

### **AGENDA**

### LOS ANGELES REGIONAL INTEROPERABLE COMMUNICATIONS SYSTEM AUTHORITY ("AUTHORITY")

### **BOARD OF DIRECTORS MEETING**

Thursday, February 3, 2022 • 9:00 a.m.

Microsoft Teams Meeting\* Link: Click here to join the meeting

### Call-in Number for Board Members and Public:

Public may submit a Public Comment during the meeting to the Board by accessing the Microsoft Teams Meeting Link above or by the Call-In Telephone Number below.

**Telephone Number:** (323) 886-6924

Conference ID: 137 829 092#

AGENDA POSTED: January 28, 2022

Complete agendas are available on the Authority's website at <a href="http://www.la-rics.org">http://www.la-rics.org</a>. \*The procedures used for this Teleconference Meeting are governed by AB 361.

	MEMBERS		ALTERNATES			
1.	Fesia Davenport, CEO County of Los Angeles Chief Executive Office	1.	John Geiger County of Los Angeles Chief Executive Office			
2.	Anthony Marrone (Vice-Chair), Interim Fire Chief County of Los Angeles Fire Department	2.	Eleni Pappas, Deputy Fire Chief County of Los Angeles Fire Department			
3.	Alex Villanueva (Chair), Sheriff County of Los Angeles Sheriff's Department	3.	Brian Yanagi, Acting Chief County of Los Angeles Sheriff's Department			
4.	Kay Fruhwirth, Director, EMS Agency County of Los Angeles Department of Health Services	4.	Richard Tadeo, Assistant Director, EMS Agency County of Los Angeles Department of Health Services			
5.	Vacant Seat Los Angeles Area Fire Chiefs Association	5.	Vacant Seat Los Angeles Area Fire Chiefs Association			
6.	Brian Solinsky, Police Chief Los Angeles County Police Chief's Association	6.	Vacant Seat Los Angeles County Police Chief's Association			
7.	Mark R. Alexander, City Manager California Contract Cities Association	7.	Marcel Rodarte, Executive Director California Contract Cities Association			
8.	David Povero, Chief of Police City of Covina Police Department	8.	Ric Walczak, Captain City of Covina Police Department			
9.	Mark Fronterotta, Chief of Police City of Inglewood Police Department	9.	Ed Ridens, Deputy Chief City of Inglewood Police Department			
10.	Brian Leyn, Captain City of Signal Hill Police Department	10.	Vacant Seat City of Signal Hill Police Department			

OFFICERS					
Scott Edson, LA-RICS Executive Director					
Arlene Barrera, County of Los Angeles Auditor-Controller					
Keith Knox, County of Los Angeles Treasurer and Tax Collector					
Susy Orellana-Curtiss, LA-RICS Administrative Chief					
Beatriz Cojulun, LA-RICS Board Secretary					



### 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)
  - **A.** January 6, 2022 Regular Meeting Minutes

Agenda Item A

- IV. PUBLIC COMMENTS
- V. CONSENT CALENDAR (B)
  - B. FINDINGS TO CONTINUE TELECONFERENCE MEETINGS UNDER AB 361
    AND RELATED ACTIONS

It is recommended that your Board:

- 1. Find, in accordance with AB 361 Section 3(e)(3), California Government Code Section 54953(e)(3), that the Board has reconsidered the circumstances of the State of Emergency due to the COVID-19 pandemic and that the State of Emergency remains active; and
- 2. Find, in accordance with AB 361 Section 3(e)(3), California Government Code Section 54953(e)(3), that local officials continue to recommend measures to promote social distancing.

Agenda Item B

- VI. REPORTS -(C F)
  - **C.** Director's Report Scott Edson

Agenda Item C

**D.** Project Manager's Report – Justin Delfino

Agenda Item D

- E. Joint Operations and Technical Committee Chair's Report No Report
- **F.** Finance Committee Chair's Report John Geiger



### VII. DISCUSSION ITEM - (G - I)

**G.** PSBN Round 2 Implementation and Construction Update – Chris Odenthal

Agenda Item G

H. Spectrum and Licensing Issues Impacting Land Mobile Radio Deployment – Ted Pao

Agenda Item H

Outreach Update – Sven Crongeyer

Agenda Item I

### VIII. ADMINISTRATIVE MATTERS (J-K)

J. APPROVE LIST OF PREQUALIFIED BIDDERS RESULTING FROM THE LA-RICS LAND MOBILE RADIO TELECOMMUNICATION FACILITY CONSTRUCTION AND INSTALLATION PROJECT RFSQ

It is recommended that your Board:

- 1. Find the proposed actions are exempt from the California Environmental Quality Act (CEQA) for the reasons stated in this Board Letter.
- 2. Approve the enclosed list of Prequalified Bidders (Enclosure) resulting from the successful Request for Statement of Qualifications (RFSQ) solicitation which will allow Bidders to respond to future Invitation for Bids (IFB) for construction work.

Agenda Item J

K. APPROVE AMENDMENT NO. 88 TO AGREEMENT NO. LA-RICS 007 LOS ANGELES REGIONAL INTEROPERABLE COMMUNICATIONS SYSTEM LAND MOBILE RADIO SYSTEM

It is recommended that your Board:

- Find that the proposed approval and execution of Amendment No. 88 to contemplate the four (4) Change Orders are not subject to the California Environmental Quality Act (CEQA) because it is not defined as a project under CEQA and does not have the potential for causing a significant effect on the environment.
- 4. Approve Amendment No. 88 to Agreement No. LA-RICS 007 for an LMR System with Motorola Solutions, Inc. (MSI), which revises the Agreement



- to incorporate four (4) Change Orders as further described in this Board Letter for a cost increase in the amount of \$20,254.
- 5. Authorize increase to the Maximum Contract Sum in an amount of \$20,254 when taking the recommended actions into consideration from \$214,687,454 to \$214,707,708.
- 6. Delegate authority to the Executive Director to execute Amendment No. 88, in substantially similar form to the enclosed Amendment (Enclosure).
- 7. Allow for the issuance of one or more Notices to Proceed for the Work contemplated in Amendment No. 88, as may be necessary.

Agenda Item K

- IX. MISCELLANEOUS NONE
- X. ITEMS FOR FUTURE DISCUSSION AND/OR ACTION BY THE BOARD
- XI. CLOSED SESSION REPORT -
  - 1. CONFERENCE WITH LEGAL COUNSEL –Anticipated Litigation (subdivision (d) of Government Code Section 54956.9) (1 case).

### XII. ADJOURNMENT AND NEXT MEETING:

Thursday, March 3, 2022, at 9:00 a.m., via Microsoft Teams / Teleconference Meeting.



### **BOARD MEETING INFORMATION**

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) requests 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.)

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 <u>as soon as possible</u>. (323) 881-8291 or (323) 881-8295.

SI REQUIERE SERVICIOS DE TRADUCCION, FAVOR DE NOTIFICAR LA OFICINA LO MAS PRONTO POSIBLE. (323) 881-8291 o (323) 881-8295.

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

February 3, 2022 Page 5 Regular Meeting Agenda



# BOARD OF DIRECTORS MEETING MINUTES

### LOS ANGELES REGIONAL INTEROPERABLE COMMUNICATIONS SYSTEM AUTHORITY

### Thursday, January 6, 2022 · 9:00 a.m.

Conducted via Microsoft Teams Meeting

### **BOARD MEMBERS PRESENT**

David Povero, Chief of Police, City of Covina Police Department

Mark Fronterotta, Chief of Police, City of Inglewood Police Department

### ALTERNATES FOR BOARD MEMBERS PRESENT

John Geiger, County of Los Angeles Chief Executive Office

Frank Forman, Alternate Vice-Chair, Assistant Fire Chief, County of Los Angeles Fire Department

Brian Yanagi, Alternate Chair, Acting Chief, County of Los Angeles Sheriff's Department

Kay Fruhwirth, Assistant Director, EMS Agency, County of Los Angeles Department of Health Services

Marcel Rodarte, Executive Director, California Contract Cities Association

### **OFFICERS PRESENT**

Scott Edson, LA-RICS Executive Director

Susy Orellana-Curtiss, LA-RICS Administrative Deputy

Beatriz Cojulun, LA-RICS Board Secretary

### **BOARD MEMBERS ABSENT / VACANT**

Vacant Seat, The Los Angeles Area Fire Chiefs Association

Brian Solinsky, Police Chief, Los Angeles Area Fire Chiefs Association

Brian Leyn, Captain, City of Signal Hill Police Department



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

### I. CALL TO ORDER

Alternate Chair Brian Yanagi wished everyone a Happy New Year and called the Regular Meeting of the Board to order at 9:03 a.m.

### II. ANNOUNCE QUORUM – Roll Call

Board Secretary Beatriz Cojulun took the roll and acknowledged a quorum was present.

### III. APPROVAL OF MINUTES (A-B)

- **A.** December 2, 2021 Regular Minutes
- B. December 20, 2021 Special Minutes

Alternate Chair Yanagi asked if there were any questions or comments from the Board to both sets of minutes attached to the Regular Meeting agenda. There were no questions or comments, therefore, he asked for a motion to approve.

Board Member David Povero motioned first, seconded by Alternate Board Member Kay Fruhwirth.

Ayes 6: Geiger, Forman, Yanagi, Fruhwirth, Povero, and Fronterotta. Abstained 1: Rodarte (not present at both meetings)

### MOTION APPROVED.

### IV. PUBLIC COMMENTS - NONE

There was no public comment.

### V. CONSENT CALENDAR – (C)

### C. FINDINGS TO CONTINUE TELECONFERENCE MEETINGS UNDER AB 361 AND RELATED ACTIONS

Alternate Chair Yanagi asked if there were any questions or comments from the Board for Consent Calendar Agenda Item C. There were no questions or comments, therefore, he asked for a motion to approve.



Alternate Board Member Povero motioned first, seconded by Alternate Board Member Marcel Rodarte.

Ayes 7: Geiger, Forman, Yanagi, Fruhwirth, Rodarte, Povero, and Fronterotta.

#### MOTION APPROVED.

### VI. REPORTS (D-G)

### **D.** Director's Report – Scott Edson

Executive Director Scott Edson stated that, unfortunately, the County of Los Angeles (County) lost a firefighter early that morning and the Authority's thoughts and prayers go out to the firefighter's family and also to the County Fire Department (LACOFD) family, as well as to all of the public safety professionals across the nation.

Executive Director Edson wished everyone a Happy New Year and hoped everyone had a safe and joyous holiday season.

Executive Director Edson said the Authority team did not take any holiday time off and despite some setbacks due to rain, construction on the remaining sites continued its progress with only one (1) site remaining to start construction.

Executive Director Edson shared a brief summary relating to Land Mobile Radio (LMR) Contract Amendment Number 86 which includes, among other things, an approval of a Change Order to mitigate damage to a road caused by recent storms; as well as Delegated Authority not to exceed \$20,000 for unforeseen road work at sites caused by similar inclement weather. Executive Director Edson stated that receiving Delegated Authority will allow the Authority to proceed with time-sensitive Change Orders to effectuate the repair work and allow construction to continue uninterrupted.

Executive Director Edson mentioned that Project Manager Justin Delfino would provide the Board with updates on the work performed by Motorola Solutions, Inc. (MSI) under his Project Manager (PM) Report. However, Executive Director Edson expressed that he was happy to report that on December 15, 2021, the Request for Statement of Qualifications (RFSQ) was released for the construction of the final site, MCI. Executive Director Edson shared that responses are due on January 18, 2022, to qualify vendors to proceed to the next step in the Invitation for Bid (IFB) process. Executive Director Edson went on to say that in parallel, the Authority is working with the Architecture and Engineering (A&E) Firm to finalize the design which is required for the IFB. Executive Director Edson stated the Authority projects returning to the Board on February 3, 2022, to request entering



into agreements with prequalified bidders and then again on March 8, 2022, to request approval to adopt, advertise, and award a contract via issuance of an IFB. Executive Director Edson took the opportunity to thank Melissa Saradpon, the Authority's Contracts Analyst, who worked diligently through the Holiday season, leading the procurement process and ensuring the final site waiting construction continued moving ahead of schedule.

Executive Director Edson was happy to report that with the MCI site, where the Authority assumed the scope to design, bid and build, the Coastal Development Permit application was submitted to the County Department of Regional Planning (DRP) on December 22, 2021. Executive Director Edson thanked Deputy Program Manager Tanya Roth for spearheading this effort, and noted the significant time-savings by assuming this work, in comparison to previous Coastal Development Permit application submissions done under MSI Scope that took several months to prepare.

Executive Director Edson shared that during the 2022 Rose Parade and Rose Bowl game, the LA-RICS team performed testing and loading simulations based on criteria from fielded units to determine the suitability of system operations. Executive Director Edson went on to say the Authority received favorable results which would be rolled into simulations for Super Bowl 56 testing in February 2022.

Executive Director Edson expressed the Authority is looking forward to Super Bowl 56, unfortunately, as reported to the Board over the past few months, a site that continues to face issues is Green Mountain (GRM). Executive Director Edson said that despite aggressively pushing Department of Water and Power (DWP) Real Estate and engineering, as well as City of Los Angeles (City) Mayor's Office, the Authority has no progress to report on their scope. Executive Director Edson said the Authority has gone above and beyond required efforts by performing DWP Real Estate work, engaging the State Department of Parks and Recreation (State Parks), drafting language and documents on their behalf in an effort to expedite their unrealistic timelines. Executive Director Edson stated that Agenda Item L, seeks among other things, approval of a Change Order to perform a topographical survey at the GRM site in order to provide DWP and State Parks with the power easement at the site. Executive Director Edson went on to say that nonetheless in an effort to stay on schedule the Authority needs to explore other options, such as utilizing a generator for temporary power while in parallel we continue to pressure DWP and the City. Executive Director Edson said he would keep the Board apprised of any updates.

Executive Director Edson stated that Lead Engineer Ted Pao would provide the Board with an update on the Spectrum and Licensing issues impacting the LMR program under Agenda Item I. Executive Director Edson stated that as he reported to the Board last December 2021, there are eight (8) licenses that are at risk of not



being approved, with one (1) site's licenses being the most time-sensitive. Executive Director Edson said that if these are not approved, the Authority will not only experience degradation of the Project's coverage, but may also impact progress on the program. Executive Director Edson went on to say the Authority is aggressively pushing County Leadership to ensure the Federal Communication Commission (FCC) approve these licenses in the timeframe required so as not to further delay the program. Executive Director Edson stated the Authority continues to work with the County Internal Services Department (ISD), the Spectrum Manager, as well as County Chief Executive Officer, to leverage the public safety aspect and need, with the FCC.

Executive Director Edson stated as for grants, following the November 2021 Urban Area Security Initiative (UASI) Approval Authority meeting where the region voted to allocate \$10 million out of the \$40 million needed to complete the program. California Governor's Office of Emergency Services (Cal OES) issued a letter to the UASI Approval Authority and the County CEO requesting the Los Angeles/Long Beach UASI and all UASI Approval Authority partners mutually develop a regional solution for completion of the LA-RICS project, given this is a program that will benefit the region in its entirety. Executive Director Edson stated the grantor required a written update along with a Plan addressing the funding shortfall by no later than January 31, 2022. Executive Director Edson said that on December 15, 2021, the UASI Approval Authority met again and voted to increase the previous allocation from \$10 million over two (2) years to \$15 million over three (3) years. Executive Director Edson said the UASI Approval Authority, despite efforts from County Sheriff's Department (LASD), and support from the LACOFD, did not vote on how they would address the Plan that is due to the State/Cal OES by end of January 2022. Executive Director Edson shared the Authority reached out to the Grants Director at the City Mayor's Office and asked for a meeting or call to discuss how the plan would be addressed. Executive Director Edson went on to say the Authority has not received a response to the Authority's numerous requests to-date.

Executive Director Edson said that there are two (2) grants in the region to support public safety: 1) UASI who receives 84% of regional funding; and 2) State Homeland Security Grant Program (SHSP) who receives 16% of the regional funding. Executive Director Edson said that SHSP met on December 16, 2021, and voted to allocate \$3.5 million to LA-RICS in 2022 which is 16% of the LA-RICS Funding gap in 2022. Executive Director Edson stated given regional funds are intended to support regional programs such as LA-RICS, that UASI should provide its support as SHSP has done and adjust its allocation over three (3) years to provide the necessary funding in 2022, while in parallel we pursue state-level funding in upcoming budget cycles. Executive Director Edson went on to say the Authority is working with regional leaders to ensure this is achieved and will report back to the Board with these important updates.



Executive Director Edson expressed that on a final note, good and bad news, Board Member Cathy Chidester, who was not present, on her behalf made public her retirement from County service, as well as announcing that Alternate Board Member Kay Fruhwirth, who was in attendance, would be Interim EMS agency Director, effective January 29, 2022.

Executive Director Edson stated that Cathy Chidester requested he read the following to the LA-RICS Board and Team Members:

"As I am retiring from County service, I am so glad that I had the opportunity to serve on the LARICS Board. This is the most complex and vital project that I have ever been involved in. I am so impressed with the dedication, and commitment to quality of everyone involved in this project. I learned more about radio design, LTE, towers and the Catalina fox then I ever thought possible. I had hoped to out stay Mark Alexander as one of the first participants in the fledgling program as the Bylaws were being developed but it was not meant to be. All the best to the Board and LA-RICS family. Keep fighting the good fight!"

Executive Director Edson shared that he has known Cathy Chidester since 2009, that he has always been impressed by her knowledge, wisdom and common sense, all of which have benefitted this program and him personally. Executive Director Edson, on behalf of the Authority and himself, wished her the best in her retirement and expressed how very lucky the Authority has been to have such a great Alternate Board Member in Kay Fruhwirth, as she steps into Cathy's role of Board Member.

There was no further discussion.

E. Project Manager's Report – Justin Delfino

### LMR PROGRAM CONSTRUCTION OVERVIEW

Program Manager Delfino provided an update on the construction overview and shared some recent successes on the LMR Program for the month of December.

### **Open and Active Sites:**

Program Manager Delfino stated that just as reported at the December 2021 Board Meetings, there are still five (5) sites working toward substantial completion: the Catalina sites Tower Peak (TWR), Dakin Peak (DPK), Black Jack Peak (BJM), LACF072, and San Pedro Hill (SPH).

There is only (1) Coastal Commission site remains to start, MCI. SPN and TOP-RELAY equipment will be installed at MCI. Total site count remains at 58 sites.



### Notable December and to date successes on the LMR Program:

- There are zero recordable injuries to-date.
- Successful Rose Parade event, where early use system performed flawlessly for the LASD and other users supporting the Pasadena, California events over the New Year Holiday.
- MCI was submitted to County of Los Angeles Department of Regional Planning (DRP) to start the California Coastal Commission review of the project. The Project Team strategically determined to order the tower structural analysis early on in the design process to ensure that the tower would be usable in its current condition. The results of the analysis concluded that the existing tower will be suitable for use. Deputy Program Manager Roth will elaborate regarding the Coastal application in greater detail under Agenda Item J.
- LACF072 is the featured site with substantial progress having been made over the Holidays. The shelter is now installed as well as the mono-pine antenna structure. Program Manager Delfino provided further details under the LMR Highlights portion of his report.
- Program Manager Delfino provided site status as 31 were sites optimized; 26 sites on the air; and 15 cells on the air.

### SAAs:

Program Manager Delfino informed the Board that all site access agreements have been completed.

### **Areas of Focus:**

Program Manager Delfino reported:

- The surety company remains involved in the Program, although in the month of December 2021, they were not engaged with the LA-RICS Project Team.
- As Executive Director Edson previously stated, MSI and the Authority have collaborated on the GRM utility issue with a solution that will mirror BUR1's temporary solution with the use of a roll-up (portable) generator for prime power until normal utility power becomes available at each site. MSI and LA-RICS teams have met to discuss minimal power needs at each site so that an appropriate generator size is selected. Furthermore, the Teams have discussed that this interim solution does not impact or delay to the overall Program completion date.
- Monitoring the reported impacts due to labor shortages and supply chain disruption due to COVID-19. In addition to the reports the Authority received from MSI regarding these impacts material delivery impacts, Southern California Edison (SCE), also reported similar problems also caused by COVID-19 e.g. SPH. The SPH site was initially tracking on-time, but due to a



- manufacturer generator delay, as well as SCE's reported difficulty in obtaining common parts, for example, lids to electrical volts from Jenson pre-cast.
- The Authority is closely monitoring cutover planning by partner agencies to ensure frequency availability and readiness for MSI to start testing.
- Closeout documentation submissions from MSI are an area of focus. MSI has had difficulty in assembling the documents that are required for those closeout submissions.
- Program Manager Delfino stated the Authority would be meeting with MSI later today to solidify and formalize their commitment for UASI 19' grant year work completion dates.
- The December 2021 submission of the Integrated Master Schedule (IMS), MSI did not submit an IMS update that was compliant with Exhibit A 1.4.15, the requirements therein govern monthly updating requirements. On Tuesday, January 4, 2022, the Authority discussed the January IMS update and MSI committed that by January 31, 2022, MSI would have enough time to incorporate MCI into the IMS. The effects of that change schedule are expected to reduce the overall time from the baseline agreement completion date October 10, 2023.

