Interstate 10 – Hassayampa Valley Roadway Framework Study

Working Paper No. 1

Project Management Plan (including Stakeholder Outreach/Consent Plan)

June 2006

Prepared for



Prepared by



TABLE OF CONTENTS

1	INTRODUCTION AND BACKGROUND	3
2	SCOPE OF WORK	4
3	PROJECT ADMINISTRATION	11
	PROJECT ORGANIZATION	11
	PROJECT CONTROLS	13
	PROJECT CHARGE NUMBERS	14
	DOCUMENT AND DATA CONTROL	14
4	DESIGN AND PLANNING	15
5	CONSTRUCTION MANAGEMENT, CONSTRUCTION ENGINEERING	
6	QUALITY ASSURANCE AND CONTROL	15
7	COMPUTER AIDED DRAFTING AND DESIGN	15
8	STAKEHOLDER OUTREACH/CONSENT PLAN	
9	HEALTH AND SAFETY	22

ATTACHMENTS

- A. Hours Estimate
- B. Summary of QA/QC Plan for Wilson & Company
- C. Project Schedule
- D. File Index

Interstate 10-Hassayampa Valley Roadway Framework Study

PROJECT WORK PLAN

1 INTRODUCTION AND BACKGROUND

Project Title: MAG Contract No.: 309

Project Description: Interstate 10-Hassayampa Valley

Roadway Framework Study

Project No.: 60011885

Client: Maricopa Association of Governments (MAG)

Project Manager: Robert Hazlett, PE

302 1st Avenue, Suite 300

Phoenix, AZ 85003 Phone: (602) 254-6300 Fax: (602) 254-6490

Email: rhazlett@mag.maricopa.gov

Project Location: Far West Valley (greater Phoenix metropolitan area)—mostly in

Buckeye, Surprise and unincorporated Maricopa County

Project Limits: The study covers a large area bounded generally by SR-74 or its

projection on the north, the Gila River on the south, SR-303L (Estrella Freeway) or its projection on the east, and the 459th

Avenue section line on the west.

Project Goal: The goal of this project is to plan the development of a roadway

network in the study area, to determine and prioritize operational and safety improvements to preserve Interstate 10 (I-10), and to form a framework for regional connections and roadways within the

project study area.

Project Objectives: 1. Develop a network of north/south and east/west roadways,

varying in functional classification, that will provide access

throughout the study area and preserve I-10.

2. Optimize the network to provide regional accessibility by channeling traffic to and from I-10 at the fewest possible service

traffic interchange (TI) locations.

3. Formulate a prioritization framework for constructing the roadway

framework, regional connections, and future Tls along I-10.

4. Examine opportunities to incorporate alternative transportation modes into the development of the Roadway Framework Study.

Project Work Plan Interstate 10-Hassayampa Valley Roadway Framework Study

- 5. Create a financing framework for the roadway framework proposal to facilitate development of the project's recommendations concurrently with build-out of the study area.
- 6. Recommend an access management system for each functional classification, and opportunities to establish access management plans along specific roadway framework proposals.

Project Funding:

MAG's funding partners in this project are the Arizona Department of Transportation (ADOT), Maricopa County Department of Transportation (MCDOT), Town of Buckeye, City of Goodyear and City of Surprise. MAG is using funds received from the Federal Highway Administration (FHWA).

2 SCOPE OF WORK

The detailed Scope of Work for this project is located in the project files. The purpose of this project is to develop a long-range roadway framework and transportation plan for the study area, which is expected to experience tremendous population growth and economic development over the next 25 years. This section summarizes the detailed scope of work, which is appended to the consultant agreement with MAG and can be found in the DMJM Harris project files.

Task 1: Project Initiation

Purpose: To provide a solid foundation for a collaborative relationship between MAG, its agency partners, and the consultant team; and for timely completion of all tasks on an aggressive schedule.

- 1.1 Conduct an initial scoping meeting with the Study Review Team (SRT), as well as two development forums with major landowners, developers and other stakeholders in the study area. The two forums, to be held approximately four weeks apart, will be designed to elicit a wide range of viewpoints regarding issues, concerns and needs for the study area, as well as information on planned and proposed development projects.
- 1.2 Submit a detailed project work plan and a stakeholder outreach/consent plan for MAG review and approval.
- 1.3 Develop procedures for coordination between consultant and MAG staff on travel demand modeling and forecasting.
- 1.4 Ascertain the available resources for data on existing and future conditions in the study area.

Products: Draft Working Paper #1, Project Work Plan/Management Plan, plus Stakeholder Outreach/Consent Plan

Task 2— Land Use and Development Data

Purpose: To develop in formation on future land development patterns necessary for successful completion of traffic forecasting and other tasks.

2.1 Review previous transportation and land use studies. Summarize any findings pertinent to the present study.

- 2.2 Using readily available documentary and Internet sources, conduct a generalized environmental and land use/drainage inventory to lay the groundwork for the environmental overview (Task 7.2 below).
- 2.3 Conduct interviews with planning and development staff from Buckeye, Glendale, Goodyear, Surprise, and Maricopa County to obtain detailed information on approved developments within the study area, development proposals currently in the pipeline, and anticipated proposals.
- 2.4 Conduct the first round of community interviews with key agency staff (besides planning and development staff) and other stakeholders.
- 2.5 Obtain further information directly from cooperating landowners and developers identified during the agency and community interviews.
- 2.6 Compile a database of development proposals.
- 2.7 In consultation with MAG and its agency partners, estimate the locations, intensities, and types of development in the remainder of the study area, for 2030 and build-out conditions.
- 2.8 Aggregate quantitative population and employment estimates on known development projects and remaining developable land by Transportation Analysis Zone (TAZ), for subsequent use in year 2030 and build-out modeling.
- 2.9 Use the information developed in the preceding subtasks to outline two land use scenarios: trend and compact.
- 2.10 At the second SRT meeting, present and obtain feedback on long-range land use and socioeconomic projections for the study area, and on the land use scenarios. Discuss findings from the first set of community interviews and their Implications for study goals and objectives.

