



**SYSTEM PURCHASE AGREEMENT**

**BETWEEN**

**WASHOE COUNTY**

---

**(Buyer)**

**and**

**HARRIS CORPORATION  
COMMUNICATION SYSTEMS SEGMENT  
(Seller)**

**DATE: Sept. 27, 2018**

# SYSTEM PURCHASE AGREEMENT

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## SYSTEM PURCHASE AGREEMENT

**THIS SYSTEM PURCHASE AGREEMENT** ("Agreement") is made and entered into this 27<sup>th</sup> day of Sept, 2018 ("Effective Date"), by and between WASHOE COUNTY, 1001 E. Ninth St. Reno Nevada, 89520, (hereinafter referred to as "Buyer") and Harris Corporation, a Delaware corporation, acting through its Communication Systems Segment (hereinafter referred to as "Seller") together the ("Parties").

### WITNESSETH:

**WHEREAS**, The State of Nevada, acting by and through its Department of Transportation, Washoe County, Nevada, a political subdivision of the State of Nevada, and Nevada Energy, ("**NSRS Members**") previously entered into that certain contract Nevada Shared Radio System Contract, dated as of May 9, 2017 (the "**Member Agreement**"), pursuant to which the NSRS members issued a Request for Proposal entitled "REVISED REQUEST FOR PROPOSAL, 697-16-016, Project Specifications and Instructions for Submitting a Proposal to furnish Nevada Shared Radio Replacement Project"(collectively, the "RFP") requesting proposals to provide NSRS Members with a radio communications System and services ("**Nevada Shared Radio System**"), as set forth in the RFP.

**WHEREAS** Buyer has selected Seller's Proposal and now desires to enter into this Agreement with Seller to provide Buyer with the radio communications and services that Buyer requires to support its obligations under the Member Agreement and as set forth in the Scope of Work attached to this Contract as an exhibit.

Nevada Shared Radio System, when fully implemented for each NSRS Member, will incorporate sub-systems for each NSRS Member, while together operating as an integrated statewide communication system providing communication for all NSRS Members. The Nevada Shared Radio System, as designed by Seller, will only operate as an integrated statewide communication system when all NSRS Members have contracted with Buyer to provide each NSRS Members' sub-system of the total system. The Nevada Shared Radio System will be implemented for all NSRS Members simultaneously on a regional basis as set forth in the Scope of Work attached to this Contract as an exhibit. ("**Shared Regional Implementation**").

**WHEREAS** Buyer and Seller desire to enter into this Agreement to set forth in writing their respective rights, duties and obligations hereunder.

**NOW, THEREFORE**, for and in consideration of the mutual promises contained herein and other good and valuable consideration, the sufficiency and receipt of which are hereby acknowledged, it is mutually agreed between the Buyer and Seller as follows:

### SECTION 1. DEFINITIONS:

As used herein, the terms set forth below shall have meanings set forth below.

- A. "Acceptance" shall mean Acceptance of the System as set forth in the Testing and Acceptance section of this Agreement.
- B. "Acceptance Date" shall mean the date the System is accepted as set forth in the Testing and Acceptance section of this Agreement.

- C. “Acceptance Tests” shall mean the testing procedures attached to the Statement of Work and mutually agreed upon by Buyer and Seller to be performed to determine whether the System has met the Acceptance criteria either set forth in the Statement of Work attached to this Agreement as an exhibit or as mutually agreed upon in writing by Buyer and Seller.
- D. “Certificate of Insurance” shall mean the certificate to be provided by Seller evidencing the insurance coverage of Seller.
- E. “Change Order” shall mean a written modification to the Total Agreement Price, Project Schedule or other Agreement terms which is signed by both Parties.
- F. “Detailed Design Documents” shall mean those documents deliverable by Seller to Buyer at the conclusion of the Detailed Design Review described in the subsection Detailed Design Review under the Project Management Planning section of this agreement.
- G. “Detailed Design Review” or “DDR” shall have the meaning given in the subsection Detailed Design Review under the Project Management Planning section of this agreement.
- H. “Documentation Deliverables” shall mean the standard commercial quality manuals to be furnished by the Seller to the Buyer pursuant to the terms set forth in the Statement of Work attached to this Agreement as an exhibit and this Agreement.
- I. “Effective Date of the Agreement” shall be the date on which the Agreement is signed by the last of the parties to sign the Agreement. The “Effective Date” shall be the date inserted on the first page of the Agreement.
- J. “Expiration Date” shall mean the date on which the Term of this Agreement shall end which shall be the end of the Warranty Period (as defined in the Warranty Section) except that some other sections of this Agreement may have a later end date for that section of the Agreement as specifically provided in those sections of this Agreement.
- K. “Final System Acceptance” shall mean the Final Acceptance for the NSRS pursuant to section 13 paragraph E.
- L. “Hardware” shall mean, collectively, the Terminal Hardware and Infrastructure Hardware, as defined below.
- M. “Infrastructure Hardware” shall mean the equipment, goods, and materials to be supplied by Seller for the System infrastructure, as further described in the Statement of Work attached to this Agreement as an exhibit.
- N. “Project Kick-Off Meeting” shall have the meaning given in the Project Management and Planning section of this Agreement.
- O. “Project Manager” shall mean each respective Party’s duly authorized representative designated to manage each Party’s Project obligations.
- P. “Project Schedule” shall mean the schedule attached to the Statement of Work or otherwise mutually agreed upon by Seller and Buyer in writing for the delivery of the Hardware and Software and the performance of the Services described in the Statement of Work attached to this Agreement as an exhibit.

- Q.** “Project Sites” shall mean those sites where any construction work is performed or any Infrastructure Hardware is installed under the terms of this Agreement. The term “Project Sites” will include all of the Tower Sites (as defined below).
- R.** “Punch list” shall mean a list of non-service affecting defects in the appearance, operation or installation of the system infrastructure hardware, which the seller shall promptly resolve.
- S.** “Responsibility Matrix” shall mean the table included in the Statement of Work attached to this Agreement as an exhibit, which depicts the roles and responsibilities of Seller and Buyer set forth this Agreement.
- T.** “RFP” shall mean Buyer's request for proposal as described in the recitals of this Agreement.
- U.** “Services” or “Work” shall mean the services and work to be provided by Seller to Buyer included in the Statement of Work attached to this Agreement as an exhibit.
- V.** “Software” shall mean the proprietary computer software of Seller as owned exclusively by Seller or Seller's suppliers, as appropriate, and as further defined in and licensed to Buyer pursuant to the terms of the Software License Agreement.
- W.** “Software License Agreement” shall mean the System Software License Agreement set forth in an exhibit attached to this Agreement.
- X.** “Statement of Work” shall mean the description of the work to be performed by Seller to deliver the Hardware, install the System and provide the Services, all as described in an exhibit attached to this Agreement.
- Y.** “System” shall mean the radio communications System comprised of the Hardware and Software to be furnished by Seller to Buyer pursuant to the terms set forth in the Statement of Work attached to this Agreement as an exhibit.
- Z.** “Terminal Hardware” shall mean mobile units, portable units, control stations and related accessories to be provided by Seller as listed in the Statement of Work attached to this Agreement as an exhibit.
- AA.** “Subcontractor” shall mean a business or individual not employed by Seller and contracted with Seller to perform work on behalf of Seller.
- BB.** “Total Agreement Price” shall mean the price of the Hardware, the Software license and the Services to be furnished by Seller to Buyer pursuant to the terms set forth in the Statement of Work attached to this Agreement as an exhibit and this Agreement.
- CC.** “Tower Sites” shall mean those sites where equipment will be installed on existing or new towers as included in the Seller’s Proposal and to be finalized in the Detailed Design Documents or subsequent Change Orders.

## **SECTION 2. SCOPE OF WORK:**

- A. Seller shall furnish, deliver and install the Hardware and Software for the System and provide the Documentation Deliverables and Services in accordance with the terms of the Statement of Work, attached to this Agreement as an exhibit, the Project Schedule and this Agreement.
- B. The Detailed Design Documents, as described in the Project Management and Planning section of this Agreement and as amended by mutual agreement in writing by the Parties, shall be incorporated into this Agreement after the Detailed Design Documents are approved by the Buyer and thereafter shall supersede any contrary provisions in the Statement of Work attached to this Agreement as an exhibit.
- C. Seller shall commence, carry on and complete its obligations under this Agreement with all deliberate speed in accordance with the dates set forth in the Project Schedule and in a sound, economical and efficient manner, in accordance with this Agreement and all applicable laws. In providing services under this Agreement, Seller agrees to cooperate with the various departments, agencies, employees and officers of Buyer.
- D. Seller agrees to secure at Seller's own expense all personnel necessary to carry out Seller's obligations under this Agreement. Such personnel shall not be deemed to be employees of Buyer nor shall they have or be deemed to have any direct contractual relationship with Buyer. Seller expressly understands and agrees that the Seller is and shall in all respects be considered an independent contractor.

## **SECTION 3. PROJECT MANAGEMENT AND PLANNING:**

- A. **Project Managers.** Seller shall designate a Project Manager who will lead the Seller' team for the System installation project and other Services and Work described in this Agreement (the "Project") and will serve as the Buyer's primary point-of-contact for Seller's project team and the official liaison between Seller's project team and Buyer. Buyer shall designate a Project Manager to function as the primary point-of-contact and official liaison between Seller's Project Manager and the Buyer.
- B. **Project Completion Dates.** The Project completion dates are described in the schedule included in the Statement of Work, entitled "Project Schedule." The Project Schedule may only be modified by mutual written approval of the Parties or as otherwise provided in this Agreement.
- C. **Project Kick-off Meeting.** Promptly after the Effective Date of the Agreement, the Seller's Project Manager shall schedule a Project Kick-Off Meeting, the timing and location of which will be mutually agreed upon by Seller and Buyer. The objectives of this meeting include introduction of all project participants, review of the roles of the project participants, review of the overall project scope and objectives, review of the resource and scheduling requirements and review of current site status.
- D. **Site Visits.** All existing towers, shelters and associated equipment provided by or mandated by Buyer shall be satisfactory in all manners to accommodate the System proposed by the Seller. Following the Effective Date of the Agreement, the Buyer shall provide Seller with access to all Project Sites upon reasonable notice to allow Seller and additional team members designated by the Buyer to thoroughly examine each Site and to perform the Detailed Design Review, to prepare a schedule of preparatory work required for each site and a timeline for completion of the preparatory work at each site.
- E. **Construction Management Services, Site Preparatory Work.** Seller shall perform the civil construction services set forth in the Statement of Work and the Responsibility Matrix including, but not limited to, the site improvement civil construction to be performed at the identified sites. After

execution of this Agreement, Seller shall identify and disclose to Buyer any and all problems or conditions at all Project Sites identified during the site visits of which Seller is aware that may affect the Work to be performed by Seller under this Agreement.

F. **Detailed Design Review.** The Detailed Design Review (“DDR”) phase will commence after the Effective Date of the Agreement, and conclude at a mutually acceptable time to maintain adherence to the Project Schedule. During the DDR, Seller’s Project Manager and project team will meet with Buyer’s project team on one or multiple occasions to review the System design, technical data, and site specific information to confirm and to refine the System and Tower Sites. At the conclusion of the DDR, Seller will provide Buyer with the following documents (the “Detailed Design Documents”) for review and approval by Buyer:

- Final Siting Plans
- Project Schedule
- Final pricing for site civil construction and microwave infrastructure
- Final pricing for Project Management services
- Engineered Site plans (sufficient for the Buyer to obtain required zoning approvals) and construction drawings for each site.
- Shelter Floor Plan Drawings
- Rack Elevation Drawings
- System Block and Level Diagrams
- Power and HVAC Loads
- Antenna Network Diagrams
- Site Frequency Plans (including spectrum analysis and intermodulation studies of existing and proposed frequencies at each site).
- TX Combiner Plan by Site
- Network Backhaul Plans
- Radio Frequency plans
- Cutover plan
- Staging Acceptance Test Plan (SATP)
- Coverage Acceptance Test Plan (CATP)
- Final Acceptance Test Plan (FATP)
- Equipment list
- Location of demarcation points for any items to be provided by the Buyer
- Site installation drawings, including room layouts, all cable runs, and grounding
- Antenna drawings including antenna placement on tower and coaxial cable loading information, antenna center line heights, and any other equipment mounted on the tower on a site by site basis
- Tower structural analysis results for towers passing analysis

- Structural analysis detailing required tower modifications for any towers that fail analysis
- Any other documents as mutually agreed upon by the parties.

Buyer shall have Twenty business (20) days to conduct its review of the above documents. Approval of Detailed Design Documents by the Buyer shall not be unreasonably withheld, conditioned or delayed.

- G. Project Schedule.** The Project Schedule for the Work is included in the Statement of Work, as an attachment entitled "Project Schedule." Updates to the start dates and durations will be made as the information evolves and will be mutually agreed upon by both parties or updated as otherwise provided herein.
- H. System Implementation Communications.** Seller and Buyer shall jointly establish a plan that defines regular meetings, reporting structure, and other communications activities, including working sessions that may be needed throughout the term of this Agreement to plan sub-tasks, including at a minimum: (a) one or more DDR meetings to communicate the final engineering design; (b) formal monthly reports to Buyer's Project Manager concerning work in progress and accomplishments; (c) weekly status meetings at which the parties' Project Managers and other project participants will provide updates; (d) conference calls with Seller's and Buyer's project teams to discuss tasks, assign responsibility, and establish schedules; and (e) workshops or working sessions that may be needed throughout the Project to plan subtasks.
- I. Buyer Approvals.** Buyer will acknowledge receipt of and review and respond with reasonable promptness to all submittals or other items requiring its approval under this Agreement. For all such submittals or other items Buyer will provide the Seller with either; (i) written notification of Buyer's approval, or (ii) a written notification of conditional approval subject to Seller providing prompt correction of any noted deficiency, or (iii) in the case of a submittal that does not meet the requirements of the Agreement, a written notification of Buyer's disapproval. Buyer's disapproval notification will be provided with reasonable detail to sufficiently advise Seller of the basis on which the submittal was determined to be unacceptable. Buyer agrees that, except as otherwise provided, failure to provide approval, conditional approval or non-approval of a submittal for which its approval is required within fifteen (15) business days of acknowledgement of receipt of the submittal from the Seller may result in a delay to the Project and that Seller may take any action allowed under this Agreement including but not limited to a Change Order as defined under this Agreement for such delays. Seller understands and agrees that Buyer is a political subdivision governed by a Board of Commissioners who may be required to approve certain submittals, and that the process for doing so may take several weeks or more. For all such submittals the Parties hereto agree Buyer shall use reasonable efforts to present any such submittals to the Board of Commissioners for their review and possible approval in such manner as to avoid delays to the Project. The parties agree that this section, Project Management and Planning, does not relate to the Testing and Acceptance procedures in the Testing and Acceptance section of this Agreement.

#### **SECTION 4. OBLIGATIONS FOR SYSTEM IMPLEMENTATION:**

The following subsections apply to the Work to be performed under the Agreement.

- A. Project Management and Implementation Plan.** Buyer and Seller each agree to perform their respective tasks and obligations pertaining to permits and licenses, Project Site surveys, general Project Site-related responsibilities, general Hardware-related responsibilities, and Project Site-specific

responsibilities as set forth in the Statement of Work. The Buyer's obligations set forth in the Statement of Work shall be performed by Buyer in a timely and proper fashion in accordance with the Project Schedule, or as otherwise agreed upon by Buyer and Seller, to allow Seller to timely perform its obligations under the Agreement.

