting this rural interstate to an urban interstate. This requires a number of retention and detention basins which can be seen in the roadway layout as blue areas. These basins require additional right-of-way which is a key element in determining the footprint of the project. The first priority was to utilize existing storm drains wherever possible. The second priority was to incorporate retention wherever possible to take water out of the system. The third priority was detention basins when retention was not feasible, which includes first flush. The final option was to discharge directly into a wash, but that solution was very minimally utilized on this project.
- Since the right-of-way footprint has been identified, the environmental team is working on conducting their evaluations and teams are going out in the field next week.
- Plan sheet development is underway for the initial DCR.

Priscilla Thompson with ADOT Utilities and Railroad asked that she be invited to any future meetings with utilities related to this project.

Brad encouraged everyone to pay attention to the proposed right-of-way takes which were about to be discussed and speak up if there are any concerns with what is being proposed. He noted that right-of-way acquisition will be a major topic that the public will pay attention to on this project.

Paul Black, Jacobs roadway design lead, discussed the right-of-way needs on the project. He presented the right-of-way requirements for both alternatives, specifying the acreage of necessary acquisition as well as the number of affected parcels. He reminded attendees that the right-of-way needs on the SR210 corridor as well as I-10 from Alvernon Way to Kolb Road. In summary, Alternative I requires approximately 140 acres with 172 affected parcels, while Alternative IV requires 154 acres with 186 affected parcels. This equates to a 10% difference in required acreage and an 8% difference in number of affected parcels between the two alternatives. Note that the number of affected parcels does not necessarily equate to the number of property owners that will need to be contacted. He noted that approximately 20% of the new ROW needs are for external drainage basins.

Paul went over the current design layout to discuss where the current ROW needs are and what is triggering those needs:

- SR210:
  - There is a new ramp from westbound Golf Links to Alvernon Way which requires new ROW.
  - All businesses within the triangular section of ramps in this vicinity will be acquired
  - New ROW is needed in all four corners at the interchange with Ajo Way, primarily for slope development for the ramps. One parcel will need to be acquired in the SE quadrant for a new drainage basin.
  - ROW for a drainage basin is needed on the east side of SR210 just south of Michigan Street.



**I-10 / Barraza-Aviation Pkwy (SR 210)**  
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- Of the property takes along this corridor, three are homes and the rest are businesses or undeveloped/vacant properties.
- I-10 from I-19 to Alvernon Way:
  - There is a new ramp heading from Park Avenue towards 6<sup>th</sup> Avenue which will require new ROW for the embankment.
  - A new EB off-ramp to Park Avenue will be constructed to reduce the skew of the intersection, which requires a total take of the Western Inn.
  - Additional ramps will be built at Kino Parkway to facilitate all movements while eliminating some of the loop ramps. New ROW will be needed for these new ramps as well as for the ramp slopes.
  - There are some parcels owned by ADOT that could potentially be sold, as that ROW is no longer needed. These properties were not considered in the ROW take calculations.
  - A new diamond interchange will be built at Country Club Road. ROW will be needed in all four quadrants for this interchange. One additional parcel will be taken for a drainage basin.
  - ROW strips along Country Club Road will be needed to widen the road from a 2-lane section to a 5-lane section. It is still unclear whether that will be acquired by ADOT or the City of Tucson, but that can be worked out later.
  - The interchange at Palo Verde Road will be taken out of service, so ADOT will have additional ROW in the vicinity that possibly could be sold.
  - A significant amount of ROW will be needed in the NW quadrant at Alvernon Way to allow for the system-to-system interchange ramps between I-10 and SR210.
  - Mike Dawson mentioned that at the public meeting the owners of the property in the SW quadrant were anxious to build either a hotel or a self-storage facility. He was unsure if they had approached the City with this proposal yet, but pointed out that it is cheaper to purchase a vacant lot than a hotel.
  - A road may need to be constructed across Julian Wash to provide access to a residential neighborhood, as the neighborhood's current access is too close to the interchange intersection. The exact location of this new road is still being investigated, but it would be an all-weather crossing (likely a box culvert) over the wash.
- I-10 from Alvernon Way to Kolb Road:
  - A parcel in the SE quadrant will need to be acquired for a drainage basin since there are so many ramps within this interchange.
  - Another property between I-10 and Julian Wash and north of Drexel will be acquired for a drainage basin. There are slivers of additional ROW that Alternative IV needs in this vicinity that are not needed for Alternative I, primarily for slopes.
  - Additional ROW is needed at Valencia Road for slopes for the EB and WB off-ramps. Alternative IV requires a little more ROW in the NE quadrant for slopes.
  - Two drainage basins will be required between Valencia Road and Craycroft Road, so new ROW will be necessary in both alternatives.
  - There are residences on the west side of I-10 between Valencia Road and Craycroft Road, so that existing ROW line will be maintained. The roadway will shift to the east requiring additional ROW for slopes for both alternatives.
  - The interchange at Craycroft Road requires small slivers of ROW in each quadrant in Alternative I. In Alternative IV however, more ROW is needed in three of the four quadrants.
  - A new drainage basin on the west side of I-10 will require new ROW between Craycroft Road and Wilmot Road.



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- There are residences on the east side of I-10 between Craycroft Road and Wilmot Road. That ROW line will be held and the roadway will shift to the west. No new ROW will be needed for this in Alternative I, but Alternative IV will require additional ROW.
- The interchange at Wilmot Road requires a decent amount of ROW to reduce the skew of the intersections. A drainage basin requires the take of a property in the SE quadrant. Alternative IV requires additional ROW in the SW quadrant to accommodate the slip ramp from EB mainline to the EB CD road.
- Additional ROW is needed in Alternative IV between Kolb Road and Wilmot Road for the slip ramp from the WB CD road to WB I-10 mainline. The existing ROW line on the west side of I-10 will be held and all widening will occur to the east to avoid impacting residences.
- ROW is needed in all four quadrants at Kolb Road to accommodate the flyover bridges for northbound and southbound Kolb Road.
- All work east of Kolb Road fits within the existing ROW.

Paul discussed issues related to access within the project that need to be addressed.

- Craycroft Road (north side): A Pilot truck stop was constructed north of I-10 since the Feasibility Study was completed. Their access is very close to the intersection with the WB I-10 ramps. The study team is wondering if the access for the Triple T truck stop across the street should be aligned with the Pilot driveway to form a single larger intersection – and if so, if that would be too close to the interchange intersection.
  - It was noted that Pima County is already looking to improve access in that area, and Jacobs should contact Steve Wilson to see what their current plans are. They may only be looking at the access for Pilot and not the Triple T.
  - ADOT pointed out that the design requirement for right-in-right-out access is 330' from the interchange intersection and 660' for left-turn access. These guidelines should be followed in this scenario. It appears the current access for Pilot may violate this requirement.
  - Merrisa Marin from ADOT ROW pointed out that if the only ingress/egress to a property is removed, then the property must be considered a total take. It is against the law to take property in order to provide access to another property (referring to the homes north of the Pilot). If no other options can be developed, both the Pilot and the Triple T would be total takes. Paul noted that Triple T has a large property and their main access can shift north to avoid the access concern or property take. Merissa suggested she sit down with the design team to go over the options in this area.
  - It was noted that a large freight complex (Freightliner of Arizona) is located behind the Pilot and utilizes the Pilot access. There is a lot of truck traffic in this area. It was asked if they could have access via the frontage road, but Paul pointed out that the frontage road is being taken out of service.
  - The subdivision to the north also has access to Craycroft Road via the same driveway used by Pilot. Eliminating that access would have more severe consequences. The design team will investigate the operations at this access to see if the existing access can remain.
  - It was brought up that there will soon be an increase in the need for truck parking as new regulations will require electronic devices in trucks which limit how much they can drive without taking a break. It may be worth a conversation with Pilot and Triple T to see what their forecasts are, as this regulation takes effect this December.
- Craycroft Road (south side): The EB frontage road is being removed which eliminates some accesses for businesses and homes. The businesses have other access points, so those are not a concern. The



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homes have no other access point, so the team is proposing that Craycroft Road be widened and an access onto Craycroft Road be provided for these homes.

- Wilmot Road to Kolb Road: A new development (La Estancia de Tucson) is being proposed on the north side of I-10. This development surrounds three small properties with cell towers and communications buildings which currently have access to the frontage road. Since the frontage road is being taken out of service, access needs to be provided for these properties. There may be an easement through the development to two of the properties which can be used for access, but the cell tower may still not have access. The cell tower property will only be impacted if Alternative IV is selected. If Alternative I is selected, the cell tower property can remain in place and still have access.
  - Someone asked if the cell tower would encroach into the roadway clear zone. Paul indicated that if needed, barrier protection would be provided. The tower itself likely has its own clear zone requirement, and the roadway may need to be outside that clear zone. If that is the case, the tower may need to be relocated.

Brad briefly went over the project schedule. Plan production has begun for the DCR so cost estimates can be prepared. Environmental efforts are underway and will continue for a few months. The next progress meeting is scheduled for October 25<sup>th</sup>, 2017 in the same conference room as this meeting. A public information meeting is tentatively scheduled for early December to present the two alternatives. This meeting will solicit feedback from the public before the initial DCR is published. The draft DCR and EA is scheduled to be submitted at the end of 2017. Comments from the public meeting will be incorporated into the final DCR and EA.

Sarah Karasz was asked if she has heard back from DMAFB regarding a cooperating agency agreement, but she has not heard from them yet and agreed to reach out to them again.

Brad mentioned that the team has developed a traffic simulation model to analyze the operations of the freeway, ramps, and intersections. He presented the preliminary results of the analysis, which may change as adjustments are made to the network as design progresses. For Alternative I, the freeway mainline is operating at LOS C or better in both the AM and PM peak hour for the year 2040. For Alternative IV, the freeway mainline and CD roads are all operating at LOS C or better in both the AM and PM peak hour for the year 2040, with the exception of the WB mainline between Alvernon Way and Country Club Road which operates barely within the range of LOS D. However, LOS D is still within the required threshold for an urban freeway system. All of the interchange intersections operate at LOS C or better in both the AM and PM peak hour for both Alternative I and Alternative IV, with the exception of 6<sup>th</sup> Avenue which operates at LOS D in the PM peak hour for both alternatives. Again, LOS D is still acceptable and within the required threshold. These results show that the proposed roadway system will operate extremely well in the design year of 2040, but also beyond that. The LOS results for Alternatives I and IV will be presented along with the No Build LOS in the Design Concept Report.

Related to project communications, Brad reminded attendees of the project website. All documents related to this project from the very beginning are posted on the website including meeting minutes, exhibits, and project deliverables. This site is intended for use by the study team only. The login information is available in the meeting presentation slides. There is a separate website for public use with information related to the project. The content on the public website is out of date, however, ADOT will be updating it soon.

- Study Team Website: [www.jacobsaz.com](http://www.jacobsaz.com)
  - Login: I-10 Corridor
  - Password: Empirita




**I-10 / Barraza-Aviation Pkwy (SR 210)**  
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- Public Project Website:  
<http://www.azdot.gov/planning/transportation-studies/i-10-and-sr-210-feasibility-study>

**ACTION ITEM LIST**

- The Jacobs team will continue to pursue the key issues discussed in this meeting to define the critical elements of this study as early as possible.
- Jacobs to contact Steve Wilson from Pima County regarding access at the Pilot truck stop, as they are currently looking into that area.
- The Jacobs traffic team will look into the Pilot access to Craycroft Road to see if traffic operations can be analyzed. They will investigate the feasibility of maintaining the current access and whether it would negatively affect operations, and also whether that access could remain as full-access or if it would need to be right-in-right-out only.
- Sarah Karasz will reach out to DMAFB again regarding the cooperating agency agreement
- Stakeholders are encouraged to review and comment on the meeting minutes to ensure accuracy.

Signed:   
Brad Olbert, PE, Project Manager

Attachments

**Meeting Notes**



**I-10 / Barraza-Aviation Pkwy (SR 210)**  
Design Concept Report & Environmental Assessment

ARIZONA DEPARTMENT OF TRANSPORTATION  
205 S. 17<sup>th</sup> Avenue, Mail Drop 605E  
Phoenix, AZ 85007

**COORDINATION MEETING NOTES**

**I-10, I-19 to Kolb Road & SR 210, Golf Links to I-10**  
Project No. 010 PM 260 H7825 01L

August 8, 2017

**TO: Meeting Attendees**

Rudy Perez, ADOT Project Manager  
Merrisa Marin, ADOT R/W Project Management Section Coordinator  
Jim Walcutt, ADOT R/W Review Appraiser  
Laura Gilbreath, ADOT R/W Acquisition Manager  
Richard Erickson, ADOT R/W Project Management  
Charlene Mullis, ADOT R/W  
Geoff Holloway, ADOT R/W  
Jim Stoleson, ADOT R/W  
Michael Mayes, ADOT R/W Manager  
Steve Charmer, ADOT R/W  
John Eckhardt, ADOT R/W  
Michael Craig, ADOT R/W  
Brad Olbert, Jacobs Project Manager

**FROM:**

Brad Olbert, Jacobs Project Manager

**SUBJECT:**

R/W COORDINATION MEETING NOTES  
I-10, I-19 to Kolb Road & SR 210, Golf Links to I-10  
Project No. 010 PM 260 H7825 01L  
PHASE II (I-10/SR 210) Design Concept Report and Environmental Assessment

**INTRODUCTION**

The coordination meeting was held at 2:00 PM August 8, 2017 at the ADOT Engineering Building in the R/W Large Conference Room. The meeting ended at 3:40 PM.

**SUMMARY**

Rudy Perez, ADOT Project Manager opened the meeting at 2:00 PM. Self-introductions were made by all attendees.

Brad Olbert, Jacobs Project Manager, presented an overview of the project covering the project area, the project purpose and need, the two build alternatives and the project schedule. One hard set of the preliminary concepts for the two build alternatives showing the R/W takes was provided to the group. A PDF copy of the



**I-10 / Barraza-Aviation Pkwy (SR 210)**  
 Design Concept Report & Environmental Assessment  
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two alternatives was provided to Rudy Perez for distribution to individuals needing the information. In addition, four hard copies of a list of all parcels requiring right of way takes was provided to the group. The list identified the parcel number, owner, address and the amount of take required for each alternative. A PDF copy of the list was provided to Rudy Perez for distribution to those needing the information. The excel file of the list was requested. The file will save the R/W Group the time to recreate the file. They will use the excel file to add their information.

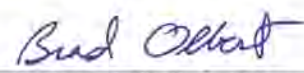
Brad walked the group through Alternative I identifying takes and unique issues. There were several locations where guidance was requested where access was an issue and how best to handle a possible right of way take. Laura Gilbreath requested a list of those locations needing a response. Alternative IV was not covered but the takes and issues are similar to Alternative I.

Mike Mayes requested electronic project files of the two alternatives from Jacobs. This will make their work easier to develop the cost estimate for the takes. Jacobs will forward the information to the group using a file transfer link. Jacobs requested the right of way estimate by November 1<sup>st</sup>. Mike said this type of request is not uncommon and they will provide us the information by that date.

Brad Olbert (Jacobs) can be reached at 602-530-1670 or brad.olbert@jacobs.com if you have questions or need additional information.

**ACTION ITEM LIST**

- Jacobs to forward excel file of the right of way takes for the two alternatives. Note: this item was completed 8/8/17.
- Jacobs to forward electronic project files for the two alternatives. Note: this item was completed 8/8/17.
- Jacobs will identify locations where guidance is needed on the best way to handle access issues vs taking the parcel.

Signed:   
 Brad Olbert, PE, Project Manager

**Meeting Notes**



**I-10 / Barraza-Aviation Pkwy (SR 210)**  
 Design Concept Report & Environmental Assessment

ARIZONA DEPARTMENT OF TRANSPORTATION  
 205 S. 17<sup>th</sup> Avenue, Mail Drop 605E  
 Phoenix, AZ 85007

**COORDINATION MEETING NOTES**

**I-10, I-19 to Kolb Road & SR 210, Golf Links to I-10**  
 Project No. 010 PM 260 H7825 01L

August 22, 2017

**TO: Meeting Attendees**

- Rudy Perez, ADOT Project Manager\*\*
- Sarah Karasz, ADOT Senior Environmental Planner\*\*
- Tom Deitering, FHWA Project Delivery Team Leader
- Ammon Heier, FHWA Area Engineer
- Tremaine Wilson, FHWA Environmental Coordinator\*\*
- Mike Dawson, EcoPlan Environmental Manager
- Joe D'onofrio, Jacobs Environmental Manager
- Brad Olbert, Jacobs Project Manager

\*\* Attended via teleconference

**FROM:**

Brad Olbert, Jacobs Project Manager

**SUBJECT:**

FHWA I-10/Craycroft Road Coordination Meeting Notes  
 I-10, I-19 to Kolb Road & SR 210, Golf Links to I-10  
 Project No. 010 PM 260 H7825 01L  
 PHASE II (I-10/SR 210) Design Concept Report and Environmental Assessment

**INTRODUCTION**

The coordination meeting was held at 1:00 PM August 22, 2017 at the FHWA office conference room. The meeting ended at 2:30 PM.