### **LMR HIGHLIGHTS**

### Features Site(s):

Program Manager Delfino shared some images depicting activity at the following site:

 County of LACF072 – Malibu/Santa Monica Mountains (photo from December 28, 2021)

Program Manager Delfino referenced a prior report to the Board where it was explained that continued site progress was dependent on delivery of shelter, which was delayed by its manufacturer Thermobond. Program Manager Delfino said that on December 28, 2021, the shelter delivery was made, which allowed the chain reaction of progress to continue. In fact after the shelter was hoisted into position and installed the mono-pine was hoisted into position just 2.5 hours later on the same day. Program Manager Delfino stated that the progress made at LACF072 was the greatest success of the Ph.2 effort for the month of December 2021.

This concluded the report on Agenda Item E from Program Manager Delfino. There was no further discussion.

- F. Joint Operations and Technical Committee Chairs Report No Report
- G. Finance Committee Chair Report No Report



### VII. DISCUSSION ITEMS (H-K)

### H. PSBN Round 2 Implementation and Construction Update – Chris Odenthal

Program Director Chris Odenthal provided the Board with an update to the PSBN Round 2 program. Program Director Odenthal stated that sites 1-25 have been completed, the only site remaining with work to be done is Pomona Court House 2 (POM2). Program Director Odenthal said the Authority has been working with the Judicial Council of California (JCC) to confirm their approval on the building final for site release. Program Director Odenthal went on to state that now that it has been approved, Motive Energy, the Contractor completing that site, will commence work at POM2. Program Director Odenthal concluded by saying that Magic Mountain Link 2 (MML2) is completed and simply waiting to be energized by SCE.

This concluded the update on Agenda Item H by Program Director Odenthal. There was no further discussion.

### I. Spectrum and Licensing Issues Impacting Land Mobile Radio Deployment – Ted Pao

Technical Lead Ted Pao reported that LA-RICS is in receipt of a spectrum monitoring analysis report by the Internal Services Department (ISD). Technical Lead Pao went on to say that as the report indicated, tropospheric ducting was observed at several sites on TV Channel 16 spectrum during the monitoring efforts. Technical Lead Pao stated that this observation is consistent with the Authority's observation and to some extent, observation by MSI. Technical Lead Pao said the scope of this analysis and report did not consider how ducting will impact UHF system performance, but merely demonstrate if ducting is observed at the selected test sites and the severity of the interference. Technical Lead Pao shared the Authority's technical staff was still completing a detailed review of this report and will provide a summary to Executive Director Edson.

Technical Lead Pao stated for the Authority's FCC licensing update, the FCC has not issued any additional LA-RICS UHF licenses. Technical Lead Pao said that Executive Director has provided the ISD Director the deadlines and the impact these licenses have on the Authority's System Deployment. Technical Lead Pao shared that ISD's response is in agreement with LA-RICS, the issuing of licenses is a priority, therefore will be engaging with the FCC after some clarification and supporting data is provided by LA-RICS. Technical Lead Pao went on to say that it also recommends LA-RICS to assess alternative solutions if the licenses are not granted or not granted within the project's timeline. Technical Lead Pao stated that LA-RICS will be working with ISD on these alternative solutions.



This concluded the update on Agenda Item I by Technical Lead Pao. There was no further discussion.

### J. Update on Coastal Commission Sites in the Land Mobile Radio System – Tanya Roth

Deputy Program Manager Roth stated that 2021 marked significant progress with the LMR deployment in the coastal zone. Deputy Program Manager Roth said that construction was wrapped up on Castro Peak (CPK) while also breaking ground on all three (3) Catalina sites and at LACF072. Deputy Program Manager Roth went on to say that it was hard to debate which has been the most significant, making LA-RICS a reality on Catalina or finally putting in place the infrastructure at LACF072 to bring reliable and expanded coverage to the fire-prone and terrain-challenged area, concluding either way, both were critical wins for LA-RICS over 2021. Deputy Program Manager Roth expressed that 2022 will mark the completion of construction and Phase 2 closeout activities for all aforementioned sites and also the inclusion of MCI into the overall system build.

Deputy Program Manager Roth stated that as reported to the Board over the last several months, the forecast date for the Coastal Exemption Permit Submittal to the Department of Regional Planning (DRP) was targeted before year-end. Deputy Program Manager Roth stated as reported by Director Edson the team beat the projection date and the package was uploaded onto the DRP's online portal, Epic LA, on Wednesday, December 22, 2021, just before the Christmas holiday. Deputy Program Manager Roth said the efficient manner in which the MCI site has progressed to-date, is a testament to the quality work-product and engagement of the contracted vendor, Brandow and Johnston (B&J), as well as the true partnership the landowner, Saddle Peak Communications - a private entity, has demonstrated.

Deputy Program Manager Roth said that staff has been in regular communication with DRP, the submittal package is in the process of being assigned to a Planner, the assigned Planner will be one (1) of the two (2) Planners that processed the previous seven (7) coastal permits and therefore would be familiar with LA-RICS eliminating the need for a "getting to know you" process and learning curve. Deputy Program Manager Roth went on to say that once assigned, fees would be assessed and upon payment by B&J, the Authority expects DRP comments to the submittal package follow approximately 30 days thereafter. Deputy Program Manager Roth expressed that with the wild housing market and impacts of COVID work-fromhome policies across mostly every industry, DRP has been inundated with home-improvement renovation applications, effectively flooding their system, but DRP continues to be a collaborative partner to LA-RICS and intends to keep LA-RICS as a priority project for processing.



Deputy Program Manager Roth said that while staff await formal comment from DRP, MSI is also now engaged on MCI via LMR Amendment No. 85 and subsequent LMR NTP No. 41, issued on December 23, 2021, which contemplates MSI's Phase 4 efforts on the site and stipulates MSI's collaboration with B&J, the Phase 1 design vendor and the still to be determined Phase 2 general contractor. Deputy Program Manager Roth went on to say the first major deliverable from MSI will be the final Radio Frequency (RF) design, shelter floor plan and rack layout which is due the 3<sup>rd</sup> week of January 2022. Deputy Program Manager Roth stated once that is finalized, B&J will progress the zoning drawings to Construction Drawings in preparation for submittal to County DPW for Building Permit review.

Deputy Program Manager Roth concluded by stating that a number of chess pieces had to align for LA-RICS to be able to capitalize on the unexpected availability of an existing 70' tower in the coastal zone. Deputy Program Manager Roth expressed now that it is all happening, which is an exciting win for both LA-RICS and public safety in the region. Deputy Program Manager Roth said the Authority still has a significant amount of work ahead and the team remains focused on those tasks to complete all required permitting for the final site in the program.

This concluded the update on Agenda Item J by Deputy Program Manager Roth.

There was no further discussion.

### K. Outreach Update – Sven Crongeyer

Operations Lead Lieutenant Sven Crongeyer went on to provide the September Outreach Update and directed the Board to the summary of Outreach activities contained in the agenda packet.

Operations Lead Crongeyer reported that last month the Authority spoke with representatives from the City of Inglewood Police Department, the US Department of Homeland Security, and the Federal Bureau of Investigation (FBI) to discuss communications plans for Super Bowl 56. Lead Operations Crongeyer said the Authority began the process of loaning out radios to these agencies for interoperability during the event.

Operations Lead Crongeyer shared that LA-RICS Mirador (MIR) radio site overlooking the Rose Bowl and Rose Parade Route was tested on New Year's Eve and New Year's Day. Lead Operations Crongeyer went on to say the testing plan that was developed by LA-RICS staff, LASD and the Pasadena Police Department was successful. Lead Operations Crongeyer said the useful information that was collected will assist the Authority with planning future large scale events, including Super Bowl 56.



Operations Lead Crongeyer concluded by saying that representatives from the City of Cerritos Emergency Management Department are working with LA-RICS staff to prepare their Emergency Management Center for compatibility with LA-RICS.

This concluded the report on Agenda Item K. There was no further discussion.

### VIII. ADMINISTRATIVE MATTERS (L)

L. APPROVE AMENDMENT NO. 86 TO AGREEMENT NO. LA-RICS 007 LOS ANGELES REGIONAL INTEROPERABLE COMMUNICATIONS SYSTEM LAND MOBILE RADIO SYSTEM

Contracts Manager Arismendez requested the Board authorize the Executive Director to execute Amendment No. 86 to Agreement No. LA-RICS 007 to incorporate certain change orders and to make certain California Environment Quality Act (CEQA) Findings set forth in the Board Letter, which increase the Maximum Contract Sum by \$11,438, collectively.

Contracts Manager Arismendez further requested the Board:

- 1. Make the following findings:
  - Find the approval and execution of Amendment No. 86 to contemplate a change order for certain roadwork at the Pine Mountain (PMT) site. Contracts Manager Arismendez reiterated what Executive Director Edson mentioned earlier in his report that due to certain inclement weather conditions it is necessary to proceed with this particular Change Order is in the amount of \$5,241.
  - Contracts Manager Arismendez requested the Board approve Amendment No. 86 which contemplates a Change Order for the Green Mountain (GRM) site for certain surveying work in the amount of \$6,197.
  - Contracts Manager Arismendez also requested the Board approve Amendment No. 86 which reflects a no cost Change Order for DTVRS testing.
  - Contracts Manager Arismendez requested the Board approve an increase to the Maximum Contract Sum which contemplates the aforementioned Changes Orders for a grand total amount of \$11,438.
  - Contracts Manager Arismendez also requested the Board delegated authority to the Executive Director for a not-to-exceed amount of \$20,000 to issue one or more amendments and Notices to Proceed (NTP) to MSI

January 6, 2022 Page 12 Regular Meeting Agenda



for time sensitive Change Orders related to road work at sites impacted by recent inclement weather conditions.

 Lastly, Contracts Manager Arismendez requested the Board approve the Amendment No. 86 and to delegate authority to the Executive Director to execute the Amendment, as well as any NTPs related to Amendment No. 86.

Contracts Manager Arismendez stated that if approved by the Board, the actions contemplated in Amendment No. 86 would be covered by UASI Grants.

This concluded Agenda Item L presented by Contracts Manager Arismendez.

Alternate Chair Yanagi asked if there were any questions or comments from the Board. There were no questions or comments, therefore he asked for a motion to approve.

Alternate Board Member Marcel Rodarte motioned first, seconded by Board Member Kay Fruhwirth.

Ayes 7: Geiger, Forman, Yanagi, Fruhwirth, Rodarte, Povero, and Fronterotta.

**MOTION APPROVED.** 

- IX. MISCELLANEOUS NONE
- X. ITEMS FOR FUTURE DISCUSSION AND/OR ACTION BY THE BOARD NONE
- XI. CLOSED SESSION REPORT

The Board entered into Closed Session at 9:38 a.m.

1. CONFERENCE WITH LEGAL COUNSEL –Anticipated Litigation (subdivision (d) of Government Code Section 54956.9) (1 case).

Chief Eleni Pappas assumed attendance representing LACOFD.

The Board returned from Closed Session at 10:04 a.m. Counsel Truc Moore stated the Board was back in open session and the Brown Act did not require a report.



### XII. ADJOURNMENT AND NEXT MEETING:

Alternate Chair Yanagi called for a motion to adjourn the Regular Meeting. Board Member Kay Fruhwith motioned first.

The Regular Board meeting adjourned at 10:10 a.m., and the next Regular meeting will be held on February 3, 2022, at 9:00 a.m., via Microsoft Teams / Teleconference Meeting.



## LOS ANGELES REGIONAL INTEROPERABLE COMMUNICATIONS SYSTEM AUTHORITY

2525 Corporate Place, Suite 100 Monterey Park, California 91754 Telephone: (323) 881-8291 http://www.la-rics.org

SCOTT EDSON EXECUTIVE DIRECTOR

February 3, 2022

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

Dear Directors:

### FINDINGS TO CONTINUE TELECONFERENCE MEETINGS UNDER AB 361 AND RELATED ACTIONS

### **SUBJECT**

The California Legislature passed AB 361 to enhance public access to local legislative body meetings during the COVID-19 pandemic and future applicable emergencies. Under AB 361, to continue to meet via teleconferencing, the local legislative body must adopt, by a majority vote, specific findings within 30 days of the first use of the teleconferencing meeting rules after October 1, 2021, and within every 30 days thereafter. The first Board meeting under AB 361 occurred on October 7, 2021, and the Board made thereafter. Given the timing of the January meeting, it is time for the Board to make another finding to continue to use a telephonic meeting.

### **RECOMMENDED ACTIONS**

It is recommended that your Board, acting on its behalf, and on behalf of the Finance, Operations and Technical Committees appointed by the Board and which are subject to the Brown Act:

- 1. Find, in accordance with AB 361 Section 3(e)(3), California Government Code Section 54953(e)(3), that the Board has reconsidered the circumstances of the State of Emergency due to the COVID-19 pandemic and that the State of Emergency remains active; and
- 2. Find, in accordance with AB 361 Section 3(e)(3), California Government Code Section 54953(e)(3), that local officials continue to recommend measures to promote social distancing.

### **BACKGROUND**

LA-RICS Board of Directors February 3, 2022 Page 2

On September 10, 2021, the Legislature passed AB 361, to enhance public access to local legislative body meetings during the COVID-19 pandemic and future applicable emergencies. The Governor signed AB 361 into law on September 16, 2021. To ensure the safety of members of the public and personnel while guaranteeing the public's right to attend and participate in meetings of local legislative bodies and in alignment with the County of Los Angeles' Health Officer's recommendations to reduce crowding indoors and to support physical distancing, the Board can continue to meet via teleconferencing, in compliance with AB 361 while we are under a State of Emergency and while State or local officials continue to recommend measures to promote physical distancing. However, the Board will need to regularly consider the circumstances of the State of Emergency to determine whether teleconferencing should continue no later than 30 days after the Board's first meeting under AB 361 (October 7, 2021), and within every thirty (30) days thereafter.

### PURPOSE/JUSTIFICATION OF RECOMMENDED ACTION

Under AB 361, to continue to meet via teleconferencing, the local legislative body must adopt, by a majority vote, specific findings within 30 days of the first use of the teleconferencing meeting rules after October 1, 2021, and within every 30 days thereafter. The Board held its first meeting under AB 361 on October 7, 2021, made its first findings on November 4, 2021, its second finding on December 2, 2021, December 20, 2021, and its fourth finding on January 6, 2022. As we approach the third 30-day deadline and given the timing of the January 2022 Board meeting, the Board needs to make the necessary findings. The Governor's declaration of a statewide emergency is still in effect, and the County of Los Angeles' Public Health Officer still currently recommends physical distancing. Under AB 361, it is appropriate for the Board to continue with a teleconference meeting for the December special meeting.

### FACTS AND PROVISIONS/LEGAL REQUIREMENT

The Authority's counsel has reviewed the recommended actions and approved as to form.

### CONCLUSION

The Executive Director recommends the Board make the recommended findings.

Respectfully submitted.

SCOTT EDSON

**EXECUTIVE DIRECTOR** 

**MBC** 

c: Counsel to the Authority

**FEBRUARY 3, 2022** 

### LTE UPDATE

PSBN Round 2 – Sites 1-25 are complete. Closeout materials for the five (5) sites constructed under AT&T funding are assembled and are under review by First Responders Network Authority (FirstNet)/AT&T Corporation (AT&T) for acceptance. There remains final power and generator commissioning at Magic Mountain Link2 (MML2).

### **LMR UPDATE**

- Phase 2
  - ✓ Building Permit(s) Total site count remains at fifty-eight (58) sites for the LA-RICS LMR Network. Topanga Peak-RELAY (TOP-RELAY) was submitted for consideration to the County of Los Angeles (County) Department of Regional Planning (DPR) on behalf of the California Coastal Commission. It was anticipated that DRP will have comments to MSI's proposal that could result in significant design changes being required. Through careful consideration the Teams have determined a time savings alternative, to de-scope the build out of the TOP-RELAY site, and to move the non-redundant Radio Frequency (RF) Equipment to co-locate at the MCI location. The MCI site is where the Saddle Peak (SPN) site equipment will be installed as well.
  - ✓ Motorola Solutions Inc. (MSI) and the Authority have agreed to use the September 14, 2021, Data Date Integrated Master Schedule (IMS) for the baseline schedule. However, the Program Teams have met to discuss that the finish date of the Program will likely change and may be pulled in, specifically due to the TOP-RELAY equipment moving to MCI now. The Phase 4b scope (testing work) requires addition-scheduling efforts by MSI, beyond the information that was provided to MSI by the Authority. MSI is currently working on incorporating the MCI scope into the Integrated Master Schedule (IMS) for an update that will be delivered February 1, 2022.
  - ✓ Below is a breakdown of the current site progress for Phase 2 and Phase 4a work scope:
    - MSI is nearing Phase 2 and Phase 4a completion at several UASI 19' sites. MSI transmitted a Constructive Change Notification on January 14, 2022, that describes general impacts that Covid-19 has created for MSI and that they are evaluating the extent of the impacts, since they are unquantified by MSI, according to MSI. MSI has previously reported delays in their supply-chain and labor forces, and overall operational impacts in prior Constructive Change Notifications. At the Green Mountain site (GRM), the utility provider Los Angeles Department of Water and Power (LADWP) still needs to provide

**FEBRUARY 3, 2022** 

a utility power plan to LA-RICS. The LADWP Management, Real Estate representatives, and Mayor's office representatives met on Friday, November 19, 2021, to discuss steps forward to bring the requested utility service to completion. LA-RICS is undertaking the environmental review [California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA)] while also shepherding the Right of Entry (ROE) Agreement between California State Parks, City of Los Angeles (City) Department of Water and Power (LADWP), and the Authority. At this time, LA-RICS and the City have discussed the use of a roll-up generator to provide interim power to allow for the completion of the site. There is a meeting planned for January 20, 2022, to inspect available generators at the City. The Burnt Peak (BUR1) site remains challenged for normal utility power as well, since MSI informed the Authority on November 16, 2021, that MSI will no longer support the plan to utilize the emergency generator for use as prime power. Since that the time, the Teams have determined to use a roll-up generator at BUR1 to complete the Phase 4a and Phase 4b scope. According to Southern California Edison (SCE) the "Microgrid" power solution is still on-track for use in approximately 17 months. MSI has substantially completed all Phase 2 work for the UASI 19' sites at this time and is currently working to complete Phase 2 work at Black Jack Peak (BJM), Dakin Peak (DPK), Tower Peak (TWR), San Pedro Hill (SPH), and City Fire Station 072 (LACF072). MSI is also working to complete Phase 4a work at several UASI 19' sites. A spending plan modification has been shared with the Granting Authority so that there is transparency in which sites MSI has requested extensions for work completions versus other sites that will complete within the standard Grant performance period for UASI 19'. LA-RICS will further discuss the extension requests with the Granting Authority to confirm that the proposed extensions are allowable.

### Phase 4 – Optimization and Closeout

- ✓ There are eleven (15) cells on the air; (31) sites are optimized; and (26) sites are on the air.
- ✓ Cutover plans are currently being further developed between LA-RICS and MSI. The cutover plans will be managed to ensure that all cutovers occur as planned so no significant delays occur. Stakeholders and prospective users are encouraged to contact LA-RICS representatives with their agency cutover plans to ensure smooth transitions on to the LA-RICS Network.
- ✓ Discussions with Inter Subsystem Interface (ISSI) and the State of California and the City Mayor's Office have focused on interoperability beyond ISSI using Critical Connect. The State of California is already using the early use system and is looking to partner with LA-RICS for service within the County of Los Angeles (County) borders, once the system is fully completed.

**FEBRUARY 3, 2022** 

- ✓ ISSI connections have been successfully tested and used on multiple occasions including talk groups established with Torrance and Inglewood utilizing LA-RICS along with the Interagency Communications Interoperability (ICI) Network. The early system was successfully tested for the 2022 Rose Parade events, with positive feedback reported from users.
- ✓ Over twenty-three (23) sites have undergone the Phase 4 audit and the corresponding closeout books were submitted to LA-RICS for record.
- ✓ MSI will deliver the first subsystem Narrowband Mobile Data Network (NMDN) Phase1 starting on August 4, 2022.

**FEBRUARY 3, 2022** 

### LMR SITES



**FEBRUARY 3, 2022** 

LA-RICS GRANT STATUS										
Grant	Award	Costs Incurred/NTP Issued	Invoiced / Paid	Remaining Balance	Performan ce Period					
UASI 12	\$18,263,579	\$18,263,579	\$18,263,579	\$-	3/31/17					
UASI 13	\$13,744,067	\$13,744,067	\$13,744,067	\$-	3/31/18					
UASI 14	\$4,997,544	\$4,997,544	\$4,997,544	\$-	7/31/17					
UASI 16	\$5,240,455	\$5,240,455	\$5,240,455	\$-	5/31/19					
UASI 17	\$34,763,750	\$34,763,750	\$34,763,750	\$-	5/31/20					
UASI 18	\$35,000,030	\$35,000,030	\$ 35,000,030	\$-	5/31/21					
UASI 19	\$35,000,000	\$34,936,591*	\$ 11,789,163	\$63,409	5/31/22					
UASI 21	\$2,000,000	\$-	\$-	\$2,000,000	3/31/24					
UASI 22	\$5,000,000	\$-	\$-	\$5,000,000	5/31/25					
UASI 23	\$5,000,000	\$-	\$-	\$5,000,000	5/31/26					
UASI 24	\$5,000,000	\$-	\$-	\$5,000,000	5/31/27					
SHSP 22	\$3,520,000	\$-	\$-	\$3,520,000	5/31/25					
ВТОР	\$149,608,227	\$149,608,227	\$149,608,227	\$ 0	9/30/20					

<sup>\*</sup> Costs incurred, NTP Issued and / or line item included in approved Spending Plan.