- B. **Access.** Buyer shall provide access, at no cost to Seller, to all owned, leased, or licensed Project Sites at reasonable times, and with an escort (if required) at no charge, upon reasonable prior notification from Seller. Buyer shall ensure sufficient room, within reason, for construction vehicles used by Seller. Seller shall identify any concerns with access to the Project Sites at the time of the DDR. After DDR any new concerns that were not present at the time of the DDR will be raised to the Buyer at the time any new concern is known. Buyer shall issue temporary identification cards to Seller's personnel and its authorized subcontractors, if required, for access to any of the Project Sites.
- C. **Changes in Sites.** Any sites where Seller will operate and perform System installation under the terms of this Contract must be approved by Buyer, which approval shall not be unreasonably withheld, delayed or conditioned. Should Buyer direct an addition to, removal from, or modification of the list of sites as detailed in this Agreement that affects Seller's cost or schedule or System performance, including, but not limited to coverage, the parties agree that such change shall entitle Seller to a Change Order and each Party shall attempt, in good faith to fully negotiate and execute such Change Order prior to commencement of the Work at the changed site.
- D. **Preparatory Work on Sites.** Notwithstanding anything to the contrary contained in this Agreement, the parties agree that some Project Sites may require tower replacement or modifications, as well as related permitting and licensing for Work and/or obtaining physical real estate space. As stated in the Responsibility Matrix, Buyer shall be responsible for securing all necessary site zoning, site access, or other permits (including but not limited to easements, impact studies, planning commission approval, variances, etc.) necessary for the Work, whether required by federal, state, or local authorities, with Seller assisting by providing information and any required civil engineering drawings. Buyer shall also have the responsibility to secure by lease, purchase, easement or otherwise all rights and access to selected sites or additional real estate as may be required. Buyer also shall be responsible for paying all utility charges to the appropriate utility for providing utility services to the System installation areas. The Parties agree to mitigate the need for tower replacement or modification to the extent practical. If any unanticipated tower replacements become necessary, Seller is entitled to an extension of time for any impacted activities and/or an equitable adjustment to the Contract Price to maintain the Project Schedule.
- E. **Frequency FCC Licensing.** The Buyer will be responsible for obtaining all Federal Communications Commission frequency licenses for the System, with Seller providing technical assistance and information as set forth in the Statement of Work. Seller shall provide the Buyer with a recommended frequency plan for the system with sufficient time as agreed with the Buyer to process request to acquire or purchase and license any frequency needed with the appropriate authorities. Seller has no responsibility or obligation to secure licensed frequencies. In the event Buyer fails to obtain FCC licenses, and such failure has a material impact on the cost of Work performed by Seller under the Agreement and/or the schedule, the parties agree that Seller shall be entitled to an equitable adjustment to the Project Schedule, the Total Agreement Price, or both and that a Change Order shall be agreed to by the parties.
- F. **Federal Aviation Administration (FAA) Approvals.** Buyer will be responsible for obtaining all FAA approvals for newly-constructed or modified towers with Seller providing technical assistance and information as set forth in the Statement of Work.

- G. Contractor Licenses.** Seller will be responsible for obtaining all contractor licenses required for the performance of its duties and obligations.
- H. Prevailing Wages.** Pursuant to NRS 338.020, every contract over \$250,000 (for Redevelopment Projects the contract amount is \$100,000) to which a public body is a party and that requires the employment of skilled or unskilled labor in the performance of a public work must contain in expressed terms the rate of wages to be paid to each of the classes of workmen. The rate of wages must not be less than the rate of such wages then prevailing in the county in which the public work is located. Unlike prevailing wage requirements under Federal law (Davis-Bacon) and requirements in many states that surround Nevada, Nevada's prevailing wage requirements may be met by providing a combination of wages and permissible benefits to the mechanic or workman. Prevailing wage rates and amendments are posted on the Labor Commissioner's website [www.labor.nv.gov](http://www.labor.nv.gov)
- I. Vietnam Veterans.** The SELLER agrees to comply with Section 402-Affirmative Action for Disabled Veterans and Veterans of the Vietnam Era Act.
- J. Equal Employment Opportunity.** The SELLER will not discriminate against any employee or applicant for employment or individual receiving the benefit of SELLER services because of race, creed, religion, color, age, national origin, political affiliation, sex, sexual orientation, familial status, or disability (as provided in Section 504 of the Rehabilitation Act of 1973, as amended). SELLER will take action to ensure that all applicants are considered equally. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination, rates of pay or other forms of compensation; and selection for training, including apprenticeship. The SELLER agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this non-discrimination clause. Such action shall include individuals benefiting from program services/activities.
- K. Americans with Disabilities Act.** The SELLER agrees to comply with any federal regulations issued pursuant to the Americans with Disabilities Act (ADA) and Section 504 of the Rehabilitation Act of 1973, as amended.
- L. Hatch Act.** Neither SELLER program nor the funds provided therefore, nor the personnel employed in the administration of the program shall be in any way or to any extent engaged in the conduct of political activities in contravention of Chapter 15 of Title 5, United States Code.
- M. Byrd Anti-Lobbying Amendment.** The SELLER agrees to conform to the regarding Influence/Lobbying Requirements as set forth in the Byrd Anti-Lobbying Amendment 31 U.S.C. 1352.
- N. Clean Air Act.** The SELLER agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act 42 U.S.C. 7401-7671 q and the federal Water Pollution Control Act as amended 33 U.S.C. 1251-1387.
- O. Drug-Free Workplace Requirements.** SELLER agrees to conform to the guidelines set forth in the certification regarding Drug-Free Workplace Requirements. SELLER certifies that it will provide a drug-free workplace by:
- a) Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession or use of a controlled substance is prohibited in the grantee's workplace and specifying the actions that will be taken against employees for violation of such prohibition;
  - b) Establishing a drug-free awareness program to inform employees about:
    1. The dangers of drug abuse in the workplace;
    2. The grantee's policy of maintaining a drug-free workplace;
    3. Any available drug counseling, rehabilitation, and employee assistance programs; and
    4. The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;

- c) Making it a requirement that each employee to be engaged in the performance of the grant be given a copy of the statement required by paragraph (1);
- d) Notifying the employee in the statement required by paragraph (1) that, as a condition of employment under the grant, the employee will:
  - 1. Abide by the terms of the statement; and
  - 2. Notify the employer of any criminal drug statute conviction for a violation occurring in the workplace no later than five days after such conviction;
- e) Notifying the agency within ten days after receiving notice under subparagraph (4) (b) from an employee or otherwise receiving actual notice of such convictions;
- f) Taking one of the following actions, within 30 days of receiving notice under subparagraph (4) (b), with respect to any employee who is so convicted;
  - 1. Taking appropriate personnel action against such employee, up to and including termination; or
  - 2. Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency;
- g) Making a good faith effort to continue to maintain a drug-free workplace through implementation of paragraphs (a), (b), (c), (d), (e) and (f).

**P. Debarment, Suspension and Other Responsibility Matters.** SELLER certifies to the best of its knowledge and belief that it and its principals:

- 1. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
- 2. Have not, within a three year period preceding this Agreement, been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- 3. Are not presently indicted for or otherwise criminally or civilly charged by a government entity (Federal, State, or local) with commission or any other offenses enumerated in (b) above;
- 4. Have not, within a three-year period preceding this Agreement, had one or more public transactions (Federal, State, or local) terminated for cause or default; and
- 5. Understands that a false statement on this certification may be grounds for rejection or termination of this Agreement. In addition, under 18 USC Sec. 1001, a false statement may result in a fine of up to \$10,000 or imprisonment for up to 5 years, or both.

## **SECTION 5. DELIVERY, TITLE AND RISK OF LOSS:**

- A. Infrastructure Hardware.** Seller shall ship the Infrastructure Hardware at Buyer's expense on or before the dates set forth in the Project Schedule. Buyer shall approve shipment to Buyer's secured facility before Seller ships. Seller will give Buyer three (3) business days-notice before shipment. Partial deliveries shall be permitted. Upon receipt of the equipment by the Buyer, title to each portion of the Hardware and all risk of loss or damage shall pass to Buyer. Infrastructure Hardware may be shipped directly to Buyer or to a mutually agreed upon staging or storage location. Upon transfer of title from Seller to Buyer, Buyer shall keep the Hardware fully insured.
- B. Terminal Hardware.** Seller shall ship the Terminal Hardware to Buyer at Buyer's expense. Seller shall only ship Terminal Hardware to Buyer at Buyer's request. Seller will give Buyer three (3)

business days-notice before shipment. Partial deliveries shall be permitted. Upon receipt of the Terminal Hardware by the Buyer, title to each portion of the Hardware and all risk of loss or damage shall pass to Buyer.

- C. Regardless of whether title has passed to Buyer, Seller is responsible for any damage to any Infrastructure or Terminal Hardware which is caused by any employee, agent, subcontractor, or other person or entity employed by Seller during installation and testing of such Hardware, from the time Seller takes physical control of the Hardware to final acceptance of System by Buyer.

#### **SECTION 6. PRICE:**

- A. The Total Agreement Price is the sum of the Infrastructure Hardware Price (Section 6.A.1), additional funds established for but not limited to Project Site Civil Infrastructure and Microwave Infrastructure (Section 6.A.2), and the total price of all Terminal Hardware (Section 6.A.3). The individual prices for the units of Hardware, the Software license and the Services to be performed are as set forth in the Price Schedule as an attachment to the Statement of Work. Buyer and Seller recognize that the pricing under this Agreement is dependent upon a volume discount based on the amount of Terminal and Infrastructure Hardware purchased by Buyer. In the event that the Buyer does not purchase the total Terminal and Infrastructure Hardware under this Agreement as represented in Exhibit 5 Equipment List and Exhibit 6 Price Schedule, [REDACTED]

- B. The Total Agreement Price to be paid by Buyer to Seller is Nineteen million, five hundred four thousand, two hundred eighty-seven and 28/100 United States Dollars (\$19,504,287.28). The individual prices for the units of Hardware, the Software license and the Services to be performed are as set forth in the Price Schedule as an attachment to the Statement of Work. Payments for the Infrastructure Hardware Price are addressed in Section 9.A.1.

1. The mutually agreed upon Seller radio system equipment pricing amounts have been priced on a commercial, firm-fixed price basis and are set forth in the table below and in the Total NSRS Price Summary, Table B.1 in Exhibit 6 to the Statement of Work. [REDACTED]

[REDACTED] he pricing amounts do not include any sales and use taxes. Applicable sales and use taxes, if any, will be included on invoices and payable by buyer.

- [REDACTED]
2. Due to the scope and nature of the Agreement, additional funds have been established to address Seller services, including but not limited to Project Site Civil Infrastructure and Microwave Infrastructure, that may be required to complete the project scope of work. The scope of services requiring the use of these additional funds will be agreed upon in writing by the Parties in a Change Order to this Agreement prior to the commencement of such services. The cost of services will also be negotiated prior to performing the services and will include all costs associated with the work.

[REDACTED] Services to be performed by the Seller shall not commence until its receipt of written approval from the Buyer.

3. Pricing for Terminal Hardware is specified on a per unit basis in Exhibit 6. Payments for Terminal Hardware equipment are addressed in Section 9.A.3.

4. [REDACTED] The definition of “third party materials” does not include any vendor materials listed in the Harris Price Catalog pages (“Vendor Materials”).

[REDACTED] Seller will provide a copy of the applicable Harris Price Catalog page as substantiation for the price of any Vendor Materials.

5. Terminal Hardware Pricing after extended warranty period:

## **SECTION 7. TAXES:**

In addition to any price specified herein, Buyer shall pay the gross amount of any present or future sales, use, excise, value-added, or other similar tax applicable to the price, sale or any Products or services furnished hereunder or to their use by Seller or Buyer, or Buyer shall otherwise furnish Seller with tax exemption certificates acceptable to all applicable taxing authorities.

## **SECTION 8. CHANGES AND ADDITIONS:**

- A. **Hardware Changes.** In the event of any change in the Hardware as a result of the imposition after the Effective Date of this Agreement of any requirements by any federal, state, or local government, Seller

shall be entitled to an equitable adjustment, by Change Order, in the Total Agreement Price, the Project Schedule, or both. Any such adjustment in the Total Agreement Price or Project Schedule shall be mutually satisfactory to Buyer and Seller. Price increases and/or extensions of time shall not be binding upon either Party unless and until evidenced by a Change Order signed by the parties hereto.

- B. Buyer Requested Changes.** Buyer may request changes in or additions to the Work or in the time or place of performance of the Work under this Agreement. If any such change causes an increase or decrease in the cost of, or the time required for, performance of any part of the Work under this Agreement, Buyer or Seller, as applicable, shall be entitled to an equitable adjustment, by Change Order, in the Total Agreement Price, the Project Schedule, or both. Any such adjustment in the Total Agreement Price or Project Schedule shall be mutually satisfactory to Buyer and Seller. Price increases and/or extensions of time shall not be binding upon either Party unless and until evidenced by a Change Order signed by the parties hereto.
- C. Buyer Delays In Performance.** To the extent that Buyer fails to timely perform its obligations under the Responsibility Matrix or otherwise under this Agreement, and such failure has a material impact on the cost of Work performed by Seller under the Agreement and/or the schedule, the parties agree that Seller shall be entitled to an equitable adjustment to the Project Schedule, the Total Agreement Price, or both. Any such adjustment in the Total Agreement Price or Project Schedule shall be mutually satisfactory to Buyer and Seller. Price increases and/or extensions of time shall not be binding upon either Party unless and until evidenced by a Change Order signed by the parties hereto.
- D. Concealed Conditions.** If, following Buyer's Acceptance of the Detailed Design Documents, Seller encounters a concealed condition, of which it had no reason to be aware, at one or more Project Sites, then the Parties agree to work together to determine the best course of action and agree to negotiate in good faith a Change Order and an equitable adjustment to the Project Schedule and/or Total Agreement Price. Any such adjustment in the Total Agreement Price or Project Schedule shall be mutually satisfactory to Buyer and Seller. Price increases and/or extensions of time shall not be binding upon either Party unless and until evidenced by a Change Order signed by the parties hereto.
- E. Product Discontinuance.** Subject to its obligation to fulfill its obligations set forth in the Agreement, Seller reserves the right to change or to discontinue any product covered by the Agreement provided that Seller agrees to make available to the Buyer a functionally equivalent replacement product equal to or better than the product discontinued.
- F. Frequency Support and Frequency Changes.** Seller shall reasonably support Buyer in submitting the Buyer's frequency licensing applications to the Regional authorities and the Federal Communications Commission for this project. In the event that, after all commercially reasonable efforts and due diligence have been expended, the Buyer cannot obtain all of the necessary United States and Canada government approvals for the frequency plan as described in this Statement of Work and this Agreement, it shall be treated as an excusable delay event pursuant to the Excusable Delays section of this agreement for which an extension to the Project Schedule shall be granted, and Seller will diligently and expeditiously prepare and provide to Buyer a System re-design for its review and approval including all price and schedule changes. Notwithstanding anything to the contrary contained in the Agreement, the Parties agree if a System re-design has a material impact on the cost of Work performed by Seller under the Agreement and/or the schedule, the parties agree that that Seller may be entitled to an equitable adjustment to the Total Agreement Price and/or the Project Schedule for Seller's services on any such System re-design. Any such adjustment in the Total Agreement Price or Project Schedule shall be mutually satisfactory to Buyer and Seller. Price increases and/or extensions of time shall not be binding upon either Party unless and until evidenced by a Change Order signed by

the parties hereto. In the event that Buyer and Seller cannot mutually agree on the System re-design, either party may then terminate the Agreement on thirty (30) days written notice to the other Party.