**SUMMARY**

Rudy Perez, ADOT Project Manager opened the meeting at 1:00 PM. Self-introductions were made by all attendees.

Brad Olbert, Jacobs Project Manager, presented an overview of the I-10/Craycroft Road TI area. Handouts were provided that included a meeting agenda, vicinity map, city limits map, demographics information, RDG Access Control guidelines, summary of options to consider for changes to access control north of the TI that included photos of the area, and two concept drawings to discuss. The Craycroft Road TI is located within the jurisdiction of Pima County. The area bounded by I-10 on the south, the Julian Wash on the north, Valencia Road on the west and Wilmot Road on the east is known as "Littletown".



**I-10 / Barraza-Aviation Pkwy (SR 210)**  
 Design Concept Report & Environmental Assessment  
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Traffic operations north of the interchange have deteriorated with recent developments and it was clear that additional improvements will be needed to make sure the north side of the TI will function well in the future. If no improvements are made the LOS will continue to deteriorate as traffic volumes increase. Travel Plaza Way (located approximately 320' north of the I-10 westbound ramps) provides access to a Pilot Travel Center (truck stop), Freightliner of Arizona (a truck service center) and approximately 1500 residences all located to the east of Craycroft Road. The Tucson Truck Terminal (known as the Triple T Truck Stop) is located on the west side of Craycroft Road just to the north of I-10. Circle K and an RV Park with approximately 150 parking spots rounds are also present on the west side of Craycroft Road. North of Littletown Road there is an elementary school, a middle school and the Thomas Jay Regional Park. Craycroft Road stops at Littletown Road because Julian Wash is located an eighth of a mile to the north of Littletown Road.

The Littletown area to the north of I-10 is isolated by the Julian Wash and the UPRR which greatly reduces the area served by the Craycroft Road TI. The Littletown area has access to I-10 at three locations, the Valencia Road TI to the west, Craycroft Road TI to the south and Avocet Drive provides access to the Wilmot Road TI to the east.

Mike Dawson with EcoPlan went over the demographics of the area. He identified the area as having income below the state average, a higher percentage of minorities, housing values were below the state average, and approximately 80% of the residential homes were being rented.


The group went over ADOT's Roadway Design Guidelines regarding access control. Tom Deitering said FHWA and ADOT worked together on the new guideline. FHWA expected the guidelines to be followed to minimize access conflicts in the future as traffic volumes increase. Littletown is an Environmental Justice concern.

Brad went over a couple of quick sketches that realigned Elvira Road to connect to Craycroft Road about 600 feet north of the I-10 ramps. A number of residents would be affected.

The Littletown area has many homes that were built over fifty years ago and many are potential historic structures. Tom said the historic element will affect the alternative selection process. It appears that meetings with the businesses and residents on the access control along Craycroft Road will be needed. Access control south of the interstate should also be looked at as there are other businesses that could be purchased and developed like the Pilot Center on the north side of I-10.

**ACTION ITEM LIST**

- Jacobs to provide a draft scope of work for the additional work at the I-10/Craycroft Road TI.
- Jacobs to work on a couple of alternatives to help identify the access control issues.
- Meet with the Southcentral District to discuss the access control issue, potential alternatives and the need for additional public involvement.

Signed:   
 Brad Olbert, PE, Project Manager

101 North 1<sup>st</sup> Avenue, Suite 2600  
 Phoenix, Arizona 85003

**JACOBS**

Tel. (602) 253-1200  
 Fax. (602) 253-1202

**Meeting Notes**



**I-10 / Barraza-Aviation Pkwy (SR 210)**  
 Design Concept Report & Environmental Assessment

ARIZONA DEPARTMENT OF TRANSPORTATION  
 205 S. 17<sup>th</sup> Avenue, Mail Drop 605E  
 Phoenix, AZ 85007

**COORDINATION MEETING NOTES**

**I-10, I-19 to Kolb Road & SR 210, Golf Links to I-10**  
 Project No. 010 PM 260 H7825 01L

**October 12, 2017**

**TO: Meeting Attendees**

- Rudy Perez, ADOT Project Manager
- Sarah Karasz, ADOT Senior Environmental Planner
- Rod Lane, ADOT Southcentral District Engineer
- James Gomes, ADOT Southcentral Regional Traffic Engineer
- Maria Altemus, EcoPlan Environmental Planner
- Mike Dawson, EcoPlan Environmental Manager
- Brad Olbert, Jacobs Project Manager

**FROM:**

Brad Olbert, Jacobs Project Manager

**SUBJECT:**

ADOT Coordination Meeting - I-10/Craycroft Road Access Control  
 I-10, I-19 to Kolb Road & SR 210, Golf Links to I-10  
 Project No. 010 PM 260 H7825 01L  
 PHASE II (I-10/SR 210) Design Concept Report and Environmental Assessment

**INTRODUCTION**

The coordination meeting was held at 1:00 PM October 12, 2017 at the ADOT Southcentral conference room. The meeting ended at 2:10 PM.

**SUMMARY**

Rudy Perez, ADOT Project Manager opened the meeting at 1:00 PM. Self-introductions were made by all attendees.

Brad Olbert, Jacobs Project Manager, presented an overview of the I-10/Craycroft Road TI area. Handouts were provided that included a meeting agenda, vicinity map, city limits map, Roadway Design Guidelines (RDG) Access Control guidelines, summary of options to consider for changes to access control north of the TI that included photos of the area, and three concept drawings to discuss. The area bounded by I-10 on the south, the Julian Wash on the north, Valencia Road on the west and Wilmot Road on the east is known as "Littletown".

Traffic operations north of the interchange have deteriorated with recent developments and additional improvements may be needed to make sure the north side of the TI will function through the 2040 design year. If no improvements are made the LOS will continue to deteriorate as traffic volumes increase. Travel Plaza Way (located approximately 320' north of the I-10 westbound ramps) provides access to a Pilot Travel Center (truck stop), Freightliner of Arizona (a truck service center) and approximately 1500 residences all located to

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**I-10 / Barraza-Aviation Pkwy (SR 210)**  
 Design Concept Report & Environmental Assessment  
 PAGE 2 OF 3

the east of Craycroft Road. Freightliner has additional property to expand into. The Tucson Truck Terminal (known as the Triple T Truck Stop) is located on the west side of Craycroft Road just to the north of I-10. Circle K and an RV Park with approximately 150 parking spots rounds are also present on the west side of Craycroft Road. North of Littletown Road there is an elementary school, a middle school and the Thomas Jay Regional Park. Craycroft Road stops at Littletown Road because Julian Wash is located an eighth of a mile to the north of Littletown Road.

The Littletown area to the north of I-10 is isolated by the Julian Wash and the UPRR which limits the area served by the Craycroft Road TI. The Littletown area has access to I-10 at three locations, the Valencia Road TI to the west, Craycroft Road TI to the south and Avocet Drive provides access to the Wilmot Road TI to the east.

Mike Dawson with EcoPlan went over the demographics of the area. He identified the area as having income below the state average, a high percentage of minorities and housing values were below the state average (approximately \$80,000).

Brad presented a map that showed the Craycroft Road TI being located within the jurisdiction of Pima County (see attachments). Mike Dawson said the City of Tucson council recently voted to annex the Craycroft Road area north of I-10. The City wanted the tax revenue brought in by the truck stops. The annexation would be final in 30 days.

The group went over ADOT's Access Control from the Roadway Design Guidelines (see attachments). For existing conditions right-in and right-out access is acceptable within 100' of the TI ramp returns. Brad said three options were developed for discussion purposes and illustrates access control out to 660'.

Option 1 (see attachments) – Access onto Travel Plaza Way will be limited to only a right-in turning movement. Traffic wanting access to Craycroft Road from the east will use the realigned Elvira Road or Burcham Avenue to Elvira Road. Elvira Road would connect to Craycroft Road 660' north of the east side ramp return. Access to Craycroft Road from the Triple T Truck Stop would be at the realigned Elvira Road. Circle K will utilize driveways for access to Craycroft Road. A raised median island along Craycroft Road would preclude left-turn movements from the I-10 ramps north to Elvira Road. North of Elvira Road left-turn movements will be allowed from a two-way center left-turn lane. Light green areas shown on the concept drawing indicate parcels with structures that may be eligible for designation as historic structures. Realigning Elvira Road using reverse curves takes out a significant number of homes. With this option truck traffic from the Pilot Station or Freightliner would be routed north on Burcham Avenue to make a left-turn movement onto Elvira Road and then another left-turn onto Craycroft Road.

For all of the options with Alternative I, the I-10 westbound ramp would act as a frontage road from Craycroft Road to Valencia Road. Thus, the Triple T Truck Stop would have right-in/right-out access along the westbound ramp. For Alternative IV, the westbound ramp would not be a frontage road thus access to the Triple T Truck Stop would be from Craycroft Road.

For all of the options, the drainage flow that approaches Craycroft Road near Travel Plaza Way will be routed under Craycroft Road using the same size culvert structure that conveys flow under Elvira Road. The flow will be routed to the north along the west side of Craycroft Road in a concrete lined channel discharging into an existing earthen channel located immediately west of the intersection of Craycroft Road and Dream Street. A drop inlet will be used to set the new culverts a couple of feet under the current Craycroft Road dip crossing to minimize raising the profile grade along Craycroft Road as much as possible.



**I-10 / Barraza-Aviation Pkwy (SR 210)**  
 Design Concept Report & Environmental Assessment  
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Option 2 (see attachments) – Access onto Travel Plaza Way from Craycroft Road will be limited to only a right-in turning movement. Traffic wanting access to Craycroft Road from the east will use Burcham Avenue to a new short segment of Elvira Road. Elvira Road would connect to Craycroft Road 660' north of the east side ramp return. Access to the west side would be at the intersection of Craycroft Road and Elvira Road. Circle K will utilize driveways for access to Craycroft Road. A raised median island would preclude left-turn movements from the I-10 ramps north to Elvira Road. North of Elvira Road a two-way center left-turn lane would be used for access. The short segment of Elvira Road only takes two lots. With this option truck traffic from the Pilot Station or Freightliner would be routed north on Burcham Avenue to make a left turn onto Elvira Road and then another left-turn onto Craycroft Road.

Option 3 (see attachments) – Access onto Travel Plaza Way will be limited to right-in and right-out turning movements. Traffic wanting to access Craycroft Road from the east to go south from Travel Plaza Way will use a roundabout to make a U-turn or just pass through the roundabout if coming from the north. Access from the west side would utilize the roundabout or driveways from businesses like Circle K. A raised median island would preclude left-turn movements from the ramps north to the roundabout. North of the roundabout a two-way left-turn center lane would be used for access. Using the roundabout should not remove any homes. With this option truck traffic from the Pilot Station or Freightliner would make a right turn onto Craycroft Road and then make a U-turn at the roundabout to return to I-10. Residential lots located near the roundabout would share a common driveway with adjacent lots to keep the number of driveways to a minimum. A significant amount of right-of-way will be needed from the Triple T Truck stop.


Rod Lane pointed out that Options 1 and 2 would route truck traffic through the residential area. This may be unacceptable to the neighborhood unless the homes affected by the traffic are purchased and noise walls are constructed to help isolate the noise and visual impact. Rod requested a "Draft" watermark be added to the Options. Note: The watermark has been added to the options.

Brad said we will need to get new traffic and tuning counts at the Craycroft Rd TI. The new Pilot Truck Stop and the Freightliner service center have changed the traffic patterns since the area was modeled with the Feasibility Report. VISSIM modeling will be prepared to look at the impacts to existing conditions and with the proposed changes (Options 1, 2, and 3) to the interchange.

Brad said he would like to delay presenting Alternatives I and IV to the public until the access issue has been worked out with the Littletown community. We would like to have a separate public meeting for the Littletown area to get their input and work out a good solution for them. This will avoid having these issues take up time in the public meetings designed to present Alternatives I and IV. Rod Lane said we need to schedule a meeting with the City of Tucson. The City spent a lot of time with the neighborhood during the annexation process and will know how best to prepare the public involvement plan for the neighborhood.

**ACTION ITEM LIST**

- Rudy Perez will set up a meeting with the City of Tucson to discuss the additional access control work needed at the I-10/Craycroft Road TI and to discuss the public involvement needs for the area.  
 Note: The meeting has been scheduled for Monday October 23<sup>rd</sup>, 2017 at 10 am at the District office.

Signed:   
 Brad Olbert, PE, Project Manager

**Attachments**

Meeting Notes



I-10 / Barraza-Aviation Pkwy (SR 210)  
Design Concept Report & Environmental Assessment

ARIZONA DEPARTMENT OF TRANSPORTATION  
205 S. 17<sup>th</sup> Avenue, Mail Drop 605E  
Phoenix, AZ 85007

TEP COORDINATION MEETING NOTES (Revised)

I-10, I-19 to Kolb Road & SR 210, Golf Links to I-10  
Project No. 010 PM 260 H7825 01L

October 12, 2017

TO: Meeting Attendees

Rudy Perez, ADOT Project Manager  
Sarah Karasz, ADOT Senior Environmental Planner  
Priscilla Thompson, ADOT District Utility Coordinator  
Renee Darling, Tucson Electric Power Company Senior Environmental & Land Use Planner  
Brad Olbert, Jacobs Project Manager

FROM:

Brad Olbert, Jacobs Project Manager

SUBJECT:

TEP I-10 Coordination Meeting Notes  
I-10, I-19 to Kolb Road & SR 210, Golf Links to I-10  
Project No. 010 PM 260 H7825 01L  
PHASE II (I-10/SR 210) Design Concept Report and Environmental Assessment

INTRODUCTION

The coordination meeting was held at 2:10 PM October 12, 2017 at the ADOT Southcentral District conference room. The meeting ended at 3:10 PM.

SUMMARY

Rudy Perez, ADOT Project Manager opened the meeting at 2:10 PM. Self-introductions were made by all attendees.

Brad Olbert, Jacobs Project Manager, presented an overview of the I-10, I-19 to Kolb Road and SR 210 project area. Brad handed out packets of information which included seven plan sheets that showed Alternative I along I-10 from the Country Club Road TI to the Valencia Road TI and along SR 210. In addition, roadway profile information was provided to Renee for all of the I-10 mainline, I-19 to Kolb Road and SR 210.

At the last TEP coordination meeting, TEP requested a route for their service vehicles to use if UPRR train cars would cause a blockage of both Irvington Road and Ajo Way. Currently TEP would use Contractors Way to go north up to Alvernon Way. Brad showed Renee a paved maintenance roadway that utilizes parts of the old northbound segment of Contractors Way as a means to go north to Alvernon Way. The maintenance roadway will have locked gates so the roadway is not used by the public, however, the roadway would be available to bicycles. TEP would be given a set of keys for their emergency use of the roadway. A similar maintenance

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roadway is located along the UPRR railroad right-of-way. This paved maintenance roadway also utilizes parts of the old southbound segment of Contractors Way as a means for access to the area near the railroad. TEP and Tucson Water will have access to the roadway by means of a locked gate. Sarah Karasz, ADOT Senior Environmental Planner, said from ADOT's perspective the northbound maintenance roadway should not be labeled a bicycle route. Bicycle routes can become part of the formal bicycle system and can fall into a Section 4(f) category for parks. Sarah will forward information to Jacobs on this issue. Jacobs will be careful to label the route as a maintenance road.

Renee Darling provided handout information for two planning projects. The first planning project involves master planning for the Irvington Campus. The campus will upgrade and relocate its existing 138 kV substation and extend several 138 kV transmission lines within the campus. TEP is planning to construct new reciprocating internal combustion engine (RICE) generators on the Irvington Campus. TEP also plans to construct a new office building on the site and potentially widen Irvington Road to facilitate employee traffic turning movements into the site. One 138 kV transmission line crosses Alvernon Way along Irvington Road. TEP's main concern with the transmission line is to provide adequate clearance for the 138kV transmission line over our improvements and needed roadway profile information. Brad went over the roadway plan and profile information provided and showed Renee how to find the information TEP needed.

Renee covered the second planning project which involved a new 138 kV transmission line route that needs to go from their new 138 kV switching yard to a proposed substation located near 36<sup>th</sup> Street and Kino Parkway. There were a number of routes that could be taken including one through the Alvernon Way / I-10 system interchange. Brad said he will provide additional ramp profile information in the interchange area because the ramps are at different elevations than the I-10 mainline. Jacobs is developing a drainage concept using retention basins that are not shown in the plan views provided. Power poles could potentially be located within the basins the foundations will need to be a few feet taller and deeper to account for the water. Jacobs will provide the drainage concept when it is available.

Renee requested that someone from ADOT be present at the stakeholder meeting on October 23<sup>rd</sup> to represent ADOT's position on their facilities including the planned improvements to I-10 and SR 210. Priscilla Thompson said she would be available for the meeting. Renee also requested a letter of support from ADOT for the RICE project. The letter should identify the need for coordination with power transmission lines crossing the proposed I-10 / SR 210 alignments.

