AGENDA

LOS ANGELES REGIONAL
INTEROPERABLE COMMUNICATIONS SYSTEM AUTHORITY

BOARD OF DIRECTORS MEETING
Thursday, October 1, 2015 • 9:00 a.m.
Grace E. Simons Lodge
1025 Elysian Park Drive, Los Angeles, CA 90012

Los Angeles Regional Interoperable Communications System Authority (the "Authority")

AGENDA POSTED: September 25, 2015
Complete agendas are made available for review at the designated meeting location. Supporting documentation is available at the LA-RICS Office located at 2525 Corporate Place, Suite 100, Monterey Park, CA 91754 during normal business hours and may also be accessible on the Authority's website at http://www.la-rics.org.

Members:	Alternates:
1. **Miguel Santana**, CAO, City of Los Angeles	**Patty Huber**, Asst., CAO, City of Los Angeles
2. **Ralph Terrazas**, Fire Chief, City of Los Angeles Fire Dept.	**Graham Everett**, Asst., Chief, City of Los Angeles Fire Dept.
3. **Charles L. Beck**, Vice Chair, Chief of Police, LA Police Dept.	**Maggie Goodrich**, Chief Information Officer, LA Police Dept.
4. **Sharon Tso**, Chief Legislative Analyst, City of Los Angeles	**Matias Farfan**, Asst., Chief Legislative Analyst, City of Los Angeles
5. **Sachi Hamai**, Chair, CEO, County of Los Angeles	**Tom Tindall**, Director, CEO, County of Los Angeles
6. **Daryl L. Osby**, Fire Chief, County of Los Angeles Fire Dept.	**Chris Bundesen**, Asst., Fire Chief, County of Los Angeles Fire Dept.
7. **Jim McDonnell**, Sheriff, County of Los Angeles Sheriff's Dept.	**Dean Gialamas**, Division Dir., County of Los Angeles Sheriff's Dept.
8. **Cathy Chidester**, Dir., EMS Agency, County of LADHS	**Karolyn Fruhwirth**, Asst., Dir., EMS Agency, County of LADHS
9. **Steven K. Zipperman**, Chief of Police, LA School Police Dept.	**Jose Santome**, Deputy Chief, LA School Police Dept.
10. **Bill Walker**, Fire Chief, City of Alhambra Fire Dept.	**Chris Donovan,** Fire Chief, City of Monrovia Fire Dept.
11. **Larry Giannone**, Chief of Police, City of Sierra Madre Police Dept.	**Joe Ortiz**, Captain, City of Sierra Madre Police Dept.
12. **Mark R. Alexander**, City Manager, CA Contract Cities Assoc.	**Sam Olivito**, Executive Dir., CA Contract Cities Assoc.
13. **Kim Raney**, Chief of Police, City of Covina Police Dept.	**David Povero**, Captain, City of Covina Police Dept.
14. **Douglas Prichard**, City Manager, City of Rolling Hills Estates	**Greg Grammer**, Asst., City Manager, City of Rolling Hills Estates

Officers:

Patrick Mallon, Executive Director
John Naimo, County of Los Angeles Auditor-Controller
Joseph Kelly, County of Los Angeles, Treasurer and Tax Collector
Priscilla Lara, Board Secretary

LA-RICS

NOTE: ACTION MAY BE TAKEN ON ANY ITEM IDENTIFIED ON THE AGENDA

I. CALL TO ORDER

II. ANNOUNCE QUORUM – Roll Call

III. APPROVAL OF MINUTES (A-B)

A. September 10, 2015 – Regular Meeting Minutes

Agenda Item A

B. September 10, 2015 – Special Meeting Minutes

Agenda Item B

IV. PUBLIC COMMENTS

V. CONSENT CALENDAR – (None)

VI. REPORTS (C-F)

C. Finance Committee Report – John Geiger

D. Director's Report – Pat Mallon

- LTE Project Status
  - LTE Environmental Status
  - LTE Construction Status
  - LTE Contract Status
- LMR Project Status
  - LMR Environmental Status
  - LMR Contract Status

E. Project Manager's Report – Pat Mallon

Agenda Item E

LA-RICS

F. Grant Status Report – Pat Mallon

VII. DISCUSSION ITEMS (G)

G. Status of Membership Opt-Out and Impact on Funding Plan

Agenda Item G: Enclosure

VIII. ADMINISTRATIVE MATTERS (H)

H. AMENDMENT NO. 19 FOR OUTREACH ACTIVITIES TO PROJECT AND CONSTRUCTION MANAGEMENT SERVICES AGREEMENT (CONTINUED FROM MEETING OF SEPTEMBER 10, 2015)

It is recommended that your Board:

1. Approve Amendment No. 19 to the Project and Construction Management Services contract with Jacobs, in substantially similar form to the Enclosure, which revises the contract to increase the scope and level of effort to complete outreach activities for the LMR portion of the project and provide outreach associated with the CEQA/NEPA environmental component of the project increasing the Maximum Contract Sum by $1,255,765 from $35,753,651 to $37,009,416.

2. Delegate authority to the Executive Director to execute Amendment No. 19 with Jacobs, substantially similar in form to the Enclosure.

Agenda Item H: Enclosures

IX. MISCELLANEOUS – (None)

X. ITEMS FOR FUTURE DISCUSSION AND/OR ACTION BY THE BOARD

XI. CLOSED SESSION REPORT

Conference with Legal Counsel – Anticipated Litigation (subdivision (d) (2) and (d) (4) of Government Code Section 54956.9) (2 cases)

XII. ADJOURNMENT and NEXT MEETING:

Thursday, November 5, 2015, at 9:00 a.m., at the Grace E. Simons Lodge.

LA-RICS

BOARD MEETING INFORMATION

Members of the public are invited to address the LA-RICS Authority Board on any item on the agenda prior to action by the Board on that specific item. Members of the public may also address the Board on any matter within the subject matter jurisdiction of the Board. The Board will entertain such comments during the Public Comment period. Public Comment will be limited to three (3) minutes per individual for each item addressed, unless there are more than ten (10) comment cards for each item, in which case the Public Comment will be limited to one (1) minute per individual. The aforementioned limitation may be waived by the Board's Chair.

(NOTE: Pursuant to Government Code Section 54954.3(b) the legislative body of a local agency may adopt reasonable regulations, including, but not limited to, regulations limiting the total amount of time allocated for public testimony on particular issues and for each individual speaker.)

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SI REQUIERE SERVICIOS DE TRADUCCION, FAVOR DE NOTIFICAR LA OFICINA CON 72 HORAS POR ANTICIPADO.

The meeting is recorded, and the recording is kept for 30 days.

BOARD OF DIRECTORS MEETING MINUTES

LOS ANGELES REGIONAL INTEROPERABLE COMMUNICATIONS SYSTEM AUTHORITY

September 10, 2015
Grace E. Simons Lodge
1025 Elysian Park Drive, Los Angeles, CA 90012

Board Members Present:
Sachi Hamai, Chair, CEO, County of Los Angeles
Daryl L. Osby, Fire Chief, County of Los Angeles Fire Dept.
Cathy Chidester, Director, EMS Agency, County of LA, DHS
Mark R. Alexander, City Manager, CA Contract Cities Assoc.

Alternates For Board Members Present:
Patty Huber, Asst., CAO, alternate for Miguel Santana, CAO, City of Los Angeles
Graham Everett, Asst., Chief, alternate for Ralph Terrazas, Fire Chief, City of Los Angeles Fire Dept.
Maggie Goodrich, CIO, alternate for Charles L. Beck, Vice Chair, Chief of Police, Los Angeles Police Dept.
Matias Farfan, Asst., Chief Legislative Analyst, alternate for Sharon Tso, Chief Legislative Analyst, City of Los Angeles
Alex Radovic, Lieutenant, alternate for Jim McDonnell, Sheriff, Los Angeles County Sheriff's Dept.
Jose Santome, Deputy Chief, alternate for Steven K. Zipperman, Chief of Police, Los Angeles School Police Dept.
Chris Donovan, Fire Chief, alternate for Bill Walker, Fire Chief, City of Alhambra Fire Dept.
Joe Ortiz, Captain, alternate for Larry Giannone, Chief of Police, City of Sierra Madre Police Dept.
David Povero, Captain, alternate for Kim Raney, Chief of Police, City of Covina Police Dept.
Greg Grammer, Asst., City Manager, alternate for Doug Prichard, City Manager, City of Rolling Hills Estates

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Officers Present:
Patrick Mallon, LA-RICS Executive Director

Absent:

AGENDA ITEM A

I. CALL TO ORDER

Chair Sachi Hamai called the Regular and Special meeting of the Board to order, and ran both meetings concurrently.

II. ANNOUNCE QUORUM – Roll Call

Chair Hamai acknowledged that a quorum was present and asked for a roll call.

III. APPROVAL OF MINUTES (A-C)

A. August 6, 2015 – Regular Meeting Minutes

Chair Hamai asked for a motion to approve, Alternate Member Patty Huber motioned first, seconded by Alternate Member Jose Santome. The Board's consensus was unanimous.

Ayes 13: Hamai, Osby, Chidester, Alexander, Huber, Everett, Goodrich, Farfan, Radovic, Santome, Ortiz, Povero, and Grammer.

MOTION APPROVED.

B. August 6, 2015 – Special Meeting Minutes

Chair Hamai asked for a motion to approve, Alternate Member Patty Huber motioned first, seconded by Alternate Member Jose Santome. The Board's consensus was unanimous.

Ayes 13: Hamai, Osby, Chidester, Alexander, Huber, Everett, Goodrich, Farfan, Radovic, Santome, Ortiz, Povero, and Grammer.

MOTION APPROVED.

C. August 27, 2015 – Special Meeting Minutes

Chair Hamai asked for a motion to approve, Alternate Member Jose Santome motioned first, seconded by Board Member Cathy Chidester.

Ayes 12: Hamai, Osby, Chidester, Huber, Everett, Goodrich, Farfan, Radovic, Santome, Ortiz, Povero, and Grammer.

Abstentions: 1

MOTION APPROVED.

CHAIR HAMAI STATED TO UNDERTAKE THE SPECIAL AGENDA ITEM A. COMMUNICATIONS TRANSPORT SERVICES AGREEMENT WITH SOUTHERN CALIFORNIA EDISON.

IV. PUBLIC COMMENTS – (None)

V. CONSENT CALENDAR – (None)

VI. REPORTS (D-I)

D. Finance Committee Report - John Geiger

Mr. John Geiger stated the Regular Finance Committee Meeting was held on August 27, 2015. One of the items discussed was the Funding Plan. Two other items were also discussed. The first is the Urban Areas Security Initiative (UASI) Memorandum of Understanding (MOU). There is a proposed MOU by Judge Bonner to be entered into by Interagency Communications Interoperability System (ICIS) and LA-RICS. We received one comment from a public speaker during the meeting. A unanimous vote was to table consideration of the MOU until there is a final report from the Joint Technical and Operations Committee. We expect a potential financial impact from the recommendation from the Joint Technical and Operations Committee of additions, amendments, or proposals by the LA-RICS Board. The second item was a recommendation to approve the revised Fiscal-Year 2015-16 Operating Budget, which is before the Board today is Agenda Item L. The final item is Funding Plan alternatives. As you may recall, we have a funding plan that was approved by this Board in March 2014 with an opt-out date of November 23, 2015. An Ad Hoc Committee was tasked with exploring potential alternatives to the Funding Plan. The Ad Hoc Committee met on September 8, 2015, and intends to meet again before the Board of Directors meeting on October 1, 2015, and to submit recommendations to the Board at that time. It is recommended that if the Board wants to pursue any of the alternatives a special meeting will be calendared for October 8, 2015, with a vote to be taken prior to the opt-out period.

Board Member Alexander asked why a special meeting would be needed. “Why can’t we take that item up at the October 1, 2015?” Mr. Geiger stated that is possible, however, this special meeting will provide the respected members an additional week for review. Board Member Alexander stated the efficient way is for the Ad Hoc Committee to have a recommendation by October 1, 2015, and if a recommendation is not ready an extension of the opt-out date should be voted upon. Mr. Geiger stated if the Ad Hoc Committee had a recommendation ready, he would have presented it today and at this time we are not there. The longer we wait there can be a negative financial impact for the Board and members. Board Member Alexander stated he shares that same concern. “We need enough time to share with the members. The members need to know what their financial obligation is

going to be. We run the risk of cities opting-out because of lack of information." Board Member Alexander requested this item of the opt-out date to be agenized.

E. Legislative Committee Report - Olyvia Rodriguez

Olyvia Rodriguez reported that the committee met on August 19, 2015, and discussions were similar to the Finance Committee to consider the draft MOU between ICIS and LA-RICS. Per LA-RICS staff, the committee was asked to review the draft MOU and to discuss the draft from a legislative perspective. At this time the committee did not take action on this item. We deferred to the other committees especially the Joint Technical and Operations Committee for their review and expertise. The committee is waiting for feedback and will meet again.

F. Joint Technical and Operations Committee Report – Rick Burke

The Joint Technical and Operations Committee held a meeting on August 25, 2015, to discuss Public Safety Broadband Network (PSBN) security, PSBN training, agency on-boarding planning, and the LA-RICS/ICIS MOU. The committee recommended the formation of an Ad Hoc Committee to address in greater detail these items. It was also recommended that specific sections of LA-RICS/ICIS MOU be sent to Counsel for review as well as specific sections to be sent to the Ad Hoc Committee to review in greater detail. The Ad Hoc Committee met on September 3, 2015 and agreed, pending confirmation from the City of Los Angeles (City), a Chief of Information Security Officer (CISO) is needed before moving forward with the use of the County of Los Angeles Sheriff's Department (Sheriff's) existing agreement for the procurement of Public Key Information (PKI) certificate authority. The PKI is required for deployment for the PSBN system. A conference call was held with the County, City, and Televate on September 8, 2015, and it was agreed that the Sheriff's PKI solution would be used for the PSBN.

A recommendation was made to develop a charter to guide the members of the security sub-committee and operations sub-committees. Volunteers are drafting the charter for Ad Hoc Committee review and discussion at the next meeting. The Ad Hoc Committee made recommendations regarding the LA-RICS/ICIS MOU and referred those edits back to the Chair of the Joint Technical and Operations Committee and the sub-committees for their review and consideration at the next scheduled meeting.

Alternate Member Maggie Goodrich asked when is the next meeting scheduled. Alternate Member Alex Radovic stated no meeting is scheduled at this time. Alternate Member Goodrich asked will the meeting be scheduled before October 1, 2015. Alternate Member Radovic stated hopefully. Mr. Rick Burke stated the work of the sub-committees is ongoing every day to advance the program. There is a

program for continued outreach for all member agencies to discuss with Information Technology (IT) departments their security needs.

G. Director's Report – Pat Mallon

Executive Director Pat Mallon provided an update on the status of the Funding Plan. During the month of August we received two Notices of Withdrawal from the Cities of Lancaster and Monterey Park. A recap of the impact on the Funding Plan resulting from all cities that have withdrawn is reflected in Agenda Item K. The total impact to the Funding Plan to date stands at 11.87%. A conference call of the Ad Hoc Committee was held on September 8th with further discussions to be scheduled in the near future.

Long Term Evolution (LTE) Project Update

As previously reported, the Grant Performance period for out Broadband Technology Opportunities (BTOP) grant concludes on September 30th.

In regard to the LTE construction status, as of September 9th, there are 45 sites complete, 18 sites are in construction, all with completion scheduled on or before September 30th. There are a total 15 Cell on Wheel (COW) locations. 10 sites are located at Southern California Edson (SCE) facilities, 2 at County of Los Angeles Water Works sites, 1 at the Sheriff's STAR Center, and 2 at California Highway Patrol (CHP) sites. One CHP site may be problematic due to space limitations. All trailers are being outfitted concurrently with the processing of permits for on-site electrical work. Review of the COW sites by the State Historical Planning Office has been completed with their notice of concurrence received yesterday. One "Backhaul" site (San Dimas Microwave) was dropped due to escalating costs and concern that the site could not be completed before the September 30th cut-off date.

California FirstNet Update

The California Office of Emergency Services (CalOES) has circulated a questionnaire seeking information from all public agencies on their use of "Data" services. Responses to the questionnaire are due to CalOES on or before September 30th. All public agencies within the County of Los Angeles are encouraged to submit their responses. This information is critical in assuring an appropriate plan for the PSBN in California.

Land Mobile Radio (LMR) Project Status

Executive Director Pat Mallon reported on the LMR environmental status and stated that discussions with Federal Emergency Management Agency (FEMA) and the City of Los Angeles are continuing relative to the Environmental Impact Analysis. The first draft of the Programmatic Environmental Assessment for the LMR project has been submitted to the City of Los Angeles as Grant Administrator for the UASI grant. We are continuing outreach efforts to the federal agencies on whose land we

are proposing LMR installations. These agencies include U.S. Forest Service, U.S. Fish and Wildlife Service, the Army Corp of Engineers and Bureau of Land Management.

UASI Requested Draft MOA from Judge Robert Bonner

Over the past few weeks, the Legislative, Finance and Joint Technical and Operations Committees have met to discuss the proposed MOA from Judge Bonner relative to coordination of efforts by LA-RICS and ICIS to insure interoperability throughout the County Los Angeles. Per direction from the Joint Technical and Operations Committee, a working group of representatives from the County and City of Los Angeles met to discuss the specific language of the MOA. The product of that working group will be shared with the Joint Committee and then presented to your Board for consideration.

Chair Hamai asked Executive Director Pat Mallon if we heard back from the City on September 8, 2015. Executive Director Pat Mallon stated we do not have that information.

H. Project Manager's Report – Pat Mallon

The Jacobs Project Management Report and Motorola Monthly Report are included in your package as Agenda Item E.

I. Grant Status Report – Pat Mallon

The State Homeland Security Grant Program (SHSGP) Approval Authority met last week and allocated $700,000 to the LA-RICS project to allow consultant assistance throughout the system optimization process for the LTE system. We anticipate the award action will be presented to your Board shortly after the start of the calendar year.

VII. DISCUSSION ITEMS (J-K)

J. Outreach Update

The purpose of this discussion item is to update your Board on the status of outreach pertaining to LTE PSBN Project. All outreach for LTE PSBN Project has been completed, with the exception of the COW sites. There are a total of 15 COW sites in the deployment plan.

K. Status of Membership Opt-Out and Impact on Funding Plan

The purpose of this discussion item is to update your Board on the number of member agencies that have opted-out of the LA-RICS Membership to date, and corresponding impact on the Adopted Funding Plan.

As previously mentioned, since your last meeting of August 6, 2015, two member agencies have opted out. They are Lancaster (0.66%) and Monterey Park (0.43%), which represents 1.09% of membership. A cumulative total of 11.87% of member agencies have opted-out to date.

VIII. ADMINISTRATIVE MATTERS (L-O)

L. APPROVE THE FISCAL-YEAR 2015-16 PROPOSED AMENDED LOS ANGELES REGIONAL INTEROPERABLE COMMUNICATIONS SYSTEM AUTHORITY OPERATING BUDGET

It is recommended that your Board:

It is recommended that the Los Angeles Regional Interoperable Communications System Authority (Authority) approve the enclosed Fiscal-Year 2015-16 Proposed Amended Operating Budget of $122,925,000 to be utilized for the continued operation of the Authority (Enclosure 1). The Finance Committee also recommends adoption of the attached Fiscal-Year 2015-16, Proposed Amended Operating Budget and took action at its last regular meeting to adopt such recommendation.

Mr. John Geiger and Administrative Chief Susy Orellana-Curtiss provided updates for this item. Mr. Geiger commented on the matter of supplanting issue relative to the use of UASI grant funds. There were follow-up questions from CalOES that were to be handled by the grant administrator. In a letter dated August 26, 2015, from the Mayor's office the grant administrator supported use of these UASI funds for personnel on the project. On September 9, 2015, County provided fully executed MOU's for all the personnel items that are fully or partially funded by UASI grants for Fiscal-Year 2015-16 operating budget. These are third-party contracts that happen to come from a public agency. At this time we do not have a final determination. Mr. Geiger encourages the Board of Directors and those that sit on the UASI Advisory Board to seek endorsement from that Board on this item.

Chair Hamai asked if we heard back from CalOES at this time. Mr. Geiger stated, "No, we have not." Administrative Chief Susy Orellana-Curtiss stated the administrative matter that is before your Board is to recommend an amended operating budget, which reflects accounting for expenditures that were captured in Fiscal-Year 2014-15. If you refer to page 6 of 7 of the Enclosure, Agenda Item L, Contractor and Consults line item payable by the BTOP grant is now $68,321,00 million versus the adopted budget that came before your Board for Fiscal-Year 2015-16 $81,655.000. This is the administrative amended budget to align the 14-15

expenditures incurred and cleared in Fiscal-Year 15-16, reflecting the total available grant to fund expenditures in Fiscal-Year 15-16. This is the only change. Administrative Chief Susy Orellana-Curtiss stated we added detail per the Finance Committee recommendation to reflect UASI or SHSGP funding, which can be found in pages 2 through 5.

Chair Hamai stated for the motion we had at the last meeting, we are operating under the 90-day extension of these positions. Since we have not heard back from CalOES, I suggest that this Agenda Item L be amended again to extend it for another 90-days, until we hear back from CalOES.

Chair Hamai asked for a motion to approve, Chair Hamai motioned first, seconded by Alternate Member Maggie Goodrich. The Board's consensus was unanimous.

Ayes 14: Hamai, Osby, Chidester, Alexander, Huber, Everett, Goodrich, Farfan, Radovic, Santome, Donovan, Ortiz, Povero, and Grammer.

Chair Hamai stated the second part of the motion is to move all of Agenda Item L as amended.

Chair Hamai asked for a motion to approve, Alternate Member Patty Huber motioned first, seconded by Alternate Member Matias Farfan. The Board's consensus was unanimous.

Ayes 14: Hamai, Osby, Chidester, Alexander, Huber, Everett, Goodrich, Farfan, Radovic, Santome, Donovan, Ortiz, Povero, and Grammer.

M. AMENDMENT NO. 1 TO COMMUNITY RELATIONS CONSULTANT SERVICES

It is recommended that your Board:

1. Approve an amendment to accept additional services from County of Los Angeles Chief Executive Office per a Delegated Authority Agreement with G. F. Bunting, on behalf of the Authority, to do the following:

    a. Increase the scope of work to contemplate additional community relations work for the grant close out period of the PSBN project and to commence said services for the LMR project.

    b. Increase the maximum compensation by $100,000 for a total maximum contract cost not to exceed $200,000, substantially similar in form to the Enclosure.

c. Reimburse the County of Los Angeles for such services, which are an allowable expense under the Broadband Technology Opportunity Program (BTOP) grant for PSBN work or under State Homeland Security Grant Program (SHSGP) and/or the Urban Area Security Initiative (UASI) grant funds for work related to the LMR Project.

Board Member Alexander stated he has not heard any feedback on this issue. Executive Director Mallon stated the Bunting Group has helped us develop a strategy to deal with the press at outreach meetings such as the Los Angeles Police Department North Hollywood station. Chair Hamai stated on the County side, the door-to-door flyers and getting out there was very successful in resolving the issues with the communities and media. Alternative Member Jose Santome stated this was a very important topic and wants to thank Executive Director Pat Mallon for his leadership in resolving this issue with the communities. Alternative Member Jose Santome stated he agrees with Board Member Alexander that we need to continue to reach out to the communities and address their concerns.

Chair Hamai asked for a motion to approve, Alternate Member Jose Santome motioned first, seconded by Board Member Daryl L. Osby. The Board's consensus was unanimous.

Ayes 14: Hamai, Osby, Chidester, Alexander, Huber, Everett, Goodrich, Farfan, Radovic, Santome, Donovan, Ortiz, Povero, and Grammer.

N. AMENDMENT NO. 18 FOR OUTREACH ACTIVITIES TO PROJECT AND CONSTRUCTION MANAGEMENT SERVICES AGREEMENT

It is recommended that your Board:

1. Approve Amendment No. 18 to the Project and Construction Management Services contract with Jacobs, in substantially similar form to the Enclosure, which revises the contract to increase in scope and level of effort to complete outreach activities for the LMR portion of the project and provide outreach associated with the CEQA/NEPA environmental component of the project increasing the Maximum Contract Sum by $1,405,765 from $35,603,651 to $37,009,416.

2. Delegate authority to the Executive Director to execute Amendment No. 18 with Jacobs, substantially similar in form to the Enclosure.

Board Member Alexander stated for an increase of $1.4 million he would like to understand the full scope of work that was involved. Executive Director Mallon stated we have a large audience for the LMR project which includes stakeholders, Board of Supervisors, City Councils, member agencies, etc. The increase proposed

is for the LMR system not the PSBN. Board Member Alexander requested additional information relative to the number of staff members, hours, and rates involved. Administrative Chief Susy Orellana-Curtiss quoted the details, which consists of 4,397 hours for the community outreach team, 436 hours from the environmental team, and the hourly rates are $195 for Katz members, $155 for environmental outreach and the Jacobs management leads. Board Member Alexander stated in his opinion those rates are high. Administrative Chief Susy Orellana-Curtiss stated that this amendment for outreach over the course of 28 months through December 2017.

Alternate Member Santome asked if we can amend the action item without passing a 28 month commitment and bring back the remainder of the action in October. Alternate Member Goodrich stated we should not approve for the full 28 month period. Alternate Member Santome offered to amend his proposal for the month of September only. Counsel Truc Moore stated that the amendment could be for a not-to-exceed amount of $150,000 for the month of September, so all necessary work could occur during the month of September. Chair Hamai stated that the amendment before for us would be not-to-exceed the amount of $150,000 for the month of September and bring back to the Board in October the remaining.

Chair Hamai asked for a motion to approve, Alternate Member Santome motioned first, seconded by Alternate Member Huber. The Board's consensus was unanimous.

Ayes 14: Hamai, Osby, Chidester, Alexander, Huber, Everett, Goodrich, Farfan, Radovic, Santome, Donovan, Ortiz, Povero, and Grammer.

O. APPROVE AMENDMENT NO. 14 FOR AGREEMENT NO. LA-RICS 008 FOR LOS ANGELES REGIONAL INTEROPERABLE COMMUNICATIONS SYSTEM PUBLIC SAFETY BROADBAND NETWORK

It is recommended that your Board:

1. Approve Amendment No. 14 to Agreement No. LA-RICS 008 for the PSBN with Motorola Solutions, Inc. (Motorola), substantially similar in form to the Enclosure, which revises the Agreement to:

   (a) Reconcile spare equipment required for the continued operation and support of the PSBN for an increased amount of $1,214,021.

   (b) Reconcile equipment necessary for the fifteen (15) COWs for an increased amount of $2,157,669.

   (c) Account for site construction changes for an increased amount of $80,220.

(d) Reconcile of excess equipment for a decreased amount of $24,229.

(e) Authorize an increase to the Maximum Contract Sum by $3,427,681 ($3,451,910 increase to account for (1) spare equipment reconciliation and (2) equipment for the COWs; and a cost savings of $24,229 for excess equipment reconciliation) from $129,471,804 to $132,899,485.

3. Allow for the issuance of one or more Notices to Proceed for the Work contemplated in Amendment No. 14.

4. Delegate authority to the Executive Director to execute Amendment No. 14 in substantially similar form to the enclosed Amendment.

Chair Hamai asked for a motion to approve, Board Member Cathy Chidester motioned first, seconded by Alternate Member Santome. The Board's consensus was unanimous.

Ayes 14: Hamai, Osby, Chidester, Alexander, Huber, Everett, Goodrich, Farfan, Radovic, Santome, Donovan, Ortiz, Povero, and Grammer.

IX. MISCELLANEOUS – (None)

X. ITEMS FOR FUTURE DISCUSSION AND/OR ACTION BY THE BOARD

XI. CLOSED SESSION REPORT

Conference with Legal Counsel – Anticipated Litigation (subdivision (d) (2) and (d) (4) of Government Code Section 54956.9) (2 cases)

The Board entered into Closed Session at 9:50 a.m., and returned to Open Session at 10:19 a.m. The Brown Act does not require a report.

XIII. ADJOURNMENT and NEXT MEETING:

Chair Hamai announced adjournment of this meeting at 10:23 a.m., along with the Special Meeting. The Board's consensus was unanimous. The next Board meeting will take place on Thursday, November 5, 2015, at 9:00 a.m., at the Grace E. Simons Lodge.

BOARD MEETING INFORMATION

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SI REQUIERE SERVICIOS DE TRADUCCION, FAVOR DE NOTIFICAR LA OFICINA CON 72 HORAS POR ANTICIPADO.

The meeting is recorded, and the recording is kept for 30 days.

BOARD OF DIRECTORS
SPECIAL MEETING MINUTES

LOS ANGELES REGIONAL
INTEROPERABLE COMMUNICATIONS SYSTEM AUTHORITY

September 10, 2015
Grace E. Simons Lodge
1025 Elysian Park Drive, Los Angeles, CA 90012

Board Members Present:
Sachi Hamai, Chair, CEO, County of Los Angeles
Daryl L. Osby, Fire Chief, County of Los Angeles Fire Dept.
Cathy Chidester, Director, EMS Agency, County of LA, DHS
Mark R. Alexander, City Manager, CA Contract Cities Assoc.

Alternates For Board Members Present:
Patty Huber, Asst., CAO, alternate for Miguel Santana, CAO, City of Los Angeles
Graham Everett, Asst., Chief, alternate for Ralph Terrazas, Fire Chief, City of Los Angeles Fire Dept.
Maggie Goodrich, CIO, alternate for Charles L. Beck, Vice Chair, Chief of Police, Los Angeles Police Dept.
Matias Farfan, Asst., Chief Legislative Analyst, alternate for Sharon Tso, Chief Legislative Analyst, City of Los Angeles
Alex Radovic, Lieutenant, alternate for Jim McDonnell, Sheriff, Los Angeles County Sheriff's Dept.
Jose Santome, Deputy Chief, alternate for Steven K. Zipperman, Chief of Police, Los Angeles School Police Dept.
Chris Donovan, Fire Chief, alternate for Bill Walker, Fire Chief, City of Alhambra Fire Dept.
Joe Ortiz, Captain, alternate for Larry Giannone, Chief of Police, City of Sierra Madre Police Dept.
David Povero, Captain, alternate for Kim Raney, Chief of Police, City of Covina Police Dept.
Greg Grammer, Asst., City Manager, alternate for Doug Prichard, City Manager, City of Rolling Hills Estates

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Officers Present:
Patrick Mallon, LA-RICS Executive Director

Absent:

AGENDA ITEM B

I. CALL TO ORDER

Chair Hamai called the Regular and Special meeting of the Board to order and ran both meetings concurrently.

II. ANNOUNCE QUORUM – Roll Call

Chair Hamai acknowledged that a quorum was present and asked for a roll call.

III. PUBLIC COMMENTS – (None)

IV. CONSENT CALENDAR – (None)

V. REPORTS - (None)

VI. ADMINISTRATIVE MATTERS (A)

A. COMMUNICATIONS TRANSPORT SERVICES AGREEMENT WITH SOUTHERN CALIFORNIA EDISON

It is recommended that your board:

1. Find that the approval and execution of the Agreement and for the work covered by the Agreement to use SCE's fiber and power networks, is categorically exempt under CEQA pursuant to CEQA Guidelines Sections 15301, 15303, and 15304 for the reasons stated in this letter and as noted in the record of the project.

2. Delegate authority to the Executive Director to execute an Agreement, substantially similar in form to the enclosed, between the SCE and the Authority to allow the SCE to provide fiber and power services to ten (10) COW Sites for the PSBN Sites in the amount of $2,288,399, which will commence upon execution for a term of three (3) years with two (2) annual renewal options which, if exercised, would cost $94,500 for each annual renewal option.

Agenda Item A: Enclosure

Chair Hamai asked for a motion to approve, Chair Hamai motioned first, seconded by Alternate Member Matias Farfan. The Board's consensus was unanimous.

Ayes 14: Hamai, Osby, Chidester, Alexander, Huber, Everett, Goodrich, Farfan, Radovic, Santome, Donovan, Ortiz, Povero, and Grammer.

MOTION APPROVED.

VII. MISCELLANEOUS – (None)

VIII. ITEMS FOR FUTURE DISCUSSION AND/OR ACTION BY THE BOARD

IX. CLOSED SESSION REPORT – (None)

X. ADJOURNMENT and NEXT MEETING:

Chair Hamai announced adjournment of this meeting at 10:23 a.m. The Board's consensus was unanimous. The next Board meeting will take place on Thursday, November 5, 2015, at 9:00 a.m., at the Grace E. Simons Lodge.

BOARD MEETING INFORMATION

Members of the public are invited to address the LA-RICS Authority Board on any item on the agenda prior to action by the Board on that specific item. Members of the public may also address the Board on any matter within the subject matter jurisdiction of the Board. The Board will entertain such comments during the Public Comment period. Public Comment will be limited to three (3) minutes per individual for each item addressed, unless there are more than ten (10) comment cards for each item, in which case the Public Comment will be limited to one (1) minute per individual. The aforementioned limitation may be waived by the Board's Chair.

(NOTE: Pursuant to Government Code Section 54954.3(b) the legislative body of a local agency may adopt reasonable regulations, including, but not limited to, regulations limiting the total amount of time allocated for public testimony on particular issues and for each individual speaker.)

Members of the public who wish to address the Board are urged to complete a Speaker Card and submit it to the Board Secretary prior to commencement of the public meeting. The cards are available in the meeting room. However, should a member of the public feel the need to address a matter while the meeting is in progress, a card may be submitted to the Board Secretary prior to final consideration of the matter.

It is requested that individuals who require the services of a translator contact the Board Secretary no later than the day preceding the meeting. Whenever possible, a translator will be provided. Sign language interpreters, assistive listening devices, or other auxiliary aids and/or services may be provided upon request. To ensure availability, you are advised to make your request at least 72 hours prior to the meeting you wish to attend. (323) 881-8291 or (323) 881-8295

SI REQUIERE SERVICIOS DE TRADUCCION, FAVOR DE NOTIFICAR LA OFICINA CON 72 HORAS POR ANTICIPADO.

The meeting is recorded, and the recording is kept for 30 days.

Los Angeles Regional Interoperable Communications System

PROJECT DESCRIPTION

Events of 9-11-01 have highlighted the need for first responders to be able to communicate with each other. Emergency communications primarily address local jurisdictional needs. Most agencies utilize separate radio towers and equipment, often co-located as seen here, and separate radio frequencies.

Currently, there is duplication of costs and first responders cannot communicate with each other. Many legacy systems around the County are obsolete and well beyond their useful life. The LA-RICS Project Vision is to construct, own, operate, and maintain a regional, interoperable public safety radio system. The program will establish a County-wide public safety wireless voice and data radio system for all first and secondary responders. Existing radio frequencies will be pooled and the current infrastructure utilized wherever practical. New FCC licensed broadband spectrum will be utilized.

Design, construction, and deployment of two County-wide systems (1) Land Mobile Radio (LMR) voice network will utilize a pool of 88 existing communications sites and (2) Long Term Evolution (LTE) broadband data network will utilize a pool of 231 existing communications sites. Both systems will comply with CEQA and NEPA standards.