## **SECTION 9. PAYMENTS:**

- A. The Total Agreement Price for the Hardware, the Software license and the Services shall be paid by the Buyer to Seller following the pricing schedules below (Section 9, A.1 – A.3). The Seller shall submit a signed invoice in accordance with the pricing schedule for all services rendered along with one copy of documentation validating that work associated with the invoice has been completed. Invoices must be submitted on the Seller's stationary or on the Buyer's standard invoice form.
1. **Infrastructure Hardware.** Costs for Infrastructure Hardware are to be paid for by Buyer upon completion of the milestones specified in the project schedule, Exhibit 4, and as hereto specified.
- i. Six and a one quarter percent (6.25%) of the Total Agreement Price (excluding the aggregate price of the Terminal Hardware included in the Total Agreement Price) shall be due at the time of the signing of the Agreement by the Buyer and Seller.
  - ii. Twelve (12%) of the Total Agreement Price (excluding the aggregate price of the Terminal Hardware included in the Total Agreement Price) shall be due at the time of signed approval of the final Detailed Design Review.
  - iii. Ten percent (10%) of the Infrastructure Hardware Price (excluding the aggregate price of the Terminal Hardware included in the Total Agreement Price) shall be due at the time that the full Network Switching Center (NSC) Installation is commences.
  - iv. Fifteen percent (15%) of the Total Agreement Price (excluding the aggregate price of the Terminal Hardware included in the Total Agreement Price) shall be due at the time that the full Network Switching Center (NSC) Installation is complete.
  - v. Fifteen percent (15%) of the Total Agreement Price (excluding the aggregate price of the Terminal Hardware included in the Total Agreement Price) shall be due at the time of approval of Region two (2) Infrastructure Hardware factory staging as described in the project schedule.
  - vi. Twenty percent (20%) of the Total Agreement Price (excluding the aggregate price of the Terminal Hardware included in the Total Agreement Price) shall be due at the time of Region two (2) Infrastructure Hardware shipment and delivery to Buyer. Partial payments of the total Infrastructure Hardware amount due under this subparagraph shall be allowed and shall be calculated using the value of the Infrastructure Hardware shipped and delivered as a percentage of the total value of the Infrastructure Hardware to be shipped and delivered under the terms of this Agreement. The Buyer shall have the right to inspect and confirm that the Infrastructure Hardware included in Seller's invoice has been delivered to Buyer
  - vii. Fifteen percent (15%) of the Total Agreement Price (excluding the aggregate price of the Terminal Hardware included in the Total Agreement Price) shall be due upon completion and Buyer approval of the Buyer portion of Region Two (2) Hardware installation (exclusive of the mutually agreed upon value of any punch list items).
  - viii. Six and three quarters percent (6.75%) of the Total Agreement Price (excluding the aggregate price of the Terminal Hardware included in the Total Agreement Price) plus any remaining unpaid portion of the Total Agreement Price for all Hardware, Software and Services to be provided under the terms of this Agreement (excluding the aggregate

price of the Terminal Hardware included in the Total Agreement Price) shall be due upon Final System Acceptance (including resolution of all punch list items).

## **2. Site Civil Construction and Microwave Infrastructure Hardware and Services**

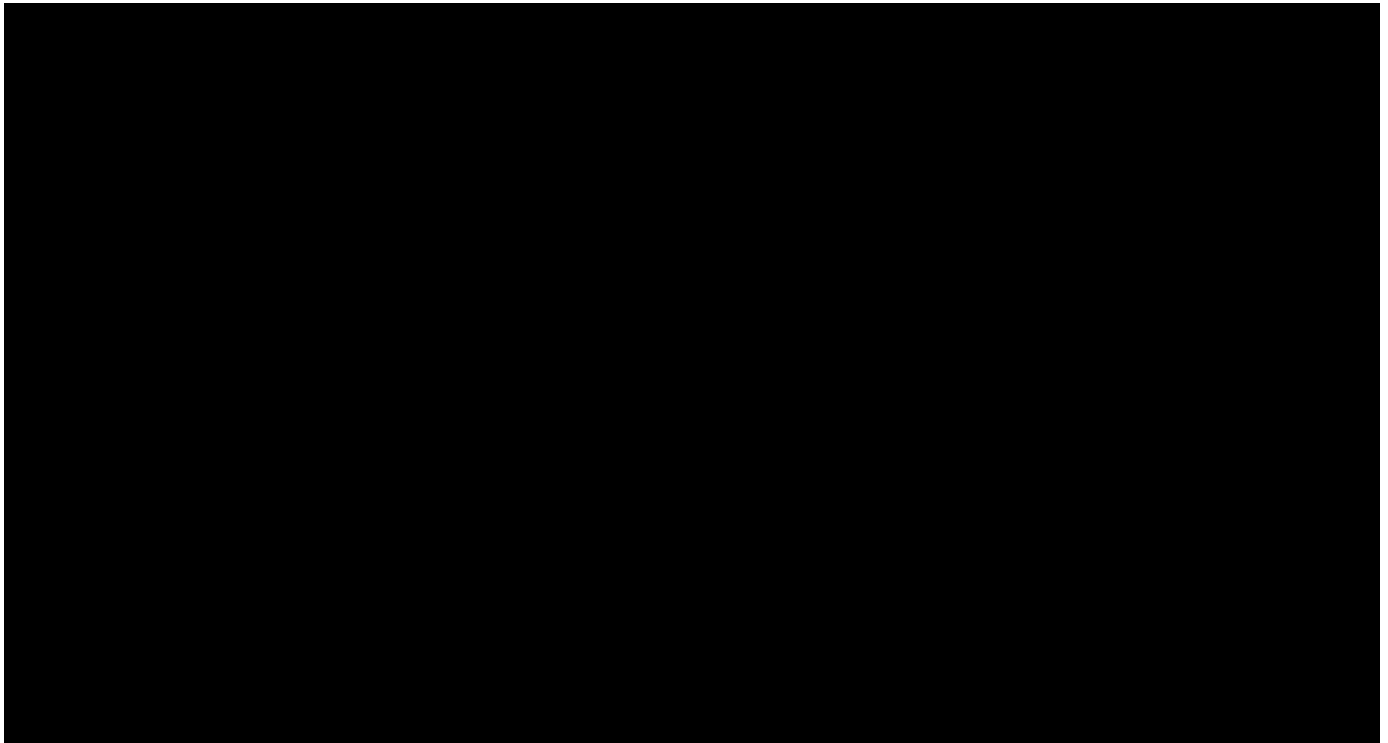
Payment in full at shipment of equipment and payment monthly on services, shall be due for civils related work.

1. Seller shall submit signed invoices for Site Civil and Microwave Infrastructure hardware and services based on pricing specified in the Final Detailed Design. Invoices shall be submitted when Site Civil or Microwave Infrastructure at one or more sites is complete.
2. Invoices submitted for Site Civil and Microwave Infrastructure hardware and services shall be accompanied by substantial documentation indicating work has been completed.
  - a. If Seller's subcontractor performed work, subcontractor's invoice to Seller shall be included as part of invoice documentation.
3. At completion of 100% of the site civil construction and microwave equipment, software, and licensing installation, including all punch list items, 100% of the cost detailed in the Final Detailed Design for site civil construction and microwave equipment, software, and licensing shall be paid by Buyer to Seller.

## **3. Terminal Hardware:**

One Hundred Percent (100%) of the purchase price of Terminal Hardware shall be invoiced upon Buyer's approval of shipment of units on a per unit basis.

## **4. Radio System Equipment Milestone Payments**



- B.** Buyer reserves the right to inspect and approve all work or deliverables performed by Seller under this Agreement before payment is made to the Seller. Payment will be withheld if Buyer determines any work or deliverables to be unsatisfactory in that they have not been provided in a workmanlike manner consistent with standards in the trade, profession, or industry. Payment shall remain unpaid until the professional services are completed in accordance with the standards and work requirements defined in this Agreement. In such an event, Buyer will provide the Seller with a written explanation as to why payment has been withheld.
- C.** **Payment of invoices**
1. The Seller shall be paid within thirty (30) calendar days of a received invoice which is complete, correct and undisputed by Buyer.
  2. Buyer shall have twenty (20) calendar days after receipt of an invoice to dispute any or all of the charges on that invoice. The undisputed amount shall be paid to the Seller within thirty (30) calendar days of receipt of an invoice. The disputed amount shall be negotiated and resolved in good faith by both Parties and paid within thirty ((30) calendar days after the date the corrected invoice is received by Buyer or is approved by both Parties for payment.
- D.** **Other Amounts** Any other amounts due Seller hereunder shall be due sixty (60) days following Buyer's stamped received date of Seller's proper invoice.

#### **SECTION 10. SUBCONTRACTING:**

Seller may subcontract any portion of Work to be performed by Seller hereunder and shall obtain prior approval and consent of Buyer, provided that Seller shall be responsible for the performance and Work of any such subcontractors.

Seller understands and agrees that Buyer is subject to an Interlocal Agreement which describes the operations of its portion of the radio system among the parties to that Interlocal Agreement. To build and implement the System as described herein Seller will require access to the Interlocal members' properties which include secure facilities such as police stations and jails. Seller is aware and agrees that those members have the right to require independent background checks performed by another entity. Buyer will use its best efforts in advance of any such need to obtain agreement from the members to accept the background checks performed by Seller and Seller will provide Buyer with the information requested by members to obtain that agreement. The Parties will work together to avoid delays and any impact on the critical path.

#### **Background Checks**

Access to Buyer controlled areas is granted on an as-needed basis only in accordance with Seller's internal badge and access policies. Buyer shall specify in the Release or Scope of Work whether or not the Work under this Contract requires either: (i) unescorted physical access to Buyer's Facilities;

or (ii) local or remote access to Buyer's Cyber Assets. For all Personnel who require either such access, Seller shall:

- a. Conduct, at Seller's cost and expense, a Personnel risk assessment to include at a minimum an identity verification and seven (7) year criminal background check for the current residence and past locations of residence of all Personnel requiring access. All background checks will be conducted in accordance with federal, state, provincial and local laws, and subject to existing collective bargaining unit agreements or other agreements, if any. A background check completed within two (2) years prior to the date the Seller signed a Seller/Vendor Information Form for each such person will be considered valid. Following the initial background check, updates shall be performed no less frequently than every seven (7) years or upon request by Buyer. In the event Buyer notifies Seller of impending expiration of a background check, Seller shall provide an updated Seller/Vendor Information Form reflecting a refreshed background check within twenty (20) days of receipt of the Notice in order to avoid revocation of such person's access. An appropriate authorization form must be signed by each of the Personnel prior to a background check being conducted, acknowledging that the background check is being conducted and authorizing the information obtained to be provided to Buyer;
- b. Ensure that Personnel have passed the background checks outlined in this subsection prior to requesting access to Buyer's Facilities and/or Cyber Assets. In the event any such person: (i) is currently under indictment for a crime punishable by imprisonment for a term exceeding one (1) year; (ii) has been convicted (within the past seven (7) years) in any court of a crime punishable by imprisonment for a term exceeding one (1) year; (iii) is currently a fugitive of justice; or (iv) is an alien illegally or unlawfully in the United States, such person shall be considered a "restricted person" and may not be granted access without prior written consent from Buyer. In the event any such person's background check reveals any residency gap of six (6) consecutive months or more, Seller shall review, evaluate, and document any such residency gap to ensure that it does not pose a risk to Buyer's Facilities or Cyber Assets, prior to making a determination that Personnel have passed the background check;
- c. Ensure that Personnel complete Buyer provided or approved training prior to requesting access;
- d. Ensure that Personnel have passed Seller's drug and alcohol exam and are in compliance with Seller's substance abuse/drug and alcohol policy; and
- e. Keep accurate and detailed documentation to confirm completion dates for background checks and all required training (initial and annual training, to the extent applicable), and certify to Buyer such documentation by completing an information form containing a complete record of the completed background checks for each person who will have access. Buyer has the right to audit Seller's records supporting each Seller/Vendor Information Form submitted to Seller and to verify that the requisite background checks and training were performed. Seller shall provide Buyer with all requested records supporting Seller/Vendor Information forms within a reasonable time after receiving such a request, and in the form requested by Buyer, but not longer than three (3) business days following the date of such request.
- f. Notify the Buyer in a timely manner of termination or change in status removing the need for access. In the case of Sensitive Personnel and/or involuntary termination, notification must

be immediate. In all other cases, notification must be within one business day.

- g. Seller shall not allow any person who has not met the foregoing requirements of this subsection to perform Work, unless Seller has received prior written consent from Buyer.

#### **SECTION 11. EXCUSABLE DELAYS:**

- A. Seller shall not be liable for reasonable delays in delivery or failure to perform due directly or indirectly to: (1) causes beyond Seller's reasonable control, (2) Acts of God, acts (including failure to act) of any governmental authority (de jure or de facto), wars (declared or undeclared), riots, revolutions, strikes or other labor disputes, fires, floods, sabotage, nuclear incidents, earthquakes, storms, epidemics, (3) Seller's inability to timely obtain necessary materials, items, components or services from suppliers who are affected by the foregoing circumstances, or (4) Buyer Delays in Performance of its obligations hereunder in a timely manner. The foregoing shall apply even though any of such causes exists at the time of signature of the Agreement by Seller or occurs after delays in Seller's performance of its obligations due to other reasons.
- B. In the event of any delay or failure excused by this Section Excusable Delays, Seller shall as soon as practical notify Buyer and shall at the same time, or at the earliest practical date after such notice, specify the revised delivery and performance dates. In the event of such delay, the time of delivery or of performance shall be extended for a reasonable time period to compensate for the time lost by Seller by reason of the delay.

#### **SECTION 12. SELLER'S INSURANCE AND PERFORMANCE BOND:**

- A. Buyer has established specific indemnification and insurance requirements for contracts/agreements with contractors/consultants to help ensure that reasonable insurance coverage is maintained. Indemnification and hold harmless clauses are intended to ensure that contractors/consultants are aware of and accept the responsibility for losses or liabilities related to their activities. Exhibit D is attached and included by reference. All conditions and requirements identified in this Exhibit shall be completed prior to the commencement of any work under this contract/agreement.
- B. The parties do hereby expressly agree that Buyer, acting at its sole option and through its Risk Manager, may waive any and all requirements contained in this section Seller's Insurance, such waiver to be in writing only. Such waiver may include or be limited to a reduction in the amount of coverage required above. The extent of waiver shall be determined solely by Buyer's Risk Manager taking into account the nature of the Work and other factors relevant to Buyer's exposure, if any, under this Agreement.
- C. Within ten (10) business days of execution of this Agreement, Seller shall provide Buyer with a surety bond for performance substantially in the form set forth in attachment to this Agreement, which bond shall terminate upon final System Acceptance as set forth in subsection A above.

#### **SECTION 13. TESTING AND ACCEPTANCE:**

- A. **NSRS Regional Implementation:** An NSRS Region means those 3 divisions as defined in Figure 1 – NSRS Regional Map, contained in Exhibit 10 - Statement of Work- Project Implementation Plan

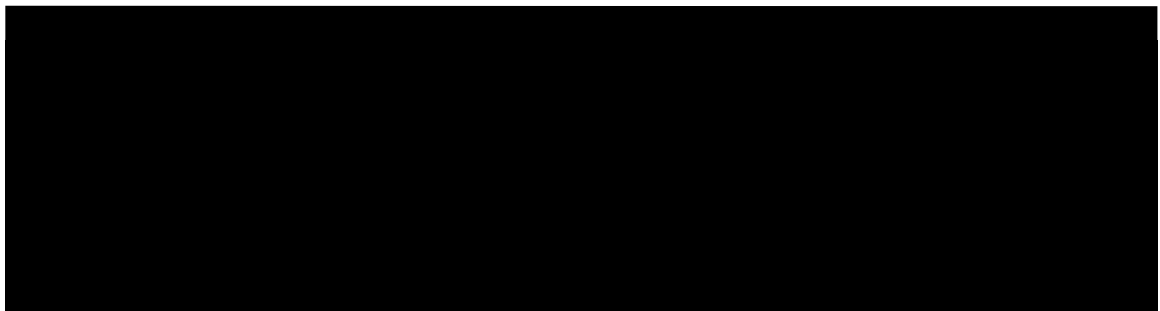
(“NSRS Region”). Each NSRS Region will be implemented simultaneously for each NSRS Member. Buyer and Seller agree that the Project will begin by performing the System Implementation project tasks on an NSRS Region by NSRS Region Basis at the direction of the NSRS Members. The Infrastructure Hardware and associated Software for each NSRS Region shall meet the requirements for the Factory Testing Phase defined below prior to the shipment of the hardware. Buyer, other NSRS Members and Seller will have developed and agreed upon an Acceptance Testing Plan for each NSRS Region by the end of the Detailed Design phase of the Project.