# Los Angeles Regional

### **Interoperable Communications System**

### **PROJECT DESCRIPTION**

Events of September 11, 2001 highlighted the need for first responders to be able to communicate with each other. Emergency communications primarily address local jurisdictional needs, and most agencies utilize separate radio towers, equipment, and radio frequencies. LA-RICS is designed to address each of these concerns.

Currently, there is duplication of systems which leads to increased costs while continuing to inhibit first responders' ability 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 provide innovative solutions for the public safety community by removing barriers to interoperable voice and data communications and allow individuals and agencies to focus on accomplishing their mission with the tools necessary to provide excellent service to their communities. To accomplish this vision, the program is implementing 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.

Design, construction, and deployment of a County-wide Land Mobile Radio (LMR) voice network utilizes 59 sites. All sites in both the LMR and LTE augmentation comply with CEQA and NEPA standards.

Project and Construction Management Services will provide network, infrastructure, project, and advisory services across four of the five program phases (Phase 5 – Maintenance is excluded) 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 Project Management Company** 

Communications Vendor:

LMR - Motorola Solutions, Inc.
LTE - Motorola Solutions, Inc., David
Evans & Associates, Metrocell, Inc.,
Diversified Communications, Inc, Motive
Energy, Inc. and Jitney, Inc.



Monthly Report No. 117
February 3rd, 2022
Submitted January 28, 2022

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### LTE UPDATES

#### Operations/Governance

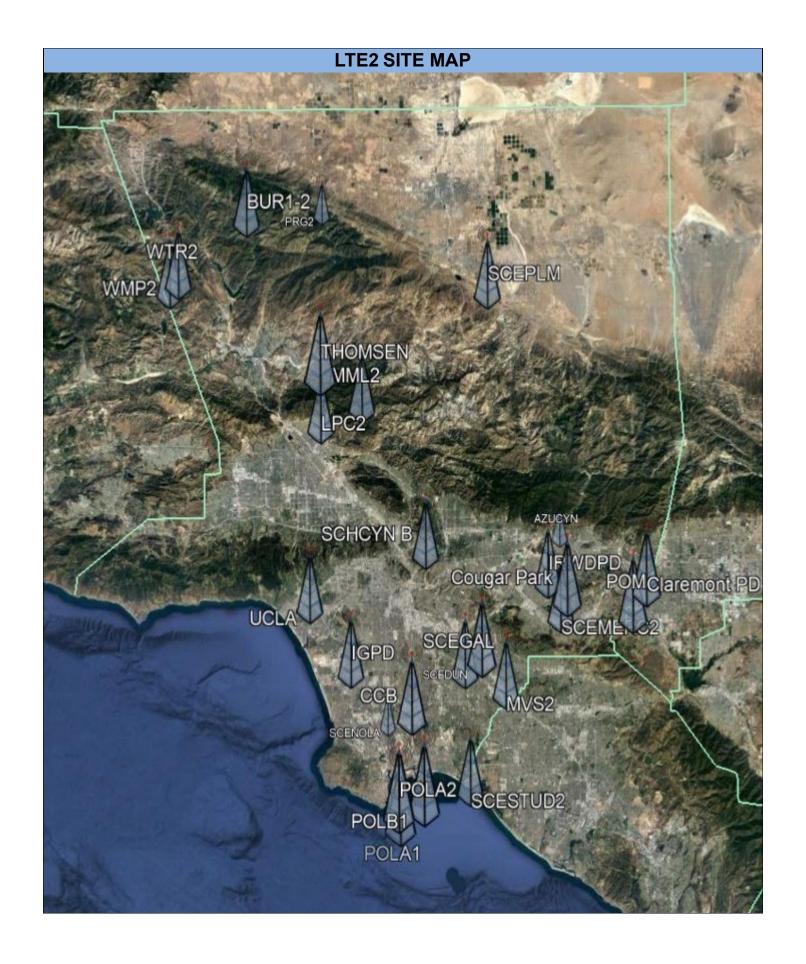
- The LA-RICS Operations team is holding meetings regularly to focus on the following:
  - 1. Manage network migration to LA-RICS to meet milestone cut-over dates established in the approved IMS.
  - 2. Ensure internal LA-RICS operational aspects are in place.
  - 3. Develop and Implement Policies as determined by the operations contributors.

#### **Special Events**

No new activity.

#### LTE Round 2 Updates

- January 2022 saw progress on obtaining final inspections for POLA1 and POLA2 and POM2. Regarding POM2, the JCC has made the determination that the LA-RICS contractor must mechanically attach the antenna sled mounts despite the risk of future leaks on the new roof system and considering the high potential of encountering hazardous materials during the drilling though roof activity. In January the Architect of Record (AOR) completed and delivered the revised connection details to the LA-RICS contractor for installation. The JCC also approved this revised detail. Regarding the POLA1 and POLA2 final building inspections, The AOR needed to redesignate an individual since the person who was originally named as the AOR had left the firm. This administrative task is now completed, the AOR's new designee will provide the City of Los Angeles Department of Building and Safety (LADBS) with signed structural observation reports to confirm that the installation of the tower foundations was installed per plans and specifications. The POLB1 site was not constructed by LA-RICS. The design work for POLB1 and construction plans were delivered to FirstNet AT&T.
- There are no safety issues to report on in this period.
- There are no labor compliance issues to report in this period.
- There are no environmental compliance issues to report in this period.



### **LMR UPDATES**

#### **Environmental Update**

- Jacobs continued the full-time MMRP monitoring effort in this period as several ground disturbing activities are still taking place during Ph.2 work. Motorola has not substantially improved its' ability to forecast work that requires advanced planning measures, nor properly given advanced landlord notification. While blatant mis-scheduling of work has become less frequent, it has not yet been eradicated from the Ph.2 effort, which directly impacts the MMRP efforts and workflow, since monitors are required onsite for certain work. Motorola has received formal correspondence from LA-RICS demanding that MSI discontinue late cancelations, no shows, inaccurate work plans and early dismissal of work so that site monitors aren't misdirected and so that work proceeds on a continual, uninterrupted basis in accordance with the IMS and environmental monitoring requirements.
- The Project Team has accomplished Worker Environmental Awareness Program (WEAP) training for 1,696 persons as of January 7, 2022.
- Jacobs filed an NOD with the LA County Registrar for change orders at sites GRM and PMT.

#### **Permitting Support**

• There is one (1) permit yet to be received for the newly added MCI site. The addition of the MCI site (replacing the previous SPN and RELAY sites) was approved by the Board on December 20<sup>th</sup>, 2021, Since MCI is still in the design phase and is under review with the Department of Regional Planning, although the replacement of the two other sites with MCI significantly reduces the overall scope of remaining Phase 2 work. Fifty-nine (59) building permit applications have been made to date (AGH, APC, BHS, BJM, BKK, BMT, BUR1, CCB, CCT, CITYWLK, CLM, CPK, CRN, DPK, DPW38, ESR, FCCF, FRP, GMT, GRM, HPK, INDWT, JPK2, LACF072, LACFDEL, LAN, LARICSHQ, LASDTEM, LDWP243, LPC, MDI, MLM, MMC, MML, MIR, MTL2, MVS, OAT, ONK, PHN, PLM, PMT, POM, PRG, RIH, RHT, RPVT, SDW, SGH, SPH, SPN, TOPRELAY, TPK, TWR, UCLA, UNIV, VPK, WMP, WTR).

#### Site/Civil

- All site access agreements (SAA's) are completed and have been transmitted to MSI.
- 58 sites in Network, 53 sites completed through Ph.4a.
- Only 2 sites remain to start, MCI and the installation of TOP RELAY shelter, generator, and RF equipment.
- Over 49 sites have normal power on and are optimized at site level by MSI.
- There are no safety issues to report on in this period.
- The "Project Schedule" with the data date of September 14th, 2021 (version 2) is the current operative baseline Integrated Master Schedule (IMS). The finish date shown on the 9/14/2021DD IMS has a Final System Acceptance date as October 10<sup>th</sup>, 2023. The Authority maintains that the finish date of the Program may be sooner than forecasted by MSI, particularly if the review and approval of the recently submitted application to the Department of Regional Planning for the site MCI occurs quickly, however the LA-RICS Team will receive an update to the IMS on February 1st 2022 that will detail finish date changes if any Significant progress has been made at twelve (12) UASI 19 sites and MSI has committed to complete all Ph.2 work at the Catalina Island sites by the end of this this January 2022. Submission of Ph.2 close-out documentation continues to be a struggle for MSI to complete and submit to the Authority. Formal correspondence has been sent to MSI to request that all outstanding close-out materials are submitted immediately for past due items. MSI has continued to submit schedule updates that unilaterally extend the Program completion date beyond the approved finish date in the accepted baseline IMS. For example, MSI recently submitted to the Authority a January 11th data date IMS update that did not comply with the prescribed requirements for schedule updates and suggests a completion date in January of 2024. MSI marked the file as "not contractually binding," as has been the practice of MSI for the past several months. The Authority rejected that purported schedule update for being non-compliant with the contract schedule requirements in many respects.

#### Network

- Frequency usage, narrow-banding, Agency cut-over process, and cut-over duration remain focal items for the LMR Program Ph.4 Teams. All forecasted dates have been forwarded to Motorola for IMS updates, which are included in the 7/13/2021DD IMS as well as the updated versions that succeeded it, including the approved IMS 9/14/2021DD. System interference on Ch. 16, is still being investigated by the Sheriff's Department and ISD along with the technical leads from the LA-RICS Project Team. The coordination between LASD, MSI, and LA-RICS is critical to ensure that frequencies are available for testing and operating the Analog Conventional System (ACVRS) particularly. In July 2021 the ISSI connection to the ICI system was again successfully tested, connecting South Bay ICI users with LA-RICS during an event at SoFi Stadium as well as other successful tests since that time. MSI has made considerable progress on the turn-up of 700Mhz cells for optimization and have reported that they are on schedule for the turnover of the first subsystem, NMDN Ph.1, on August 4th, 2022.
- The LMR Site Map is shown below.





# LOS ANGELES REGIONAL INTEROPERABLE COMMUNICATIONS SYSTEM AUTHORITY

2525 Corporate Place, Suite 100 Monterey Park, California 91754 Telephone: (323) 881-8291 http://www.la-rics.org

SCOTT EDSON EXECUTIVE DIRECTOR

February 3, 2022

To: LA-RICS Authority Board of Directors

From: Scott Edson

**Executive Director** 

### **PSBN ROUND 2 IMPLEMENTATION AND CONSTRUCTION UPDATE**

The purpose of this discussion item is to provide an update on the Public Safety Broadband Network (PSBN) Round 2 deployment.

CO:mbc

**Enclosure** 

### LA-RICS PSBN SITE DEPLOYMENT Week of 1/24/2022

Site ID	Туре	GC	City Planning	MISC Permit HDP /CP	Building Permit Rec'd	SAA Exec	Site Construction Start	Tower Delivered	Tower Construction Complete	Lines & Antennas Complete	Equipment Installation Complete	Site Construction Finish	Close Out	Comments
			NA	NA	5/21/2020	Complete	7/31/2020	NA	11/20/2020	11/27/2020	11/30/2020	11/30/2020	2/18/2022	All Power work is complete. Waiting for final inspection from SCE and power
														on.
MML2	Colo	MSI												
			NA	NA	9/11/2020	Complete	9/28/2020	8/21/2020	10/16/2020	11/27/2020	11/30/2020	11/30/2020	8/11/2021	Site Complete
MNTBLPD	Pole	Diversified												
			7/30/2020	CP = Approved	7/31/2020	Complete	8/10/2020	8/29/2020	8/29/2020	2/5/2021	10/6/2020	3/5/2021	9/15/2021	Site Complete
	Pole	Jitney		HEP = Approved										
POLA1														
POLA2	Pole	Jitney	7/30/2020	CP = Approved HEP = Approved	7/31/2020	Complete	8/10/2020	8/29/2020	8/29/2020	10/6/2020	10/6/2020	4/19/2021		LA-RICS scope complete. Site waiting for Fenix Terminal and AT&T to finalize power and fiber agreement.
I OLIAZ			NA		12/23/2020	Complete	2/1/2021	NA	NA	3/12/2021	6/18/2021	10/8/2021		Updated drawings submitted to the JCC for review and approval. Once
POM2	Roof	Motive			. ,		, ,				, ,	, ,		approved, work will commence.

Legend				
	Completed			
	Forecasted - Scheduled			



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SCOTT EDSON EXECUTIVE DIRECTOR

February 3, 2022

To: LA-RICS Authority Board of Directors

From: Scott Edson

**Executive Director** 

### SPECTRUM AND LICENSING ISSUES IMPACTING LAND MOBILE RADIO DEPLOYMENT

The purpose of this discussion item is to update your Board on the radio spectrum issue for the Land Mobile Radio System (LMR) system as well as frequency licensing issues impacting the LMR deployment.

TP:mbc



# LOS ANGELES REGIONAL INTEROPERABLE COMMUNICATIONS SYSTEM AUTHORITY

2525 Corporate Place, Suite 100 Monterey Park, California 91754 Telephone: (323) 881-8291 http://www.la-rics.org

SCOTT EDSON EXECUTIVE DIRECTOR

February 3, 2022

To: LA-RICS Authority Board of Directors

From: Scott Edson

**Executive Director** 

### **OUTREACH UPDATE**

The purpose of this discussion item is to update your Board on the status of outreach activities pertaining to the LA-RICS Public Safety Broadband Network (PSBN) and Land Mobile Radio (LMR) project. The below meetings occurred since our last report to you:

MUNICIPALITY	MEETING DATE
Weekly Outreach Meeting	January 3, 2022
International Public Safety Association (IPSA) Board of Directors Meeting (IPSA)	January 12, 2022
Emergency Communications Preparedness Center (ECPC) Advanced Technologies Working Group (ATWG) Monthly Meeting	January 12, 2022
Bi-weekly Threat Briefing & Intelligence Discussion - U.S. Department of Homeland Security (DHS) Office of Intelligence and Analysis (I&A)	January 13, 2022
Bi-weekly Cyber Threat Discussion (U.S. Department of Homeland Security (DHS) Office of Intelligence and Analysis (I&A), in collaboration with Cyber Mission Center: Foreign Malign Influence Threats Collection Support Primer (CSP) Webinar Series)	January 13, 2022
International Public Safety Association (IPSA) Board of Directors Meeting (IPSA) – Finance Committee Meeting	January 14, 2022
Super Bowl Preparedness Meeting with Inglewood Police Department	January 18, 2022
International Association of Chiefs of Police Communications (IAPC) Communications and Technology Committee – Monthly Meeting	January 19, 2022
Weekly Outreach Meeting	January 24, 2022

### **AGENDA ITEM I**

MUNICIPALITY	MEETING DATE
Cybersecurity Evaluation Tool Demonstration (CSET) Webinar	January 27, 2022
Weekly Outreach Meeting	January 31, 2022

The Executive Director attended several association meetings related to technology, communications, and public safety.

Authority Staff shared system metrics from the 2022 Rose Bowl and Rose Parade with the County of Los Angeles Sheriff's Department's (LASD) Emergency Operations Bureau (EOB) staff and Pasadena Police Department representatives. The metrics relate useful information such as the number of transmissions per hour, the amount of radios on each talk group and peak usage times. This extremely useful information has never before been available and will be used to help prepare for future large scale events.

Authority staff met weekly to discuss new outreach opportunities and followed up on those in progress.

The Executive Director is a member of the IACP Communications and Technology Committee and attends monthly meetings to stay current on communications technology, policy and procedures.

A Memorandum of Understanding (MOU) between LA-RICS and the Hacienda La Puente Unified School District (HLPUSD) is currently with the HLPUSD for approval. Once the MOU is approved, LA-RICS staff will begin the onboarding process.

Representatives from the City of Paramount have been working closely with LA-RICS staff to procure the proper radio equipment to ensure a smooth transition to LA-RICS.

Super Bowl 56 planning continues for LA-RICS participating agencies. LASD's Radio Services staff are providing pre-programmed portable radios for the event. The communications plan is being finalized with assistance from the County of Los Angeles Fire Department (LACOFD).

SC:mbc



## LOS ANGELES REGIONAL INTEROPERABLE COMMUNICATIONS SYSTEM AUTHORITY

2525 Corporate Place, Suite 100 Monterey Park, California 91754 Telephone: (323) 881-8291 http://www.la-rics.org

SCOTT EDSON EXECUTIVE DIRECTOR

February 3, 2022

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

**Dear Directors:** 

APPROVE LIST OF PREQUALIFIED BIDDERS RESULTING FROM THE LA-RICS LAND MOBILE RADIO TELECOMMUNICATION FACILITY CONSTRUCTION AND INSTALLATION PROJECT RFSQ

#### **SUBJECT**

Board approval is requested to approve the enclosed list of Prequalified Bidders resulting from the Land Mobile Radio (LMR) Telecommunication Facility Construction and Installation Project Request for Statement of Qualifications (RFSQ) solicitation.

#### **RECOMMENDED ACTIONS**

It is recommended that your Board:

- 1. Find the proposed actions are exempt from the California Environmental Quality Act (CEQA) for the reasons stated in this Board Letter.
- Approve the enclosed list of Prequalified Bidders (Enclosure) resulting from the successful Request for Statement of Qualifications (RFSQ) solicitation which will allow Bidders to respond to future Invitation for Bids (IFB) for construction work.

#### **BACKGROUND**

On January 7, 2021, your Board authorized the Executive Director to enlist procurement services from the County of Los Angeles Department of Public Works (Public Works) for construction services. In connection with your Board's authorization, the Authority sought Public Works' assistance to issue a procurement for construction services as Public Works has the requisite expertise, resources, and procurement infrastructure for this type of procurement.

#### PURPOSE/JUSTIFICATION OF RECOMMENDED ACTIONS

The purpose of the recommended actions before your Board for consideration is to approve a list of Prequalified Bidders resulting from a successful procurement process which will allow the Prequalified Bidders to respond to future IFBs for construction services. Following your Board's approval of the list of Prequalified Bidders, and once the architecture and engineering contractor completes construction drawings, the Authority will return to your Board for approval to adopt plans and specifications which include a project budget, authority to advertise for bids, and award a resultant contract for construction work. The Authority may return to your Board for additional construction work to be bid to these prequalified Contractors, as needed.

#### **CONTRACTING PROCESS**

On December 15, 2021, Public Works released the LMR Telecommunication Facility Construction and Installation Project Request for Statement of Qualifications (RFSQ) solicitation on behalf of the Authority. The solicitation was posted on the County's "Doing Business with Us" website, on Public Works' "Business Opportunities" website, and on the LA-RICS website. Additionally, the RFSQ was advertised in three (3) newspapers: La Opinion, Los Angeles Daily Journal, and the Los Angeles Sentinel.

On December 28, 2021, an optional Prequalification Conference was held and on January 18, 2022, five (5) Statement of Qualifications (SOQs) were received. Five (5) SOQs were reviewed for compliance with the minimum mandatory requirements set forth in the RFSQ. After careful review, the SOQs that met the minimum mandatory requirements progressed to the prequalification process. SOQs were then evaluated on various factors such as experience, organizational history, compliance with various laws and safety records. Five (5) Bidders exceeded the minimum threshold score of 60% of the maximum 130 points and were considered responsive and eligible for the Prequalification List. On January 27, 2022, the Bidders were notified of the results of the prequalification process and the Bidders who met the minimum threshold score are being presented to your Board for consideration to be included on the list of Prequalified Bidders.

#### **ENVIRONMENTAL DOCUMENTATION**

The proposed action contemplated in this Board Letter is not a project pursuant to CEQA because it is an activity that is excluded from the definition of a project by Section 15378(b) of the CEQA Guidelines. The proposed action to approve a list of Prequalified Bidders is an administrative activity of government, which will not result in direct or indirect changes to the environment. Authority staff will return to your Board as necessary for consideration of appropriate environmental documentation pursuant to CEQA before the approval of any activities that constitute a project under CEQA.

#### FISCAL IMPACT/FINANCING

At present, the recommended action to approve a list of Prequalified Bidders does not have an immediate fiscal impact. However, the Authority will return to your Board for approval of a project budget on a per site basis, which if approved will identify its corresponding funding source in accordance with the timing of completion of construction services being bid.

#### FACTS AND PROVISIONS/LEGAL REQUIREMENT

The Authority's counsel has reviewed the recommended actions and approved as to form.

#### **CONCLUSION**

Upon the Board's approval of the recommended actions, the Executive Director will have delegated authority to proceed in a manner described in the recommended actions.

Respectfully submitted,

SCOTT EDSON

**EXECUTIVE DIRECTOR** 

JA

Enclosure

cc: Counsel to the Authority

# LIST OF PREQUALIFIED BIDDERS FOR THE LA-RICS AUTHORITY LAND MOBILE RADIO TELECOMMUNICATION FACILITY CONSTRUCTION AND INSTALLATION PROJECTS

- 1. Commline, Inc. (Joint Venture with Hoffman Management & Construction Corporation
- 2. Diversified Communications Services, Inc.
- 3. Jitney Company, Inc.
- 4. Metro RF Services, Inc.
- 5. Metrocell Construction, Inc.