Project and Construction Management Services will provide network, infrastructure, project, and advisory services across 5 program phases for each of the LMR and LTE projects:

- **Phase 1 - System design**
- **Phase 2 - Site construction and modification**
- **Phase 3 - Supply telecommunication system components**
- **Phase 4 - Telecommunications system implementation**
- **Phase 5 - Telecommunications system maintenance**

Location:
2525 Corporate Place, Suite 100
Monterey Park, CA 91754

Authority:
Los Angeles Regional Interoperable Communications System

Management:
LA-RICS Project Team

Consultant:
Jacobs Program Management Company

Communications Vendor:
LMR - Motorola Solutions, Inc.
LTE - Motorola Solutions, Inc.

LA-RICS

Monthly Report No. 42
For September, 2015
Submitted September 25, 2015

AGENDA ITEM E

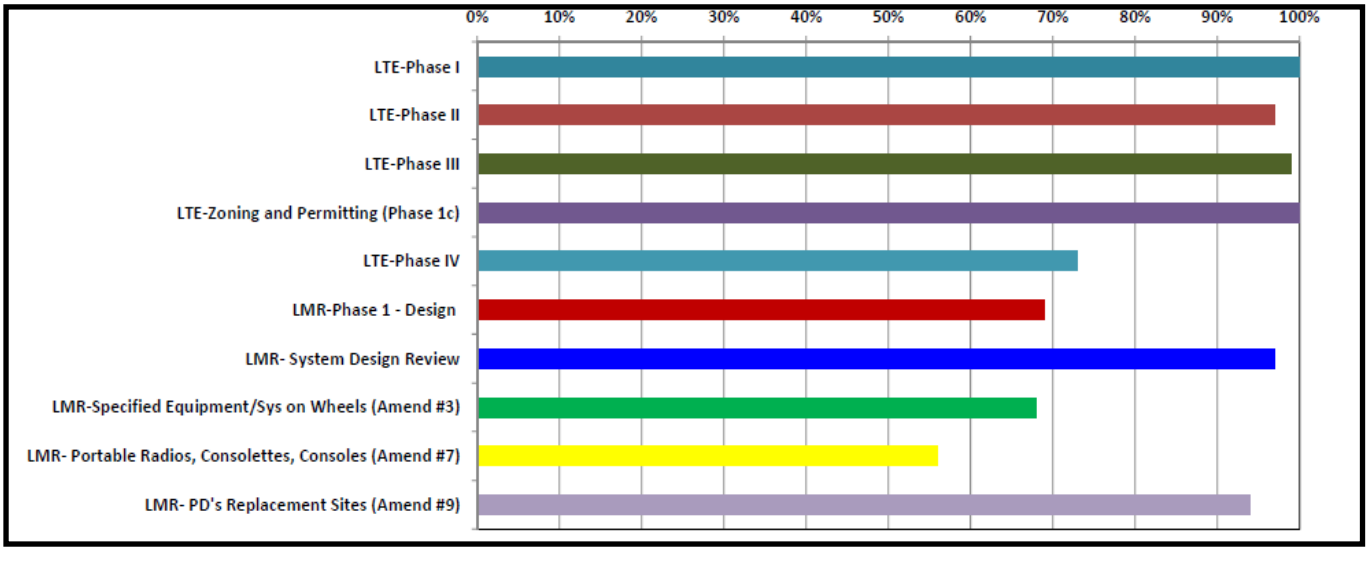
PROGRAM DASHBOARD

CATEGORY	RATING	CHANGE	COMMENTS
SAFETY		NO CHANGE	
QUALITY		NO CHANGE	
SCHEDULE		CHANGE	Construction is scheduled to complete by September 30, 2015.
COST/BUDGET		CHANGE	REVISED GRANT AMOUNT FROM NTIA
RISK		CHANGE	GRANT CAP RESPONSE AND COMPLETION OF SITES UNDER THE AMENDED PROGRAM
PROJECT STAFFING		CHANGE	CHANGE MANAGEMENT IS CREATING A STAFFING SHORTAGE FOR PORCESSING DAILY WORK.

ACTIVITIES STATUS

ITEM	STATUS	DUE DATE
LTE PHASE I	COMPLETED	AUGUST, 2015
LTE PHASE II	IN PROGRESS	SEPTEMBER, 2015
LTE PHASE III	IN PROGRESS	SEPTEMBER, 2015
LTE ZONING AND PERMITTING (PHASE 1C)	IN PROGRESS	SEPTEMBER, 2015
LTE PHASE IV	IN PROGRESS	SEPTEMBER, 2016
LMR PHASE 1 DESIGN	IN PROGRESS	NOVEMBER, 2015
LMR SYSTEM DESIGN	IN PROGRESS	DECEMBER, 2015
LMR SPECIFIED EQUIPMENT/SYS ON WHEELS (AMEN #3)	IN PROGRESS	OCTOBER, 2015
LMR PORTABLE RADIOS, CONSOLETTES, CONSOLES (AMEND #7)	IN PROGRESS	NOVEMBER, 2015
LMR PD's REPLACEMENT SITES (AMEND #9)	IN PROGRESS	DECEMBER, 2015

DELIVERABLES PROGRESS REPORT



AGENDA ITEM E

LA-RICS MASTER CALENDAR

October 2015 (Proposed)						
Sunday	**Monday**	**Tuesday**	**Wednesday**	**Thursday**	**Friday**	**Saturday**
				1 JPA Board Mtg	2	3
4	5 1400 – LTE System Design & Site Meeting w/MSI	6 0900 – WESM Mtg 1000 – LMR Weekly Site & System Design Mtg	7 0800 – Weekly LTE Backhaul Mtg 1330 - LA-RICS LMR Early Deployment / LMR Project Review Status	8 1400 - LA-RICS LTE/LMR Weekly Change Management Meeting	9	10
11	12 1400 – LTE System Design & Site Meeting w/MSI	13 0900 – WESM Mtg 1000 – LMR Weekly Site & System Design Mtg	14 0800 – Weekly LTE Backhaul Mtg 1330 - LA-RICS LMR Early Deployment / LMR Project Review Status	15 1400 - LA-RICS LTE/LMR Weekly Change Management Meeting	16	17
18	19 1400 – LTE System Design & Site Meeting w/MSI	20 0900 – WESM Mtg 1000 – LMR Weekly Site & System Design Mtg	21 0800 – Weekly LTE Backhaul Mtg 1330 - LA-RICS LMR Early Deployment / LMR Project Review Status	22 1400 - LA-RICS LTE/LMR Weekly Change Management Meeting	23	24
25	26 1400 – LTE System Design & Site Meeting w/MSI	27 0900 – WESM Mtg 1000 – LMR Weekly Site & System Design Mtg	28 0800 – Weekly LTE Backhaul Mtg 1330 - LA-RICS LMR Early Deployment / LMR Project Review Status	29 1400 - LA-RICS LTE/LMR Weekly Change Management Meeting	30	31

AGENDA ITEM E

LTE TECHNOLOGY UPDATES

- **LMR/LTE Shared Site Activities**
  - **Continued review of all shared LMR/LTE sites**
- **Issuance of NTP 32 for the purchase of five (5) Cisco routers and five (5) units of data and related work for testing eNodeB sites for backhaul testing**
- **Issuance of Amendment 13 for the removal of seventy-seven (77) PSBN sites, replacement of one (1) PSBN site, reconciliation of equipment, and various cost changes.**
- **Ongoing IMS activities**
- **Ongoing Weekly LTE System Design and Site Development Meetings as well as daily calls**
- **Ongoing LTE project reports received weekly/ monthly**
  - **Weekly Status Report**
  - **Monthly Status Reports**
  - **Integrated Master Schedule (IMS)**
- **The ongoing backhaul design for static sites is complete**
- **PSBN testing plan reviewed and approved**
- **PSBN backhaul installation for leased fiber circuits along with MW is 50% complete**
- **All 15 COWS have been outfitted with LTE equipment and deliveries to each designated location has started**
- **SCE utility designs are completed**

LMR TECHNOLOGY UPDATES

- **LMR/LTE Shared Site Activities**
  - **Continued review of all shared 39 LTE/ LMR sites**
- **Ongoing Working Weekly LMR System Design and Site Documentation meetings**
  - **14 of 25 Site drawings reviewed and complete, 11 Site reviews are due this week**
- **Ongoing Early Deployment engineering**
  - **Began to develop fleet mapping procedures for Sheriff Test radios**
  - **Acceptance Test Plans complete**
- **Completed final review of Motorola Design Deliverables**
  - **Reviewed with Authority staff and Motorola to document final comments**
- **Microwave Backhaul design analysis**
  - **Reviewed paths and reconfigured design to make the design more efficient by using fewer sites and closing local rings**
- **Ongoing FCC Licensing Meeting**
  - **Discussion of path forward for all licensing Issues. RFQ for FCC license T-Band frequency sets at all sites.**
  - **700 MHz planning and submission for additional five frequencies pairs and seeking Letters of Concurrence from current operators**
- **Ongoing LMR project reports received weekly/ monthly:**
  - **Weekly Status Report**
  - **Monthly Status Report**
  - **Integrated Master Schedule (IMS)**
  - **Site Analysis and Inclusion of USFS Sites**
  - **Participated in Joint Operations and Technical Committee meeting**

LTE SITES/CIVIL DELIVERABLES

- **Received SHPO concurrence for15 FCC 620 forms for the 15 COW sites**
- **Received updated FONSI to include LAPDPAC**
- **Supported the Authority in negotiations with MSI/ GD regarding cost of implementation of revised CMRs**
- **Participated in weekly meetings with NTIA to discuss follow on environmental work**
- **Continued oversight of MSI/GD environmental compliance efforts**
- **Continued to support design process regarding environmental constraints**
- **SHPO clearance as well as all outstanding environmental compliance tasks have been cleared**
- **2 CHP or State sites has been dropped and 13 COW sites remaining**
- **COW deployment has been performed for 11 of the 13 sites as of 9/18**

LMR SITES/CIVIL DELIVERABLES

- **Attended teleconferences with LA City Mayor's Office Staff, AECOM, and FEMA personnel to discuss NEPA approach**
- **Jacobs submitted a Revised Preliminary Administrative Draft PEA to the City for AECOM review on August 27, 2015. Jacobs attended a teleconference with AECOM and the City on September 4, 2015 to review the PEA and on September 17, 2015 to discuss their written responses to that draft**
- **Continued FCC 620/621 preparation for LMR sites**
- **Continued preparation of the Biological Assessment**

JACOBS

LA-RICS

LA RICS LMR Summary Schedule

01-Jul-15 07:01
Page: 1 of 1
LA RICS_LMR_IMS_repl-2 Data Date: 21-Mar-15

Summary
Actual Work
Remaining Work
Critical Remaining Work
Baseline Milestone
Milestone
Milestone

Activity ID	Activity Name	Start	Finish	Total Float	% Complete
LA-RICS MSI LMR Integrated Master Schedule (IMS) Replan		**28-Aug-13 A**	**18-Mar-19**	**-256**	**27.84%**
Phase 1 - LMR System Design		**28-Aug-13 A**	**24-Nov-15**	**586**	**69.26%**
LMR_389	Authority LMR Project start / Contract Signed	28-Aug-13 A			100%
LMR_390	Notice to Proceed Phase 1	09-Sep-13 A			100%
Project Management Plan		09-Sep-13 A	23-Dec-13 A		100%
LA-RICS Deliverables		15-Jul-15	15-Oct-15	-138	0%
LA-RICS Provides Access to Core Sites		18-Sep-13 A	18-Mar-14 A		100%
Early Shipment		27-Sep-13 A	10-Dec-14 A		100%
Amendment 3 - Specified Equipment Shipment and System on Wheels		20-Dec-13 A	21-Oct-15	-232	67.53%
Amendment 4 - Station B Equipment		20-Dec-13 A	03-Nov-15	-241	66.24%
Integration of SOW and STB		23-May-14 A	09-Jun-14 A		100%
Amendment 5 - VDC Core 2 Deployment		17-Apr-14 A	06-May-14 A		100%
Amendment 7 - Portable Radio Equipment, Consolettes, & Consoles		07-May-14 A	24-Nov-15	-256	55.61%
Amendment 8 - Portable Radios and Radio Accessories		28-Aug-14 A	22-Sep-14 A		100%
Project Description Preparation		18-Sep-13 A	06-Dec-13 A		100%
Amendment 9 - Project Descriptions for 26 potential replacement sites		26-Nov-14 A	01-May-15	730	94.34%
Environmental Review		15-Jul-14 A	02-Oct-15	-246	77.99%
Design Review		09-Oct-13 A	24-Nov-15	-256	69.83%
Phase 1a - Licensing Process		**23-Mar-15**	**02-Jul-15**	**298**	**0%**
LMR_1547	License Preparation	23-Mar-15	01-Jul-15	297	0%
LMR_1548	FCC Licensing Processing	02-Jul-15	02-Jul-15	297	0%
LMR_1549	B.1.6 FCC License and Application Forms - FCC Licenses Granted		02-Jul-15	298	0%
Phase 1b - Submit Required Permits & Approvals		**05-Oct-15**	**20-Jan-16**	**-2**	**0%**
Zoning Permit		05-Oct-15	31-Dec-15	-2	0%
Building Permits		26-Oct-15	20-Jan-16	-2	0%
Receive Permit Approvals		10-Nov-15	20-Jan-16	-2	0%
Phase 2 - Site Construction and Site Modification		**28-Sep-15**	**22-Dec-16**	**53**	**0%**
LMR_1855	Notice to Proceed Phase 2 Received for Materials		02-Oct-15	-229	0%
LMR_1856	Notice to Proceed Phase 2 Received for Sites		02-Oct-15	-199	0%
Notice to Proceed Phase 2 for Sites (Broken out by Site #)		28-Sep-15	27-Jan-16	-2	0%
Site Construction Materails		05-Oct-15	03-Feb-16	-207	0%
Site Build / Modiifcations		18-Nov-15	22-Dec-16	53	0%
Phase 3 - Supply LMR System Components		**02-Jul-15**	**24-Aug-16**	**398**	**0%**
LMR_6425	B.1.6 FCC Licensing	02-Jul-15	02-Jul-15	297	0%
LMR_3893	Notice to Proceed Phase 3		24-Nov-15	-256	0%
LMR_6800	B.3.9 System Management and Monitoring Subsystem	20-Apr-16	20-Apr-16	486	0%
Manufacturing / Staging / Site Development and Test		25-Nov-15	24-Aug-16	8	0%
Phase 4 - LMR System Implementation		**23-Mar-15**	**18-Mar-19**	**-256**	**0%**
LMR_6805	B.4.1.1.1.7 System Management and Monitoring Subsystem		20-Apr-16	486	0%
LMR_3921	Notice to Proceed Phase 4		09-May-16	-230	0%
RF Emission Safety Report		23-Mar-15	31-Aug-15	646	0%
Implementation & Testing		11-Feb-16	16-Mar-18	-256	0%
Warranty - 12 months		19-Mar-18	18-Mar-19	-256	0%
Phase 5 - LMR System Maintenance		**18-Mar-19**	**18-Mar-19**	**-256**	**0%**

AGENDA ITEM E

LA RICS LTE MASTER SCHEDULE

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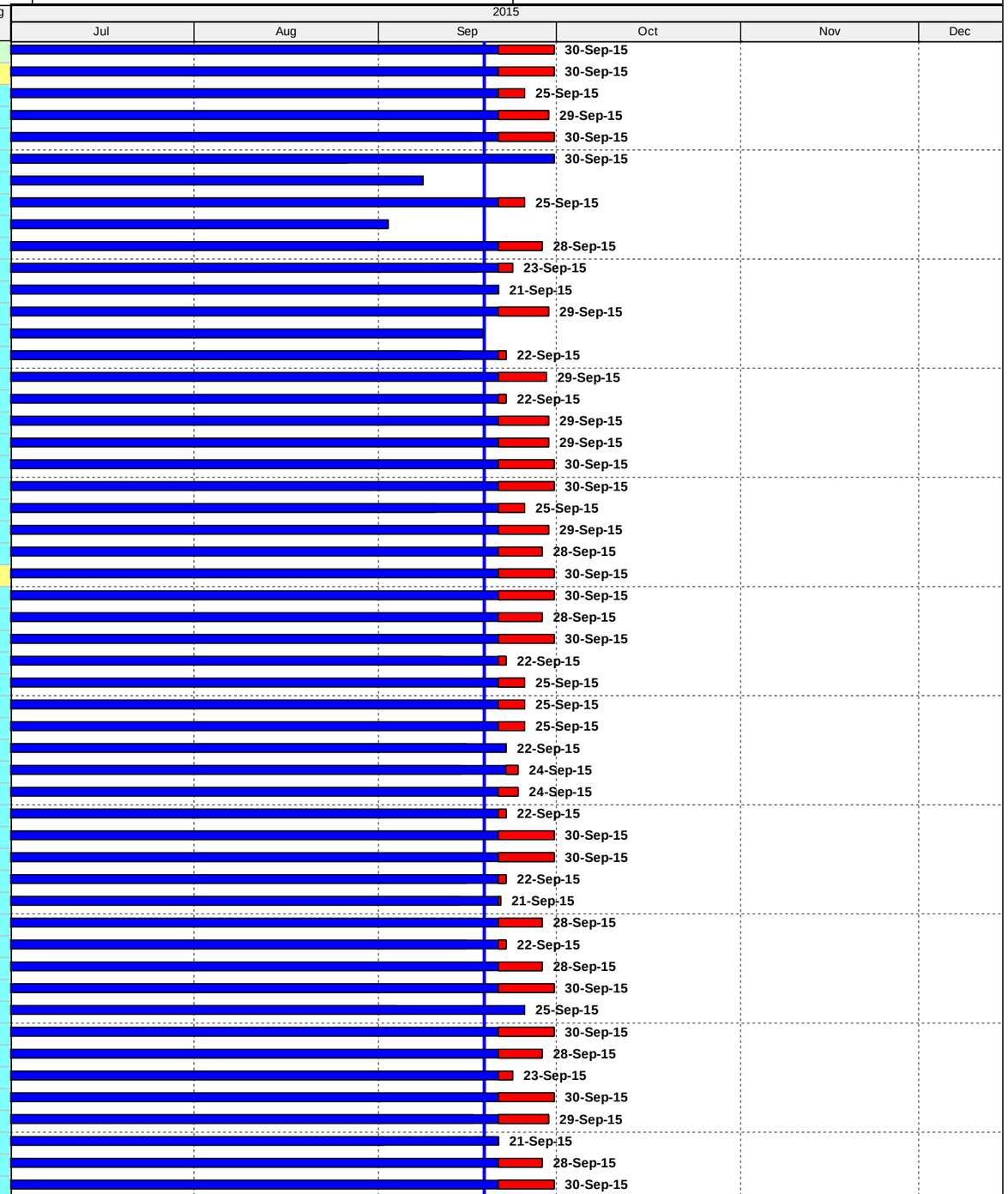
Remaining Level of Effort | Remaining Work
Actual Level of Effort | Critical Remaining Work
Actual Work | (New Bar)
(New Bar) | Milestone

Activity ID	Activity Name	Start	Finish	Remaining Duration
Total		04-Feb-14 A	30-Sep-15	8
LA_City		04-Mar-14 A	30-Sep-15	8
LA.LAPD077		12-Mar-14 A	25-Sep-15	5
LA.LAPDDVN		12-Mar-14 A	29-Sep-15	7
LA.LAPDFTH		12-Mar-14 A	30-Sep-15	8
LA.LAPDHLB		04-Mar-14 A	30-Sep-15	0
LA.LAPDHWD		12-Mar-14 A	08-Sep-15 A	0
LA.LAPDMIS		12-Mar-14 A	25-Sep-15	5
LA.LAPDNED		12-Mar-14 A	02-Sep-15 A	0
LA.LAPDNHD		12-Mar-14 A	28-Sep-15	6
LA.LAPDNWT		12-Mar-14 A	23-Sep-15	3
LA.LAPDOLY		10-Mar-14 A	21-Sep-15	0
LA.LAPDPAC		12-Mar-14 A	29-Sep-15	7
LA.LAPDRAM		12-Mar-14 A	18-Sep-15 A	0
LA.LAPDTOP		12-Mar-14 A	22-Sep-15	2
LA.LAPDVNS		12-Mar-14 A	29-Sep-15	6
LA.LAPDWIL		12-Mar-14 A	22-Sep-15	2
LA.LAPDWLA		12-Mar-14 A	29-Sep-15	7
LA.LAPDWVD		12-Mar-14 A	29-Sep-15	7
LA.LAPP001		12-Mar-14 A	30-Sep-15	8
LA.LDWP243		12-Mar-14 A	30-Sep-15	8
LA.SEP		12-Mar-14 A	25-Sep-15	5
LA.SWP		12-Mar-14 A	29-Sep-15	7
LA.VPC		12-Mar-14 A	28-Sep-15	6
LA_County		21-Feb-14 A	30-Sep-15	8
LA.BMT		12-Mar-14 A	30-Sep-15	8
LA.CCT		12-Mar-14 A	28-Sep-15	6
LA.CEN		12-Mar-14 A	30-Sep-15	8
LA.FCCF		12-Mar-14 A	22-Sep-15	2
LA.LACHAR		12-Mar-14 A	25-Sep-15	5
LA.LACOLV		12-Mar-14 A	25-Sep-15	5
LA.LACUSC		12-Mar-14 A	25-Sep-15	5
LA.LAN		12-Mar-14 A	22-Sep-15	0
LA.LASDALD		12-Mar-14 A	24-Sep-15	2
LA.LASDCSN		12-Mar-14 A	24-Sep-15	4
LA.LASDIDT		12-Mar-14 A	22-Sep-15	2
LA.LASDLKD		12-Mar-14 A	30-Sep-15	8
LA.LASDLNX		12-Mar-14 A	30-Sep-15	8
LA.LASDNCC		12-Mar-14 A	22-Sep-15	2
LA.LASDNWK		12-Mar-14 A	21-Sep-15	1
LA.LASDPRV		12-Mar-14 A	28-Sep-15	6
LA.LASDSCV		12-Mar-14 A	22-Sep-15	2
LA.LASDSDM		21-Feb-14 A	28-Sep-15	6
LA.LASDTEM		12-Mar-14 A	30-Sep-15	8
LA.LHS		12-Mar-14 A	25-Sep-15	0
LA.MLM		12-Mar-14 A	30-Sep-15	8
LA.ONK		12-Mar-14 A	28-Sep-15	6
LA.PHN		12-Mar-14 A	23-Sep-15	3
LA.PLM		12-Mar-14 A	30-Sep-15	8
LA.RANCHO		12-Mar-14 A	29-Sep-15	7
LA.SLA		12-Mar-14 A	21-Sep-15	0
LA.WAL		12-Mar-14 A	28-Sep-15	6
LA.WHD		12-Mar-14 A	30-Sep-15	8



AGENDA ITEM E

JACOBS

LA-RICS

LA RICS LTE MASTER SCHEDULE

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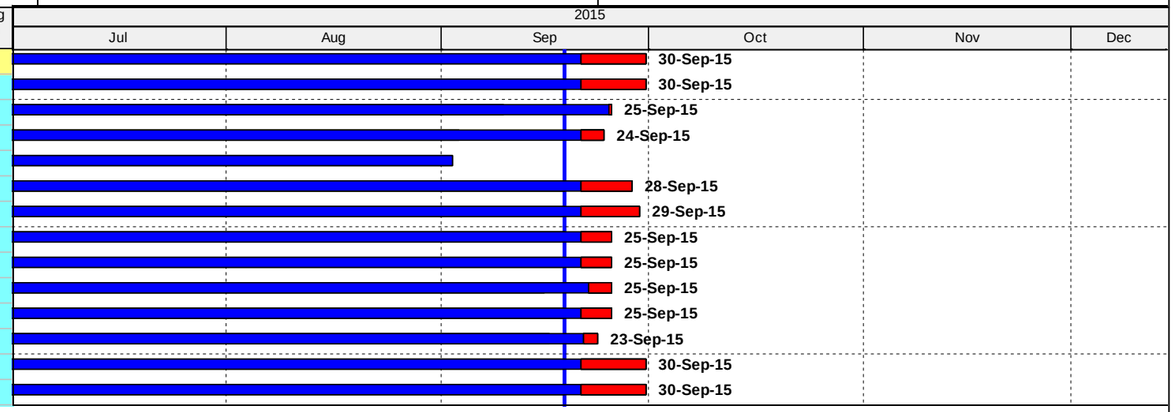
PSBN_FS5-23... Data Date: 19-Sep-15

Remaining Level of Effort | Remaining Work
Actual Level of Effort | Critical Remaining Work
Actual Work | (New Bar)
(New Bar) | Milestone

Activity ID	Activity Name	Start	Finish	Remaining Duration
Independent Cities		**04-Feb-14 A**	**30-Sep-15**	**8**
LA.ARCPD01		**04-Feb-14 A**	**30-Sep-15**	**8**
LA.AZPD001		**12-Mar-14 A**	**25-Sep-15**	**1**
LA.CLM		**12-Mar-14 A**	**24-Sep-15**	**4**
LA.CPTFD04		**12-Mar-14 A**	**02-Sep-15 A**	**0**
LA.ELMNTPD		**12-Mar-14 A**	**28-Sep-15**	**6**
LA.FS5		**12-Mar-14 A**	**29-Sep-15**	**7**
LA.GARD001		**12-Mar-14 A**	**25-Sep-15**	**5**
LA.LBFD012N		**12-Mar-14 A**	**25-Sep-15**	**5**
LA.LBPDHQ		**12-Mar-14 A**	**25-Sep-15**	**4**
LA.PASA001		**12-Mar-14 A**	**25-Sep-15**	**5**
LA.PASDNPD		**12-Mar-14 A**	**23-Sep-15**	**2**
LA.VEFD001		**12-Mar-14 A**	**30-Sep-15**	**8**
LA.VEFD003		**12-Mar-14 A**	**30-Sep-15**	**8**



AGENDA ITEM E

Monthly Report #25

Reporting Period: 08/24/15 thru 09/11/15

Los Angeles Regional Interoperable Communications System (LA-RICS) - Land Mobile Radio System

Motorola Solutions, Inc.

AGENDA ITEM E

Table of Contents

1. Executive Summary

The Los Angeles Regional Interoperable Communications System Land Mobile Radio (LA-RICS LMR) program consists of the following five (5) phases; Phase 1 LMR System Design, Phase 2 LMR Site Construction and Site Modification, Phase 3 Supply LMR System Components, Phase 4 LMR System Implementation, and Phase 5 LMR System Maintenance. Phases 1-4 span over a five (5) year period which includes one (1) year of system warranty. Phase 5 provides the Authority with fifteen (15) one year options for Motorola to provide system monitoring and maintenance services.

The LA-RICS LMR program is currently in Phase 1 LMR System Design. Notices-To-Proceed numbers 1 through 13 have been issued authorizing distinct work for system Design services, the design and implementation of the initial deployment of the LMR system elements termed "Early Equipment", "Specified Equipment and System on Wheels", and "Station B Equipment", "Frequency Licensing", "UPS System", and "Portable Radios, Consolettes and Consoles", "Portable Radio Equipment", alternate sites "Project Descriptions", "Frequency Licensing for the Base System" and Bridge Warrant for Early and Specified Equipment.

Motorola and the Authority continue working with the United States Forrest Service (USFS) to explore the possibility of using USFS sites to enhance coverage in the Angeles National Forest.

This month's report for the LA-RICS LMR program covers the reporting period from ***08/24/15*** through ***09/11/15***. As of this reporting period Phase 1 LMR System Design is 69% complete. Associated Phase 1 tasks include A&E, Frequency Coordination (continues after final site confirmation), Site Access Agreements and Environmental Review which are currently in progress. These tasks are separate from the RF system design tasks. Once the Site Access Agreements and the Environmental Impact Report (EIR) process are complete, there will be a true up of the actual final site configuration and schedule for the LMR system. The primary Phase 1 activities for this period include:

LMR Design Review (97% Complete)
The LMR System Design is a compilation of documents that will define the architecture, functionality and performance of all of the subsystems that make up the LMR system. It includes all aspects of the system including performance criteria, reliability levels and testing procedures. System Design activities for this period included frequency identification and planning, evaluation of site parameter changes, development of subsystem architecture, and submittal of revised drafts sections of subsystem functional operations. A final set of site parameters was selected to complete the coverage design process. Motorola delivered the updated design documents which the Authority has approved. Discussions have occurred with the City of Los Angeles City as to how their needs can best be met within the LA-RICS system. The City is expected to a make a final decision in the coming weeks which will result in a new design review. Next steps will be to start construction drawings on the sites the Authority has secured permission for onsite work by Motorola.

- Test Plan Development (100% Complete)
  Acceptance Test Plans are a part of the LMR System Design deliverable. The test plans outline the test criteria and procedures that will be conducted during the implementation phase. The test plans are designed to demonstrate system functionality and system requirements. The test plans were delivered along with the LMR System Design documents. As part of the LMR System Design review process the Test Plans will be updated upon receipt of the comments from the

Authority.

- LA-RICS Deliverables - Authority Site Access Agreements
  Authority's efforts to develop and execute the applicable Site Access Agreements for the required sites in the LMR design. This task also includes access to the sites that will host the system's core switching network. Even though no agreements have been executed the Authority has made continued progress with the Member Agencies to finalize Site Access Agreements. This activity is primarily being driven by the Authority's Outreach Program. With the change of this activity from a task to a milestone it is no longer measuring progress and therefore we only show 0% or 100% complete for each Site Agreement.

The following table provides a dashboard snapshot of the projects' health signs.

LMR Project Dashboard			
Category	**Rating**	**Change**	**Comments**
Schedule			EIR milestones are under review for determination of schedule impact.
Quality			No quality issues to report
Risk			Risk items have been identified regarding; Spectrum, Site Access Agreements, and Site Conditions. FEMA has suggested an Environmental Process that has impacted the overall schedule..
Scope			Potential scope impacts. T.B.D. as project progrsses
Budget			Any budget impact due to environmental delay is yet to be determined.

2. Project Status

The following sections identify task activities during the reporting period and the planned activities for the next reporting period.

2.1 Tasks In Progress or Completed

The following depict the task activity that occurred during the current reporting period.

Activity Name	Activity Status
LA-RICS Deliverables	
Lease Negotiations & Site Access Use Agreement	In Process
NEPA FONSI	In Process
CEQA Notice of Determination	In Process
Project Descriptions	
Develop 3 Additional Project Descriptions (2of 3 Completed)	In Process

3. Project Risk Register

Title	Assigned	Impact	Risk Description	Status
Site Condition Changes	Authority	High	Site condition differences from RFP to current condition may impact ability to implement planned installations and delay or require changes to LMR design (e.g. coverage, backhaul, etc.) Changes in the LTE project and sites that have dropped due to availability have had an impact on the LMR at planned shared and or co-located sites. Evaluation of these impacts are under review.	Active
Environmental Process	Authority	High	The individual or collective determination of environmental impacts or mitigations may impact site work or even site viability. Environmental review process is impacting project implementation schedule.	Active
Site Access Agreements	Authority	High	Lease holders approvals are needed in order to implement LA-RICS improvements at sites.	Active
Spectrum Availability, 700 MHz	Authority	High	Lack of frequencies may impact coverage and/or site viability, necessitating design changes.	Active

4. Areas of Concern

This section describes any events and or circumstances of which the Contractor is aware that has delayed or may delay project activities and what corrective or remedial actions was taken or will be taken to resolve the issue. Outstanding Issues Log (the "OIL Log") entries are also tabulated and monitored in this section. "Oil Log" items include, for example, sequencing, infrastructure, site access, coordination issues, congestion of workers and equipment, time requirements for design, procurement, and installation.

ID	Event / Circumstance	Remedial Action Taken or Required
02-01	Early Construction of Some Sites	Authority determination if construction of some sites can be expedited in Q4 2015. However recent predictions on approval process are pushing expedited construction into Q1 2016.
02-02	System Design impacts due to changes in site conditions	Motorola and the Authority have analyzed probable site changes and suitable site replacement candidates. Adjusted tower heights at some of the sites may impact the coverage.
05-01	Impacts of filing Environmental Impact Report	MSI incorporated the EIR milestones into the project schedule which impacted the start of construction into 2016. MSI and Authority to continue with project schedule impact analysis to pull in project activities to improve revised project plan.

5. Disputes and Claims

This section describes any disputes, potential claims, and claims made during the reporting period.

Dispute / Claim / Potential Claim	Status / Actions	Resolution Date
None to report this period		

6. Financial Status

The following represents the invoice payments that were completed during the reporting period and the remaining amount to be invoiced and paid.

Invoice Payment Category	Invoice Payment Totals
Contract Sum Full Payable Amount (Phase 1)	$ 41,784,492
Cumulative Invoice Payments from Last Report	$ 36,351,250
Total Invoice Payments This Period	$
Remaining Amount to be Paid	$ 5,433,242

7. LA-RICS Master Schedule

An executive view depicting the status of the primary activities:

The project schedule for this report remains unchanged. Upon completion of the Environmental Impact Report and a revised site list for the system has been determined Motorola will develop a revised project schedule for the remaining site design tasks in Phase 1 and all of the tasks in Phases 2 through 4.

2.2 Tasks Planned for Next Period (09/14/15 thru 10/16/15)

The following depict the task activity that is planned for the next reporting period.

Activity Name	Planned Status
LA-RICS Deliverables	
Lease Negotiations & Site Access Use Agreement	On Going
Access to Core Sites	On Going
NEPA FONSI / CEQA Notice of Determination	On Going
Environmental Review & Documentation (Authority)	
Environmental Consultant Initiates CEQA & EHP/NEPA Analysis	On Going
Prepare Preliminary Draft EHP/NEPA Form	On Going
Prepare EIR	On Going
Project Descriptions	
Develop 1 Additional Project Descriptions (Agoura Hills)	On Going

2.3 Authority Look-Ahead Tasks (120-Day)

For the Authority planning purposes the following table provides a one hundred twenty (120) Day look-ahead of the Authority-specific activities to conduct coordination, inspections, approvals, consents, and or provide decisions necessary from the Authority to facilitate Contractor's progress.

Activity Name	Start
LA-RICS Deliverables	
Lease Negotiations & Site Access Use Agreement	09-Sep-13 A
LA-RICS Provides Access to Core Sites	18-Sep-13 A
NEPA FONSI / CEQA Notice of Determination	On Going
Environmental Review & Documentation (Authority)	
CEQA Exemption Applicability & Eligibility Screening & Assessment	On Going
Environmental Consultant Performs CEQA Environmental Review & Prepares Draft CEQA Determination	On Going
Lead Agency CEQA Determination	On Going
Consult Federal Agency and Prepare Draft NEPA Document	On Going
Prepare NEPA Document	On Going
Submit Final EHP & NEPA Document	On Going
Federal Lead Agency NEPA Determination	On Going
Complete Remaining Project Description of the 26 Potential Sites (Simpson Building)	On Plan to Finish
Complete 3 Additional Project Descriptions Review	On Plan to Finish
Phase 1b Submit Required Permits and Approvals	
See Environmental Review & Documentation tasks above	On Going

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Monthly Report - #19

Reporting Period: 8/24/15 thru 9/11/15

Los Angeles Regional Interoperable Communications System (LA-RICS) – Public Safety Broadband Network

Motorola Solutions, Inc.

Table of Contents

1. Executive Summary

The Los Angeles Regional Interoperable Communications System - Public Safety Broadband Network (LA-RICS PSBN) project is a 700 MHz Long Term Evolution (LTE) public safety mobile broadband network that will provide broadband services across the County of Los Angeles for the Authority's Member Agencies.