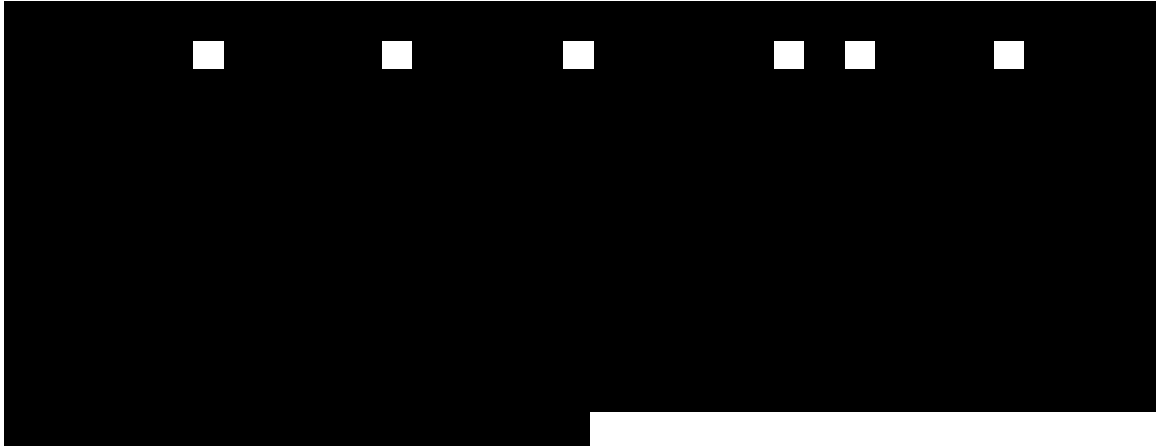
- B. The Factory Testing Phase:** For each NSRS Region, the Factory Testing Phase, NSRS Members and Seller shall approve a Factory Acceptance Test Plan (“FATP”), which shall include visual inspections, verification of electrical parameters of the Hardware and associated Software, functional tests, system resiliency and other aspects of the Hardware and associated Software or systems, conducted in accordance with standards of good engineering practice and including such other quality control and product approval procedures as the manufacturer normally conducts on such Hardware and associated Software, to determine whether the Hardware and associated Software meets its Specifications according to the FATP. For each NSRS Region, the Factory Test Phase shall be conducted by Seller with NSRS Members observing on Hardware it manufactures in addition to third party products in the design. Such processes and results of such tests shall be documented and the documentation for each piece of Hardware and associated Software shall be provided to Buyer and NSRS Members within fourteen (14) business days of the date the Hardware is shipped to Nevada. The presentation of such documentation by Seller or Seller’s supplier to Buyer shall constitute Seller’s representation that the statements in the documents are true and correct, and that the factory testing according to the FATP and as observed by the NSRS Members for such Hardware and associated Software have been met. The shipment of Hardware for installation shall also constitute Seller’s representation that the FATP for such Hardware and associated Software have been met. No Hardware shall be shipped or installed before it has met the FATP. NSRS Members and Seller shall jointly commence the Acceptance Tests on a mutually agreeable date and a representative of Seller and a representative of each NSRS Member shall sign off on the form provided as part of the test procedure whether each item of the test was passed or failed.
- C. Regional Acceptance Testing:** Seller shall notify Buyer and the other NSRS Members that an NSRS Region is ready for Acceptance Tests at least fifteen (15) business days before commencement of the Acceptance Tests. Acceptance Testing is defined as set out in the Functional Acceptance Test Procedures, SOW Exhibit 8, and the Coverage Character Test Procedures, SOW Exhibit 9, and shall include such other tests and procedures as Buyer or other NSRS Members may reasonably request during the development of the Acceptance Testing Plan during the Detailed Design Phase of the project. NSRS Members and Seller shall jointly commence the Acceptance Tests on a mutually agreeable date and a representative of Seller and a representative of each NSRS Member shall sign off on the form provided as part of the test procedure as to whether each item of the test was passed or failed. If the NSRS Region does not fulfill the requirements of the Acceptance Tests, and the failure is solely attributable to Seller’s obligations under this Contract, Seller shall promptly correct the defects at no additional cost to Buyer and other NSRS Members as needed. Upon correction of the defects the Acceptance Tests for the applicable part of the NSRS Region shall be repeated in accordance with the procedures set forth in this Section and the Acceptance Testing Plan. Successful completion of the Acceptance Tests with all test having passed for an NSRS Region is the sole criterion for technical NSRS Regional Acceptance (“Regional Acceptance”) and the initiation of the Warranty Period for the Infrastructure Hardware with respect to the NSRS Region. For avoidance of doubt, initially, the first NSRS Region will be implemented and tested. Next, the second NSRS Region will be implemented. During the testing of the second NSRS Implementation Region, the previously implemented NSRS region components that are common to both regions will be tested. Next, the third NSRS Region will

be implemented. During the testing of the third NSRS Implementation Region, the previously implemented components that are common to all regions will be tested.

- D. 30-Day Operational Burn-in Phase:** The 30-Day Operational Burn-Test for each NSRS Region shall follow immediately after the successful completion of Regional Acceptance for each NSRS Region. During this time, representatives of Seller, Buyer and other NSRS Members shall observe the test procedure as defined in the Functional Acceptance Test Procedures in Exhibit 8 of the SOW. The 30-Day Operational Burn-in Phase will last for 30 consecutive days and shall be loaded with subscribers as agreed with the Member, but shall run anew in the event of a Major Failure as defined in the Acceptance Test Plan, with the 30-day clock restarting after Seller has corrected the cause of the Major failure, which Seller shall correct at Seller's expense.
- E. Final System Acceptance:** Final Acceptance for the NSRS shall occur when (i) Regional Acceptance has occurred for each NSRS Region including the 30-Day Operational Burn-In Test (ii) the Hardware and Software for the System, and Services have been furnished, delivered, installed and (iii) Seller has furnished Buyer with all document deliverables, and (iv) Seller and Buyer agree on a list of nonservice affecting defects in the appearance, operation or installation of the Hardware (the "Punch List") which Seller shall promptly resolve within and agreed reasonable timeframe.
- F. Preplanning Regional Acceptance Meeting:** When Buyer or any NSRS Member recognizes that they cannot meet a contractual obligation for performance under their respective Agreement with Seller, including but not limited to slippage in the Project Schedule, obligations under the Responsibility Matrix, or other material changes such that any region cannot be implemented per the Project Schedule, Seller and all NSRS Members shall meet to mutually agree on a Change Order. Such Change Order may affect the planned Coverage or other technical requirement for the NSRS region under implementation and may result in a modification to the Coverage Guarantee for that NSRS Region. The Change order shall ensure the continuation of the implementation of the NSRS Region in a timely manner so as not to delay the overall implementation for all NSRS Members.
- G.** Notwithstanding the acceptance testing of the NSRS Regions set forth in subsections C, and the exclusion of the shared Connect Cores as defined in Exhibit 10 - Statement of Work - Project Implementation Plan, if Buyer commences use of any portion of the System, in an NSRS Region for its intended purpose, other than for the express purpose of training, testing, or pre-acceptance site usages as mutually agreed upon by Seller and Buyer in writing, prior to Regional Acceptance of that NSRS Region, the applicable portion of the purchase price for that NSRS Region shall be due and payable and the NSRS Region will be deemed accepted. The Warranty Period for Infrastructure Hardware for the applicable portion of the System put into use together with the associated installation Services shall be deemed to have commenced concurrently with the use of the applicable portion of the System for its intended purpose. The use of the applicable portion of the System for its intended purpose shall be deemed to have occurred when Buyer commences to use and rely primarily on the applicable portion of the System for its communications.

**H.**





- I. As used in the Agreement, the term "Regional Acceptance Date" shall mean the date of "Acceptance" of one of the NSRS Regions, which shall be deemed to occur upon the earlier of: (1) the date on which the NSRS Region is deemed accepted pursuant to subsection (C) above, or (2) the date on which the Region is deemed accepted pursuant to subsection (G) above.
- J. Commitments and Assumptions.
- a. Seller will provide a Testing Coordinator who will establish the approach, reasonably acceptable to the Parties, to measure, record and report progress on all testing activities.
  - b. Seller will ensure the technical environment is set up to support each round of testing.
  - c. Testing activities for each portion of the Project will be completed in accordance with the Acceptance Testing Plans.
  - d. Seller will promptly provide a written summary of each round of comprehensive Acceptance Testing.
  - e. All Acceptance Testing will be performed by Seller with the cooperation and under the observation and supervision of Buyer and other NSRS Members.

#### **SECTION 14. SOFTWARE LICENSE.**

Subject to the terms and conditions of the Software License Agreement attached hereto as an exhibit to this Agreement, Buyer is granted a license to use the Software only in conjunction with the System purchased under this Agreement. "Software" means the "Licensed Programs" as defined in the Software License Agreement.

#### **SECTION 15. COVERAGE:**

Seller's representations concerning the distance at which usable radio signals will be transmitted and received by Hardware supplied hereunder are set forth in the Statement of Work. Coverage for the System as approved at the Detail Design review, shall be measured as provided in the Testing and Acceptance section of this Agreement.

#### **SECTION 16. WARRANTIES:**

##### **A. Hardware and Services**

The warranties for the System, including all Services, Software and Hardware, set forth in the Purchase Agreement Documents shall begin on the date of the first NSRS Regional Acceptance Date and continue for a period of one year following Acceptance of the last NSRS Region implemented

(the "Warranty Period"). Seller warrants for the Warranty Period, that the Hardware and installation Services furnished by Seller under this Agreement, and further specified in Statement of Work, Exhibit 11, Warranty Plan, shall be new, free from defects in material and workmanship and shall conform to the Agreement specifications. Any Services provided during the Warranty Period are set forth in the Scope of Work. Any and all claims for breach of this warranty are conclusively deemed waived unless made within the Warranty Period. The warranty period for additional Hardware purchased by Buyer from Seller after System Acceptance shall be warranted for the following periods of time from the date the Hardware is delivered to Buyer:

- i. for mobile and portable radios ("Subscriber Units"), twenty-four (24) months.
- ii. for all other Hardware, one (1) year.

**B. Subscriber Units:** Subscriber Unit warranty period shall begin at the date put into service and run for a period of twenty-four 24(months). Subscriber Unit accessories, including batteries, are warranted for a period of one year. For purposes of this Warranty the Subscriber Unit's batteries supplied by Seller shall be deemed defective if: (1) the battery capacity is less than 80% of rated capacity, or (2) the battery develops leakage. Replacement batteries shall be warranted only for the remaining unexpired portion of the Warranty Period. This warranty becomes void if: (1) the battery has been subjected to any kind of misuse, detrimental exposure, or has been involved in an accident, or (2) the battery is used in equipment or service other than the Hardware for which it is specified.

**C.** During the Warranty Period if any component of the Hardware or portion of the installation Services fails to meet the foregoing warranties, Seller's sole obligation and Buyer's exclusive remedy under this warranty shall be the correction by Seller of the failure at Seller's option: (1) by repairing any defective component of the Hardware, or (2) by furnishing any necessary repaired or replacement parts, (3) by the redoing of the faulty installation, or replacement per section D, E or F below. Any such failure, or the repair or replacement of the defective component or the redoing of any installation, shall not extend the Warranty Period. Where such failure cannot be corrected by Seller's reasonable efforts, the parties will negotiate an equitable adjustment in price. Seller will be responsible for all charges incurred in returning defective parts to Seller's plant and shipping repaired or replacement parts to Buyer. All warranty labor must be performed by an authorized service group approved by Seller either at its place of business, for mobile or portable equipment, or at the Buyer's location for fixed location equipment should Seller determine that it is not feasible to return the fixed location equipment to Seller's authorized service group.

**D.**



E.



F.



- G. NSRS Member Performed Warranty Repair - The Members shall have the right to perform any maintenance and/or repairs required during the warranty period without voiding or affecting the Seller's warranty. Member technicians that complete the repairs must have taken all training classes outlined by Harris in the Statement of Work, Exhibit 11 – Warranty Plan , otherwise the work may void the warranty for said component. If Member work causes further system issues because of improper or negligent repair and a deeper level of Harris support be required, Harris may charge Member for such additional support if requested by member.
- H. Any additional purchases of equipment, including radios, and installation services which may be purchased by Members and delivered or performed by Seller after Final System Acceptance, shall be warranted on the same terms, limitations, and exclusions as are set forth herein, except that the warranty on the equipment and installation services shall be for a period of two (2) years for additional Subscriber Units items from the date of delivery of that item of equipment, one (1) year for additional Infrastructure Hardware items from the date of delivery of that item of equipment, and one (1) year from the date of completion of that installation service.
- I. With the exception of the NSRS Member Performed Warranty Repair as defined in section G. Above, Seller's obligations shall not apply to: (1) Hardware or components thereof which are normally consumed in operation, or, or (2) defects which are the result of improper storage, use, or installation performed by other than Seller, maintenance performed by other than Seller, or repair performed by other than Seller, or (3) Hardware which has been subjected to any other kind of misuse or detrimental exposure or has been involved in an accident, or (4) Hardware or installations altered or repaired by any party other than Seller without Seller's prior written consent.
- J. While on Member's premises, Seller, its agents, employees, or Subcontractors shall conform in all respects with physical, fire, or other security regulations. Seller shall be responsible for care of Buyer's equipment and any damage to facilities during servicing.
- K. **Coverage and System Integration Warranty.** Notwithstanding the other provisions of this Section Warranties, Seller's only Warranty as to radio coverage is that the System, prior to Regional Acceptance, shall have successfully passed the coverage tests in the Acceptance Test Plan. This

Warranty is operative only when the Shared Regional Implementation occurs. For Coverage and System Integration purposes, the Testing and Acceptance section of this agreement defines on a Regional basis, that if the NSRS Region does not fulfill the requirements of the Acceptance Tests, and the failure is solely attributable to Seller obligations under this Contract, Seller shall promptly correct the defects at no additional cost to the Member and other NSRS Members as needed.

**L. Software**

The warranty for the Software is set forth in the Software License Agreement. The Seller shall update all devices to the same and latest release level prior to the conclusion of the Warranty Period at no additional cost to the Members.

- M.** THE WARRANTIES AND REMEDIES SET FORTH IN THIS SECTION AND IN THE SOFTWARE LICENSE AGREEMENT CONSTITUTE THE ONLY WARRANTIES WITH RESPECT TO THE HARDWARE, SOFTWARE AND SERVICES AND THE BUYER'S EXCLUSIVE REMEDIES IN THE EVENT SUCH WARRANTIES ARE BREACHED. THEY ARE IN LIEU OF ALL OTHER WARRANTIES WHETHER WRITTEN, ORAL, EXPRESS, IMPLIED, OR STATUTORY INCLUDING, WITHOUT LIMITATION, THE WARRANTY OF MERCHANTABILITY AND THE WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT SHALL SELLER BE LIABLE FOR SPECIAL, CONSEQUENTIAL OR INDIRECT DAMAGES INCLUDING, BUT NOT LIMITED TO, LOSS OF PROFITS OR REVENUES.

**SECTION 17. COOPERATIVE PURCHASING:**

**Purchases by Other Public Entities:** This Agreement may be used by other public bodies to purchase subscriber equipment at the prices set forth below and in accordance with the terms, including applicable warranties of this Agreement unless otherwise specified herein. This pricing cannot be combined with any other Harris promotional offers. Such public bodies shall place their own order(s) directly with Seller, and Seller shall deal directly with any public body the Buyer approves to use the Agreement. The terms and conditions of this Agreement shall govern purchases by other public bodies unless they and the Seller agree to execute separate contracts. With the approval of the Seller, any public body using this Agreement may add terms and conditions required by statute, ordinances, or regulations. To the extent permitted by law, the parties may agree to additional or modified terms and conditions unique to the public body or as required by the circumstances surrounding the purchase. Buyer is not liable for the obligations of any public body which joins or uses this Agreement to purchase subscriber equipment at the prices set forth in the pricing schedule and in accordance with the terms, including applicable warranties of this Agreement unless otherwise specified herein. Buyer, its officials and employees are not responsible for placement of orders, invoicing, payments, contractual disputes, or any other transactions between the Seller and any other public bodies. In no event shall Buyer, its officials or employees be responsible for any costs, damages or injury resulting to any party from use of a Buyer contract. If, when preparing such a contract, the additional terms and conditions of a public body seeking to purchase pursuant to cooperative procurement are unacceptable to the Seller, the Seller may withdraw its consent to extension of the contract to that particular body. Buyer, assumes no responsibility for any notification of the availability of this Agreement for use by other public bodies, but the Seller may carry out such notification.