ACTION ITEM LIST

- Jacobs to provide additional I-10 to SR 210 ramp profile information as soon as it becomes available to TEP.
- Jacobs to provide the drainage design concept as soon as it is available to TEP.
- Sarah Karasz to provide Jacobs with information regarding labeling of bicycle routes within ADOT right-of-way.
- Rudy Perez will author the letter of support for the RICE project and reach out to find the appropriate individual within ADOT to sign the letter.

Signed:



Brad Olbert, PE, Project Manager

Attachments

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Meeting Notes



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COORDINATION MEETING NOTES

I-10, I-19 to Kolb Road & SR 210, Golf Links to I-10  
Project No. 010 PM 260 H7825 01L

October 30, 2017

TO: Meeting Attendees

Rudy Perez, ADOT Project Manager  
Rod Lane, ADOT Southcentral District Engineer  
James Gomes, ADOT Southcentral Regional Traffic Engineer  
Kimberly Noetzel, ADOT Communications Manager  
Robin Raine, City of Tucson, Deputy Director, Tucson Department of Transportation  
Andy McGovern, City of Tucson, Engineering Manager, Tucson Department of Transportation  
Steve Wilson, Pima County, Project Manager, Department of Transportation  
Bill Strickler, Pima County, Civil Engineering Manager, Department of Transportation  
Maria Altemus, EcoPlan Environmental Planner  
Mike Dawson, EcoPlan Environmental Manager  
Brad Olbert, Jacobs Project Manager

FROM:

Brad Olbert, Jacobs Project Manager

SUBJECT:

ADOT Coordination Meeting - I-10/Craycroft Road Access Control  
I-10, I-19 to Kolb Road & SR 210, Golf Links to I-10  
Project No. 010 PM 260 H7825 01L  
PHASE II (I-10/SR 210) Design Concept Report and Environmental Assessment

INTRODUCTION

The coordination meeting was held at 10:00 AM October 30, 2017 at the ADOT Southcentral District conference room. The meeting ended at 11:15 AM.

SUMMARY

Brad Olbert, Jacobs Project Manager opened the meeting at 10:10 AM. Self-introductions were made by all attendees.

Brad presented an overview of the I-10/Craycroft Road TI area. Handouts were provided that included a meeting agenda, vicinity map, city limits map, Roadway Design Guidelines (RDG) Access Control, summary of options to consider for changes to access control north of the TI that included photos of the area, and three concept drawings to discuss.

Traffic operations north of the interchange have deteriorated with recent developments and additional improvements may be needed to make sure the north side of the TI will function through the 2040 design year.

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If no improvements are made the LOS will continue to deteriorate as traffic volumes increase. Travel Plaza Way (located approximately 320' north of the I-10 westbound ramps) provides access to a Pilot Travel Center (truck stop), Freightliner of Arizona (a truck service center) and approximately 1500 residences all located to the east of Craycroft Road. Freightliner has additional property to expand into. The Tucson Truck Terminal (known as the Triple T Truck Stop) is located on the west side of Craycroft Road just to the north of I-10. Circle K and an RV Park with approximately 150 parking spots rounds are also present on the west side of Craycroft Road. North of Littletown Road there is an elementary school, a middle school and the Thomas Jay Regional Park. Craycroft Road stops at Littletown Road because Julian Wash is located an eighth of a mile to the north of Littletown Road.

The Littletown area to the north of I-10 is isolated by the Julian Wash and the UPRR which limits the area served by the Craycroft Road TI. The Littletown area has access to I-10 at three locations, the Valencia Road TI to the west, Craycroft Road TI to the south and Wilmot Road TI to the east.

Mike Dawson with EcoPlan went over the demographics of the area. He identified the area as having income below the state average, a high percentage of minorities and housing values were below the state average (approximately \$85,000). A high percentage of the homes in the area are being rented approx. 40%.

Brad presented a map that showed the Craycroft Road TI being located within the jurisdiction of Pima County. However, the City of Tucson council recently voted to annex the Craycroft Road area north and south of I-10. Robin Raine forwarded a figure that identified the annexation area (see attachment). The annexation will be final in about 2 weeks. Robin was asked about the annexation and how acceptable the property owners were to being annexed. Robin said there were only a few against the annexation but they received over 700 property owners agreeing to be annexed. The City stopped their annexation outreach efforts once they had enough property owners that were in favor of the annexation. The other 600 property owners out of 1300+ were not necessarily against the annexation. They just didn't respond that they were in favor of the action.

Robin asked Steve Wilson about the design changes Pima County had worked on for Craycroft Road. The plans for the work were about 95% complete. It included changes to the return radius to Travel Plaza Way so that two semis could enter and leave Travel Plaza Way at the same time. The work also involved changes to the sidewalks. Pima County tried to purchase R/W from the Triple T Truck Stop but they refused. Pima County wanted to move a bus stop located near the Circle K south closer to the I-10 ramps. Fifty to sixty persons use the current stop. Triple T thought moving the bus stop closer to where trucks were turning into the truck stop would not be desirable.

The group went over ADOT's Access Control from the Roadway Design Guidelines (see attachments). For existing conditions right-in and right-out access is acceptable between 100' to 660' of the TI ramp returns. Brad said three options were developed for discussion purposes and illustrates access control out to 660'.

Option 1 (see attachments) – Access onto Travel Plaza Way will be limited to only a right-in turning movement. Traffic wanting access to Craycroft Road from the east will use the realigned Elvira Road or Burcham Avenue to Elvira Road. Elvira Road would connect to Craycroft Road 660' north of the east side ramp return. Access to Craycroft Road from the Triple T Truck Stop would be at the realigned Elvira Road. Circle K will utilize driveways for access to Craycroft Road. A raised median island along Craycroft Road would preclude left-turn movements from the I-10 ramps north to Elvira Road. North of Elvira Road left-turn movements will be allowed from a two-way center left-turn lane. Light green areas shown on the concept drawing indicate parcels with structures that may be eligible for designation as historic structures. Realigning Elvira Road using reverse curves takes out a significant number of homes. With this option truck traffic from

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the Pilot Station or Freightliner would be routed north on Burcham Avenue to make a left-turn movement onto Elvira Road and then another left-turn onto Craycroft Road.

For all of the options with Alternative I, the I-10 westbound ramp would act as a frontage road from Craycroft Road to Valencia Road. Thus, the Triple T Truck Stop would have right-in/right-out access along the westbound ramp. For Alternative IV, the westbound ramp would not be a frontage road thus access to the Triple T Truck Stop would be from Craycroft Road.

For all of the options, the drainage flow that approaches Craycroft Road near Travel Plaza Way will be routed under Craycroft Road using the same size culvert structure that conveys flow under Elvira Road. The flow will be routed to the north along the west side of Craycroft Road in a concrete lined channel discharging into an existing earthen channel located immediately west of the intersection of Craycroft Road and Dream Street. A drop inlet will be used to set the new culverts a couple of feet under the current Craycroft Road dip crossing to minimize raising the profile grade along Craycroft Road as much as possible.

Option 2 (see attachments) – Access onto Travel Plaza Way from Craycroft Road will be limited to only a right-in turning movement. Traffic wanting access to Craycroft Road from the east will use Burcham Avenue to a new short segment of Elvira Road. Elvira Road would connect to Craycroft Road 660' north of the east side ramp return. Access to the west side would be at the intersection of Craycroft Road and Elvira Road. Circle K will utilize driveways for access to Craycroft Road. A raised median island would preclude left-turn movements from the I-10 ramps north to Elvira Road. North of Elvira Road a two-way center left-turn lane would be used for access. The short segment of Elvira Road only takes two lots. With this option truck traffic from the Pilot Station or Freightliner would be routed north on Burcham Avenue to make a left turn onto Elvira Road and then another left-turn onto Craycroft Road.

Option 3 (see attachments) – Access onto Travel Plaza Way will be limited to right-in and right-out turning movements. Traffic wanting to access Craycroft Road from the east to go south from Travel Plaza Way will use a roundabout to make a U-turn or just pass through the roundabout if coming from the north. Access from the west side would utilize the roundabout or driveways from businesses like Circle K. A raised median island would preclude left-turn movements from the ramps north to the roundabout. North of the roundabout a two-way left-turn center lane would be used for access. Using the roundabout should not remove any homes. With this option truck traffic from the Pilot Station or Freightliner would make a right turn onto Craycroft Road and then make a U-turn at the roundabout to return to I-10. Residential lots located near the roundabout would share a common driveway with adjacent lots to keep the number of driveways to a minimum. A significant amount of right-of-way will be needed from the Triple T Truck stop. Rod Lane said the southbound left-turn into Travel Plaza Way should be removed. Jacobs will make the change.

Steve Wilson asked if a circulation route from the east end of Travel Plaza Way could be extended to the east edge of Freightliner parcel and then head south to the I-10 Frontage Road. This would allow trucks entering Travel Plaza Way to route back to Craycroft Road avoiding the left-turn onto Craycroft Road. James Gomes said this would violate the current access control so that will need to be adjusted to make this option work. The roundabout option could still be used but it would provide an alternative route to making the U-turn via the roundabout. Jacobs will look into this option.

The group noticed that Options 1 and 2 would route truck traffic through the residential area. This could be unacceptable to the neighborhood unless the homes affected by the traffic are purchased and noise walls are constructed to help isolate the noise and visual impact. Mike Dawson pointed out that Environmental Justice



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areas cannot be taken if there are reasonable and prudent alternatives to avoid taking them. Lower cost is not an acceptable reason to take the homes in lieu of taking commercial property. This would rule out Options 1 and 2.

Brad said we will need to get new traffic and tuning counts at the Craycroft Rd TI. The new Pilot Truck Stop and the Freightliner service center have changed the traffic patterns since the area was modeled with the Feasibility Report. VISSIM modeling will be prepared to look at the impacts to existing conditions and with the proposed changes to the interchange.

Brad said he would like to delay presenting Alternatives I and IV to the public until the access issue has been worked out with the Littletown community. The group discussed the public involvement approach moving forward. Brad said he would like to have a separate public meeting for the Littletown area to get their input regarding access control. Hopefully this will avoid having these issues take up time in the public meetings designed to present Alternatives I and IV. Rudy Perez brought up needing meetings with Triple T Truck Stop, Pilot Travel Center and Freightliner of Arizona. It was concluded that we would select a day for Triple T Truck Stop, Pilot Travel Center and Freightliner of Arizona to meet separately with the design team at ADOT and go over the two alternatives and the access control options for Craycroft Road. A public meeting with the neighborhood would follow at a later date.

Schedule wise, the public involvement for the Craycroft Road TI would conclude in January with the Public Information Meeting for the I-10/SR 210 study taking place in April. Kim Noetzel said she will need to meet with HDR (Public Involvement Consultant) to discuss the scope and get a proposal.

Rudy summarized the meeting by identifying the roundabout option and the circulation option using Travel Plaza Way connecting to the westbound off-ramp as the options for Jacobs to develop moving forward. Meetings will be set up with Triple T Truck Stop, Pilot Travel Center and Freightliner of Arizona. A public meeting will also be set up to discuss the access control changes to the Craycroft Road TI.

**ACTION ITEM LIST**

- Rudy Perez will set up a meeting with ADOT Communications on the PI scope.
- Rudy Perez will set up a follow-up meeting with FHWA to discuss the access control approach needed at the I-10/Craycroft Road TI and to discuss the public involvement needs for the area.

Signed:   
 Brad Olbert, PE, Project Manager

Attachments

Meeting Notes



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PROGRESS MEETING NOTES

I-10, I-19 to Kolb Road & SR 210, Golf Links to I-10  
Project No. 010 PM 260 H7825 01L

November 8, 2017

TO: Meeting Attendees

Mark Hoffman, ADOT Multimodal Planning\*\*\*  
Carlos Lopez, ADOT Major Projects Group\*\*\*  
Joan Lovell, ADOT ITS\*\*  
Rudy Perez, ADOT Project Manager  
Taiping Tang, ADOT Bridge Group\*\*\*  
Sebastian Tonazzi, ADOT Community Relations  
Jim Walcutt, ADOT R/W Review Appraiser  
Emily Dawson, ADOT Southcentral District  
James Gomes, ADOT Southcentral District Regional Traffic Engineer  
Rod Lane, ADOT Southcentral District Engineer  
Richard La Pierre, ADOT Southcentral District Permits Supervisor  
Priscilla Thompson, ADOT Southcentral District Utility Engineering Coordinator  
Ammon Heier, FHWA Area Engineer  
Micah Horowitz, ASLD Planning and Engineering\*\*\*  
Alex Kuchansky, ASLD Engineer\*\*\*  
Sixto Molina, City of South Tucson City Manager  
Robin Raine, City of Tucson Assistant Transportation Director  
Bruce Vaughn, U of A Planning Design & Construction  
Carlos Valdez, Sunnyside Unified School District Transportation & Maintenance Manager  
Scott Robidoux, Tucson Airport Authority Planner  
Maria Altemus, EcoPlan Environmental Planner  
Mike Dawson, EcoPlan Senior Environmental Planner  
Paul Black, Jacobs Roadway\*\*\*  
Judah Cain, Jacobs Roadway\*\*\*  
Joe D'Onofrio, Jacobs Environmental  
Brad Olbert, Jacobs Project Manager  
Sandy Thoms, Jacobs Traffic\*\*\*  
Chris Blue, Pima Association of Governments Transportation Planner\*\*\*  
Aichong Sun, Pima Association of Governments  
Seth Chalmers, Pima County Traffic Engineering  
Rick Ellis, Pima County Engineering

\*\*\* Attended via teleconference



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FROM:  
Brad Olbert, Jacobs Project Manager

SUBJECT:  
PROGRESS MEETING NOTES  
I-10, I-19 to Kolb Road & SR 210, Golf Links to I-10  
Project No. 010 PM 260 H7825 01L  
PHASE II (I-10/SR 210) Design Concept Report and Environmental Assessment

INTRODUCTION

The Progress Meeting for this project was held at 1:00 PM November 8, 2017 at the ADOT Southcentral District Conference Room. Teleconferencing was available via WebEx for attendees offsite. The meeting was adjourned at 2:30 PM.

The meeting was well represented by agencies interested in improving the I-10 corridor from Junction I-19 to Kolb Road and providing a connection for SR 210 to I-10. Representatives included ADOT, Federal Highway Administration (FHWA), Arizona State Land Department (ASLD), City of Tucson, City of South Tucson, University of Arizona, Sunnyside Unified School District, the University of Arizona, Tucson Airport Authority, Pima County, and Pima Association of Governments (PAG).

SUMMARY

Rudy Perez, ADOT Project Manager, opened the meeting at 1:00 PM. Introductions were held for all attendees.

Brad Olbert, Jacobs Project Manager, shared that much has been done on the project since the last progress meeting, including coordination with many different agencies. Notes and figures from these meetings are posted on the study team project website. The following coordination meetings took place:

- *ADOT Right-of-Way*  
The ADOT ROW group developed a cost estimate for the acquisition of the proposed ROW takes. This cost is not included in the cost estimates that will be discussed in this meeting since the study team did not receive them in time.
- *Craycroft Road TI*  
The study team met with FHWA, ADOT Southcentral District, City of Tucson, and Pima County to discuss the options for addressing access control issues at the Craycroft Road TI. As discussed in the last progress meeting, there are truck stops and new businesses in the vicinity that will pose access control issues at the interchange that will affect not only those businesses, but also nearby residents. The study team plans to meet with the affected businesses and the public to fill them in on the project and get their input so that a reasonable solution can be reached. This will only include homes and businesses near the Craycroft Road TI and will happen before the public meeting for the entire project.

The key dilemma at this interchange is that a full-access driveway/intersection is located too close to the I-10 ramps. ADOT requires that full-access driveways be at least 660' away from freeway ramps. The driveway in question is within this distance and provides access to residents as well as businesses. This is an issue for both Alternatives I and IV. A handful options were considered for remedying this:



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- If this were to become a right-in-right-out access, traffic wanting to make a left turn would instead have to turn right and make a U-turn at the next available opportunity. This is problematic since a large number of trucks will be using this access.
- Another option would be to route all traffic through the subdivision to utilize an access farther from the interchange. This is not ideal as trucks would be driving through residential neighborhoods.
- Another option is to realign Elvira Road to be 660' away from the interchange ramps. This would require multiple residential property takes, many of which are homes that could potentially be historical buildings. The neighborhood in question is also a low-income neighborhood which would trigger environmental justice concerns. With these considerations in mind and if there is a reasonable and prudent alternative, the team does not want to take more properties to resolve this issue.
- Another alternative considered was to install a roundabout at least 660' to the north of the I-10 ramps. This would allow vehicles wanting to turn left out of Travel Plaza Way to turn right and make a U-turn at the roundabout to head southbound. This seems to be one of the most viable solutions.
- Pima County suggested installing a one-way loop road off Travel Plaza Way to allow traffic to get back on to the ramp. This alternative, along with the other viable options that will be presented to the local public, will be discussed more in detail later in the meeting.