## LOS ANGELES REGIONAL INTEROPERABLE COMMUNICATIONS SYSTEM AUTHORITY

2525 Corporate Place, Suite 100 Monterey Park, California 91754 Telephone: (323) 881-8291 http://www.la-rics.org

SCOTT EDSON EXECUTIVE DIRECTOR

February 3, 2022

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

**Dear Directors:** 

APPROVE AMENDMENT NO. 88 TO AGREEMENT NO. LA-RICS 007 LOS ANGELES REGIONAL INTEROPERABLE COMMUNICATIONS SYSTEM LAND MOBILE RADIO SYSTEM

#### <u>SUBJECT</u>

Board approval is requested to authorize the Executive Director to execute Amendment No. 88 to Agreement No. LA-RICS 007 (Agreement) to incorporate four (4) Change Orders for MPLS reconfiguration work at the BKK Landfill (BKK) site, Visual Impact Assessment Mitigation Measures (VIAMM) implementation work required by the United States Forest Service (USFS) at certain sites, survey conveyance work at the Tower Peak (TWR) site, and the replacement of a server as further described in this Board Letter, which results in an increase to the Maximum Contract Sum in an amount of \$20,254.

#### **RECOMMENDED ACTIONS**

It is recommended that your Board:

- Find that the proposed approval and execution of Amendment No. 88 to contemplate the four (4) Change Orders are not subject to the California Environmental Quality Act (CEQA) because it is not defined as a project under CEQA and does not have the potential for causing a significant effect on the environment.
- 2. Approve Amendment No. 88 to Agreement No. LA-RICS 007 for an LMR System with Motorola Solutions, Inc. (MSI), which revises the Agreement to incorporate four (4) Change Orders as further described in this Board Letter for a cost increase in the amount of \$20,254.

- 3. Authorize increase to the Maximum Contract Sum in an amount of \$20,254 when taking the recommended actions into consideration from \$214,687,454 to \$214,707,708.
- 4. Delegate authority to the Executive Director to execute Amendment No. 88, in substantially similar form to the enclosed Amendment (Enclosure).
- 5. Allow for the issuance of one or more Notices to Proceed for the Work contemplated in Amendment No. 88, as may be necessary.

#### **BACKGROUND**

As construction activities continue to progress on the LMR System, approval of certain Change Orders is necessary to address changes made in the field and continue construction and system implementation activities that were not originally contemplated in MSI's scope. As a result, the recommended actions before your Board for consideration contemplate four (4) Change Orders that have been identified during the construction and implementation process that are necessary to complete the LMR System.

#### PURPOSE/JUSTIFICATION OF RECOMMENDED ACTIONS

Approval of the recommended actions will authorize the Executive Director to execute Amendment No. 88 to incorporate certain Change Orders as further described in this Board Letter, all actions resulting in an increase to the Maximum Contract Sum by 20,254.

It is necessary to incorporate a Change Order at the BKK site in the amount of \$414 in order for MSI to perform reconfiguration and testing work in connection with the MPLS network, in particular to provide a port at the BKK site to allow the electrical meter to be read remotely.

Additionally, it is necessary to incorporate a Change Order in the amount of \$15,518 related to certain finish application work at nine (9) sites (BUR1, FRP, GMT, LPC, MDI, MML, MTL2, PMT, WTR) where parts were color treated at Natina in order to comply with USFS VIAMM requirements contemplated in the LA-RICS' Special Use Permit and the USFS Decision Memo.

Further, it is necessary to incorporate a Change Order for the TWR site for an increase in scope in the amount of \$4,322 for aerial ground survey of the existing utility poles and a corresponding path for a Southern California Edison (SCE) conveyance at this site.

Lastly, it is necessary to incorporate a no-cost Change Order to replace a server to address issues related to outdated versions of web browsers.

These activities before your Board for recommendation were not previously contemplated in the Agreement, but are necessary to complete construction and

LA-RICS Board of Directors February 3, 2022 Page 3

implementation activities at these sites. All the work is network configuration work that does not affect the physical environment in any way.

The revisions contemplated in Amendment No. 88 have been reviewed by Authority staff, as well as its consultant (Jacobs) and Motorola, with both parties negotiating and agreeing to each change order, including associated costs.

Further, all recommended actions have been presented to the Change Control Board (CCB) which includes stakeholder participation and oversight from member agency representatives such as County of Los Angeles Sheriff's Department (Sheriff's Department) and County of Los Angeles Fire Department (Fire Department). Additionally, participation and oversight from Authority project team members representing technical (Internal Services Department), operations (Sheriff's Department and Fire Department), finance, grants, contracts, and Jacobs form part of the CCB. The CCB participants vetted the revisions presented to your Board for consideration and recommend approval.

#### FISCAL IMPACT/FINANCING

The activities contemplated in Amendment No. 88 will result in an increase to the Maximum Contract Sum by \$20,254 from \$214,687,454 to \$214,707,708. The additional work contemplated in Amendment No. 88 in the amount of \$20,254 shall be fully reimbursed by the Urban Areas Security Initiative (UASI) 19/UASI 21 grants, dependent on the timing of completion of work.

#### FACTS AND PROVISIONS/LEGAL REQUIREMENT

The Authority's counsel has reviewed the recommended actions and approved as to form.

#### CONCLUSION

Upon the Board's approval of the recommended actions, the Executive Director will have delegated authority to proceed in a manner described in the recommended actions.

Respectfully submitted,

SCOTT EDSON

**EXECUTIVE DIRECTOR** 

JA

**Enclosure** 

cc: Counsel to the Authority

#### AMENDMENT NUMBER EIGHTY-EIGHT TO AGREEMENT NO. LA-RICS 007 FOR

### LOS ANGELES REGIONAL INTEROPERABLE COMMUNICATIONS SYSTEM LAND MOBILE RADIO SYSTEM

#### **RECITALS**

This Amendment Number Eighty-Eight (together with all exhibits, attachments, and schedules hereto, "Amendment No. 88") is entered into by and between the Los Angeles Regional Interoperable Communications System Authority ("Authority") and Motorola Solutions, Inc. ("Contractor"), effective as of February \_\_\_\_\_\_\_, 2022, based on the following recitals:

The Authority and Contractor have entered into that certain Agreement No. LA-RICS 007 for Los Angeles Regional Interoperable Communications System ("<u>LA-RICS</u>") Land Mobile Radio System, dated as of August 15, 2013 (together with all exhibits, attachments, and schedules thereto, all as amended prior to the date hereof, the "<u>Agreement</u>").

The Agreement has been previously amended by Amendment Number One, effective as of September 5, 2013, to exercise the Unilateral Option for all Work pertaining to Phase 1 (System Design), without the Additive Alternates; with no change to the Maximum Contract Sum.

The Agreement has been previously amended by Amendment Number Two, effective as of October 29, 2013, to exercise the Unilateral Option for all Work pertaining to Project Descriptions in Phase 1 (System Design) for the Bounded Area Coverage Additive Alternate; with no change to the Maximum Contract Sum.

The Agreement has been previously amended by Amendment Number Three, effective as of December 19, 2013, to, among other things, exercise the Unilateral Option for all Work pertaining to Contractor's provision and implementation of Specified Equipment (as defined in Amendment No. 3) increasing the Maximum Contract Sum by \$1,285,230, from \$280,354,954 to \$281,640,184.

The Agreement has been previously amended by Amendment Number Four, effective as of December 19, 2013, to, among other things, provide and implement under Phase 1 (System Design) certain additional equipment referred to as "Station B Equipment" increasing the Maximum Contract Sum by \$1,169,047, from \$281,640,184 to \$282,809,231.

The Agreement has been previously amended by Amendment Number Five, effective as of March 27, 2014, to, among other things; include license coordination fees, increasing the Maximum Contract Sum by \$20,240, from \$282,809,231 to \$282,829,472.

The Agreement has been previously amended by Amendment Number Six, effective as of April 17, 2014, to, among other things, upgrade to the Los Angeles Police Department's Valley Dispatch Center's ("LAPDVDC") Uninterruptible Power Supply ("UPS") to accommodate the installation and deployment of Core 2 at this facility, increasing the Maximum Contract Sum by \$68,146, from \$282,829,472 to \$282,897,618.

The Agreement has been previously amended by Amendment Number Seven, effective as of May 8, 2014, to, among other things, purchase portable radios, radio accessories, consolettes, and consoles; and to add a provision to address potential joint obligations of Authority and Contractor under the Antennae Lease Agreement dated April 17, 2014, between the City of Los Angeles, the Authority, and Contractor; increasing the Maximum Contract Sum by \$5,177,051, from \$282,897,618 to \$288,074,669.

The Agreement has been previously amended by Amendment Number Eight, effective as of August 28, 2014, to purchase additional portable radios and radio accessories; increasing the Maximum Contract Sum by \$3,671,006, from \$288,074,669 to \$291,745,675.

The Agreement has been previously amended by Amendment Number Nine, effective November 19, 2014, to (a) make changes necessary to reflect the removal of one (1) LMR System Site and all the Work and equipment associated with the removal of this site; (b) make the necessary changes to reflect Phase 1 (System Design) Project Description Work only for twenty-six (26) potential replacement sites; (c) exercise the Unilateral Options for all Work pertaining to Phase 2 (Site Construction and Site Modification), Phase 3 (Supply LMR System Components), and Phase 4 (LMR System Implementation) for twenty-six (26) existing LMR System Sites; with no increase to the Maximum Contract Sum.

The Agreement has been previously amended by Amendment Number Ten, effective February 17, 2015, to (a) make the necessary changes to reflect Phase 1 (System Design) Description Work for one (1) potential replacement site; (b) make changes necessary to reflect the removal of four (4) LMR System Sites and all the Work and equipment associated with these sites; (c) make changes necessary to reflect the inclusion of four (4) LMR System Sites and all the Work and equipment associated with these sites and exercise the Unilateral Options for all Work pertaining to Phase 1 (System Design), Phase 2 (Site Construction and Site Modification), Phase 3 (Supply LMR System Components), and Phase 4 (LMR System Implementation) for these four LMR System Sites; (d) exercise the Unilateral Options for all Work pertaining to Phase 2 (Site Construction and Site Modification), Phase 3 (Supply LMR System Components), and Phase 4 (LMR System Implementation) for eight (8) LMR System Sites currently contemplated in the Design; (e) allow for two power load studies to be conducted; and (f) make other certain changes as reflected in Amendment No. 10, increasing the Maximum Contract Sum by \$1,101,138, from \$291,745,675 to \$292,846,813.

The Agreement has been previously amended by Amendment Number Eleven, effective April 28, 2015, to (a) make the necessary changes to reflect Phase 1 (System Design) Description Work for two (2) potential replacement sites; (b) make changes necessary to reflect an existing credit from Amendment No. 3 in the amount of \$547,158 in Phase 3 (Supply LMR System Components) for one (1) LMR System Site, (c) make changes necessary to add project management costs that were inadvertently omitted in Amendment No. 10 in the amount of \$64,282 in Phase 4 (LMR System Implementation) for one (1) LMR System Site, and (d) make other certain changes as reflected in

Amendment No. 11, all of which reduced the Maximum Contract Sum by \$459,529, from \$292,846,813 to \$292,387,284.

The Agreement has been previously amended in Amendment Number Twelve, effective August 27, 2015, to (a) make the necessary changes to reflect the shifting of FCC Licensing Work and costs from Phase 3 (Supply LMR System Components) to Phase 1 (System Design) in the amount of \$284,041; (b) make certain changes to reflect the increase of FCC Licensing Work to contemplate the licensing of all UHF T- Band frequencies as referenced in Attachment B, at each of the applicable subsystem sites in order to achieve compliance with the performance criteria set forth in the Agreement, all in the amount of \$139,076; (c) make the necessary changes to reflect the inclusion of a bridge warranty for the Specified Equipment (Core 1, Core 2, repeater sites, Site on Wheels, and Station B Equipment) previously purchased under Amendment No. 3 and Amendment No. 4, to bridge the gap in warranty for this equipment until such time as Final LMR System Acceptance is achieved in the amount of \$647,533; and (d) to purchase portable radios, radio accessories, consolettes, and a control station for the Los Angeles Sheriff's Department Aero Bureau for purposes of mutual aid in the amount Maximum Contract Sum by \$1,172,843 from of \$386,234; increasing the \$292,387,284 to \$293,560,127.

The Agreement has been previously amended to Amendment Number Thirteen effective October 30, 2015 to make the necessary changes to reflect Phase 1 (System Design) Work to add lease exhibits to twenty-nine (29) LMR System Sites; increasing the Maximum Contract Sum by \$14,888 from \$293,560,127 to \$293,575,015.

The Agreement has been previously amended in Amendment Number Fourteen, effective November 17, 2015, to reflect the Work to reprogram UHF frequencies in accordance with Attachment A and purchase upgraded equipment for the County of Los Angeles Sheriff's Department's (LASD) Station B, as well as the Authority's System on Wheels to prepare for use at certain scheduled events in the amount of \$64,256, increasing the Maximum Contract Sum from \$293,575,015 to \$293,639,271.

The Agreement has been previously amended in Amendment Number Fifteen, effective December 17, 2015, to reflect the inclusion of Phase 1 (System Design) Project Description Work for eleven (11) potential replacement sites in the amount of \$128,414, increasing the Maximum Contract Sum from \$293,639,271 to \$293,767,685.

The Agreement has been previously amended in Amendment Number Sixteen, effective December 23, 2015, to (a) reflect the removal of thirty-one (31) LMR System Sites from the scope of Phase 1 (System Design) Work only for a cost reduction in the amount of \$1,132,374; (b) reflect the inclusion of seventeen (17) LMR System Sites into the scope of Phase 1 (System Design) only which includes all Work associated with the addition of these sites into Phase 1 (System Design) for a cost increase in the amount of \$635,537; (c) exercise the Unilateral Options for all Work pertaining to Phase 1 (System Design) for seventeen (17) LMR System Sites; (d) include Phase 1 (System Design) Project Description Work only for one (1) potential replacement site (LACF134) for a cost increase in the amount of \$11,674; (e) account for a comprehensive redesign

of the LMR System and all associated Work for a cost increase in the amount of \$1,054,440; (f) reflect the removal, relocation, and deployment of the LMR System Core 2 equipment from Los Angeles Police Department Valley Dispatch Center (LAPDVDC) to Palmdale Sheriff Station (PLM) and necessary Work associated with this relocation and for a cost increase in the amount of \$499,912; increasing the Maximum Contract Sum by \$1,069,189 (\$635,537 + \$11,674 + \$1,054,440 + \$499,912 - \$1,132,374 when taking the above cost increases and decreases into consideration) from \$293,767,685 to \$294,836,874.

The Agreement has been previously amended in Amendment Number Seventeen, effective April 25, 2016, as follows:

- a Make changes necessary to reflect the removal of thirty-four (34) LMR System Sites from the scope of Phase 1 (System Design), Phase 2 (Site Construction and Site Modification), Phase 3 (Supply LMR System Components), and Phase 4 (LMR System Implementation), respectively, and all associated Work of the same for a cost reduction in the amount of \$45,143,083.
- b. Make the changes necessary to reflect the inclusion of nineteen (19) LMR System Sites into the scope of Phase 1 (System Design), Phase 2 (Site Construction and Site Modification), Phase 3 (Supply LMR System Components), and Phase 4 (LMR System Implementation), respectively, and all associated Work of the same for a cost increase in the amount of \$23,677,589.
- Re-baselining of the project management overhead expenses, attributable in the Agreement to each phase of the work that contemplates project management fees, to more accurately reflect the current project scope, and to establish a formula to more accurately price the net impact on project management overhead expenses of any subsequent addition or removal of sites. The re-baseline removes costs on a per site basis to a new per phase deliverable as contemplated in Amendment No. 17 in the amount of \$8,207,108. This re-baselining does however result in a net cost reduction in the amount of \$572,826 which is contemplated in the re-baseline.
- d Reconcile equipment necessary for certain LMR System Sites as well as the logging recorder as a result of redesign for a cost increase in the amount of \$3,171,159.
- e. Exercise the Unilateral Options for all Work pertaining to Phase 1 (System Design), Phase 2 (Site Construction and Site Modification), Phase 3 (Supply LMR System Components), and Phase 4 (LMR System Implementation) respectively, for those LMR System Sites contained in the LMR System reflecting the reconciliation of sites contemplated in Amendment No. 17.
- f. Decreasing the Maximum Contract Sum by \$10,087,227 (-\$45,143,083 +\$23,677,589 + \$8,207,108 + \$3,171,159) when taking the above cost increases and decreases into consideration) from \$294,836,874 to \$284,749,647.

#### g. Make other certain changes as set forth in Amendment No. 17.

The Agreement has been previously amended in Amendment Number Eighteen, effective May 4, 2016, to (a) reflect the inclusion of eight (8) LMR System Sites into the scope of Phase 1 (System Design) Work only which includes all Work associated with the addition of these sites into Phase 1 (System Design) for a cost increase in the amount of \$76,136; (b) exercise the Unilateral Options for all Work pertaining to Phase 1 (System Design) for eight (8) LMR System Sites; (c) reflect the inclusion of Phase 1 (System Design) Project Description Work for four (4) LMR System Sites for a cost increase in the amount of \$46,696; and (d) increasing the Maximum Contract Sum by \$122,832 (\$76,136 + \$46,696), when taking the cost increases into consideration from \$284,749,647 to \$284,872,479.

The Agreement has been previously amended in Amendment Number Nineteen, effective May 5, 2016, to make changes necessary to (a) reflect the removal of one (1) LMR System Site from the scope of Phase 1 (System Design), Phase 2 (Site Construction and Site Modification), Phase 3 (Supply LMR System Components), and Phase 4 (LMR System Implementation) for a cost reduction in the amount of \$1,192,712, which includes a reduction in the amount of \$20,322 for project management costs for this site; (b) reconcile equipment necessary for certain LMR System Sites as a result of redesign for a cost increase in the amount of \$1,197,256; increasing the Maximum Contract Sum by \$4,544 (\$1,197,256 - \$1,192,712), when taking the cost increases and decreases into consideration, from \$284,872,479 to \$284,877,023; and (c) make other certain changes as set forth in Amendment No. 19.

The Agreement has been previously amended in Amendment Number Twenty, effective September 28, 2016, to make changes necessary to (a) reconcile nine (9) LMR System Sites to reflect the updated LMR System Design for a cost increase in the amount of \$367,144, (b) include 3D Modeling Work for certain LMR System Sites for a cost increase in the amount of \$6,534; (c) remove Site Lease Exhibit Work for certain LMR System Sites for a cost decrease in the amount of \$14,884; (d) increasing the Maximum Contract Sum by \$358,794 (\$367,144 + \$6,534 - \$14,884) from \$284,877,023 to \$285,235,817 when taking the cost increases and decreases into consideration and (e) make other certain changes as set forth in Amendment No. 20.

The Agreement has been previously amended in Amendment Number Twenty-One, effective October 27, 2016, to make changes necessary to reflect (a) the replacement of one (1) LMR System Site Johnstone Peak (JPK) with site Johnstone Peak 2 (JPK2) by (1) removing site JPK from the scope of Phase 1 (System Design), Phase 2 (Site Construction and Site Modification), Phase 3 (Supply LMR System Components), and Phase 4 (LMR System Implementation), respectively, and all associated Work of the same; and (2) include the JPK2 site into the scope of Phase 1 (System Design), Phase 2 (Site Construction and Site Modification), Phase 3 (Supply LMR System Components), and Phase 4 (LMR System Implementation), respectively, and all associated Work of the same, with the equivalent scope and cost for all Phases as JPK resulting in a cost neutral replacement; (b) exercise the Unilateral Options for all Work pertaining to Phase 1 (System Design) only for the replacement site Johnstone

Peak 2; (c) reconcile ten (10) LMR System Sites to reflect the updated LMR System Design for a cost increase in the amount of \$804,944; (d) remove five (5) Project Descriptions from the scope of Phase 1 Work for a cost decrease in the amount of \$58,370; (e) make changes necessary to reflect an administrative revisions for a cost decrease in the amount of \$32,001; (f) increasing the Maximum Contract Sum by \$714,573 (\$804,944 - \$58,370 - \$32,001) from \$285,235,817 to \$285,950,390, when taking the cost increases and decreases into consideration; and (g) make other certain changes as set forth in Amendment No. 21.

The Agreement has been previously amended in Amendment Number Twenty-Two, effective November 17, 2016, to make changes necessary to reflect (a) the reconciliation of three (3) LMR System Sites to reflect the updated LMR System Design for a cost increase in the amount of \$476,676; (b) increasing the Maximum Contract Sum by \$476,676 from \$285,950,390 to \$286,427,066, when taking the cost increase into consideration; and (c) make other certain changes as set forth in Amendment No. 22.

The Agreement has been previously amended in Amendment Number Twenty-Three, effective December 21, 2016, to make changes necessary to (a) include four (4) LMR System Sites and all Work and equipment associated with these sites into Phase 1 (System Design) to be contemplated in the LMR System for a cost increase in the amount of \$36,068; (b) exercise the respective Unilateral Options all Phase 1 (System Design) Work pertaining to the four (4) LMR System Sites; (c) purchase certain Radio Equipment to be used with Authority's User Equipment for a cost increase in the amount of \$948; (d) increase the Maximum Contract Sum by \$39,016 from \$286,427,066 to \$286,466,082, when taking the cost increases into consideration; and (d) make other certain changes as set forth in Amendment No. 23.