The LA-RICS Authority was awarded a Comprehensive Community Infrastructure (CCI) Broadband Technology Opportunity Program (BTOP) grant by Department of Commerce's National Telecommunications and Information Administration (NTIA) to deploy the LA-RICS PSBN system. The BTOP grant program requires that the LA-RICS PSBN system be compatible with the future Nationwide Public Safety Broadband Network (NPSBN) currently being designed and developed by FirstNet, an independent authority within the NTIA. Additionally the Authority executed a Spectrum Manager Lease Agreement (SMLA) with FirstNet for spectrum usage rights to operate on the 700 MHz public safety broadband spectrum (D-Block). The LA-RICS-PSBN system provides the Authority with the opportunity to work cooperatively with FirstNet, while participating in testing and providing input in what will ultimately form the National Public Safety Broadband Network (NPSBN).

The LA-RICS PSBN program consists of the following five (5) phases; Phase 1 PSBN System Design, Phase 2 PSBN Site Construction and Site Modification, Phase 3 Supply PSBN Components, Phase 4 PSBN System Implementation, and Phase 5 PSBN Maintenance. Phases 1-4 must have construction activities substantially completed by September 30, 2015 to be in compliance with the BTOP grant funding program. The cost for all Work performed that is not covered by the BTOP grant program will be the sole responsibility of the Authority. Phase 5 provides the Authority with the first five (5) years of one year options for Motorola to provide system monitoring and maintenance services.

On March 10, 2014 the Authority issued **NTP 1** authorizing Motorola to begin all work in Phase 1 for System Design services. Phase 1 primary activities include:

- LA-RICS Deliverables
- Project Management Plans
- System Design
- Site Design
- RF Emissions Report
- Inventory and Management System

On April 7, 2014 the Authority issued **NTP 2** for **Amendment 2** to add detailed design services to Phase 1 for Additive Alternate No. 1, a Home Subscriber Server (HSS), and Additive Alternate No. 2, a Redundant Evolved Packet Core (EPC).

On June 20, 2014 the Authority issued **Amendment 3** to exercise the Unilateral Options for all Work pertaining to Phase 2, Site Construction and Site Modification, and Phase 3, Supply PSBN Components.

On June 20, 2014 the Authority issued **NTP 3** to begin limited work related to Phase 2 and Phase 3. Microwave equipment was excluded from NTP 3 until the Authority approves the backhaul design and issues a separate NTP. NTP 3 also authorized Motorola to proceed with all planning and non-site mobilization work related to Phase 2, Site Construction and Site Modification, however, no construction work at a specific project site location will be conducted until the Authority has received all required NEPA and/or any other applicable Federal and State Environmental approvals for each specific location.

On July 10, 2014 the Board of Directors approved **Amendment 4** for Phase 2, Site Construction and Site Modification, and Phase 3, Supply PSBN Components of Additive Alternate No. 1, a Home Subscriber Server (HSS) and Additive Alterative No. 2, a Redundant Evolved Packet Core (EPC).

On September 8, 2014 the Authority issued **NTP 4** to proceed with work related to Phase 3 Supply PSBN Components for Additive Alternate No. 1, a Home Subscriber Server (HSS). Phases 2 and 4 were excluded from NTP 4 as they relate to Additive Alternative No. 1. Per NTP 4, authorization to design and purchase the HSS have been issued but installation and implementation have been excluded.

On September 17, 2014 the Authority issued **NTP 5** authorizing Motorola to proceed with Work related to Site Construction and Site Modification under Phase 2 for Additive Alternate No. 1, Home Subscriber Server (HSS). With respect to Phase 2, Site Construction and Site Modification, the services to be performed for Additive Alternate No. 1 involve minor site preparation activities in order to receive applicable equipment racks within the existing communications rooms at the Fire Command and Control Facility.

On September 25, 2014 the Authority issued **NTP 6** authorizing Motorola to proceed with ordering 40 additional standard equipment packages. As of NTP 6, Motorola is not authorized to proceed with ordering any equipment that is dependent on final design approval from the Authority, including for microwave and backhaul, until such time as the Authority has approved the final design for such sites and issues an NTP. The final site and backhaul design will be completed within 60 days of the Authority finalizing site locations and tower configurations.

On September 26, 2014 the Authority issued **NTP 7** authorizing Motorola to proceed with Phase 4, PSBN Implementation Work. The work related to the installation of the Primary EPC at FCCF consists of installing, optimizing, testing, commissioning, and deploying all of the Authority-authorized portion of the PSBN including, without limitation, all hardware, software, physical and network infrastructure, data, and all other deliverables and other work necessary to implement the full functionality of the PSBN and training staff on the use of the PSBN. NTP 7 excludes installation of the System Management Monitoring Servers (SMMS - the servers required to manage and monitor the PSBN).

On October 1, 2014 the Authority approved **Amendment 6** for the removal of three (3) PSBN Sites and to make the changes necessary to reflect the replacement of undisguised antenna support structures to disguised antenna support structures at 32 PSBN Sites. Amendment 6 increases the Maximum Contract Sum by $2,613,300 from $175,583,275 to $178,196,575.

On October 10, 2014 the Authority issued **NTP 8** authorizing Motorola to modify the existing order of 40 sites contemplated in NTP No. 6 (standard antenna support structures - 70 foot undisguised monopoles) to order 40 sites worth of equipment considering any mix of antenna support structures (undisguised and/or disguised, with disguised antenna support structures limited to 31 sites pursuant to Amendment No. 6) that Motorola deems necessary to commence construction activities. As of this NTP, construction activities remain prohibited pending the Authority receiving FONSI and SHPO approvals.

On October 22, 2014 the Authority issued **NTP 9** authorizing Motorola to proceed with all Phase 4 Work related to the installation of the System Management and Monitoring Subsystem (SMMS) at the County of Los Angeles' Fire Department's Fire Command and Control Facility (FCCF). The NTP included the statement: “Motorola Solutions has agreed to provide a fully geo-redundant SMMS configuration (to

begin implementation in November, 2015)." Motorola provided clarification that the agreement was still under negotiation for cost and schedule delivery and that the deployment of the geo-redundant SMMS was predicated on the NTP for the redundant Evolved Packet Core (EPC).

On November 4, 2014 the Authority issued **NTP 10** authorizing Motorola to begin construction on 94 sites provided within the NTP.

On December 2, 2014 the Authority issued **NTP 11** authorizing Motorola to proceed with all Work necessary for ordering and installing site routers and core routers at FCCF, LAPDVDC, and all sites for Phase 3, Supply PSBN Components. NTP also authorized Motorola to proceed with all Work related to Phase 3 for Additive Alternate 2 Redundant EPC to be located at LAPDVDC.

On December 2, 2014 the Authority issued **NTP 12,** authorizing Motorola to proceed with ordering an additional 75 PSBN Sites worth of standard equipment, such as antenna support structures Evolved Packet Core (EPC) components, eNodeB components, antennas, and associated accessories for all sites that are not dependent on final design approval. Additionally, Motorola is authorized to proceed with the ordering of all Work related to Phase 3, Supply PSBN Components, and Phase 4, PSBN Implementation, for TMR Cabinets and TMR battery backup components for 75 PSBN Sites.

On December 30, 2014 the Authority issued **NTP 13,** authorizing Motorola to begin construction on 31 City of Los Angeles Sites listed in NTP.

On December 31, 2014 the Authority approved **Amendment 7** to make changes necessary to reflect the replacement of undisguised antenna support structures with various types of antenna support structures at eight PSBN Sites.

On January 22, 2015 the Authority issued **NTP 14,** authorizing Motorola to proceed with ordering 25 vehicular routers.

On January 28, 2015 the Authority issued **NTP 15,** authorizing Motorola to begin construction on the two sites VEFD001 and VEFD003

On February 5, 2015 the Authority approved **Amendment 8** for the removal of thirty-six (36) PSBN Sites, include six (6) new PSBN Sites and to make the changes necessary to reconcile the hose tower installation costs for twenty-eight (28) PSBN Sites. Amendment 8 decreases the Maximum Contract Sum from $178,196,575 to $166,254,679.

On March 3, 2015 the Authority issue **NTP 16**, authorizing Motorola to begin construction on the four sites; ARCPD01, AZPD001, ELMNTPD, LACF159.

On March 4, 2015 the Authority issue **NTP 17**, authorizing Motorola to proceed with ordering and implementing TMR cabinets for seventy-five (75) sites.

On March 3, 2015 the Authority and Motorola presented its project status report to the NTIA and NOAA representatives. The meeting highlighted the equipment procurement plan and implementation plan to deploy 182 sites by August 15, 2015. Motorola presented the updated PSBN system coverage maps based on the 182 sites.

On March 5, 2015 the Authority approved **Amendment 9** for the removal of twenty-four (24) PSBN Sites, include six (6) new PSBN Sites and to make the changes necessary to accommodate various changes in civil construction scope at applicable sites.. Amendment 9 decreases the Maximum Contract Sum from $166,254,679, to $158,930,274.

On March 10, 2015 the Authority issue **NTP 18**, authorizing Motorola to proceed with ordering the necessary microwave radio equipment and accessories to implement the PSBN microwave paths identified in the approved PSBN backhaul design.

On March 18, 2015 the Authority issue **NTP 19**, authorizing Motorola to proceed with all Work related to Phase 4 (PSBN implementation) for Additive Alternate 2, Redundant Evolved Packet Core (EPC) at the Los Angeles Police Department Valley Dispatch Center (LAPDVDC).

On April 2nd, 2015 the Authority issued a formal **Suspension Order**, directing Motorola to halt the procurement equipment.

On April 3rd, 2015 the Authority received a **Stop Work Notice** for all work and was issued a Corrective Action Plan (CAP) from NOAA to be submitted by April 13, 2015. Between 3/3/15 and 3/13/15 Motorola produced numerous supporting coverage scenarios for the Authority to include within the CAP response.

On April 16, 2015 the Authority issued a letter to Motorola requesting a plan for reduced scope and an analysis of cost impact. A Schedule was released on 5/07/15 and is updated on a weekly basis.

On May 7, 2015 the Authority issued **NTP 20**, authorizing Motorola to proceed with ordering the necessary microwave radio equipment and accessories to implement the PSBN microwave paths remaining as part of the CAP site list.

On May 7, 2015 the Authority issued **NTP 21**, partially cancelling the Suspension Order that was issued on April 3, 2015 and authorized construction to resume at the 69 sites identified in the Corrective Action Plan.

On May 7, 2015 the Authority issued **NTP 22**, directing Motorola to 1) look at options are returning Additive Alternate No. 1, the Redundant Evolved Packet Core (EPC), assigned to the Los Angeles Police Department Valley Dispatch Center (LAPDVDC) to Ericsson; (2) recover the redundant EPC for Motorola's use in other projects or (3) resell the Redundant EPC to a secondary market. Motorola is evaluating the cost impacts and the legal possibilities with the directive issued in this NTP.

On May 12, 2015 the Authority issued **NTP 23**, authorizing Motorola to order fiber optic equipment and provide services via contract between Fujitsu and Motorola in order to create a link between the FCCF and the City fiber ring. NTP 23 was limited to the County portion of the design.

On May 15, 2015 the Authority issued **NTP 24**, authorizing Motorola to order leased fiber services from AT&T, Verizon, and Time Warner to provide connections between the applicable CAP sites and the FCCF EPC site.

On May 15, 2015 the Authority issued **NTP 25**, directing Motorola to 1) return the excess PSBN equipment to its manufacturers, 2) recover the excess equipment for Motorola’s use in other projects,

or 3) resell the excess PSBN equipment to a secondary market, in accordance with the list of equipment in the NTP. Motorola is evaluating the list of equipment provided in the NTP and the cost impacts and the legal possibilities with the directive issued in this NTP.

On May 20, 2015 the Authority issued **NTP 26** Authorizing Motorola to order fiber optic equipment and provide services via contract between Fujitsu and Motorola to create a link between the EPC located at the Los Angeles County Fire Department's FCCF facility and the City Los Angeles fiber ring. NTP 26 expands upon the products and services in NTP 23 to include the City portion of the fiber scope.

On June 18, 2015 the Authority approved **Amendment 10** for the Inclusion of 15 Cell-On-Wheels and the Construction Restoration Work at 30 PSBN Sites.

On June 25, 2015 the Authority issued **NTP 27** Authorizing Motorola to proceed with all Phase 1 (System Design) Work for fifteen (15) Cell-On-Wheels (COWs) sites.

On June 30, 2015 the Authority issued **NTP 28** Authorizing Motorola to proceed with all Work related to construction restoration for thirty (30) PSBN Sites that have been removed from the program.

On June 30, 2015 the Authority issued **NTP 29** Authorizing Motorola to proceed with ordering nine hundred and seventy-five (975) VML-750 in-vehicle router units.

On July 16, 2015 the Authority approved **Amendment 11** to add 15 Cell-On-Wheels (COWs) and the PASDNPD site to the PSBN program.

On July 16, 2015 the Authority issued **NTP 30** Authorizing Motorola to proceed with all Phase 2 (Site Construction and Site Modification), Phase 3 (Supply PSBN components), and Phase 4 (PSBN Implementation) Work for fifteen (15) Cell-On-Wheels (COWs).

On August 13, 2015 the Authority approved **Amendment 12** to remove forty-two (42) sites from the PSBN system, authorize the removal of seven (7) tower foundations at the applicable restoration sites, to purchase 5,000 Universal Integrated Circuit Cards (UICC), purchase of five (5) CISCO routers and five (5) corresponding units of data services, and approvals for applicable change orders.

On August 13, 2015 the Authority issued **NTP 31** Authorizing Motorola to proceed with ordering five thousand (5,000) standalone universal Integrated Circuit Cards (UICCs)

<u>This report covers the period from 8/24/15 to 9/11/15</u>

On September 1, 2015 the Authority issued **NTP 32** authorizing Motorola to proceed with ordering five (5) CISCO routers and five (5) corresponding units of data and related Work that are capable of operating a 4G cellular aircard on a commercial carrier that will allow Motorola and the Authority to temporarily test eNodeB sites in the event that the permanent backhaul solution is not available at the time of site commissioning.

On September 4, 2015 the Authority approved **Amendment 13** to confirm the prior removal of 77 additional sites.

The following table provides a dashboard snapshot of the projects' health signs.

PSBN Project Dashboard			
Category	**Rating**	**Change**	**Comments**
Schedule			Testing and training will continue after the completion date of construction on 9/30/15.
Quality			No current quality issues to report.
Risk			The tight schedule to finish all sites construction by September 30, 2015 remains a challenge.
Scope			The reduction of the number of sites to be constructed and other requirements of the Corrective Action Plan may require contract amendments to adjust Scope in the current Agreement.
Budget			Motorola has submitted and will be submitting a substantial number of change orders that will require Authority review for resolution.

2. Project Status

The following sections identify task activities during the reporting period and the planned activities for the next reporting period.

2.1 Tasks In-Progress and Completed

The following depict the task activity that occurred during the current reporting period.

Activity Name	Activity Status
LA-RICS Deliverables	
Site Access Agreements & Right of Entry Permits	2 COW Sites
Provide Access and Escort Schedule to EPC and RAN Sites	As Needed
SHPO Submittal and Approvals	Completed
Zoning and Permitting Outreach	Completed
Supplemental EA & Approval	Completed
System Design Activities	
Site Network Re-Design due to Site Changes	In Progress
Backhaul Re-Design due to Site Changes	In Progress
Network Management System Design Update With Comments	In Progress
Cell on Wheels (COW) Design Activities	Completed
Site Design Activities	
Site Walk	Completed

Activity Name	Activity Status
Site Sketch Development due to Scope Changes	Completed
Site Sketch Approvals due to Scope Change	Completed
Site Surveys (1A) due to Scope Change	Completed
Zoning & Permitting	
FAA Determination	Completed
Construction Drawings	Completed
Site Construction & Site Modification (Phase 2)	
Site Layout - Construction Mobilization	Completed
Excavation and forming for Tower and Equipment Pad	Completed
Foundation Pour with Test Cylinders	Completed
Complete 3 day Cylinder Test	Completed
Tower Installed	Applicable Sites
Set Generator and Fuel Tank include plumbing test	Applicable Sites
Install Antennas and lines	Applicable Sites
Install New ground rods	Applicable Sites
Trenching New electrical service	Applicable Sites
Inspect any trenching (LARICS Rep and Muni Inspector)	Applicable Sites
Rough in New electrical service	Applicable Sites
Inspection of Rough in electrical	Applicable Sites
Ground Resistivity Test Completed	Applicable Sites
Final Electrical Hook up	Applicable Sites
Site Restoration Services for Canceled Sites (30 sites)	Completed
Supply PSBN Components (Phase 3)	
Order Fiber Connectivity Equipment as scope changes	Completed
Oder of VML broadband mobile routers (1,000)	Completed
Order of UICC cards (5,000)	Completed
System Implementation (Phase 4)	
LTE EPC Install & Configuration / Test Station (eNB)	In Progress
LTE Station (eNB), Battery Backup & Telecommunications (TMR) Cabinet Installation	In Progress
Fiber Equipment & Cable Installation (Indoor & Outdoor)	In Progress

2.2 Tasks Planned for Next Period (09/14/15 thru 10/16/15)

The following depict the task activities that are planned for the next reporting period.

Activity Name	Planned Status
LA-RICS Deliverables	
Provide Access to Sites	Completed
Right of Entry Agreements	Completed
Site Access Agreements	Completed
Zoning and Permitting Outreach	Completed
Supplemental EA & Approvals	Completed
Construction Inspections	In Progress
Zoning and Permitting	
Cell on Wheels (COW) Permit Activities due to scope change	Completed
Construction Drawings due to scope changes	Completed
Site Construction and Site Modification (Phase 2)	
Site Layout - Construction Mobilization	On Plan to Finish
Excavation and forming for Tower and Equipment Pad	On Plan to Finish
Foundation Pour with Test Cylinders	On Plan to Finish
Complete 3 day Cylinder Test	On Plan to Finish
Tower Installed	On Plan to Finish
Set Generator and Fuel Tank incl plumbing test	On Plan to Finish
Install Antennas and lines	On Plan to Finish
Install New ground rods	In Progress
Trenching New electrical service	In Progress
Inspect any trenching (LARICS Rep and Muni Inspector)	In Progress
Rough in New electrical service	In Progress
Inspection of Rough in electrical	In Progress
Ground Resistivity Test Completed	In Progress
Final Electrical Hook up	In Progress
System Implementation (Phase 4)	
LTE EPC Install, Configuration, Testing (Potential Reconfiguration)	As Needed
Redundant EPC (Additive Alternate #2) (Removal)	ON HOLD
LTE Station (eNB), Battery Backup & Telecommunications (TMR) Cabinet Installation	In Progress
Fiber Equipment & Cable Installation (Indoor & Outdoor)	In Progress
Microwave sites equipment	In Progress
Submit Closeout documents & as-built drawings	In Progress

2.3 Authority Look-Ahead Tasks (120-Day)

For the Authority planning purposes the following table provides a one hundred twenty (120) Day look-ahead of the Authority-specific activities to conduct coordination, inspections, approvals, consents, and or provide decisions necessary from the Authority to facilitate Contractor's progress.

Activity Name	Start
LA-RICS Deliverables	
Provide Access to Sites	On Plan to Finish
Right of Entry Agreements	On Plan to Finish
SHPO Submittal and Approval	On Plan to Finish
Site Access Agreements	On Plan to Finish
Supplemental EA and Route Modification Filings & Approvals	On Plan to Finish
System Design Activities	
Review Submitted Changes to System Design & Backhaul Design	On Plan to Finish
Acceptance Test Plan	
Revised ATP Review and Approvals	On Plan to Finish
Site Design Activities	
Site Walk Escorts	On Plan to Finish
Site Sketch Approvals	On Plan to Finish
Authority Approvals for Site Surveys and Geotechnical Studies	On Plan to Finish
Disguised Tower Determination	On Plan to Finish
Zoning Package Review and Approval	On Plan to Finish
Cell on Wheels Design Activities	On Plan to Finish
Zoning and Permitting	
Zoning Package Submittal and Approval	On Plan to Finish
Construction Package Review and Approval	On Plan to Finish
Building Permit Submittal and Approval	On Plan to Finish
Cell on Wheels Permit Activities	On Plan to Finish
Site Construction and Site Modification (Phase 2)	
Notice to Proceed Civil Construction Services for City of Los Angeles Sites	On Plan to Finish
Notice to Proceed for Independent Cities	On Plan to Finish
Site Inspections	As needed
Site Restoration Services for Canceled Sites (30 sites)	On Plan to Finish
Supply PSBN Components (Phase 3)	
Inventory PSBN Components	As needed
System Implementation (Phase 4)	
EPC & Network Management Installation Testing (Potential Reconfiguration)	As needed
PSBN Site Equipment Inspections	As needed
PSBN Training	On Plan to Start
PSBN Tuning and Testing	On Plan to Start
PSBN Coverage Optimization	On Plan to Start
PSBN As-Built Documentation Review	On Plan to Start

3. Project Risk Register

For this monthly report, the following items are at risk.

Title	Assigned	Impact	Risk Description	Status
Equipment Order NTPs	LA-RICS	High	NTP for spare equipment	Requires NTP for remaining units
Construction NTPs, SAAs, FONSI, EAs (FONSI / NHPA)	LA-RICS	High	Applicable remaining sites requiring NTPs for site construction and SAAs	Final SAAs for COW sites
Change Order Claims	LA-RICS	High	Multiple change requests are under review	Submitted claims currently under review.

4. Areas of Concern

This section describes any events and or circumstances of which the Contractor is aware that has delayed or may delay project activities and what corrective or remedial actions was taken or will be taken to resolve the issue. Outstanding Issues Log (the "OIL Log") entries are also tabulated and monitored in this section. "Oil Log" items include, for example, sequencing, infrastructure, site access, coordination issues, congestion of workers and equipment, time requirements for design, procurement, and installation.

ID	Event / Circumstance	Remedial Action Taken or Required
06-01	Fiber Connectivity	Began the ordering process for leased fiber circuits for applicable sites. Timeline for delivery for site testing is at risk for longer lead sites. Attempting to expedite lines with carriers.
10-01	Inadequate Commercial Power at Sites	Timelines for the power companies to deliver new commercial power is on the critical path for project completion. Authority and Contractor met with the power companies and were able to gain agreements that will help expedite power to the sites.

5. Disputes and Claims

This section describes any disputes, potential claims, and claims made during the reporting period.

Dispute / Claim / Potential Claim	Status / Actions	Resolution Date
Responsibility for Commercial Power at Sites with Inadequate Power	MSI and the Authority are in disagreement on the responsibility of the cost for commercial power to the meter.	TBD
Background Check Method and Security Escort	The Authority is in disagreement with MSI on the cost for security escorts.	TBD
Directed Change Orders	Multiple directed changes are either	TBD

Dispute / Claim / Potential Claim	Status / Actions	Resolution Date
	in dispute or are being challenged by the Authority.	

6. Financial Status

The following table represents the invoice payments that have been completed to date. The revised Contract Sum amount based on the Corrective Action Plan is being reviewed by the Authority and Motorola. For this reporting period the Contract Sum is based on Amendment 14.

PSBN Invoice Payment Category	Invoice Payment Totals
PSBN Contract Sum Full Payable Amount (Phases 1-4)	$ 91,771,405
Cumulative Invoice Payments from Last Report	($ 31,537,325)
Total Invoice Payments This Period	($ 0)
Remaining Amount to be Paid	$ 60,234,080

7. LA-RICS PSBN Project Schedule

The Suspension Order and subsequent Corrective Action Plan required the project schedule re-planning efforts to start over with a revised site list, revised scope, and remobilization start dates. Motorola presented a new schedule update on May 7, 2015, reflecting the revised scope and remobilization. The current schedule indicates applicable construction drawings and permit activities, construction activities, equipment placement, and a basic site test that may or may not use temporary power and temporary backhaul. The basic site test has been performed at the warehouse and will only be repeated at the physical site upon completion of final power and backhaul. Final power and backhaul at most sites will occur during the warranty period. Final Documentation, Testing, Punchlist Resolution, and Training will occur during the warranty period. For this reporting period the attached PDF file is used in lieu of the Executive Snapshot view and provides a summary view by phase by site with the exception of the tasks mentioned above.

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See attached PSBN Summary Schedule (PDF file)

LA-RICS

LOS ANGELES REGIONAL INTEROPERABLE COMMUNICATIONS SYSTEM AUTHORITY

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PATRICK J. MALLON
EXECUTIVE DIRECTOR

October 2, 2015

To: LA-RICS Authority Board of Directors

From: Patrick J. Mallon
Executive Director

STATUS OF MEMBERSHIP OPT-OUT AND IMPACT ON FUNDING PLAN

The purpose of this discussion item is to update your Board on the number of member agencies that have opted-out of the LA-RICS Membership to date, and corresponding impact on the Adopted Funding Plan. As of the Board agenda filing date, there are no updates to report from that provided at your September 10, 2015 meeting.

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Enclosure

AGENDA ITEM G

Member Agencies who have Opted-Out

Member Agencies		% of Cost Allocation
City of Alhambra **Date of Withdrawal: 09/22/14**		0.54%
Explanation of Withdrawal of Membership	On January 14, 2015 Lauren Myles, Alhambra City Clerk, sent the Authority Minutes Excerpt for the September 22, 2014 regular meeting of the Alhambra City Council noting two Systems being built rely heavily on grant funds and those funds are at risk of being lost due to inability to perform within the timeline required by the grants. Another issue of concern is the JPA's funding plan being based on 100% participation of members, despite the JPA Board adopting a motion to allow for a 180-day no-cost opt-out period. As members withdraw from the JPA, the costs borne by the remaining members will rise. Alhambra anticipates majority of independent cities will withdraw and thus the belief is this would result in a significant cost increase to the City of Alhambra.	
City of Bell Gardens **Date of Withdrawal: 08/24/2015**		0.16%
Explanation of Withdrawal of Membership	No reason cited in letter of withdrawal.	
City of Beverly Hills **Date of Withdrawal: 07/01/2015**		0.26%
Explanation of Withdrawal of Membership	Uncertainty of cost required to buildout the Systems, issues with resiliency of the funding plan and unknown service levels.	
City of Burbank **Date of Withdrawal: 08/20/2014**		0.80%
Explanation of Withdrawal of Membership	No reason cited in letter of withdrawal.	

Member Agencies		% of Cost Allocation
City of Calabasas **Date of Withdrawal: 06/11/14**		0.10%
Explanation of Withdrawal of Membership	City Manager Anthony Coroalles provided a letter indicating the City's withdrawal from LA-RICS; however, no official documentation was provided to the City Council. A phone call was placed to the City Manager regarding when the City Council took formal action and the reasons for withdrawing from LA-RICS.	
City of El Segundo **Date of Withdrawal: 08/19/2014**		0.17%
Explanation of Withdrawal of Membership	No reason cited in letter of withdrawal.	
City of Gardena **Date of Withdrawal: 07/15/14**		0.25%
Explanation of Withdrawal of Membership	Police Chief Ed Medrano of Gardena in his Staff Report to City Council stated that while supportive of LA-RICS, City staff has determined that it is not in the best financial, technical and operational interest of the City at this juncture to remain a member of LA-RICS without having a clearer understanding of the costs, service level and overall viability of the system over a fifteen to thirty-year horizon.	

Member Agencies		% of Cost Allocation
City of Glendale **Date of Withdrawal: 07/24/14**		1.43%
Explanation of Withdrawal of Membership	City Manager Scott Ochoa in his Staff Report to City Council provided an analysis of LA-RICS and Glendale needs and determined that an attractive feature of the LA-RICS system is that it increases the coverage area of local agencies to a Los Angeles Countywide radio system. However, Glendale radio users currently have such capabilities through its partnership with other agencies in the Interagency Communications Interoperability System (ICIS), which has operated as a JPA since 2003. Of note, it was recently verified that there is a technology integration path between the ICIS and LA-RICS network, contained within the LA-RICS vendor contract which allows full interoperability between both radio networks. Of significant importance, is the LA-RICS LTE grant requirement that services be offered to non-member agencies of the JPA on a subscription basis. As host city of the ICIS radio system, Glendale is compelled by the ICIS JPA to provide its members 24 months advance notice of its intent to separate from the JPA. Of late, ICIS has been approached by many independent cities expressing interest in joining the JPA, with the City of Santa Monica submitting a formal letter of intent to join. Based on the foregoing, at this time staff does not believe it is in the best financial, technical and operational interest of the City of Glendale to remain a member of LA-RICS, thus it is recommending withdrawal from the LA-RICS JPA.	
City of Hermosa Beach **Date of Withdrawal: 10/27/2014**		0.12%
Explanation of Withdrawal of Membership	Verbal notice given via telephone conversation. Pending written notice of withdrawal.	
City of Lancaster **Date of Withdrawal: 08/11/2015**		0.66%
Explanation of Withdrawal of Membership	No reason cited in letter of withdrawal.	

Member Agencies		% of Cost Allocation
City of Long Beach **Date of Withdrawal: 01/08/2015**		3.13%
Explanation of Withdrawal of Membership	City Manager, Patrick West notified LA-RICS of withdrawal, citing no reason, however stating Long Beach will continue to be supportive of the LA-RICS project, and will, where feasible, support the construction of infrastructure necessary for the implementation of the LA-RICS project within the City of Long Beach.	
City of Manhattan Beach **Date of Withdrawal: 09/30/2014**		0.24%
Explanation of Withdrawal of Membership	No reason cited in letter of withdrawal.	
City of Monrovia **Date of Withdrawal: 03/03/2015**		0.31%
Explanation of Withdrawal of Membership	No reason cited in letter of withdrawal.	
City of Monterey Park **Date of Withdrawal: 08/21/2015**		0.43%
Explanation of Withdrawal of Membership	Uncertainties how the final work plan, cost share of the project, required equipment replacement costs to the Police and Fire Departments as well as a potential hard match requirement will impact the City of Monterey Park significantly.	

Member Agencies		% of Cost Allocation
City of Palos Verdes Estates **Date of Withdrawal: 05/27/14**		0.09%
Explanation of Withdrawal of Membership	Resolution No. R14-21 states that LA-RICS has not determined the specific and actual cost that the City of Palos Verdes Estates will be required to pay for the LMR and LTE as part of the City's continued membership in the LA-RICS JPA and the City has determined that it would not be in the best interests of the City to participate in a program where neither the short-term or long-term cost to be incurred by the City have been fully defined.	
City of Pomona **Date of Withdrawal: 06/17/14**		0.71%
Explanation of Withdrawal of Membership	The Chief of Police in his Staff Report to City Council stated that he does not believe that cost and other issues related to remaining in LA-RICS for use by the Pomona Police Department is beneficial to the City and that the participation in LA-RICS is beneficial to the City of Pomona.	
City of San Marino **Date of Withdrawal: 04/30/2015**		0.13%
Explanation of Withdrawal of Membership	No reason cited in letter of withdrawal.	
City of Santa Clarita **Date of Withdrawal: 03/24/15**		0.53%
Explanation of Withdrawal of Membership	Serious concerns regarding the safety and proximity of sites to residential areas, opting out to solidify their opposition of sites in their city.	
City of Santa Monica **Date of Withdrawal: 06/23/15**		0.58%
Explanation of Withdrawal of Membership	No reason cited in letter of withdrawal.	

Member Agencies		% of Cost Allocation
City of South Pasadena **Date of Withdrawal: 05/06/2015**		0.18%
Explanation of Withdrawal of Membership	No reason cited in letter of withdrawal.	
City of Torrance **Date of Withdrawal: 06/19/14**		1.05%
Explanation of Withdrawal of Membership	City Manager LeRoy Jackson in his Staff Report to City Council stated that there are a lot of unknowns to the LA-RICS system. The first two unknowns are: what are we buying and how much will it cost? The LTE Broadband system will require immediate contributions in order to meet the 10% grant matching fund requirement for the unknown system. He also stated that it is important to note that LA-RICS would only provide the "backbone" system for both the LMR and LTE systems. Equipment to operate on the system would still be the responsibility of individual member agencies and would require cities to purchase equipment that is compatible with the LA-RICS system. Torrance has estimated this to be a substantial investment. The City Manager believes that the South Bay region currently has a functioning interoperable safety communication system. There is a possibility of enhancing the current system by interfacing with Interagency Communication Interoperability System (ICIS). ICIS has a Joint Powers Agreement with sixteen cities including Burbank, Pasadena, Glendale, Pomona, Culver City, Beverly Hills, and many San Gabriel Valley cities. His report also included information that if Torrance withdraws from LA-RICS, we would still need to seek membership or subscription to the LMR system; however, since the funding plan has been modified to eliminate the replacement fund, there would appear to be no penalty. Therefore, it is the conclusion of the City Manager that the City of Torrance should submit a letter of withdrawal to LA-RICS.	
Total Percentage Allocated to Opt-Out Members		**11.87%**

LA-RICS

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PATRICK J. MALLON
EXECUTIVE DIRECTOR

October 1, 2015

LA-RICS Board of Directors
Los Angeles Regional Interoperable Communications System Authority (the "Authority")

Dear Directors:

AMENDMENT NO. 19 FOR OUTREACH ACTIVITIES TO PROJECT AND CONSTRUCTION MANAGEMENT SERVICES AGREEMENT (CONTINUED FROM MEETING OF SEPTEMBER 10, 2015)

SUBJECT

Board approval is requested to (1) authorize an amendment to the Project and Construction Management Services contract with Jacobs Project Management Co., (Jacobs) to increase the scope and level of effort for complete outreach activities for the Land Mobile Radio (LMR) portion of the project including, but not limited to, outreach to communicate the projects purpose, needs and benefits, provide information about LMR sites within the impacted areas, educate stakeholder agencies and the public on important public safety aspects of the project, and to provide outreach associated with the California Environmental Quality Act (CEQA)/National Environmental Policy Act (NEPA) environmental component of the project; (2) increase the Maximum Contract Sum by $1,255,765 to reflect the increased scope and level of effort for the outreach activities; and (3) delegate authority to the Executive Director to execute Amendment No. 19 in substantially similar form to the Enclosure.

RECOMMENDED ACTION

It is recommended that your Board:

1. Approve Amendment No. 19 to the Project and Construction Management Services contract with Jacobs, in substantially similar form to the Enclosure, which revises the contract to increase the scope and level of effort to complete outreach activities for the LMR portion of the project and provide outreach

AGENDA ITEM H

associated with the CEQA/NEPA environmental component of the project increasing the Maximum Contract Sum by $1,255,765 from $35,753,651 to $37,009,416.

2. Delegate authority to the Executive Director to execute Amendment No. 19 with Jacobs, substantially similar in form to the Enclosure.

BACKGROUND

On March 29, 2012, your Board authorized the Executive Director to execute the contract with Jacobs for project and construction management services. Since this contract's inception, your Board has approved various amendments to significantly increase the scope of work, such as adding a preliminary Phase 0 to the project to develop technical specifications and Request for Proposals (RFP) and proposal compliance analysis. This work was not initially contemplated and constituted new scope. Further amendments were approved by your Board to increase the scope of environmental work being performed, and the level of effort for certain tasks that the Authority has required throughout the term of this contract. Such increased scope also included outreach.

During the LTE portion of the project, both the County and the City of Los Angeles requested additional public outreach. It is contemplated that similar outreach efforts are also warranted and will be required prior to the commencement of construction. This will also include outreach to key stakeholders. As per the approved amendments, Jacobs has been coordinating and providing outreach for the Public Safety Broadband Network (PSBN) system and can leverage lessons learned from the PSBN that can be applied successfully to the LMR System.

At your meeting of September 10, 2015, your Board approved an Amendment (No. 18) to the Jacobs contract to increase LMR outreach activities in an amount not to exceed $150,000 and for duration of not more than 30 days. Your Board also requested additional detail as the outreach activities contemplated and manpower required and associated cost for such activities.