**SECTION 18. INTERFERENCE:**

Radio System coverage and performance are subject to degradation due to anomalous propagation and interference beyond the reasonable control of Seller. Seller cannot be responsible for degradation or disruption of Service caused by operation of other radio Systems or by natural phenomena or other interference over which the Seller has no reasonable control. In the event of a case of degradation due to interference by an

outside party, Seller will provide engineering support to Buyer at Buyer's expense to support Buyer's efforts in resolving the interference issue with the outside party. In the event of a case of degradation due to interference of the Buyer's System caused by Seller, Seller will resolve the interference issue at no cost to the Buyer.

#### **SECTION 19. PATENTS:**

- A. Seller warrants that the System furnished hereunder shall be delivered free of any rightful claim of any third party for infringement of any United States patent or copyright. If Buyer notifies Seller promptly of the receipt of any claim that the System infringes a United States patent or copyright and gives Seller information, assistance and exclusive authority to settle and defend such claim, Seller at its own expense shall defend, or may settle, any suit or proceeding against Buyer so far as based on a claimed infringement which breaches this warranty. If, in any such suit arising from such claim, the continued use of the System for the purpose intended is enjoined by any court of competent jurisdiction, Seller shall, at its expense and option, either: (1) procure for Buyer the right to continue using the System, or (2) modify the System so that it becomes non-infringing, or (3) replace the System or portions thereof so that it becomes non-infringing, or (4) remove the System and refund the purchase price (less reasonable depreciation for use). The foregoing states the entire liability of Seller for patent or copyright infringement by the System and is subject to any limitation of total liability set forth in this Agreement.
- B. The preceding subsection (A) shall not apply to: (1) any portion of the System which is manufactured to Buyer's design, or (2) the use of the System in conjunction with any other apparatus or material not supplied by Seller to the extent that such conjoined use causes the alleged infringement. As to any portion of the System or use described in the preceding sentence, Seller assumes no liability whatsoever for patent infringement.
- C. THE PATENT AND COPYRIGHT WARRANTY AND INDEMNITY OBLIGATIONS RECITED ABOVE ARE IN LIEU OF ALL OTHER PATENT AND COPYRIGHT WARRANTIES AND INDEMNITIES WHATSOEVER, WHETHER ORAL, WRITTEN, EXPRESS, IMPLIED OR STATUTORY.

#### **SECTION 20. LIMITATION OF LIABILITY:**

- A. Except for Seller's liability to third parties for its willful misconduct or negligent acts or omissions as more particularly described in the Indemnification Section of this Agreement, the total liability of Seller, including its subcontractors or suppliers, for all claims of any kind for any loss or damage, whether in contract, warranty, tort strict liability or otherwise, arising out of, connected with, or resulting from the performance or non-performance of this Agreement or from the manufacture, sale, delivery, installation, technical direction of installation, resale, repair, replacement, licensing or use of any Hardware, Software or the furnishing of any Service, shall not exceed the Total Price of the Agreement. Except as to title, any such liability shall terminate upon the expiration of the Warranty Period.
- B. IN NO EVENT, WHETHER AS A RESULT OF BREACH OF AGREEMENT, WARRANTY, TORT (INCLUDING NEGLIGENCE OR INFRINGEMENT), STRICT LIABILITY OR OTHERWISE, SHALL SELLER, OR ITS SUBCONTRACTORS OR SUPPLIERS, BE LIABLE FOR ANY SPECIAL, CONSEQUENTIAL, INCIDENTAL, INDIRECT OR EXEMPLARY DAMAGES INCLUDING, BUT NOT LIMITED TO, LOSS OF PROFITS OR REVENUES, LOSS

OF USE OF THE HARDWARE OR ANY OTHER EQUIPMENT, COST OF CAPITAL, COST OF SUBSTITUTE GOODS, FACILITIES, SERVICES OR DOWNTIME COSTS.

- C. Any action for any claim of any kind for any loss or damages arising out of, connected with, or resulting from the performance, non-performance or breach of the Agreement, or from the manufacture, sale, delivery, installation, technical direction of installation, resale, repair, replacement, licensing or use of any Hardware, Software or the furnishing of any Services, shall be commenced within statutory limits defined by the State of Nevada after the cause of action accrued.
- D. The provisions of this Section, LIMITATION OF LIABILITY, shall apply notwithstanding any other provisions of this Agreement or any other agreement.
- E. The provisions of this Section, LIMITATION OF LIABILITY, shall survive the expiration or termination of this Agreement.

**SECTION 21. TERMINATION AND REMEDIES:**

- A. Any agreement which extends beyond the term of any Washoe County Commissioner in office at the time of the signing of this Agreement is binding beyond that term only if funding is appropriated. NRS 244.320. Washoe County reasonably believes that funds can and will be obtained sufficiently to make all payments during the term of this Agreement. In the event the County fails to appropriate or budget funds for the purposes specified in this Agreement, or that County has been required, in its sole judgment, to amend previous appropriations or budgeted amounts to eliminate or reduce funding for the purposes in this Agreement, this Agreement shall be terminated without penalty, charge or sanction to the County.
- B. A default or breach may be declared with or without termination. This Agreement may be terminated by either Party upon written notice of default or breach to the other Party as follows:
  - a. In the event of a material breach of this Agreement by Seller which shall continue for one hundred twenty (120) or more days after written notice of such breach (including a reasonably detailed statement of the nature of such breach) shall have been given to Seller by Buyer, Buyer shall be entitled to avail itself cumulatively of any and all remedies available at law or in equity (provided such remedies are not otherwise limited under the terms of this Agreement) and either: (1) suspend performance of its payment obligations under the Agreement for as long as the breach continues uncorrected; or (2) terminate this Agreement by written notice to Seller if the breach remains uncorrected. The following shall constitute material breaches of this Agreement:
    - 1. Failure by Seller to reasonably provide or perform any of the services or duties called for in this Agreement within the time requirements provided for in this Agreement, or any agreed to extensions.
    - 2. violation by Seller of any State, Federal or local law, or failure by Seller to comply with any applicable States and Federal service standards, as expressed by applicable statutes, rules and regulations.
    - 3. failure by Seller to carry applicable licenses or certifications as required by law.
    - 4. failure of Seller to comply with reporting requirements contained herein.
    - 5. inability of Seller to perform the Work provided for herein.
    - 6. Seller becomes insolvent, subject to receivership, or becomes voluntarily or involuntarily subject to the jurisdiction of a bankruptcy court

- C. Except as otherwise provided in this Agreement, in the event of: (1) any failure by Buyer for sixty (60) or more days to make any payment when due, or (2) any other material breach of this Agreement by Buyer which shall continue for one hundred twenty (120) or more days after written notice of such breach (including a reasonably detailed statement of the nature of such breach) shall have been given to Buyer by Seller, Seller shall be entitled to avail itself cumulatively of any and all remedies available at law or in equity (provided such remedies are not otherwise limited under the terms of this Agreement) and either: (1) suspend performance of its obligations under this Agreement for as long as the breach remains uncorrected; or (2) terminate this Agreement by written notice to Buyer if the breach remains uncorrected.
- D. Except as provided in Section 21 ¶A, in the event Buyer terminates this Agreement as provided herein, all finished and unfinished Hardware and Documentation Deliverables produced or made by Seller for Buyer, up to and including the date of termination, under this Agreement shall become the property of Buyer and Seller shall be entitled to receive compensation, including all associated fees accrued up to the point of termination, in accordance with the terms of this Agreement for any such Hardware and Documentation Deliverables. Notwithstanding the above, Seller shall not be relieved of liability to Buyer for damages sustained by Buyer by virtue of any breach of this Agreement by Seller described in subsection B above and, after providing Seller with written notice of breach as set forth in subsection B, Buyer may withhold any payments to Seller for the purpose of set-off of any damages, as agreed upon or finally adjudicated, against such payment. Harris shall use commercially reasonable efforts to resell or return any unopened Equipment after termination.

## **SECTION 22. CONFIDENTIALITY:**

- A. During the term of this Agreement, it is anticipated that one party (hereafter the "Disclosing Party") may disclose to the other party (hereafter the "Receiving Party") information which the Disclosing Party considers proprietary and confidential. Accordingly, with respect to any specification, drawings, sketches, models, samples, tools, technical information, confidential business information or data, in written or other tangible form which: (1) has been designated in writing by the Disclosing Party as confidential or proprietary, or (2) is of the type that the Receiving Party customarily treats as confidential or proprietary, and which is furnished by the Disclosing Party to the Receiving party in contemplation of or under this Agreement (hereinafter "Information"), the Receiving Party shall treat such Information, for a period of five (5) years after the Effective Date of this Agreement, as confidential information with the same degree of care as the Receiving Party affords to confidential information of its own of a similar nature and shall not reproduce any such Information, in whole or in part, except as specifically authorized in writing by the Disclosing Party.
- B. The provisions of the preceding subsection shall not apply to any Information which:
1. is or shall become publicly available without breach of this Section Confidentiality, on the part of the Receiving Party;
  2. is already known by the Receiving Party prior to receipt from the Disclosing Party;
  3. is independently developed by the Receiving Party;
  4. is rightfully obtained by the Receiving Party from third parties without restriction; or
  5. is required to be disclosed by appropriate governmental or judicial order provided that Receiving Party gives Disclosing Party prior written notice of such order and assists Disclosing Party in taking reasonable actions to restrict such order.
  6. Is declared by Federal or Nevada law such as NRS Chapter 239 to be public.

- C. The provisions of this Section, Confidentiality, shall survive the expiration or termination of this Agreement.
- D. The confidentiality obligations of this Section, Confidentiality, shall not apply to Software, the confidentiality and other rights and obligations with respect to which are set forth in the Software License Agreement.

### **SECTION 23. COMPLIANCE:**

Seller agrees to comply with all federal, state and local laws, ordinances, codes, rules and regulations in effect as of the Effective Date of this Agreement that may in any way affect the Work by Seller hereunder. Any Hardware or Software furnished by Seller under this Agreement shall comply in all material respects with federal, state and local laws and regulations applicable to the manufacture, packing, sale and shipment of such Hardware or Software as of the Effective Date of this Agreement and shall comply with any amendments thereto which may have come into effect prior to the time such Hardware or Software are delivered provided that the price and, if necessary, delivery of such Hardware or Software shall be equitably adjusted to compensate Seller for the effect of compliance with any such amendments.

### **SECTION 24. NOTICES:**

Notices and other communications between the parties shall be transmitted in writing by certified mail or nationally recognized overnight courier service to the parties at the addresses set forth below and shall be deemed effective upon receipt by the receiving party. Either party may change its address by giving notice in writing thereof to the other party.

#### **IF TO BUYER:**

Craig Betts, Chief Information Officer  
Washoe County, Technology Services  
1001 E. Ninth St.  
Reno, NV, 89512  
Phone: (775) 328-2355  
Email: [cbetts@washoecounty.us](mailto:cbetts@washoecounty.us)

#### **WITH A COPY TO:**

Quinn Korbolic, IT Manager  
Washoe County, Technology Services  
1001 E. Ninth St.  
Reno, NV, 89512  
Phone: (775) 328-2348  
Email: [qkorbolic@washoecounty.us](mailto:qkorbolic@washoecounty.us)

#### **BUYER INVOICE CONTACT:**

Sara Delozier  
Washoe County, Technology Services  
1001 E. Ninth St.  
Reno, NV, 89512  
Phone: (775) 328-2352  
Email: [sdelozier@washoecounty.us](mailto:sdelozier@washoecounty.us)

#### **IF TO SELLER:**

Harris Corporation

221 Jefferson Ridge Parkway  
Lynchburg, Virginia 24501  
[REDACTED]

WITH A COPY TO:  
Harris Corporation  
221 Jefferson Ridge Parkway  
Lynchburg, Virginia 24501  
[REDACTED]

SELLER INVOICE CONTACT:  
Harris Corporation  
221 Jefferson Ridge Parkway  
Lynchburg, Virginia 24501  
[REDACTED]

#### **SECTION 25. ORDER OF PRECEDENCE:**

The Statement of Work and the following Exhibits are expressly incorporated herein by reference and, together with this Agreement, constitute the Agreement Documents. In the event of a conflict among or between the Agreement Documents, the documents shall control in the order of precedence set forth below:

1. Amendments to this Agreement
2. This Agreement (not including the Exhibits and documents listed below)
3. Detailed Design Documents
4. **Exhibit A** - Statement of Work, with Attachments
5. **Harris Proposal**
6. **RFP**
7. **Exhibit B** - Software License Agreement
8. **Exhibit C** – Form of Surety Bond for Performance

#### **SECTION 26. TERM:**

The term of this Agreement shall commence upon the Effective Date of this Agreement and shall continue for five (5) years from the date of Final System Acceptance. The term of the Software license is set forth in the Software License Agreement.

#### **SECTION 27. ENTIRE AGREEMENT:**

The entire agreement of the parties is contained herein and this Agreement supersedes any and all oral agreements and negotiations between the parties relating to the subject matter hereof.

#### **SECTION 28. AMENDMENT:**

The parties expressly agree that this Agreement shall not be amended in any fashion except in a writing(s) executed by authorized representatives of both parties.

#### **SECTION 29. SEVERABILITY:**

If any provision of this Agreement is held to be illegal, invalid, or unenforceable by a court of competent jurisdiction, the parties shall, if possible, agree on a legal, valid, and enforceable substitute provision that is as similar in effect to the deleted provision as possible. The remaining portion of the Agreement not declared illegal, invalid, or unenforceable shall, in any event, remain valid and effective for the term remaining unless the provision found illegal, invalid, or unenforceable goes to the essence of this Agreement.

### **SECTION 30. WAIVER:**

No term of this Agreement may be waived except in a writing signed by the party waiving enforcement. No term of this Agreement shall be deemed to be waived by reason of any failure to previously enforce such term. In no event shall the making of any payment required by this Agreement constitute or be construed as a waiver by Buyer of any breach of the covenants of this Agreement or a waiver of any default of Seller and the making of any such payment by Buyer while any such default or breach shall exist shall in no way impair or prejudice the right of Buyer with respect to recovery of damages or other remedy as a result of such breach or default.

### **SECTION 31. HEADINGS:**

Section headings are inserted for convenience only and shall not be used in any way to construe the meaning of terms used in this Agreement.

### **SECTION 32. GOVERNING LAW:**

The parties agree that this Agreement is entered into in the State of Nevada and shall therefore be governed by the laws of Nevada without resort to conflict of laws principles. Venue for any legal proceedings shall be in any state or federal court in Washoe County, Nevada, which the Parties agree shall have exclusive jurisdiction over disputes arising out of the interpretation of this Agreement. It is expressly understood and agreed to by the parties hereto that in the event of any disagreement or controversy between the parties, law shall be controlling. Venue for any legal proceedings shall be in any state or federal court in the State of Nevada.

### **SECTION 33. ASSIGNMENT; SUCCESSORS AND ASSIGNS:**

This Agreement shall not be assigned nor any interest or obligation in this Agreement transferred by either Party without the written consent of the other Party, which shall not be unreasonably withheld or delayed. Notwithstanding the above, Seller may assign this Agreement, without consent, in the event of a change of controlling ownership interest (either directly or indirectly) in Seller or in the event of merger, recapitalization, consolidation, other business combination or sale of all or substantially all of the assets of Seller. In addition, Seller may also assign or transfer, without consent, claims for money due or to become due Seller from Buyer under this Agreement to a bank, trust company or other financial institution if and only if the instrument of assignment contains a provision substantially to the effect that it is agreed that the right of the assignee in and to any moneys due or to become due to Seller shall be subject to prior claims of all persons, firms and corporations for services rendered or materials supplied for the performance of the Work called for in this Agreement. Seller shall promptly provide to Buyer notice of any such permitted assignment or transfer without consent.