Product: Draft Working Paper #2, Future Land Use and Development

Task 3— Evaluation Framework

Purpose: To formulate evaluation criteria and performance measures early in the study, to achieve a consensus before introducing specific alternatives and undertaking the evaluation process.

- 3.1 Based on results of the partnering workshop, the first two SRT meetings and findings from community interviews, refine the draft goals and objectives.
- 3.2 In consultation with MAG staff, create an evaluation methodology and criteria for screening and evaluating roadway framework alternatives. This process will contain two tiers or levels. Tier 1 *screening* level criteria will be designed to help identify the most promising alternatives as quickly and efficiently as possible. Tier 2 *evaluation* level criteria are more likely to be quantitative, but will also cover non-quantifiable elements. These criteria will be applied to the three framework alternatives developed in Task 6 below.
- 3.3 Select the most appropriate quantitative measures for assessing the performance of alternative network scenarios in Tier 2.
- 3.4 Devote the third SRT meeting to a discussion of goals, objectives, evaluation criteria, and performance measures. Make appropriate revisions in response to SRT input.

Product: Draft Working Paper #3, Evaluation Methodology and Criteria

Task 4— Existing and Expected Future Transportation Conditions

Purpose: To understand existing and expected future transportation conditions and projects, as background for development of alternative roadway network scenarios.

- 4.1 Compile available roadway and traffic data on existing arterials throughout the study area. A summary of this information, along with recent MAG traffic forecasts, will be shown in graphic and tabular form.
- 4.2 Identify all programmed (committed or funded) short-term roadway improvements in the study area. Current and recent development proposals will be reviewed for information on circulation networks within planned communities,
- 4.3 Obtain all available details on longer-range projects included in the MAG RTP and funded through Proposition 400. These will be considered committed projects. Longrange circulation elements of private development proposals for master-planned communities will also be researched.
- 4.4 Use the information gathered in the last two subtasks to establish the Existing plus Committed network.
- 4.5 Interview transportation or public works staff from each jurisdiction regarding any planned or proposed projects, whether or not an implementation date has been established. This subtask includes both publicly and privately funded projects for primary and secondary arterial streets.
- 4.6 Identify, define, and quantify current transportation funding sources at the jurisdictional level. Define how these funding sources are constrained, and how they might be used for major facilities in a subregional, multi-jurisdictional context.
- 4.7 Follow up the agency interviews by talking with developers (or their consultants) who are willing to provide information on roadway plans.
- 4.8 Tabulate and map the information on programmed, planned, and proposed transportation projects in the study area. This "Expected Future" transportation network will become the background network for development of alternative transportation frameworks.
- 4.9 Present the Existing plus Committed and Expected Future networks at SRT meeting #4 for comment and adjustment.
- 4.10 Publish the first public information newsletter.
- 4.11 Conduct the first community workshop to review existing conditions and identify issues. The workshop will educate the public about existing conditions and constraints, and identify and prioritize issues.

Product: Draft Working Paper #4, Existing and Expected Future Transportation Conditions

Task 5— Travel Demand Forecasts

Purpose: To provide coordination with MAG staff, and direct the preparation and analysis of travel demand forecasts for the study area. The travel forecasts will provide the basis for identification of projected roadway deficiencies, future year (2030 and bulldout) roadway requirements, and development of Implementation strategies.

5.1 Meet with MAG modeling staff to discuss overall approach, including specification of available data sets, land use and socioeconomic variables, and transportation networks. Acquire data file and establish GIS interface for coding of Inputs and presentation of modeling output. Determine coordination requirements between MAG

staff and the DMJM Harris team.

- 5.2 Prepare Travel Demand Methodology Report to document the modeling protocol, including MAG staff and consultant responsibilities, and to specify key model input assumptions and output expectations. The MAG modeling area will require expansion to be consistent with project study area boundaries. The current Regional Analysis Zone (RAZ) structure will be reviewed and refined into smaller, more detailed zones.
- 5.3 Review and refine the Transportation Analysis Zone (TAZ) structure In the study area commensurate with land use specifications. Refine centroid connectors and update related roadway network attributes, as necessary to ensure accessibility. Assemble background information for purposes of defining both the Existing plus Committed (E+C) and Expected Future roadway networks.
- 5.4 Assemble 2030 and build-out land use data and disaggregate within the refined study area TAZ structure. Two land use scenarios will be developed: trend-based and compact.
- 5.5 Prepare district-to-district trip tables for assessing the relationship of study area growth to the balance of the MAG region. Provide a preliminary assessment of the need for new and expanded regional roadway connections.
- 5.6 Specify/prepare inputs and coordinate application of the MAG travel demand model to assign 2030 and build-out trips to both the E+C and Expected Future roadway networks.
- 5,7 Develop and apply mode choice factors to account for various levels of alternative mode use. Mode choice scenarios incorporating both trend forecasts and higher utilization ('trend plus') will be developed and applied.
- 5.8 Identify and document roadway network deficiencies, to provide the basis for developing and testing alternative transportation framework scenarios.
- 5.9 Coordinate MAG modeling of various roadway framework alternatives. *Product: Draft Working Paper #5, Travel Demand Forecasts*

Task 6— Alternative Transportation Framework Scenarios

Purpose: To develop a set of comprehensive roadway network scenarios for the study area through a two-tiered screening and evaluation process.

- 6.1 Conduct two Community Future Focus conferences (one each in Buckeye and Surprise), open to the public but with directed participation by local elected and appointed officials, key stakeholders, and community leaders. Their purpose is to "roll up our sleeves" and debate possible futures, to generate ideas and lay the groundwork for the three transportation scenarios.
- 6.2 Summarize each conference; analyze common themes and divergent viewpoints. The results will help the study team conceptualize the range of potential framework scenarios.
- 6.3 Define a range of potential roadway framework scenarios at a conceptual level, based upon known developments, topographical constraints, assessment of travel demand patterns, and arterial spacing standards. Use detailed trip tables from the MAG transportation mode[to assess levels of demand along key corridors, along with a preliminary determination of capacity requirements.
- 6.4 Perform "fatal flaw" screening of scenarios.