PURPOSE/JUSTIFICATION OF RECOMMENDED ACTION

The purpose of the recommended actions is to authorize the Executive Director, on behalf of the Authority, to make the changes necessary to reflect (1) an increase in scope and level of effort for complete outreach activities for the LMR portion of the project and provide outreach associated with the CEQA/NEPA environmental component of the project; (2) revise Attachment A (Scope of Work) to reflect the increased outreach work; and (3) increase in the Maximum Contract Sum to

contemplate the increased scope and level of effort related to the increased outreach activities.

It is important that the Authority engage Jacobs to perform this increased outreach work for the LMR System in an effort to communicate the projects purpose, needs and benefits, provide information about LMR sites within the impacted areas, and educate stakeholder agencies (e.g., County of Los Angeles Board of Supervisors, City of Los Angeles Council, other City and town Councils, professional organizations, interest groups, etc.) and the public on important public safety aspects of the project ahead of any potential public opposition.

Jacobs, in concert with the Authority, has developed a comprehensive 28 month outreach plan to apply to the LMR project which takes lessons learned from the PSBN system. The plan contemplates aggressive outreach efforts and ongoing communications to stakeholders and the public within the impacted areas commencing well in advance of construction activities and throughout the construction process. Such communications include, but are not limited to, door to door/face to face notifications to residents within 500 feet of the impacted site, outreach to employees assigned at any of the sites, and the dissemination of informational materials regarding the LMR project. We can also anticipate the need for outreach to a broader area for those sites located within or near environmentally sensitive areas.

Further, the outreach strategy is proactive in that it offers three distinct categories to tackle outreach to address site specific needs as follows:

- Enhanced Outreach
- Moderate Outreach
- Basic Outreach

Each of these categories is tailored to address specific site conditions such as whether a site is located within 500 feet of a residential, educational, or commercial property, or whether a site is located in a rural or environmentally sensitive area.

It is contemplated that approximately 5,833 staff hours will be needed to provide the overall outreach required. In addition to the outreach strategy outline above for residents, educational institutions and businesses, specific audiences outlined below will also receive outreach:

- Stakeholder Meetings (Total: 115 – 165)
  - Member agencies meetings: (66 – 95)
  - BOS/LA City council, district offices, etc.: (18-25)
  - Town councils, special interest groups, professional organizations: (31 – 45)

The enclosed staffing plan provides a breakdown of the hours that are anticipated to accomplish the overall outreach needed for the LMR project.

In addition, the outreach plan contemplates the required outreach efforts required to support the CEQA/NEPA environmental review process. As the documents are being prepared, the team will strategize for the forthcoming public comment review periods and the requirement to conduct outreach to impacted agencies, interested parties, and stakeholders. The combining of the general outreach described herein with the environmental outreach previously approved by your Boards has resulted in staffing efficiencies. These efficiencies will result in a reduction to the combined cost of the outreach by $83,650. This reduction represents a total of 558 personnel hours.

Overall, as it relates to development and construction of the LMR System, it is envisioned that the outreach plan will curtail reactive efforts in exchange for proactive measures, expedite the securing of Site Access Agreements and local permits.

The Authority staff has thoroughly assessed its need, and has determined it to be the most efficient process from a project perspective to obtain these additional outreach services from Jacobs. They have intimate knowledge of the LA-RICS project as a whole, have been performing similar outreach services for the PSBN system, and can leverage lessons learned to the benefit of the Authority, the public, and stakeholders.

FISCAL IMPACT/FINANCING

At your meeting of September 10, 2015 Amendment 18 was amended to increase the contract sum by $150,000 to allow environmental and Stakeholder outreach to continue until this item was further reviewed and approved by your board.

An increase to the Maximum Contract Sum in the amount of $1,255,765 will increase the Maximum Contract Sum amount from $35,753,651 to $37,009,416.

All contract costs related to the services rendered under this Amendment No. 19 for the LMR System will be reimbursable under the Urban Areas Security Initiative (UASI) and State Homeland Security Grant Program (SHSGP) grant awards from the Department of Homeland Security.

FACTS AND PROVISIONS/LEGAL REQUIREMENT

The Counsel to the Authority has reviewed the recommended action.

CONCLUSION

Upon the Board's approval of the recommended actions, on behalf of the Authority, the Executive Director will execute Amendment No. 19, substantially similar in form to the Enclosure.

Respectfully submitted,

PATRICK J. MALLON
EXECUTIVE DIRECTOR

PJM:JA:pl

Enclosure

c: Counsel to the Authority

AGENDA ITEM H

AMENDMENT NUMBER NINETEEN TO

AGREEMENT FOR CONSULTANT SERVICES

Recitals

This Amendment Number Eighteen ("Amendment No. 19") is entered into by and between the Los Angeles Regional Interoperable Communications System Authority ("Authority") and Jacobs Project Management Co. ("Consultant"), effective as of October _____, 2015, based on the following recitals:

Authority and Consultant have entered into that certain Agreement for Consultant Services, dated as of March 29, 2012 (together with all attachments and appendices thereto, all as amended prior to the date hereof, the "Agreement").

The Agreement has been previously amended by Amendment Number One, effective as of May 15, 2012, to engage Consultant to perform certain work under Preliminary Phase, which was originally contemplated under Phase 1, and to adjust the Consultant's Staffing Plan accordingly, all as further described in Amendment Number One.

The Agreement has been previously amended by Amendment Number Two, effective as of June 4, 2012, to engage the Consultant to perform certain work under Preliminary Phase, which was originally contemplated under subsequent phases, and to adjust Consultant's Staffing Plan accordingly, all as further described in Amendment Number Two.

The Agreement has been previously amended by Amendment Number Three, effective as of July 2, 2012, to engage the Consultant to perform certain work under Preliminary Phase, which was not originally contemplated and constituted new scope, and to adjust Consultant's Staffing Plan, resource level effort, and additional costs accordingly, all as further described in Amendment Number Three, which increased the Maximum Contract Sum by $1,546,933 from $20,871,260 to $22,418,193.

The Agreement has been previously amended by Amendment Number Four, effective as of September 21, 2012, to engage the Consultant to perform certain work under the Preliminary Phase, which was originally contemplated under subsequent phases, and to adjust Consultant's Staffing Plan accordingly, all as further described in Amendment Number Four.

The Agreement has been previously amended by Amendment Number Five, effective as of January 1, 2013, to reallocate the level of effort between LTE Project activities and LMR Project activities, and to adjust Consultant's Staffing Plan accordingly to reflect the reallocation of such levels of effort, all as further described in Amendment Number Five.

The Agreement has been previously amended by Amendment Number Six, effective as of May 31, 2013, to include work for Negotiation and Outreach activities for both the LMR and LTE Systems, to reallocate the level of effort between the Preliminary Phase and subsequent phase activities for the LMR and LTE Systems, and to adjust Consultant's Staffing Plan accordingly to reflect the reallocation of such levels of effort, all as further described in Amendment Number Six.

The Agreement has been previously amended by Amendment Number Seven, effective as of September 5, 2013, to separate the Scope of Work into two separate projects, defined as the LMR System project and the LTE System project, to make revisions to the Agreement as necessary to reflect such two separate projects, to add additional work to Phase 1 of the LMR System project and the Preliminary Phase of the LTE System project, which was not previously contemplated and constituted new scope, and adjust Consultant's Staffing Plan, associated resource levels of effort, and additional cost accordingly to reflect two LA-RICS projects, all as further described in Amendment Number Seven, which increased the Maximum Contract Sum by $4,889,427 from $22,418,193 to $27,307,620.

The Agreement has been previously amended by Amendment Number Eight, effective as of December 12, 2013, (a) to include work to deliver certain LTE Project Description documents for 232 project sites in the LTE System, (b) to reallocate the level of effort between the Preliminary Phase and Phase 1 activities for the LTE System, and (c) to adjust Consultant's Staffing Plan accordingly to reflect the reallocation of such levels of effort, all as further described in Amendment Number Eight, which corrected the Maximum Contract Sum to $27,317,585.

The Agreement has been previously amended by Amendment Number Nine, effective as of March 11, 2014, to (a) perform certain environmental work including but not limited to, preparing and delivering a CEQA-compliant Environmental Impact Report (EIR) and a NEPA-compliant Environmental Assessment (EA) as well as perform various biological and cultural resource surveys and reports for the LMR Project work under the LMR Project Phase 1, System Design, as described in the Scope of Work, (b) adjust the Appendix A-2 (Staffing Plan) accordingly, and (c) increased the Maximum Contract Sum to account for the scope of work in the amount of $2,862,080 from $27,317,585 to $30,179,665.

The Agreement has been previously amended by Amendment Number Ten, effective May 14, 2014, to reallocate the level of effort between phases of the LMR Project, and to adjust Appendix A-2 (Staffing Plan) accordingly to reflect the reallocation of such levels of effort.

The Agreement has been previously amended by Amendment Number Eleven, effective as of June 5, 2014, to (a) perform certain Cultural Resources environmental work as described in the Scope of Work due to the Authority's increased need for environmental support, and (b) to adjust Appendix A-2 (Staffing Plan) accordingly to reflect such levels of effort; and (c) increase the Maximum Contract Sum to account for

the increase in scope of work in the amount of $306,600 from $30,179,665 to $30,486,265.

The Agreement has been previously amended by Amendment Number Twelve, effective August 21, 2014, to (a) perform certain environmental work for the LTE System project including, but not limited to, (1) conducting a CEQA statutory exemption analysis and prepare and deliver a Notice of Exemption, (2) preparing and delivering a supplemental NEPA-compliant Environmental Assessment (EA); and (3) increase the level of environmental compliance monitoring efforts to accommodate the compressed construction schedule; all of which is described in the Scope of Work due to the Authority's increased need for environmental support, (b) to adjust Appendix A-2 (Staffing Plan) accordingly to reflect such levels of effort; and (c) increase the Maximum Contract Sum to account for the increase in scope of work in the amount of $2,011,080 from $30,486,265 to $32,497,345.

The Agreement has been previously amended by Amendment Number Thirteen, effective December 31, 2014, to (a) revise Attachment A (Scope of Work) to clarify certain tasks associated with Federal and grant requirements as it relates to the Davis-Bacon Act, (b) to revise Appendix A-2 (Staffing Plan) to reflect an Agreement Budget; (c) revise Attachment B (Rate Schedule) to reflect new positions/staff; and (d) make other certain revisions contemplated in Amendment No. 13.

The Agreement has been previously amended by Amendment Number Fourteen, effective April 16, 2015, to (a) revise Appendix A-2 (Agreement Budget) to reflect the shifting in funds between Phases 1 through 3 for the LMR System to remedy a staff planning error, and (b) to revise Attachment D (Administration of Agreement) to reflect changes in the Consultant's Key Personnel, with no increase to the Maximum Contract Sum.

The Agreement has been previously amended by Amendment Number Fifteen, effective May 21, 2015, to (a) reduce the cost for LTE portion of work by $789,120, to decrease the level of effort apportioned to the LTE project as proposed in the Authority's response to a Corrective Action Plan issued by the National Oceanic and Atmospheric Administration (NOAA) Grants Management Division, on behalf of the National Telecommunications and Information Administration (NTIA), following direction from the County of Los Angeles (County) and City of Los Angeles (City) to reduce the number of PSBN Sites; (b) from a portion of this reduced cost, increase the level of effort for outreach services by $685,200 to communicate the projects purpose, needs and benefits, provide information about the sites within the impacted areas, and educate the public on important public safety aspects of the project; and (c) to revise Appendix A-2 (Agreement Budget) to reduce the Maximum Contract Sum by $103,920 ($789,120 - $685,200), from $32,497,345 to $32,393,425, when taking the smaller scale PSBN project and increased level of outreach efforts into consideration.

The Agreement has been previously amended by Amendment Number Sixteen, effective July 14, 2015, to (a) increase the level of staffing contemplated in the

Agreement to ensure that Work related to the PSBN portion of the Agreement in regards to claims resolution are successfully completed; and (b) revise Appendix A-2 (Agreement Budget) to increase the Maximum Contract Sum by $249,680 from $32,393,425 to $32,643,105, in accordance with the increased level of staffing.

The Agreement has been previously amended by Amendment Number Seventeen, effective September 2, 2015, to (a) increase the scope of work and cost as it relates to the LMR System to perform certain environmental work, including but not limited to, (i) preparing and delivering nine (9) NEPA-compliant Environmental Assessment (EA) for broken down as follows: three (3) site-specific EAs for sites on non-Federal land and six (6) EAs for sites on federal land administered by six (6) different Federal agencies related to the Land Mobile Radio (LMR) System; (ii) perform the various biological and cultural resource (including historical, architectural history, archeological and/or paleontological) surveys, record search and reports required for the various EAs; (iii) increase the scope of environmental compliance monitoring to oversee and coordinate the activities of the LMR Contractor; (iv) all in the amount of $3,442,250; (b) revise Attachment A (Scope of Work) to reflect the increased environmental work; (c) reallocate funds from subsequent phases to Phase 1 to continue Phase 1 LMR activities while environmental work is in progress in an amount of $1,961,996; (d) reflect a reduction in costs by identifying various staff efficiencies in subsequent phases for a cost savings in the amount of $2,443,700; and (e) revise Appendix A-2 (Agreement Budget) to reflect an increase in the Maximum Contract Sum by $2,960,546, ($3,442,250 + $1,961,996 - $2,443,700 when taking increases and cost savings into consideration) from $32,643,105 to $35,603,651, to contemplate the increased scope and level of effort related to the environmental work.

This Agreement has been previously amended by Amendment Number Eighteen, effective September 10, 2015, to (a) increase in scope and level of effort for complete outreach activities for the LMR portion of the project, which includes, but is not limited to, outreach to communicate the projects purpose, needs and benefits, provide information about LMR sites within the impacted areas, educate stakeholder agencies and the public on important public safety aspects of the project, provide outreach associated with the CEQA/NEPA environmental component of the project; (b) revise Attachment A (Scope of Work) to reflect the increased outreach work; and (c) revise Appendix A-2 (Agreement Budget) to reflect an increase in the Maximum Contract Sum by a not to exceed amount of $150,000 from $35,603,651 to $35,753,651, to contemplate the increased scope and level of effort related to the increased outreach activities for work performed from the effective date of this Amendment No. 18 to October 1, 2015.

Authority and Consultant desire to further amend the Agreement to (a) reflect an increase in scope and level of effort for complete outreach activities for the LMR portion of the project, which includes, but is not limited to, outreach to communicate the projects purpose, needs and benefits, provide information about LMR sites within the impacted areas, educate stakeholder agencies and the public on important public safety aspects of the project, provide outreach associated with the CEQA/NEPA environmental

component of the project; (b) revise Attachment A (Scope of Work) to reflect the increased outreach work; and (c) revise Appendix A-2 (Agreement Budget) to reflect an increase in the Maximum Contract Sum by $1,255,765 from $35,753,651 to $37,009,416, to contemplate the increased scope and level of effort related to the increased outreach activities.

This Amendment No. 19 is authorized under Paragraph 40 of the Agreement.

NOW THEREFORE, in consideration of the foregoing recitals, all of which are incorporated as part of this Amendment No. 19, and for other valuable consideration, the receipt and sufficiency of which are acknowledged, Authority and Consultant hereby agree as follows:

1. Capitalized Terms; Section References.

   Capitalized terms used herein without definition (including in the recitals hereto), have the meanings given to such terms in the Agreement, as amended by this Amendment No. 19. Unless otherwise noted, section references in this Amendment No. 19 refer to sections of the body of the Agreement, as amended by this Amendment No. 19.

2. Section 3.1, under Consideration, of the Agreement, is deleted in its entirety, and is replaced by the following:

   3.1 In consideration of the performance by Consultant in a manner satisfactory to Authority of the services described in Section 2 above, including receipt and acceptance of such work by Executive Director of the Authority or such person's designee (hereinafter called "Director"), Authority agrees to pay Consultant a maximum not-to-exceed sum of Thirty Seven Million, Nine Thousand, Four Hundred and Sixteen ($37,009,416).

3. Attachment A (Scope of Work), is hereby deleted in its entirety, and is replaced by the Attachment A (Scope of Work), dated October 2015, attached to this Amendment No. 19 and incorporated by this reference.

4. Appendix A-2 (Agreement Budget) to Attachment A (Scope of Work) to the Agreement is hereby deleted in its entirety, and is replaced by Appendix A-2 (Agreement Budget), dated October 2015, attached to this Amendment No. 19 and incorporated by this reference.

5. This Amendment No. 19 shall become effective as of the date identified in the recitals, which is the date upon which:

   5.1 An authorized officer of Consultant has executed this Amendment No. 19;

5.2 The Authority's Board of Directors has authorized the execution of this Amendment No. 19, if required;

5.3 Los Angeles County Counsel has approved this Amendment No. 19 as to form; and

5.4 The Executive Director of the Authority has executed this Amendment No. 18.

6. Except as expressly provided in this Amendment No. 19, all other terms and conditions of the Agreement shall remain the same and in full force and effect.

7. Consultant and the person executing this Amendment No. 19 on behalf of Consultant represent and warrant that the person executing this Amendment No. 19 for Consultant is an authorized agent who has actual authority to bind Consultant to each and every term and condition of the Agreement, as amended by this Amendment No. 19, and that all requirements of Consultant to provide such actual authority have been fulfilled.

8. This Amendment No. 19 may be executed in one or more original or facsimile counterparts, all of which when taken together shall constitute one in the same instrument.

9. This Amendment No. 19 shall be governed by, and construed in accordance with, the laws of the State of California applicable to agreements made and to be performed within that State.

* * *

AMENDMENT NUMBER NINETEEN TO

AGREEMENT FOR CONSULTANT SERVICES

IN WITNESS WHEREOF, the parties hereto have caused this Amendment No. 19 to be executed on their behalf by their duly authorized representatives, effective as of the date first set forth above.

LOS ANGELES REGIONAL INTEROPERABLE COMMUNICATIONS SYSTEM AUTHORITY

By: _____

Patrick J. Mallon
Executive Director

JACOBS PROJECT MANAGEMENT CO.

By: _____

Issam Khalaf
Vice President
West Division PMCM

APPROVED AS TO FORM FOR THE LOS ANGELES REGIONAL INTEROPERABLE COMMUNICATIONS SYSTEM AUTHORITY:

MARY WICKHAM
Interim County Counsel

By: _____

Truc L. Moore
Senior Deputy County Counsel

ATTACHMENT A
SCOPE OF WORK

1. INTRODUCTION

Jacobs (Consultant) will work within the framework established by the Los Angeles Regional Interoperable Communications System (LA-RICS) Authority (JPA or Authority) and in accordance with the activities and services surrounding each phase of program deployment for both the LMR and LTE projects. Consultant will provide experienced and dedicated resources to coordinate the planning, designing, developing, supplying, fabricating, constructing, installing, testing, deploying, commissioning, training, and maintenance necessary for successful completion of the LMR and LTE projects. The projects will be delivered using a turnkey method that will involve the LMR System and LTE System Contractors to perform required site design and construction as well as design and installation of the LMR and LTE Systems.

The Consultant will assist the Authority in making plans, projections, and decisions for its communications needs based on full life-cycle planning steps. The Consultant will also assist in developing criteria to determine when a technology refresh of any aspect of the LA-RICS LMR or LTE Systems should be considered. Many of the steps required for a technology refresh need to be coordinated (subscribers, network, backhaul) but some can be performed independently. The Consultant will help the Authority to consider costs, including labor, out-of-pocket expenses, and the trade-off analysis of continuing to modify and maintain the legacy system(s) versus moving to new system(s) at the right time in the future, when developing this criteria.
The Consultant will visit completed and in-progress LA-RICS LMR and LTE transmission sites to evaluate the LMR System and LTE System Contractor's construction methodologies and practices in the conduct of the LA-RICS site builds. Further, they will assist in ensuring that the LMR System and LTE System Contractor's follow construction industry best practices in the construction of Authority LMR and LTE Facilities.

2. SCOPE OF WORK

Consultant shall be the Authority's Project Manager for the LA-RICS LMR and LTE projects. The work to be performed by the Consultant under this Agreement will be assigned by the Authority pursuant to one or more Notices to Proceed issued under and in accordance with Section 2 (Consultant's Services) of the Agreement. The work to be performed by the Consultant includes all work as described in this Scope of Work, to the extent they are not inconsistent with Sections 2.1 and 2.2 below:

2.1 Staffing Plan

The Consultant will prepare and maintain a staffing plan (Staffing Plan). The Consultant will be required to periodically modify and update the staffing plan to meet changing LA-RICS LMR and LTE project requirements. Any changes to the Consultant's staffing plan shall not result in an increase of the total costs by phase contained in Appendix A.2 (Agreement Budget) approved by the Authority as part of this Agreement. Upon Authority approval and in accordance with the Agreement, the Consultant may move allocated budget amounts set forth in Appendix A.2 (Agreement Budget) from one phase to another phase within the same Project (LTE/LMR) to account for efficient utilization of staff and to meet changes to the project schedules. However, such budget reallocations between phases shall be done in the form of an Amendment and shall not increase the total approved Project budget, LTE/LMR respectively, nor shall it increase the total maximum contract sum set forth in Section 3.1 of the Agreement. At a minimum the Consultant's staff shall include the following:

a. A Program Director who will serve as the Consultant's responsible point of contact for the Consultant's overall performance and compliance with the Agreement;
b. A Program Manager who will (a) be responsible for planning and coordinating all work under the

Agreement, (b) serve as the Consultant's primary liaison, (c) manage Consultant's staff, and (d) oversee the delivery of the LMR and LTE LA-RICS projects;

c. A Senior Project Manager to oversee the delivery of the LMR System project;
d. A Senior Project Manager to oversee the delivery of the LTE System project;
e. At least one Systems Manager for the LMR System;
f. At least one Systems Manager for the LTE System;
g. A Document Control and administrative support staff;
h. A Professional Project Scheduler;
i. A Professional Cost Estimator;
j. A Contract/Change Order Manager;
k. An experienced Outreach Manager; and
l. Technical Support Staff experienced in the design and implementation of wireless voice and data communications systems.

2.2 General Scope of Services

The Consultant will manage the LA-RICS LMR and LTE projects in accordance with high professional industry standards. The Consultant will be responsible for a combination of essential project and construction management services with respect to the LA-RICS LMR and LTE projects, including, but not limited to, the following functions for each project:

2.2.1 Coordinate the planning, designing, developing, supplying, fabricating, constructing, installing, testing, commissioning, deploying and training for the successful completion of the LA-RICS project, including the LMR System and LTE System.

2.2.2 Develop program procedures for the management of funding authorizations, funding approvals, cost escalation, communications protocols, responsibility matrix, and records management for each project.

2.2.3 Prepare and manage project(s) budgets and schedules. This task includes, but is not limited to the following activities:

a. Provide revenue and cash flow analysis for each project;
b. Develop project phasing alternatives including cost models for each project;
c. Prepare and/or review cost estimates and related cost and contingency analyses for each project;
d. Prepare and/or review critical path method project schedules and related analyses for each project;
e. Prepare and/or review resource-loaded project schedules for each project.
f. Prepare, review, and update a total project cost estimate (TPCE) which includes: land acquisition costs, construction costs, programming/development, plans and specifications, consultant services fees, miscellaneous expenditures, jurisdictional approvals, and services provided by Authority staff for each project. The TPCE for each project shall be updated on a monthly basis; and
g. Review change order requests and associated cost estimates for each project.

2.2.4 Review and assess the each LMR and LTE project's system architecture, design criteria and standards, and coordinate design technical reviews and resolution of technical issues. This task includes, but is not limited to the following activities:

a. Review of architectural, technical, and engineering documents and studies for accuracy, constructability, compliance with project technical requirements, and value engineering;
b. Assist in developing alternate/value engineering design solutions;

c. Evaluate and make recommendations on changes in scope of work and prepare requests for change orders/amendments;
d. Prepare authorization documentation including contract/agreement amendments and notices to proceed;
e. Develop a Quality Assurance/Quality Control plan;
f. Conduct quality control/quality assurance inspections and provide reports; and
g. Manage, coordinate, and validate systems acceptance criteria;
h. Coordinate the implementation of best management practices and, if applicable, CEQA Mitigation Monitoring and Reporting Program in LMR and LTE system construction documents.

2.2.5 Provide document control, administrative support, and information management for the LMR and LTE projects. This task includes, but is not limited to the following activities:

a. Maintain a library for each project of "official" documents including all engineering/as-built documents, project correspondence, and contract documents. The library shall be delivered to the Authority at the completion of the contract. This library shall be available to the Authority for review throughout this contract;
b. Safeguard all Authority and Member property, including proprietary and sensitive information;
c. All documents to be stored in both hard copy and electronic formats.

2.2.6 Administer LMR and LTE project contracts, including, but not limited to, contracts with the LMR and LTE System Contractors and the environmental services consultants. This task includes, but is not limited to the following activities:

a. Review the work of other contractors and consultants, certify percentage of work completed, and make recommendations on the approval of invoices for each project;
b. Review consultants' and contractors' safety programs for compliance with all local, state and federal requirements and regulations;
c. Assist in coordinating and preparing for consultants' and contractors' project status meetings and participate in same;
d. Review and make recommendations on consultant and contractor(s) work product for compliance with LA-RICS project technical and contractual requirements;
e. Evaluate and make recommendations on changes in scope of work and prepare requests for change orders, and contract/agreement amendments for each project;
f. Track, review and make recommendations on contractor requests for information and submittals for each project; and
g. Assist the Authority with the separate procurement of other contractors and consultants to perform other services relating to the LA-RICS project, including the preparation of a request for proposals, review of proposals, and implementation of the consultant's resultant agreement.

2.2.7 Provide the Authority's staff and Board of Directors with project reports for the LMR and LTE projects. This task includes, but is not limited to the following activities:

a. Prepare and coordinate monthly project status reports which shall include a brief discussion of current activities being carried out; activities to be completed in the upcoming month; review and discussion of project schedule (actual vs. baseline); and review and discussion of the project budget including expenditures to date, and budget remaining, for each project;
b. Provide risk analysis support, quality control audits, value analysis and constructability reviews for each project; and

c. Prepare as-needed reports and materials for LA-RICS project executive staff and Authority's Board of Directors' meetings, and attend such meetings.

2.2.8 Work in a coordinated, cooperative manner with other entities involved in the LMR and LTE projects including Authority staff, other contractors and consultants, government representatives, and other stake holders involved in the projects. This task includes, but is not limited to the following activities:

a. Provide support in coordination of interagency and public involvement/consensus building, including the preparation of presentation materials, and making presentations;
b. Develop and carry out a comprehensive strategic public relations plan including timelines, products and budget, for each project. This includes ability to work and communicate with public officials, local communities and government and professional organizations; and
c. Coordinate work of other contractors and consultants performing similar public relations function sunder their respective contracts; and
d. Identification, application, coordination, and acquisition of all required permits and approvals for construction of the LMR and LTE projects.

2.2.9 Provide telecommunication appraisal expertise for valuation on all match expenditure for grant funds for each project;

2.2.11 Ensure compliance with applicable rules and regulations. This task includes, but is not limited to the following activities:

a. Ensure that the LMR and LTE System Contractors and other consultants comply with all Federal, California State, County, and local grant fund requirements, and monitor the LMR and LTE System Contractor's and consultants' compliance with same;
b. Ensure the LMR and LTE System Contractors' adherence and compliance to the applicable federal, State and local laws, ordinances, regulations, rules, guidelines, directives, policies and procedures, including, but not limited to, Association Public-Safety Officials (APCO) Project 25 and building codes;
c. Ensure that the LMR and LTE System Contractors adhere and comply with all Federal Communication Commission (FCC) rules and regulations; and
d. Ensure that the LMR and LTE System Contractors adhere and comply with applicable standards and regulations pertaining to the Federal Communications Commission Waiver and subsequent Orders regarding the implementation of a nationwide broadband interoperable network in the 700MHz band.
e. With respect to compliance with Federal and grant funding requirements, Consultant shall ensure that the LTE System Contractors' adherence to and compliance with the Federal Davis-Bacon Act as follows:

    1. Consultant shall actively monitor the LTE System Contractor performing the work funded by the Broadband Telecommunication Opportunities Program (BTOP) grant which requires the LTE System Contractor to pay prevailing wages as determined by the Department of Labor in accordance with the Davis-Bacon Act.
    2. Consultant shall monitor the LTE System Contractor and its sub-contractors submission of certified payroll records. Consultant shall ensure that the LTE System Contractor and its sub-contractors prepare weekly certified payroll documentation using Form WH-347 (available at http://www.dol.gov/whd/forms/wh347.pdf), or an equivalent. If an electronic tracking system is used, Consultant shall confirm that such electronic reporting system is DOL/DBRA/CA compliant. Additionally, Consultant shall confirm that such electronic tracking system's electronic signature is DOL compliant. Lastly, Consultant shall confirm that such electronic tracking system checks for the appropriate Davis-

Bacon wage rate requirements by County, as applicable. Consultant shall ensure that the LTE System Contractor and its sub-contractors submit this information to the Authority, and by extension the Consultant, on a weekly basis within seven days of the regular payment date of the LTE System Contractor's or its sub-contractors payroll period.

3. Consultant shall ensure that the LTE System Contractor or its sub-contractors employing apprentices or trainees under approved programs maintain and submit written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.
4. Consultant shall follow-up with the LTE System Contractor regarding any discrepancies which indicate that proper wages and or benefits are not being paid or tracked properly in accordance with the Davis-Bacon Act. Such follow-up may include, but not be limited to, meetings with the LTE System Contractor, its sub-contractors, and others as necessary to gain compliance and document the effort and outcomes.
5. Consultant shall conduct field interviews to demonstrate Davis-Bacon compliance with employees of the LTE System Contractor and its sub-contractors. Field interviews shall be done using best practices and in a frequency customary for labor compliance administration under Federal requirements.
6. Consultant shall provide labor compliance record keeping services in conjunction with the Consultants onsite document control administrator.
7. Consultant shall provide written directions to the LTE System Contractor as necessary when labor compliance issues arise.
8. Consultant shall communicate to the Authority and the Federal National Telecommunications Information and Administration (NTIA) on matters related to Davis-Bacon and project compliance.
9. Consultant shall develop a responsibilities and duties matrix for monitoring labor compliance to ensure that the Authority, the LTE System Contractor, and its sub-contractors are in accordance with the Grant requirements and by extension, the Davis-Bacon requirements.
10. Consultant shall provide a written monthly report to the Authority describing the current status of the LTE System Contractor and its sub-contractors relative to labor compliance and Davis-Bacon. However, should any labor compliance issues arise with the LTE System Contractor or its sub-contractors, the Contractor will notify the Authority immediately, and no later than 14 calendar days; identify and employ a plan to resolve the problem; and put processes in place to mitigate future occurrences.

2.2.12 Assist the Authority with site related activities for both the LMR and LTE projects. This task includes, but is not limited to the following activities:

a. Assist in and coordinate activities relating to acquisition of rights to the LMR and LTE sites;
b. Conduct preconstruction site analysis and planning for the LMR and LTE sites, including considerations for temporary utilities and structures, construction sequencing, construction site coordination, site infrastructure, construction-related traffic analysis, etc.;
c. Coordinate LMR and LTE site activities with utility companies;
d. Coordinate LMR and LTE site geotechnical testing and investigation services;
e. Coordinate LMR and LTE environmental site assessments;
f. Monitor LMR and LTE land surveying services; and
g. Monitor LMR and LTE field engineering investigations, assessments, and reports;

2.2.13 Assist in environmental documentation preparation and processing in conformance with the CEQA and NEPA for both projects, including:

a. Coordinate with consultant in charge of preparing CEQA/NEPA related studies for the LA-RICS LTE project;

b. Monitor and report on best management practices and NEPA and CEQA mitigation measures (if any) to ensure compliance during LMR and LTE project implementation.
c. Prepare and deliver a CEQA-compliant Environmental Impact Report (EIR) and NEPA-compliant Environmental Assessment (EA), as required, for the LMR project. The lead agency for the EIR will be the LA RICS JPA and the lead agency for the EA will be the Federal Emergency Management Agency (FEMA).
d. Develop a draft project description for a Proposed Action based on input received from the Authority and/or the System Contractors.
e. Develop technical reports to describe the existing environment and analyze potential environmental impacts for the EA/EIR.
f. Perform biological surveys and prepare biological reports through the Design Phase of the LMR project, and support federal Endangered Species Act Section 7 consultation with USFWS, and Section 2081 and 2080.1 (California Fish and Game Code) consultation with CDFW.
g. Prepare comprehensive reports including a biological assessment, biological technical report, and biological evaluation (for federal lands).
h. Perform cultural resources surveys and prepare cultural resources reports and in support of SHPO and Native American consultation.

2.2.14 Coordinate project close-out activities including system acceptance and end-user training for both the LMR and LTE projects.

3. PROGRAM REVIEW AND VALIDATION

The Consultant will conduct a series of mobilization interactive planning sessions with the JPA's Executive Director, and key LMR and LTE project personnel to focus on teambuilding, planning, organization, and project kick-off. These sessions will include consideration of stakeholder concerns, obtaining answers to relevant questions, and development of an understanding of roles in supporting other stakeholders. The sessions will be used to establish and document team alignment, roles, responsibilities, and expectations for both projects.

The Consultant's experts in project management, planning, funding, scheduling, and estimating will work with the Authority to address the LMR and LTE projects' unique challenges and begin drafting the Project Delivery Plan (PDP) for each project. Using initial work sessions as the starting point, the Consultant will develop a detailed PDP based on each project's goals and guided by a strategic total project implementation perspective for each project.

The Consultant will deploy the following methodologies and techniques to form a solid foundation for LMR and LTE project execution:

a. Perform team building activities: team orientation, information sharing, establishing lines of communication
b. Transfer existing project information/documentation to Consultant members
c. Confirm project management goals and objective
d. Verify the status of ongoing tasks and define critical issues
e. Confirm lines of authority, organization, roles, and responsibilities
f. Confirm budget and schedule status and funding/cash flow issues
g. Engage in interactive planning to develop master schedule milestones
h. Develop coordinated work plan with all major players
i. Review and develop current project budget and estimates for roll-up into master budget
j. Initialize project management control system

k. Maintain customized, targeted QA/QC in every facet of the project
l. Confirm, verify, and create a project-level communication plan
m. Create and distribute the project-level document distribution plan

4. PROJECT ADMINISTRATION SERVICES

4. 1 Prepare and maintain Master Calendar and Meeting Minutes for the LMR and LTE projects

The Consultant will prepare and maintain the master calendar for each of the LMR and LTE projects, which are key management and administrative control systems that are both proactive and reactive. Project master schedules are used to schedule and document significant events and maintain records on a weekly basis for all project meetings for each project. Minutes of these meetings are recorded and distributed to a designated list of participants. The Consultant will prepare meeting minutes for all meetings designated by the Authority both the LMR and LTE projects and use them to measure and document work progress, identify problems, and the required action(s) for resolution. Upon completing the LMR and LTE projects, these master project calendars, and the record of all meeting minutes for each project, shall serve as an audit trail of all major project events and milestones.

4.2 Provide document control, administrative support, and information management for the LA-RICS LMR and LTE projects

The Consultant will establish and maintain a records management system that will be a project management control system which will fully integrate all project documentation for both the LMR and LTE projects. The web-based systems will be controlled via a secured access availability based on an approved responsibility matrix and communication protocols.