• Tucson Electric Power (TEP)

The study team met with TEP to discuss utility impacts. This was a very timely meeting because TEP is in the process of developing a master plan for modifying their campus in the vicinity of Irvington Road and Alvernon Way. Many of their facilities in place today will be relocated. They will be relocating a substation, installing a new generating station, and building a new tower for employees. This is convenient because now the study team can coordinate with TEP to ensure any right-of-way impacts can be addressed in their new site planning. TEP will also be relocating some transmission lines, so they will now be able to install them at an appropriate elevation to accommodate the future improvements from this project.

Brad provided a status of the project to date:

- Earthwork modeling is complete so the team has earthwork and retaining wall estimates.
- Work has progressed for the signing, ITS, and lighting design. Brad briefly showed the conceptual plans for the signing, pavement marking, lighting, and freeway management system (FMS) improvements. The FMS improvements will include dynamic message signs (DMSs), CCTV cameras, vehicle detection loops, wrong way vehicle detection, and ramp metering infrastructure. These concepts are available for both Alternative I and Alternative IV and have been reviewed by ADOT, FHWA, and ADOT Southcentral District.
- An initial onsite drainage concept was developed and quantities were used to help formulate the cost estimate, which will be discussed later.
- A preliminary bridge analysis is being conducted to determine the number and size of all necessary structures. This will help in developing an accurate cost estimate for structures in both alternatives. As part of this effort, the study team has been meeting with Pima County and the City of Tucson to ensure the bridges will meet their needs and accommodate any future expansion these agencies expect such as additional travel lanes, bike lanes, and sidewalks.



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- Environmental efforts are ongoing. This work lags the roadway design efforts since they need to know the final footprint of the improvements. The initial HazMat report has been developed.
- Initial plan sheets have been developed for both alternatives. The roadway profiles and typical sections have also been developed for all the mainline sections and ramps. These documents will give a good idea of the number of lanes proposed in all locations, where the ramps are connecting, and so forth. While these documents say PRELIMINARY NOT FOR CONSTRUCTION OR RECORDING, it was requested that all of these documents also display the word DRAFT in a large and obvious location, just in case they make their way into public hands.
- An implementation plan will be developed for this project, but work on that has not yet started as more details of the project still need to be worked out. The project will need to be broken into segments to be built over time as funds become available. The plan will also discuss detours during construction and how traffic can be routed while this is being built. A meeting will be set up with Pima County and the City of Tucson to discuss this further.

Brad asked attendees to review the plans and documents on the team website. This is an opportunity to provide input prior to the initial DCR coming out. The access issues at Craycroft Road will cause about a 3-month delay in releasing the initial DCR. If anyone has comments on the plans anytime during that timeframe, the study team welcomes them and will incorporate them into the Initial DCR. It is expected that the corridor-wide public meeting will be held in April 2018 and the Initial DCR will be completed in the Summer of 2018 so that it can incorporate input from the public.

It was suggested that in order to provide access from Pilot to I-10, to route vehicles north on Craycroft Road up to Littletown Road which then ties into Valencia Road at a signalized intersection. Brad clarified that while this option would work, it is preferred to keep the trucks on Craycroft Road near the TL. Otherwise they would be driving through the residential neighborhood, by two schools, and a regional park which is not preferred. It was noted that traffic around these schools is problematic and that attempting to improve this area for through-traffic could potentially be opening a can of worms. Carlos Valdez with the Sunnyside Unified School District said a number of students walk along Craycroft Road and Littletown Road to get to the schools. Traffic around the schools is already a problem. Increasing the traffic would make the situation worse.

Paul Black, Jacobs roadway design lead, discussed the cost estimate for both alternatives. Quantities were developed for the ten highest-cost items for the project and are summarized for comparison. Paul pointed out that Alternative IV has consistently higher costs than Alternative I, and the current estimated difference in cost between the two alternatives is approximately \$68 million. This is primarily due to the additional pavement, earthwork, and barriers necessary for the wider footprint of the CD system in Alternative IV. The CD system also requires larger bridges and additional traffic and FMS elements, which adds to the cost.

Right-of-way costs were not included in the cost estimate, as they were not yet available. Alternative I has 172 parcels with 140 acres to acquire, while Alternative IV has 186 parcels with 154 acres. The additional right-of-way necessary for Alternative IV will translate to a higher cost, and therefore the cost differential between the two alternatives will continue to increase.

The costs for utility relocation were estimated based on a rule of thumb that each interchange will require \$5 million. There are 11 interchanges for each alternative, so it was estimated at \$55 million for each alternative. These costs will be updated as the design progresses to reflect the best possible estimate.



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There is an existing frontage road along I-10 between Valencia Road and Kolb Road. It was determined during the feasibility study that the frontage road, particularly in the eastbound direction, is underutilized and can be removed. The westbound frontage road will also be removed even though it has impacts to some parcels because the right-of-way is needed for mainline improvements. The parcel impacts are located in two general areas:

- *Between Valencia Road and Craycroft Road*  
 There is vacant land on the north side of I-10 in which the sole access to the parcels is via the frontage road. Some of the parcels will be acquired for drainage basins, but there are still 11 parcels that would no longer have access depending on which alternative is selected:
  - For Alternative I, traffic at Craycroft Road wanting to get on westbound I-10 will take a ramp that goes through the Valencia Road interchange, traffic then gets onto I-10 via the Valencia Road on-ramp. This occurs because the weaving distance between the Craycroft Road and Valencia Road interchanges is too short to accommodate the projected traffic volumes. Therefore, the ramp then serves as a one-way frontage road. Access to the 11 parcels could then still be provided along that frontage road.
  - For Alternative IV, the CD system can accommodate the weaving maneuver between the Craycroft Road on-ramp and Valencia Road off-ramp. Therefore, no frontage road is being provided and there are 11 parcels that will need to be acquired due to lack of access.

A possible solution to this access issue is tied to the Craycroft Road roundabout option discussed previously. The roundabout could serve a new roadway to the west that runs from Craycroft Road. In Alternative I it could tie into the long ramp/frontage road to provide an additional access to Valencia Road or westbound I-10. In Alternative IV it could continue farther west through the 11 parcels and tie into Valencia Road. The 11 parcels would then have access via that road and would no longer be total takes. The additional cost of this roadway would need to be evaluated relative to the right-of-way takes. It is expected that the cost to resolve this access issue will be more expensive in Alternative IV, which will further increase the differential in cost between the two alternatives.

Rod Lane said the Craycroft Road westbound ramp should be called a frontage road and not a ramp for Alternative I. Access is not allowed for ramps but it is allowed for frontage roads. This should be discussed with FHWA to make sure they concur.

- *Between Wilmot Road and Kolb Road*  
 On the north side of I-10, there are several parcels in which their only access is off the westbound frontage road. Most of the impacted parcels are vacant, but a few have already been developed. There is already a planned development called La Estancia PAD that is expected to have access to the frontage road. The impacts are expected to be the same between Alternatives I and IV, with the exception of one parcel that contains a cell tower. Access to this cell tower will differ between the two alternatives:
  - For Alternative I, the roadway widening does not impact the parcel, but new access will need to be provided to the cell tower via a new roadway segment.
  - For Alternative IV, the CD system encroaches into the cell tower which requires it to be relocated. One option is to do a partial take on the parcel and relocate the cell tower to the back of the parcel. The other option is to do a total take on the cell tower parcel. Costs for both options will be evaluated before making a decision.



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Approximate costs to resolve the access issues in this location will be developed, but it is expected that Alternative IV will be more expensive, further increasing the cost differential between the two alternatives.

An evaluation matrix will be developed for the two alternatives, but cost is only one component of that matrix.

Brad discussed the current access issues at Craycroft Road. The study team has developed two options for addressing these issues, both of which employ a roundabout.

- Option 1 allows for northbound trucks on Craycroft Road to turn right on Travel Plaza Way. If they then want to get back on I-10, they can make a right onto northbound Craycroft Road and make a U-turn at the roundabout to take them to the I-10 on-ramps. Residential traffic will have access to Craycroft Road via Elvira Road and Travel Plaza Way. Trucks wanting to access Triple T will have full access via the roundabout as the west leg of the roundabout will serve that parcel. In Alternative I, the frontage road will provide additional access locations to Triple T, but those additional access points will not exist in Alternative IV. This may pose an issue and require a total take of the Triple T.
- Option 2 has all of the components of Option 1, but also has a one-way westbound connector road that connects from the southern terminus of Travel Plaza Way to the I-10 westbound off-ramp/frontage road. This would help reduce the number of trucks on Craycroft Road and within the roundabout. This concept has not yet been investigated with respect to traffic operations, but provides another option to consider.

Drainage improvements will be included with both proposed options. The roundabout diameter is currently proposed at 180' to accommodate larger trucks and lowboys. This poses some access issues to a Circle K gas station in the northwest corner of the proposed roundabout. This would need to be dealt with, but there are many options to consider that the study team will investigate further. Under both options, a small frontage road would be provided for the homes immediately east of the roundabout. They would have access to Craycroft Road via a driveway as shown in the provided exhibits. It is likely that no residential property takes would be necessary.

The question was raised on whether the study team considered utilizing Dream Street (parallel to and north of Elvira Road) for the primary residential access. It was mentioned that more residents are using Dream Street to gain access to Craycroft Road since the Pilot Travel Center was built. The intersection is now having congestion issues and should be improved. Brad indicated that had not been investigated, but the team will look into it. He indicated that new traffic counts will be collected and traffic circulation will be modeled to determine the impacts of the proposed alternatives.

It was suggested that under option 2, Elvira Road be connected to the new Travel Plaza Way connector road to allow residents to also utilize it and avoid Craycroft Road. It could then also be utilized by the residential subdivision to the east.

It was also suggested that under option 2, the new connector road could run from the cul-de-sac, between the Freightliner of Arizona and the Pilot businesses, and connect to the I-10 ramp/frontage road.

The connector road in option 2 will cause trucks to be accelerating and decelerating right behind some houses. Brad indicated that a sound wall may be necessary.



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It was brought up that the restaurant within the Triple T is a popular attraction for residents and tourists, so that parcel sees regular vehicular traffic as well as heavy truck traffic.

These options will be investigated further, and a resolution will be made after getting input from the businesses and local residents. It was suggested to also include representatives from both of the nearby schools in the discussions. FHWA will also need to be included in the discussions when defining access to ramps/frontage roads.

The question was brought up about the implementation plan and the order that these various projects will come about. The region seems to be heavily focused on improving Kino Parkway, but that does not seem to be the best decision right now. Country Club Road would be a smarter option to improve first. It was pointed out that the Country Club Road TI is currently in the 5-year plan for design and right-of-way costs of \$8 million, so it appears that interchange is in fact a priority right now. The implementation plan that will be developed as part of this project will help prioritize locations for construction and outline a logical progression of improvements.


Brad briefly went over the project schedule. The next progress meeting is tentatively scheduled for January 24, 2018 and the next project-wide public meeting will be in April 2018. The environmental studies and documentation will be prepared in June 2018, with the Initial DCR/Draft EA expected to be submitted around June 2018.

Related to project communications, Brad reminded attendees of the project website. All documents related to this project from the very beginning are posted on the website including meeting minutes, exhibits, and project deliverables. This site is intended for use by the study team only. The login information is available below. There is a separate website for public use with information related to the project, also listed below.

- Study Team Website: [www.jacobsaz.com](http://www.jacobsaz.com)
  - Login: I-10 Corridor
  - Password: Empirita
- Public Project Website:  
<http://www.azdot.gov/planning/transportation-studies/i-10-and-sr-210-feasibility-study>

**ACTION ITEM LIST**

- The Jacobs team will continue to pursue the key issues discussed in this meeting.
- The Jacobs traffic team will continue investigating the access issues at Craycroft Road and meet with the public and appropriate stakeholders to come up with a viable solution.
- Stakeholders are encouraged to review the preliminary plans and documents on the study website and provide comments that can be incorporated prior to publishing the initial DCR.
- Stakeholders are encouraged to review and comment on the meeting minutes to ensure accuracy.

Signed:   
Brad Olbert, PE, Project Manager

Attachments

**Meeting Notes**



**I-10 / Barraza-Aviation Pkwy (SR 210)**  
Design Concept Report & Environmental Assessment

ARIZONA DEPARTMENT OF TRANSPORTATION  
205 S. 17<sup>th</sup> Avenue, Mail Drop 605E  
Phoenix, AZ 85007

**PROGRESS MEETING NOTES**

**I-10, I-19 to Kolb Road & SR 210, Golf Links to I-10**  
Project No. 010 PM 260 H7825 01L

**February 21, 2018**

**TO: Meeting Attendees**

- Tazeen Dewan, ADOT Project Manager
- Shajed Haque, ADOT Drainage\*\*\*
- Sayeed Hani, ADOT Railroad and Utility Section\*\*\*
- Sarah Karasz, ADOT Environmental Planning Group
- Tammy Mivshek, ADOT Traffic Design\*\*\*
- Jerimiah Moerke, ADOT Community Relations
- Kimberly Noetzel, ADOT Community Relations
- Taiping Tang, ADOT Bridge Group\*\*\*
- Jim Walcutt, ADOT R/W Review Appraiser
- Emily Dawson, ADOT Southcentral District
- James Gomes, ADOT Southcentral District Regional Traffic Engineer
- Richard La Pierre, ADOT Southcentral District Permits Supervisor
- Priscilla Thompson, ADOT Southcentral District Utility Engineering Coordinator
- Tremaine Wilson, FHWA Environmental\*\*\*
- Micah Horowitz, ASLD Planning and Engineering\*\*\*
- Alex Kuchansky, ASLD Engineer\*\*\*
- Sixto Molina, City of South Tucson City Manager
- Shellie Ginn, City of Tucson Planning\*\*\*
- Chris Anderson, Tucson Fire Department Deputy Chief
- Jeff Thompson, Tucson Fire Department
- Scott Robidoux, Tucson Airport Authority Planner
- Maria Altemus, EcoPlan Environmental Planner
- Mike Dawson, EcoPlan Senior Environmental Planner
- Paul Black, Jacobs Roadway\*\*\*
- Judah Cain, Jacobs Roadway\*\*\*
- Joe D'Onofrio, Jacobs Environmental\*\*\*
- Brad Olbert, Jacobs Project Manager
- Sandy Thoms, Jacobs Traffic\*\*\*
- Haley Estelle, HDR Public Involvement
- Chris Blue, Pima Association of Governments Transportation Planner
- John Moffatt, Pima County Economic Development\*\*\*
- Heather Ruder, Pima County Project Management
- Steve Wilson, Pima County Project Manager
- Robert Young, Pima County Division Manager

\*\*\* Attended via teleconference



**I-10 / Barraza-Aviation Pkwy (SR 210)**  
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**FROM:**

Brad Olbert, Jacobs Project Manager

**SUBJECT:**

PROGRESS MEETING NOTES  
 I-10, I-19 to Kolb Road & SR 210, Golf Links to I-10  
 Project No. 010 PM 260 H7825 01L  
 PHASE II (I-10/SR 210) Design Concept Report and Environmental Assessment

**INTRODUCTION**

The Progress Meeting for this project was held at 1:00 PM February 21, 2018 at the ADOT Southcentral District Conference Room. Teleconferencing was available via WebEx for attendees offsite. The meeting was adjourned at 2:15 PM.

The meeting was well represented by agencies interested in improving the I-10 corridor from Junction I-19 to Kolb Road and providing a connection for SR 210 to I-10. Representatives included ADOT, Federal Highway Administration (FHWA), Arizona State Land Department (ASLD), City of Tucson, City of South Tucson, Tucson Airport Authority, Tucson Fire Department, Pima County, and Pima Association of Governments (PAG).

**SUMMARY**

Brad Olbert, Jacobs Project Manager, opened the meeting at 1:00 PM. Introductions were held for all other attendees, including the newly appointed ADOT Project Manager for this project, Tazeen Dewan.

Brad shared that much has been done on the project since the last progress meeting, including two meetings with the ADOT Southcentral District.

- The study team drafted a technical memorandum on the proposed implementation plan, on which the District provided their comments. The memorandum was provided as part of the agenda packed to the team. A high-level overview of this implementation plan will be discussed in the meeting, but attendees are encouraged to review the memo on their own and provide comments.
- The study team met with the District utility coordinator to discuss the high-level cost estimate for utility relocations along the corridor and prepared a for each interchange individually. This new cost estimate is more precise than what the team presented previously.

Brad provided a status of the project to date:

- The preliminary bridge analysis is ongoing. There are between 65 and 70 structures within the project limits. Once the analysis is complete it will be sent to ADOT for review.
- The team has started writing the draft DCR which will be available for review only after the access issues at the Craycroft Road TI are resolved.
- The environmental work is on hold pending a resolution to the Craycroft Road access issues.
- The Craycroft Road access issues will be worked out. Some concepts have been developed and there is a public meeting scheduled for April to get input from residents and stakeholders.