The Agreement has been previously amended in Amendment Number Twenty-Four effective January 25, 2017, to make changes necessary to reflect (a) the reconciliation of six (6) LMR System Sites to align with the updated LMR System Design for a cost increase in the amount of \$2,379,232; (b) increase the Maximum Contract Sum by \$2,379,232 from \$286,466,082 to \$288,845,314, when taking the cost increase into consideration; and (c) make other certain changes as set forth in Amendment No. 24.

The Agreement has been previously amended in Amendment Number Twenty-Five effective March 20, 2017, to make changes necessary to reflect (a) the reconciliation of five (5) LMR System Sites to align with the updated LMR System Design for a cost decrease in the amount of \$330,670; (b) the inclusion of three (3) LMR System Sites into the scope of Phase 2 (Site Construction and Site Modification), Phase 3 (Supply LMR Components), Phase 4 (LMR System Implementation), and exercising the Unilateral Options of the same, to align with the updated LMR System Design for a cost increase in the amount of \$4,684,205 (c) increase the Maximum Contract Sum by \$4,353,535 from \$288,845,314 to \$293,198,849, when taking the cost increase and decrease into consideration; and (d) make other certain changes as set forth in Amendment No. 25.

The Agreement has been previously amended in Amendment Number Twenty-Six, effective April 13, 2017, to make changes necessary to reflect (a) the reconciliation of seven (7) LMR System Sites to align with the updated LMR System Design for a cost increase in the amount of \$2,336,048; (b) the inclusion of one (1) LMR System Site into the scope of Phase 2 (Site Construction and Site Modification), Phase 3 (Supply LMR Components), Phase 4 (LMR System Implementation), and exercising the Unilateral Options of the same, to align with the updated LMR System Design for a cost increase in the amount of \$64,744 (c) increase the Maximum Contract Sum by \$2,400,792 from \$293,198,849 to \$295,599,641, when taking the cost increase into consideration; and (d) make other certain changes as set forth in Amendment No. 26.

The Agreement has been previously amended in Amendment Number Twenty-Seven, effective June 1, 2017, to make changes necessary to reflect (a) the reconciliation of two (2) LMR System Sites to align with the updated LMR System Design for a cost decrease in the amount of \$355,410 (b) the inclusion of two (2) LMR System Sites into the scope of Phase 2 (Site Construction and Site Modification), Phase 3 (Supply LMR Components), Phase 4 (LMR System Implementation), and exercising the Unilateral Options of the same, to align with the updated LMR System Design for a cost increase in the amount of \$1,439,627 (c) make changes necessary to reflect an administrative reconciliation, a reconciliation related to dropped sites, and a reconciliation related to services performed in Phase 1 for a cost decrease in the amount of \$3,434,574; (d) increase the scope to include all Work necessary to implement an environmental Mitigation Monitoring and Reporting Plan into the LMR program to assess and ensure mitigation measures are met for a cost increase in the amount of \$2,912,356, (e) increase the Maximum Contract Sum by \$561,999 from \$295,599,641 to \$296,161,640 when taking the cost increases and decreases into consideration; and (f) make other certain changes as set forth in Amendment No. 27.

The Agreement has been previously amended in Amendment Number Twenty-Eight, effective August 21, 2017, to make changes necessary to reflect (a) the reconciliation of one (1) LMR System Site to align with the updated LMR System Design for a cost increase of \$868,771 (b) make changes necessary to reflect LMR Change Order Modifications for a cost increase in the amount of \$31,487; (c) increase the Maximum Contract Sum by \$900,258 from \$296,161,640 to \$297,061,898 when taking the cost increases into consideration; and (d) make other certain changes as set forth in Amendment No. 28.

The Agreement has been previously amended in Amendment Number Twenty-Nine, effective September 07, 2017, to make changes necessary to reflect (a) the inclusion of one (1) LMR System Site into the scope of Phase 2 (Site Construction and Site Modification), Phase 3 (Supply LMR Components), Phase 4 (LMR System Implementation), and exercise the Unilateral Options of the same, to align with the updated LMR System Design for a cost increase in the amount of \$1,170,471 (b) make changes necessary to reflect LMR Change Order Modifications for a cost increase in the amount of \$31,922; (c) increase the Maximum Contract Sum by \$1,202,393 from \$297,061,898 to \$298,264,291 when taking the cost increases into consideration; and (d) make other certain changes as set forth in Amendment No. 29.

The Agreement has been previously amended in Amendment Number Thirty, effective November 09, 2017, to make changes necessary to reflect (a) the reconciliation of seven (7) LMR System Site to align with the updated LMR System Design for a cost decrease of \$1,664,767 (b) the inclusion of one (1) LMR System Site into the scope of Phase 2 (Site Construction and Site Modification), Phase 3 (Supply LMR Components), Phase 4 (LMR System Implementation), and exercise the Unilateral Options of the same, to align with the updated LMR System Design for a cost increase in the amount of \$1,228,018 (c) make changes necessary to reflect LMR Change Order Modifications for a cost increase in the amount of \$4,195; (d) upgrade equipment for the Multiprotocol Label Switching (MPLS) Mobile Backhaul which will provide the backhaul capacity necessary for network performance reliability and functionality for a cost increase in the amount of \$2,200,000; (e) increase the Maximum Contract Sum by \$1,767,446 from \$298,264,291 to \$300,031,737 when taking the cost increases and decreases into consideration; and (f) make other certain changes as set forth in Amendment No. 30.

The Agreement has been previously amended in Amendment Number Thirty-One, effective February 28, 2018, to make changes necessary to reflect (a) certain LMR Change Order Modifications, in particular the installation of tower lighting at Mira Loma (MLM) LMR System Site, for a cost increase in the amount of \$19,573; (d) increase the Maximum Contract Sum by \$19,573 from \$300,031,737 to \$300,051,310 when taking the cost increases into consideration; and (b) make other certain changes as set forth in Amendment No. 31.

The Agreement has been previously amended in Amendment Number Thirty-Two, effective March 1, 2018, to make changes necessary to reflect (a) the reconciliation of three (3) LMR System Sites to align with the updated LMR System Design for a cost decrease in the amount of \$4,131,931; (b) a cost neutral administrative reconciliation in connection with the Narrowband Mobile Data Network (NMDN) Subsystem to align all corresponding per site NMDN costs to a single line item cost, impacting thirty-three (33) LMR System Sites; (c) decrease the Maximum Contract Sum by \$4,131,931 from \$300,051,310 to \$295,919,379 when taking the cost decrease into consideration; and (d) make other certain changes as set forth in Amendment No. 32.

The Agreement has been previously amended in Amendment Number Thirty-Three, effective May 30, 2018, to make changes necessary to reflect (a) certain LMR Change Order Modifications for a cost increase in the amount of \$17,490 (b) increase the Maximum Contract Sum by \$17,490 from \$295,919,379 to \$295,936,869 when taking the cost increase into consideration; and (c) make other certain changes as set forth in Amendment No. 33.

The Agreement has been previously amended in Amendment Number Thirty-Four, effective July 31, 2018, to make changes necessary to reflect (a) the inclusion of one (1) LMR System Site into the scope of Phase 2 (Site Construction and Site Modification), Phase 3 (Supply LMR Components), Phase 4 (LMR System Implementation), and exercise the Unilateral Options of the same, to align with the updated LMR System Design for a cost increase in the amount of \$1,016,780; (b) certain LMR Change Order Modifications for a cost increase in the amount of \$90,744; (c) the

removal of certain Authority equipment, in particular an Uninterruptible Power Supply (UPS), from the Los Angeles Police Department's Valley Dispatch Center (LAPDVDC) for a cost increase in the amount of \$6,010; (d) an extension of a bridge warranty for the certain Early Deployment/Specified Equipment purchased and deployed under previously approved Amendments to bridge the warranty gap for this equipment until December 31, 2019, for a cost increase in the amount of \$430,800; (e) increase the Maximum Contract Sum by \$1,544,334 from \$295,936,869 to \$297,481,203 when taking the cost increase into consideration; and (f) make other certain changes as set forth in Amendment No. 34.

The Agreement has been previously amended in Amendment Number Thirty-Five, effective October 11, 2018, to make changes necessary to reflect (a) the reconciliation of one (1) LMR System Site Olinda (OLI) from the scope of Phase 1 (System Design), Phase 2 (Site Construction and Site Modification), Phase 3 (Supply LMR System Components), and Phase 4 (LMR System Implementation), respectively, and all associated Work of the same for a cost decrease in the amount of \$701,234; (b) the inclusion of one (1) LMR System Site Winding Way (WWY) into the scope of Phase 2 (Site Construction and Site Modification), Phase 3 (Supply LMR Components), Phase 4 (LMR System Implementation), and exercise the Unilateral Options of the same, to align with the updated LMR System Design for a cost increase in the amount of \$1,064,388; (c) certain LMR Change Order Modifications for a cost increase in the amount of \$13,115 (d) make changes necessary to reflect an administrative reconciliation, a reconciliation related to the removal of certain Authority equipment, in particular an Uninterruptible Power Supply (UPS), from the Los Angeles Police Department's Valley Dispatch Center (LAPDVDC) for a cost increase in the amount of \$601; (e) increase the Maximum Contract Sum by \$376,870 from \$297,481,203 to \$297,858,073 when taking the cost decrease and increase into consideration; and (f) make other certain changes as set forth in Amendment No. 35.

The Agreement has been previously amended in Amendment Number Thirty-Six, effective November 19, 2018, to make changes necessary to reflect (a) reconciliation of five (5) LMR System Sites to align with the updated LMR System Design for a cost decrease in the amount of \$535,981; (b) inclusion of one (1) LMR System Site San Pedro Hill (SPH) into the scope of Phase 2 (Site Construction and Site Modification), Phase 3 (Supply LMR Components), Phase 4 (LMR System Implementation), exercising the Unilateral Options of the same, to align with the updated LMR System Design for a cost increase in the amount of \$842,471; (c) incorporate an LMR Change Order Modification for a cost increase in the amount of \$4,952 (d) increase the Maximum Contract Sum by \$311,442 from \$297,858,073 to \$298,169,515 when taking the cost decreases and increases into consideration; and (e) make other certain changes as set forth in Amendment No. 36.

The Agreement has been previously amended in Amendment Number Thirty-Seven, effective February 26, 2019, to make changes necessary to (a) incorporate certain LMR Change Order Modifications for a cost increase in the amount of \$56,337; (b) increase the Maximum Contract Sum by \$56,337 from \$298,169,515 to \$298,255,852 when taking the cost increases into consideration; and (c) make other certain changes as set forth in Amendment No. 37.

The Agreement has been previously amended in Amendment Number Thirty-Eight, effective June 11, 2019, to make changes necessary to (a) incorporate certain LMR Change Order Modifications as further described in Amendment No. 38 that results in a net cost decrease in the amount of \$47,393; (b) decrease the Maximum Contract Sum by \$47,393 from \$298,225,852 to \$298,178,459 when taking the cost increases and decreases into consideration; and (c) make other certain changes as set forth in Amendment No. 38.

The Agreement has been previously amended in Amendment Number Thirty-Nine, effective September 16, 2019, to make changes necessary to (a) reflect a reconciliation related to the Narrowband Mobile Data Network (NMDN) Subsystem resulting in a cost decrease in the amount of \$720,207, (b) incorporate certain LMR Change Order Modifications as further described in Amendment No. 39 that results in a cost increase in the amount of \$73,606; (c) decrease the Maximum Contract Sum by \$646,601 from \$298,178,459 to \$297,531,858 when taking the cost increase and decrease into consideration; and (d) make other certain changes as set forth in Amendment No. 39.

The Agreement has been previously amended in Amendment Number Forty, effective September 16, 2019, to make changes necessary to (a) reflect a reconciliation to remove two (2) LMR System Sites, Lower Encinal Pump Station (LEPS) and Winding Way (WWY), from the scope of Phase 2 (Site Construction and Site Modification), Phase 3 (Supply LMR System Components), and Phase 4 (LMR System Implementation) and reconcile the Narrowband Mobile Data Network (NMDN) Subsystem to align with the updated LMR System Design for a net cost decrease in the amount of \$2,053,456; (b) revise Exhibit B (LMR System Specification) to include the scope for certain Work related to Channel 15 and 16 Interference Mitigation resulting in a cost increase in the amount of \$803,207; (c) incorporate certain LMR Change Order Modifications as further described in Amendment No. 40 that results in a cost decrease in the amount of \$10,920; (d) decrease the Maximum Contract Sum by \$1,261,169 from \$297,531,858 to \$296,270,689 when taking the cost increases and decreases into consideration; and (e) make other certain changes as set forth in Amendment No. 40.

The Agreement has been previously amended in Amendment Number Forty-One, effective October 17, 2019, to make changes necessary to (a) incorporate certain LMR Change Order Modifications as further described in Amendment No. 41 that results in a cost increase in the amount of \$255,975; (b) increase the Maximum Contract Sum by \$255,975 from \$296,270,689 to \$296,526,664 when taking the cost increase into consideration; and (c) make other certain changes as set forth in Amendment No. 41.

The Agreement has been previously amended in Amendment Number Forty-Two, effective February 20, 2020, to make changes necessary to (a) reflect a modification to the scope of the Acceptance Testing Plan (ATP) for a cost decrease in the amount of \$6,512,264; (b) in consideration of the modified ATP scope; (c) reduce certain Pre-Installation Acceptance Testing for a cost decrease in the amount of \$245,663; (d) extend the Bridge Warranty certain Early Deployment/Specified Equipment purchased and deployed under previously approved Amendments to bridge the warranty gap for this equipment until December 31, 2020, for a cost increase in the

amount of \$312,897; (e) revise Exhibit C.16 (LMR Mitigation Monitoring and Reporting Plan [MMRP]) to reflect collective amounts for LMR Monitoring, Surveys, and Reporting Tasks and LMR Contingency Tasks, which is cost neutral; (f) decrease the Maximum Contract Sum by \$6,445,029 from \$296,526,664 to \$290,081,635 when taking aforementioned actions and costs into consideration; and (g) make other certain changes as set forth in Amendment No. 42.

The Agreement has been previously amended in Amendment Number Forty-Three, effective April 23, 2020, to make changes necessary to (a) reflect a reconciliation of certain equipment which results in a cost decrease in the amount of \$50,313 (b) incorporate certain LMR Change Order Modifications as further described in Amendment No. 43 that results in a cost increase in the amount of \$185,344; (c) increase the Maximum Contract Sum by \$135,031 from \$290,081,635 to \$290,216,666 when taking aforementioned actions and costs into consideration; and (d) make other certain changes as set forth in Amendment No. 43.

The Agreement has been previously amended in Amendment Number Forty-Four, effective April 23, 2020, to make changes necessary to (a) reflect a reconciliation related to certain LMR Change Order Modifications as further described in Amendment No. 44 which results in a cost increase in the amount of \$2,609 (b) increase the Maximum Contract Sum by \$2,609 from \$290,216,666 to \$290,219,275 when taking aforementioned actions and costs into consideration; and (c) make other certain changes as set forth in Amendment No. 44.

The Agreement has been previously amended in Amendment Number Forty-Five, effective April 23, 2020, to make changes necessary to (a) incorporate certain LMR Change Order Modifications as further described in Amendment No. 45 which results in a cost increase in the amount of \$39,050 (b) increase the Maximum Contract Sum by \$39,050 from \$290,219,275 to \$290,258,325 when taking aforementioned actions and costs into consideration; and (c) make other certain changes as set forth in Amendment No. 45.

The Agreement has been previously amended in Amendment Number Forty-Six, effective May 11, 2020, to make changes necessary to (a) incorporate certain LMR Change Order Modifications as further described in Amendment No. 46 which results in a cost increase in the amount of \$375,728 (b) increase the Maximum Contract Sum by \$375,728 from \$290,258,325 to \$290,634,053 when taking aforementioned actions and costs into consideration; and (c) make other certain changes as set forth in Amendment No. 46.

The Agreement has been previously amended in Amendment Number Forty-Seven, effective June 16, 2020, to make changes necessary to (a) reflect a reconciliation of certain equipment which results in a cost decrease in the amount of \$3,130,664; (b) incorporate certain LMR Change Order Modifications as further described in Amendment No. 47 which results in a cost increase in the amount of \$634,535; (c) decrease the Maximum Contract Sum by \$2,496,129 from \$290,634,053 to \$288,137,924 when taking aforementioned actions and costs into consideration; and (d) make other certain changes as set forth in Amendment No. 47.

The Agreement has been previously amended in Amendment Number Forty-Eight, effective August 17, 2020, to make changes necessary to (a) incorporate certain LMR Change Order Modifications as further described in Amendment No. 48 which results in a cost increase in the amount of \$10,159; (b) increase the Maximum Contract Sum by \$10,159 from \$288,137,924 to \$288,148,083; and (c) make other certain changes as set forth in Amendment No. 48.

The Agreement has been previously amended in Amendment Number Forty-Nine, effective October 2, 2020, to make changes necessary to (a) incorporate certain LMR Change Order Modifications as further described in Amendment No. 49, which results in a cost increase in the amount of \$370,007; (b) increase the Maximum Contract Sum by \$370,007 from \$288,148,083 to \$288,518,090; and (c) make other certain changes as set forth in Amendment No. 49.

The Agreement has been previously amended in Amendment Number Fifty, effective November 24, 2020, to make changes necessary (a) reflect a reconciliation to replace one (1) LMR System Site Sunset Ridge (SUN) with the East Sunset Ridge (ESR) site into the scope of Phase 2 (Site Construction and Site Modification), Phase 3 (Supply LMR System Components), and Phase 4 (LMR System Implementation), all associated Work, and exercising the Unilateral Options of the same, for a net cost increase in the amount of \$1,293,256; (b) extend the Bridge Warranty for certain Early Deployment/Specified Equipment purchased and deployed under previously approved Amendments to bridge the warranty gap for this equipment until December 31, 2021, for a cost increase in the amount of \$393,906; (c) incorporate certain LMR Change Order Modifications as further described in Amendment No. 50, which results in a cost increase in the amount of \$375,108; (d) increase the Maximum Contract Sum by \$2,062,270 from \$288,518,090 to \$290,580,360; and (e) make other certain changes as set forth in Amendment No. 50.

The Agreement has been previously amended in Amendment Number Fifty-One, effective January 14, 2021, to make changes necessary to (a) incorporate certain LMR Change Order Modifications as further described in Amendment No. 51, which result in a cost increase in the amount of \$23,977; (b) increase the Maximum Contract Sum by \$23,977 from \$290,580,360 to \$290,604,337; and (c) make other certain changes as set forth in Amendment No. 51.

The Agreement has been previously amended in Amendment Number Fifty-Two, effective January 22, 2021, to make changes necessary to (a) reconcile the Agreement to reflect a reduction in Phase 2 (Site Construction and Site Modification) for a cost decrease in the amount of \$34,203; (b) incorporate certain LMR Change Order Modifications as further described in Amendment No. 52, pursuant to Exhibit B.1, Sections 2.1.10 and 2.2.7.3 of the Agreement, which result in a cost increase not to exceed \$34,359; (c) increase the Maximum Contract Sum by a not to exceed amount of \$156 from \$290,604,337 to \$290,604,493 when taking the actions contemplated in Amendment No. 52 into consideration; and (d) make other certain changes as set forth in Amendment No. 52.

The Agreement has been previously amended in Amendment Number Fifty-Three, effective February 11, 2021, to make changes necessary to (a) incorporate certain LMR Change Order Modifications as further described in Amendment No. 53 for a cost increase in an amount not to exceed \$342,460; (b) increase the Maximum Contract Sum by an amount not to exceed \$342,460 from \$290,604,493 to \$290,946,953 when taking the actions contemplated in Amendment No. 53 into consideration; and (c) make other certain changes as set forth in Amendment No. 53.

The Agreement has been previously amended in Amendment Number Fifty-Four, effective February 18, 2021, to make changes necessary to (a) reflect a reconciliation related to the Leased Fiber Link between FCCF and PLM for a cost decrease in the amount of \$12,360; (b) incorporate certain LMR Change Order Modifications as further described in Amendment No. 54 for a net cost increase in the amount of \$138,707; (c) increase the Maximum Contract Sum by \$126,347 from \$290,946,953 to \$291,073,300 when taking the actions contemplated in Amendment No. 54 into consideration; and (d) make other certain changes as set forth in Amendment No. 54.

The Agreement has been previously amended in Amendment Number Fifty-Five, effective February 18, 2021, to make changes necessary to (a) incorporate certain LMR Change Order Modifications related to the Outdoor Power System and Equipment at Topanga Peak (TOP) for a cost increase in an amount of \$196,126; (b) increase the Maximum Contract Sum by an amount of \$196,126 from \$291,073,300 to \$291,269,426 when taking the actions contemplated in Amendment No. 55 into consideration; and (c) make other certain changes as set forth in Amendment No. 55.

The Agreement has been previously amended in Amendment Number Fifty-Six, effective March 5, 2021, to make changes necessary to (a) reflect a reconciliation to remove five (5) LMR System Sites from the scope of Phase 1 (System Design), Phase 2 (Site Construction and Site Modification), Phase 3 (Supply LMR System Components), and Phase 4 (LMR System Implementation), respectively, and all associated Work of the same, for a cost decrease in the amount of \$3,645,399; (b) incorporate certain LMR Change Order Modifications related to the Biota Reports Equipment at Topanga Peak (TOP) for a cost increase in an amount of \$13,972; (c) decrease the Maximum Contract Sum by an amount of \$3,631,427 from \$291,269,426 to \$287,637,999 when taking the actions contemplated in Amendment No. 56 into consideration; and (d) make other certain changes as set forth in Amendment No. 56.