The Consultant shall establish a project file index, for both the LMR and LTE projects, consistent with industry standards, and as approved by the Authority. Consultant shall implement the approved file indexes and maintain a physical record (hard copies) of all project-related documents and records for both projects. These shall be stored in a secured location approved by the Authority. Project documents and records shall be readily available to Authority staff upon request.

4.3 Administer LA-RICS Project Contracts

The Consultant will assist the Authority with the review all project related contracts/agreements, including but not limited to, contracts with both the LMR System Contractor and the LTE System Contractor, and the environmental services consultant, to determine applicability of the contractors' and/or consultant's scope of work with the overall intent of the LA-RICS projects, and to determine all contractually required deliverables. Working closely with the key stakeholders, the Consultant will determine which deliverables in each project require stakeholder review and/or approval. These review and approval cycles will be in the program-level project schedule and will include deliverables (for tracking) in the project management control systems for each project.

4.4 Assist in environmental documentation preparation and processing in conformance with the CEQA and NEPA for the LTE project

The Consultant will review the contract requirements of the Authority's environmental consultant and assist with the coordination of all LTE contract deliverables with the environmental consultant, working with the Authority to schedule review and comment periods for environmental documentation, review and provide comment to such environmental documentation, and ensure all comments are returned to the environmental consultant and are incorporated in the final documents for the LTE project. The Consultant will assist the

Authority and the environmental consultant as needed at public meetings required for approval of the LTE environmental documents. The Consultant will ensure that any routine and regular documents or reports (daily, monthly, by site) required by the contract for the LTE project are complete and submitted. Following approval of the environmental documents, the Consultant will ensure that the best management practices and, if applicable, the CEQA Mitigation Monitoring and Reporting Program is implemented by applicable parties as defined in the environmental documents, for the LTE project.

4.5 Prepare the environmental documentation and ensure processing in conformance with CEQA and NEPA for the LMR project

The Consultant is responsible for all phases and activities associated with the preparation and delivery of the NEPA-compliant Environmental Assessment (EA) and CEQA-compliant Environmental Impact Report (EIR) for the LMR project. Consultant will work with the Authority to schedule review and comment periods for environmental documentation with the LA-RICS Staff, and ensure that all relevant comments are incorporated in the final documents for, as necessary, for the LMR project. The Consultant will assist the Authority in conducting any public meetings that may be required for approval of the LMR environmental documents. The Consultant will ensure that any routine and regular documents or reports (daily, monthly, by site) required by the contract for the LMR project are complete and submitted. Following approval of the environmental documents for the LMR project, the Consultant will ensure that the best management practices and, if applicable, the CEQA Mitigation Monitoring and Reporting Program, is implemented by applicable parties as defined in the environmental documents, for the LMR project.

The Consultant will review and validate LMR and LTE Contractor(s) reports for Construction Management Activities (CMA), at all LMR and LTE sites where the LMR and LTE Contractors perform CMA analysis whether Biological or Cultural, and provide the Authority with periodic reports as to the LMR and LTE Contractor's performance during LMR and LTE site construction. These services include, but are not limited to, review of Contractor CMA reports and LMR/LTE site inspections to verify that the LMR and LTE Contractors are proceeding with construction in compliance with CMA requirements as outlined in the LMR and LTE System Contracts respectively.

4.6 Prepare and maintain Project Reports and Records for the LMR and LTE projects

Immediately after notice to proceed, as part of the Consultant's integration plan, they will work with the Authority's key staff to determine the content and regularity of project reports for both the LMR and LTE projects. The Consultant will use the approved communications plan to determine the distribution for drafts as well as final reports for each project. Monthly LMR and LTE project reports will be provide to the Authority with current and accurate information regarding the program master plans. These monthly reports for each project will include:

a. A project budget analysis for each project describing the total project cost, actual expenditures to date, percent of budget spent to date, and budget remaining to complete the project. Identify any potential funding shortfalls and potential ways to mitigate them for each project.
b. A project schedule analysis for each project describing activities completed to date, project percent complete, actual progress versus baseline schedule, upcoming project milestones, activities on the critical path, and activities to be completed in the upcoming month (look-ahead schedule).
c. Future construction activities and early notification of potential operational impacts for each project that require coordination with the Authority
d. Pending action items for each project

With the approval of the Authority, the monthly report can be a single report containing status of both the LMR and LTE projects.

These reports will track float changes in all project areas, flagging those areas where the available float is decreasing (indicating a lack of progress) or increasing (indicating exceeding planned progress) and identifying the factors causing the change. The monthly trend report assists in identifying problem areas before they become critical. Using this report the Consultant can provide a detailed explanation of the root cause(s) for a delay in any area, as well as recommended corrective plan of action, for each project.
The Consultant will prepare these monthly reports in two forms:

a. An executive summary, that functions as a periodic newsletter of construction progress for project stakeholders and LA-RICS stakeholders
b. Analysis of the LMR System Contractor's and LTE System Contractor's recovery schedule (if applicable).
a. A detailed report for each project

The executive summary will be a graphic representation of the current and accurate status of each program's master plan. The detailed report supporting the summary of each project discusses all aspects of the program(s) master plan and the scope, schedule, and budget of current capital projects. The methodology used in preparing these reports for each project will be based on integrating information from various project databases or control systems such as:

a. Schedule information (completion status, milestone, critical path, and baseline schedule.
b. Total project cost estimates and financial summaries.
c. Project cash flow.
d. Submittals.
e. Requests for information.
f. Requests for quotation.
g. Critical issues

4.7 Provide and maintain an Electronic Document Control

The Consultant will provide a Document Control Plan and project file index which will define control procedures for all project-related documentation for each project. They will establish, manage, set-up, and implement a fully integrated, image-based document and retrieval system, for both the LMR and LTE projects, allowing for the archiving, control and security of all documents, records, reviews, correspondence, and writings, which shall provide the capability for expediting the transmittal of project-related construction documents. Consultant document control staff will maintain the accuracy of these databases through both daily and weekly updates.

The document control system for each project will:

a. Enable the management of millions of records and retrieval in seconds
b. Store consultant services agreements and contracts for easy retrieval and review
c. Shares documents with colleagues while protecting confidential information
d. Allow for e-mailing or faxing files with the click of a mouse
e. Provide an easy way to share documents with other offices or take them on the road
f. Tackle paper flow and information overload
g. Provide legal documentation

The Consultant will ensure all hardware and software purchased meets the specific requirements to support the proposed electronic document control system and other established programs. They will work with the

Authority to ensure the management information system for both projects possesses adequate capacity to manage the requirements, such as a shared local area network, electronic image-based document control system, and communications such as e-mail, computerized faxing, and internet access.

4.8 Provide and maintain an Issues Tracking System for each project

The Consultant will employ a web based Issues Tracking System such as Oracle Contract Manager as an issues tracking tool for each project to provide:

a. Effective communication and accountability from which project performance can be evaluated
b. Built-in modules for intuitive form routing and tracking tools to responsible parties
c. Allows project executives to focus on managing projects, not paper

5. SCHEDULE AND COST MANAGEMENT

Develop program procedures for the management of funding authorizations, funding approvals, cost escalation, communications protocols, responsibility matrix, and records management for the LMR and LTE projects.

The Consultant will develop a Project Delivery Plan (PDP) for each of the LMR and LTE projects consisting in part of program procedures for implementation and management of all tasks. Consultant will develop the PDP using industry best practices and will then customize it to meet the specific needs of the LMR and LTE projects. They will meet with key Authority personnel to better understand existing protocols for funding authorization approvals and communication for each project.

The Consultant will use this information to create program procedures, a communication plan, and a responsibility matrix with flow charts for each project.

The Consultant will track and manage cost escalation by using internal cost data for similar programs/projects as well as published industry cost information to establish trending plans. They will use these trending plans to determine the appropriate contingency levels for the LA-RICS LMR and LTE project cost models.

The Consultants' records management system will be a project management control system that will fully integrate all project information for reach project. This will be a web-based system and will have secured access availability based on an approved responsibility matrix and communications protocols.

5.1 Prepare and manage project budgets and schedules

The Consultant will develop program-level budgets and schedules for both the LMR and LTE projects. The master schedules will be a roadmap to project completion. Working with the information gathered at the interactive planning session, the Consultant will work one-on-one with the critical project stakeholders to develop a master schedule for each project that details every activity required to complete the project. This includes preconstruction activities including CEQA/NEPA studies, design milestones, third-party contracts, equipment and furnishings procurement and delivery, and JPA requirements, construction phasing, training, testing and commissioning activities, and review and approval checkpoints for each project.

Based on criteria established for the prospective projects, the Consultant's estimators will query the historical database for similar type projects and use factors such as location and escalation to benchmark each project to the center point of construction. They will use data from each of these projects to develop a cost model or budget for the new LMR and LTE projects based on a set of assumptions in the planning documents. In certain situations or geographies, they will perform market surveys to determine current market conditions such as

labor costs and availability, market saturation as it relates to the bidding climate, and any special factors to be considered for the local market.

Consultant shall review the LMR System Contractor's and LTE System Contractor's baseline schedules and make recommendations to the Authority whether to approve or reject the schedule for each project. Once the baseline schedules are established and approved, the Consultant will ensure that the Authority receives monthly schedule updates from the LMR System Contractor and the LTE System Contractor. The Consultant shall review the monthly schedules updates and make recommendations to the Authority whether to approve or reject the updated schedules for each project. The Consultant shall provide review comments to the LMR System Contractor and the LTE System Contractor to be incorporated into subsequent updates. Schedule review comments for each project shall include a discussion on the following:

a. Overall contractual project duration (calendar days) and any changes to the contractual substantial completion date. Include a discussion of any change orders which may have extended the contractual substantial completion date.
b. Discussion regarding the addition/deletion of any activities, calendar changes, changes in the relationship between activities and/or activity lags, changes in the description activities, calendar changes, changes in the duration of activities, number of activities with "actual start" dates, and number of activities with "actual completion" dates.
c. A critical path analysis for each of the LMR and LTE projects.

5.1.1 Establishment of a Baseline Schedule

The Consultant will establish a baseline schedule with the LMR System Contractor and the LTE System Contractor that is fair to the Authority and LMR and LTE Systems Contractors and is an accurate representation of how each Contractor will actually build the LMR and LTE projects. For each project, the schedule will include consideration of, but not be limited to:

a. An understanding of critical tasks to be performed
b. An understanding of project schedule and budget objectives
c. Consensus of basic schedule architecture, software usage and administrative steps for the balance of the project
d. Review of the telecommunications system contractor's detailed baseline schedule
e. Examination of logic durations, constructability, and flow of work laid out in the schedule, including non-implementation/construction restraints and activities (i.e. permits, procurement strings, submittal reviews and approvals, other contractor activities, end user activities, and restrictions)
f. Analysis of cost and manpower allocations by trade and examination of cumulative distribution
g. Consideration of input from major subcontractors and vendors, thorough the telecommunications system contractor, in development and approval of the schedule.

5.1.2 Key schedule management activities for the LMR and LTE projects will include, but not be limited to:

a. Short interval schedules, such as two- and three-week look-ahead schedules
b. Updating the schedule monthly
c. Preparing float trend analysis on each update (refer to the float chart on the following page)
d. Generating pay applications from the updated schedule
e. Evaluating the LMR System Contractor and LTE System Contractor's recovery schedules and identifying mitigation measures needed whenever progress is delayed
f. Identifying mitigation measures needed for the recovery or when changes to the contract scope of work have the potential to impact the schedule

g. Coordinating all construction activities with particular attention to coordination with various contractors working on different bid packages
h. Documenting, verifying, and reporting progress monthly
i. Performing technical analysis for all the changes submitted and/or subsequent claims made by the telecommunications system contractor
j. Conducting negotiation of all time impact settlements

5.1.3 Integration of the System(s) with a Work Breakdown Structure/Chart of Accounts

To make the LMR and LTE projects controls process comprehensive to all program aspects, the Consultant will integrate each individual system component into an overall project control system for each project. One of these integrated components is the work breakdown structure (WBS). Consultant will work closely with the Authority to determine and define the best WBS for each project, and determine, for each project, whether projects' structure should be shaped by funding source, bid packages, program phase, or a hybrid of system/structure. These project structures will provide detailed definition to contract packages and major budget elements, and define segregated budgets across the whole organization, such as owner's costs, PM/CM Consultant, and the LMR and LTE Systems Contractor's cost assignments.

5.1.4 Use of Each System as a Management Tool

Each WBS entry, for each project, will have a project definition sheet that provides the WBS description, set of functional requirements the projects must satisfy, the allowed budgets (by design or construction phase for each active party), and overall project(s) schedule. Together this matched data provides a tool to baseline and track performance against a pre-determined set of metrics.

5.1.5 Provide telecommunication appraisal expertise for valuation on all match expenditure for grant funds

The grant application and approval process for each project involves developing investment justifications based on technical or operational needs, and also developing a financial analysis that provides approval authorities with the confidence that all costs and benefits have been defined and quantified. This analysis is especially important when the applicant must produce matching funds to qualify. One of the key aspects of developing a cost analysis is creating a viable set of assumptions, particularly in the areas of technology, finance, and operations. For a particular appraisal, the Consultant will work with the Authority's Executive Director to identify and quantify these assumptions for each of the LMR and LTE projects. Using an in-house cost estimating tool, the Consultant will provide a life-cycle cost estimate for the applicable LMR and/or LTE Systems based on actual contract information balanced against industry information, as well as the Consultant's experience with comparable systems. The estimated costs for each project may include:

a. Radio equipment and control
b. Backhaul equipment
c. Interoperability equipment
d. Subscriber units
e. Antennas
f. Dispatch consoles and other subsystems needed to interconnect to the radio network
g. Real property, site access agreements, and site modifications
h. Microwave upgrade/extensions
i. Project management
j. Annual maintenance
k. First year operational costs
l. Projected 10-year capital costs

m. Projected 10-year operational costs

6. QUALITY ASSURANCE/QUALITY CONTROL

The size and complexity of two simultaneous LMR and LTE LA-RICS projects demand an exacting approach to quality control, risk management, and customer satisfaction. To ensure that the LMR and LTE Systems Contractors deliver the best and most comprehensive solutions for the Authority, the Consultant will employ proven processes for QA/QC and Risk Management services across all project phases for each project. To ensure the Consultant achieves Authority expectations and goals, the Consultant will use a client satisfaction process to measure their team's performance against mutually agreed-upon key performance indicators for each project. The following paragraphs outline the approach to these critical areas.

a. The Consultants team members will have performed QA/QC specialized functions on statewide radio deployments in the U.S.
b. The Consultant will use the industry's most comprehensive collection of radio technology engineers and analysts available
c. The Consultant of QA/QC process experts will have performed similar services for projects similar to the LA-RICS project
d. High-level team management involvement will be used throughout the LA-RICS project
e. The Consultant's complete and operational radio systems performance approach will:
    i. Provide a QA/QC plan that encompasses the QA/QC process, reviews, methodology, resources, and objectives of the QA/QC program
    ii. Apply best practices analytical tools to verify and validate the telecommunications system contractor's approach and estimations
    iii. Provide a detailed, actionable recommendations for system and/or program modifications or improvements

The intent and benefit of a well-defined QA/QC process for each project is to verify and validate the specific work products of each project phase. The Consultant will develop a QA/QC plan that supports Authority expectations of quality from the LMR and LTE System Contractors.

6.1 Verify Technical Compliance

The Consultant will assess and report on the LMR System Contractor's and LTE System Contractor's adherence to the technical requirements of the LMR and LTE projects during all project phases. These requirements include the functional, operational, standards compliance, performance, coverage/capacity, and interoperability requirements of the LA-RICS program. Reports will be generated on a quarterly basis for each project, with ad-hoc reports generated for compliance actions that require immediate response.

7. RISK MANAGEMENT

The Consultant will implement a comprehensive risk tracking and mitigation program for each project that will:

a. Identify and evaluate potential risks to the LMR and LTE projects
b. Identify risk mitigation strategies and activities for each project
c. Report on findings and recommendations for each project

In addition, the Consultant will closely monitor the LMR and LTE Systems Contractors' project plans to identify potential risks to the timely completion of project milestones and tasks and to the adherence to the project schedule for each project. The Consultant will provide reports with findings and recommendations on a quarterly basis for each project, or as required.

The Consultant will employ these two key risk management functions:

a. Risk *assessment*, where the Consultant and Authority staff will determine the risks in each project and identify plans to execute should the risk materialize.
b. Risk *control*, where the Consultant and Authority staff will take a proactive role to minimize and mitigate identified risks in each project before they occur.

The Consultant will develop and maintain, with input from the Authority, a list of potential risks for each project. Potential risks will be included for all participating organizations, including the LMR System Contractor and the LTE System Contractor, all subcontractors for each project, participating local jurisdictions, and the JPA in areas such as:

a. Critical path analysis – dependencies and impact of non-achievement
b. Schedule realities and anomalies – realistic durations compared to recent past histories
c. Design – comprehensive and in sync with industry best practices
d. Production limitations – ability to meet schedules and prioritize new orders
e. Weather – impact of adverse weather conditions
f. Past history with specific products being fielded – issues and anomalies
g. Construction and vendor delays – track record of performance and vendor delivery
h. Organization – organizational structure that supports requirements and changes
i. Third party – regulatory issues, permitting processes, environmental concerns, etc.
j. Public relations – impact of political wind shifts, perceptions, and communications

7.1 Dispute Resolution

For each of the LMR and LTE projects, the Consultant will ensure that design documents are well coordinated, easy to read, complete, and as error-free as possible. To achieve this, the Consultant will conduct thorough design and constructability reviews for each project with a multi-disciplined A/E team. The Consultant will conduct reviews at design milestones, often at the conclusion of each design phase, at intermittent completion milestones, or via over-the-shoulder reviews for specific technical needs. The Consultant will ensure:

a. That design documents prepared by the telecommunications system contractor comply with state and local codes.
b. Building systems are energy efficient.
c. The design accounts for technology needs.

The Consultant will work in cooperation with the Authority to develop a checklist approach to document review for each of the LMR and LTE projects.

The Consultant will attempt to resolve issues in each project as early as possible and at the lowest management level. During the initial phase of the LMR and LTE projects, the Consultant will conduct an interactive planning session to ensure all project details and needs are discussed early and openly. The Consultant will develop a defined project execution plan for each project with established key milestone dates for each phase, identifying key interface points, identifying the project critical path and setting coordination procedures and soliciting the LMR and LTE Systems Contractors' buy in to the overall plans. It will establish a protocol identifying how Contractor issues will be addressed. The Consultant will subsequently monitor each project for potential issues and work quickly to resolve them while impacts are minimal. If the Consultant observes or suspects a problem exists that could lead to a claim in either project, they will:

a. Evaluate the potential risk
b. Explore alternatives for resolving the problem

c. If required, prepare supplemental guidance to clarify contract requirements
d. Begin preparing a potential claim file to capture all correspondence, reports, meeting minutes, and other documents relevant to the issue
e. Proactively address and fairly resolve telecommunications system contractor's issues as they arise so that they don't become claims
f. If a claim is filed, assist with the resolution with expertise, lessons learned, and strategy development
g. Initiate a change order, if appropriate, to compensate a contractor for changed conditions

8. PROJECT CLOSEOUT

Coordinate System Acceptance and End-User Training for each LMR and LTE Project

For each LMR and LTE project, the Consultant will determine the project closeout requirements during the program's integration phase. The Consultant will work closely with key stakeholders, especially maintenance and facility personnel, to understand their requirements for closeout, including warranty requirements, start-up, training, and usual and ongoing maintenance. The Consultant will include these requirements in the project management controls system for each project, as well as on the projects' master schedule. The Consultant will provide a comprehensive issues tracking system to provide visibility and definition to outstanding deficiencies and an integrated project schedule for both the LMR and LTE projects. The Consultant will coordinate acceptance activities for each project with the Authority (including their program managers, execution of a work acceptance certificate) and applicable jurisdictions to ensure all LMR and LTE Contractor obligations are complete. This includes:

a. Obtaining jurisdictional approvals of the site design documents
b. Completing all contract milestones
c. Obtaining work acceptance certificates for substantial/final completion of LMR system acceptance, LTE system acceptance, and final telecommunications system acceptance

9. STATEMENT OF WORK BY PHASES

Both the LMR and LTE projects in the LA-RICS program will be executed in the following six phases:

Preliminary Phase (Phase 0) – Project Startup (LMR and LTE)
Phase 1 – System Design (LMR and LTE)
Phase 2 – Site Construct and Site Modification (LMR and LTE)
Phase 3 – Supply Telecommunications System Components (LMR and LTE)
Phase 4 –System Implementation (LMR and LTE)
Phase 5 –System Maintenance (LMR and LTE)

9.1 PRELIMINARY PHASE 0 – LMR AND LTE PROJECT STARTUP

Upon the effective date of Consultant Agreement and a Notice to Proceed (NTP), and prior to the execution of the LMR System Contractor's contract or the LTE System Contractor's contract, Consultant shall fully perform the Preliminary Phase tasks and deliverables in this Section 9.1 for both the LMR and LTE projects.

9.1.1 Document Management System

Consultant shall establish a document management system for both the LMR and LTE projects in both electronic and paper documents format.

9.1.2 Cost Modeling

Consultant will assist the Authority in developing a project cost model for each project that considers grant funding allocations, proposed/required Member contributions, proposed/required Member/subscriber/affiliate

fees, timelines and cash flow requirements by phase. Consultant shall create a baseline cost of the LMR and LTE System Contractors' scope of work, identifying costs by phase, project schedule(s), and migration plan(s). Consultant shall work with the Authority and other relevant entities to create reports for each project analyzing the optimization of LA-RICS project funding/grant funding with the LA-RICS projects schedules.

9.1.3 Project Delivery Plan (PDP)

Consultant shall create a Project Delivery Plan draft for both the LMR and LTE projects, subject to subsequent revision under Section 3.0 above.

9.1.4 LMR System Analysis

Consultant shall prepare an analysis regarding the LMR system addressing

a. The potential wasteage if the Authority were to implement the LMR system on the T-Band frequencies (470 to 512 MHz) and then migrate the LMR system to 700-800 MHz band frequencies or other hybrid network prior to the T-Band frequencies being auctioned under HR 3630
b. The feasibility of the Authority forgoing implementation of the LMR system on the T-Band frequencies, and rather implementing the LMR system on 700-800 MHz band frequencies or other hybrid network.

Regarding item a. of this task, issues to be addressed include:

a. How much of the T-Band design would be reusable?
b. What is the breakage/throwaway?
c. In a notional design, how many sites would be needed for a 700-800 MHz band frequency, or some hybrid thereof, LMR system?
d. Where could the Authority co-locate the 700-800 MHz band frequency sites with the LTE system sites?
e. If the Authority could co-locate some number of 700-800 MHz band frequency sites with LTE system sites, how many frequencies would the Authority need?
f. Is the migration from T-Band frequencies to 700-800 MHz band frequencies a significant forklift effort?
g. What percentage of what the Authority deployed on the T-Band frequencies will require replacement (breakeage)?

Regarding item b. of this task, issues to be addressed include:

a. How many sites would be needed?
b. What is the estimated cost?
c. What is the total cost of ownership?
d. In a notional system, what are the number of frequencies the Authority would need in order to build-out a system to cover Los Angeles County at the coverage and capacity specifications noted in Request for Proposals?
e. Does the Authority or its Members have those frequencies now?
f. How long will it take to build out the network?
g. What else is possible?
h. What other frequencies could the Authority use?
i. How could the Authority use the analog overlay?
j. Could the Authority use the LTE system sites for 700-800MHz deployment and enhance frequency reuse?
k. What would coverage and capacity look like depending on the design?

9.1.5 LMR Site Assessments

As part of the project descriptions, the Consultant will perform detailed site assessments for all 109 identified LMR sites. The project descriptions will include site drawings showing construction boundaries, footprints of towers and shelters, and disturbance areas. It will also provide tower and shelter details, including quantity, height, size, foundation, lighting, number and type of antennas, and amount of grading and clearing necessary. Since the documents will be used as a reference for the environmental analysis, the Consultant will employ specialized technical support staff, experienced in the requirements, environmental impact, and documentation of radio tower site construction, to ensure the accuracy and completeness of all information.

The Consultant will work closely with the Authority to schedule, coordinate, and review these documents to ensure they accurately describe the systems and site components at each of the 109 LMR sites, and that they provide the necessary information for the environmental CEQA and NEPA review process. Also, the Consultant will complete site visits and inspections for all existing 109 LMR sites to ensure the accuracy of the LMR site database as provided in the RFP and supporting documents. The Consultant will perform visual site surveys to include, but not be limited to, the following elements:

a. Structural analyses of existing towers and other antenna support structures.
b. Equipment inventory.
c. Access road conditions.
d. General site conditions.
e. Physical availability of surrounding land space.
f. Perimeter security.
g. Commercial power.
h. Emergency power.
i. AC and/or DC power.
j. Equipment shelter design.
k. HVAC.
l. Grounding and lightning protection.
m. Tower FAA obstruction lighting and painting.
n. Fire suppression and prevention.
o. Telco service.
p. Site safety radio frequency radiation compliance.
q. Grounding and variances from specific vendor standards.
r. Transmission line support structures.
s. Waveguide and dry air systems.
t. Civil and earthwork performance criteria.
u. Nearby obstructions that may impact microwave paths and mobile radio coverage.
v. Implementation of best management practices and CEQA/NEPA mitigation measures (if any).

The result of LMR Site Assessment task will be a complete and comprehensive LMR site database of all 109 LMR sites. The site database will be resident in the SharePoint system for easy access by the Consultant, the Authority, and subsequent Telecommunications System Contractor(s).

9.1.6 LMR Hybrid System Analysis

Consultant shall prepare an analysis regarding the feasibility of a potential hybrid LA-RICS LMR system consisting of:

a. The use of the County-owned UHF T-Band frequencies for a County-wide digital trunked voice radio system DTVRS for the agencies which currently use that frequency band.

b. The use of the seventy (70) 700 MHz County-licensed frequencies to provide County-wide coverage for migrating selected UHF T-Band subscribers away from that spectrum in preparation for the eventual requirement to vacate the T-Band spectrum.
c. The use of the County-owned UHF T-Band spectrum to provide NMDN (narrowband data, 25 KHz) County-wide coverage until LTE services are available from the National Public Safety Broadband Network or a compatible network implemented by the Authority.
d. The use of the existing County-licensed 800 MHz spectrum (64 channels) for the Analog Conventional Voice Radio System (ACVRS).

The areas to be included in this analysis include the following, for both the 700 MHz and UHF T-Band components:

a. Coverage
b. Capacity
c. Spectrum use including high-level channel planning for simulcast planning and channel reuse
d. Initial high-level identification and mitigation of interference issues
e. High-level implementation and migration considerations
f. Rough order-of-magnitude costs for the LMR and microwave equipment, infrastructure, and vendor-related implementation/project management

This task does not constitute a network design, but is rather a feasibility analysis. Preliminary and detailed analyses will be conducted by the future LMR System Contractor during Phase 1 design activities, and reviewed by the Consultant.

Assumptions from the initial LMR Feasibility Study (section 9.1.5 above) will be used in this hybrid network feasibility analysis, including the areas of user requirements, technical and functional specifications from the 2011 Telecommunications Services RFP, spectrum ownership, currently awarded grant funding, and site availability. No consideration will be given to determining the timing of the availability of additional 700/800 MHz spectrum, the availability of LTE capacity, legislative or policy changes related to the T-Band giveback process, or the availability of any funds related to H.R. 3630. Channel requirements per site will be developed using existing system use information and the minimum channel count of 10 per site defined in the RFP will not be used; rather, the channel counts per site will be based on a high-level assessment of requirements based on current use and projected growth as outlined in the RFP.

Additional scope of work in this section 9.1.6, and as a follow-on to completed activities for the LMR Hybrid System Analysis as outlined above, will include an interference analysis of two (2) 700 MHz guard band channels.

As a result of the enactment of HR 3630 on February 22, 2012, LA-RICS is tasked to look for additional radio spectrum to construct a UHF T-band/700 MHz hybrid voice and data network. LA City has contributed thirty-four (34) 700 MHZ frequencies. Two MHz of 700 MHz spectrum was also identified for potential use. These two are the guard band frequencies 768-769 MHz and 798-799 MHz which separate the broadband from the narrowband frequencies, and are not currently allocated for use by FCC rules. The Authority plans to apply for a waiver to the FCC rules to utilize these frequencies in support of its Hybrid network.

The Authority has contacted FCC counsel to begin the waiver process for these frequencies. The added scope to the Jacobs Scope of Work (restated herein) is as follows:

a. Provide a needs analysis demonstrating and justifying that other spectrum is not available.
b. Provide an interference analysis to ascertain that the use of the spectrum as identified above is possible

without significant interference to adjacent services.

c. Complete the FCC Form 605 License Application, articulating the technical parameters for use of the spectrum.

Consultant will utilize subject matter experts skilled in the areas of RF frequency coordination, frequency interference engineering, knowledge of FCC rules, and familiarity with the waiver and licensing process. Additionally, Consultant will generate technical supporting documentation in the form of interference contours. This scope is anticipated to take no longer than six (6) weeks from issuance of notice to proceed to completion.

9.1.7 RFP Rewrite (LMR and LTE)

Consultant will support the RFP Rewrite process for both LMR and LTE, in the following areas:

a. LTE and LMR network specification
b. Site and constructability considerations
c. Overall program rollout expectations
d. Design, deployment, test and acceptance processes and specification
e. Phasing and schedule considerations
f. Overall site and network requirements generation

The Consultant will perform the following minimum program support activities:

a. Provide input with respect to technical and functional specifications for consistency with industry standards and client requirements.

b. Provide input with respect to LMR and LTE RFP(s) for inconsistencies in technology, methodology, and performance.

c. Provide input with respect to the review of LMR and LTE RFP(s) to ensure consistency with the proposed evaluation and scoring methodology and process.

d. Provide input with respect to the review of LMR and LTE RFP(s) to validate that proposals can be verified through future acceptance testing.

e. Provide input with respect to the review of boilerplate terms, conditions, and instructions for appropriateness and applicability to the goals and objectives of the LA-RICS initiative.

f. Provide input with respect to the review of service level/performance guarantee requirements to validate that they can be achieved.

g. Provide input with respect to the review for unnecessary risk items that may be ascertained in proposer(s) proposals.

The Deliverable for this 9.1.8 RFP Rewrite task is the Summary Report of activities performed in support of LA-RICS RFPs for both the LMR and LTE Systems resulting in a LMR System Contractor RFP and a LTE System Contractor RFP that will each be the basis for LMR and LTE Contractor(s) selection to perform the design, deployment, test, and acceptance for the LA-RICS program.

9.1.8 RFP/Proposals Compliance Analysis

Consultant will perform the RFP Proposal Compliance Analysis for both the LMR and LTE proposal(s), specifically in the areas of LMR and LTE network specifications, site and constructability considerations, and with respect to specific Proposer(s) proposed deployment decisions and infrastructure development considerations for each

project. The Consultant will perform the following minimum proposal compliance activities for each project:

a. Review LMR and LTE RFPs to validate proposer(s) knowledge of LA-RICS requirements for each project.

b. Identify key areas of LMR and LTE RFP response to be used for compliance analysis for each project.

c. Develop a format for the Compliance Report that will be specific to each proposer(s) proposal for both the LMR and LTE proposals.

d. Develop analytical processes to ensure consistency across compliance report sections, and aid in consistency in the evaluation and scoring processes for each project.

e. Review specific technical sections of each proposer(s) proposal to validate compliance with RFP requirements and expectations for each project.

f. Review each proposer(s) response for both projects to validate that the required services and functions can be delivered operationally by the proposer(s), and that their proposed solution is viable and cost effective for each project.

g. Provide input with respect to review of the LMR and LTE RFPs to validate proposer(s) approach, cost, and acceptance criteria for the LMR and LTE network deployments for each project.

h. Review transition and implementation plans for reasonableness, adequacy, and compliance with LMR and LTE RFP considerations for each project.

i. Review and prepare an analysis of each proposer(s) proposal response for each project, indicating the strengths and weaknesses of each proposer(s) responses with respect to LMR and LTE RFP requirements.

j. Identify major concerns and risks with each proposer(s) response for each project.

Additionally, Consultant will provide LMR and LTE Subject Matter Expertise (SME) support to the Evaluation Team, to include the following tasks for each project:

a. Provide clarifications to the Evaluation Team, as needed, with respect to proposer(s) proposed technology and infrastructure solutions for each project.

b. Provide guidance to the Evaluation Team, as needed, with respect to industry best practices for LMR and LTE network deployment and site/civil construction for each project.

c. Assist the Evaluation Team, as needed, to fully understand the nature and intent of proposer(s) proposed technology and infrastructure solutions for each project.

d. Closely coordinate with the Evaluation Team across all components of the Evaluation process for each project.

e. Provide expert advice and recommendations to the Evaluation Team, as needed, to help the team understand not only the written solutions proposed by the proposer(s), but also the nuances of the proposer(s) proposal(s) with respect to design, deployment, test, cutover, and acceptance activities for each project.

f. Drawing upon the Consultants' expertise in the public safety market, provide reasonable estimations of constructability and network deployment success with respect to the proposer(s) proposed solutions and activities for each project.

g. Generally, assist the Evaluation Team with all aspects of the LMR and LTE evaluations with respect to each section of proposer(s) proposal(s) for each project, but not to include actual scoring activities.

The Deliverables for this 9.1.9 Proposal(s) Compliance Analysis tasks are the LMR and LTE Summary Compliance Reports for each proposer(s) of activities performed in response to the LA-RICS RFP(s)/Addendum(s). The Compliance Analyses will form the basis for the Proposal evaluation process for each project, specifically with respect to the design, deployment, test, and acceptance of the LA-RICS program. Additionally, written clarifications, recommendations, comparisons, and statements of expert witness, as provided to the Evaluation Team, will be compiled as part of the Deliverables for these tasks.

9.1.9 Negotiations

Consultant shall participate in and advise the Authority during negotiations of both the LMR and LTE Systems contract documents to ensure that the Authority obtains the best terms and conditions, as accurately and effectively memorialized in the agreements for each project.

Consultant shall participate in and advise the Authority during negotiations with the selected LMR and LTE Systems Contractors to assist with identifying/clarifying Contractor(s) scope of work with respect to radio network deployment and site constructability, terms and conditions (including the justification for claimed exceptions), network design, deployment, test and acceptance, and all components and aspects of proposer(s) proposals(s) that would be the subject of negotiations for each project. Consultant will specifically support these LMR and LTE tasks in the following areas:

a. Assess LMR and LTE Contractor(s) proposal(s) with respect to terms and conditions as pertains to radio network deployment, site assessment, construction, testing, and acceptance for each project.

b. Assess LMR and LTE Contractor(s) proposal(s) for site network technology applicability, construction schedules, methodologies, processes, and plans for each project.

c. Assess LMR and LTE Contractor(s) proposal(s) processes for telecommunications equipment deployment, site upgrades, builds, over-builds, modifications, etc. for each project.

d. Assess LMR and LTE Contractor(s) proposal(s) for compliance with industry LMR, LTE, and construction standards, and radio deployment and construction best practices for each project.