**I-10 / Barraza-Aviation Pkwy (SR 210)**  
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Paul Black, Jacobs roadway design lead, discussed the changes that have been made to the design to address access issues. On westbound I-10 between Valencia Road and Craycroft Road, the distance between the two interchanges is less than required.

- In Alternative I the team proposed to remove the auxiliary lane and instead have a frontage road to take traffic between the two interchanges. This would provide access to some properties on the north side of I-10 as well as the Triple T truck stop at Craycroft Road.
- Under Alternative IV, the frontage roads would be taken out of service and access from Craycroft Road and to Valencia Road would be accomplished via an auxiliary lane on the CD roadway. While the length of this auxiliary lane is a little shorter than desired, the volume of traffic expected to utilize the ramps is not significant enough to negatively affect traffic operations. However, removing the frontage road also removes access to the parcels on the north side of I-10 which would result in total property takes. To avoid these significant ROW takes, the team is proposing to keep the westbound frontage road in service under Alternative IV, similar to what is being proposed under Alternative I.

Paul provided a high-level overview of the draft implementation plan. As the entire project is estimated to cost around \$1 billion, it is expected that it will need to be phased out into multiple smaller projects to be built as funding becomes available. When looking at the project on a high level, it made sense to break it into three distinct areas:

- **Group 1:** I-10 from I-19 to Valencia Road would involve improving older-style interchanges such as partial cloverleaf interchanges in the urban area of I-10 as well as improving the interchange spacing.
  - *Project 1:* Construction of Country Club Road TI which will allow the removal of the Palo Verde Road TI and addition of the westbound on-ramp from Alvernon Way. This will improve the interchange spacing along I-10 in this vicinity.
  - *Project 2:* Reconstruction of Kino Parkway, which currently has some structural concerns that should be addressed sooner rather than later.
  - *Project 3:* Reconstruct Park Avenue TI to address the old partial cloverleaf ramp and some weaving concerns on I-10 due to the close interchange spacing.
  - *Project 4:* Reconstruct 6<sup>th</sup> Avenue TI to address left-turn capacity issues. The bridge over I-10 needs to be widened or reconstructed to accommodate dual left-turn lanes onto I-10. The timing of this project can be adjusted as needed based on the demand for the dual left-turn lanes.
  - *Project 5:* Improves I-10 from just east of Palo Verde Road to Valencia Road by widening I-10 to three lanes in each direction. This project also includes building the structures for the SR 210 interchange to minimize impact to I-10 traffic when it is constructed at a later date.
  - *Project 6:* Widens eastbound I-10 and constructs the median lanes from 6<sup>th</sup> Avenue to Kino Parkway.
- **Group 2:** Extending SR 210 from Palo Verde Road to I-10 at Alvernon Way
  - *Project 7:* Constructs the interchange of SR 210 and Golf Links Road to provide direct connection ramps.
  - *Project 8:* Constructs mainline SR 210 from Palo Verde Road to Ajo Way. Traffic on Alvernon Way will be maintained during this project but will have a reduced number of lanes.
  - *Project 9:* Constructs SR 210 from Ajo Way to I-10 and ties into the ramps constructed as part of Project 5 in Group 1.
- **Group 3:** Improving I-10 from Valencia Road to Kolb Road. The widening to I-10 mainline in this vicinity can be done incrementally as funding becomes available and widening can occur on the inside lanes towards the median.
  - *Project 10:* Reconstructing the Valencia Road TI and the frontage roads that connect to Craycroft Road.



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- *Project 11:* Reconstructing the Craycroft Road TI and the access management improvements on Craycroft Road.
- *Project 12:* Reconstructing the Wilmot Road TI.
- *Project 13:* Reconstructing the Kolb Road TI as a DDI and constructing the necessary tapers to tie the newly widened I-10 into the existing cross-section to the east.
- *Project 14:* Constructing northbound and southbound express flyover ramps over I-10 at Kolb Road. This can be done once enough development occurs that the amount of northbound and southbound traffic through the DDI exceeds capacity.

Paul referred everyone to the Technical Memorandum that discusses each of the projects and their associated detour routes. Most detour routes follow major streets that are currently five-lane cross sections and will likely last a few months depending on how long the cross-road reconstructions will take. Mike Dawson from Ecoplan indicated that the detour routes are important due to noise impacts. Chris Anderson from the Tucson Fire Department asked if the detour routes will have barriers up blocking turning lanes or if all lanes will remain open. He emphasized that any detour routes and barricades would need to accommodate emergency vehicles and their turning radius as well as pull-off areas to where vehicles can be pushed after a crash. Paul indicated that these are important items but this level of detail will be determined in the final design and construction phases of the project.

Paul discussed the changes to ROW needs based on the addition of the westbound frontage road between Craycroft Road and Valencia Road. He showed a table depicting the required ROW areas for the entire project for each alternative. Alternative IV will require an additional 14.77 acres of land over Alternative I. Paul then discussed the cost associated with ROW acquisitions and showed a table breaking down the costs for each project under each alternative. In total, Alternative IV will require an additional \$4.49 million in ROW costs over Alternative I.

Paul discussed the total project cost estimate and showed a table summarizing the costs for key items under each alternative. These costs have been refined since last presented in November of 2017. In total, Alternative IV will cost an additional \$74.9 million over Alternative I. As the team writes the initial DCR, they intend to identify what benefits Alternative IV presents over Alternative I to justify the higher cost.

Mike Dawson asked if a cost estimate could be developed for the No Build scenario. This could be as simple as an estimate for routine bridge maintenance as well as a per lane-mile of roadway for pavement resurfacing. It was discussed that this project is crucial for the region to meet future traffic demands and it is unlikely that Alternative I or IV will not be constructed. However, the No Build cost estimate may be needed for environmental documentation.

The question was raised about what other factors will be considered in comparing the alternatives other than cost. Paul indicated that other evaluation criteria will be discussed in the DCR such as traffic operations, safety, ROW impacts, utility impacts, environmental impacts, cost, maintenance, public acceptance, and so forth.

Haley Estelle, HDR Public Involvement Specialist, discussed the public involvement plan for the access issues at the Craycroft Road TI. The study team is proposing a roundabout on Craycroft Road to mitigate the removal of left-turn egress from Travel Plaza Way. The study team has developed two options for addressing these issues, both of which employ a roundabout. They plan to first meet with stakeholders in early April to discuss the proposed options and will meet with nearby residents shortly thereafter. This will all be done before the larger public meeting that is for the entire project.



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- Brad discussed the two options being proposed to mitigate the Craycroft Road access issues.
- Option 1 installs a roundabout to allow vehicles leaving Travel Plaza Way to head southbound on Craycroft Road and ultimately onto I-10. There is currently full access at this intersection that will need to be restricted to right-in right-out only due to proximity to the TI. The roundabout allows vehicles to exit Travel Plaza Way and travel north to the roundabout to make a U-turn to head south.
  - Option 2 installs a roundabout just as in Option 1, but also installs a one-way road connecting Travel Plaza Way to the westbound I-10 off-ramp to try and reduce some of the truck traffic through the roundabout.

The team will discuss other possible options with the stakeholders to come up with the best solution for the area.

The team will be collecting traffic counts to understand what is currently going on in this area and to verify that these concepts will operate adequately.

Brad indicated that there is a dip drainage crossing across Craycroft Road which is posing some challenges. Since this project is installing a median on Craycroft Road, a pipe will need to be installed below the road which requires the roadway profile to be raised. This creates issues with property owners where their access to Craycroft Road will be impacted. The team is proposing to install driveways to short frontage roads to allow access to the parcels that face Craycroft Road.

The question was raised under Option 2 if there is still need for a roundabout if the one-way connector road is provided. Brad explained that the roundabout would still be needed because many of the residents in the area also utilize Travel Plaza Way to turn south onto Craycroft Road. Another option would be to provide a roadway to the west from the roundabout that would connect to the WB frontage road. This would greatly reduce the volume of traffic passing through the WB ramp intersection. We need to see if this is an option to pursue with TTT Truck Stop.

Brad briefly went over the project schedule. The stakeholder meeting and public meeting for the Craycroft Road improvements will be in April of 2018. The next progress meeting is tentatively scheduled for May of 2018 and the next project-wide public meeting will also be in May. The environmental studies and documentation will be prepared in June 2018, with the Initial DCR/Draft EA expected to be submitted around June 2018. These will first be submitted to ADOT for review and comment, then distributed to the study team.

Sixto Molina, City of South Tucson City Manager, brought up that vacant parcels between the railroad tracks and 6<sup>th</sup> Avenue have recently been purchased and redevelopment is expected in that area. There is a meeting March 29<sup>th</sup> where the City of South Tucson will hear from the land owners on what the plans are for the properties. ADOT has been invited to that meeting. There is also more development expected in the vacant parcels between 6<sup>th</sup> Avenue and Park Avenue.

The question was raised on why the team is keeping an interchange at Park Avenue instead of just creating frontage roads between 6<sup>th</sup> Avenue and Kino Parkway. These three interchanges are spaced close together and the Park Avenue interchange could have just been removed instead of spending money on costly braided ramps to meet the required weaving distances. Brad pointed out that there are very important developments in place with access to Park (Tucson Marketplace, Walmart, Costco, etc.) and others planned for the future along Park Avenue, so it was preferred to keep that interchange in service.





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Brad asked Scott Robidoux of the Tucson Airport Authority if there is anything the team should be aware of as far as airport development. Scott indicated that FAA will need to be notified of this project as it gets closer to final design. Nothing is needed from the study team at this point. Davis-Monthan AFB and the Department of Defense were both invited to be cooperating agencies on this project but the team has not heard back from either agency.

Related to project communications, Brad reminded attendees of the project website. All documents related to this project from the very beginning are posted on the website including meeting minutes, exhibits, and project deliverables. This site is intended for use by the study team only. The login information is available below. There is a separate website for public use with information related to the project, also listed below.

- Study Team Website: [www.jacobsaz.com](http://www.jacobsaz.com)
  - Login: I-10 Corridor
  - Password: Empirita
- Public Project Website:  
<http://www.azdot.gov/planning/transportation-studies/i-10-and-sr-210-feasibility-study>

**ACTION ITEM LIST**

- The Jacobs team will continue to pursue the key issues discussed in this meeting.
- The Jacobs team will meet with the public and appropriate stakeholders to discuss the Craycroft Road access issues and proposed solutions.
- Stakeholders are encouraged to review the Draft Implementation Plan Technical Memorandum and provide any comments, particularly concerning the proposed detours.
- Stakeholders are encouraged to review and comment on the meeting minutes to ensure accuracy.

Signed:   
 Brad Olbert, PE, Project Manager

Attachments

**Meeting Notes**



**I-10 / Barraza-Aviation Pkwy (SR 210)**  
 Design Concept Report & Environmental Assessment

ARIZONA DEPARTMENT OF TRANSPORTATION  
 205 S. 17<sup>th</sup> Avenue, Mail Drop 605E  
 Phoenix, AZ 85007

**COORDINATION MEETING NOTES**

**I-10, I-19 to Kolb Road & SR 210, Golf Links to I-10**  
 Project No. 010 PM 260 H7825 01L

June 5, 2018

**TO: Meeting Attendees**

Tazeen Dewan, ADOT Project Manager  
 Rod Lane, ADOT Southcentral District Engineer\*\*\*  
 Doug Moseke, ADOT Southcentral Deputy District Engineer\*\*\*  
 James Gomes, ADOT Southcentral Regional Traffic Engineer\*\*\*  
 Jerimiah Moerke, ADOT Community Relations\*\*\*  
 Ammon Heier, FHWA Area Engineer  
 Joe D'onofrio, Jacobs Environmental Manager  
 Brad Olbert, Jacobs Project Manager

\*\*\* Attended via teleconference

**FROM:**

Brad Olbert, Jacobs Project Manager

**SUBJECT:**

FHWA I-10/Craycroft Road Coordination Meeting Notes  
 I-10, I-19 to Kolb Road & SR 210, Golf Links to I-10  
 Project No. 010 PM 260 H7825 01L  
 PHASE II (I-10/SR 210) Design Concept Report and Environmental Assessment

**INTRODUCTION**

The coordination meeting was held at 2:30 PM June 5, 2018 at the ADOT Engineering Building conference room. The meeting ended at 3:30 PM.

**SUMMARY**

Tazeen Dewan, ADOT Project Manager opened the meeting at 2:30 PM. Self-introductions were made by all attendees.

Brad Olbert, Jacobs Project Manager, presented an overview of the I-10/Craycroft Road TI area. Handouts were provided that included a memorandum of access control concepts developed for the area to the north of the interchange. The Craycroft Road TI is located within the jurisdiction of the City of Tucson. The area is bounded by I-10 on the south, the Julian Wash on the north, Valencia Road on the west and Wilmot Road on the east. The area is known as "Littletown".



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 Design Concept Report & Environmental Assessment  
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Jacobs recently picked up traffic counts at the I-10/Craycroft Road TI and at the Craycroft Road/Travel Plaza Way. The two newly installed traffic signals are operating at LOS B/C during the AM peak hours and B/C during the PM peak hours. The Craycroft Road/Travel Plaza Way intersection is operating at LOS A for AM and PM peak hours. Operational analysis of current conditions with 2040 projected volumes indicates the interchange will reach capacity, LOS D/D during the AM peak hour and LOS C/D during the PM peak hour. The operational analysis of current conditions with 2040 projected volumes at the intersection of Craycroft Road and Travel Plaza Way results in an LOS F during the AM peak hour and LOS F during the PM peak hour. Travel Plaza Way (located approximately 200' north of the I-10 westbound ramps) provides access to a Pilot Travel Center (truck stop), Freightliner of Arizona (a truck service center) and approximately 1500 residences all located to the east of Craycroft Road. The Tucson Truck Terminal (known as the Triple T Truck Stop) is located on the west side of Craycroft Road just to the north of I-10. North of Littletown Road there is an elementary school, a middle school and the Thomas Jay Regional Park. Craycroft Road stops at Littletown Road because Julian Wash is located an eighth of a mile to the north of Littletown Road and the UPRR is located to the north of the wash.

The Littletown area to the north of I-10 is isolated by the Julian Wash and the UPRR which greatly reduces the area served by the Craycroft Road TI. The Littletown area has access to I-10 at three locations, the Valencia Road TI to the west, Craycroft Road TI to the south and to the Wilmot Road TI to the east.

The Littletown area has many homes that were built over fifty years ago, many are potential historic structures. The Littletown residential area is also a low income housing area with a high percentage of minorities, which makes the area an Environmental Justice concern. Taking any homes in this area would not be acceptable to FHWA based on the fact that there are reasonable and prudent alternatives available to taking these homes.

Brad reviewed the concepts that were described and illustrated in the attached memorandum. The seven concepts presented were:

- 1) **Purchase the Pilot Travel Center** – estimated to cost \$6.5 M. This concept has a high cost, would cause a loss in tax revenue for the City of Tucson and the commercial area will need to be repurposed.
- 2) **Realign Elvira Road** – realigning Elvira Road to connect to Craycroft Road to the north of the TI would involve taking homes from the Littletown area. Taking any homes in this area would not be acceptable to FHWA based on the fact that there are reasonable and prudent alternatives available.
- 3) **Construct a Roundabout** – constructing a roundabout on Craycroft Road 660' to the north of the TI. Vehicle noise and light from headlights would be an issue for adjacent residences. Improvements along Craycroft Road would extend up to Dream Street. Drainage improvements will parallel Craycroft Road up to Dream Street. The roundabout concept will require a significant amount of property to be acquired from the Triple T Truck Stop. Concerns were expressed by Craycroft Road stakeholders that truck drivers will not make the U-turn to return to I-10 via the Craycroft Road TI but continue north to Littletown Road to enter I-10 at the Valencia Road TI. This concept meets the access control criteria.
- 4) **Construct a Roundabout with a one-way connector road to the I-10 westbound off-ramp** – Similar to Concept 3 with the added one-way connector road to the I-10 westbound off-ramp. The connector road would impact the Freightliner development potentially removing most of the employee parking. Truck traffic from the Pilot Center would have access to the connector road 24/7. Truck noise and light from headlights would be an issue for adjacent residences located immediately east of Freightliner. If Freightliner is acquired, the ADOT R/W Group estimated the cost at \$6.5 M.



**I-10 / Barraza-Aviation Pkwy (SR 210)**  
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5) **Construct a Roundabout with a two-way connector road to the I-10 westbound off-ramp** – Similar to Concept 3 with the addition of a two-way connector road to the I-10 westbound off-ramp through the Triple T parcel. This connector road would provide an easier route to I-10 by passing the westbound frontage road signal. The connector road would bisect the Triple T parcel relocating the current truck parking area. This concept would not reduce the number of vehicles using the roundabout.

6) **Eliminate the westbound off-ramp at Craycroft Road and retain the westbound frontage road between Wilmot Road and Craycroft Road** – This concept allows the right-in and right-out for the Pilot Travel Center and the Freightliner parcels. Access control on Craycroft Road will no longer be an issue north of the TI since the frontage road would remove most of the turning movements from Craycroft Road. The Pilot Travel Center representative was not in favor of this concept because westbound drivers would have to make a decision to get off of I-10 at the Wilmot Road off-ramp which is 1.5 miles to the east. Then travel along the frontage road to get to their business. This would have an impact on their business.