- 6.5 Share results of the Initial screening evaluation in a workshop format at SRT meeting #5.
- 6.6 Based on input from stakeholders and the preceding "fatal flaw" screening of feasibility, delineate three roadway framework alternatives for subsequent modeling and more detailed evaluation.
- 6.7 Present the three draft scenarios at SRT meeting #6 for review and comment. The presentation will compare and contrast the three scenarios, and include a preliminary, qualitative assessment of the relative effectiveness of each scenario in meeting the various project objectives.
- 6.8 Use input from the SRT to revise, refine and elaborate the three framework scenarios. The scenarios will be defined in sufficient detail to allow testing of their potential effects on future travel demand.
- 6.9 Conduct the second round of key community interviews to discuss the alternative scenarios.
- 6.10 Conduct briefings of elected officials in each community, and of the appropriate Maricopa County Supervisors, to explain the three alternative scenarios and solicit input.

Product: Draft Working Paper #6, Alternative Transportation Frameworks

Task 7— Evaluation of Alternative Scenarios

Purpose: To provide a sound technical foundation for selection and further development of a recommended transportation framework scenario for the study area.

- 7.1 Work with MAG modeling staff to identify shifts in travel demand (in 2030 and at build-out) that are likely to occur because of each scenario.
- 7.2 Prepare a generalized environmental overview. Topics will include, but not necessarily be limited to: gross environmental characteristics (e.g., landforms, topography, drainage, soils, biota), socioeconomic impacts (right-of-way acquisition, Title VI/Environmental Justice) and impacts on the physical and natural environment (e.g., species habitat, Waters of the United States, Section 4(f) impacts). A single overview of the study area will cover all three scenarios and point out any instances where clear differences between them exist.
- 7.3 Estimate order-of-magnitude construction and right-of-way costs for each scenario, using generalized assumptions derived from typical costs in Maricopa County.
- 7.4 Identify feasible alternative methods to pay for each alternative framework scenario, with preliminary assessments of funding availability from a variety of sources.
- 7.5 Produce and distribute the second public information newsletter.
- 7.6 Hold the second community workshop to obtain feedback on the scenarios from the community at large, and make final changes to the scenarios to reflect this input as appropriate.
- 7.7 Develop a matrix for evaluation of the scenarios, using the criteria and method established in Task 3. Each cell of the matrix will contain a rating and an explanation thereof.
- 7.8 On the basis of this evaluation, select the preliminary preferred network scenario.
- 7.9 Present the matrix and evaluation results at SRT meeting #7, to obtain stakeholder feedback on the evaluation results, as well as input on the preliminary recommendation for a preferred network scenario.

7.10 Revise the evaluation results to reflect SRT and MAG staff comments. *Product: Draft Working Paper #7, Evaluation and Environmental Overview*

Task 8A— Draft Transportation Framework Recommendation

Purpose: To develop the preliminary recommendation for a preferred transportation framework scenario.

- 8.1 Produce and distribute the third public information newsletter.
- 8.2 Hold the third community workshop to obtain public comment on the recommended scenario. Depending on input received, the study team's initial recommendation of a single scenario may be modified to incorporate elements from other scenarios.
- 8.3 Estimate planning level capital, operating/maintenance and right-of-way costs for the recommended framework. All costs and revenue projections will be given in year 2006 dollars.
- 8.4 Compile a list of specific projects that constitute the key elements of the recommended scenario. The list will include not only capital construction projects, but also policies, strategies and other actions necessary to make the scenario work. A preliminary assignment of jurisdictional responsibilities and potential funding sources (where known) will also be developed.
- 8.5 Develop a project prioritization process in consultation with MAG staff.
- 8.6 Describe the range of funding sources and opportunities that may be available, both today and in the future, to help implement the recommended projects. This subtask will occur concurrently with project prioritization, since funding availability will be one of the criteria used to rank projects.
- 8.7 Summarize the project-level funding analysis in a revenue plan for the preferred alternative, using those revenue sources deemed most viable by project stakeholders.
- 8.8 Develop a draft matrix listing projects in priority order, along with responsible jurisdictions, potential funding sources, and general timeframe for implementation. Prepare a map showing the location of recommended projects, and a Gantt chart illustrating the sequence of major capital projects and showing projects that may overlap.

Product: Draft Working Paper #8, Draft Transportation Framework Recommendation

Task 8B — Final Transportation Framework Recommendation

Purpose: To refine and elaborate the final recommendation for a preferred transportation framework scenario, using input from the SRT and other stakeholders. 8.9 Conduct second round of elected official briefings to explain the recommended scenario and solicit input.

- 8.10 Meet with the SRT (meeting #8) to discuss proposed projects and preliminary priorities.
- 8.11 Produce and distribute the fourth public information newsletter.
- 8.12 Hold fourth community workshop on prioritization, and incorporate input into the final prioritization scheme.
- 8.13 Revise, refine and elaborate all elements of Task 8A to incorporate input from the SRT, elected officials, stakeholders, interested members of the community and MAG staff.

Product: (See Task 9.)

Task 9 — Final Project Documentation

Purpose: To convey information on the study and its findings in the manner that will be most useful to MAG, its agency partners, and the community at large.