The Agreement has been previously amended in Amendment Number Fifty-Seven, effective March 11, 2021, to (a) incorporate (a) incorporate a LMR Change Order Modification related to the Removal of a Subgrade Concrete Structure at Castro Peak (CPK) for a cost increase in an amount of \$8,566; (c) increase the Maximum Contract Sum by an amount of \$8,566 from \$287,637,999 to \$287,646,565 when taking the action contemplated in Amendment No. 57 into consideration; and (d) make other certain changes as set forth in Amendment No. 57.

The Agreement has been previously amended in Amendment Number Fifty-Eight, effective April 2, 2021, to (a) reflect a reconciliation of a modification to the scope of

Phase 2 (Site Construction and Site Modification) for one (1) LMR System Site Universal Studios (UNIV) for a cost decrease in the amount of \$57,167; (b) incorporate a LMR Change Order Modification for the UNIV site for a cost increase in an amount of \$61,668; (c) increase the Maximum Contract Sum by \$4,502 from \$287,646,565 to \$287,651,067 when taking the actions contemplated in Amendment No. 58 into consideration; and (c) make other certain changes as set forth in Amendment No. 58.

The Agreement has been previously amended in Amendment Number Fifty-Nine, effective May 14, 2021, to (a) reflect a reconciliation to remove a LMR Change Order Modification for the MTL2 site related to road access for a cost decrease in an amount of \$260,007; (b) incorporate certain LMR Change Order Modifications as further described in Amendment No. 59 for a net cost increase in the amount of \$16,130; (c) decrease the Maximum Contract Sum by \$243,877 from \$287,651,067 to \$287,407,190 when taking the actions contemplated in Amendment No. 59 into consideration; and (d) make other certain changes as set forth in Amendment No. 59.

The Agreement has been previously amended unilaterally in Amendment Number Sixty – Unilateral Amendment No. 1, issued May 18, 2021, to make changes necessary to (a) incorporate change orders for the DPK, FRP, MIR and MTL2 sites regarding utility power work and the removal of an existing tower as further described in Unilateral Amendment No. 1 for a not to exceed cost increase in the amount of \$39,866 to the Maximum Contract Sum; (b) increase the Maximum Contract Sum by \$39,866 from \$287,407,190 to \$287,447,056 for the Work contemplated in Unilateral Amendment No. 1; and (c) make other certain changes as set forth in Unilateral Amendment No. 1.

The Agreement has been previously amended unilaterally in Amendment Number Sixty-One – Unilateral Amendment No. 2, issued June 29, 2021, (a) incorporate a change order for the RPVT site for the removal of an extensive amount of concrete debris as further described in Unilateral Amendment No. 2 for a not to exceed cost increase in the amount of \$257,862 to the Maximum Contract Sum; (b) increase the Maximum Contract Sum by \$257,862 from \$287,447,056 to \$287,704,918 for the Work contemplated in Unilateral Amendment No. 2; and (c) make other certain changes as set forth in Unilateral Amendment No. 2.

The Agreement has been previously amended unilaterally in Amendment Number Sixty-Two – Unilateral Amendment No. 3, issued July 13, 2021, (a) incorporate a change order for the East Sunset Ridge (ESR) site to condition and blade the access road as further described in Unilateral Amendment No. 3 for a not to exceed cost increase in the amount of \$14,205 to the Maximum Contract Sum; (b) increase the Maximum Contract Sum by \$14,205 from \$287,704,918 to \$287,719,123 for the Work contemplated in Unilateral Amendment No. 3; and (c) make other certain changes as set forth in Unilateral Amendment No. 3.

The Agreement has been previously amended in Amendment Number Sixty-Three, issued July 20, 2021, to (a) incorporate certain LMR Change Order Modifications as further described in Amendment No. 63 for a cost increase in the amount of \$10,788; (b) increase the Maximum Contract Sum by \$10,788 from \$287,719,123 to

\$287,729,911, when taking the actions contemplated in Amendment No. 63 into consideration; and (d) make other certain changes as set forth in Amendment No. 63.

The Agreement has been previously amended in Amendment Number Sixty-Four, issued July 30, 2021, to (a) incorporate a change order for the Tower Peak (TWR) site related to a Survey for SCE Conveyance as further described in Amendment No. 64 for a cost increase in the amount of \$8,106; (b) increase the Maximum Contract Sum by \$8,106 from \$287,729,911 to \$287,738,017, when taking the actions contemplated in Amendment No. 64 into consideration; and (c) make other certain changes as set forth in Amendment No. 64.

The Agreement has been previously amended unilaterally in Amendment Number Sixty-Five – Unilateral Amendment Number Four, issued August 12, 2021, to (a) reconcile Phase 2 Work for the San Pedro Hill (SPH) site reflected in a Change Order Modification as further described in Unilateral Amendment No. 4 for a not to exceed cost increase in the amount of \$945,937; (b) increase the Maximum Contract Sum by \$945,937 from \$287,738,017 to \$288,683,954, for the Work contemplated in Unilateral Amendment No. 4; and (c) make other certain changes as set forth in Unilateral Amendment No. 4.

The Agreement has been previously amended unilaterally in Amendment Number Sixty-Six – Unilateral Amendment Number Five, issued August 19, 2021, to (a) incorporate a certain LMR change order for the Magic Mountain Link (MML) site related to additional power utility work as further described in Unilateral Amendment No. 5 for a cost increase in the amount of \$104,344; (b) increase the Maximum Contract Sum by \$104,344 from \$288,683,954 to \$288,788,298, for the Work contemplated in Unilateral Amendment No. 5; and (c) make other certain changes as set forth in Unilateral Amendment No. 5.

The Agreement has been previously amended unilaterally in Amendment Number Sixty-Seven – Unilateral Amendment Number Six, issued, August 19, 2021, to (a) incorporate a certain LMR change order for the Black Jack Peak (BJM) site related to rock coring for caissons which includes additional tower foundation drilling as further described in Unilateral Amendment No. 6 for a cost increase in the amount of \$60,220; (b) increase the Maximum Contract Sum by \$60,220 from \$288,788,298 to \$288,848,518, for the Work contemplated in Unilateral Amendment No. 6; and (c) make other certain changes as set forth in Unilateral Amendment No. 6.

The Agreement has been previously amended unilaterally in Amendment Number Sixty-Eight – Unilateral Amendment Number Seven, issued, August 19, 2021, to (a) incorporate a certain LMR change order for the Castro Peak (CPK) site related to rock coring for caissons which includes additional tower foundation drilling as further described in Unilateral Amendment No. 7 for a cost increase in the amount of \$78,061; (b) increase the Maximum Contract Sum by \$78,061 from \$288,848,518 to \$288,926,579, for the Work contemplated in Unilateral Amendment No. 7; and (c) make other certain changes as set forth in Unilateral Amendment No. 7.

The Agreement has been previously amended unilaterally in Amendment Number Sixty-Nine – Unilateral Amendment Number Eight, issued, August 19, 2021, to (a)

incorporate a certain LMR change order for the Dakin Peak (DPK) site related to rock coring for caissons which includes additional tower foundation drilling as further described in Unilateral Amendment No. 8 for a cost increase in the amount of \$66,682; (b) increase the Maximum Contract Sum by \$66,682 from \$288,926,579 to \$288,993,261, for the Work contemplated in Unilateral Amendment No. 8; and (c) make other certain changes as set forth in Unilateral Amendment No. 8.

The Agreement has been previously amended unilaterally in Amendment Number Seventy – Unilateral Amendment Number Nine, issued, August 19, 2021, to (a) incorporate a certain LMR change order for the Green Mountain (GRM) site related to rock coring for caissons which includes additional tower foundation drilling as further described in Unilateral Amendment No. 9 for a cost increase in the amount of \$31,320; (b) increase the Maximum Contract Sum by \$31,320 from \$288,993,261 to \$289,024,581, for the Work contemplated in Unilateral Amendment No. 9; and (c) make other certain changes as set forth in Unilateral Amendment No. 9.

The Agreement has been previously amended unilaterally in Amendment Number Seventy-One – Unilateral Amendment Number Ten, issued, August 19, 2021, to (a) incorporate a certain LMR change order for the Los Angeles County Fire Station 072 (LACF072) site related to rock coring for caissons which includes additional tower foundation drilling as further described in Unilateral Amendment No. 10 for a cost increase in the amount of \$3,367; (b) increase the Maximum Contract Sum by \$3,367 from \$289,024,581 to \$289,027,948, for the Work contemplated in Unilateral Amendment No. 10; and (c) make other certain changes as set forth in Unilateral Amendment No. 10.

The Agreement has been previously amended unilaterally in Amendment Number Seventy-Two – Unilateral Amendment Number Eleven, issued, August 19, 2021, to (a) incorporate a certain LMR change order for the Rancho Palos Verdes (RPVT) site related to rock coring for caissons which includes additional tower foundation drilling as further described in Unilateral Amendment No. 11 for a cost increase in the amount of \$8,044; (b) increase the Maximum Contract Sum by \$8,044 from \$289,027,948 to \$289,035,992, for the Work contemplated in Unilateral Amendment No. 11; and (c) make other certain changes as set forth in Unilateral Amendment No. 11.

The Agreement has been previously amended unilaterally in Amendment Number Seventy-Three – Unilateral Amendment Number Twelve, issued, August 19, 2021, to (a) incorporate a certain LMR change order for the Sand Pedro Hill (SPH) site related to rock coring for caissons which includes additional tower foundation drilling as further described in Unilateral Amendment No. 12 for a cost increase in the amount of \$7,761; (b) increase the Maximum Contract Sum by \$7,761 from \$289,035,992 to \$289,043,753, for the Work contemplated in Unilateral Amendment No. 12; and (c) make other certain changes as set forth in Unilateral Amendment No. 12.

The Agreement has been previously amended unilaterally in Amendment Number Seventy-Four – Unilateral Amendment Number Thirteen, issued, August 19, 2021, to (a) incorporate a certain LMR change order for the Tower Peak (TWR) site related to rock coring for caissons which includes additional tower foundation drilling as further described

in Unilateral Amendment No. 13 for a cost increase in the amount of \$54,558; (b) increase the Maximum Contract Sum by \$54,558 \$289,043,753 to \$289,098,311, for the Work contemplated in Unilateral Amendment No. 13; and (c) make other certain changes as set forth in Unilateral Amendment No. 13.

This Agreement has been previously amended unilaterally in Amendment Number Seventy-Five — Unilateral Amendment No. 14, issued September 3, 2021, to (a) incorporate a certain LMR change order for the Rancho Palos Verdes Tee Course (RPVT) site related to utility power work as further described in Unilateral Amendment No. 14 for a cost increase in the amount of \$286,577; (b) increase the Maximum Contract Sum by \$286,577 from \$289,098,311 to \$289,384,888, for the Work contemplated in Unilateral Amendment No. 14; and (c) make other certain changes as set forth in Unilateral Amendment No. 14.

This Agreement has been previously amended unilaterally in Amendment Number Seventy-Six – Unilateral Amendment No. 15, issued September 3, 2021, to (a) incorporate a certain LMR change order for the Topanga Peak (TOP Relay) site related to zoning application as further described in Unilateral Amendment No. 15 for a cost increase in the amount of \$24,740; (b) increase the Maximum Contract Sum by \$24,740 from \$289,384,888 to \$289,409,628, for the Work contemplated in Unilateral Amendment No. 15; and (c) make other certain changes as set forth in Unilateral Amendment No. 15.

This Agreement has been previously amended in Amendment Number Seventy-Seven, issued September 17, 2021, to (a) incorporate certain LMR change orders related to a power meter payment at the Universal Studios (UNIV) site as well as provisioning and installing bollards at the Frost Peak (FRP) site as further described in Amendment No. 77 for a cost increase in the amount of \$16,130; (b) increase the Maximum Contract Sum by \$16,130 from \$289,409,628 to \$289,425,758, when taking the actions contemplated in Amendment No. 77 into consideration; and (c) make other certain changes as set forth in Amendment No. 77.

The Agreement has been previously amended unilaterally in Amendment Number Seventy-Eight – Unilateral Amendment No. 16, issued September 24, 2021, to (a) incorporate a certain LMR change order for the Burnt Peak 1 (BUR1) site related to utility power work as further described in Unilateral Amendment No. 16 for a cost increase in the amount of \$7,300; (b) increase the Maximum Contract Sum by \$7,300 from \$289,425,758 to \$289,433,058 for the Work contemplated in Unilateral Amendment No. 16; and (c) make other certain changes as set forth in Unilateral Amendment No. 16.

The Agreement has been previously amended unilaterally in Amendment Number Seventy-Nine – Unilateral Amendment No. 17, issued September 29, 2021, to (a) incorporate a certain LMR change order for the San Pedro Hill (SPH) site related to utility power work as further described in Unilateral Amendment No. 17 for a cost increase in the amount of \$41,045; (b) increase the Maximum Contract Sum by \$41,045 from \$289,433,058 to \$289,474,103 for the Work contemplated in Unilateral Amendment No. 17; and (c) make other certain changes as set forth in Unilateral Amendment No. 17.

The Agreement has been previously amended unilaterally in Amendment Number Eighty – Unilateral Amendment No. 18, issued October 4, 2021, to (a) incorporate a certain LMR change order for the Burnt Peak 1 (BUR1) site related to rock coring for caissons which additional tower foundation drilling as further described in Unilateral Amendment No. 18 for a cost increase in the amount of \$18,960; (b) make changes necessary to reflect a reconciliation related to utility power work at Burnt Peak 1 (BUR1) site for a cost decrease in the amount of \$7,300; (c) increase the Maximum Contract Sum by \$11,660 from \$289,474,103 to \$289,485,763 when taking the actions contemplated in Unilateral Amendment No. 18 into consideration; and (c) make other certain changes as set forth in Unilateral Amendment No. 18.

The Agreement has been previously amended in Amendment Number Eighty-One, issued October 8, 2021 to (a) reflect the removal of one (1) LMR System Site, Saddle Peak (SPN) from the scope of Phase 4 (LMR System Implementation) only for a cost reduction in the amount of \$99,371; (b) reflect the inclusion of one (1) LMR System Site, MCI, inclusive of the line items provided in Attachment A to Amendment No. 81, into the scope of Phase 4 (LMR System Implementation) only for an increase in the amount of \$228,900; (c) exercise the Unilateral Options for all Work pertaining to Phase 4 (LMR System Implementation) for one (1) LMR System Site, MCI; (d) increase the Maximum Contract Sum by \$129,529 from \$289,485,763 to \$289,615,292, when taking the actions contemplated in Amendment No. 81 into consideration; and (e) make other certain changes as set forth in Amendment No. 81.

The Agreement has been previously amended in Amendment Number Eighty-Two, issued October 8, 2021, to (a) revise payments to align with Provisional Subsystem Acceptance; (b) preserve the parties' positions with respect the IMS reflecting an October 2023 completion date; and (c) make other certain changes as set forth in Amendment No. 82.

The Agreement has been previously amended in Amendment Number Eighty-Three, issued November 5, 2021, to (a) incorporate a LMR Change Order Modification related to the Antenna Changes necessitated by FCC Requirements at Burnt Peak1 (BUR1) for a cost increase in an amount of \$17,412; (b) increase the Maximum Contract Sum by \$17,412 from \$289,615,292 to \$289,632,704; and (c) make other certain changes as set forth in Amendment No. 83.

The Agreement has been previously amended unilaterally in Amendment Number Eighty-Four – Unilateral Amendment No. 19, issued November 5, 2021, to (a) incorporate a certain LMR change order for the various sites related to field implementation of USFS VIAMM requirements as further described in this Unilateral Amendment No. 19 for a cost increase in the amount of \$168,928; (b) increase the Maximum Contract Sum by \$168,928 from \$289,632,704 to \$289,801,632; and (c) make other certain changes as set forth in Unilateral Amendment No. 19.

The Agreement has been previously amended in Amendment Number Eighty-Five, issued December 23, 2021, to make changes necessary to reflect an overall reconciliation of the scope of the Agreement and Exhibit C (Schedule of Payments) as follows: (a) reflect

a reduction of certain scope of Phase 1 (System Design) work for a cost decrease in an amount of \$529,133; (b) reflect a reduction of certain scope of Phase 2 (Site Construction and Site Modification) work for a cost decrease in an amount of \$495,754, and reflect discounts from Phase 2 (Site Construction and Site Modifications) within C.15 in the amount of \$180,346; (c) reflect a reduction of certain testing contemplated in the scope of Phase 4 (LMR System Implementation) for a cost decrease in the amount of \$636,439, and reflect the reduction of certain Phase 4 (LMR System Implementation) Work for the TOP (Relay) site in the amount of \$77,558, and lastly, reflect the inclusion of certain Phase 4 (LMR System Implementation) Work for the MCI site for a cost increase in the amount of \$146,334, all actions resulting in a net cost decrease to Phase 4 (LMR System) Implementation) in an amount of \$567,300; (d) reflect the removal of certain Additive Alternates, in particular, Bounded Area Coverage, Mandatory Building Coverage, Metrorail Coverage, and LMR System Maintenance for Additive Alternates, respectively, for a cost decrease in an amount of \$73,350,438; (e) reflect a reconciliation of certain LMR Change Orders resulting in a cost decrease in an amount of \$10,497; (f) decrease the Maximum Contract Sum by \$75,133,830 from \$289,801,632 to \$214,667,802 and (g) make other certain changes as set forth in Amendment No. 85.

The Agreement has been previously amended in Amendment Number Eighty-Six, issued January 12, 2022, to (a) incorporate certain LMR Change Order Modifications as further described in Amendment No. 86 for a cost increase in the amount of \$14,386; (b) increase the Maximum Contract Sum by \$14,386 from \$214,667,802 to \$214,682,188; and (c) make other certain changes as set forth in Amendment No. 86.

The Agreement has been previously amended unilaterally in Amendment Number Eighty-Seven – Unilateral Amendment No. 20, issued \_\_\_\_\_\_, 2022, to (a) incorporate an Change Order to supply and install 40-feet of waveguide bridge at the Rolling Hills Transmit (RHT) site as further described in Unilateral Amendment No. 20 for a cost increase in the amount of \$5,266; (b) increase the Maximum Contract Sum by \$5,266 from \$214,682,188 to \$214,687,454; and (c) make other certain changes as set forth in Unilateral Amendment No. 20.

The Authority and Contractor desire to further amend the Agreement to make changes necessary to (a) incorporate four (4) LMR Change Order Modifications as further described in this Amendment No. 88 for a cost increase in the amount of \$20,254; (b) increase the Maximum Contract Sum by \$20,254 from \$214,687,454 to \$214,707,708; and (c) make other certain changes as set forth in this Amendment No. 88.

This Amendment No. 88 is authorized under Section 2 (Changes to Agreement) of the Agreement.

NOW THEREFORE, in consideration of the foregoing recitals, all of which are incorporated as part of this Amendment No. 88, and for other valuable consideration, the receipt and sufficiency of which are acknowledged, Authority and Contractor hereby agree as follows:

- 1. <u>Capitalized Terms; Section References</u>. Capitalized terms used herein without definition (including in the recitals hereto), have the meanings given to such terms in the Agreement. Unless otherwise noted, section references in this Amendment No. 88 refer to sections of the Agreement, as amended by this Amendment No. 88.
- 2. <u>LMR Change Order Modifications</u>. The parties agree and acknowledge the Contractor will perform the Work contemplated in COR No. MSI-7083, COR No. MSI-7089, COR No. 7090, and COR No. 7091, which are included herein by this reference, pursuant to Exhibit C.17 (LMR Change Order Modifications) and in accordance with this Section 2, in exchange for the amounts set forth in Exhibit C.17 (LMR Change Order Modifications) of Exhibit C (Schedule of Payments).