Additionally, the Consultant will perform the following services in support of LMR and LTE Contractor negotiations:

a. Participate in the development of the initial negotiations strategy for each project.

b. Develop what-if scenarios and devil's advocate positions for possible negotiation(s) positions for each project.

c. Identify weak and strong points in the LMR and LTE Contractor(s) negotiation(s) positions.

d. Provide 'best current practices' for key negotiation areas based on recent experiences in other negotiation processes.

e. Review proposed LMR and LTE Contractor(s) schedule(s) to validate the viability of the proposed program schedule for each project.

f. Review component and network test procedures for reasonableness for each project.

g. Review payment/acceptance terms and conditions with respect to the adequacy of milestones and program performance metrics for each project.

h. Review and provide comparative pricing for services and equipment based on other similar negotiations efforts for each project.

i. Validate amount and applicability of equipment proposed to ensure adequacy of program deployment and performance for each project.

j. Provide QA/QC of Contractor(s)-proposed microwave routes, coverage, and service guarantees to identify weak areas for each project.

k. Review Terms and Conditions for areas that might impact design, implementation, testing, or acceptance criteria for each project.

The Deliverables for these 9.1.9 Negotiations tasks are the Summary Report of activities performed in support of LA-RICS LMR and LTE Contractor(s) negotiations(s) resulting in a LMR System Contractor contract and a LTE System Contractor contract.

Once negotiations for each project are completed, Consultant will also provide an additional Deliverable of preparing and providing a written analysis and recommendation of the respective LMR and LTE System being considered for award by the Authority. Such analysis is anticipated to be used and/or included in the board letter to the Authority's Board of Directors recommending award of a contract to the selected LMR System Contractor and the LTE System Contractor. Consultant's analysis will set forth (1) the specifics of each of the Systems being considered for award, (2) whether, in the Consultant's opinion, each such System will meet the technical and operational needs of the Authority and the Authority's members, and (3) the Consultant's technical recommendation for award of each of the LMR and LTE Systems. The sufficiency of such analysis will be reviewed and approved by the Authority.

9.1.10 Outreach

The Consultant will provide outreach support activities to the Authority for the purpose of informing and advising the local community, local public safety agencies, and Authority Members in the following program areas for each of the LMR and LTE projects:

a. Provide an overall project description and anticipated program timelines for the LMR and LTE projects.

b. Provide and maintain the master file of LA-RICS presentations, and keep presentation materials current and up to date.

c. Outline infrastructure development and construction, and the impact of such work on local jurisdictions and communities for each project.

d. Provide information and support for public dissemination of environmental assessments, as may be originated by either the environmental consultant or the Consultant, including providing LMR and LTE site assistance to the Authority for each project.

e. Provide analysis to the public and affected Authority Members regarding the expected capital expenditure and operations/maintenance costs of the LMR and LTE Systems.

f. LA-RICS brochure and marketing material preparation for each project.

g. Assist with development of timelines specific to the work to be performed for each affected Authority Member and/or City, so targeted communities know what to expect from the LMR and LTE projects.

h. Provide a LA-RICS Fact Sheet to include common questions along with answers for each project.

i. Assist with prioritizing follow-up meetings for each project with cities and public safety agencies.

j. Prepare a marketing packet for meetings with City officials regarding Site Access Agreements for each project.

The Consultant will provide coordination services for local outreach meetings and attend such meetings as desired and requested by the Authority for each project.

The Consultant will provide other outreach services and/or activities to assist with specific environmental issues that may be identified and requested by the Authority for each project.

Although commenced in the Preliminary Phase, outreach activities may extend over various phases of each project.

The Deliverables for these 9.1.10 Outreach tasks are presentations, marketing materials, and fact sheets, as well as other work product generated from these 9.1.10 Outreach tasks.

9.1.11 Environmental Support

For the LTE project, in Phase 0 of that project, the Consultant will provide best practices analysis to include Biological, Archeological, and Botanist services to assist and validate the Environmental Consultant's analysis that environmental documentation is prepared and submitted as stipulated in CEQA and NEPA guidelines. These validation activities will result in specific review of all environmental documentation provided by the Environmental Consultant. These reviews will be provided to the Authority weekly, as they occur, through edits/modifications to documents and recommendations to the Authority regarding the process, schedule, and deliverables for the environmental certification process for the LTE project.

The Deliverables for these LTE-PH0-9.1.11 Environmental Support activities are the environmental documents themselves.

Additionally, in support of the LTE construction effort, the consultant will provide environmental construction compliance monitors, including at least one senior biologist to oversee and coordinate the activities of the LTE Contractor's environmental compliance monitors. Duties will include:

a. Review of LTE Contractor-prepared environmental compliance management plan (ECMP)(may also be known as mitigation monitoring compliance reporting plan or similar).

b. Site inspections at LTE construction sites to verify ECMP compliance by LTE Contractor.

c. Coordination with LTE Contractor environmental compliance monitors

d. Coordination with appropriate Authority staff.

e. Coordination with federal and state regulatory or land management agencies, as appropriate to support environmental compliance at construction sites.

Compliance monitoring leads are required to support an anticipated 72-hour per week construction schedule.

LTE deliverables for this Phase 2 effort will at a minimum be Weekly Compliance Monitoring Reports.

9.1.12 Project Descriptions

For each of the 232 LTE sites, Consultant will provide a detailed Project Description of the LTE Project that provides information on the activities that will be undertaken by the Authority at the sites, including but not limited to the following information for each LTE site:

a. Confirm location of site boundaries, including aerial and topographic representations showing those boundaries as required for analysis under CEQA and NEPA .

b. Purpose and needs.

c. General description of the LTE Project's technical, economic, and environmental characteristics as required for analysis under CEQA and NEPA review, as well as identifying existing structures on site.

d. Incorporation of all Monopole types that could be considered for use at an individual site (disguised, undisguised, rooftop, facility attached, modified flag pole, etc.)

e. Incorporation of all types of lighting that could be considered for use on each Monopole considered.

f. Incorporation of a general description of the type and extent of proposed trenching and excavation expected to occur.

g. Incorporation of a description of the time of day work and days per week work is expected to occur and work schedule.

h. Incorporation of estimates for duration of construction, the number of truck trips, and the type and duration of use of construction equipment/machinery that is assumed to be used.

i. Incorporation of generalized description of infrastructure development expected to be required for project implementation.

j. Incorporation of Construction Management Requirements (as defined in the LTE System Contract) proposed for implementation at each site.

The Deliverables for these 9.1.12 Project Descriptions are the Project Description documents for each of the 232 LTE sites that will be provided to the LTE Contractor following LTE Contractor contract execution for confirmation by such LTE Contractor.

LTE deliverables for this Phase 0 at a minimum will be:

a. LTE-PH0-9.1.7 LTE RFP Rewrite Summary Report
b. LTE-PH0-9.1.8 LTE Proposals Compliance Analysis Reports
c. LTE-PH0-9.1.9 LTE Negotiations Summary Report; Written Analysis and Recommendation to Authority Board

d. LTE-PH0-9.1.10 Outreach Presentations, Marketing Materials, and Fact Sheets
e. LTE-PH0-9.1.11 Environmental Documents Review Reports
f. LTE-PH0-9.1.12 Project Description documents

9.2 PHASE 1 – LMR AND LTE SYSTEM DESIGN

Early in the design phase for each project, the LMR and LTE Systems Contractors will prepare detailed Project Description documents that will describe the LMR System and LTE System respectively. The Consultant will work closely with the Authority and the LMR and LTE Systems Contractors to schedule, coordinate, and review these documents to ensure they accurately describe the systems and site components, and provide the necessary information for the environmental CEQA and NEPA review process for each project.

The LMR and LTE project descriptions will include site drawings showing construction boundaries, footprints of towers and shelters, and disturbance areas for each project. It will also provide tower and shelter details, including quantity, height, size, foundation, lighting, number and type of antennas, and amount of grading and clearing necessary. Since the documents for each project will be used as a reference for the environmental analyses, the Consultant will employ specialized technical support staff, experienced in the requirements, environmental impact, and documentation of radio tower site construction, to ensure the accuracy and completeness of all information for each project.

The Consultant will conduct a Constructability/Design Review for each of the LMR and LTE projects which will include review for compliance of rules, regulations, and codes. The Consultant will document and track any compliance issues found during the review process for each project and send the non-compliance issues to the A/E of record for correction. The Consultant will confirm compliance/correction of the issues either in a subsequent submission or through review of the documents for each project.

The Consultant understands that no system acquisition actions will be authorized for either the LMR or the LTE projects until the Phase 1 system design process is complete and associated environmental documentation is approved for each project respectively. Therefore, this task will commence as soon as possible after the LMR and LTE system(s) contracts are awarded in order to expedite the environmental CEQA and NEPA processes and reduce the risk of project schedule delays for each project.

9.2.1 Review Detailed Design Documents

The Consultant's vision for delivering each of the LMR and LTE systems design review services will be based on:

a. Applying experienced personnel with extensive public safety communications technology experience

b. Working within a structured quality management system that includes the JPA-approved processes, milestones, and checklists that the Consultant has successfully tested and implemented on similar projects

The Consultant will employ a combination of experienced personnel, coupled with the use of best practice quality management processes, to provide a comprehensive understanding and articulation of the LMR system design and LTE system design in each project respectively. The methodology for Phase 1 system design is depicted below and in the following sections.

9.2.2 System Design Methodology

Key elements of the design review activities include planning, scheduling, and coordinating preliminary design

reviews (PDR) and detailed design reviews (DDR) with the Authority and the LMR System Contractor and the LTE System Contractor respectively, scheduling key milestones within the project master schedule for each of the LMR and LTE projects, and an independent assessment of the LMR System Contractor's and the LTE System Contractor's detailed design specifications. The Consultant will review all technical documentation for accuracy, constructability, and value engineering for each project. The evaluation of system specifications will consist of the following elements:

a. Requirements traceability – LMR System Contractor's and the LTE System Contractor's design specifications must be inclusive and comply with all requirements outlined in the final system performance criteria and environmental documents for each project.
b. Allocation of requirements – Each required functional element of the design specifications for both the LMR and LTE projects must be allocated to a system element that can be verified through factory, field, and acceptance testing.
c. Specification verification – Key performance elements should be independently evaluated and verified compliant with system performance criteria for each project.
d. Risk assessment – Based on the technologies specified for each of the LMR and LTE projects, the Consultant will identify high-risk areas and develop mitigation strategies for the Authority's review and approval.

For the design and subsequent phases for each of the LMR and LTE projects, the Consultant will work with the Authority to create a requirements traceability matrix (RTM) for each project which will separate each documented LMR System and LTE System requirement into a distinct tracking item. Using the RTM, the Consultant will monitor the project and ensure that functional, operational, performance, and user requirements are addressed throughout the planning, design, implementation, and testing phases of each of the LMR and LTE projects.

Design review activities for each subsystem of the LMR System and the LTE System will include a detailed evaluation of the following elements, as well as other elements that may be identified in the early planning with Authority staff:

a. Overall architecture and its feasibility within the entire system of systems for each project
b. Adherence to P25 standards and guidelines for the LMR project
c. Compliance with all federal, California State, County, and local fund requirements, rules, regulations, guidelines, directives, policies, and procedures for each project
d. Compliance with applicable FCC rules and regulations, including the 700 MHz waiver requirements for each project
e. Compliance with CEQA and NEPA regulations for each project
f. Verification of coverage, capacity, growth potential, and throughput for each project
g. Antenna designs for each project
h. Frequency/channel plans for each project
i. FCC licensing for each project
j. Interfaces and features for each project
k. Interoperability to existing systems and backhaul networks for each project
l. Backhaul network design, capacity/throughput analysis, microwave path analyses, fiber connectivity, redundancy, IP routing and addressing for each project
m. Reliability, fault tolerance, and scalability for each project
n. Network security and encryption for each project
o. Consoles for the LMR project
p. Logging recorder for the LMR project

q. System management and monitoring for each project
r. Inventory and maintenance tracking system for each project
s. Testing plans including factory (staging), component, integration, performance, and acceptance test plans for each project
t. Cutover plans for impact on operations; parallel operation on reuse sites for each project
u. Maintainability for each project
v. Disaster recovery plans for each project
w. Interference, particularly in the case of the LMR project, in simulcast mode.
x. Subscriber functionality for each project
y. Local and environmental regulation compliance for each project
z. Hardware, software, and services parts list to ensure no missing or extra items for each project
aa. General compliance to each of the LMR System Contractor and LTE System Contractor contracts and risks to future change orders for each project
bb. LMR System Contractor's and LTE System Contractor's value engineering plans for each project

The Consultant will evaluate the detailed design of the LMR system network Subsystems, which will include the P25 digital trunked voice radio system (DTVRS), the analog conventional voice radio system (ACVRS), and the Los Angeles Regional Tactical Communications System (LARTCS) and narrowband mobile data network (NMDN). The Consultant will similarly evaluate the LTE system detailed design and Subsystems for that project.

The Consultant understands the incumbent challenges of designing two new regional systems that must not only leverage existing infrastructure, but also accommodate interoperability among disparate systems and over varying terrain for each of the LMR and LTE network initiatives. For the LMR project, the Consultant will review the DTVRS design specifications for compliance to its stand-alone performance requirements and its interoperability with regional P25 (ICIS and Riverside County) and non-P25 (Orange and San Bernardino County) systems, as well as state agencies such as the California Highway Patrol and federal agencies such as the FBI.

9.2.3 Verify Coverage and Capacity

For each of the LMR and LTE projects, the Consultant will provide independent verification services for key network performance criteria such as coverage and capacity. The Consultant understands that the Authority has requested that the LMR System and LTE System Contractors supply copies of their coverage software to the LA-RICS project team for use throughout the project.

The Consultant is familiar with a number of vendor-specific and other industry coverage modeling tools for both the LMR and LTE networks. Should the LMR and/or LTE System Contractors furnish copies of their coverage software to the Consultant, the Consultant will be able to operate and leverage the software to meet any LA-RICS coverage prediction requirements, within the terms and conditions of the Agreements with the LMR System Contractor and the LTE System Contractor. Where either the LMR System Contractor or the LTE System Contractor does not make their coverage modeling tool available to the Consultant, the Consultant will provide independent verification of coverage and capacity using other industry-approved modeling tools, as necessary to provide the Authority validation that the Contractor(s) coverage and capacity meet the technical specifications of their Agreement.

In all cases, and for each of the LMR and LTE projects, the Consultant will evaluate coverage and system performance by adhering to guidelines and recommendations outlined in the TIA publication, TSB-88. This document is an industry-accepted and widely used reference for radio frequency coverage modeling and system

performance validation.

The Consultant will use a comprehensive network design toolset to independently verify the LMR System Contractor's and LTE System Contractor's performance predictions. The design tool set shall include the following modules:

a. A complete coverage analysis tool
b. A high-resolution mapping tool
c. A reliable network capacity analysis tool
d. A system-wide interference analysis tool

The network design toolset shall provide microwave design/path planning for backhaul design verification for each of the LMR and LTE Systems. This will facilitate point-to-point and end-to-end performance analyses by modeling the paths in detail, taking into consideration both urban (building) and terrain clutter. In addition to LMR system design and analysis, the Consultant will also perform LTE system design and analysis. The Consultant will perform the following tasks related to both the LMR and LTE Systems:

a. Recommend ideal radio site candidates
b. Evaluate coverage propagation
c. Analyze uplink and downlink rates for user equipment within coverage area
d. Analyze and mitigate potential interference

9.2.4 Design Review Activities

a. The Consultant's Phase 1 design activities will depend on the number and level of design reviews proposed by the LMR and LTE System Contractors.

The Consultant recognizes that due to the size and scope of the LA-RICS program, there could be multiple PDR activities for each of the LMR System and LTE System reviews, depending on how the Authority contracts with the LMR System and LTE System Contractors. The Consultant will adjust their design review activities to accommodate the Authority approved final schedule for each project.

As part of the overall risk assessment and mitigation process for each project, the Consultant will create a master punch list independent from the LMR System Contractor's and LTE System Contractor's lists. The master punch list for Phase 1 in each project will be based on the Requirements Traceability Matric (RTM) and will be used in subsequent phases to track construction, radio system implementation, and testing deficiencies for each project. The master punch list for each project will include, but is not limited to:

a. A complete description of the deficiency
b. Which section of the RTM or test procedure the deficiency is related to (as applicable)
c. Target correction date
d. Actual correction date
e. Scheduled re-test date (if applicable) and results
f. Assignment of responsibility
g. Resolution

During design review activities for both the LMR and LTE projects, the Consultant will identify high-risk areas and work with the Authority to require the LMR System Contractor and the LTE System Contractor to develop alternatives to targeted aspects of the design solutions.

To meet the objective in providing the most cost-effective LA-RICS solution, the Consultant will evaluate procurement and implementation costs for each of the LMR and LTE System designs proposed by the LMR System and LTE System Contractors. Their analysis methodology will include system modeling and providing budgetary cost estimates for baseline and alternative design solutions. Cost estimates are based on the Consultant's extensive knowledge and estimates will consider the following costs for each project:

a. LMR System and LTE System equipment and control
b. Core and backhaul network equipment
c. Subscriber units
d. Acquisition and placement of towers and shelters
e. AC and DC power systems
f. HVAC
g. Backup generator systems replacement or upgrade
h. Site acquisition and development
i. Permitting
j. Delivery, staging, and other testing costs
k. Project management, engineering, and service fees
l. Life-cycle maintenance
m. Contingency

For each of the LMR and LTE projects, the Consultant will coordinate and participate at each PDR and DDR presented by the LMR System Contractor and the LTE System Contractor. They will establish exit and entrance criteria for each of the reviews and work with the Authority to determine when those criteria are met, opening the gate for the Contractor to go to the next design step in the prescribed design process.

Once all design specifications are reviewed and risks, alternatives, and cost estimates established as part of the PDR and/or DDR processes, the Consultant will prepare a design analysis and recommendations report for each project and present it for Authority approval to proceed to Phase 2 Site Construction and Site Modification.

For each project and as required, the Consultant will assist the Authority in contract administration and preparing change orders/amendments to the LMR System Contractor and the LTE System Contractor. They will assist in negotiating change orders using the baseline contract specifications, performance criteria, and terms and conditions as a starting point.

For each project the Consultant will review the LMR System Contractor's and LTE System Contractor's proposed change orders in detail, looking for specific items such as:

a. Extra equipment or software that is not necessary to build the system.
b. Open-ended or vague statements.
c. Inadequate vendor program management and/or quality assurance.
d. Unclear or immeasurable performance specifications.
e. Accuracy/applicability of labor rates and hours for the scope being performed.

9.2.5 Develop Detailed A/E Design Documents for Site Improvements/Assist with Jurisdictional Approvals

During the system design phase for each project, the LMR System Contractor and LTE System Contractor will develop architectural-engineering plans for site improvements and facilities construction for both the existing sites and any new sites. Throughout that process, the Consultant will provide over-the-shoulder peer/design reviews of the designs to ensure that best practices are being implemented, infrastructure capacity is being

planned with appropriate contingencies, and that all best management practices and environmental mitigation measures (if any) are incorporated.

The Consultant will perform visual site surveys as necessary to verify site selection and design decisions. For each project, the Consultant will review the following elements of the LMR System Contractor's and LTE System Contractor's site design:

a. Structural analyses of existing towers and other antenna support structures.
b. Equipment inventory.
c. Access road conditions.
d. General site conditions.
e. Physical availability of surrounding land space.
f. Perimeter security.
g. Commercial power.
h. Emergency power.
i. AC and/or DC power.
j. Equipment shelter design.
k. HVAC.
l. Grounding and lightning protection.
m. Tower FAA obstruction lighting and painting.
n. Fire suppression and prevention.
o. Telco service.
p. Site safety radio frequency radiation compliance.
q. Grounding and variances from specific vendor standards.
r. Transmission line support structures.
s. Waveguide and dry air systems.
t. Civil and earthwork performance criteria.
u. Nearby obstructions that may impact microwave paths and mobile radio coverage.
v. Implementation of best management practices and CEQA/NEPA mitigation measures, if any.
w. Confirm site availability including – specifically if site is owned by the Authority and/or Authority members, and if the Authority has procured the legal rights to carry out the proposed improvements on the selected site.

The Consultant will provide assistance with Jurisdictional Approvals. Because the site locations fall in different cities and unincorporated areas, jurisdictional approvals for each of the LMR and LTE projects will be more complex to assess, coordinate, and track. The LMR System Contractor and LTE System Contractor are responsible for pulling permits. For each of the LMR and LTE projects, the Consultant will assist the Authority with site related tasks including, but not limited to, the following:

a. Conducting activities relating to the acquisition of rights to the sites
b. Conducting preconstruction site analysis and planning, including considerations for temporary utilities and structures, construction sequencing, construction site coordination, site infrastructure, construction-related traffic analysis, etc.
c. Coordinating site activities with utility companies
d. Coordinating geotechnical testing and investigation services
e. Coordinating environmental site assessments
f. Monitoring land surveying services
g. Monitoring field engineering investigations, assessments, and reports

b. For each of the LMR and LTE projects, the Consultant will ensure that proper planning takes place for a successful outcome of the jurisdictional approval process, which will minimize any potential project delays. The Consultant will support the LMR System Contractor and LTE System Contractor to ensure that:

a. Early in the design process for each project the LMR and LTE System Contractors identify the agencies having jurisdiction for the review and approval of the plans for each site or number of sites in the same municipality
b. The LMR and LTE System Contractor develop a comprehensive checklist of all the agencies required to provide clearances
c. Each project is properly introduced to jurisdictional agencies
d. The LMR and LTE System Contractors meet with each of the major lead agencies to better understand their requirements and the turnaround time for plan checks
e. The LMR and LTE System Contractors develop a checklist of the type of documents and number of copies each agency requires for the submittals

9.2.6 Prepare CEQA EIR and NEPA EA Documentation and Supporting Studies

For the LMR (Phase 1) Environment Impact Report (EIR) and Environmental Assessment (EA), the Consultant will prepare and deliver a CEQA-compliant EIR and NEPA-compliant EA. The lead agency for the EIR will be the Authority and the lead agency for the EA will be the Federal Emergency Management Agency (FEMA). There are five (5) tasks associated with this Scope of Work as follows:

TASK 1 - Project Initiation

The Consultant will develop a Work Plan consisting of project schedule, budget, communication plan, roles and responsibilities, and safety plan for the EIR/EA preparation and delivery.

The Consultant's Program Manager will meet with LA-RICS Staff to present the Work Plan for the LMR project and discuss roles and responsibilities, deliverables, and schedule.

The Consultant will establish an Electronic File Transfer (ETF) system to be used to move data between the Consultant, the Authority, FEMA, and other project stakeholders.

TASK 2 - Develop Project Description

The Consultant will develop a draft project description for a Proposed Action based on input received from LA-RICS and the LMR System Contractor. The project description must be fully developed prior to the onset of environmental analyses, as changes to this could result in re-analysis with cost and schedule impact.

TASK 3 - Develop Technical Reports

The Consultant will develop technical reports to describe the existing environment and analyze potential environmental impacts for the EIR/EA. The Consultant will coordinate within its project team, with the System Contractor and with Authority's staff to review and incorporate applicable vetted and accepted data, outreach information, etc. in the working draft document. Resources anticipated for review include:

a) *Aesthetics*. A generalized description of existing visual character will be conducted for most sites. Areas, byways, or highways that have special scenic designations will be focused on in greater detail (i.e., on a site specific basis). Up to 4 visual simulations will be developed.

b) *Air Quality*. The Consultant will develop an air quality analysis sufficient to quantify anticipated emissions associated with project construction and compare these against significance thresholds established by the South Coast and Antelope Valley AQMDs. Emissions will be estimated using the CalEEMOD program. Project parameters including construction schedule, construction equipment fleet mix including Clean Air Act compliance (i.e., tier 3, tier 4), intensity and duration of use, ground disturbance will all be made available to analysis during Task 2 to support analysis. Greenhouse gas emissions will be estimated based on CEQA guidelines.

c) *Biological Resources*. Technical studies associated with this discipline are discussed in detail in later sections of this SOW. Under the EIR/EA, significance criteria will be developed and impacts identified in relation to these.

d) *Cultural Resources*. Technical studies associated with this discipline are discussed in detail in later sections of this SOW. Under the EIR/EA, significance criteria will be developed and impacts identified in relation to these. ODCs are included for travel and for a cultural resources records search at the South Central Coast Information Center and other regional California Historical Resources Information System (CHRIS) information centers applicable to the LMR project sites.

e) *Paleontological Resources*. Technical studies associated with this discipline are discussed in detail in later sections of this SOW. Under the EIR/EA, significance criteria will be developed and impacts identified in relation to these. ODCs are included for a paleontological resources records search at the Los Angeles County Museum of Natural History.

f) *Geology, Soils and Minerals*. Generalized descriptions of geology (including earthquake potential), soils, important (state- and federal-designated) farmland, and mineral resources will be prepared. Analysis of soil erosion, loss of farmland, and seismic activity will be conducted. The Consultant will review results of the site-specific geotechnical investigation provided by the System Contractor and will incorporate applicable information as needed.

g) *Hazards and Hazardous Materials*. Analysis of impacts associated with airspace hazards, hazardous materials management, and potential to encounter past releases will be conducted. The Consultant will review and incorporate information from the site-specific hazardous material assessment report and the RF emission report provided by the System Contractor in this analysis.

h) *Hydrology-Water Resources*. A characterization of existing surface and groundwater resources will be conducted and an analysis of project impacts on these resources made. The Consultant will review and incorporate information from the site-specific geotechnical investigation provided by the System Contractor related to groundwater resources as needed.

i) *Land Use*. Documentation of existing zoning and general plan characteristics will be made for all applicable jurisdictions. The Consultant has assumed that the Authority's intergovernmental immunity strategy used for the LTE EA will hold for the LMR EIR/EA but will adjust the analysis as necessary based on outcome of agency outreach.

j) *Noise*. A generalized description of the noise environment will be developed. Two generalized models showing noise contours associated with construction activities will be developed and applied to rural and urban sites.

k) *Population/Housing/Environmental Justice*. General population characteristics will be described. The expectation is that this analysis will be qualitative and of minimal length. An environmental justice analysis will be prepared following the Council on Environmental Quality guidelines.

l) *Public Services*. A brief description of public services will be developed, and an analysis of the Proposed Action's effect on public services will be performed.

m) *Recreation Resources*. A brief description of existing recreational resources near LMR sites will be provided, along with a discussion of impacts associated with construction and operations.

n) *Transportation-Traffic*. A qualitative discussion will be provided regarding transportation and traffic.

o) *Utilities-Service Systems*. A brief overview of electric, water, wastewater, and solid waste providers will be included, along with a high-level analysis of project demands against system capacities.

Additionally, the Consultant will perform literature searches and order data from reputable repositories to establish baseline conditions in the proposed project area for each of the resources identified above.

TASK 4 – Prepare the EA and EIR

The Consultant will develop a draft and final EA/EIR and prepare document necessary for filing and public notices compliant with CEQA and NEPA. The effort will include:

a) A working draft EA/EIR will be provided to the Authority with one round of comment incorporation (followed with a screen check copy).

b) An administrative draft EA/EIR will be provided to FEMA with one round of comment incorporation (followed with a screen check copy).

c) A published draft EA/EIR used to solicit public comments.

d) A working final EA/EIR will be provided to the Authority with one round of comment incorporation (followed with a screen check copy).

e) An administrative final EA/EIR will be provided to FEMA with one round of comment incorporation (followed with a screen check copy).

f) A published final EA/EIR will be used to support a Finding of No Significant Impact (FONSI) and for certification purposes (EIR).

Total document size including appendices (but not including supporting tech studies such as 620/621 forms or EDR reports) is anticipated to be no more than 3000 pages. Up to 5 hardcopies of the Public Draft and Public Final versions of the document will be printed. Cost of outsourcing of printing is to reimbursed by LA-RICS to Consultant. Remaining public versions of the document will be made available on the Authority's LA-RICS web site or CD/DVD. Copies of working, administrative, and screen check versions will be made available to internal reviewers by FTP or SharePoint site. Any document filing fees is to be reimbursed by LA-RICS to Consultant.

TASK 5 – Maintain Administrative Record

The Consultant will be responsible for maintaining the administrative record for the LMR environmental EA/EIR project. This will include draft and final reports, references, correspondence with lead, cooperating, or regulatory agencies, etc., public comments, internal written communications, data contact logs, project notices, final modeling runs for noise and air quality analysis, GIS database, and field logs.

Regarding **Biological Resources**, the Consultant will perform biological surveys and prepare biological reports through the Design Phase of the LMR project. The Consultant will support federal Endangered Species Act Section 7 consultation with USFWS, and Section 2081 and 2080.1 (California Fish and Game Code) consultation with CDFW. There are two (2) Tasks for the biological scope of work: 1) Conduct Surveys and 2) Prepare Biological Reports, which are defined below:

1. Conduct Surveys

While it is possible that hundreds of special-status species could occur in the action area, effects to this many species are not anticipated. As a result, based on current knowledge, a total of 9 types of surveys are proposed for the LMR project. Specific information necessary to determine need for additional survey (over that discussed below) can only be gained through the habitat assessment, which is the first survey proposed.

A stepped approach to surveys is included in this effort, in order to more efficiently tailor more expensive focused surveys to those areas expected to require them. Each is described below.

a) *General Habitat Assessment*. This involves a desktop analysis of 120 sites to describe general biological character (i.e., urban or rural), and the land cover present. Land cover will be classified using either Holland (1986), or the Manual of California Vegetation, 2nd Edition (2009) method. A field study area (FSA) extending 500 feet from the LMR tower centroid and at least100 feet from the LMR site boundaries (whichever is greater) will be established. Field maps will be created based on land cover identified during the desktop assessment. Field teams will mobilize to the 120 sites. For urban sites, site access will not be required (rather, more natural appearing areas within the surrounding FSA will be visited). For rural sites, areas within the LMR site and surrounding FSA will be classified. For all sites, land cover identified during the desktop analysis will be confirmed. The data will be compiled in GIS and a letter report developed.

b) *Botanical Surveys*. Focused botanical surveys can be accommodated at up to 12 sites. For the survey, a plant compendia consisting of special-status plants (down to California Rare Plant Rank 2B) will be developed. The field botanists will visit reference populations of subject species (either at appropriate herbaria or in the field). Teams of 2 botanists (one a senior-level botanist) will be fielded at each of the 12 sites. One spring survey is anticipated at the 12 sites, with follow up survey at 6 sites to identify any late-blooming sensitive species. The data will be compiled in GIS and a letter report developed.

c) *Arroyo Toad*. Survey for arroyo toad has been accommodated for only one site. This is based on an assumption that only one LMR site would be located within one kilometer of arroyo toad habitat. The six required surveys are at specified intervals and must occur between March 15 and July 1. Survey will be conducted in accordance with the USFWS' *Survey Protocol for the Arroyo Toad, May 1 1999.* The data will be compiled in GIS and a single letter report developed for the entire set of surveys.

d) *California Red-Legged Frog*. Survey for the California red-legged frog has been accommodated for only one site. This is based on an assumption that only one LMR site would be located within one mile of California red-legged frog habitat. The eight required surveys are at specified intervals and six of these must occur between February 25 and April 30. Survey will be conducted in accordance with the USFWS' *Revised Guidance on Site Assessments and Field Surveys for the California Red-legged Frog,* August 2005. The data will be compiled in GIS and a single letter report developed for the entire set of surveys.

e) *Desert Tortoise*. Survey for the desert tortoise has been accommodated for two sites, each identified at NTP. The LMR site itself will be surveyed, along with three additional belt transects, at 200 meters, 400 meters, and 600 meters from the LMR site boundary. Survey will be conducted in accordance with the USFWS' *Preparing for Any Action that May Occur Within the Range of the Mojave Desert Tortoise, 2010 Field Season.* The data will be compiled in GIS and a single letter report developed for the entire set of surveys.

f) *Coastal California Gnatcatcher*. Survey for the coastal California gnatcatcher has been accommodated for two sites, using the spring survey protocol. The six required breeding season surveys are at specified intervals and these must occur between March 15 and June 30. If this survey window is missed, then non-breeding season surveys consisting of 9 surveys can occur between July 1 and March 14 at an additional cost of $35,000 for the two assumed sites, as nine surveys would be required outside of breeding season. Survey will be conducted in accordance with the USFWS' *Coastal California Gnatcatcher Presence/Absence Survey Guidelines*, February 28, 1997. The data will be compiled in GIS and a single letter report developed for the entire set of surveys.

g) *Least Bell's Vireo*. Survey for the least Bell's vireo has been accommodated for only one site. This is based on an assumption that only one LMR site would be located within 500 feet of least Bell's vireo habitat. The eight required surveys are at specified intervals and must occur between April 10 and July 31. Survey will be conducted in accordance with the USFWS' *Least Bell's Vireo Survey Guidelines,* January 19, 2001. The data will be compiled in GIS and a single letter report developed for the entire set of surveys.

h) *Southwestern Willow Flycatcher.* Survey for the southwestern willow flycatcher has been accommodated for only one site. This is based on an assumption that only one LMR site would be located within 500 feet of southwestern willow flycatcher habitat. The five required surveys are at specified intervals and must occur between May 15 and July 17. Survey will be conducted in accordance with the USFWS' *A Natural History Summary and Survey Protocol for the Southwestern Willow Flycatcher,* 2010. The data will be compiled in GIS and a single letter report developed for the entire set of surveys.

i) *Burrowing Owl*. Efforts for burrowing owl are two-phased. A focused survey is assumed as required at a single site. Habitat assessment and survey will be conducted within the FSA only in accordance with the CDFW's *Staff Report on Burrowing Owl Mitigation,* March 7, 2012. The data will be compiled in GIS and a single letter report developed for the entire set of surveys.

General Assumptions:

a) It is assumed that there are 120 LMR sites in the "universe of sites" and that no new sites will be added to this universe after receipt of the initial NTP.

b) The Authority recognizes that new sites added after NTP can affect the overall project schedule as well, if required biological resources surveys are not conducted in accordance with timelines stipulated in state or federal protocols or guidance.

c) It is assumed that escorts will be required for LMR site visits. Authority will schedule and cluster site visits to minimize travel time.

d) New sites will not be added to the "universe of sites" after NTP. Cost of additional sites will need to be negotiated.

e) Unless otherwise identified, all effort identified herein represents maximum 10 hours per day effort, including two hours round trip drive time.

f) No wetland delineations have been included in this cost proposal.

g) It is assumed that no work would occur within an existing applicable HCP or NCCP except for one site. It is assumed that no work would occur within lands administered by the Santa Monica Mountains Conservancy.

2. Prepare Biological Reports

In addition to the small tech memos (letter reports) to be developed for the individual species survey efforts, the consultant will prepare up to three comprehensive reports for the project. These include a biological assessment and a biological technical report covering 120 sites, and biological evaluation (for federal lands).

a) A *Biological Assessment* will be developed to support Section 7 consultation under the Federal Endangered Species Act, and consistency determinations under Section 2080.1 of the California Fish and Game Code. Up to 41 species would be included for consideration in this document, however, only 20 of the species would be expected to occur within the project area (reducing full analysis to 21 species).

b) A *Biological Technical Report* would be developed to document occurrence for and impacts to special-status species in the project area. This document would be used to support Section 2081 permitting with CDFW, and provide supporting analysis for the EA/EIR.

c) A *Biological Evaluation* will be developed to support special use and right of way permitting on federal lands. This document will account for species occurrence and impacts for agency-designated special-status species such as BLM Sensitive, BLM WEMO HCP, Forest Service Sensitive, and/or Forest Service Management Indicator Species.