- 9.1 Prepare a detailed report outline for review and approval by MAG staff.
- 9.2 Develop the Draft Final Report documenting all work done in the project, including revised versions of all draft working papers. An executive summary will be designed in a poster-map format to present the objectives and findings of the project quickly to a wide readership. DMJM Harris will give MAG 200 hard copies of the executive summary and provide the file on CD in .pdf or other format specified by MAG.
- 9.3 Electronically distribute (on CD-ROM) the Draft Final Report to MAG staff and SRT members for review and comment.
- 9.4 Hold the final SRT meeting (#9) to present highlights of the report and discuss comments and questions from SRT members.
- 9.5 Revise the report to reflect comments; add (to the appendix) a matrix recording all comments and how they were addressed.
- 9.6 Conduct a final internal review of the document for QA/QC before its resubmission to MAG.
- 9.7 Submit a pre-final "proof version" of the report to MAG for final review prior to publication.
- 9.8 Issue the final report and executive summary in a format designed for convenient user access and easy distribution. Upon request, DMJM Harris will give MAG up to ten hard copies for its archives; however, the primary mode of distribution will consist of posting on the MAG website, supplemented by CD-ROM for key MAG staff, agency partners and selected major stakeholders.
- 9.9 If requested to do so, assist MAG staff in presenting the findings and recommendations to appropriate MAG committees and the MAG Regional Council (one presentation to each body). DMJM Harris will develop a concise PowerPoint presentation for this purpose.
- 9.10 Also upon request, DMJM Harris will make this same presentation (in conjunction with MAG staff) to the governing bodies of Buckeye, Surprise, Goodyear, and Maricopa County.

Product: Draft Final Report and Final Report documenting the entire project, including an executive summary

Task 10—Key Deliverables

- 10.1 Detailed project work plan (10 copies to MAG)
- 10.2 Draft Working Paper #1, Project work plan/management plan, including stakeholder outreach/consent plan (10 copies to MAG, plus one copy to each agency or organization represented on the SRT)
- 10.3 Draft Working Paper #2, Future Land Use and Development (same distribution as 10.2)
- 10.4 Draft Working Paper #3, Evaluation Methodology and Criteria (same distribution)
- 10.5 Draft Working Paper #4, Existing and Expected Future Transportation Conditions (same distribution)
- 10.6 Draft Working Paper #5, Travel Demand Forecasts (same distribution)

- 10.7 Draft Working Paper #6, Alternative Transportation Frameworks (same distribution)
- 10.8 Draft Working Paper #7, Evaluation and Environmental Overview (same distribution)
- 10.9 Draft Working Paper #8, Draft Transportation Framework Recommendation (same distribution)
- 10.10 Public information newsletters: four editions; DMJM Harris to provide 150 copies of each for distribution by MAG; color, up to four 8.5 x 11 sides each
- 10.11 Draft Final Report: 10 hard copies plus CD-ROM to MAG, plus distribution of up to 30 CD-ROMs to SRT members and other stakéholders as directed by MAG. Draft executive summary: to be included on CD-ROM, plus 15 hard copies of mock-up to MAG.
- 10.12 Final Report: 10 hard copies plus CD-ROM to MAG, plus distribution of up to 30 CD-ROMs to SRT members and other stakeholders as directed by MAG.
- 10.13 Executive Summary (final): DMJM Harris will print up to 200 hard copies for distribution as MAG sees fit, plus inclusion on Final Report CD-ROM.

3 PROJECT ADMINISTRATION

Project Organization

The DMJM Harris Project Manager will be Ethan Rauch. Mr. Rauch will be the main project contact and will serve as the primary client contact on a day-to-day basis. He will attend all meetings for this project unless he specifically designates other team members to attend on his behalf.

The Project Principal will be John McNamara. As chief planner for DMJM Harris, he will provide direction and guidance to the project manager, strategize with the MAG project manager where appropriate, and make his expertise available to brainstorm creative solutions and troubleshoot whenever necessary.

The following professionals constitute the DMJM Harris Project Team. Attachment A lists estimated hours by individual.

Role Project Manager Planning Principal Access Management	Team Member Ethan Rauch John McNamara Jenny Bixby	Phone (602) 337-2645 (602) 337-2587 (602) 337-2664	E-mail ethan.rauch@dmjmharris.com john.mcnamara@dmjmharris.com jennifer.bixby@dmjmharris.com
Cost Estimation Structural Engineering Considerations	Rodney Bragg David Chase	(602) 337-2617 (602) 337-2660	rodney.bragg@dmjmharris.com david.chase@dmjmharris.com
Intergovernmental Liaison	Chuck Eaton	(602) 337-2576	chuck.eaton@dmjmharris.com
Drainage Context	Edie Griffith-Mettey	(520) 299-8700, x123	edie.griffith-mettey@dmjmharris.com
Environmental Context High Capacity Corridors	Kammy Horne Michael Kies	(602) 337-2518 (602) 337-2595	kathleen.horne@dmjmharris.com michael.kies@dmjmharris.com

Land Use Planning QA/QC Manager Traffic Model Inputs Transportation Networks	Jackie Pfeiffer Paul Waung Michael Gorton* Dan Marum*	(602) 337-2594 (602) 337-2607 (480) 893-8860 (480) 893-8860	jaclyn.pfeiffer@dmjmharris.com paul.waung@dmjmharris.com megorton@wilsonco.com dan.marum@wilsonco.com
Model Applications &	Mark Peterson*	(619) 330-5200	mepeterson@wilsonco.com
Coordination Stakeholder	Curt Dunham**	(480) 816-1811	psainc@cox.net
Coordination	Curt Durmain	(400) 010-1011	<u>psairic@cox.riet</u>
Stakeholder	Peggy Fiandaca**	(480) 816-1811	psainc@cox.net
Outreach/Consent			
Organizational	Jim Barry***	(520) 471-0365	jbarry70@cox.net
Partnerships Implementation &	Curt Lueck***	(520) 743-8748	cla-tucson@comcast.net
Funding	Curt Lueck	(320) 143-0140	cia-tucsori@corricast.riet

^{*}Wilson & Company (subconsultant)

Consultant team members may be added on an as-needed basis and will likely vary during the course of this project as work loads dictate.

The following subconsultant will be responsible for travel demand modeling coordination with MAG, and will assist DMJM Harris with transportation planning and traffic engineering tasks, as specified in its subconsultant agreement and scope of work

Wilson & Company, Inc. 9633 S. 48th Street, Suite 290 Phoenix, AZ 85044

Contact: Dan Marum Phone: (480) 893-8860

A summary of the QC/QA plan for Wilson & Company is appended as Attachment B.

The following subconsultant will be responsible for stakeholder outreach and consent, and will assist in community planning.