Item No.	Site ID	Site Name	COR No.	Description	Amount
1.	Various	Various	MSI-7083	USFS Sites Field Implementation of VIAMM – Ice Shields and Awnings	\$15,518
2.	BKK	BKK Landfill	MSI-7089	MPLS Reconfiguration	\$414
3.	TWR	Tower Peak	MSI-7090	Survey SCE Conveyance	\$4,322
4.		iPASONET Server Replacement	MSI-7091	iPASONET Server Replacement	\$0
		_		TOTAL AMOUNT:	\$20,254

#### 3. <u>Amendments to Agreement</u>.

- 3.1 Section 8.1 (Maximum Contract Sum and Contract Sum General), in particular Section 8.1.1 of the Base Document, is deleted in its entirety and replaced with the following:
  - 8.1.1 The "Maximum Contract Sum" under this Agreement is Two Hundred Fourteen Million, Seven Hundred Seven Thousand, Seven Hundred Eight Dollars (\$214,707,708) which includes the Contract Sum and all Unilateral Option Sums, as set forth in Exhibit C (Schedule of Payments).
- 3.2 Section 24.4 (Limitation of Liability), in particular Section 24.4.1 of the Base Document, is deleted in its entirety and replaced with the following:
  - 24.4.1 Except for liability resulting from personal injury, harm to tangible property, or wrongful death, Contractor's total liability to the Authority, whether for breach of contract, warranty, negligence, or strict liability in tort, will be limited in the aggregate to direct damages no greater than One Hundred Fifty-Seven Million, Two Hundred Sixty Thousand, Eight Hundred Ninety-Nine Dollars (\$157,260,899). Notwithstanding the foregoing, Contractor shall not be liable to the Authority for any special, incidental, indirect, or consequential damages

#### 4. <u>Amendments to Agreement Exhibits</u>.

- 4.1 Exhibit C.1 (LMR System Payment Summary) to Exhibit C (Schedule of Payments) is deleted in its entirety and replaced with Exhibit C.1 (LMR System Payment Summary), which is attached to this Amendment No. 88 and incorporated herein by this reference.
- 4.2 Exhibit C.17 (LMR Change Order Modifications) to Exhibit C (Schedule of Payments) is deleted in its entirety and replaced with Exhibit C.17 (LMR Change Order Modifications), which is attached to this Amendment No. 88 and incorporated herein by this reference.
- 4.3 Exhibit C.22 (LMR Subsystem Acceptance Payment Schedule) to Exhibit C (Schedule of Payments) is deleted in its entirety and replaced with Exhibit C.22 (LMR Subsystem Acceptance Payment Schedule), which is attached to this Amendment No. 88 and incorporated herein by this reference.
- 5. This Amendment No. 88 shall become effective as of the date identified in the recitals, which is the date upon which:
  - 5.1 An authorized agent of Contractor has executed this Amendment No. 88;
  - 5.2 Los Angeles County Counsel has approved this Amendment No. 88 as to form;
  - 5.3 The Board of Directors of the Authority has authorized the Executive Director of the Authority, if required, to execute this Amendment No. 88; and
  - The Executive Director of the Authority has executed this Amendment No. 88.
- 6. Except as expressly provided in this Amendment No. 88, all other terms and conditions of the Agreement, as amended, shall remain the same and in full force and effect.
- 7. Contractor and the person executing this Amendment No. 88 on behalf of Contractor represent and warrant that the person executing this Amendment No. 88 for Contractor is an authorized agent who has actual authority to bind Contractor to each and every term and condition of this Amendment No. 88, and that all requirements of Contractor to provide such actual authority have been fulfilled.
- 8. This Amendment No. 88 may be executed in one or more original or facsimile counterparts, all of which when taken together shall constitute one in the same instrument.

\* \* \*

#### AMENDMENT NUMBER EIGHTY-EIGHT TO AGREEMENT NO. LA-RICS 007 FOR

## LOS ANGELES REGIONAL INTEROPERABLE COMMUNICATIONS SYSTEM LAND MOBILE RADIO SYSTEM

IN WITNESS WHEREOF, the parties hereto have caused this Amendment No. 88 to be executed on their behalf by their duly authorized representatives, effective as of the date first set forth above.

INT	S ANGELES REGIONAL EROPERABLE COMMUNICATIONS STEM AUTHORITY	МОТ	OROLA SOLUTIONS, INC.
Ву:		Ву: _	
	Scott Edson Executive Director		Arturs A. Vanags Motorola Project Director
ANC	PROVED AS TO FORM FOR THE LOS GELES REGIONAL INTEROPERABLE MMUNICATIONS SYSTEM AUTHORITY:		
	DRIGO A. CASTRO-SILVA Inty Counsel		
Ву:			
	Truc L. Moore Principal Deputy County Counsel		

EXHIBIT C.1 - SCHEDULE OF PAYMENTS  LMR SYSTEM PAYMENT SUMMARY									
Summary	Unilateral Option Sum		Contract Sum - Full Payable Amount			10% Holdback Amount	N	Payment Jinus 10% Holdback Amount	
Phase 1 <sup>(Note 1)</sup>	\$	-	\$	41,754,828	\$	3,117,312	\$	38,637,516	
Phase 2	\$	-	\$	43,222,351	\$	4,212,845	\$	39,009,506	
Phase 3	\$	-	\$	56,336,725	\$	4,230,075	\$	52,106,650	
Phase 4	\$	-	\$	20,732,003	\$	2,009,828	\$	18,722,174	
SUBTOTAL (Phases 1 to 4):	\$	-	\$	162,045,907	\$	13,570,061	\$	148,475,846	
Phase 5 (15 Years)	\$	55,898,518	\$	-	\$	-	\$	55,898,518	
TOTAL (Phases 1 to 5):	\$	55,898,518	\$	162,045,907	\$	13,570,061	\$	204,374,364	
Bounded Area Coverage Additive Alternate (Note 1)	\$	19,109,375	\$		\$	1,910,937	\$	17,198,437	
Mandatory Building Coverage Additive Alternate	\$	29,828,448	\$		\$	2,982,845	\$	26,845,603	
Metrorail Coverage Additive Alternate	\$	4,792,260	\$		\$	479,226	\$	4,313,034	
LMR System Maintenance for Additive Alternates	\$	19,620,355	\$		\$	1,962,036	\$	17,658,320	
Source Code Software Escrow	\$	1,304,000	\$	_	\$	130,400	\$	1,173,600	
LMR Mitigation Monitoring and Reporting Plan			\$	2,912,356	\$		\$	2,912,356	
LMR Change Order Modifications			\$	3,302,078	\$	330,208	\$	2,971,870	
LMR Unilateral Amendments			\$	1,271,806	\$	127,181	\$	1,144,625	
Multiprotocol Label Switching Mobile Backhaul			\$	2,200,000	\$	220,000	\$	1,980,000	
Channel 15 and Channel 16 Interference Mitigation			\$	803,207			\$	803,207	
LMR Bridge Warranty			\$	1,785,136			\$	1,785,136	
SUBTOTAL	\$	130,552,956	\$	174,320,490	\$	21,712,893	\$	283,160,553	
TOTAL CONTRACT SUM:				\$174,320,490					
LMR Discounts <sup>(Note 2)</sup>	-\$16,815,301								
MAXIMUM CONTRACT SUM(Total Unilateral Option Sum plus Total Contract Sum):	ract \$214,707,708								

Note 1: The cost for the Project Descriptions for the Bounded Area Coverage only are reflected in Exhibit C.2 (Phase 1 - System Design) as amended and restated in Amendment No. 2., and included (\$173, 110) in Phase 1 Contract Sum - Full Payable Amount. The balance of the remaining Unilateral Option Sum for Bounded Area Coverage Additive Alternate Work is reflected in Exhibit C.7 (Bounded Area Coverage Additive Alternate).

Note 2: The total remaining balance of the LMR Discounts applied to the Max Contract Sum will be utilized at the discretion of the Authority.

## SCHEDULE OF PAYMENTS EXHIBIT C.17 - LMR CHANGE ORDER MODIFICATIONS

Change Order Number	Site ID	Item/Category	Contract Sum - Payable Amount		10% Holdback Amount		Payable Amount Less 10% Holdback Amount	
		Amendment No. 28						
MSI 003 Revised	OLI	MSI-003 OLI Tower Mapping (Revised)	\$	-	\$	-	\$	-
		MSI-007 LDWP243 Additional Structural Analysis for Coverage						
MSI-007	LDWP243	Enhancement	\$	2,200	\$	220	\$	1,980
MSI-008	LMR	MSI-008 Station B Reprogramming of 700 MHz DTVRS Stations	\$	9,912	\$	991	\$	8,921
MSI-009	AGH	MSI-009 AGH SCE Engineering Fee Reimbursement	\$	5,634	\$	563	\$	5,071
MSI-012	LMR	MSI-012 Site 3D Models per Authority Request BJM, DPK, TWR	\$		\$		\$	
MSI-015	BUR1	MSI-015 BUR1 SCE Engineering Fee	\$	3,308	\$	331	\$	2,977
MSI-016	BMT	MSI-016 BMT SCE Engineering Fee	\$	592	\$	59	\$	533
MSI-017	MML	MSI-017 MML SCE Engineering Fee	\$	3,308	\$	331	\$	2,977
		Amendment No. 28 Subtotal	\$	24,953	\$	2,495	\$	22,458
		Amendment No. 29						
MSI-030	APC	MSI-030 Saturday Labor and Crane Cost	\$	2,405	\$	241	\$	2,165
MSI-020R	BKK	MSI-020R Tower Mapping and Painting	\$	26,225	\$	2,623	\$	23,603
MSI-024	BKK	MSI-024 Dispersive Wave Testing	\$	5,426	\$	543	\$	4,883
MSI-1208	POM	MSI-LMR1208 ACM and LCP Testing Services	\$	4,400	\$	440	\$	3,960
		Amendment No. 29 Subtotal	\$	38,456	\$	3,846	\$	34,610
		Amendment No. 30						
MSI-1205	MVS	MSI-1205 MVS LCP Testing Services	\$	4,195	\$	420	\$	3,776
		Amendment No. 30 Subtotal	\$	4,195	\$	420	\$	3,776
		Amendment No. 31						
MSI-1265 MSI-1206	ONK CCT	MSI-1265 Environmental Testing ACM and LPC Services MSI-1206 HVAC Condenser Pad Modification	\$	3,633	\$	363 975	\$	3,270
MSI-1200 MSI-1321	AGH	MSI-1321 Additional Title, Survey, Research	\$	9,745 2,100	\$	210	\$	8,771 1,890
MSI-1267R	LARICSHQ	MSI-1267R Environmental Testing ACM and LPC Services	\$	4,095	\$	410	\$	3,686
3.3.03 3.2 (7.3)		Amendment No. 31 Subtotal	\$	19,573	\$	1,957	\$	17,616
		Amendment No. 33	Ψ	17,575	Ψ	1,737	Ψ	17,010
MSI-1528	MLM	MSI-1528 MLM Tower Light	\$	17,490	\$	1,749	\$	15,741
1133 34 23		Amendment No. 33 Subtotal	\$	17,490		1,749		15,741
		Amendment No. 34	Ť	21,120	4	2,. 12	Ψ	20,112
MSI-1447	AGH	MSI-1477 AGH Additional Electrical Work	\$	84,503	\$	8,450	\$	76,053
MSI-1435	HPK	MSI-1435 HPK Power Conduit Outside Compound	\$	6,241	\$		\$	5,617
		Amendment No. 34 Subtotal	\$	90,744	\$	9,074	\$	81,670
		Amendment No. 35						
MSI-5002	SDW	MSI-5002 SDW Waveguide Bridge Installation	\$	13,115	\$	1,312	\$	11,804
		Amendment No. 35 Subtotal	\$	13,115	\$	1,312	\$	11,804
		Amendment No. 36						
MSI-5003	BJM	MSI-5003 BJM Tower Mapping Services	\$	4,952	\$	495		4,457
		Amendment No. 36 Subtotal	\$	4,952	\$	495	\$	4,457
		Amendment No. 37						
MSI-5010	CRN	CRN Lead Paint Abatement and Consulting Services	\$	3,754	\$	375	\$	3,379
MSI-5008	CRN	CRN Siren	\$	10,113	\$	1,011	\$	9,102
3.667.701.7	~~	CD11 D		_				
MSI-5015 MSI-1209R	CRN FCCF	CRN Permanent Fence FCCF Receptacle Light Installation	\$ \$	5,043 12,336	\$	504 1,234	\$	4,539 11,102

MSS-IV1002   MMC   MMC Concree Under Apphals   \$ 9,765   \$ 9,77   \$ 8,799   MSS-IV1003   MMC   MMC Electrical Power Condains   \$ 2,200   \$ 2,201   \$ 2,203   \$ 2,205	Change Order Number	Site ID	Item/Category Contract Sum - Payable Amount				% Holdback Amount	Payable Amount Less 10% Holdback Amount	
MST-5017	MSI-UNI-002	MMC	MMC Concrete Under Asphalt	\$	9,765	\$	977	\$	8,789
MSI-5017	MSI-UNI-003	MMC	MMC Electrical Power Conduits	\$	2,703	\$	270	\$	2,433
MSI-5017			Amendment No. 37 Subtotal	\$	56,337	\$	5,634	\$	50,703
MSI-5030									
MSI-1030   FCCF   FCCF Relocated Primer Site Equipment   S									
MSI-5038   SGII   SGII Barrel Tile Roof   \$ 6,843   \$ 6,848   \$ 6,459   MSI-5031   SGII   SGII NDC X Stand Down Chast   \$ 7,652   \$ 7,655   \$ 6,087   MSI-5045   DPW38   DPW				\$	4,725		473		4,253
MSI-5021   SGH   SGH   SGH   SGH   SGE   SGH   SGE			1 1			т.	-		-
MSI-5046   DPW38   DPW38 LCP Testing				+ -					,
MSI-5038									,
MSI-5066			-	<u> </u>					· · · · · · · · · · · · · · · · · · ·
MSI-INI-005				+ '					,
MSI-024				+ '					·
MSI-5024   MIR   MIR   Additional Topography							,	_ '	` ' '
MSI-5061   MD1   MD1 2nd Ges/Technical Engineering Services   \$ 7.588   \$ 7.59   \$ 6.829				+			` ' '		, ,
MSI-5028   MDI   MDI Underground Uility Locator   \$ 7.56   \$ 7.6   \$ 6.80				+ -					
MSI-5039   MDI   MDI Addition Topo Survey   S   2.100   S   2.101   S   1.890	MSI-5028	MDI	<u> </u>	<u> </u>					· · · · · · · · · · · · · · · · · · ·
Amendment No. 38 Subtotal   \$ (47,393) \$ (4,739) \$ (42,654)	MSI-5029	MDI	· ·	\$	2,100	\$	210	\$	1,890
MSI-5073   AGH   AGH Encroachment Permit Fee   \$   4,807   \$   481   \$   4,326   MSI-5045   CCB   CCB   Abatement and Remediation Work   \$   13,125   \$   1,313   \$   11,813   MSI-5076   LACFDEL   LACFDEL   New Phase   Work_Rev.    \$   43,271   \$   43,271   \$   43,27   \$   38,944   MSI-5068   SPH   SPH Lease Exhibit Option_Rev.    \$   1,065   \$   107   \$   5959   MSI-5063   UNIV   UNIV Recuperation of Cost for Day Tank for Cancelled Site   \$   1,338   \$   1,134   \$   10,204   \$	MSI-5050	WWY	WWY Native American Monitoring	\$	580	\$	58	\$	522
MSI-5073   AGH   AGH Encroachment Permit Fee   \$ 4,807   \$ 481   \$ 4,326   MSI-5045   CCB   CCB Abatement and Remediation Work   \$ 13,125   \$ 1,313   \$ 11,813   MSI-5076   LACEDEL   ACEDEL New Phase I Work, Rev.1   \$ 43,271   \$ 4,327   \$ 3,89,44   MSI-5068   SPH   SPH Lease Exhibit Option_Rev.1   \$ 1,065   \$ 107   \$ 959   MSI-5063   UNIV   UNIV Recuperation of Cost for Day Tank for Cancelled Site   \$ 11,338   \$ 1,134   \$ 10,204   MSI-5068   SPH   SPH Lease Exhibit Option_Rev.1   \$ 73,606   \$ 7,361   \$ 66,245   MSI-5070   UNIV   Recuperation of Cost for Day Tank for Cancelled Site   \$ 11,338   \$ 1,134   \$ 10,204   MSI-5070   UNIV   Recuperation of Cost for Day Tank for Cancelled Site   \$ 73,606   \$ 7,361   \$ 66,245   MSI-5070   UNIV   New Phase I Work   \$ 51,002   \$ 3,771   \$ 33,035   MSI-5070   UNIV   New Phase I Work   \$ 51,002   \$ 5,102   \$ 45,922   MSI-5069   RPVI   New Phase I Work   \$ 51,004   \$ 5,102   \$ 49,922   MSI-5069   RPVI   New Phase I Work   \$ 54,696   \$ 5,470   \$ 49,226   MSI-5042   INDWT   Request for Road Repairs   \$ 14,425   \$ 1,443   \$ 12,983   MSI-5072   IMR   ACM-LCP-Testing and Monitoring   \$ \$ 12,672   \$ 1,245   \$ 1,443   \$ 12,983   MSI-5072   IMR   Addition of Microwave Link from BHS to SPH   \$ 22,740   \$ 2,274   \$ 2,274   \$ 2,0466   MSI-5072   IMR   Additional Ice Bridge   \$ 1,975   \$ 198   \$ 1,778   MSI-5081   IMR   LARTCS VHF Frequency Changes   \$ 48,041   \$ 4,804   \$ 4,3237   MSI-5087   MTL2   Road Repair Design   \$ 2,200   \$ 220   \$ 1,980   MSI-6015   UNIV   Addition of Microwave Link   \$ 51,604   \$ 5,160   \$ 46,444   MSI-6015   UNIV   Addition of Microwave Link   \$ 51,604   \$ 5,160   \$ 46,444   MSI-6015   UNIV   Addition of Microwave Link   \$ 61,638   \$ 61,648   \$ 5,5478   \$ 20,030   MSI-6019   MML   Environmental Phase II Limited Substrace Investigation   \$ 19,310   \$ 1,931   \$ 1,737   \$ 4,804   \$ 4,804   \$ 4,804   \$ 4,804   \$ 4,804   \$ 4,804   \$ 4,804   \$ 4,804   \$ 4,804   \$ 4,804   \$ 4,804   \$ 4,804   \$ 4,804   \$ 4,804   \$ 4,804   \$ 4,804   \$ 4,804   \$ 4,804   \$ 4,804   \$ 4,80			Amendment No. 38 Subtotal	\$	(47,393)	\$	(4,739)	\$	(42,654)
MSI-5045   CCB   CCB Abatement and Remediation Work   \$   13,125   \$   1,313   \$   11,813   MSI-5076   LACEDEL   LACEDEL   New Phase   Work_Rev.1   \$   43,271   \$   43,271   \$   38,944   MSI-5068   SPH   SPH Lease Exhibit Option, Rev.1   \$   1,065   \$   107   \$   5959   MSI-5063   UNIV   UNIV Recuperation of Cost for Day Tank for Cancelled Site   \$   11,338   \$   1,134   \$   10,204   \$   10,204   \$   MSI-5063   UNIV   UNIV Recuperation of Cost for Day Tank for Cancelled Site   \$   11,338   \$   1,134   \$   10,204   \$   MSI-5071   RIH   Location Change   \$   37,705   \$   3,771   \$   33,935   MSI-5070   UNIV   New Phase I Work   \$   51,024   \$   5,102   \$   45,922   MSI-5069   RPV1   New Phase I Work   \$   51,024   \$   5,102   \$   45,922   MSI-5069   RPV1   New Phase I Work   \$   54,696   \$   5,470   \$   49,226   MSI-5042   INDWT   Request for Road Repairs   \$   14,425   \$   1,443   \$   12,983   MSI-5067   RHF   ACM/LCP Testing and Monitoring   \$   \$   \$   \$   \$   \$   \$   \$   \$			Amendment No. 39						
MSI-5076	MSI-5073	AGH	AGH Encroachment Permit Fee	\$	4,807	\$	481	\$	4,326
MSI-5068   SPH   SPH Lease Exhibit Option_Rev.1   \$ 1,065   \$ 107   \$ 959	MSI-5045	ССВ	CCB Abatement and Remediation Work	\$	13,125	\$	1,313	\$	11,813
MSI-5063	MSI-5076	LACFDEL		\$	43,271	\$	4,327	\$	38,944
MSI-5071   RIH   Location Change   \$ 37,006   \$ 7,361   \$ 66,245								Ψ	
MSI-5071   RIH   Location Change   \$ 37,705   \$ 3,771   \$ 33,935     MSI-5070   UNIV   New Phase I Work   \$ 51,024   \$ 5,102   \$ 45,922     MSI-5069   RPV1   New Phase I Work   \$ 54,696   \$ 5,470   \$ 49,226     MSI-5042   INDWT   Request for Road Repairs   \$ 14,425   \$ 1,443   \$ 12,983     MSI-5065   RHF   ACM-LCP Testing and Monitoring   \$ -	MSI-5063	UNIV	,				,		
MSI-5071   RIH   Location Change   \$ 37,705   \$ 3,771   \$ 33,935     MSI-5070   UNIV   New Phase I Work   \$ 51,024   \$ 5,102   \$ 45,922     MSI-5069   RPVI   New Phase I Work   \$ 54,696   \$ 5,470   \$ 49,226     MSI-5042   INDWT   Request for Road Repairs   \$ 14,425   \$ 1,443   \$ 12,983     MSI-5066   RHT   ACM-LCP Festing and Monitoring   \$ 12,672   \$ 1,267   \$ 11,405     MSI-5066   SPH   RF Engineering Coverage Assessment/Maps   \$ 12,672   \$ 1,267   \$ 11,405     MSI-5072   LMR   Addition of Microwave Link from BHS to SPH   \$ 22,740   \$ 2,274   \$ 20,466     MSI-5078   CPK   Additional Ice Bridge   \$ 1,975   \$ 198   \$ 1,778     MSI-5081   LMR   LARTCS VHF Frequency Changes   \$ 48,041   \$ 4,804   \$ 43,237     MSI-5087   MTL2   Road Repair Design   \$ 2,200   \$ 220   \$ 1,980     MSI-6017   RIH   Addition of Microwave Link   \$ 51,604   \$ 5,160   \$ 46,444     MSI-6016   SPH   Addition of Microwave Link   \$ 51,604   \$ 5,160   \$ 46,444     MSI-6015   UNIV   Addition of Microwave Link   \$ 51,604   \$ 5,160   \$ 46,444     MSI-6016   SPH   Addition of Microwave Link   \$ 51,604   \$ 5,160   \$ 46,444     MSI-6018   LPC   Environmental Phase II Limited Subsurface Investigation   \$ 19,740   \$ 1,974   \$ 17,766     MSI-6019   MML   Environmental Phase II Limited Subsurface Investigation   \$ 19,310   \$ 1,931   \$ 17,379     Amendment No. 45 Subtotal   \$ 39,050   \$ 33,000   \$ 297,000     MSI-6030   JPK/RHT/VPK   Tower Top Amplifier Upgrade for Early Deployment Site Transition   \$ 45,728   \$ 4,573   \$ 41,155     MSI-6030   JPK/RHT/VPK   Tower Top Amplifier Upgrade for Early Deployment Site Transition   \$ 45,728   \$ 4,573   \$ 41,155     MSI-6030   JPK/RHT/VPK   Tower Top Amplifier Upgrade for Early Deployment Site Transition   \$ 45,728   \$ 4,573   \$ 41,155     MSI-6030   JPK/RHT/VPK   Tower Top Amplifier Upgrade for Early Deployment Site Transition   \$ 45,728   \$ 4,573   \$ 41,155     MSI-6030   JPK/RHT/VPK   Tower Top Amplifier Upgrade for Early Deployment Site Transition   \$ 45,728   \$ 4,573   \$ 41,155     MSI-6030   JPK/RHT/VPK				\$	73,606	\$	7,361	\$	66,245
MSI-5070				<del>-</del>		ı			
MSI-5069	MSI-5071	RIH		\$	37,705	\$	3,771	\$	33,935
MSI-5042   INDWT   Request for Road Repairs   \$ 14,425 \$ 1,443 \$ 12,983	MSI-5070	UNIV	New Phase 1 Work	\$	51,024	\$	5,102	\$	45,922
MSI-5067   RHT   ACM/LCP-Testing and-Monitoring   \$	MSI-5069	RPV1	New Phase 1 Work	\$	54,696	\$	5,470	\$	49,226
MSI-5066   SPH   RF Engineering Coverage Assessment/Maps   \$ 12,672 \$ 1,267 \$ 11,405	MSI-5042	INDWT	^ ^	\$	14,425	\$	1,443	\$	12,983
MSI-5072			Ţ Ţ			<b>\$</b> -	<del>-</del>	\$	<del>-</del>
MSI-5078   CPK   Additional Ice Bridge   \$ 1,975   \$ 198   \$ 1,778								· ·	
MSI-5081									
MSI-5087   MTL2   Road Repair Design   \$ 2,200   \$ 220   \$ 1,980			e	<u> </u>					· · · · · · · · · · · · · · · · · · ·
Amendment No. 41 Subtotal   \$ 245,478   \$ 24,548   \$ 220,930				+-'					
MSI-6017   RIH   Addition of Microwave Link   \$ 51,604   \$ 5,160   \$ 46,444	MS1-3087	WHL2						_	,
MSI-6017         RIH         Addition of Microwave Link         \$ 51,604         \$ 5,160         \$ 46,444           MSI-6016         SPH         Addition of Microwave Link         \$ 61,638         \$ 6,164         \$ 55,474           MSI-6015         UNIV         Addition of Microwave Link         \$ 74,711         \$ 7,471         \$ 67,240           Amendment No. 43 and Amendment No. 44 Subtotal         \$ 187,953         \$ 18,795         \$ 169,158           MSI-6018         LPC         Environmental Phase II Limited Subsurface Investigation         \$ 19,740         \$ 1,974         \$ 17,766           MSI-6019         MML         Environmental Phase II Limited Subsurface Investigation         \$ 19,310         \$ 1,931         \$ 17,379           Amendment No. 45 Subtotal         \$ 39,050         \$ 39,050         \$ 35,145           Amendment No. 46           MSI-6043         POM         Asbestos Abatement Services         \$ 330,000         \$ 33,000         \$ 297,000           MSI-6030         JPK/RHT/VPK         Tower Top Amplifier Upgrade for Early Deployment Site Transition         \$ 45,728         \$ 4,573         \$ 41,155				À	245,478	Þ	24,548	Ф	220,930
MSI-6016         SPH         Addition of Microwave Link         \$ 61,638         \$ 6,164         \$ 55,474           MSI-6015         UNIV         Addition of Microwave Link         \$ 74,711         \$ 7,471         \$ 67,240           Amendment No. 43 and Amendment No. 44 Subtotal         \$ 187,953         \$ 18,795         \$ 169,158           Amendment No. 45           MSI-6018         LPC         Environmental Phase II Limited Subsurface Investigation         \$ 19,740         \$ 1,974         \$ 17,766           MSI-6019         MML         Environmental Phase II Limited Subsurface Investigation         \$ 19,310         \$ 1,931         \$ 17,379           Amendment No. 45 Subtotal         \$ 39,050         \$ 39,050         \$ 35,145           Amendment No. 46           MSI-6043         POM         Asbestos Abatement Services         \$ 330,000         \$ 33,000         \$ 297,000           MSI-6030         JPK/RHT/VPK         Tower Top Amplifier Upgrade for Early Deployment Site Transition         \$ 45,728         \$ 4,573         \$ 41,155	MSI-6017	RIH		\$	51 604	\$	5 160	\$	46 444
MSI-6015         UNIV         Addition of Microwave Link         \$ 74,711         \$ 7,471         \$ 67,240           Amendment No. 43 and Amendment No. 44 Subtotal         \$ 187,953         \$ 18,795         \$ 169,158           Amendment No. 45           MSI-6018         LPC         Environmental Phase II Limited Subsurface Investigation         \$ 19,740         \$ 1,974         \$ 17,766           MSI-6019         MML         Environmental Phase II Limited Subsurface Investigation         \$ 19,310         \$ 1,931         \$ 17,379           Amendment No. 45 Subtotal         \$ 39,050         \$ 35,145           Amendment No. 46           MSI-6043         POM         Asbestos Abatement Services         \$ 330,000         \$ 33,000         \$ 297,000           MSI-6030         JPK/RHT/VPK         Tower Top Amplifier Upgrade for Early Deployment Site Transition         \$ 45,728         \$ 4,573         \$ 41,155							· · · · · · · · · · · · · · · · · · ·		·
Amendment No. 45           MSI-6018         LPC         Environmental Phase II Limited Subsurface Investigation         \$ 19,740         \$ 1,974         \$ 17,766           MSI-6019         MML         Environmental Phase II Limited Subsurface Investigation         \$ 19,310         \$ 1,931         \$ 17,379           Amendment No. 45 Subtotal         \$ 39,050         \$ 35,145           Amendment No. 46           MSI-6043         POM         Asbestos Abatement Services         \$ 330,000         \$ 33,000         \$ 297,000           MSI-6030         JPK/RHT/VPK         Tower Top Amplifier Upgrade for Early Deployment Site Transition         \$ 45,728         \$ 4,573         \$ 41,155							·		
MSI-6018         LPC         Environmental Phase II Limited Subsurface Investigation         \$ 19,740         \$ 1,974         \$ 17,766           MSI-6019         MML         Environmental Phase II Limited Subsurface Investigation         \$ 19,310         \$ 1,931         \$ 17,379           Amendment No. 45 Subtotal         \$ 39,050         \$ 35,145           Amendment No. 46           MSI-6043         POM         Asbestos Abatement Services         \$ 330,000         \$ 33,000         \$ 297,000           MSI-6030         JPK/RHT/VPK         Tower Top Amplifier Upgrade for Early Deployment Site Transition         \$ 45,728         \$ 4,573         \$ 41,155		Amendme	ent No. 43 and Amendment No. 44 Subtotal	\$	187,953	\$	18,795	\$	169,158
MSI-6019         MML         Environmental Phase II Limited Subsurface Investigation         \$ 19,310         \$ 1,931         \$ 17,379           Amendment No. 45 Subtotal         \$ 39,050         \$ 35,145           Amendment No. 46           MSI-6043         POM         Asbestos Abatement Services         \$ 330,000         \$ 33,000         \$ 297,000           MSI-6030         JPK/RHT/VPK         Tower Top Amplifier Upgrade for Early Deployment Site Transition         \$ 45,728         \$ 4,573         \$ 41,155			Amendment No. 45						
Amendment No. 45 Subtotal         \$ 39,050         \$ 3,905         \$ 35,145           Amendment No. 46           MSI-6043         POM         Asbestos Abatement Services         \$ 330,000         \$ 33,000         \$ 297,000           MSI-6030         JPK/RHT/VPK         Tower Top Amplifier Upgrade for Early Deployment Site Transition         \$ 45,728         \$ 4,573         \$ 41,155	MSI-6018	LPC	Environmental Phase II Limited Subsurface Investigation	\$	19,740	\$	1,974	\$	17,766
Amendment No. 45 Subtotal         \$ 39,050         \$ 3,905         \$ 35,145           Amendment No. 46           MSI-6043         POM         Asbestos Abatement Services         \$ 330,000         \$ 33,000         \$ 297,000           MSI-6030         JPK/RHT/VPK         Tower Top Amplifier Upgrade for Early Deployment Site Transition         \$ 45,728         \$ 4,573         \$ 41,155	MSI-6019	MML	Environmental Phase II Limited Subsurface Investigation	\$	19,310	\$	1,931	\$	17,379
Amendment No. 46           MSI-6043         POM         Asbestos Abatement Services         \$ 330,000         \$ 33,000         \$ 297,000           MSI-6030         JPK/RHT/VPK         Tower Top Amplifier Upgrade for Early Deployment Site Transition         \$ 45,728         \$ 4,573         \$ 41,155			Amendment No. 45 Subtotal		-		•		
MSI-6030 JPK/RHT/VPK Tower Top Amplifier Upgrade for Early Deployment Site Transition \$ 45,728 \$ 4,573 \$ 41,155			Amendment No. 46						
MSI-6030 JPK/RHT/VPK Tower Top Amplifier Upgrade for Early Deployment Site Transition \$ 45,728 \$ 4,573 \$ 41,155	MSI-6043	POM	Asbestos Abatement Services	\$	330,000	\$	33,000	\$	297,000
	MSI-6030	JPK/RHT/VPK	Tower Top Amplifier Upgrade for Early Deployment Site Transition	+	•	<u> </u>			·
			Amendment No. 46 Subtotal	\$	375,728	\$		-	338,155