7) **Construct a signal at the intersection of Craycroft Road and Travel Plaza Way** – Operational analysis using 2040 projections and widening the Craycroft Road TI indicates the roadway will function with an LOS B in both the AM and PM peak hours. Other than taking right-of-way to widen Craycroft Road from I-10 to Travel Plaza Way there is minimal impact to the neighborhood. This concept would avoid making drainage improvements north of Travel Plaza Way. However, this concept does not implement the access control guidelines and may require a variance to move forward.

Brad said the least costly concept is 7. It also has the least impact on the neighborhood and local businesses. The signal at Craycroft Rd/Travel Plaza Way has an LOS B/B for 2040 and should operate well beyond the design year. This is due to the fact that the area north of the TI is almost built out and it is isolated by the UPRR and Julian Wash. All other concepts impact the businesses and/or the neighborhood. Concept 7 does not implement the access control guidelines and may require a variance to move forward. Jacobs was planning to meet with the neighborhood to present the roundabouts but it is not needed if we move forward with the Concept 7.

Ammon Heier said based on the review of all of the concepts presented, Concept 7 may be acceptable to FHWA provided the Change of Access Report shows the concept has no effect on the interstate and adjacent TIs. Brad said Jacobs was going to wait on doing the Change of Access Report for the recommended alternative. James Gomes said it may be better to do it now to justify the concept.


Rod Lane said the district has been purchasing businesses and homes to implement access control at other TIs along I-10. Going for a variance at this location may set a precedence that may not be acceptable. He would like some time to discuss this situation internally. Rod wants to make a decision quickly to minimize delays to the project schedule. Rod asked if the City of Tucson is aware of the situation at Craycroft Road. Brad said Tom Fisher is the new liaison for the City. The Craycroft Road stakeholder PowerPoint presentation (only presents the roundabout concepts) and the minutes for the last Stakeholder meeting were sent to him which discusses the situation. Tom said he read the information and wants to be kept in the loop. Tom is not aware of the latest operational analysis for Concept 7 or the concept for purchasing businesses (Concept 1).



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**ACTION ITEM LIST**

- ADOT Southcentral District to confer internally on the concepts.
- FHWA to determine what they will need to approve concept 7 if the waiver is desired.
- Jacobs to set up a meeting with the City of Tucson to go over the concepts and to get their input.
- Jacobs to send out a request for dates and time availability for two weeks from now to set up a meeting.

Signed:   
Brad Olbert, PE, Project Manager

Attachment

**Meeting Notes**



**I-10 / Barraza-Aviation Pkwy (SR 210)**  
Design Concept Report & Environmental Assessment

**ARIZONA DEPARTMENT OF TRANSPORTATION**  
205 S. 17<sup>th</sup> Avenue, Mail Drop 605E  
Phoenix, AZ 85007

**COORDINATION MEETING NOTES**

**I-10, I-19 to Kolb Road & SR 210, Golf Links to I-10**  
Project No. 010 PM 260 H7825 01L

June 11, 2018

**TO: Meeting Attendees**  
Rod Lane, ADOT Southcentral District Engineer  
Doug Moseke, ADOT Southcentral Deputy District Engineer  
Darlene Danehy, Psomas, Project Engineer  
Mike Smejkal, Tucson Airport Authority, Vice President of Planning and Engineering  
Scott Robidoux, Tucson Airport Authority, Airport Planner  
Brad Olbert, Jacobs Project Manager

**FROM:**  
Brad Olbert, Jacobs Project Manager

**SUBJECT:**  
Tucson Airport Authority Coordination Meeting Notes  
I-10, I-19 to Kolb Road & SR 210, Golf Links to I-10  
Project No. 010 PM 260 H7825 01L  
PHASE II (I-10/SR 210) Design Concept Report and Environmental Assessment

**INTRODUCTION**

The coordination meeting was held at 2:00 PM June 11, 2018 at the ADOT Southcentral District conference room. The meeting ended around 3:00 PM.

**SUMMARY**

Mike Smejkal with TAA opened the meeting at 2:00 PM. Self-introductions were made by all attendees. Mike wanted to meet with the I-10 team to go over some planning alternatives the Tucson Airport Authority (TAA) has been reviewing. Long range improvements to the airport include a parallel runway that requires realignment of Alvernon Way. TAA hired Psomas to look into alternatives to realigning Alvernon Way.

Mike presented Alternative 1 which illustrated the current realignment of Alvernon Way along with roadway infrastructure improvements to Country Club Road, Los Reales Road, Aerospace Parkway and the Old Vail Connection Road. Projected traffic volumes were shown as well as the location of the future airport terminal. The construction timeline for many of the roadways may be 25 years or more. Country Club Road would serve as the main roadway entrance to the future airport terminal. Los Reales Road connects to the I-10/Craycroft Road TI and was described as a shortcut for westbound traffic on I-10 travelling to the airport.



**I-10 / Barraza-Aviation Pkwy (SR 210)**  
 Design Concept Report & Environmental Assessment  
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Mike presented Alternative 2 which illustrated no realignment of Alvernon Way to the south of the airport. The parkway connection to I-10 from the south shifted from Alvernon Way to Craycroft Road TI. This alternative appeared to shift approximately 8,000 vehicles per day from the Alvernon Way TI to the Craycroft Road TI. Similar to Alternative 1, roadway infrastructure improvements included Country Club Road, Los Reales Road, Aerospace Parkway and the Old Vail Connection Road. Projected traffic volumes were shown as well as the location of the future airport terminal. The construction timeline for many of the roadways listed above may be 25 years or more. Country Club Road would serve as the main roadway entrance to the future airport terminal. Los Reales Road connects to the I-10/Craycroft Road TI and would serve as a shortcut for westbound traffic on I-10 travelling to the airport.

Brad said the Alternative 1 concept follows the PAG Regional framework Model and should work fine with the current concepts for I-10. The Alternative 2 roadway concept differs from the PAG model. The Craycroft TI capacity and associated ramps would need to be checked if this alternative moves forward. I-10 capacity will also need to be checked but should be fine as there should be ample capacity. Rod Lane asked about the construction timeframe on the segment east of Alvernon Way. Brad said this area is most likely 10 years or more from now.

Note: If TAA's Alternative 2 is desired by the region, we would need to re-visit the PAG model projections and determine what impacts Alternative 2 would have on traffic volumes along I-10. Then the VISSIM traffic model would be modified and run to identify adjustments needed to increase capacity to handle the additional turning movements at the Craycroft Road TI and identify any adjustments needed to I-10, the frontage roads from Craycroft Road to Valencia Road, and the Valencia Road TI ramps.

**ACTION ITEM LIST**

This was an information coordination meeting. However, Jacobs will monitor any future planning adjustments to the PAG regional system.

Signed:   
 Brad Olbert, PE, Project Manager

Attachments

**Meeting Notes**



**I-10 / Barraza-Aviation Pkwy (SR 210)**  
 Design Concept Report & Environmental Assessment

ARIZONA DEPARTMENT OF TRANSPORTATION  
 205 S. 17<sup>th</sup> Avenue, Mail Drop 605E  
 Phoenix, AZ 85007

**COORDINATION MEETING NOTES**

**I-10, I-19 to Kolb Road & SR 210, Golf Links to I-10**  
 Project No. 010 PM 260 H7825 01L

June 18, 2018

**TO: Meeting Attendees**

- Tazeen Dewan, ADOT Project Manager
- Rod Lane, ADOT Southcentral District Engineer\*\*
- Doug Moseke, ADOT Southcentral Deputy District Engineer\*\*
- James Gomes, ADOT Southcentral Regional Traffic Engineer\*\*
- Jerimiah Moerke, ADOT Community Relations\*\*
- Ammon Heier, FHWA Area Engineer
- Joe D'onofrio, Jacobs Environmental Manager\*\*
- Brad Olbert, Jacobs Project Manager

\*\* Attended via teleconference

**FROM:**

Brad Olbert, Jacobs Project Manager

**SUBJECT:**

FHWA I-10/Craycroft Road Coordination Meeting Notes  
 I-10, I-19 to Kolb Road & SR 210, Golf Links to I-10  
 Project No. 010 PM 260 H7825 01L  
 PHASE II (I-10/SR 210) Design Concept Report and Environmental Assessment  
 Craycroft Road TI Access Control

**INTRODUCTION**

The coordination meeting was held at 1:00 PM June 18, 2018 at the ADOT Engineering Building conference room. The meeting ended at 2:30 PM.

**SUMMARY**

Tazeen Dewan, ADOT Project Manager opened the meeting at 1:00 PM. Self-introductions were made by all attendees. Handouts were provided that included an agenda, a memorandum that summarized access control concepts developed for the area to the north of the interchange, and the meeting notes from the 6/5/18 meeting.

Brad Olbert, Jacobs Project Manager, presented an overview of the previous meeting (6/5) on the I-10/Craycroft Road TI area. All previous options had negative impacts on business or the neighborhood except the signal concept at Travel Plaza Way/Craycroft Road which may need a variance. The signal concept would also set an unwanted precedence that the district will need to deal with for all other TI improvements along I-10 and I-19. The concepts involving a roundabout were not desirable from the perspective of the local business



**I-10 / Barraza-Aviation Pkwy (SR 210)**  
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owners and truckers that need to use the intersection. Nearby residents would also be affected due to the increased traffic flow. Purchasing the Pilot Travel Center and possibly the Triple T Truck Stop was a concept that had merit because it would remove truck traffic from the area. A concept was developed for discussion in the case that purchasing the Pilot Travel Center was the preferred concept to move forward for the project.


Constructing a signal at the intersection of Craycroft Road and Travel Plaza Way was discussed. This concept had the least cost of all the concepts and had no impacts on any business or the residential area. FHWA reviewed this alternative in house and found the concept to be an incremental improvement to the TI that is feasible and would probably be acceptable. However Rod Lane with the District said this alternative is not favored because of the precedence that it would set and the long term implications for ADOT.

A concept was reviewed that included purchasing the Pilot Travel Center. Purchasing the Pilot Travel Center and possibly the Triple T Truck Stop was a concept that had merit because it would remove truck traffic from the area. Providing a roundabout for trucks to make a U-turn to come back to I-10 would not be needed. A simpler tee intersection could be developed with a two-way connector road to the westbound frontage road. U-turns for cars would use the left-turn bay. See attached figure. Rod Lane liked the concept but thought we should first determine how well it functions without purchasing Pilot or the Triple T. Develop a dual left-turn at the intersection and widening the two-way connector road to accommodate the dual left-turns. If needed, position the intersection further north to accommodate the left-turn storage. The tee intersection most likely will need to be signalized. The District preferred that the cross drainage pass under Craycroft Road, no dip crossing. Jacobs will update the concept and report back to the group next week.

Ammon Heier asked why not remove the TI at Craycroft Road since there is a relatively small residential area to the north of I-10 and a large regional landfill to the south of I-10 that the TI serves. Rod Lane said the District had similar thoughts. The District met with the Tucson Airport Authority regarding their transportation master plan last week (6/11). Craycroft Road is an alternative connection point to I-10 for the Tucson Airport. Country Club Road will serve as the main connection roadway to the airport in the future. Alvernon Way and Craycroft Road are secondary connection points. Removing the TI at Craycroft Road would reduce the secondary connection points to just Alvernon Way. Brad said Craycroft Road is also a shortcut for I-10 westbound traffic travelling to the airport. Removing the TI at Craycroft would reduce the future transportation planning options available to the airport.

**ACTION ITEM LIST**

- Jacobs will develop a Craycroft Road access control concept that has a signalized tee intersection located approximately 660 feet north of the TI. The intersection will have dual left-turn lanes (northbound to westbound) onto a two-way connector road that connects to the I-10 westbound frontage road. The location for the intersection may shift further north based on left-turn storage requirements. The tee intersection replaces the roundabout concept.
- Jacobs will set up a meeting next week to review the new concept.
- Jacobs to set up a meeting with the City of Tucson when the best concept is found for Craycroft Road.

Signed:   
 Brad Olbert, PE, Project Manager

**Attachment**

101 North 1<sup>st</sup> Avenue, Suite 2600  
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**JACOBS**

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**Meeting Notes**



**I-10 / Barraza-Aviation Pkwy (SR 210)**  
 Design Concept Report & Environmental Assessment

ARIZONA DEPARTMENT OF TRANSPORTATION  
 205 S. 17<sup>th</sup> Avenue, Mail Drop 605E  
 Phoenix, AZ 85007

**COORDINATION MEETING NOTES**

**I-10, I-19 to Kolb Road & SR 210, Golf Links to I-10**  
 Project No. 010 PM 260 H7825 01L

July 3, 2018

**TO: Meeting Attendees**

- Tazeen Dewan, ADOT Project Manager
- Rod Lane, ADOT Southcentral District Engineer\*\*
- Jerimiah Moerke, ADOT Community Relations\*\*
- Ammon Heier, FHWA Area Engineer\*\*
- Joe D'onofrio, Jacobs Environmental Manager\*\*
- Brad Olbert, Jacobs Project Manager

\*\* Attended via teleconference

**FROM:**

Brad Olbert, Jacobs Project Manager

**SUBJECT:**

FHWA I-10/Craycroft Road Coordination Meeting Notes  
 I-10, I-19 to Kolb Road & SR 210, Golf Links to I-10  
 Project No. 010 PM 260 H7825 01L  
 PHASE II (I-10/SR 210) Design Concept Report and Environmental Assessment  
 Craycroft Road TI Access Control

**INTRODUCTION**

The coordination meeting was held at 1:00 PM, Tuesday, July 3, 2018 at the ADOT Engineering Building conference room. The meeting ended at 2:00 PM.

**SUMMARY**

Tazeen Dewan, ADOT Project Manager opened the meeting at 1:00 PM. Self-introductions were made by all attendees. Handouts were provided that included an agenda, a memorandum that summarized access control concepts developed for the area to the north of the interchange, and comments from James Gomes.

Brad Olbert, Jacobs Project Manager, reviewed Concept 8 for the I-10/Craycroft Road TI area. This concept has a signalized tee intersection located north of Travel Plaza Way and south of the Circle K. West of the intersection a two-way roadway forms a loop connection with the I-10 westbound frontage road. The connector road bisects the Triple T parcel and is widened to accommodate dual left-turns from Craycroft Road (northbound to westbound). Craycroft Road will have a raised median from the westbound TI ramp to the new tee intersection. Traffic wanting to enter I-10 westbound from Travel Plaza Way will travel north on Craycroft Road to the two-way connector road. The traffic turns left onto the connector road and makes a right-turn onto

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 Design Concept Report & Environmental Assessment  
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the westbound frontage road to the Valencia Road TI. Passenger cars and small trucks wanting to enter I-10 eastbound could make a U-turn at the tee intersection and enter I-10 at the Craycroft Road TI. Otherwise, large trucks will travel to the Valencia Road TI to enter I-10 eastbound. Jacobs will add a location for a right-in/right-out entrance along Craycroft Road for Triple T.

There is an existing drainage dip crossing located just north of Travel Plaza Way. The 100-year flow rate is approximately 400 cfs. After crossing over Craycroft Road, the runoff sheet flows to an existing drainage channel located to the west and north of the Triple T Truck Stop. For this concept the raised median acts as a barrier to runoff crossing over Craycroft Road. The runoff will need to be conveyed under Craycroft Road to allow improvements to the roadway. The flow will need to be conveyed northerly in a culvert or open channel to the existing drainage channel located near Dream Street. Runoff from residences located along Craycroft Road also flows westward toward and across Craycroft Road and will need to be collected and conveyed under Craycroft Road. A box culvert/open channel concept is shown on the concept drawing. See attached figure. Preliminary estimate of box culvert size is 4' to 5' high x 10' to 12' wide. With a minimal slope on the channel/box culvert alignment, it appears that Craycroft Road will need to be elevated 1 to 2 feet above the existing dip crossing and near the tee intersection where the connector road will need to cross over the box culvert. Elevating Craycroft Road through this section will affect how to connect residential driveways with the roadway and collect and convey the drainage under the roadway. Rod Lane suggested putting in a frontage road along that section of Craycroft Road. Jacobs and J2 (drainage sub) will need to work on the access and drainage moving forward.

Preliminary traffic analysis shows the Level-Of-Service (LOS) of the northbound to westbound left-turn movement to be LOS A at the 2040 AM peak hour and LOS B at the 2040 PM peak hour. Access into and out of residential lots adjacent to Craycroft Road needs to be analyzed to determine how much to shift Craycroft Road to the west to provide better access and to collect runoff. Brad said the City of Tucson has a 20 foot frontage concept that was shown on the Roundabout concepts (see memorandum dated 7/2/2018). The frontage road concept can be incorporated for this concept as well.