Partners for Strategic Action (PSA) 13771 Fountain Hills Blvd, Suite 360 Fountain Hills, AZ 85268

Contact: Peggy Fiandaca Phone: (480) 816-1811

PSA's QA/QC procedures emphasize independent review of work products for both technical accuracy and readability. These procedures include the following:

• All written work (plans, documents, reports, and presentations) receive an independent review by a PSA staff member other than the originator of work prior to distribution.

Page 12 Project Work Plan

^{**}Partners for Strategic Action (subconsultant)

^{***}Curtis Lueck & Associates (subconsultant)

- Written reports are reviewed for clarity and conciseness by technical and nontechnical staff.
- The PSA-assigned project manager reviews reports and documents prior to transmittal to clients.
- On projects in which PSA serves as a subconsultant, the prime consultant provides a third party review prior to submittal to the client.
- All versions of documents are kept on file in electronic format, with the version clearly labeled.

PSA invests in continuing education to ensure that all professional and technical staff has up-to-date tools and training. Staff members maintain appropriate professional certifications and remain proficient and current in disciplines through membership in professional organizations, attendance at seminars and conferences, and independent research.

The following subconsultant will be responsible for work on implementation programming, funding evaluation and organizational partnerships:

Curtis Lueck & Associates (CLA) 5460 W. Four Barrel Court Tucson, AZ 85743

Contact: Curt Lueck Phone: (520) 743-8748

CLA's QA/QC procedures emphasize independent review of work products for both technical accuracy and readability. CLA does not provide engineering design services, per se, so its procedures are not geared to such services. CLA always has one of its staff members review the technical work done by another prior to sending it to a client. Written reports are checked for clarity and conciseness by technical and non-technical staff. The assigned project manager then reviews reports and documents prior to transmittal to clients. Since so much of CLA's work is as a subcounsultant, the firm marks work products as "Client Review", and requests a third party review from the prime consultant before submittal to the ultimate client. All versions of documents are stored and clearly labeled in electronic format.

CLA staff members also maintain proficiency and current expertise in their disciplines through membership in professional organizations, attendance at seminars and conferences, and our independent research. They acquire and use the latest software for transportation planning and traffic engineering, and attend workshops on their application.

Each of the three subconsultants has a detailed scope of work incorporated into its agreement with DMJM Harris and available in the project files.

Project Controls

Contract value: \$500,000 Cost Plus Fixed Fee

Contract time: 12 Months (to be completed by April 30, 2007)

(See Attachment C, Project Schedule, for details)

Notice-to-Proceed Date: May 5, 2006

Project Charge Numbers

60011885.0001	ODCs
60011885.0002	Project Initiation
60011885.0003	Land Use/Development Data
60011885.0004	Evaluation Framework
60011885.0005	Existing & Future Transportation Conditions
60011885.0006	Travel Demand Forecasts
60011885.0007	Transportation Framework Scenarios
60011885.0008	Evaluation of Alternative Scenarios
60011885.0009	Transportation Recommendations
60011885.0010	Final Project Documentation
60011885.0020	Wilson & Company
60011885.0021	Partners for Strategic Action
60011885.0022	Curtis Lueck & Associates

Team members are expected to charge their time accurately for monitoring purposes. If there are any question as to what project number to charge, please contact the Project Manager. Project charges and budget status shall be reviewed by the Project Manager on a monthly basis. The MAG contract with DMJM Harris specifies that the payment for each task listed under "Project Charge Numbers" will not exceed the amount designated for that task in the scope of work attached to the consultant agreement.

Internal progress meetings will be held at DMJM Harris as directed by the Project Manager.

Document and Data Control

The Project Filing Index is included in this document as Attachment D.

All documents generated by this project shall be directed to the Project Manager for distribution to appropriate team members and the appropriate project file. The Project Manager will forward documents to the client as appropriate.

All conversations and contacts shall be documented using the "Contact Memo" format. All project specific e-mails shall be printed and sent to the Project Manager for review and distribution to the Project File. All meetings shall be documented using the appropriate Meeting Minutes format. These minutes will be distributed and will contain the signature of the Project Manager.

All drawings and reports shall be prepared, checked and signed as described in the DMJM Harris Quality Management System manual.

4 DESIGN AND PLANNING

The scope of work in Section 2 above lists the deliverables for this planning project, which will follow the prescribed MAG format.

5 CONSTRUCTION MANAGEMENT, CONSTRUCTION ENGINEERING

Post Design services are not applicable to this planning project.

6 QUALITY ASSURANCE AND CONTROL

The DMJM Harris QMS requirements will be followed on this project. All QMS documentation shall be signed off and submitted to the Project Manager. It is expected that an informal interdiscipline review of drawings during the discipline review of the drawings. In addition a formal interdiscipline review will take place prior to the final submittal. Development of Design Task Protocols and calculation indexes will be the responsibility of each discipline and need to be completed and approved by the Project Manager prior to working on the project.

The Project Manager will review all reports and other project documentation prior to being submitted to the client.

7 COMPUTER AIDED DRAFTING AND DESIGN

All electronic files will be saved under U:\60011885\. This project will be completed using Microsoft Word, Excel and Power Point. All CADD drawings will be done in Microstation platform in accordance to the DMJM Arizona Design/Production Process. The MAG CAD level designations and the DMJM Harris Phoenix Office file naming conventions should be used for all Microstation files. If there are questions regarding these standards, contact the CADD Production Manager, Dean Burmeister.

8 STAKEHOLDER OUTREACH/CONSENT PLAN

This section consists of the Stakeholder Outreach/Consent Plan (SOCP). The purpose of the SOCP is to outline the steps that the consulting team and MAG will take in the development of the MAG Interstate 10-Hassayampa Valley Roadway Framework Study. The SOPC establishes strategies that address community needs and presents a high quality program that will identify, educate, inform, and engage the stakeholders throughout the process.

Ensuring that a broad base of public and stakeholder involvement opportunities occur on all MAG projects is very important. MAG is dedicated to taking a proactive approach to soliciting citizen and stakeholder comments early and often in the preparation of transportation-related studies. The purpose of the SOCP is to explain the steps that will

be taken to ensure citizen and stakeholder involvement in the development of the Interstate 10-Hassayampa Valley Roadway Framework Study.