### **SECTION 34. ANTI DISCRIMINATION**

In connection with the performance of work under this Agreement, the parties agree not to discriminate against any employee or applicant for employment because of race, creed, color, national origin, sex, sexual orientation gender identity or expression, age, disability or national origin including, without limitation, with regard to employment, upgrading, demotion or transfer, recruitment or recruitment

advertising layoff or termination, rates of pay or other forms of compensation, and selection for training, including, without limitation, apprenticeship. The parties further agree to insert this provision in all subcontracts hereunder, except subcontracts for standard commercial supplies or raw materials

During the performance of this Agreement, the Seller, for itself, its assignees and successors in interest agrees as follows:

a. Compliance with Regulations: The Seller shall comply with all of the regulations relative to nondiscrimination in federally-assisted programs of 49 CFR Part 21 and the non-discrimination provisions of NRS Chapter 613 as they may be amended from time to time (collectively “Regulations”), which are herein incorporated by reference and made a part of this Agreement.

b. Nondiscrimination: The Seller, with regard to the professional services performed by it during the Agreement, shall not discriminate on the grounds of race, color, age, religion, sex, creed, handicap, or national origin in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The Seller shall not participate either directly or indirectly in the discrimination prohibited by the Regulations, including employment practices, when the Agreement covers a program set forth in the Regulations.

c. Solicitations for Subcontracts, Including Procurement of Materials, and Equipment: In all solicitations either by competitive bidding or negotiation made by the Seller for professional services to be performed under a subcontract, including procurement of materials or leases of equipment, each potential subcontractor or supplier shall be notified by the Seller of the Seller's obligations under this Agreement and the Regulations relative to nondiscrimination on the grounds of race, color, age, religion, sex, creed, handicap, or national origin.

d. Information and Reports: The Seller shall provide all information and reports required by the Regulations, or directives issued pursuant thereto, and shall permit access to its facilities as may be determined by the County to be pertinent to ascertain compliance with such Regulations or directives. Where any information required of a Seller is in the exclusive possession of another who fails or refuses to furnish this information, the Seller shall so certify to the County and shall set forth what efforts it has made to obtain the information.

e. Sanctions for Noncompliance: In the event of the Seller's noncompliance with the nondiscrimination provisions of this Agreement, the County shall impose such sanctions as it may determine to be appropriate, including, but not limited to:

1. Withholding of payments to the Seller under the Agreement until the Seller complies, and/or
2. Cancellation, termination, or suspension of the Agreement, in whole or in part

g. Incorporation of Provisions: The Seller will include the provisions of Paragraphs (a) through (f) above in every subcontract including procurement of materials and leases of equipment, unless exempt by Regulations, order, or instructions issued pursuant thereto. The seller will take such action with respect to any subcontract or procurement as the County may direct as a means of enforcing such provisions including sanctions for non-compliance. In the event Seller becomes involved in, or is threatened with litigation by a subcontractor or supplier as a result of such direction, the Seller may request the County to enter into such litigation to protect the interests of the County and the Seller may request the United States to enter into such litigation to protect the interests of the United States.

## SECTION 35. DISPUTE RESOLUTION PROCEDURES

### Issue Resolution Ladder

The Issue Resolution Ladder is the process for elevating Disputes from the Project's field level to various levels of review, up to the Parties' executive management if necessary, with defined time limits for each level of review. The goal of the Issue Resolution Ladder is to resolve each Dispute as close to the field level as possible while recognizing the requirement to elevate the Dispute to the next level of review before the Dispute impacts cost or schedule. The Issue Resolution Ladder shall consist of four (4) levels of review and corresponding time limits to review, as follows:

| Level of Review | Seller Reviewer  | Buyer Reviewer               | Time Limit |
|-----------------|------------------|------------------------------|------------|
| 4               | Seller CEO       | Office of the County Manager | 2 weeks    |
| 3               | Regional Manager | Chief Information Officer    | 2 weeks    |
| 2               | Project Manager  | Project Manager              | 1 week     |
| 1               | Technical Lead   | Technical Lead               | 3 days     |

The individuals from the Buyer's and Seller's respective organizations filling the roles of reviewers in the Issue Resolution Ladder, and the documentation required for each level of review in the Issue Resolution Ladder, shall be identified by the respective team members. If reviewers at any level of the Issue Resolution Ladder cannot resolve a Dispute within the time limits set forth, the reviewers shall elevate the Dispute to the next level of review. If all four (4) levels of review have been exhausted, then Section B. below shall apply.

#### **For purposes of Outcome of Issue Resolution Ladder**

1. If the Buyer and Seller succeed in resolving an issue using the Issue Resolution Ladder, the Parties shall memorialize the resolution in writing, including execution of any Change Order as appropriate, and promptly perform their respective obligations in accordance therewith.
2. If a Dispute is not timely resolved using the Issue Resolution Ladder, then the parties agree to submit the dispute to non-binding mediation using a single mediator mutually agreed upon by the parties and following the Commercial Mediation Rules of the American Arbitration Association ("AAA"). As to the appointment of the mediator, and in accordance with the AAA, section M-4 Appointment of the Mediator, the Parties shall mutually agree to appoint an impartial mediator residing in Nevada or familiar with Nevada law and appoint such mediator for any dispute submitted to the American Arbitration Association for mediation or conciliation. If the dispute is unable to be resolved through good faith negotiations and non-binding mediation, then the Parties may pursue all of their legal and equitable remedies.

**State court Litigation** Only if the Parties are unable to settle a Dispute following Section B. above, then either Party may thereafter file a lawsuit in the Nevada Second Judicial District Court located in Washoe County, Nevada. Said lawsuit shall be filed no later than 180 days following issuance of the mediation finding. Service of the complaint shall be as prescribed by law and all parties agree to waive jury trial and rely on an objective procedure before a judge experienced in matters of commercial law.

### **Continuation of Work and Payments**

1. At all times during Dispute Resolution Procedures, Seller and all Seller-Related Entities shall continue with the performance of the Work and their obligations, including any undisputed Work or obligations, diligently and without delay, in accordance with this Contract, except to the extent enjoined by order of a court or otherwise approved by the Buyer in its sole discretion. Seller acknowledges that it shall be solely responsible for the results of any delaying actions or inactions taken during the course of Dispute Resolution Procedures relating to the disputed Work even if Seller's position in connection with the Dispute ultimately prevails.
2. During the course of any Dispute Resolution Procedures, the Parties shall continue to comply with all provisions of the Contract Documents, the Project Management Plan, the Governmental Approvals, and applicable Governmental Rules.
3. During the course of any Dispute Resolution Procedures, Buyer shall continue to pay to Seller, when due, all undisputed amounts owing under this Agreement.

**Joinder-** Seller agrees that, (a) at the Buyer's request, Seller shall take appropriate action to join third parties and Subcontractors involved in the design or construction of any part of the Project as parties in dispute resolution proceedings under this Section 19, and (b) Seller will allow itself to be joined as a participant in any dispute, arbitration or other proceeding that involves Buyer and any other Person relating to the Project. This provision is for the benefit of the Buyer and not for the benefit of any other party.

**Harris Effect on Surety** - Any decisions made in accordance with this Section 35 that are binding on Seller shall also be binding on the Surety under the Performance Bond; provided, however that unless the Surety is a party to such proceedings, such decisions shall not affect any defenses which are special to the Surety (i.e., defenses available to the Surety which could not have been asserted by Seller in the underlying proceeding). In the event that the Surety is a party to any proceedings, it shall have the right to, and must, assert any such special defenses therein.

**Emergency Dispute Resolution** - If a Dispute arises which must be resolved expeditiously to prevent serious damage to person or property, or serious interference with a Critical Path, both Parties shall make every effort to resolve such Dispute quickly. In such case, if Seller's Project Manager and the Buyer's Project Manager cannot reach a resolution of that Dispute within twenty-four (24) hours, they must refer the Dispute to the Buyer's Director and Seller's Chief Executive Officer (or other officer with authority to make final decisions subject only to board approval and any required third party approvals) for a meeting between the Buyer's Director and Seller's Chief Executive Officer to occur within the following twenty-four (24) hours. Once the urgent aspects of the Dispute have been resolved, the Parties may continue with the remaining procedures for dispute resolution if necessary and to the extent applicable.

**Time Limitation** – Seller acknowledges and agrees that Buyer is subject to substantial constraints which have resulted in limitations on its ability to increase the Contract Price or extend a Completion Deadline. Seller therefore acknowledges and agrees that, due to limitations on funding for the Project, prompt resolution of Disputes is of vital importance to Buyer. Seller agrees that the time limitations stated in the Contract for the filing of Claims and/or complaints with the Disputes Review Team and any subsequent State court litigation pursuant to Section 1.1.2 are necessary and reasonable.

## **SECTION 36. LIQUIDATED DAMAGES**

Seller agrees to be subject to liquidated damages for failure to achieve Regional Acceptance in any NSRS Region by the date set forth in this Agreement or a change to the Regional Acceptance Date set forth in any revision to the project schedule, (described in Exhibit 6 Project Schedule), and further agrees that such liquidated damages are intended to be compensatory and do not constitute a penalty for late delivery. The parties acknowledge and agree that the harm suffered by reason of a failure to achieve a Regional Acceptance by the date set forth in this Agreement would be difficult or impossible to calculate with any certainty and that the liquidated damages set forth below represent a reasonable estimate of that harm. The liquidated damages set forth below are specifically applicable to a failure to obtain Regional Acceptance by the dates set forth in this Agreement only. Buyer's rights and remedies for other than late delivery are set forth in this Agreement and as are otherwise available at law or equity. If Seller fails to meet the schedule date for Regional Acceptance set forth in this Agreement, and after written notice from the Buyer and after thirty (30) calendar day opportunity to cure, the Buyer may assess Liquidated Damages against Seller as defined below:

a. Damages amount per day  $((.005) \times (\text{Seller's contracted Total Agreement Price of effected NSRS Region})) / 60$ .

b. In no event shall the maximum amount of liquidated damages assessed against Seller for late deliveries under this Agreement exceed one half of one percent (.005 %) of the Total Agreement Price as agreed to in Section 6.

c. Notwithstanding the above, should the Project Schedule change due to a Change Order under this Agreement, the Project Scheduled date for Regional Acceptance may be extended to meet project requirements as mutually agreed by both parties.

d. If one of the NSRS members causes a delay to the schedule, Seller agrees to collaboratively draft a Change Order with the other NSRS members and Seller to continue the NSRS Regional Implementation. Such Change Order shall address any design and project schedule changes needed to effectively partially implement the NSRS Region. The NSRS Member causing the delay shall reimburse Harris through such Change Order for any costs including, but not limited to, redesign, remobilization, retesting or any re-execution of any activities defined in the Scope of Work in an NSRS Region where the delay occurred completing the NSRS Region's implementation for Seller at a later date. A delayed NSRS Region under this section shall not be subject to future Liquidated Damages. However, in the event that a subsequent revised schedule date is set in an approved Change Order and Seller fails to meet such date, it shall be subject to liquidated damages pursuant to this Section 36.

e. Seller shall have no liability for liquidated damages for any delay in achieving Regional Acceptance, if, after the Regional Acceptance Date, the delay is attributable to reasons other than Seller's delay, including but not limited to delay by NSRS Members and the Buyer's other Sellers, FORCE MAJEURE EVENTS OR OTHER EVENTS BEYOND SELLER'S REASONABLE CONTROL.

However, in the event that a subsequent revised schedule date is set in an approved Change Order and Seller fails to meet such date, it shall be subject to liquidated damages pursuant to this Section 36.

IN WITNESS WHEREOF, Buyer and Seller have executed this Agreement.

**BUYER**

[WASHOE COUNTY]

By: Marsha Berkbigler

Name: Marsha Berkbigler

Title: Chair County Commission

Date: 9-25-18

Witness:

By: Nancy L. Parent

Name: Nancy Parent

Title: County Clerk

Date: 9-25-18

By: Pamela Mann

Name: Pamela Mann

Title: Purchasing & Contracts Manager

Date: 9-27-18

Witness:

By: Pamela L. Matson

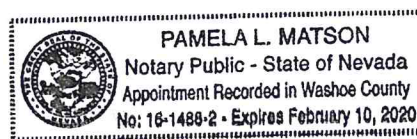
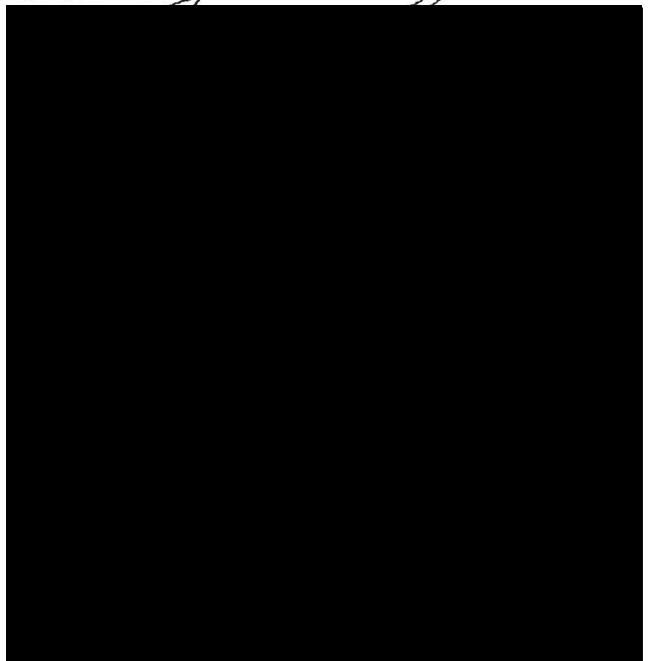
Name: Pamela L. Matson

Title: Account Clerk II / Notary

Date: 9/27/18

**SELLER**

**HARRIS CORPORATION ACTING  
THROUGH ITS COMMUNICATION  
SYSTEMS SEGMENT**





### **LIST OF EXHIBITS**

|             |                                                |
|-------------|------------------------------------------------|
| Exhibit A - | STATEMENT OF WORK (with Attachments)           |
| Exhibit B - | SOFTWARE LICENSE AGREEMENT                     |
| Exhibit C - | FORM OF SURETY BONDS FOR PERFORMANCE           |
| Exhibit D - | INDEMNITIFICATION AND INSURANCE SPECIFICATIONS |

## **EXHIBIT A**

### **STATEMENT OF WORK**

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## System Description

### Introduction

The new P25 Phase 1/Phase 2 700/800 MHz radio system for the State of Nevada will include

[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

[REDACTED] This Statement of Work (SOW) addresses Washoe County's portion of the NSRS.

### System Outline

The system consists of the following main elements:

- **Network System Control:** Harris will provide a VIDA Premier Core and a VIDA Premier/Connect Core for Washoe County's portion of the NSRS. This includes the provision of the primary VIDA Premier Core at Las Vegas SANS and the secondary VIDA Premier Core at Washoe NOC location. [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]
- **RF Sites:** Harris will provide RF subsystem (base station and antenna system) equipment for [REDACTED] Washoe County repeater sites consisting of [REDACTED]  
[REDACTED] linked to the VIDA Premier/Connect Cores via Washoe County's microwave IP network. The Washoe County microwave system will be required to connect to the primary VIDA Premier Core located in Las Vegas via NDOT's microwave network. RF Sites consist of 100-Watt P25 Phase 1/Phase 2, 700 or 800 MHz MASTR V base stations utilized for voice and data traffic. In addition, Harris will supply [REDACTED] site-on-wheels (SOW) for mobile communication deployments.