Rod Lane was unsure how we should sign the U-turn movement. U-turns could be prohibited. Brad said their traffic numbers indicate relatively low traffic north-south volumes on Craycroft Road. The left-turn / U-turn movement will have the most signal time. We are showing two south bound lanes south of the tee intersection to make the U-turn easy for a passenger vehicle. If a vehicle does not make the U-turn at the signal there is nothing to prevent the vehicle from using the Triple T parcel to maneuver over to Craycroft Road and go southbound. Otherwise it is expected that vehicles will go to the Valencia Road TI to access I-10 eastbound.

The team thought this concept met the long range access control needs for the Craycroft Road TI. The next step will be to set up a meeting with the City of Tucson (Tom Fisher) to present all of the concepts, including the recommended concept (#8 in its current configuration) and receive comments from the City. Brad will send out an email this week requesting availability for the next two weeks.

Brad said that since the roundabout concepts have not been continued there was little reason to have a neighborhood meeting to present the concepts to comment on. Jacobs would like to focus on presenting a modified Concept #8 along with the overall I-10/SR 210 project. Rod Lane suggested we ask for the City's opinion on the concepts and the need for a neighborhood meeting.

**Note:** Sarah Karasz followed up with ADOT's Civil Rights section regarding the potential need for a meeting in the Littletown area. The Civil Rights section felt that since the Littletown area is the only Environmental




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Justice (EJ) area on the project that an overall meeting for I-10/SR 210 should also be presented at a location where the Littletown neighborhood can walk to. The same information should be presented at both meeting locations.

**ACTION ITEM LIST**

- Jacobs to set up a meeting with the City of Tucson.

Signed:   
 Brad Oibert, PE, Project Manager

Attachment

Meeting Notes



I-10 / Barraza-Aviation Pkwy (SR 210)  
Design Concept Report & Environmental Assessment

ARIZONA DEPARTMENT OF TRANSPORTATION  
205 S. 17<sup>th</sup> Avenue, Mail Drop 605E  
Phoenix, AZ 85007

COORDINATION MEETING NOTES

I-10, I-19 to Kolb Road & SR 210, Golf Links to I-10  
Project No. 010 PM 260 H7825 01L

July 20, 2018

TO: Meeting Attendees

Tazeen Dewan, ADOT Project Manager  
Doug Moseke, ADOT Southcentral Deputy District Engineer  
James Gomes, ADOT Southcentral Regional Traffic Engineer  
Jerimiah Moerke, ADOT Community Relations  
Sarah Karasz, ADOT Environmental Planning  
Michael Marietti, City of Tucson Department of Transportation  
Ammon Heier, FHWA Area Engineer\*\*\*  
Brad Olbert, Jacobs Project Manager

\*\*\* Attended via teleconference

FROM:

Brad Olbert, Jacobs Project Manager

SUBJECT:

FHWA I-10/Craycroft Road Coordination Meeting Notes  
I-10, I-19 to Kolb Road & SR 210, Golf Links to I-10  
Project No. 010 PM 260 H7825 01L  
PHASE II (I-10/SR 210) Design Concept Report and Environmental Assessment  
Craycroft Road TI Access Control

INTRODUCTION

The coordination meeting was held at 10:00 AM, Friday, July 20, 2018 at the ADOT Southcentral District Conference Room. The meeting ended at 12:00 PM.

SUMMARY

Tazeen Dewan, ADOT Project Manager opened the meeting at 10:00 AM. Self-introductions were made by all attendees. Handouts were provided that included the agenda, a memorandum that summarized access control concepts developed for the area to the north of the interchange, and the Summary of the Craycroft Road Stakeholder Meetings.

Brad Olbert, Jacobs Project Manager, reviewed the concepts looked at by Jacobs. The concepts were summarized in the memorandum distributed to the attendees. For various reasons discussed in the memorandum, concepts 1 through 6 have been discontinued. Concepts 7 and 8 were the two had the least

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impact on the community. Concept 7 had the least cost but would set an undesirable precedence that the ADOT District did not want to consider.

Brad then reviewed Concept 8 for the I-10/Craycroft Road TI area (see attachment). This concept has a signalized tee intersection located north of Travel Plaza Way and south of the Circle K. West of the intersection a two-way roadway forms a loop connection with the I-10 westbound frontage road. The connector road bisects the Triple T parcel and is widened to accommodate dual left-turns from Craycroft Road (northbound to westbound). Craycroft Road will have a raised median from the westbound TI ramp to the new tee intersection. Traffic wanting to enter I-10 westbound from Travel Plaza Way will travel north on Craycroft Road to the two-way connector road. The traffic turns left onto the connector road and makes a right-turn onto the westbound frontage road to the Valencia Road TI. Passenger cars and small trucks wanting to enter I-10 eastbound could make a U-turn at the tee intersection and enter I-10 at the Craycroft Road TI. Otherwise, large trucks will travel to the Valencia Road TI to enter I-10 eastbound. Jacobs added a location for a right-in/right-out entrance along Craycroft Road for Triple T. When the project goes to design the design team can work with the Triple T Stop family to decide where best to provide access points along Craycroft Road and the I-10 westbound frontage road.

There is an existing drainage dip crossing located just north of Travel Plaza Way. The 100-year flow rate is approximately 400 cfs. After crossing over Craycroft Road, the runoff sheet flows to an existing drainage channel located to the west and north of the Triple T Truck Stop. For this concept the raised median acts as a barrier to runoff crossing over Craycroft Road. The runoff will need to be conveyed under Craycroft Road to allow improvements to the roadway. The flow will need to be conveyed northerly in a culvert or open channel to the existing drainage channel located near Dream Street. Runoff from residences located along Craycroft Road also flows westward toward and across Craycroft Road and will need to be collected and conveyed under Craycroft Road. A box culvert/open channel concept is shown on the concept drawing. See attached figure. Preliminary estimate of box culvert size is 4' to 5' high x 10' to 12' wide. With a minimal slope on the channel/box culvert alignment, it appears that Craycroft Road will need to be elevated 1 to 2 feet above the existing dip crossing and near the tee intersection where the connector road will need to cross over the box culvert. Elevating Craycroft Road through this section will affect how to connect residential driveways with the roadway and collect and convey the drainage under the roadway. Jacobs and J2 (drainage sub) will need to work on the access and drainage moving forward.

Preliminary traffic analysis shows the Level-Of-Service (LOS) of the northbound to westbound left-turn movement to be LOS A at the 2040 AM peak hour and LOS B at the 2040 PM peak hour. Access into and out of residential lots adjacent to Craycroft Road needs to be analyzed to determine how much to shift Craycroft Road to the west to provide better access and to collect runoff. Brad said the City of Tucson has a 20 foot wide frontage road concept that was shown on the Roundabout concepts (see memorandum dated 7/2/2018). The frontage road concept can be incorporated for this concept as well. Michael Marietti thought that adding the frontage road concept would work fine. Sarah Karasz mentioned the raising of Craycroft Road profile more than 6 inches in front of the historic homes triggers a visual analysis requirement for the Historic Building Survey and Report. Brad said there are 7 buildings along Craycroft Road that are 50 years or more old between I-10 and Dream Street. This includes the Triple T property.

James Gomes (ADOT) discussed Concept 6 briefly. Concept 6 would eliminate the ramps at Craycroft Road. Traffic would use the Wilmot Road TI or the Valencia Road TI for access to Craycroft Road. This would allow frontage road access to Pilot and Freightliner. This concept was discontinued because the Tucson Airport Authority planning has the Craycroft Road TI as one of the two connection points for rerouting Swan Blvd

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north to I-10 (see attachment). TAA said the Craycroft Road TI is used as a shortcut for westbound I-10 traffic to get to the airport and as a shorter route to go to Raytheon. Also, the Pilot Travel Center representative wanted the direct access from I-10 to their business. Travelers make decisions to get off I-10 when they see the Pilot Center. Pilot will lose business if the access moves to Wilmot Road. Both James and Michael would like to see a preliminary traffic analysis with the Swan Road connection at Craycroft Road TI. Brad said I-10 has ample capacity as roughly 8,000 vpd shift from the Alvernon Way route to Craycroft Road. Most likely an additional left-turn lane will be needed for the northbound to westbound turning movement. Brad will include time for a synchro analysis of the TI to be done in the next contract modification.

Brad discussed timing for the Craycroft Road TI work. The overall I-10 / SR 210 project is approximately one billion dollars. The work will be stretched out over 20 years. Jacobs prepared a draft implementation plan, dated 2/17/18, that was distributed to the project stakeholder last February. The overall project was broken down into 18 separate projects and prioritized. The Craycroft Road TI plus widening of a mile of I-10 was identified as project 11 (see attachment). The first six projects will focus on widening I-10 from I-19 to Valencia Road and then shift to building SR 210. When the DCR/EA is approved by FHWA sometime next year this project will be at least 10 years out before design starts and construction is programmed. So there may be issues that arise between now and then that could adjust the concept such as a major employment center being built nearby. The concepts proposed are based on the best information we have now.

Michael felt the team had looked at every aspect of the issue. He felt Concept 8 was good enough to present to the public with the I-10 / SR 210 alternatives. Michael said the public needs to see and comment on the proposed concept.

**ACTION ITEM LIST**

Michael Marietti will review the meeting material and discussions with the COT staff.  
Brad will send the project contact list to Michael.  
Brad will submit the contract modification adding HDR as Jacobs subconsultant next week.

Signed:   
Brad Olbert, PE, Project Manager

Attachments

**Meeting Notes**



**I-10 / Barraza-Aviation Pkwy (SR 210)**  
Design Concept Report & Environmental Assessment

ARIZONA DEPARTMENT OF TRANSPORTATION  
205 S. 17<sup>th</sup> Avenue, Mail Drop 605E  
Phoenix, AZ 85007

**PROGRESS MEETING NOTES**

**I-10, I-19 to Kolb Road & SR 210, Golf Links to I-10**  
Project No. 010 PM 260 H7825 01L

**September 12, 2018**

- TO: **Meeting Attendees**
- Tazeen Dewan, ADOT Major Projects Group, Project Manager
  - Carlos Lopez, ADOT Major Projects Group, Manager
  - Rod Lane, ADOT Southcentral District, District Engineer
  - Doug Moseke, ADOT Southcentral District, Asst. District Engineer
  - Shajed Haque, ADOT Drainage\*\*
  - Sayed Hani, ADOT Railroad and Utility Section\*\*
  - Sarah Karasz, ADOT Environmental Planning Group
  - Tammy Mivshek, ADOT Traffic Design\*\*
  - Jeremiah Moerke, ADOT Community Relations
  - Jim Walcutt, ADOT R/W Review Appraiser
  - Merrisa Marin, ADOT R/W Project Management\*\*
  - Emily Dawson, ADOT Southcentral District
  - James Gomes, ADOT Southcentral District Regional Traffic Engineer
  - Priscilla Thompson, ADOT Southcentral District Utility Engineering Coordinator
  - John Hucko, ADOT Roadside Development Section, Senior Landscape Architect\*\*
  - Alex Kuchansky, ASLD Engineer\*\*
  - Chris Anderson, Tucson Fire Department, Deputy Chief
  - Michael Marietti, City of Tucson, Department of Transportation, Project Manager
  - Jamison Brown, Pima Association of Governments, Transportation Planning Manager\*\*
  - Rick Ellis, Pima Association of Governments, Director of Transportation Services
  - Steve Wilson, Pima County Project Manager\*\*
  - Jeff Lane, Arizona Department of Public Safety
  - Scott Robidoux, Tucson Airport Authority Planner
  - Maria Altemus, EcoPlan Environmental Planner
  - Mike Dawson, EcoPlan Senior Environmental Planner
  - Judah Cain, Jacobs Roadway\*\*
  - Joe D'Onofrio, Jacobs Environmental\*\*
  - Brad Olbert, Jacobs Project Manager
  - Haley Estelle, HDR Public Involvement\*\*

\*\* Attended via teleconference





**I-10 / Barraza-Aviation Pkwy (SR 210)**  
Design Concept Report & Environmental Assessment  
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**FROM:**

Brad Olbert, Jacobs Project Manager

**SUBJECT:**

PROGRESS MEETING NOTES  
I-10, I-19 to Kolb Road & SR 210, Golf Links to I-10  
Project No. 010 PM 260 H7825 01L  
PHASE II (I-10/SR 210) Design Concept Report and Environmental Assessment

**INTRODUCTION**

The Progress Meeting for this project was held at 1:00 PM September 12, 2018 at the ADOT Southcentral District Conference Room. Teleconferencing and WebEx were available for offsite attendees. The meeting adjourned at 2:30 PM.

The meeting was well represented by agencies interested in improving the I-10 corridor from Junction I-19 to Kolb Road and providing a connection for SR 210 to I-10. Representatives included ADOT, Arizona State Land Department (ASLD), Arizona Department of Public Safety (AZDPS), City of Tucson, Tucson Airport Authority, Tucson Fire Department, Pima County, and Pima Association of Governments (PAG).

**SUMMARY**

Tazeen Dewan, ADOT Project Manager, opened the meeting at 1:00 PM. Self-introductions were provided by all other attendees. Brad Olbert, Jacobs Project Manager, did a short safety moment related to tire safety.

Brad shared that much has been done on the project since the last progress meeting. A number of meetings related to access control for the I-10/Craycroft Road TI were held. The meeting notes and figures for each of the meetings can be reviewed on line at Jacobs' project website. Information to access the website can be found on the agenda for this meeting. A brief summary of the meetings was provided by Brad.

- The Jacobs team, FHWA and the District met with Craycroft Road stakeholders (Pilot, Triple T, Freightliner, Arizona Trucking Association, Sunnyside Unified School District and Pima County Parks and Recreation) to get feedback from them regarding access control concepts along Craycroft Road. A summary of the meetings was provided as a handout.
- The Jacobs team and the District met with the Tucson Airport Authority regarding long range planning alternatives for routing traffic around the airport. One of the alternatives showed Swan Road south of the Tucson Airport being routed north connecting to I-10 at the Craycroft Road TI.
- The Jacobs team, FHWA and the District met several times to discuss additional Craycroft Road TI concepts.
- The Jacobs team, FHWA and the District, met with the City of Tucson to review all of the concepts and the recommended concept for Craycroft Road. The City of Tucson followed up with input from Sun Tran. Sun Tran requested the existing bus stop be relocated to a new location near the Circle K.

Brad provided a status of the project to date:

- Jacobs prepared a memorandum that summarized the concepts developed for the I-10/Craycroft Road TI. Each concept was evaluated and a concept was selected to illustrate the system alternatives that will



**I-10 / Barraza-Aviation Pkwy (SR 210)**  
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be presented to the public on the two system alternatives. The memorandum was provided as a handout along with a figure illustrating the concept that will be presented at the public meetings.

- The writing for the draft Initial DCR is ongoing. Several sections have been written.
- The preliminary bridge analysis was completed.
- The environmental work is progressing on the two build alternatives and the no build alternative.
- A change order to add HDR to the team as our Public Involvement consultant was just approved by ADOT. We'll be moving forward to set a date for the next Public Meetings.

Brad Olbert discussed the I-10/Craycroft Road TI access control memorandum. The concepts focused on the area to the north of the interchange to deal with the large truck volumes and the need to add a raised median per Roadway Design Guideline Section 506 - Access Control. The intersection of Travel Plaza Way and Craycroft Road is located approximately 200 feet north of the I-10 westbound Frontage Road. The raised median would block the eastbound to southbound left-turn movement from Travel Plaza Way onto Craycroft Road. While the left-turn movement is operating at a Level-of-Service (LOS) A, our preliminary analysis showed for the design year 2040 this movement with existing conditions will drop to LOS F.

Eight access control concepts were developed for the Craycroft Road TI. Realignment of Travel Plaza Way to meet access control criteria cannot be done because the realignment would impact several potential historic structures (over 50 years old) and low income housing. There are two schools and a regional park located ½ mile north of Travel Plaza Way. It was clear from our meetings with stakeholders along Craycroft Road that trucks needed to stay to the south of the schools and park. Concepts involving a roundabout were not desirable primarily because truck drivers have a difficult time negotiating roundabouts. A one-way connector road around the Freightliner facility was considered and discarded because it would most likely be a total take of the Freightliner facility due to a loss of employee parking and the impacts to the residential neighborhood to the east. Providing a signal at Travel Plaza Way would work well in the short term but not as a long term solution. Providing a signalized tee intersection located 660 feet to the north of the TI with a two-way connector road to the west that connects to the westbound frontage road met the access control criteria but with impacts to the Triple T Truck Stop. A short frontage road on the east side of Craycroft Road will be needed to provide access to residential parcels to the east and storm runoff will need to be intercepted and conveyed to an existing channel to the north. This concept was agreed to moving forward. See the attached concept figure.

Michael Marietti with the City of Tucson asked if truck volumes were considered in the signal analysis with the two-way connector road. Brad said Jacobs prepared a preliminary analysis of the intersection using Synchro software, a conservative truck volume of 20% was used in the analysis. Detailed information from a vehicle classification analysis will be used in the VISSIM analysis.