The fundamental principle that provides the underlying foundation for the SOCP is to ensure a "we're all in this together" atmosphere that will promote understanding and quality input into the study. Stakeholders, landowners, and residents must sense that their involvement is genuinely desired and that the time they spend is worthwhile. This is particularly important for drawing in very diverse groups or those that are skeptical or timid about participating. The SOCP will guide the outreach process to meet the study objectives.

At the completion of the study, a SOCP Summary Report will be developed that compiles all input received throughout the planning process.

RESPONSIBILITIES

MAG Staff

The MAG Project Manager will serve as the key contact person for the Interstate 10-Hassayampa Valley Roadway Framework Study process. He will be responsible for coordinating all activities and ensuring that the project remains on schedule. Additionally, MAG public outreach staff will provide guidance and review related to the study's public outreach and communication efforts.

Study Review Team

The Interstate 10-Hassayampa Valley Roadway Framework Study Review Team (SRT) will provide review and comment to the study. The SRT is composed of key agency stakeholders with the expertise to assist in the development of the study. The SRT will meet with the consulting team and staff throughout the process to provide process feedback and direction. The SRT will be responsible for reviewing and commenting on all draft products, as well as providing guidance on stakeholder outreach/consent activities throughout the process.

Agency Coordination

Agency coordination and communication are critical to the successful completion of the Interstate 10-Hassayampa Valley Roadway Framework Study. The MAG/consultant team will coordinate with state, regional, and local agencies throughout the study. By coordinating with the various agencies, the team will be able to:

- ✓ Obtain background information and project data;
- ✓ Identify potential stakeholders and their perspectives;
- ✓ Develop an understanding of agency goals with respect to the study, and:
- ✓ Receive feedback on the project approach, process, and products.

Consultant Team

The consultant team led by DMJM Harris is responsible for completing the agreed upon scope of work and maintaining the schedule for the completion of the MAG Interstate 10-Hassayampa Valley Roadway Framework Study. In relation to the public and stakeholder involvement process, the consultant team will work with the MAG Project Manager to identify key stakeholders and implement the SOCP.

The consultant team will be responsible for maintaining a project database, organizing, conducting and documenting stakeholder interviews, preparing for and implementing study workshops, and (with the MAG Project Manager) making presentations on the project. The goal of the SOCP and of the study is to reach consensus on a preferred alignment that will be approved by the MAG Regional Council.

INVOLVEMENT TECHNIQUES

This section of the SOCP presents the outreach techniques that will be used during the Interstate 10-Hassayampa Roadway Framework Study. These techniques will complement the team structure described above. The input techniques are intended to support the technical work program. The public outreach approach is unique because of the relatively few existing residents in and around the study area.

The outreach process includes the following activities:

- Development Forums (2)
- Key Stakeholder Interviews
- Community Future Focus Conferences (2)
- Community Workshops (4)
- Elected Official Briefings (2 rounds)

A. Development Forums

The team will organize and conduct two Development Forums early in the study. The objective of the first Development Forum is to understand issues, concerns, opportunities, and current/proposed development projects within the planning area. Approximately six weeks later, another Development Forum will be conducted to receive feedback related to the framework. Working with the staff, the team will prepare the process for each forum, develop agendas, invite participants, develop meeting materials, handle all meeting arrangements, facilitate the forum, and document the results.

B. Key Stakeholder Interviews

To understand issues, development trends and opinions about the future, two rounds of key stakeholder interviews will be conducted. These interviews will provide important background information for the team as the study begins and progresses. An interview guide will be developed and a list of potential interviewees identified with assistance from the MAG Project Manager. The team will conduct the interviews and develop a summary report. These confidential interviews will identify common themes and divergent viewpoints.

First Round of Interviews: Held early in the process to uncover issues, concerns, and development plans related to the study.

Second Round of Interviews: Held midway in the process to discuss the alternative transportation frameworks under consideration.

C. Community Future Focus Conferences

A unique aspect of the stakeholder outreach/consent process will be two Community Future Focus (CFF) Conferences: one each in Buckeye and Surprise. The purpose is to gather input and ideas from landowners, agencies, citizens and interest groups on the potential alignments and evaluation criteria. The CFF is our opportunity to bring together a broad mix of people with a stake in the study area to communicate, educate, empower, partner, and build consensus on pertinent issues. It will provide a tremendous opportunity to uncover any and all issues that will challenge the roadway framework.

The key to the success of the CFF is to ensure that the "right types of people" are in attendance at the event. These people may include elected officials, business leaders, landowners, developers, educational stakeholders (e.g., school district superintendents, board members and administrators), religious leaders, civic groups, and residents concerned about the long-term transportation needs of western Maricopa County. Directed participation will be sought through personal invitations requesting participation.

Each conference will review existing and projected conditions, discuss ideal and probable futures, examine trends, explore alternative concepts, and identify potential solutions. The consultant team will summarize each conference and identify common themes and divergent viewpoints among the two conferences collectively. The results will be used to help conceptualize the range of potential framework scenarios.

Community Future Focus Conference #1 – Buckeye Community Future Focus Conference #2 – Surprise

D. Community Workshops

Four community workshops throughout the study area will be held during the process to solicit broad community input on various issues related to Interstate 10-Hassayampa Valley Roadway Framework Study. The consultant team, working closely with MAG staff and SRT, will prepare and conduct the four community workshops to communicate with and educate participants on different aspects of the study process. The objectives

are to inform the public and stakeholders, discuss issues, and receive input related to impacts of alternative frameworks and proposed projects on the surrounding area.

Interested stakeholders, developers, landowners, agencies, and citizens will be invited to participate in the community workshops. The consultant team will prepare workshop materials, handouts, questionnaires, and presentation materials. All input received will be documented.