General Assumptions:

a) Consultant will cooperate with the Authority in the draft preparation and incorporate comments of the Authority's internal reviewers to finalize a draft document, with an additional screen check copy provided prior to submission to other agencies. Comments will be incorporated and submitted for federal lead and / or cooperating agency review.

b) Two rounds of review will be accomplished by federal lead and/or cooperating agency reviewers, with an additional screen check copy provided prior to submission to other agencies. Comments will be incorporated

and submitted for regulatory agency (e.g., USFWS, CDFW) or land management agency (e.g., USFS, BLM) review and concurrence with findings.

Regarding **Cultural Resources**, the Consultant will perform cultural resources surveys and prepare cultural resources reports through the planning phase of the LMR project. The Consultant will support SHPO and Native American consultation. There are three (3) Tasks for the cultural resources scope of work, 1) Archaeological Resources, 2) Native American Resources, and 3) State Historic Preservation Office coordination, which are defined below:

1. *Archaeological Resources*

   a. A Work Plan and Research Design will be prepared for the project to determine the likely presence of archaeological resources that may be affected by project implementation. This will set the framework upon which the subsequent work will be conducted.

   b. The Record Search will be conducted at the South Central Coastal Information Center (SCCIC) and other regional California Historical Resources Information System (CHRIS) information centers applicable to the LMR project sites. The SCCIC houses information about archaeological and historical resources (e.g. location, size, age, etc.) within Ventura, Los Angeles, and Orange Counties as well as information regarding previous research conducted in the vicinity of our project locations. This will inform us about the potential for impacts to known and suspected archaeological resources on or in the vicinity of the project locations.

   c. Fieldwork Planning and Preparation will be conducted next to determine where field surveys need to be performed on the basis of the above research. We assume that at least 65 rural locations will need to be field surveyed.

   d. Fieldwork will be performed to determine presence/absence of archaeological resources, whether previously documented or newly discovered. Teams of qualified archaeologists will mobilize to the project sites and prepare field notes, take photographs, and document the results of their field efforts as individual locations are examined.

   e. Data Compilation (mapping and photos) will be conducted to provide information regarding the results of the research, record checks, and field investigations to use for preparation of the report.

   f. Report Preparation will include the preparation of FCC Forms 620/621 in accordance with NEPA compliance requirements. This will form the basis for reporting the results of the above efforts and for making recommendations for avoidance or for mitigation, as appropriate. A summary of the findings for Forms 620/621 will also be provided.

2. *Native American Resources*. In accordance with the Native American Heritage Commission (NAHC), contact will be made early on with the NAHC to determine the presence of any sacred sites or sites of special significance to Native Americans in the project area. Tribal contacts will be established from information provided by the NAHC and will include follow-ups with tribal leaders as appropriate. Data will be compiled and documented through mapping, site photos, and site forms as needed. This information will then be inserted into the FCC Forms 620/621 as necessary. No separate report will be prepared.

3. *State Historic Preservation Office (SHPO) Consultation*. The State Historic Preservation Office (SHPO) Consultation process will be conducted in accordance with state and federal requirements. This will include the development of correspondence with SHPO for sites that may be of state-wide or federal importance that may be impacted by the project. Consultation will begin early in the process of preparation for the project and will continue throughout the life of the project. This task also includes participation in Authority Meetings throughout the life of the project.

General Assumptions:

a) It is assumed that there are 120 LMR sites in the "universe of sites" and that no new sites will be added to this universe after receipt of the initial NTP.

b) The Authority recognizes that new sites added after NTP can affect the overall project schedule as well, if required cultural resource surveys are not conducted in accordance with timelines stipulated in state or federal protocols or guidance.

c) It is assumed that escorts will be required for LMR site visits. The Authority will schedule and cluster site visits to minimize travel time, and provide site escorts as required.

d) The Authority recognizes that there could be fees associated with the filing of documents with relevant authorities. These fees will be reimbursed to the Consultant as part of Other Direct Costs (ODCs).

As specified in the LMR and LTE System Contracts, the LMR System Contractor and LTE system Contractor are to document site conditions sufficiently to design and accomplish the improvements required at each site. The Consultant will review the resultant geotechnical reports and site environmental assessments for each project to evaluate the findings and recommended solutions, particularly for foundations and any potential underground environmental hazards, along with biological, archeological, and botany considerations.

For the LMR or LTE projects, should any hazardous materials be uncovered unexpectedly during excavation, the Consultant will provide qualified technical personnel to assist in evaluating materials procedures for testing, handling, transport, and/or disposal of such materials with minimal project impact and in full compliance with governing laws and regulations.

LMR deliverables for this Phase 1 will at a minimum be:

a. LMR-PH1-9.2.1 Project Description Review Document
b. LMR-PH1-9.2.2 System Design Review Document, Requirements Traceability Matrix, and Coverage and Capacity Verification Document
c. LMR-PH1-9.2.3 Site Design Review Document
d. LMR-PH1-9.2.4 Final Design Document Review Document
e. LMR-PH1-9.2.5 Outreach Presentations, Marketing Materials, and Fact Sheets
f. LMR-PH1-9.2.6 Environmental Documents Preparation

LTE deliverables for this Phase 1 will at a minimum be:

a. LTE-PH1-9.2.1 Project Description Review Document
b. LTE-PH1-9.2.2 System Design Review Document, Requirements Traceability Matrix, and Coverage and Capacity Verification Document
c. LTE-PH1-9.2.3 Site Design Review Document

d. LTE-PH1-9.2.4 Final Design Document Review Document
e. LTE-PH1-9.2.5 Outreach Presentations
f. LTE-PH1-9.2.6 Environmental Documents Review Reports

9.2.7 Prepare CEQA Statutory Exemption Analysis and Notices of Exemption, and prepare NEPA EA and Supporting Studies

For the LTE CEQA and NEPA compliance effort, the Consultant will

a. Conduct analysis, prepare, and file Notices of Exemption with the respective County clerk office or jurisdiction over the PSBN sites in accordance with Section 21080.25, as amended by AB 1486.

b. Prepare a NEPA-compliant Supplemental EA. It is assumed that a FONSI for the LTE sites analyzed in the "base EA" (up to 231 sites) will have been signed by NTIA and that the base EA supporting this FONSI will be available for use for incorporation by reference for any supplemental analysis.

There are five tasks associated with this Scope of Work as follows:

TASK 1 - Develop Project Description

The consultant will develop a summary draft project description for a Proposed Action based on up to 45 individual project sites, including changes at sites previously considered in the base EA. These 45 potential sites would include up to 9 potential sites (two on federal land) not considered in the base EA, 7 LMR sites used for backhaul, and sites that include fiber runs, none of which is expected to exceed two miles in length. It is assumed that up to 33 of these 45 sites will require field surveys for biological and cultural resources. All new project descriptions will be based on input received from the Authority and the LTE Contractor.

TASK 2 - Develop Technical Reports

The Consultant will develop technical reports to describe the existing environment and analyze potential environmental impacts for the environmental analysis, only as these relate to resources/impacts not contemplated in the base EA. For sites previously contemplated in the base EA (in accordance with NTIA BTOP environmental assessment guidelines), data and analysis from the base EA will be incorporated by reference into the supplemental NEPA analysis, provided that the proposed sites or site development scope is the same or similar.

The Consultant will coordinate within its project team, with the LTE System Contractor, Authority's staff, and with input from NTIA to review and incorporate applicable vetted and accepted data in the working draft document. Resources anticipated for review include:

a) *Aesthetics*. A generalized description of existing visual character will be developed for most sites. Areas, byways, or highways that have special scenic designations will be focused on in greater detail (i.e., on a site specific basis). No visual simulations are anticipated to be necessary.

b) *Air Quality*. It is assumed that the base EA's air quality analysis would be incorporated by reference into the analysis.

c) *Biological Resources*. Technical studies associated with this discipline are discussed in detail in later sections of this SOW.

d) *Cultural Resources*. Technical studies associated with this discipline are discussed in detail in later sections of this SOW.

e) *Paleontological Resources*. Findings of the records search, along with a database and map will be developed for each site that includes geological formations, and paleontological sensitivity level. Impacts to paleontological resources will be assessed in the environmental document.

f) *Geology, Soils and Minerals*. Generalized descriptions of geology (including earthquake potential), soils, important (state- and federal-designated) farmland, and mineral resources will be prepared for new sites not contemplated in the base EA. Analysis of soil erosion, loss of farmland, and seismic activity will be conducted for those new sites.

g) *Hazards and Hazardous Materials*. For sites not contemplated in the base EA, analysis of impacts associated with airspace hazards, hazardous materials management, and potential to encounter past releases will be conducted. The Consultant will procure analyze, and provide a site-specific hazardous substance assessment report along with a summary analysis of this report for sites not contemplated in the base EA.

h) *Hydrology-Water Resources*. A characterization of existing surface and groundwater resources will be conducted and an analysis of project impacts on these resources made for new sites not previously contemplated in the base EA. The Consultant will review and incorporate information from the site-specific geotechnical investigation provided by the LTE Contractor related to groundwater resources as needed.

i) *Land Use*. Documentation of existing zoning and general plan characteristics will be made for all applicable jurisdictions where new sites are contemplated as consistent with the land use analysis approach in the base EA.

j) *Noise*. Two generalized models showing noise contours associated with construction activities will be developed and applied to sites not contemplated in the base EA. Presentation will be made in tabular format.

k) *Population/Housing/Environmental Justice*. An environmental justice analysis will be prepared following the Council on Environmental Quality guidelines for new sites not contemplated in the base EA. Data will be presented in tabular format.

l) *Public Services*. A brief (tabular format) description of public services will be developed, and an analysis of the Proposed Action's effect on public services will be performed for new sites not contemplated in the base EA.

m) *Recreation Resources*. A brief description of existing recreational resources near new sites not contemplated in the base EA will be provided, along with a discussion of impacts associated with construction and operations.

n) *Transportation-Traffic*. A qualitative discussion will be provided regarding transportation and traffic for sites not contemplated in the base EA.

o) *Utilities-Service Systems*. A brief overview of electric, water, wastewater, and solid waste providers will be included, along with a high-level analysis of project demands against system capacities for sites not contemplated in the base EA.

Additionally, the Consultant will perform literature searches and order data from reputable repositories to establish baseline conditions in the proposed project area for each of the resources identified above for sites not contemplated in the base EA. Any notices required to be filed related to CEQA that have not been contemplated in this effort would be reimbursable to the Consultant by the Authority. ODC's are included for the following:

1. Travel to new LTE sites that were not contemplated in the base EA for field surveys
2. Travel and for a cultural resources records search at the South Central Coast Information Center and other regional California Historical Resources Information System (CHRIS) information center applicable to the LTE project sites, as well as for field surveys
3. Paleontological resource records search at the Los Angeles County Museum of Natural History for sites not previously contemplated in the base EA
4. Procure environmental site assessment database searches from a commercial source
5. Any additional research efforts required for this work.

TASK 3 – Prepare the Environmental Documentation

The Consultant will develop environmental documentation to support CEQA Notices of Exemption. In addition, the Consultant will develop sufficient analysis to support a draft and final supplemental EA (to support a FONSI). The effort may include:

a) A working draft EA provided to the Authority with comment incorporation (followed with a screen check copy) until accepted by the Authority.

b) An administrative draft EA provided to NTIA with comment incorporation (followed with a screen check copy) until accepted by the Authority.

c) A published draft EA used to solicit agency comments.

d) A working final EA will be provided to the Authority and NTIA with one round of comment incorporation (followed with a screen check copy) until accepted by the Authority.

e) An administrative final EA will be provided to the Authority and NTIA with one round of comment incorporation (followed with a screen check copy) until accepted by the Authority.

f) A published final EA will be used to support a Finding of No Significant Impact (FONSI).

Total document size including appendices (but not including supporting tech studies such as 620/621 forms or EDR reports) is anticipated to be no more than 500 pages. Up to 5 hardcopies of the administrative final EA and published Final EA versions of the document will be printed. Cost of outsourcing of printing may be reimbursed by the Authority to the Consultant upon approval by the Authority. Remaining public versions of the document will be made available on the Authority's LA-RICS web site or CD/DVD. Copies of working, administrative, and screen check versions will be made available to internal reviewers by FTP or SharePoint site. Any document filing fees is to be reimbursed by the Authority to the Consultant upon approval by the Authority.

The following schedule is assumed for development of the Supplemental EA:

Notice to Proceed:	August 22, 2014
Develop Final Project Description and Purpose and Need Statement:	September 26, 2014
Working Draft EA to Authority:	October 10, 2014
Admin Draft to NTIA:	November 7, 2014
Public Draft EA:	January 2, 2015
Final Draft EA:	February 6, 2015

TASK 4 – Maintain Administrative Record

The Consultant will be responsible for maintaining the administrative record for the supplemental LTE NEPA and CEQA compliance effort. This will include draft and final reports, references, correspondence with lead, cooperating, or regulatory agencies, etc., public comments, internal written communications, data contact logs, project notices, final modeling runs for noise and air quality analysis, GIS database, and field logs.

TASK 5 – Special Studies

Biological Resources.

Regarding **Biological Resources**, the Consultant will perform habitat assessment and prepare biological reports for the sites or site development scope that is not in the base EA. The Consultant will support federal Endangered Species Act Section 7 consultation with USFWS. There are two (2) Tasks for the biological scope of work: 1) Conduct Surveys and 2) Prepare Biological Reports, which are defined below:

Specific information necessary to determine need for additional survey (over that discussed below) will be gained through a habitat assessment, as below.

1. *General Habitat Assessment*. This involves a desktop analysis of 33 of the up to 45 sites not contemplated in the base EA to describe general biological character (i.e., urban or rural), and the land cover present. These "sites" may include an analysis of habitat along easements for fiber or electrical interconnection extending up to one mile from a particular LTE site (one easement per site). Land cover will be classified using either Holland (1986), or the Manual of California Vegetation, 2nd Edition (2009) method. A field study area (FSA) extending up to 100 feet from the LTE site boundaries (whichever is greater) will be established. Field maps will be created based on land cover identified during the desktop assessment. Field teams will mobilize to the 33 sites. For urban sites, site access will not be required (rather, more natural appearing areas within the surrounding FSA will be visited). For rural sites, areas within the new LTE site (or fiber/utility corridor) and surrounding FSA will be classified. For all sites and corridors not contemplated in the base EA, land cover identified during the desktop analysis will be confirmed. The data will be compiled in GIS and a letter report developed.

The habitat assessment effort will be conducted electronically and will support development of a GIS and the reports identified below, for up to 33 sites not previously contemplated in the base EA.

2. Prepare Biological Reports

a) A supplemental *Biological Assessment* will be developed to support Section 7 consultation under the federal Endangered Species Act if necessary. Up to 42 species would be included for consideration in this document.

b) A *Biological Technical Report* will be developed to document occurrence for and impacts to special-status species in the project area.

c) A *Biological Evaluation* will be developed to support special use and right of way permitting on federal lands. This document will account for species occurrence and impacts for agency-designated special-status species such as Forest Service Sensitive species.

The biological compliance efforts will be included in the final Supplemental EA.

Cultural Resources

Regarding **Cultural Resources**, the Consultant will perform cultural resources surveys and prepare cultural resources reports for the supplemental LTE EA effort. The Consultant will support SHPO, NAHC, and Native American consultation (i.e., TCNS). There are three (3) tasks for the cultural resources scope of work, 1) Archaeological Resources, 2) Native American Resources, and 3) State Historic Preservation Office coordination, which are defined below:

1. *Archaeological Resources*

a) A work plan will be prepared for the project to determine the likely presence of archaeological resources that may be affected by project implementation. This will set the framework upon which the subsequent work will be conducted.
b) A record search will be conducted at the South Central Coastal Information Center (SCCIC) to obtain California Historical Resources Information System (CHRIS)-held information applicable to up to 45 new sites not contemplated in the base EA.
c) Fieldwork planning and preparation will be conducted next to determine where field surveys need to be performed on the basis of the above research. We assume that up to 33 sites not contemplated in the base EA will need to be field surveyed. A fieldwork authorization for effort on up to two federally-administered sites will be obtained by the consultant if needed.
d) Fieldwork will be performed to determine presence/absence of archaeological resources, whether previously documented or newly discovered. Teams of qualified archaeologists will mobilize to the project sites and prepare field notes, take photographs, and document the results of their field efforts as individual locations are examined.
e) Data compilation (mapping and photos) will be conducted to provide information regarding the results of the research, record checks, and field investigations to use for preparation of the report.
f) Report preparation will include the preparation of FCC Forms 620/621 in accordance with NEPA and NHPA compliance requirements. This will form the basis for reporting the results of the above efforts and for making recommendations for avoidance or for mitigation, as appropriate. A single brief report meeting the California Office of Historic Preservation's Archaeological Resources Management Report (ARMR) standards will be prepared to account for surveys associated with fiber runs and other ancillary disturbance activities. Summaries of the findings from Forms 620/621 and the report will also be provided for use in any supplemental NEPA documentation.

2. *Native American Resources*. Native American correspondence will be managed by the Consultant, and prepared for appropriate approval. In accordance with the Native American Heritage Commission (NAHC), contact will be made early on with the NAHC to determine the presence of any sacred sites or sites of special significance to

Native Americans in the project area. Tribal contacts will be established from information provided by the NAHC and will include follow-ups with tribal leaders as appropriate. Data will be compiled and documented through mapping, site photos, and site forms as needed. This information will then be inserted into the FCC Forms 620/621 as necessary. No separate report will be prepared. No additional costs associated with Native American consultation (i.e., expenses associated with review of 620 forms, monitoring, etc.) have been contemplated in this effort.

3. *State Historic Preservation Office (SHPO) Consultation*. The State Historic Preservation Office (SHPO) consultation process will be conducted in accordance with state and federal requirements, using NTIA as a lead agency and adopting the Nationwide and Collocation Programmatic Agreements. This will include the development of correspondence with SHPO for sites that may be of state-wide or federal importance that may be impacted by the project. Consultation will begin early in the process of preparation for the project and will continue throughout the life of the project. This task also includes participation in Authority Meetings throughout the life of the project. SHPO consultation will be included in the final Supplemental EA, unless otherwise directed by the NTIA, the federal lead agency.

General Assumptions:

For sites previously contemplated in the base EA, data and analysis from the base EA will be incorporated by reference into the supplemental NEPA analysis. It is assumed that there are up to 45 new areas including LTE sites and fiber runs not contemplated in the base EA that will be included in the field efforts for biological and cultural resources.

9.2.8 Provide Additional Environmental Analysis and Compliance Monitoring Support to the LMR Project

Consultant shall comply with National Environmental Policy Act (NEPA), National Historic Preservation Act (NHPA), Endangered Species Act (ESA) and provide support for environmental compliance during construction. Consultant shall also provide an option for environmental compliance at new sites that have not yet been identified and analyzed in a previous NEPA/CEQA analysis as of July 31, 2015.

1. Prepare Additional NEPA Documentation and Supporting Studies

FEMA has determined that the path forward for NEPA compliance will begin with a Programmatic Environmental Assessment (PEA). Concurrent with or immediately upon completion of a NEPA-compliant Programmatic Environmental Assessment (PEA) pursuant to Section 2.2.13 of this Attachment A (Scope of Work), the Consultant shall prepare up to nine (9) separate sets of NEPA-compliant documents for the LMR sites, which will include up to 3 separate EAs. For one of said EAs, documentation supporting up to 25 separate Records of Environmental Consideration may be substituted. The three (3) EAs will be prepared for LMR sites that are not located on federally administered lands. Consultant shall prepare up to six (6) additional separate EAs or Categorical Exclusion support documents for LMR sites that are on federally administered lands where FEMA and the federal land-administering agency would be joint lead agencies or lead and cooperating agencies. Consultant may utilize up to three (3) NEPA management teams by using shared resources to accomplish this tasking described below. This approach allows for the work to be performed in parallel or consecutively with the development of the PEA.

In addition, Consultant shall develop and track project NEPA compliance by funding allocation and maintain a spreadsheet that outlines this information for FEMA on a weekly basis. This process is expected to occur for a total of 14 months.

1.1 Develop EAs for Non-Federal Sites

Consultant shall prepare up to three (3) EAs for LMR sites that are not on federally administered lands which will address multiple sites that have been grouped based on similarity of their scopes. It is anticipated that FEMA will be the lead agency for purposes of NEPA for these sites, and that each of the three (3) EAs will be prepared in compliance with Council on Environmental Quality (CEQ) regulations found at 40 CFR 1500-1508 and FEMA's implementing regulations for NEPA at 44 CFR 10. Consultant shall analyze a Proposed Action and a No Action Alternative for each EA. Consultant shall prepare said EAs for Non-Federal sites in a manner described below.

1.1.1 A single EA or a series of REC support documents will be prepared for sites identified as "early build" sites (i.e., collocated with existing infrastructure). NEPA compliance for these sites will likely be the first completed after development of the Final PEA, and if applicable, the Final PEA's corresponding Finding of No Significant Impact (FONSI). No consultation with USFWS or SHPO is anticipated for this group of sites, which consist of sites approved for NEPA compliance by NTIA in either the Final LA-RICS LTE System EA or the supplemental EAs for LTE, or where the antenna support structure (i.e., building, monopole, or lattice tower) is already in place at a given site. This EA is expected to be highly abbreviated (i.e., the main body not to exceed 30 pages) that relies on the analysis conducted within the PEA, and that the Final NEPA documentation (i.e., either EA or REC support) for these sites will occur within 2 months of release of the FONSI, if applicable, for the PEA.

1.1.2 A single site-specific EA will be prepared for up to 25 sites where new towers would be constructed within or adjacent to existing communication or emergency response facilities. New infrastructure to be developed at these sites would be largely compatible with the infrastructure currently at each site. For sites in this site-specific EA, no effects to special status species and no USFWS consultation would be expected and the sites would not need to be included in a site-specific Biological Assessment. However, pending consultation with FEMA and other resource agencies, sites will be included in USFWS consultation and any ESA-compliant document if required. SHPO consultation for some of these sites is expected, however, and would have to be completed prior to issuance of a FONSI for these sites, unless a programmatic agreement is developed to allow for post-FONSI SHPO consultation. As a result, it is anticipated that this EA will take approximately 5 months from onset to completion of a final EA, and a draft EA could be developed prior to completion of the PEA.

1.1.3 A single EA will be prepared for up to 25 sites where new towers would be developed at new facilities (i.e., those that are not at developed existing communication or emergency response facilities). It is anticipated that for some sites, informal consultation with USFWS would be required, but that formal consultation would not be required. Note this timeline can be affected by survey windows for evaluated species.

Technical editing, GIS support, and subject matter expert support have all been included in this tasking to support NEPA document development.

1.2 Develop EAs on Federal Lands

Consultant shall prepare a total of six (6) EAs for LMR sites that are on federally administered lands. These EAs shall include the sites located on land administered by the U.S. Forest Service (USFS), National Park Service (NPS), Federal Aviation Administration (FAA), Bureau of Land Management (BLM), U.S. Army Corps of Engineers (USACE), and U.S. Coast Guard (USCG). Consultant may be required to prepare an EA for each agency, with FEMA and the other federal agency to determine Lead Agency/Cooperating Agency status for each EA. All EAs shall be prepared in accordance with 40 CFR 1500-1508, 44 CFR 10, in addition to the agency-specific NEPA guidelines or regulations identified below. A Proposed Action and No Action Alternative shall be analyzed by Consultant for each EA developed, and no other alternatives are anticipated for analysis unless they are already contemplated within the LMR system as of July 1, 2015. The six (6) EAs would be managed in two groups each with a separate NEPA manager and deputy, as identified below.

1.2.1 The EA for the USFS shall be compliant with CEQ regulations and 36 CFR 220, and include up to twenty-five (25) sites located in the Angeles National Forest (ANF) or the San Gabriel Mountains National Monument (SGMNM). A full data set for biological and cultural resources has been acquired for sites on these lands and no additional studies are expected. No change in NEPA or other associated regulations are expected as a result of SGMNM's National Monument status. The USFS EA requires one (1) full-time EA manager and one three-quarter time deputy, responsible for attending internal and external meetings and developing an EA compliant with the ANF Land Management Plan and associated communication site planning documents. The Biological Evaluation (BE) will be prepared to evaluate Forest Service Sensitive species, either as a stand-alone document or its functional equivalent will be embedded in the EA analysis. It is expected that the USFS EA will take 12 months to complete from date of inception (i.e., project description reviewed by ANF/USFS staff at appropriate approval authority level).

1.2.2 A total of five additional EAs will be created using agency-specific NEPA regulations, guidelines or orders. It is anticipated that a single management team, consisting of a NEPA manager and a deputy will lead this effort over a period of 9 months supported by staff (GIS, resource specialists, technical editing). During this period, the team can also provide assistance to the Authority in responding to public comments associated with the EAs and in securing leases, outgrants, rights-of-way, or other instruments to allow use of these federal lands. The Consultant understands any conflicts to resolve potential interagency issues will be managed by others outside of the Authority (i.e., by the federal agencies) in a manner to complete NEPA requirements as described above in a timely fashion. These five EAs include:

1.2.2.1 An EA for the two National Park Service (NPS) sites (sites LACFCP08 and PWT), compliant with CEQ and FEMA regulations, and NPS Director's Order 12.

1.2.2.2 An EA for the single FAA site (Site SPC), compliant with CEQ and FEMA regulations, and FAA Order 1050.1E (Change 1).

1.2.2.3 An EA for the single BLM site (Site BRK), compliant with CEQ and FEMA regulations, and BLM Handbook H-1790-1.

1.2.2.4 An EA for the single USACE site (Site LAFD088), compliant CEQ and FEMA regulations, and USACE NEPA regulations found at 33 CFR 230.

1.2.2.5 An EA for the single USCG site (Site PVC), compliant with CEQ and FEMA regulations and Department of Homeland Security Management Directive 5100.1.

The Consultant will prepare notices of availability for NEPA EA public review periods and prepare any responses to comments as required or as applicable. Scoping meetings and public hearings are not anticipated for any of the nine EAs, although each EA is anticipated to go through a 30 day public review period. A draft FONSI will be prepared for each EA, if appropriate.

2. Cultural Resources

2.1 Develop OFA Cultural Resources Management Reports, Perform Agency Coordination, Attend Meetings for Extended Schedule

For all sites on federally-administered lands, Consultant shall develop up to six (6) cultural resources management reports (to include historical, architectural history, archaeological and/or paleontological surveys as required or applicable), one for each agency, including those agencies that administer multiple sites proposed for LMR use (i.e., the USFS has 25 proposed LMR sites, but only a single report is anticipated for that agency).

For all sites on federally-administered lands, Consultant shall perform determinations of effect for each resource following the full Section 106 processes identified by each affected agency, rather than using the earlier anticipated FCC Form 620/621 submittals unless as directed by the federal land administering/management agencies and FEMA. It is anticipated that these extended determinations of effect will be applicable to approximately 200 resources on federal lands.

For those sites not on federally-administered lands and subject to SHPO review, Consultant shall comply with the FCC requirement that the FCC Form 620/621 submittals occur via the E-106 process, while also providing hard copy submissions of FCC Form 620/621 to SHPO (which does not participate in the E-106 process). Consultant shall manage this process for up to fifty-two (52) reports to be submitted to SHPO and FCC via these divergent methods.

Consultant shall attend meetings as necessary with the Authority, City of Los Angeles, FEMA, FCC, other federal agencies, and the Tribes for up to eight (8) months to manage input from all stakeholders. The Consultant has budgeted $30,000 in Other Direct Costs for costs associated with Tribal consultation inclusive of Tribal review fees for Soboba Band of Luiseno Indians and the Eastern Shoshone Tribe, shipping, and printing costs for the Tribal consultation packages.

3. Environmental Compliance Monitoring

In support of the LMR construction effort, Consultant shall provide environmental construction compliance monitors, including a senior environmental specialist, a senior biologist, and a senior archaeologist, to oversee and coordinate the activities of the LMR Contractor's environmental compliance monitors. Duties for the Consultant's environmental construction compliance monitors include, but are not limited to, the following:

a. Review of LMR Contractor-prepared environmental compliance management plan (ECMP) (may also be known as mitigation monitoring compliance reporting plan or similar).

b. Site inspections at LMR construction sites to verify ECMP compliance by LMR Contractor.

c. Coordination with LMR Contractor environmental compliance monitors

d. Coordination with appropriate Authority staff.

e. Coordination with federal and state regulatory or land management agencies, as appropriate to support environmental compliance at construction sites.

Compliance monitoring leads are required to support an anticipated 72-hour per week construction schedule. It is anticipated that construction and this monitoring effort will continue from onset for 18 months.

Consultant shall provide LMR deliverables for this Phase 2 effort include weekly monitoring reports (these may take the form of weekly meeting minutes) and quarterly grant compliance reporting.

4. Additional Sites (Five Sites Anticipated)

Currently, the Consultant has data and has performed environmental analysis for 116 sites. This list was initially thought to be sufficient to provide alternatives in the event sites were dropped from the system due to technical or permitting issues (i.e., environmental constraints). It now appears that there may be a need for additional alternative sites, as several sites previously thought to be securely included in the design may no longer match this case. Additional sites would require compliance with CEQA, NEPA, NHPA (SHPO's Section 106 review), ESA (USFWS Section 7 review) and other potential environmental review or permitting requirements. Consultant shall conduct additional site analysis would be expected to entail:

- CEQA-compliance (documentation to support statutory or categorical exemption, Notices of Exemptions, or publication of an initial study/mitigated negative declaration).
- NEPA compliance (documentation to support additional FEMA RECs for sites, or inclusion of a site into an already planned EA prior to Draft EA publication)
- NHPA compliance, to include records search, Native American outreach, field survey, analysis, development and submittal to SHPO of an FCC form 620 or 621 and electronic filings of the same forms to the FCC.
- ESA compliance, to include records search, agency outreach, field survey, analysis, and development of an informal assessment to USFWS supporting a "may affect, not likely to adversely affect" finding.

5. Environmental Outreach

Consultant shall conduct up to a total of six (6) EIR public review meetings: one per each County of Los Angeles Supervisorial District plus one meeting on Catalina Island. The Environmental Outreach work Consultant shall perform would include, but is not limited to, meeting planning, determining community noticing requirements, and providing community noticing. Direct costs for Environmental Outreach Work may include facility rentals, audio/visual equipment rentals, production of boards and displays, production of meeting notices and parcel mailings, all of which would be reimbursed by the Authority. Consultants shall add a senior environmental specialist, as necessary, to the outreach team on a part-time basis to ensure NEPA, CEQA, and other environmental compliance efforts are properly portrayed.

Deliverables for the LMR include:

- Up to three (3) NEPA-compliant EAs with FEMA as lead agency. One of these EAs may be substituted with REC support for up to twenty-five (25) sites
- A NEPA-compliant EA for up to twenty-five (25) sites on the Angeles National Forest (or San Gabriel Mountains National Monument
- Up to five (5) NEPA-compliant EAs with other Federal agencies.
- Up to fifty-two (52) 620/621 forms submitted through a divergent process by entering electronically in FCC's Tower Construction Notification System (TCNS).
- Up to six (6) cultural resources management reports for sites on other Federal agency lands.
- Quarterly reporting for environmental compliance monitoring during construction
- Weekly updates (in the forms of reports and/or meeting minutes) regarding environmental compliance monitoring during construction
- CEQA, NEPA, NHPA and ESA documentations for Additional Sites as described in sub-section 4 above.
- Environmental outreach presentation materials.

6. LMR Outreach

Consultant shall establish an outreach plan that establishes the objectives, approach, and programs for outreach to stakeholder agencies and the public during the remaining steps for developing and deploying the Land Mobile Radio (LMR) system. These steps include completion of the environmental reviews processes per the California Environmental Quality Act (CEQA) and National Environmental Protection Act (NEPA), support for the acquisition of site access agreements and applicable local permits, and site construction. The LMR system includes approximately 75 proposed sites distributed within the City of Los Angeles, independent cities, and unincorporated areas under the jurisdiction of the County of Los Angeles.

Consultant shall provide outreach support for the LMR system for a period up to 28 months consistent with the staffing plan for outreach. Outreach is to be provided for the five following components: Ongoing Communications, CEQA and NEPA Environmental Review, Stakeholder Agency Outreach, Support for Site Access Agreements and Local Permits, and Site Construction. For each component there will be targeted participants, objectives, and program components.

1. ONGOING COMMUNICATIONS

Consultant shall maintain open communication channels for early issue identification and resolution, provide updates, maintain transparency, and disseminate accurate and consistent project information. Target participants will be the JPA Member agencies, public, fire and law enforcement staff, and additional stakeholders as identified. Programs for ongoing communications will include:

- **Monthly email notifications:** LA-RICS will work with cities and agencies to augment the e-blast notification list. Email notifications will highlight the features and benefits of the LA-RICS program, notify the public about upcoming meetings, and provide important project updates on other topics such as Funding Plan actions.

- **Website updates:** The LA-RICS website will be audited on a monthly basis to identify needed updates and post new, relevant information. Links for significant new postings will be disseminated to contacts via e-blast notifications.

- **Project materials:** New fact sheets and other informational materials will be prepared as needed, including a fact sheet focusing exclusively on LMR.

- **Expand Contact Database:** Identify additional stakeholder agencies and organizations to receive updates and information.

2. CEQA AND NEPA ENVIRONMENTAL REVIEW

Consultant shall provide outreach support for the CEQA and NEPA Environmental Review process. The LA-RICS Authority (JPA) is completing environmental review under CEQA and NEPA. For CEQA, an Environmental Impact Report (EIR) is being prepared, with the JPA as the lead agency. Scoping for the EIR was completed in 2014, and included five meetings (one in each of the five Supervisory districts). Publication of the Draft EIR is anticipated for fall 2015, and a 30-day public review and comment period will are being planned in accordance with CEQA guidelines. Current planning includes six meetings to receive comments to the Draft EIR.

For NEPA, a Programmatic Environmental Assessment (PEA) is being prepared by JPA staff with FEMA as the lead agency. Scoping for the PEA is underway, consisting of a mail-out to approximately 265 agencies, interested parties, and other stakeholders. It is anticipated the Draft PEA will be available for public review in fall 2015.

The Consultant will provide a senior environmental specialist for 25 months to support the overall Authority outreach effort for all environmental support. Support will not be exclusive to support the CEQA and NEPA environmental review process but will include support required for Ongoing Communications, Stakeholder Agency Outreach, Site Access Agreements and Local Permits, and Site Construction.

Targeted participants will be the public, JPA members, regulatory agencies, federal land management agencies, and other interested parties and stakeholders. Programs will include the following:

- **Public meetings:** During the public review period for the Draft EIR, a public meeting will be conducted in each County of Los Angeles supervisorial district plus Avalon (Catalina Island). The purpose of the public meetings will be to provide information about the contents of the Draft EIR and solicit comments from the public, regulatory community and other interested parties and stakeholders.

- **E-mail notifications:** At key junctures in the CEQA and NEPA process, including the Draft EIR and Draft Environmental Assessment public review periods and public hearings conducted by the JPA Board for certifications of final documents, e-mail notifications will be distributed to the LA-RICS contact database.

- **Targeted notices:** Notices of the public meetings (described above) will be sent to residents and business owners within 500-foot radii of the LMR sites.

- **Website Postings:** All documents and meeting announcements will be posted on the LA-RICS website for accessibility and transparency.

3. STAKEHOLDER AGENCY OUTREACH

Consultant shall conduct meetings with the senior management of the JPA member agencies. The overarching purpose of the meetings is to keep communication channels with the member agencies open, and hear questions and concerns for proactive and early resolution. LMR discussion topics for the meetings include location of sites, status of the CEQA and NEPA environmental review processes, and the need for any applicable Site Access Agreements and local permits. The meetings will also provide an opportunity for important updates on the Funding Plan, and the LTE system launch and accomplished coverage.