- **Microwave System:** Harris will provide a new [REDACTED] link microwave solution that interconnects [REDACTED] site locations consisting of the core sites, RF sites and the existing PSAP locations within Washoe County. Harris will implement the Nokia 7705 SAR-8 MPLS router at each microwave site for the routing of packets throughout the new microwave network and will setup the routers to interface with the NDOT microwave network. Harris will coordinate with NDOT to configure the 7705 SAR-8 to properly route packets between NDOT and Washoe County microwave networks.
- **Network Management System (NMS):** Harris will provide one Network Management and Administration system, located on the active VIDA Premier Core, accessible by any authorized console/user on the radio network. The management application will provide a tool for performance tracking, event and fault monitoring, and reporting. The administration application configures, provisions, and administers the P25 network database.
- **Interoperability Solution:** Harris will provide a P25 compliant Harris ISSI/CSSI. The ISSI allows Washoe County to connect to neighboring P25 systems while the CSSI is the interface to allow other external manufacturer's consoles to interoperate on the Harris VIDA system with the required interfacing equipment. The ISSI will be licensed for 4 concurrent system connections supporting 3 P25 system connections and one CSSI connection configured to support interoperation with 75 consoles. Those consoles must support ISSI/CSSI connectivity as well as configuration and interoperation of all supported features. The ISSI/CSSI will be located on the Primary VIDA Premier Core at Las Vegas SANS. Please see the ISSI gateway section for more details.
- **Dispatch Solution:** The Washoe County P25 System includes [REDACTED] new Symphony Consoles. Twenty-seven existing consoles will be upgraded to Windows 10. Existing Symphony console licenses will be transferred to new Cores.
- **Logging Recorder:** A single logging recorder with redundant components will record all radio traffic from Washoe County's RF sites, and Symphony consoles. The Exacom logging recorder will interface directly into Washoe County's VIDA Premier/Connect Core. Telephone audio will be captured on Washoe County's existing Verint logging recorder. The Verint recorder will be connected to the VIDA/Premier Connect Core at a future date, however its connection to the VIDA Core is not part of the initial P25 system deployment or under this contract. Harris will provide a quote for equipment and services to connect the existing Verint logging recorder to the new P25 VIDA Core when

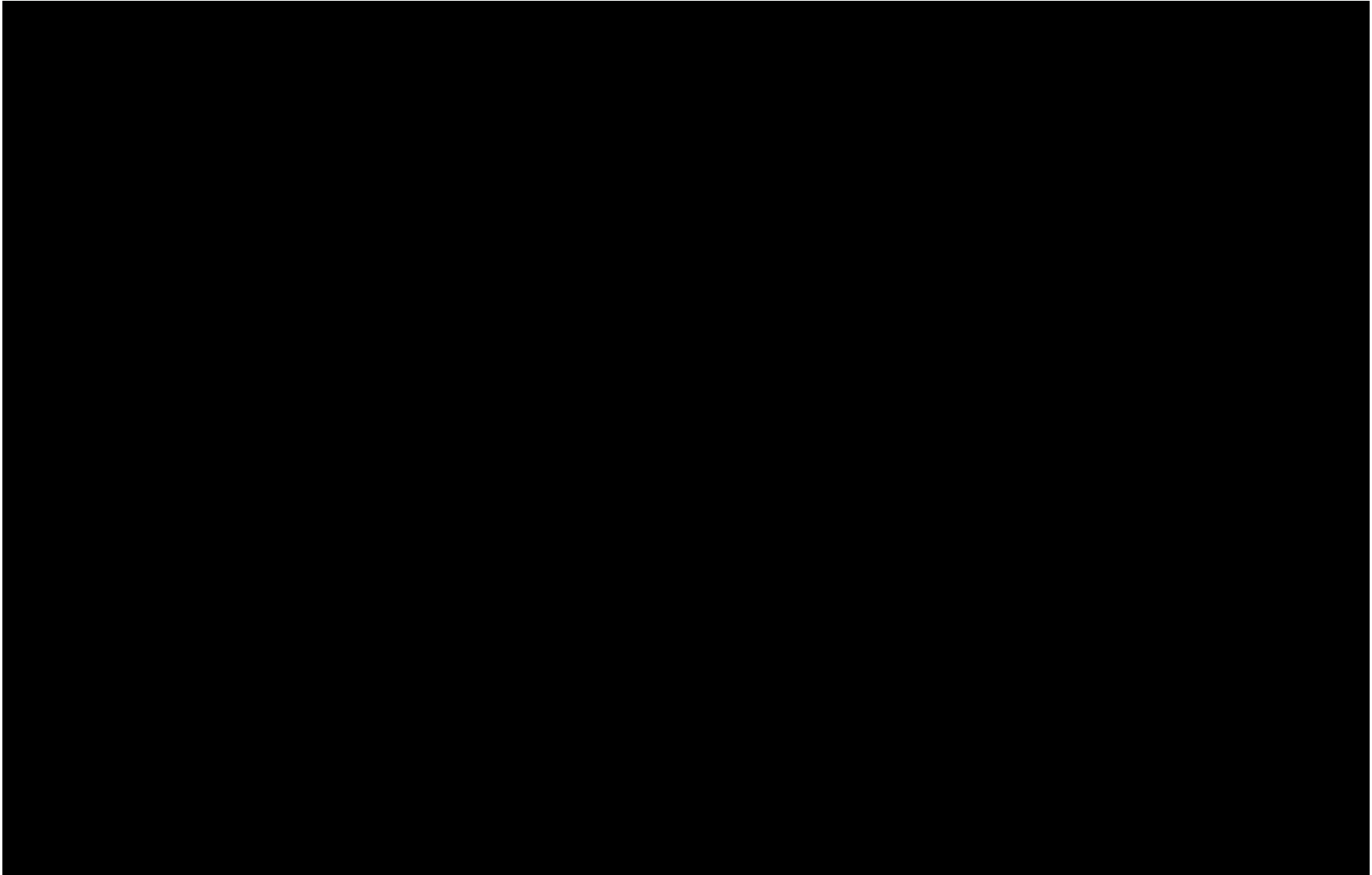
requested by Washoe County. A single logging recorder with redundant components will be provided for the Washoe County School District.

- **Subscribers:** New radios will include high-tier, mid-tier and low-tier models of mobiles and portables and desktop control stations to accommodate various users. All radios will include Link Layer Authentication and OTAP. See radio details under Subscriber Equipment.

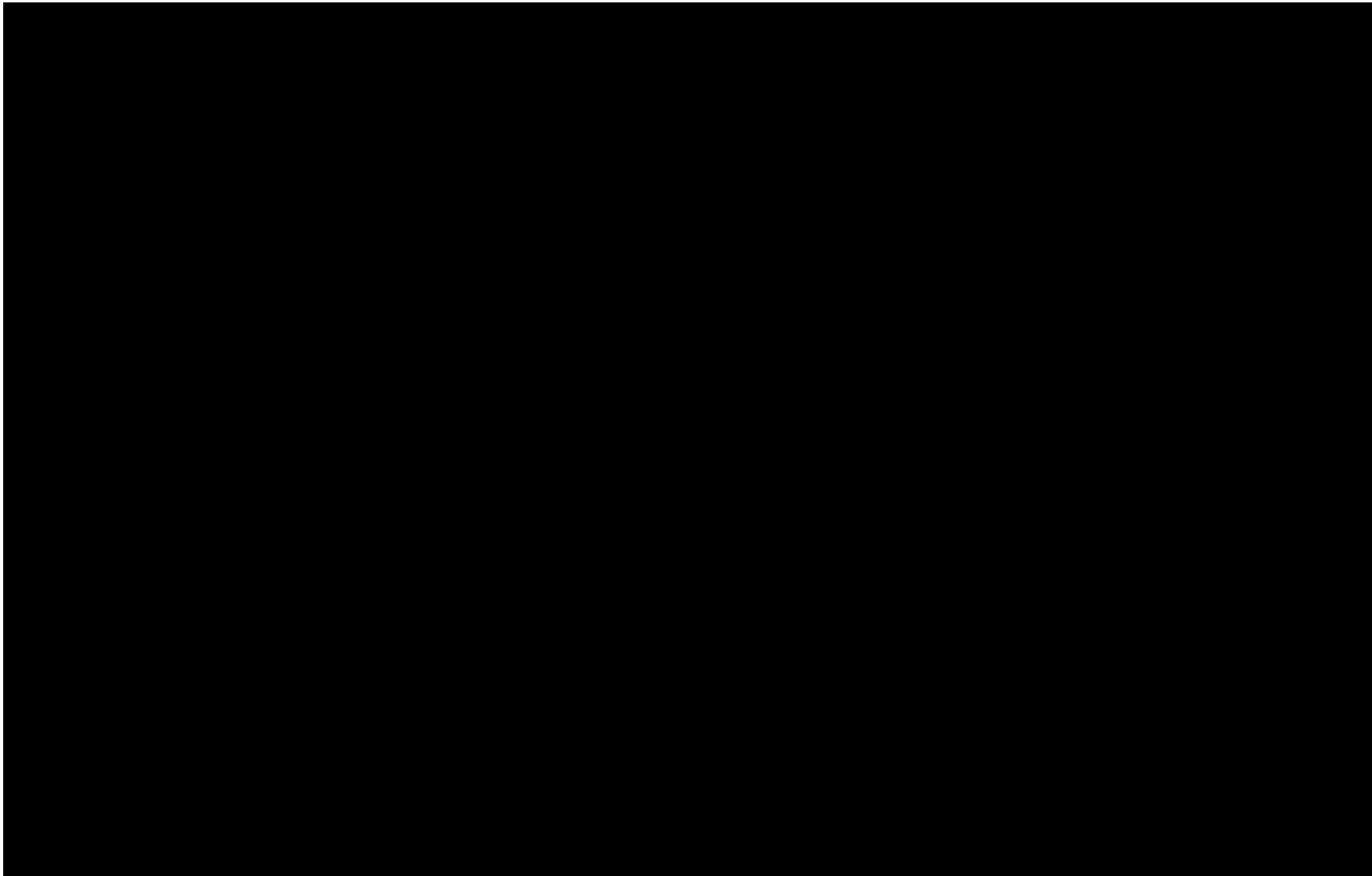
## Description of the System

The new system will support Project 25 Phase 1 and Project 25 Phase 2 technology. The new system will provide coverage enhancements with a Delivered Audio Quality (DAQ) of 3.4 or better, increased user capacity, and functionality compared to the EDACS radio system it replaces. Harris will replace Washoe County's existing EDACS system with Voice Interoperability Data Access (VIDA) P25 technology. The VIDA system will allow Washoe County to maintain a cluster of sites covering its operational area. Figure 1, Figure 2 and Figure 3 depict high-level system block diagrams of the entire NSRS network, identifying which of those assets belong to Washoe County.

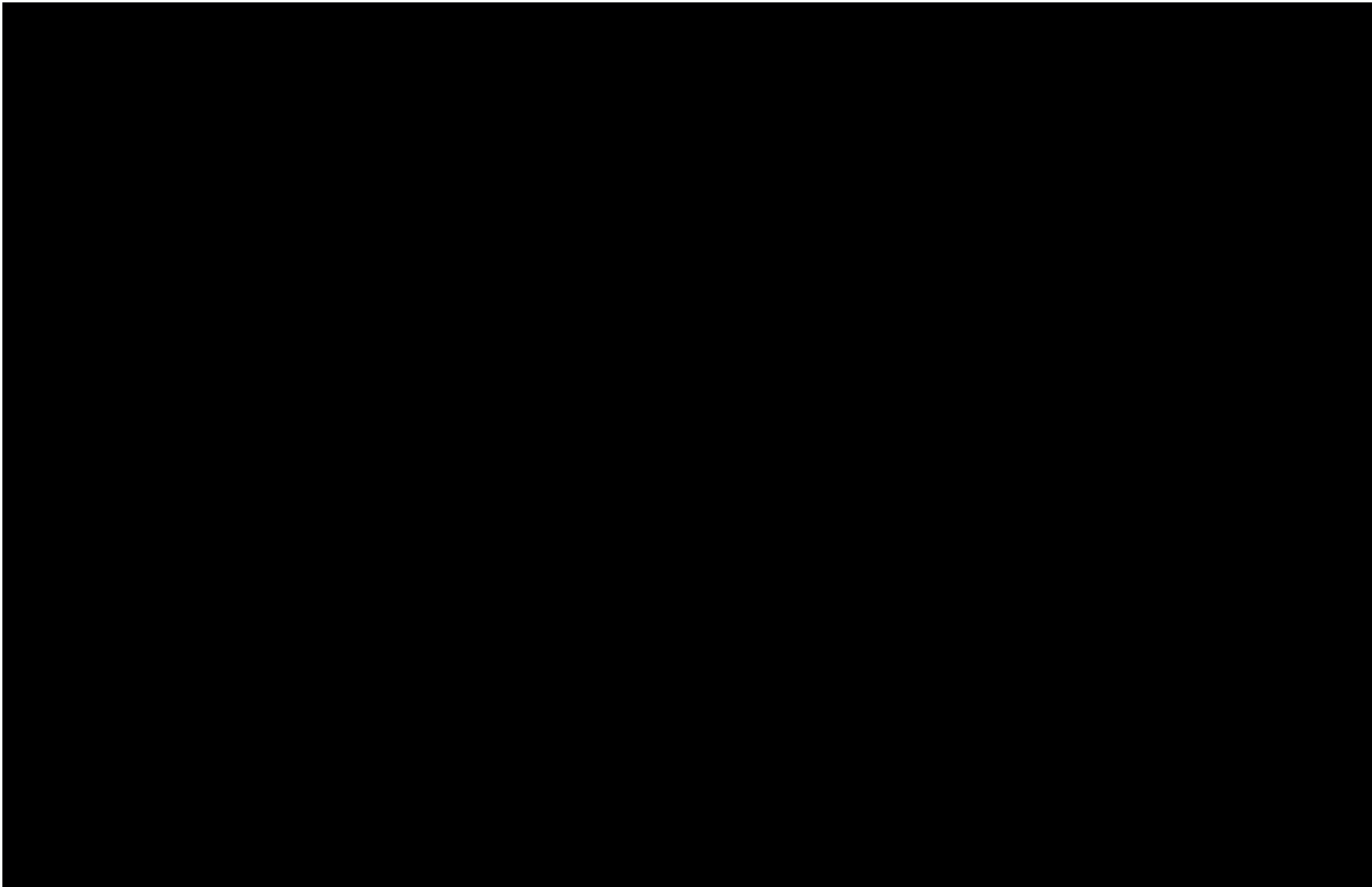
**Figure 1. System Block Diagram – Primary VIDA Premier Core – South / Secondary VIDA Premier Core – North Premier Core  
Main**



**Figure 2. System Block Diagram – VIDA Premier/Connects North**



**Figure 3. System Block Diagram – VIDA Premier/Connects South**



## Elements of the VIDA System Design

### VOICE, INTEROPERABILITY, DATA, AND ACCESS (VIDA) CORE

With the new P25 system, Washoe County will have a geographically-separated, high-availability core fully integrated together to link all aspects of the NSRS to work as a single statewide system. The NSRS VIDA Premier/Connect Cores will control Washoe County sites and consoles. To support the Washoe County region, Harris will install the VIDA Premier and VIDA Premier/Connect Cores at the following locations:

- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]

These locations will be supported by the Member's backhaul connectivity utilizing fiber optics and microwave Ethernet technology.

The VIDA Premier Core will provide the following features:

| VIDA Premier Core Features  |                          |                               |                          |                      |
|-----------------------------|--------------------------|-------------------------------|--------------------------|----------------------|
| Announcement Group          | Deregistration           | Global Positioning Satellite* | Over-the-Air-Programming | Recent User Priority |
| Automatic Site Registration | Dynamic Regrouping       | Group Call                    | Over-the-Air-Rekeying    | System-wide Calls    |
| Automatic Site Switching    | Emergency Alert          | Link layer Authentication     | Private Call             | Talk Prohibit Tone   |
| Busy Queuing and Callback   | Emergency Call           | Multigroup Call               | Push-to-Talk ID          | User Authentication  |
| Call Alert                  | Enhanced Priority Levels | Out of Range Indication       | Radio Inhibit            | Voice Encryption     |

\*See StatusAware section below.

StatusAware will provide situational awareness to all GPS-capable radios and allows output of situational data to external sub-systems like CAD and internal sub-systems such as BeOn devices. With In-band GPS, a radio provides GPS status updates when the radio transmits. Harris will provide the StatusAware feature and provide Washoe County with 50 licenses. Mapping software, if required, is the responsibility of Washoe County.

A centralized management solution located on the Washoe County VIDA Premier Core will allow common management of the Washoe County Core and other Members Cores. With multiple management priority levels available, Washoe County can determine which level of access is appropriate for each user ID. Harris will provide Washoe County with one VIDA Management Terminal located at the primary VIDA Premier/Connect Core. Each Washoe County Core will be housed in a seismic- Zone-4 rated 84" cabinet.

#### **INTEROPERABILITY**

The VIDA architecture will give Washoe County the ability to address interoperability at the network, system and radio to radio levels. Harris will provide the following interoperability elements as part of the P25 radio system.

#### **ISSI GATEWAY**

The Inter-RF Subsystem Interface (ISSI) provides P25 TIA-standardized network-level communication between P25 radio systems, regardless of system manufacturer, and the VIDA radio system. The ISSI server for Washoe County and NSRS will be virtualized in the VIDA Application Server (VAS) located on the Las Vegas VIDA Premier Core. Its primary functions will be to manage calls, entity tracking, and registration between the local VIDA system and other RF Subsystems (RFSSs). In addition to inter-system communication, the ISSI service will provide the interface that enables radios to roam between systems. The system will support additional connections by adding another ISSI server to the radio system.