Workshop #1: Alternative Framework Scenarios

Workshop #2: Evaluation of Alternative Framework Scenarios

Workshop #3: Draft Transportation Framework Recommendations Workshop #4: Final Transportation Network Recommendations

E. Elected Officials Briefings

The MAG/consultant team will make presentations to the governing bodies of local jurisdictions as needed during the process. Two rounds of briefings will occur. Team members will also be available to brief individual officials upon request. The purpose is to reach agreement on the preferred roadway framework and ultimately receive approval of the final study report.

COMMUNICATIONS TECHNIQUES

A. Stakeholder/Community Database

At the project initiation phase, all project stakeholders and interested individuals or agencies will be identified. The team has assumed that everyone will want to be involved; therefore, it is the goal of the SOCP to be inclusive rather than exclusive. This will be particularly important because of the regional implications of this planning effort.

Key agencies as well as general stakeholders will be invited to participate in the process. As other concerned public agencies and stakeholders are identified during the planning process, they will be added to the database and contacted. The consultant team will be responsible for maintaining the stakeholder/community electronic database.

The following stakeholders will be contacted and kept informed:

- Arizona Department of Transportation (ADOT)
- Maricopa County (Department of Transportation, Flood Control District, Planning & Development)
- All cities and towns within the planning area
- Arizona State Land Department
- U.S. Bureau of Land Management
- Luke Air Force Base
- Utilities serving the study area or with facilities therein

- Irrigation districts and other special districts in the area
- Developers and landowners
- Railroads (Burlington Northern Santa Fe and Union Pacific)
- Economic development organizations
- Valley Partnership and other interested civic organizations
- School districts
- Homeowners Associations and other interested citizens groups
- Other agencies as appropriate

B. Newsletters (4)

The consultant team will create a project newsletter devoted to the study. Four editions of the newsletter will be distributed at strategic points in the process. The purpose of the newsletters is to educate interested individuals and organizations about the study process, present key planning concepts and alternatives being considered by MAG and the SRT, and promote upcoming study events. The consultant team will be responsible for creating the newsletter, while MAG will distribute it to those listed in the study database.

Following are the topics for each of the study newsletters:

Newsletter #1: Existing and Known Future Transportation Conditions

Newsletter #2: Evaluation of Alternative Scenarios

Newsletter #3: Draft Transportation Framework Recommendations

Newsletter #4: Final Transportation Framework Recommendations

C. MAG Website (continuously updated page)

The consultant team will work with MAG staff to communicate information about the study process and interim products through a dedicated page on the MAG website. The study page will allow interested individuals to gather information about the study process, issues and results. The information will be interactive, allowing visitors to ask questions and provide comments, in addition to receiving information on upcoming meeting dates and the status of the study. In addition, MAG has established a special e-mail address (hassayampa@mag.maricopa.gov) for all electronic communications regarding the Interstate 10-Hassayampa Valley Roadway Framework Study.

9 **HEALTH AND SAFETY**

All DMJM Harris team members attending field reviews for this project shall review, sign and adhere to a Health and Safety Plan, which is attached to the DMJM Harris internal Project Work Plan.

Project Work Plan Interstate 10-Hassayampa Valley Roadway Framework Study

ATTACHMENT A HOURS ESTIMATE

Person					Hou	irs by Ta	sk*				
	1	2	3	4	5	6	7	8A	8B	9	Total
E. Rauch	22	52	44	44	28	130	130	100	40	40	630
J. McNamara	8	18	8	8	8	40	32	30	16	4	172
J. Bixby	0	0	0	0	0	22	16	40	12	0	90
R. Bragg	0	0	12	22	20	28	36	36	12	0	166
D. Chase	6	0	4	0	0	22	16	16	2	0	66
C. Eaton	0	0	0	0	0	0	0	32	10	0	42
E. Griffith-Mettey	0	8	4	0	0	22	16	16	2	0	68
K. Horne	0	8	2	0	0	0	24	24	4	0	62
M. Kies	0	0	0	8	8	36	30	30	8	0	120
J. Pfeiffer	0	72	12	22	0	24	40	40	24	10	244
P. Waung	2	0	2	0	0	2	2	4	2	2	16
M. Gorton (Wilson & Co.)	3	0	0	22	40	24	24	24	0	0	137
D. Marum (Wilson & Co.)	16	0	30	24	85	58	58	70	30	16	387
M. Peterson (Wilson & Co.)	4	0	8	4	100	40	40	30	8	6	240
C. Dunham (PSA)	24	45	0	40	0	28	30	28	20	6	221
P. Fiandaca (PSA)	24	20	0	40	0	30	30	30	20	0	194
J. Barry (CLA)	0	0	6	0	6	0	8	60	28	4	112
C. Lueck (CLA)	4	8	4	0	4	0	8	64	38	4	134
DMJM Harris graphic production	8	48	8	8	8	32	32	40	24	80	288
DMJM Harris administrative/clerical	8	8	8	8	8	8	8	16	8	32	112
TOTAL	129	287	152	250	315	546	580	730	308	204	3501

^{*}See Section 2, Scope of Work, for task descriptions. Task 10 is merely a list of deliverables with no hours attached.

ATTACHMENT B

WILSON & COMPANY QUALITY ASSURANCE PROGRAM SUMMARY

Purpose

The purpose of the Quality Assurance Program (QAP) is to provide guidelines for a systematic and disciplined approach that, when implemented will lead to the enhancement in the quality of professional services provided to our clients and of the professional practice of personnel.

Applicability

The QAP is applicable to all projects completed by Wilson & Company. The elements of this manual will be applied to projects, as appropriate, considering clients cost, schedule, and quality. In addition, project complexity, public safety, and consequences of failure and operational capability should be considered, in determining the quality control effort. The quality effort to be expended on each project shall be defined by the Project Quality Assurance Plan specific to that project.

Goals and Objectives

The goal of the QAP is to enhance the quality of projects by applying the framework of the program to each project. Success for implementation requires a technically competent staff; disciplined and dedicated project managers, engineers, architects, and planners; and a management team committed to accountability in the implementation of the program.