Consultant shall also conduct as-needed briefings and follow-up meetings with member agency management, elected officials, community and stakeholder committees, and organizations. Scheduling will be determined based on requests from the member agencies and other stakeholders. Consultant shall also proactively suggest and offer meetings when issues and concerns first arise, allowing for timely resolution that will help to keep the overall LMR construction schedule on track. The objectives of conducting stakeholder outreach are to deepen relationships with the member agencies, increase trust and confidence in LA-RICS, proactively solicit questions and concerns for quick resolution, disseminate accurate and consistent information, and avoid miscommunications that could delay launch of the LMR system.

Targeted participants include JPA members and stakeholders, including local city management and elected officials, City of Los Angeles and County of Los Angeles management and elected officials, town councils, neighborhood councils, local community advisory groups and organizations, and professional organizations. It is estimated that there will be approximately 80-120 meetings with various stakeholders during the course of stakeholder agency outreach. Programs for stakeholder outreach will include:

- **Meetings with leadership management of all member agencies:** Beginning in October 2015, conduct meetings that address updates on the LTE system launch and coverage, status of Funding Plan, overview of LMR sites and any applicable Site Access Agreements and local permits, status of LMR CEQA and NEPA

processes, and plan for outreach near sites before and during construction. In the meetings, Consultant shall convey the eagerness and availability to conduct subsequent presentations, briefings and meetings with elected officials, community organizations, and stakeholders. After the meetings, the consultant will ensure that follow-up occurs for all questions, concerns, and requests voiced by the member agency staff.

- **As-needed outreach agency stakeholder outreach:** Up until completion of LMR system construction, the consultant will conduct as-needed meetings, presentations, and briefings with agency staff, elected officials, community councils and organizations, emergency response personnel, and other stakeholders. Scheduling will be determined based on requests from the member agencies and other stakeholders. Consultant shall proactively suggest and offer meetings when issues and concerns first arise, allowing for timely resolution that will help to keep the overall LMR construction schedule on track.

In addition to the stakeholder agency outreach described above, outreach may be needed to secure Site Access Agreements and applicable local permits. The need for outreach will vary significantly by site, depending on the approving agency's local decision-making process and characteristics of the site.

Targeted participants will be the staff of member agencies that contain sites needing Site Access Agreements and local permit approvals, and other signing agencies for Site Access Agreements. Programs will include:

- **As-needed outreach:** Consultant shall work closely with team members charged with securing Site Access Agreements and permits to identify outreach needs and timing. Outreach tasks will take the form of presentations, briefings, photo simulation preparation, and informational materials.

4. SITE CONSTRUCTION OUTREACH

Construction relations is a specialized form of community outreach conducted during the construction phase of projects. The goal is to proactively provide information about the types and timing of construction activities so that community members are not surprised when construction begins. The proactive outreach also allows for the early identification of any issues or questions, allowing the team to provide answers before issues grow into entrenched concerns or opposition.

The objectives of conducting site construction outreach are to maintain and expand positive relationships with local community members, on-site staff, and independent city staff and elected officials; provide accurate and consistent information about the LA-RICS program and LMR construction activities, timing, and health and safety concerns to avoid proliferation of inaccurate information; hear questions and concerns from community members before construction begins, allowing for quick responses by LA-RICS; and avoid any delays in environmental clearance or construction, which could result if significant community concern is generated because of lack of proactive communications by LA-RICS.

Targeted participants include residents and businesses located in close proximity to the LMR sites, staff at law enforcement and fire protection stations with sites, and local city and elected officials who may hear concerns expressed by local community members. Outreach Programs will be customized according to the characteristics of each site and its surrounding areas, generally using the following site categories. Consultant shall work with the County and cities' staff to determine categorization. The consultant will conduct all site construction outreach a minimum of two weeks prior to the start of construction.

- **Enhanced outreach (approximately 30 sites):** LMR sites with at least one residential or educational property within 500 feet.
    - Door-to-door notification
    - Outreach with employees at the site
    - Additional outreach as needed

- **Moderate outreach (approximately 12 sites):** LMR sites with at least one commercial property – and no residential or educational properties - within 500 feet.
    - Door-to-door notification
    - Outreach with employees at the site
    - Additional outreach as needed

- **Basic outreach (approximately 35 sites):** LMR sites with no residential or commercial properties within 500 feet.
    - In general, no outreach planned; to be determined on a case-by-case basis.

While all sites have been evaluated to determine the level of site construction outreach required, Consultant may elevate any site to a higher outreach level. This will be done on a case-by-case basis in conjunction the County and cities' staff to determine categorization.

9.3 PHASE 2 – LMR AND LTE SITE CONSTRUCT AND SITE MODIFICATION

In this phase of each of the LMR and LTE projects, the Consultant will oversee the implementation of the site improvements developed by the LMR System Contractor and the LTE System Contractor during the system design phase. The plans and specifications developed during the design phase should address modifications to existing sites, facilities or infrastructure, as well as site improvements and construction of new facilities and infrastructure at new sites for each project.

In this Phase 2, the Consultant will verify that the LMR System Contractor and the LTE System Contractor delivers the work of site modifications and construction of facilities and infrastructure meeting the quality specified in the plans and specifications that were reviewed and accepted during Phases 1, System Design.

The Consultant's field engineers/construction managers will be involved hands-on on a daily basis to make sure that the following items are addressed for each project:

a. Verify that all required permits are on hand before starting any construction activities
b. Communicate upcoming construction activities in advance to all stakeholders and the appropriate

communities if impacts are expected
c. Process and address any requests for information and submittals coming from the LMR System or LTE System Contractors
d. Conduct construction observation to resolve any quality-related issues as they arise
e. Coordinate the services of the various specialty consultants, including special inspection and material testing
f. Monitor construction progress against the respective LMR or LTE project baseline schedules for each site and address recovery plans if delays become necessary
g. Review progress payment applications against work in place and process for payment as appropriate
h. Process any potential changes arising out of unforeseen field conditions or Authority-initiated directives
i. Ensure that all best management practices and environmental mitigation measures (if any) are addressed as defined in the environmental documents
j. Ensure that all master punch list work is completed properly and in a timely manner
k. Coordinate all inspection activities with the Inspector Of Record (IOR) and with deputy inspectors as may be assigned for each project.

The approved LMR and LTE System Designs may require modifications to existing sites, or new shelters and towers may be needed to accommodate coverage requirements, new equipment, or correct existing deficiencies. These modifications may include grounding system improvements, electrical system upgrades, tower reinforcements, or equipment shelter expansions.

The Consultant will oversee any LMR System or LTE System site modifications to evaluate construction methodologies and practices of the respective Contractors. Upon notice from the LMR System or LTE Sytem Contractor that site improvement work is ready for final inspection, the Consultant will conduct site inspections to ensure a quality installation and that applicable punch list items have been resolved.

LMR deliverables for this Phase 2 will at a minimum be:
a. LMR-PH2-9.3.1 Final Site Construction Report
b. LMR-PH2-9.3.2 Final Site Acceptance Report
c. LMR-PH2-9.3.3 Outreach Presentations, Marketing Materials and Fact Sheets
d. LMR-PH2-9.3.4 Environmental Document Review Reports

LTE deliverables for this Phase 2 will at a minimum be:
a. LTE-PH2-9.3.1 Final Site Construction Report
b. LTE-PH2-9.3.2 Final Site Acceptance Report
c. LTE-PH2-9.3.3 Outreach Presentations, Marketing Materials and Fact Sheets
d. LTE-PH2-9.3.4 Environmental Document Review Reports

9.4 PHASE 3 – SUPPLY LMR AND LTE SYSTEM COMPONENTS

For each of the LMR and LTE projects, upon successful completion of Phase 1 System Design and Phase 2 Site Construction and Site Modification, Phase 3 Supply Telecommunications System Components will commence. This Phase 3 consists of ordering, supplying, fabricating, and delivering the LMR System and LTE System components. As this Phase 3 kicks off, it will be important to confirm or re-establish the baseline project schedule, critical path drivers, work plans, and budget for each project.

The Consultant will work closely with the Authority to administer new contract orders and/or change orders, as necessary, for procuring the hardware, software, and other materials and services necessary to implement the LMR System and LTE System respectively.

For each project and before factory orders are placed, the Consultant will review all equipment lists for accuracy and completeness, ensuring they match the requirements of the LMR System and LTE Systems Contracts and the final design documentation. For each project they will use the RTM developed during Phase 1 System Design to monitor compliance with the system performance criteria and environmental documents.

9.4.1 Factory Acceptance Tests (FAT) and Equipment Staging

For each of the LMR and LTE projects, the Factory Acceptance Test (FAT) and equipment staging process involves assembling system infrastructure equipment for each site at the LMR System Contractor's and LTE System Contractor's facility(s) and conducting as much of the Acceptance Test Plan (ATP) activities as possible. The Consultant, as adjunct to, on behalf of, or as proxy for the Authority, will attend the FAT for each project and verify that the accepted testing procedures are properly executed and that the results concur with the system performance criteria as specified in the respective LMR and LTE technical requirements. For each project and after staging, the site equipment will be packed by the LMR System and LTE System Contractors for delivery or storage.

To provide the appropriate level of quality assurance during the FAT, the Consultant will perform the following actions for each project:

a. Re-review all applicable factory test procedures and confirm that they are designed to simulate, as closely as possible, the final overall system configuration
b. Verify test equipment metrology to ensure it is properly calibrated
c. Verify testing results will be properly documented and that any subsystem that was not tested as part of the overall staging effort is properly tested and documented by the specific supplier
d. Verify that any issues requiring a software, firmware, or hardware upgrade, downgrade, or retrofit will be clearly identified prior to shipment
e. Update master punch list throughout FAT, including recommended remedial action
f. Maintain results in a FAT report that includes FAT items from the master punch list
g. Update the requirements traceability matrix with FAT results

9.4.2 Materials Management

For each of the LMR and LTE projects, the Consultant will establish a logistics management process to ensure that the right materials are at the right place at the right time during deployment, including specifying, ordering, staging, kitting, shipping, sparing, and returns.

For each project and immediately following the FAT/staging process, while still at the manufacturer's facility, the Consultant will conduct an inventory of equipment for each site to include but not be limited to:

a. Electronics and ancillary equipment, including respective LMR System and LTE System, and microwave radios, equipment racks, power and signaling cabling, transmission lines and wave guides, antennas, grounding, and surge suppression
b. Components for shelter, antenna support structure, commercial power, emergency power, HVAC, site security, cable ladders and ice bridges, lighting, fire suppression system, and overall workmanship and materials
c. Site documentation and manuals for completeness; we will be particularly sensitive to as-built drawings

and ensure that they reflect actual site conditions
d. FCC licenses and other regulatory permits and documentation.

For each project, the Consultant will verify that inventories document quantity, model, revision level, and serial numbers as appropriate. The Consultant will note any deviations from the factory orders/equipment lists in the master punch list, even if the inventory is to be placed into storage after FAT/staging.

LMR deliverables for this Phase 3 will at a minimum be:
a. LMR-PH3-9.4.1 Final Factory Acceptance Test Report
b. LMR-PH3-9.4.2 Final Equipment Staging Report
c. LMR-PH3-9.4.3 Final Inventory and Maintenance Tracking System (IMTS) Report

LTE deliverables for this Phase 3 will be:
a. LTE-PH3-9.4.1 Final Factory Acceptance Test Report
b. LTE-PH3-9.4.2 Final Equipment Staging Report
c. LTE-PH3-9.4.3 Final IMTS Report

9.5 PHASE 4 – LMR and LTE SYSTEM IMPLEMENTATION

For each of the LMR and LTE projects, the Consultant will provide implementation planning and execution support services using the proven processes described below. The Consultant understands that the LMR System and LTE System deployment plan may vary from the Phases defined in the LMR System Contractor's and LTE System Contractor's Contract:
a. The LMR System Contractor or LTE System Contractor that the Authority selects
b. Whether Notices To Proceed (NTP), or partial NTPs are issued for the Phases of each project
c. The LMR System's and LTE System's final technical, geographical, and/or operational attributes
d. Funding sources
e. Evolving priorities and other influences, such as political, environmental, and budgetary conditions

During system implementation and deployment for each project, the Consultant will provide oversight services to ensure the LMR System Contractor and LTE System Contractor executes according to the approved implementation plan and in conformance with the system performance criteria in each of the LMR System Contract and LTE System Contract.

9.5.1 Implementation Planning

For each project, the Consultant will work closely with the Authority and the LMR System Contractor and LTE System Contractor to define a comprehensive, step-by-step implementation plan and Integrated Master Schedule (IMS) for the LMR and LTE projects solutions. The implementation plan and schedule will be based on industry best practices for developing LMR and LTE radio systems and will address, at a minimum and for each project:
a. Conformance to the applicable of the LMR System Contract and LTE System Contract and system performance criteria
b. Adequate, phased schedule
c. Risk identification and mitigation planning
d. Frequency planning and FCC licensing
e. Indication of system acceptance and other testing completion sign-off by appropriate Authority stakeholders

f. Indication that users and operations personnel must be fully trained
g. Minimizing the impact on system operations and service disruptions to public safety critical systems
h. Detailed procedures for acceptance testing, cutover, and operations
i. Minimal operation disruption during transition for users and dispatch
j. Roles and responsibilities of Authority personnel and LMR System Contractor and the LTE System Contractor personnel
k. Subsystem migration plans
l. P25 and broadband mobile data (LTE) upgrades
m. Other technology upgrades

The Consultant understands that the aspects of the design and implementation plans may change in each project, prompting the need for additional or refined cost analysis. They will evaluate variances from the baseline established in previous Phases and revise cost estimates as previously described.

9.5.2 Radio Service Migration Planning

For each of the LMR and LTE initiatives, it is extremely important to have a detailed migration plan for orderly transition from the legacy voice and data radio systems to the interoperable LMR and LTE Systems. Each step in the migration plan for each project should consider minimizing service interruptions and the impact to system users. The Consultant will review the LMR System Contractor's and LTE System Contractor's migration plan and assist the Authority in coordinating the migration process with all jurisdictions in advance of acceptance testing. Among other considerations, the migration plans for each project must account for frequency utilization as well as how legacy and new equipment can coexist to facilitate a smooth transition.

The Consultant recognizes that overall system migration for large regional and statewide systems is best executed in phases—bringing live the new system's various segments one at a time. They will work with the LMR and LTE System Contractors to transition the Authority's voice and data radio operations in coordinated phases.

For each of the LMR and LTE projects, starting in the Phase 1 Design Phase, and continuing through Phase 4 System Implementation, the Consultant will assist the Authority in evaluating how the new LMR and LTE Systems will affect the current regional operations, interoperability, policies and procedures, and governance. For each project, and in order to determine what changes may be required to meet the public safety needs with the new/upgraded LMR and LTE System, the Consultant will review the following:

a. Current regional tactical interoperable communications plan (TICP)
b. Operating agreements and memoranda between the County, City, and participating jurisdictions
c. Governance structure with the Authority and appropriate stakeholders

For each project, the Consultant will assist the Authority in updating or developing new policies, Memorandums of Understanding/Agreement (MOU/MOA), and Standard Operating Procedures (SOP) to implement effective regional interoperability and governance.

9.5.3 Acceptance Test Plans (ATP)

The LMR System Contractor and the LTE System Contractor will prepare detailed system Acceptance Test Plans (ATP) that the Consultant will evaluate during Phase 1 Design Review activities to ensure the system is thoroughly and meticulously tested to system performance criteria. For each project, the Consultant will conduct a series of recommended ATPs that will include:

a. **Field Acceptance Test Plan** – Verification that the plan tests proper operation, features, interoperability, and reliability of the LMR or LTE System, and backhaul network subsystems for each project, including system infrastructure, subscriber units, and consoles.

b. **Coverage Acceptance Test Plan (outdoor)** – Verification that the plan is consistent with TSB-88-C; provides objective evaluation the DTVRS for bit error rate (BER) and DAQ of 3.4; specifies pass/fail criteria, test areas, and size of each test tile, as per the technical specifications in the respective contracts.

c. **Coverage Acceptance Test Plan (indoor)** – Review of the Coverage Acceptance Test Plan (CATP) and verification that the evaluation of mandatory building coverage for each of the LMR and LTE projects will be either 1) service areas, or 2) by verification of indoor coverage for critical structures where the subjective indoor testing must occur. For specific critical structures, the Consultant will verify that the CATP includes a detailed map showing coverage requirements for each location, illustrating portable coverage with clear markings.

d. **Infrastructure Installation Test Plan** – Verification that the infrastructure installation test plan includes validation of all critical components (e.g., antennas, cabling, tower lighting, backup power, fault monitoring systems), especially those with significant importance to prolonged site operations during critical events or times of emergency response escalation.

e. **Full System Acceptance Test Plan** – Verification that the full system acceptance test plan contains an adequate subset of each of the other test plans to validate final acceptance and simulates, as closely as possible, the final overall system configuration.

9.5.4 Installation Support Services

For each project, the Consultant will oversee the new and upgraded equipment delivery installations, checking for quality and verifying activities against approved plans. The Consultant will inventory delivered equipment when it arrives at each site to make sure and verify it is in acceptable condition and suitable for installation.

The Consultant will accompany the LMR System Contractor and the LTE System Contractor at each site to verify that all LMR and LTE systems and equipment are present, properly installed, and that installations conform to industry workmanship standards using site-specific quality checklists. For example, the Consultant will inspect cabling for proper routing, bundling, and labeling. Inspections will also document any engineering design issues that must be dealt with and recommend corrective actions to be taken. The Consultant will update the master punch list according to issues found at each site in each of the LMR and LTE projects.

For each project, site verifications that commenced in Phase 2 will continue to ensure that site support systems (such as power, batteries, and emergency backup systems) are properly installed and operating with the system equipment. Upon notice from the LMR System Contractor or the LTE System Contractor that system installations are ready for final inspection, the Consultant will conduct site inspections to ensure installation requirements and quality standards are met. The Consultant will visit LMR and LTE sites, and dispatch sites and document any deficiencies on the master punch list, and will work as the Authority's agent with the respective LMR and LTE System Contractor to ensure that any required remedial action is taken.
If additional site work is needed in either the LMR or LTE projects, the Consultant will check progress against the

implementation schedule to see that potential delays are quickly identified and that schedule delay mitigation plans are developed. They will document inspection results, including digital photos, for each site.

Depending on the site configuration, the following is a list of candidate items for inspection in each of the projects:

a. Access road
b. General site conditions
c. Physical availability of surrounding land space
d. Perimeter security
e. Emergency power
f. AC and/or DC power
g. Equipment shelter
h. HVAC
i. Grounding and lightning suppression
j. Tower(s) and transmission line support structures
k. Antennas
l. Waveguide and dry air systems
m. Electronics: radio(s), microwave, terrestrial interconnect, ancillary systems
n. Nearby obstructions that may impact microwave paths and mobile radio coverage
o. Evidence of approval by local building inspectors
p. Site availability – specifically if a site is owned by the Authority and/or Authority members, and if the Authority has procured the legal rights to carry out the proposed improvements on the selected site through a Site Access Agreement

9.5.5 Commissioning

The Consultant will track and supervise the remaining work for the LMR System and LTE System respectively, and all of its parts, subsystems, and components to ensure they are fully functional in their respective service environments and in accordance with specified requirements in the respective contracts. As a prerequisite to final system acceptance in both the LMR and LTE projects, the Consultant will monitor and report the completion status of all master punch list items, further tasking, and deliverables.

Migrating public safety agencies to respective LMR and LTE operations will be one of the most critical portions in the deployment schedule for each project. The Consultant will work closely with the Authority, the participating agencies, and the LMR System Contractor and LTE System Contractor to define a comprehensive, step-by-step migration plan that will have the least impact on each agency's system operations, and minimize disruptions to public safety critical systems.

For each project, the commissioning process will take into consideration how legacy and new equipment can coexist in the same environment to reduce risk and facilitate a smooth transition. As part of that process, the Consultant will assist the Authority in planning and monitoring the decommissioning, removal, and disposal of equipment from legacy radio systems, as necessary, for each project. The Consultant will also continue to maintain the master punch list and ensure that final punch list items are completed prior to final milestone payments being approved. This will include delivery of all as-built and site record documentation that will enable the Authority to maintain and support the LMR and LTE Systems.

9.5.6 System Acceptance

For each project, the Consultant will oversee the LMR System Contractor's and LTE System Contractor's field acceptance testing. They will observe testing to ensure tests are conducted in accordance with the aforementioned test plans and verify system functionality, performance, reliability, and loading for each project.

The Consultant's system acceptance test oversight methodology for each project will be based on the processes outlined in the respective LMR and LTE QA/QC plans. The Consultant will use the RTM for requirements validation and will coordinate the methodology development and approval with the Authority and the LMR System Contractor and LTE System Contractor respectively. During their review of each of the LMR System and LTE System Acceptance Test Plans, the Consultant will supplement each with their explicitly-defined verification procedures.

Prior to witnessing any tests for either project, the Consultant will check the Contractors' test equipment metrology to ensure that the equipment has been properly calibrated and that the certification of calibration has not expired. The calibration should be traced to National Institute of Standards and Technology (NIST) recognized standards.

The LMR System Contractor and the LTE System Contractor must update the design documentation according to the accepted, final system for each project. The Consultant will review all final documentation, verifying not only that the documentation accurately reflects the final design, but that the final design implements the requirements captured in the RTM (i.e., meets system performance criteria) and that the master punch list is updated. If retesting is recommended in either project, the Consultant will verify the additional tests are properly executed and passed.

9.5.7 Training

For each project, training will be necessary for system equipment setup and operation, subscriber use, dispatcher use, and system management/maintenance personnel. The Consultant understands that training can become complex and costly if not standardized, since different agencies will require training on different systems, equipment, operations, and procedures. Therefore, the Consultant will work with the Authority and the LMR System Contractor and LTE System Contractor to identify a combination of standardized formal and on-the-job training requirements for the new systems.

The Consultant will review the LMR System Contractor's and LTE System Contractor's training plans for each project, to ensure compliance with the respective LMR and LTE System Contracts and performance criteria. In addition and for each project, the Consultant will review training plans for items such as the adequacy and best use of the schedule, training equipment, facilities, and presentation materials.

For both the LMR and LTE projects, the Consultant will also identify training requirements that align with the regional governance plans and initiatives, along with national SAFECOM and/or FirstNET requirements and standards. This will include proper training and regular exercises critical to the implementation and maintenance of a successful interoperability solution, including but not limited to:

a. General orientation on equipment
b. Multi-agency tabletop exercises
c. Multi-agency functional exercises
d. Continued, regular comprehensive regional training

9.5.8 Warranty Services

For each project and during the warranty period, the Consultant will verify that the LMR System Contractor's and LTE System Contractor's preventive and corrective maintenance plans include a warranty period as well as long-term, quality operations and maintenance functions throughout the LMR System's and LTE System's life-cycles. During the warranty period for each project, the Consultant will evaluate, at a minimum the following maintenance plans for:

a. Warranties
b. Infrastructure equipment repair/replacement
c. Subscriber unit repair
d. First year system maintenance
e. Ongoing system maintenance
f. 24-hour call center
g. Quality assurance inspection recommendations
h. Deficiency resolution
i. Technology upgrades
j. Software upgrades
k. Extended support services
l. Network monitoring/NOC services
m. Disaster recovery plan
n. Field engineering
o. Network, asset, and configuration management
p. Major system infrastructure component spares and their locations
q. Transition/termination plans
r. Maintenance fees

The Consultant will verify, during the warranty period, the LMR System Contractor's and LTE System Contractor's life-cycle planning plan, and verify that LMR System Contractor's and LTE System Contractor's system enhancement and support services capabilities will consist of the following steps:

a. Needs assessment/problem definition
b. Feasibility study
c. Requirements definition
d. High-level analysis and design
e. Detailed design
f. Procurement
g. Implementation
h. Testing
i. Maintenance and operations
j. Review/refresh (which will generate a new problem definition, thus making the process iterative)

LMR deliverables for this Phase 4 will at a minimum be:

a. LMR-PH4-9.5.1 Final Test Completion Report
b. LMR-PH4-9.5.2 Final Training Completion Report
c. LMR-PH4-9.5.3 Final Acceptance Report
d. LMR-PH4-9.5.4 Final Warranty Report

10 CULTURAL RESOURCES ASSISTANCE

10.1 General

a. Consultant shall develop a written plan as a path forward to Memorandum of Agreement (MOA)/geotechnical approval from SHPO .
b. Consultant shall meet with SHPO to determine path forward to both interim approval to accomplish geotechnical work and documentation required to further the MOA discussion between NTIA and SHPO.
    i. Consultant shall demonstrate to SHPO how the Authority has corrected the pathway.
    ii. Consultant shall, in concert with SHPO, determine if the work completed/planned is sufficient to secure geotechnical/MOA approval .
    iii. Consultant shall document (confirm with SHPO) and identify any remaining tasks required to secure the necessary approval(s).
    iv. Consultant shall update the written plan and provide recommendations of feasible alternatives for geotechnical/MOA approval as necessary.
c. Submit 620/621 forms:
    i. Consultant shall initially, identify those sites "ready to go" (i.e., that have adequate archaeological work described and a proper building inventory conducted) and begin submitting 620/621 forms and prioritizing on those that SHPO has already reviewed or started to review. The Authority's Environmental Contractor will prepare the forms they deem ready, and provide them to Consultant for initial technical review and a final Quality Assurance (QA)/Quality Control (QC) review.
    ii. After the first 2 weeks, Consultant shall shift the focus to the list of priority sites developed by this Consultant/Authority.

10.2 620/621 Forms

a. Consultant shall develop a quick and easy assembly process for the 620/621 forms that includes all authorship, word processing, QC (including QC of Subconsultants work and deliverables), and approval tasks.
b. Consultant shall create a new field form for use by the archaeologists that better drives the information to be used in the 620 forms (i.e., using multiple choice rather than open-ended questions).
c. Consultant shall work with the Authority's Environmental Contractor to institute a requirement that all field forms completed by the Authority's Environmental Contractor be submitted daily, reviewed daily, and corrected within 24 hours of the site visit. Consultant shall also ensure that this submission is be done by an individual knowledgeable about the forms and data placement. Consultant shall further confirm and review the initial 20 forms and a select number thereafter to ensure the assembly process is implemented correctly.
d. Consultant shall create new boilerplate language as needed for FCC Form 620 that captures the concerns SHPO has regarding site data. Consultant shall fully QC the form before initial use which are to include the following:
    i. A statement of the age of all buildings in the APE. This includes a range of dates if only aerial photo documentation exists, and a more precise date if there is other documentation. All sources must be referenced when a statement is made about a particular building or structure.

ii. A statement regarding whether an archaeology survey had been completed for each property, along with a brief description of existing conditions of the property to determine levels of recent disturbance.

e. Consultant shall ensure that documentation exists for the archaeological and architectural effort:
   i. What was surveyed (provide documentation of who, where, when, and what found to meet professional standard of care).
   ii. State the findings, even if negative.
   iii. Fully document sources of information and statements made, in particular for concluding statements regarding age of structures.
f. Consultant shall add at least two layers into the 620/621 creation/QC process. One layer of QC should occur after the form has been created (this shall be done by Consultant's senior level technical staff and a generalist comparing against source data for each site). The second should be post-signature and prior to submission to SHPO (this will be done by Consultant's generalist) to ensure the forms are complete and polished. Consultant shall create a process to get errors/omissions corrected quickly and back into line for submission to SHPO.
g. Consultant shall ensure that two PI signatures on the 620 forms are secured, one for archaeology the other for architecture.
h. Consultant shall meet with SHPO to see if it's possible to increase review rate (based on a much improved document).

10.3 Architecture

a. Consultant's CRM Tech shall obtain reliable data sources for year built data within each LTE site, and where required by SHPO, outside the LTE site in the 0.5 mile indirect APE. Consultant to feed back their success at this within one week. If unsuccessful, Consultant and Authority will assist in identifying data/data sources Consultant shall make a statement that historic aerial photos were the only sources available if no other sources were used.
b. Consultant shall ascertain the QC processes put into place by CRM Tech, and if applicable, ASM and correct/improve if appropriate. For example, check building inventory vs. count of structures seen using Bing or similar satellite/aerial imagery.
c. Consultant shall ensure that each structure for each 620/621 form is discussed separately, and a narrative that discusses the date of construction or date range based on the use of aerial photos to document the date of construction is included in the form.
d. Consultant shall ensure data collected is consistent with what is required by SHPO.
e. Consultant shall have a conversation with SHPO regarding need for DPR 523 forms for all buildings (i.e., if the resources is better documented t and drive instead to no effect or no adverse effect).
f. Consultant shall streamline inclusion of building inventories into 620 forms.
g. Consultant shall clarify the work that needs to be accomplished at site SCH.
h. Consultant shall ensure that all Subconsultants (e.g. CRM Tech) understands that no sites are "exempt" and in the event of collocation, FCC Form 621 needs to be used (in lieu of form 620).

10.4 Archaeology

a. Consultant shall compress field schedule by adding archaeologists.
b. Consultant shall streamline the field forms for archaeology to minimize variability in data collected.
c. Consultant shall eliminate the disjointedness between field work and inclusion in the 620 forms to minimize opportunity for error.
d. Consultant shall develop a detailed schedule and timetable for completion of the fieldwork.

APPENDIX A-2
AGREEMENT BUDGET

Los Angeles Regional Interoperable Communications Systems (LA-RICS)

LMR SYSTEM	
Phase 0 – Preliminary Phase – Project Startup	$2,341,038
Phase 1 – System Design	$15,023,807
Phase 2 – Site Construction and Site Modification	$3,351,288
Phase 3 – Supply LMR System Components	$431,520
Phase 4 – System Implementation	$5,515,094
Phase 5 – System Maintenance	-
LMR System Other Direct Costs	$600,050
LMR System Total	**$27,262,797**

LTE SYSTEM	
Phase 0 – Preliminary Phase – Project Startup	$1,434,602
Phase 1 – System Design	$845,174
Phase 2 – Site Construction and Site Modification	$5,288,848
Phase 3 – Supply LTE System Components	$499,790
Phase 4 – System Implementation	$1,137,125
Phase 5 – System Maintenance	-
LTE System Other Direct Costs	$541,080
LTE System Total	$9,746,619

MAXIMUM CONTRACT SUM	**$37,009,416**

Firm	Phase	Activity	Q3 - 2015			Q4 -2015			Q1 - 2016			Q2 - 2016			Q3 - 2016			Q4 -2016			Q1 - 2017			Q2 - 2017			Q3 - 2017			Q4 - 2017			Q1 - 2018	TOTALS		
			JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Summary	Hours	Rates	Fee
Katz	**1**	**Ongoing Communications**																																		
		email notification,website updates, project materials			40	40	40	20	30	30	40	40	40	40	40	40	40	40	30	30	30	30	30	30	30	30	30	30	30	30	30	30				
Katz/Jacobs	**1**	**CEQA/NEPA Environmental Review**																																		
Katz		Outreach support for Draft LMR EIR Public Review Period			40	120	240	80																												
Jacobs		Environmental Support for Outreach			87	107	147	126	66	66	93	43	36	83	36	36	83	30	27	73	27	27	66	23	23	58	18	18	37	0	0	0				
Katz	**1**	**StakeHolder Agency Outreach**																																		
		Fall 2015 meetings (member agencies)			160	160	160	80	80	80																										
		BOS/CAR/LA City Council			20			20			20			20			20			20			20			20			20							
		City/Town Council									40			30			30			30			20			20			20							
		Professional Organizations						10			10			10			10			10			10			10										
		Interest Groups						10			10			10			10			10			10			10										
		Contingency			0	0	0	40	0	0	40	0	0	40	0	0	40	0	0	40	0	0	40	0	0	40	0	0	40	0	0	0				
N/A	**1**	**SAA/Permit**																																		
	n	Outreach support for SAA/Permit Process			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
Katz	**1**	**Construction Outreach**																																		
		Door-To-Door (Resid/Business)						55	55	55	55	55	45	45	45	45	45	28	28	28	28	28	28	28	28	14	14	14	0	0	0	0				
		Employee Outreach						30	30	30	30	30	20	20	20	20	20	20	20	20	20	20	10	10	10	10	10	10	0	0	0	0				
		Contingency						30	0	0	30	0	0	30	0	0	30	0	0	30	0	0	30	0	0	20	0	0	0	0	0	0				
		Sites per month breakdown						4	4	4	4	4	3	3	3	3	3	2	2	2	2	2	1	1	1	1	1	1	0	0	0	0				
Katz		**Total Hours per Month (less environmental)**			260	320	440	379	199	199	279	129	108	248	108	108	248	90	80	220	80	80	199	69	69	175	55	55	110	30	30	30	4,397	**4,397**	**$195**	**$857,415**
Jacobs		**Total Environmental Hours per Month**			87	107	147	126	66	66	93	43	36	83	36	36	83	30	27	73	27	27	66	23	23	58	18	18	37	0	0	0	1,436	**1,436**	**$150**	**$215,350**
		Total Hours per Month Combined			**347**	**427**	**587**	**505**	**265**	**265**	**372**	**172**	**144**	**331**	**144**	**144**	**331**	**120**	**107**	**293**	**107**	**107**	**265**	**92**	**92**	**233**	**73**	**73**	**147**	**30**	**30**	**30**	**5,833**			
Katz		**ODCs (website vendor, informational and meeting materials printing, and display boards, meeting venues, mailings/postal)**			**$4,000**	**$4,000**	**$4,000**	**$0**	**$3,500**	**$3,500**	**$3,500**	**$3,500**	**$3,000**	**$3,000**	**$3,000**	**$3,000**	**$3,000**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,500**	**$2,000**	**$1,500**	**$1,500**	**$1,000**	**$500**	**$500**	**$1,000**	**$500**	**$500**	**$500**	**$ 63,000**	ODC materials ongoing outreach	**$ 63,000.00**	
Katz		**ODCs Environmental Outreach (facility fees, AV equipment rental, LA Times legal notice, Boards, Mileage, Catalina travel, mailings/formatting, printing**			**$6,000**	**$6,000**	**$6,000**	**$2,500**																								**$ 20,500**	ODC materials EIR	**$ 20,500.00**	
Bemis	**1**	**Photo Simulations (95 sims)**			**$8,000**	**$8,000**	**$8,000**	**$7,000**	**$7,000**	**$7,000**	**$1,800**	**$1,800**	**$1,800**	**$600**	**$600**	**$600**	**$600**	**$600**	**$600**	**$600**	**$600**	**$600**	**$600**	**$600**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$ 57,000**	Photosims	**$ 57,000.00**	
																																	$ -	Media Comm	**$ -**	
	1	**RF Emissions Consulting Services**			**$14,250**	**$14,250**	**$14,250**	**$14,250**	**$14,250**	**$14,250**	**$14,250**	**$14,250**	**$14,250**	**$14,250**	**$6,250**	**$6,250**	**$6,250**			**$6,250**			**$6,250**			**$6,250**			**$6,250**			**$6,250**	**$ 192,500**	RF Emissions	**$ 192,500.00**	
																																	$ 333,000	**Total ODC Expenses**	**$ 333,000**	
		NOTE: Actual hours and ODCs to be billed per month, reflecting actual work effort for tasks.																																**Total Budget**	**$1,405,765**	

Current Max Contract Sum: $ 35,603,651
NEW MAX CONTRACT SUM: $ 37,009,416

AGENDA ITEM H - ENCLOSURE