Chris Anderson with the Tucson Fire Department asked if large fire department ladder trucks can enter the proposed frontage road adjacent to Craycroft Road. Jacobs did not check the design for turning movements by fire trucks. Jacobs will run turning templates to make sure the curbing placement will allow ladder trucks to enter and exit the frontage road.

Jacobs still needs to develop the vertical profile for Craycroft Road. A drainage analysis will provide us with information on how the runoff can be conveyed under Craycroft Road and conveyed to the existing drainage channel to the north. Rick Ellis asked if the existing dip crossing would be eliminated. The existing dip crossing on Craycroft Road needs to be eliminated because the proposed raised median used for access control will block the storm flows over the roadway. The roadway profile will be elevated to get over the drainage culvert



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needed to intercept the runoff. Mike Dawson said environmental studies will look into visual, noise and air impacts caused by the Craycroft Road improvements.

Brad mentioned that future traffic volume changes to the Craycroft Road TI will come primarily from the south of I-10 and not from the area to the north. Craycroft Road to the north of the TI is isolated by the Julian Wash and the Union Pacific Railroad tracks. There is a possible reroute of Swan Road from the south that may connect with Craycroft Road in the distant future. Also the Craycroft Road TI is used as a shortcut by commuters who live to the east and work at Raytheon. If more industry is built near Raytheon the TI may experience more traffic. But again this would be for development opportunities to the south of I-10 and not to the north.

Jim Walcutt asked a question about the vacant parcel located to the north of the Pilot Travel Center if that would have an impact on the traffic volumes. Brad said it was his understanding that the vacant parcel is owned by Pilot and they were planning to develop an RV repair facility. If the repair facility is built, the impact on traffic volumes would be minor. There was a follow-up question regarding a larger vacant parcel that is located north of the Julian Wash. What impact would that have on Craycroft Road traffic volumes? The vacant land is actually two parcels. The western parcel is located adjacent to the regional park and is owned by Pima County. The eastern parcel is owned by a developer. Future traffic volumes associated with the eastern parcel will most likely utilize Wilmot Road to gain access to I-10. The developer could construct a crossing of the Julian Wash to gain access to Littletown Road. In that case a portion of the traffic will probably travel on Littletown Road to Valencia and then access I-10 at the Valencia Road TI. Some traffic will utilize Craycroft Road if there are employment opportunities to the south.

Mike Dawson asked questions about the volume of trucks that would utilize the two-way connector road during peak hours and the number of trucks that would utilize the segment of Craycroft Road near the new signal during the evening off peak hours. Mike stated that the added truck traffic late at night would be potential air, noise and visual questions asked by the 8 or 9 residences located adjacent to Craycroft Road near the new intersection. Brad said normally traffic counts are taken just during the peak hours for design purposes. Brad will check with Jacobs' traffic engineers to see if tube counters were used to record traffic counts outside the peak hour period. Jacobs will be looking into the air and noise levels for the environmental documentation.

Rick Ellis asked about the implementation of the I-10 project. How would that be done? Jacobs developed an implementation plan that was reviewed with the agency stakeholders at the progress meeting dated February 21, 2018. Brad briefly described the rationale behind the sequence of construction projects. At the progress meeting we also discussed detour routes for each project. The meeting notes and all of the figures handed out at the meeting are available on the project website listed on the meeting agenda.

James Gomes asked if the Valencia Road TI was sized adequately to handle the traffic coming from the Craycroft Road TI on the westbound frontage road. Brad said the Valencia Road TI was enlarged over its current configuration to add additional turning lanes to handle the projected vehicle turning movements. The traffic volumes included the traffic from the I-10 westbound frontage road. Jacobs' traffic engineers used a VISSIM model which allowed us to look at the traffic congestion effects on the design for both system alternatives. The Valencia Road TI functions well with the added traffic volumes from the Craycroft Road TI.

Looking ahead, three major items that are coming up include:

- Public information meetings where the two system alternatives will be presented. The public information meetings will be scheduled at two locations and on different days. The meetings will be



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held at the end of October or early November. One meeting location will be at a school near the Littletown neighborhood the other will be near the west end of the project. The meetings will have roll plots on tables showing the two system alternatives. A short power point presentation will be given to provide background information on the project and allow attendees to ask a few questions. Handouts will be provided plus several means to provide comments back to the study team. Mike Dawson said it would be good to identify several items that were addressed from the previous scoping meeting to show that we listened to the public's concerns. The outreach will involve sending notices to parcels along the corridor, sending letters to property owners that will have property takes, newspaper advertisements, notices posted at key locations, radio etc. Haley Estelle with HDR will be organizing the outreach effort.

- Second, the environmental effort is moving forward now that the project footprint has been identified. Several environmental reports (Air, Noise, Biological, Section 404, Cultural, Historic Structures, hazmat report, etc.) and the draft environmental assessment will be completed by the end of December 2018.
- Third, a draft Initial DCR and EA will be submitted to ADOT in January 2019 for their review. After ADOT reviews the documents, the documents will be modified and distributed for comments by agency stakeholders.

**ACTION ITEM LIST**

- The Jacobs team will update the VISSIM traffic model incorporating the latest Craycroft Road TI roadway changes, traffic volumes and vehicle classification information. Future traffic volumes for the Craycroft Road concept will be needed for the air and noise analysis and to answer questions from the public.
- The Jacobs team will review the proposed frontage road along Craycroft Road and run turning templates for trucks and fire equipment to ensure the larger vehicles can enter and exit the frontage road.
- The Jacobs team will continue with the preliminary design effort on Craycroft Road. The drainage concept and vertical profile need to be refined for the DCR and for the environmental analysis.
- The Jacobs team will work with ADOT to set a date for the next public meetings and develop the outreach documents.
- Sarah Karasz will check in with Davis Monthan AFB about getting a response back on a letter sent to DM asking if they wanted to be a cooperating agency.
- Stakeholders are encouraged to review and comment on the meeting minutes to ensure accuracy.

Signed:   
Brad Olbert, PE, Project Manager

Attachments

Meeting Notes



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Design Concept Report & Environmental Assessment

ARIZONA DEPARTMENT OF TRANSPORTATION  
205 S. 17<sup>th</sup> Avenue, Mail Drop 605E  
Phoenix, AZ 85007

MEETING NOTES

I-10, I-19 to Kolb Road & SR 210, Golf Links to I-10  
Project No. 010 PM 260 H7825 01L

December 12, 2018

TO: Meeting Attendees

- Tazeen Dewan, ADOT Major Projects Group, Project Manager\*\*
- Carlos Lopez, ADOT Major Projects Group, Manager\*\*
- Rod Lane, ADOT Southcentral District, District Engineer
- Doug Moseke, ADOT Southcentral District, Asst. District Engineer
- Jerimiah Moerke, ADOT Community Relations
- John Moffatt, Pima County Director, Office of Economic Development
- Carmine DeBonis, Pima County Deputy County Administrator – Public Works
- Yves Khawam, Pima County Chief Deputy Transportation Director
- Ana Olivares, Pima County Director of Transportation
- Jim Cunningham, Pima County Deputy Director of Transportation
- Kathryn Skinner, Pima County Capital Project Design Manager
- Jonathan Crowe, Pima County Project Planner & Manager
- Brad Olbert, Jacobs Project Manager

\*\* Attended via teleconference

FROM:

Brad Olbert, Jacobs Project Manager

SUBJECT:

COORDINATION MEETING NOTES  
I-10, I-19 to Kolb Road & SR 210, Golf Links to I-10  
Project No. 010 PM 260 H7825 01L  
PHASE II (I-10/SR 210) Design Concept Report and Environmental Assessment

INTRODUCTION

The project meeting started at 11:00 AM December 12, 2018 at the Pima County Public Works Conference Room. Teleconferencing was available for offsite attendees. The meeting adjourned at 1:30 PM.

The meeting was held to answer county questions regarding the two system alternatives for the I-10/SR 210 project.



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SUMMARY

Jonathan Crowe, PCDOT, opened the meeting at 11:00 AM. Self-introductions were provided by all other attendees. Jonathan presented a short safety moment related to building exits.

Several Pima County administrative and transportation staff members attended the I-10/SR 210 public information meetings. Pima County requested a meeting to receive feedback related to new developments coming to the Tucson area (Kino Sports complex and the Amazon development at the Port of Tucson) and to have some discussion on construction implementation and the Sonoran Corridor.

The expansion to the Kino Sports Park was reviewed. The County was concerned about access to their new facility. Grading is currently underway for multiple soccer fields and a stadium to attract professional tournaments. The facility is being designed at the highest level to include a hotel, waterpark and multiple retail/restaurant establishments. Mr. Olbert provided copies on the Kino Boulevard TI access control concept that illustrated signalized access to the main entrance to the facility. The access is acceptable based on the current ADOT Roadway Design Guidelines (RDG). The county would like additional access to the hotel facility that is located nearer to the Kino Parkway TI. Rod Lane with ADOT said that additional right-in/right-out access to the hotel should not be an issue with the current guidelines. ADOT and Jacobs met with Pima County Administration on the sports park a couple of times to ensure coordination. Mr. Olbert provided a copy of the access control RDG guidelines to the County.

The County asked about the timing of interchange projects. Rod Lane said first the DCR and EA need to be approved by FHWA which should occur late next summer. Unfortunately this will come after the next 5-year construction program is finalized. Because the I-10/SR 210 project will cost over a billion dollars it will be broken down into smaller projects for construction. Rod said he has place holders for the design of two of the traffic interchanges, Kino Blvd and Country Club. One of the items that Jacobs will include in the Initial DCR is a recommended implementation plan for the I-10/SR 210 project. This plan needs to be reviewed by PAG to decide on the order of the projects to be constructed. Mr. Olbert produced a map that illustrated the proposed sequence and said the draft of the implementation plan is available on Jacob's team website for review.

Mr. DeBonis asked if the I-10 traffic model used for the project included the Sonoran Corridor (SR 410). Mr. Olbert replied yes. The modeling in the RTA regional traffic model used for the project included a parkway that closely aligned with the current alignments proposed for SR 410. It was not labeled the Sonoran Corridor but it was very similar. The difference being the parkway alignment has a slightly lower operating speed than the interstate standards that SR 410 is planned to operate at. The parkway facility shown in our traffic model would move slightly fewer vehicles than an interstate facility. It was Jacobs understanding that SR 410 will initially be phased in, first as a two-lane facility when the I-10/SR 210 project is being completed and then later as an interstate facility as traffic increases. Carlos Lopez confirmed that the SR 410 traffic model has the completed I-10/SR 210 project as being part of the no-build network when analyzing the projected traffic flows for SR 410.

Mr. Moffatt said Amazon is constructing a major distribution center at the Port of Tucson. Amazon will hire 1,500 employees and the site structure will have 60+ loading docks for tractor-trailers. Hundreds of trucks and employees will be using I-10 Kolb Road TI. Will the proposed traffic interchange at Kolb Road be able to handle the traffic load? Mr. Olbert responded that the proposed future Kolb Road TI is a diverging diamond and will be able to handle the load. This type of interchange simplifies the turning movements so that most of the turning movements are free flowing and not restricted by signal phasing. The two traffic signals have only



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two phases which maximizes the time for the through movements. There should be few backups with the signals if timing with the two signals is fully actuated. Jacobs took the county's earlier comments and adjusted the turn lane configurations to accommodate heavy truck movement. In the future, when the road segment is in final design the TIs should be reviewed by the design consultant to determine if adjustments are needed. Because the whole project will need to be constructed in smaller segments it could take ten or more years before some sections are constructed. Since more developments like Amazon will happen, it will be important for final design consultants to validate our proposed TI concepts. Jacobs will review our traffic model parameters and review the current PAG traffic model to see if adjustments for the Amazon development were included. Jacobs will review our current design and verify the TI capacity to handle the traffic.

Mr. Olbert said there are two basic traffic capacity needs related to the I-10/SR 210 concepts. First, is there enough capacity on the mainline to handle the future traffic volumes and second, is there enough capacity at the TIs to get on and off the freeways. When Jacobs originally analyzed the I-10/SR 210 alternatives it was for a 2040 design year metro Tucson population of 2.0 million persons. After the economic downturn Jacobs reanalyzed the I-10/SR 210 alternatives for a 2040 design year metro Tucson population of 1.4 million persons. The concepts were then revised to fit the lower population figure. For the mainline we reduced the number of through lanes by one in each direction from Kino Parkway to Kolb Road. However, we retained the footprint identified for the 2.0 million person design. The additional through lane was stripped out and an inexpensive AC cap was placed instead of placing the PCCP pavement. Mr. Olbert handed out copies of two typical sections for I-10 to illustrate the point. This will allow the mainline capacity to be expanded in the future inexpensively when it is needed. The TIs are similar, with the number of ramp lanes adjusted down to reflect the lower population number. The operational levels of service for I-10, SR 210 and the interchanges are very good and the future levels of service will continue to be very good with minor construction adjustments. Figures illustrating the 2040 levels-of-service for the No Build Alternative, System Alternative I and System Alternative IV are attached.

Mr. Olbert also handed out an updated response to the Pima County March 20<sup>th</sup>, 2017 letter incorporating updated traffic information and location information on the two connector ramps for Alternative IV, see attachment.

**ACTION ITEM LIST**

Jacobs will review our traffic model parameters and review the current PAG traffic model to see if adjustments for the Amazon development were included. Jacobs will review our current design and verify the TI capacity to handle the traffic.

Signed:   
 Brad Olbert, PE, Project Manager

Attachments



**Meeting Minutes**

**Date:** 2/6/19  
**Meeting Location:** Conference Call  
**Meeting Date:** 2/4/19  
**Start Time:** 01:00 p.m. **End Time:** 02:00 p.m.  
**Meeting Topic:** I-10/SR210 Project - DMAFB as a Cooperating Agency  
**Participants:** Tremaine Wilson, FHWA  
 Ammon Heier, FHWA  
 Tazeen Dewan, ADOT  
 Christopher Brewster, Chief Environmental Officer, DMAFB  
 Brad Olbert, Jacobs  
 Maria Altemus, EcoPlan  
 Michael Dawson, EcoPlan  
**From:** Michael Dawson  
**Copy:** Participants  
**Federal Number:** 010-E(210)S  
**ADOT Number:** 010 PM 260 H7825 01L  
**EcoPlan Number:** 09-301004  
**Project Name:** Interstate 10, Junction Interstate 19 to Kolb Road and State Route 210, Golf Links Road to Interstate 10

- Discussion Items:**
- Introductions
  - Tremaine introduced himself and explained that Brad would present the most recent slideshow presentation that was presented at the last public meeting on November 28 and 29, 2018 to get everyone up to speed on the project
  - Brad and Michael reviewed the project history, purpose and need, previous study (Phase I) and current Phase II activities.
  - Brad and Michael explained the differences between past alternatives and the SR210 connections with I-10 and how several alignments were dismissed and are no longer options. These options included tying in SR210 further east along I-10. However there were issues with the Air National Guard, Border Patrol, DMAFB, public parks, and schools that

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- precluded connections east of Alvernon Way.
- Michael explained that a scoping letter had previously been sent to the base commander and an invitation to be cooperating agency letter had been sent to the 6<sup>th</sup> Air Force Commander previously.
  - Previous coordination with the base had been with Michael Toriello and Kasey Carter with the 355th Civil Engineering Squadron and included discussions on the south gate at Wilmot road, which in the future would accept all commercial deliveries/inspections.
  - Brad explained the differences between the System Alternative I and System Alternative IV
  - Chris explained that he and his team will determine what level of signatory authority DMAFB would like to have in the future on the project
  - Chris would like to be sure that the design plans don't impact any biological or cultural issues on the base.
  - Chris also wants to ensure that design plans don't add to bird air strike issues. He asked about water detention/retention basins along the SR210 alignment which abuts the DMAFB and is near a runway. Retention/detention basins can create an environment which attracts birds and may increase bird air strikes
  - Brad explained that there are retention basins planned for that area, but they can be modified so there is no ponding or collection of water for more than one day
  - Chris mentioned the new bike park is proposed for the northern side of Golf Links and which may impact the project. Chris mentioned that it would be a good idea to coordinate with the City of Tucson to determine what will be installed to ensure it doesn't conflict with current design plans for SR210. Work by volunteer groups is already underway for the bike park. Chris followed up by sending the conceptual plan sheet for "Wood Bike Park Project"
  - Chris said that he would like to look at the roadway design plans and the main documents, but doesn't need all the data and appendices that go with it.
  - Mike said that the current schedule has the draft EA being completed this month (February) for ADOT/FHWA review and will be ready for public review in March or April.
  - Mike asked if future DMAFB correspondence regarding the project should be sent to Toriello and Carter or just Chris. Chris responded that

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- correspondence can be addressed to him only.
- Action Items:**
- Brad to review retention/detention basins around the DMAFB and include bleed off pipes and drywells to eliminate ponding that could attract birds
  - Brad to forward proposed roadway and drainage plan sheets for SR 210 (along Alvernon Way alignment) to Chris
  - Design team to contact City of Tucson regarding development of new bike park



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