Each individual is encouraged to become familiar with the criteria used by our clients when assessing the quality of our work and comparing it to their standards. These basic evaluation criteria are as follows:

- Understanding of the client's requirements
- Knowledge of correct usage of design criteria, standards and specifications
- Knowledge of and use of current state-of-the-art technology
- Organization and clarity of our work product
- · Organization of project files, records, and data retrieval systems
- Commitment to continued self-assessment and improved services

Objectives

In order to achieve the QAP goal of superior, professional service, specific objectives need to be targeted:

Client Satisfaction/Awareness of Quality — Employees should become aware
of the acceptable and desirable standards for their tasks and services.
 Management should explain to staff the implications of carelessness, errors, and

failure to produce a quality project. The ultimate objective is to provide good designs, plans, and specifications that meet the requirements of the client and professional standards of care.

- **Minimize Risk** All steps shall be taken to minimize the project's exposure to risk.
- **Technical Training** Continuous upgrading of professional skills through continuing education in current and new techniques is actively encouraged.
- Standard of Care To maintain a standard of care consistent with the
 profession, reviews of project plans, designs, calculations, specifications, and
 reports are to be made by senior experienced staff. Strengths and weaknesses
 should be identified, and each professional should be given guidance, critique, or
 commendation as appropriate.
- **Legal Implications** All managers and staff should be fully cognizant of general standards of professional liability that may be applied to the firm with respect to work prepared under his/her direction.
- Recognition Various types of recognition will be provided to encourage continuous improvement at all levels of the organization by publicizing exceptional work.

Corporate Commitment

Wilson & Company is committed to achieving standards of quality in all of our services to clients and to public safety. Without compromising this commitment, due consideration will be given to project budgets, schedules, and other client program requirements and constraints. Wilson & Company will take appropriate measures to engineer, design, and implement into our services a level of quality adequate to comply with statutory codes, professional standards of practice, and contractually imposed requirements.

ATTACHMENT C PROJECT SCHEDULE

TASK	SCHEDULE FOR COMPLETION
Task 1-Initiate Project	May 25, 2006
Task 2-Land Use and Data Development	July 5, 2006
Task 3-Evaluate Framework	July 15, 2006
Task 4-Existing and Future Traffic Condition	July 15, 2006
Task 5-Travel Demand Forecasts	July 15, 2006
Task6-Alternative Transportation Framework	September 15, 2006
Task 7-Evaluation of Alternative Scenarios	November 15, 2006
Task 8A-Draft Transportation Framework Recommendation	January 5, 2007
Task 8B-Final Transportation Network Recommendation	March 15, 2007
Task 9-Final Project Documentation	April 30, 2007

ATTACHMENT D FILE INDEX

100	CON	TRACT
		Contract
	102	Contract Modifications
	103	Progress Reports
	104	
	105	Subconsultants
		105.1 Wilson
		105.2 PSA
		105.3 CLA
200	COR	RESPONDENCE
_00	201	
	202	Incoming Correspondence
	202	202.1 MAG
		202.2 Subconsultants
		202.3 Others
	203	Outgoing Correspondence
	203	203.1 MAG
		203.2 Subconsultants
		203.3 Others
	204	
	204	DMJM Harris Interoffice Correspondence
	203	Communication Contact Report (CCR)
300	ADM	INISTRATION/PROJECT CONTROL
	301	Basic Project Information Forms
	302	Project Budget Forms
	303	Schedule
	304	Project Work Plan
	305	O114 C1
	303	Quality Control
	305	Quality Control Meeting Memoranda
		- ·
350	306 307	Meeting Memoranda
350	306 307	Meeting Memoranda Health and Safety Plan CONTROL DOCUMENTS
350	306 307 QMS	Meeting Memoranda Health and Safety Plan
350	306 307 QMS 351	Meeting Memoranda Health and Safety Plan CONTROL DOCUMENTS Design Task Protocols Calculation Index
350	306 307 QMS 351 352	Meeting Memoranda Health and Safety Plan CONTROL DOCUMENTS Design Task Protocols Calculation Index Drawing Index
350	306 307 QMS 351 352 353	Meeting Memoranda Health and Safety Plan CONTROL DOCUMENTS Design Task Protocols Calculation Index
350 400	306 307 QMS 351 352 353 354 355	Meeting Memoranda Health and Safety Plan CONTROL DOCUMENTS Design Task Protocols Calculation Index Drawing Index Report Index
	306 307 QMS 351 352 353 354 355	Meeting Memoranda Health and Safety Plan CONTROL DOCUMENTS Design Task Protocols Calculation Index Drawing Index Report Index Scope Change Forms/Log HNICAL
	306 307 QMS 351 352 353 354 355 TECI	Meeting Memoranda Health and Safety Plan CONTROL DOCUMENTS Design Task Protocols Calculation Index Drawing Index Report Index Scope Change Forms/Log
	306 307 QMS 351 352 353 354 355 TECI 401	Meeting Memoranda Health and Safety Plan CONTROL DOCUMENTS Design Task Protocols Calculation Index Drawing Index Report Index Scope Change Forms/Log HNICAL Mapping Right-of-Way
	306 307 QMS 351 352 353 354 355 TECI 401 402	Meeting Memoranda Health and Safety Plan CONTROL DOCUMENTS Design Task Protocols Calculation Index Drawing Index Report Index Scope Change Forms/Log HNICAL Mapping Right-of-Way Roadway Alternatives
	306 307 QMS 351 352 353 354 355 TECI 401 402 403	Meeting Memoranda Health and Safety Plan CONTROL DOCUMENTS Design Task Protocols Calculation Index Drawing Index Report Index Scope Change Forms/Log HNICAL Mapping Right-of-Way

Project Work Plan Interstate 10-Hassayampa Valley Roadway Framework Study

- 407 Utilities
- Stakeholder/Community Involvement 408
- 409 Environmental
- Structures/Bridges 410
- 411 Estimates
- Funding and Implementation Review Comments 412
- 413

500 SUBMITTALS

- 501 Working Papers
- Draft Final Report 502
- Final Report 503
- 504 Other