Change Order Number	Site ID	Item/Category		ntract Sum - able Amount	10% Holdback Amount		Payable Amount Less 10% Holdback Amount	
		Amendment No. 47						
MSI-6023	LARICS	LMR System Reconciliation - Engineering & Re-Racking Services	\$	174,641	\$	17,464	\$	157,177
MSI-6045	ONK	Add ONK Prime Site and ASR	\$	438,279	\$	43,828	\$	394,451
MSI-6040	RIH	Soil Removal	\$	41,676	\$	4,168	\$	37,508
MSI- 6031	BHS	Soil Removal	\$	41,577	\$	4,158	\$	37,419
MSI-6042	LPC	Soil Removal	\$	41,854	\$	4,185	\$	37,668
MSI-6041	MDI	Soil Sampling	\$	10,134	\$	1,013	\$	9,120
MSI-6034	RHT	Additional Topography	\$	3,733	\$	373	\$	3,360
		Amendment No. 47 Subtotal	\$	751,893	\$	75,189	\$	676,704
) (QY 60.64	. avv	Amendment No. 48						
MSI-6064	AGH	Easement Payment	\$	4,055	\$	406	\$	3,650
MSI-6062	TOP	Monopole Painted Neutral Brown	\$	6,104	\$	610	\$	5,494
MSI-6050	LARICS	Core and Site Router/Switch Upgrade	\$	-	\$	-	\$	-
		Amendment No. 48 Subtotal	\$	10,159	\$	1,016	\$	9,143
		Amendment No. 49						
MSI-6061	Various	New Antenna Models and Powder Coating	\$	110,000	\$	11,000	\$	99,000
		Removing impediments to road access caused by erosion to the site						
MSI-6067	MTL2	road, etc	\$	-	\$	-	\$	-
MSI-6069	LARICS	Audio Loopback	\$	-	\$	-	\$	-
		Amendment No. 49 Subtotal	\$	110,000	\$	11,000	\$	99,000
		Amendment No. 50						
MSI-6076	PRG/AGH	PRG Relocation to AGH for NMDN System	\$	13,678	\$	1,368	\$	12,310
MSI-6077	PRG	VIAMM Implementation	\$	38,615	\$	3,862	\$	34,754
		BJM & TWR Generator Noise Mitigation Engineering Assessment						
MSI-6086	BJM/TWR	Services	\$	221,211	\$	22,121	\$	199,090
MSI-6079	MML	MML Buried Concrete and Rebar Removal	\$	101,604	\$	10,160	\$	91,444
		Amendment No. 50 Subtotal	\$	375,108	\$	37,511	\$	337,597
		Amendment No. 51				,		
MSI-6094/		1 menument 100.51	1					
MSI-7014	FCCF/PLM	Leased Fiber Link between FCCF and PLM	\$	11,617	\$	1,162	\$	10,455
MSI-6096	ССВ	Microwave Installation Modification	+	11,017	ф	1,102		10,433
WISI-0090	ССВ		\$	-	\$	-	\$	
		Amendment No. 51 Subtotal	\$	11,617	\$	1,162	\$	10,455
		Amendment No. 52						
MSI-7005	СРК	Road Work for Access	\$	23,393	\$	2,339	\$	21,054
MSI-7007	СРК	Utility Power Provision to CPK Site	\$	10,966	\$	1,097	\$	9,869
1,161 ,00,		·		•		·		
		Amendment No. 52 Subtotal	\$	34,359	\$	3,436	\$	30,923
		Amendment No. 53						
MSI-7003	Various	VIAMM Multiple Site Implementation	\$	186,594	\$	18,659	\$	167,935
		^					-	
MSI-7010	MDI	Utility Power Work	\$	155,866		15,587	\$	140,279
		Amendment No. 53 Subtotal	\$	342,460	\$	34,246	\$	308,214
MSI-7011	RPVT	Amendment No. 54  [Utility Power Survey Services]	Φ	11.000	Φ	1 100	Φ	0.000
MSI-7011 MSI-7012	WMP and WTR	Utility Power Work	\$	11,000	\$	1,100	\$	9,900
MSI-7012 MSI-7015	CPK	Subgrade Concrete Structure Evaluation Services	\$	121,895	\$	12,190	\$	109,706
1/1017	CFK		\$	5,812	\$	581	\$	5,231
		Amendment No. 54 Subtotal	\$	138,707	\$	13,871	\$	124,836
MCI 7012	TOD	Amendment No. 55	Φ.	10 < 10 <	ф	10.712	Φ	152 515
MSI-7013	ТОР	Outdoor Power System and Equipment	\$	196,126		19,613		176,513
		Amendment No. 55 Subtotal	\$	196,126	\$	19,613	\$	176,513

Change Order Number	Site ID	Item/Category Contract Sum - Payable Amount				% Holdback Amount	Payable Amount Less 10% Holdback Amount		
		Amendment No. 56							
MSI-7008	TOP	Biota Reports	\$	13,972	\$	1,397	\$	12,575	
		Amendment No. 56 Subtotal	\$	13,972	\$	1,397	\$	12,57	
		Amendment No. 57							
MSI-7024	СРК	Removal of Subgrade Concrete Structure	\$	8,566	\$	857	\$	7,70	
		Amendment No. 57 Subtotal	\$	8,566	\$	857	\$	7,70	
		Amendment No. 58			1				
MSI-7025	UNIV	Redesign Work	\$	61,668	\$	6,167	\$	55,50	
		Amendment No. 58 Subtotal	\$	61,668	\$	6,167	\$	55,50	
MGI 70.40	DOI:	Amendment No. 59							
MSI-7049	POM	Correction of Fire Alarm Deficiency	\$	5,282	\$	528	\$	4,75	
MSI-7044	RPVT	Antenna Powder Coating	\$	6,874	\$	687	\$	6,18	
MSI-7051	LAC072	Antenna Powder Coating	\$	509	\$	51	\$	45	
MSI-7045	MML	Utility Power Survey	\$	3,465	\$	347	\$	3,11	
		Amendment No. 59 Subtotal	\$	16,130	\$	1,613	\$	14,51	
MSI-7060	WTR	Amendment No. 63 Utility Power Provision	Ф	10.700	Ф	1.070	Ф	0.70	
WISI-7000	WIK	·	\$	10,788	\$	1,079	\$	9,70	
		Amendment No. 63 Subtotal	\$	10,788	\$	1,079	\$	9,70	
MSI-7064/		Amendment No. 64 and Amendment No. 88							
MSI-7090	TWR	Survey for SCE Conveyance	\$	12,428	\$	1,243	\$	11,18	
14151 7070		nent No. 64 nd Amendment No. 88 Subtotal	\$	12,428	\$	1,243	\$	11,18	
	Amenun	Amendment No. 77	Ψ	12,420	Ψ	1,243	Ψ	11,10	
MSI-7072	UNIV	Power Meter Payment	\$	8,494	\$	849	\$	7,64	
MSI-7067	FRP	Bollards Around SCE Transformer	\$	7,636	\$	764	\$	6,87	
		Amendment No. 77 Subtotal	\$	16,130		1,613		14,51	
		Amendment No. 83	Ψ	10,100	Ψ	1,010	Ψ	1 1,02	
MSI-7077	BUR1	Antenna Changes FCC Requirements	\$	17,412	\$	1,741	\$	15,67	
		Amendment No. 83 Subtotal	\$	17,412		1,741		15,67	
		Amendment No. 86		,		,		,	
MSI-7080		LMR DTVRS UHF Information Only Coverage Testing	\$	-	\$	-	\$		
MSI-7085	GRM	Surveying for Power Easement	\$	6,197	\$	620	\$	5,57	
MSI-7084	PMT	Road Maintenance	\$	5,241	\$	524	\$	4,71	
MSI-7086	WMP	Road Maintenance	\$	2,948	\$	295	\$	2,65	
		Amendment No. 86 Subtotal	\$	14,386	\$	1,439	\$	12,94	
		Amendment No. 88							
		USFS Sites Field Implementation of VIAMM – Ice Shields and							
MSI-7083	Various	Awnings	\$	15,518	\$	1,552	\$	13,96	
MSI-7089	BKK	MPLS Reconfiguration	\$	414	\$	41	\$	37	
MSI-7091		iPASONET Server Replacement	\$	-	\$	-	\$		
		Amendment No. 88 Subtotal	\$	15,932	\$	1,593	\$	14,33	
OTAL EOD	AII IMP C	HANGE ORDER MODIFICATIONS	\$	3,302,078	4	330,208	\$	2,971,87	

Note 1: The above identified Change Order Modifications have been fully negotiated between the Authority and the Contractor, and the above amounts represent a full and final resolution of all changes contained in those identified Change Order Modifications.

#### **SCHEDULE OF PAYMENTS**

#### **EXHIBIT C.22 - LMR SUBSYSTEM ACCEPTANCE PAYMENT SCHEDULE**

TOTAL HOLDBACK AS OF AMENDMENT NO. 87	HOLDBACK
Phases 1 to 4 Holdback	13,570,061
LMR Change Order Modifications Holdback	330,208
LMR Unilateral Amendments Holdback	127,181
MPLS Mobile Backhaul Holdback	220,000
Subsystem Hold Back Total	14,247,449

Subsystem	Date of Completion	Percentage	Payment of Subsystem Phase 4 Completion Acceptance	Subsystem Acceptance Testing	Release of Holdback at each Subsystem Acceptance	Release of \$1.5M of Holdback at Final Acceptance	Holdback One	Total
NMDN (Phase 1)	7/19/2022	10%	\$921,735	\$256,323	\$553,764	\$149,481	\$705,708	\$2,587,010
DTVRS	3/10/2023	55%	\$5,069,545	\$1,409,776	\$3,080,675	\$826,817	\$3,936,209	\$14,323,022
LARTCS	7/28/2023	10%	\$921,735	\$256,323	\$553,764	\$149,481	\$705,708	\$2,587,010
ACVRS	8/3/2023	20%	\$1,843,471	\$512,646	\$1,113,153	\$300,000	\$1,423,596	\$5,192,866
NMDN (Phase 2) Completion final System Documentation	n 9/26/2023	5%	\$460,868	\$128,161	\$269,930	\$74,221	\$346,762	\$1,279,942
Functional Test Acceptance				\$380,828	\$21,157		\$21,157	\$423,142
Special Operational Test Acceptance				<del>\$0</del>	<del>\$0</del>		<del>\$0</del>	<del>\$0</del>
Stress Test Acceptance				<del>\$0</del>	<del>\$0</del>		<del>\$0</del>	<del>\$0</del>
Voice Aerial Coverage Test Acceptance				<del>\$0</del>	\$9		<del>\$0</del>	<del>\$0</del>
Voice Waterway Coverage Test Acceptance				<del>\$0</del>	<del>\$0</del>		<del>\$0</del>	<del>\$0</del>
Voice Subscriber Access Test Acceptance				\$95,207	\$5,289		\$5,289	\$105,785
NMDN CAD Baseline System Test Acceptance				\$47,603	\$2,645		\$2,645	\$52,893
FinalSystem Acceptance		100%	\$9,217,354	\$3,086,867	\$5,600,376	\$1,500,000	\$7,147,073	\$26,551,670

#### **AGENDA ITEM K - ENCLOSURE**