The ISSI will be configured to support four separate system interface connections. One is for the CSSI and 3 are for the ISSI. Each of the four ISSIs will be licensed to support 20 simultaneous talkpaths. Connections and integration services to external systems is not included in this contract. Harris will quote a scope of services to connect the VIDA P25 system to another system upon request once Washoe and NSRS identifies those systems and the scope of integration. Please note, connectivity, licenses, and any other related equipment which

must be purchased by the foreign system is the responsibility of NDOT. The ISSI interface to a foreign system does not include support for EDACS talkgroups.

### **CSSI GATEWAY**

CSSI is a function of the ISSI application and will connect to a corresponding 3<sup>rd</sup> party infrastructure CSSI to allow use of 3<sup>rd</sup> party consoles. One gateway will be required at the system VIDA Premier Core and another is required at the corresponding agency dispatch center along with a core or control point to interface into the VIDA network. The CSSI will be located on the Las Vegas SANS VIDA Premier Core.

The CSSI will be designed to support 75 consoles from other manufacturers. Each CSSI server will require an external connection license. Harris will quote a scope of services to connect the CSSI to 3<sup>rd</sup> party consoles upon request once Washoe and NSRS identifies those consoles, locations and the scope of integration.

### **EDACS MIGRATION GATEWAY**

The EDACS Migration Gateway (EMG) will provide integration between the existing EDACS system and the P25 Phase 1/Phase 2 system during transition. NDOT's new 24-channel, EDACS Migration Gateway and Washoe County's recently purchased EDACS Migration Gateway, will be used during cutover. NDOT's EMG will be housed at the Primary VIDA Premier location in the south and Washoe County's EMG will be housed at the secondary VIDA Premier location in the north. Both EMGs will be used to align with the migration plan and the user transition phases.

### **INTEROPERABILITY GATEWAY**

Harris will provide an Interoperability Gateway at each of Washoe's 15 RF sites. Each gateway will support 8 interfaces. The Interoperability Gateway will provide a basic level of interoperability on the P25 radio system, permitting system-level audio connectivity with legacy trunked and conventional analog radio systems, regardless of manufacturer or frequency band. The Interop Gateway in Figure 4, will be configured to support conventional 4-wire E&M resources to interconnect with other devices.

Each gateway chassis can support up to 12 interfaces. In addition, Interop Gateways are also located at the [REDACTED]. Harris has included [REDACTED] interfaces for conventional resources located throughout the state. Please

note, gateways or the radio resources which provide the RF access must be within the coverage of the radio sites or systems they are intended to bridge. The gateways will be housed in open equipment racks having a seismic-Zone-4-rating and share the VIDA Core networking equipment. Members are responsible for backhaul to these gateways.

**Figure 4. VIDA Interoperability Gateway Chassis**



### Site Design

The Washoe County system design includes P25 trunked multicast sites and P25 simulcast systems. [REDACTED].

The selection of RF sites for the P25 system is the foundation upon which coverage, system efficiency and cost effectiveness are built. Harris leveraged [REDACTED] existing sites to maintain coverage and [REDACTED] new sites to improve coverage in challenging areas as identified. The [REDACTED] new candidate sites are listed below. The final site list is in the Site Details attachment, Exhibit 1a.

[REDACTED]

[REDACTED]

- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]

Using the existing EDACS sites' licenses as a guide, Harris optimized the coverage design to achieve maximum licensable ERP where possible and maintain a path-balanced system design. Every site will use tower-top amplifiers (TTA); however, Harris recommends its engineers and the engineers of the Washoe County revisit TTA use at all sites based on the real-world noise floor levels at each site. Harris will benchmark the noise floor at each site before installing

equipment. Any noise floor related issues identified before installation of Harris equipment will be handled as a change order.

### Simulcast Cells

Harris' exclusive Distributed Control Point (DCP) technology virtualizes the simulcast control point application and removes all simulcast hardware requirements. Washoe County's [REDACTED] simulcast systems will employ redundant DCPs. The simulcast systems are listed below. The radio equipment is housed in 84-inch, seismic-Zone-4 rated open equipment racks. [REDACTED]

[REDACTED]

- [REDACTED]
  - [REDACTED]
  - [REDACTED]
  - [REDACTED]
- [REDACTED]
  - [REDACTED]
  - [REDACTED]
- [REDACTED]
  - [REDACTED]
  - [REDACTED]
- [REDACTED]
  - [REDACTED]
  - [REDACTED]

The simulcast systems will be designed to minimize time delay interference or TDI and maximize coverage. Any TDI (also known as delay spread) is shown in pink. See simulcast maps below. The simulcast systems will be integrated to the VIDA Premier/Connect cores as depicted in Figure 2.

Figure 5. [REDACTED]



Figure 6. [REDACTED]

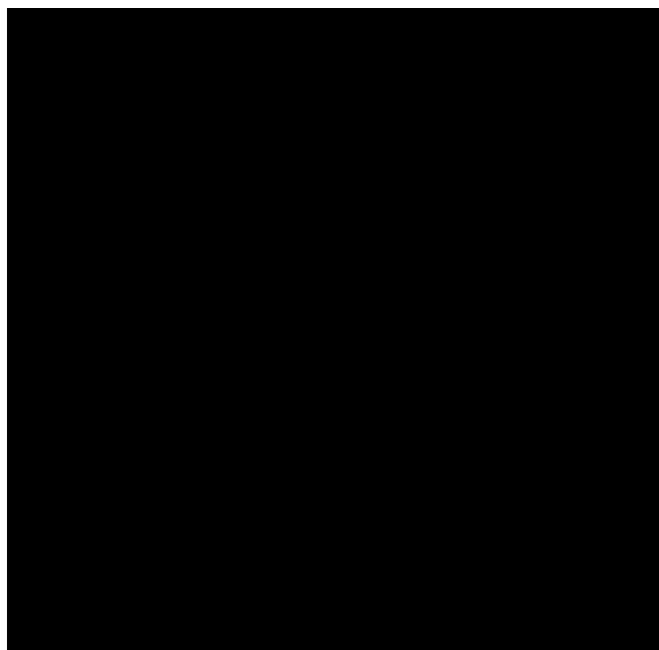
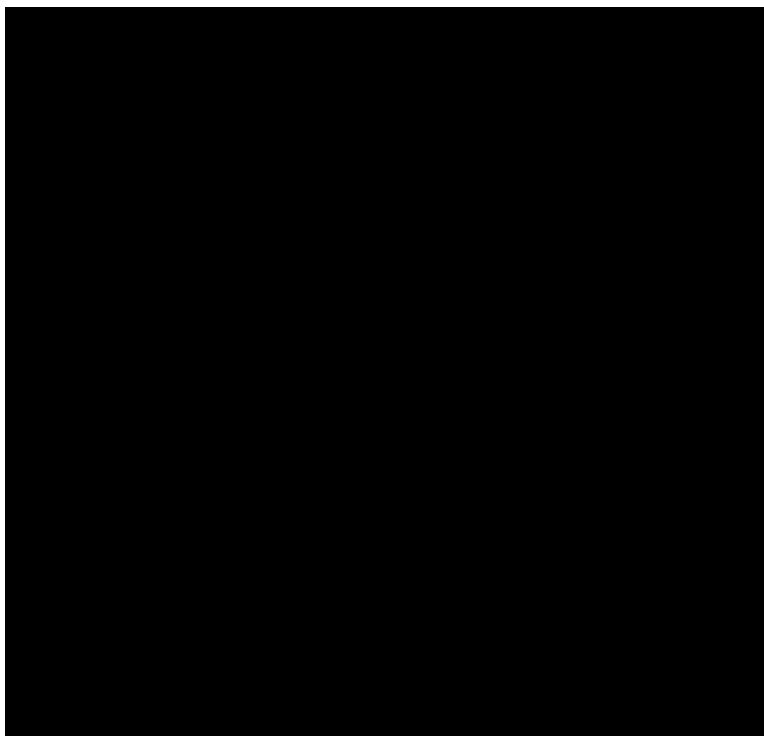


Figure 7. [REDACTED]



Figure 8. [REDACTED]



## Multisites

Harris will guarantee DAQ 3.4 coverage up to a level of 18 dB in the critical buildings listed in Figure 9. These buildings will be measured after a region has been placed into service. In the case where a building fails DAQ 3.4 testing, measurements will be taken both immediately around the building as well as inside the building in a small area centered on each failed test location. The building loss at a test location is defined as the difference between the mean of the outside measurements minus the 95th percentile of the inside measurements at the failed test location. The 95th percentile is the signal level that is exceeded by 95% of the measurements.

If the building loss is measured to be greater than 18 dB, Harris will quote the price to purchase and install BDAs at all necessary locations. Inbuilding coverage test details are in Exhibit 9 Coverage Character Test, Section 5.

### Figure 9. Washoe County Critical Buildings

| Building Name                                 | Address           | City        | Number of Floors    |
|-----------------------------------------------|-------------------|-------------|---------------------|
| Veterans Administration Hospital              | 975 Kirman Ave    | Reno        | unknown             |
| Red Rock Volunteer Fire Station               | 16180 Red Rock Rd | Ranch Haven | 1                   |
| FedEx Ground Building                         | 12501 Mustang Rd  | Sparks      | 1 (3-4 floors high) |
| Renown Regional Medical Center Emergency Room | 1155 Mill St      | Reno        | unknown             |

| Building Name                                              | Address                         | City   | Number of Floors |
|------------------------------------------------------------|---------------------------------|--------|------------------|
| Nugget Casino Resort<br>Victorias Steakhouse<br>Restaurant | 1100 Nugget Ave                 | Sparks | unknown          |
| Saint Mary's Regional<br>Medical Center                    | 235 West 6 <sup>th</sup> Street | Reno   | unknown          |
| Mendive Middle School                                      | 9100 Whitewood Drive            | Sparks | unknown          |
| Sparks Police Dept                                         | 1701 East Prater Way            | Sparks | 2                |
| Ed Van Gorder Elementary<br>School                         | 7650 Campello Drive             | Sparks | 1                |

### Site on Wheels (SOW)

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

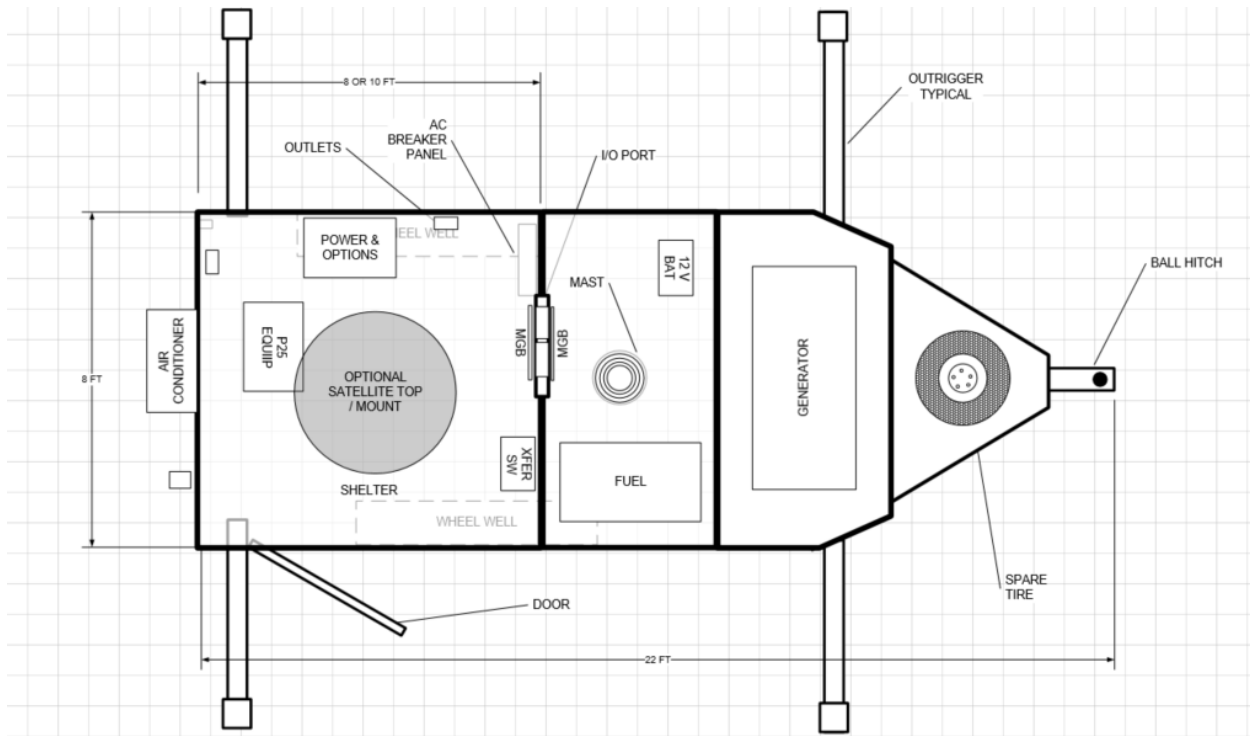
[REDACTED]

1. [REDACTED]
2. [REDACTED]
3. [REDACTED]
4. [REDACTED]
5. [REDACTED]
6. [REDACTED]
7. [REDACTED]
8. [REDACTED]

### SOW Trailer and Enclosure Specifications

The general trailer construction will consist of a steel frame, dual axle, and enclosed cargo area capable of carrying an external deployable tower and all related equipment. Figure 10 is a representation of the transportable site trailer and equipment placement in the trailer.

**Figure 10. Transportable Site Trailer**



## SOW MECHANICAL SPECIFICATIONS

Figure 11 lists the basic minimum requirements for a trailer and enclosure.

**Figure 11. Trailer Mechanical Specifications**

| Specification Description            | Minimum Requirement        |
|--------------------------------------|----------------------------|
| Tower Type                           | MAST                       |
| Enclosed Size                        | ~ 8 FT W x 8-10 FT L       |
| Trailer Width Overall                | ~ 8.5 FT (TBD by Supplier) |
| Enclosure Interior height            | 7- 8 FT (TBD by Supplier)  |
| Trailer Overall Length (w/o coupler) | ~22 Ft                     |
| Trailer Gross Vehicle Weight (GCWR)  | 6500 Lbs (TBD by Supplier) |
| Trailer Gross Axle Weight (GAWR)     | 3500 Lbs (TBD by Supplier) |
| Trailer Approximate Shipping Weight  | 3500 Lbs (TBD by Supplier) |
| Number of Axles                      | 2                          |
| Axel Capacity                        | 3500 Lbs                   |
| Standard Coupler size                | 2-5/16 inch                |
| Brakes                               | 4 Wheel Electric           |
| Tire Size                            | 15 inches                  |

| Specification Description   | Minimum Requirement   |
|-----------------------------|-----------------------|
| Tire Load Range             | (TBD by Supplier)     |
| Tire Capacity / Load Rating | 1760 Lbs              |
| Tire P.S.I                  | 50                    |
| Wheel Rim Size              | 15 inches             |
| Wheel Width                 | 6 inches              |
| Wheel Bolt Pattern          | 5.5                   |
| Anchoring System            | Outrigger, Jack Posts |

### SOW ENCLOSURE REQUIREMENTS

The enclosed area will house electrical equipment and support the additional equipment that is required for system interoperability. Figure 12 lists the features that are specific for the trailer enclosure.

Figure 12. Enclosure Requirements

| Specification Description               | Minimum Requirement                   |
|-----------------------------------------|---------------------------------------|
| Interior Floor                          | TBD by Supplier                       |
| Interior Wall Finish                    | White                                 |
| Doors                                   | Side Entrance                         |
| Exterior Top                            | Optional Satellite Mount              |
| 19 Inch Equipment Rack                  | Shock/Vibration Mount                 |
| Generator Storage                       | 16 KW                                 |
| Interior Electrical (See Power Section) | 120 V AC                              |
| Interior Lighting                       | Yes                                   |
| HVAC                                    | Yes                                   |
| Exterior Commercial Power Connection    | Yes                                   |
| Plenum / Cable Port                     | Yes                                   |
| Grounding                               | Interior per Harris LMR Specification |

### SOW MOBILE TELESCOPING TOWER

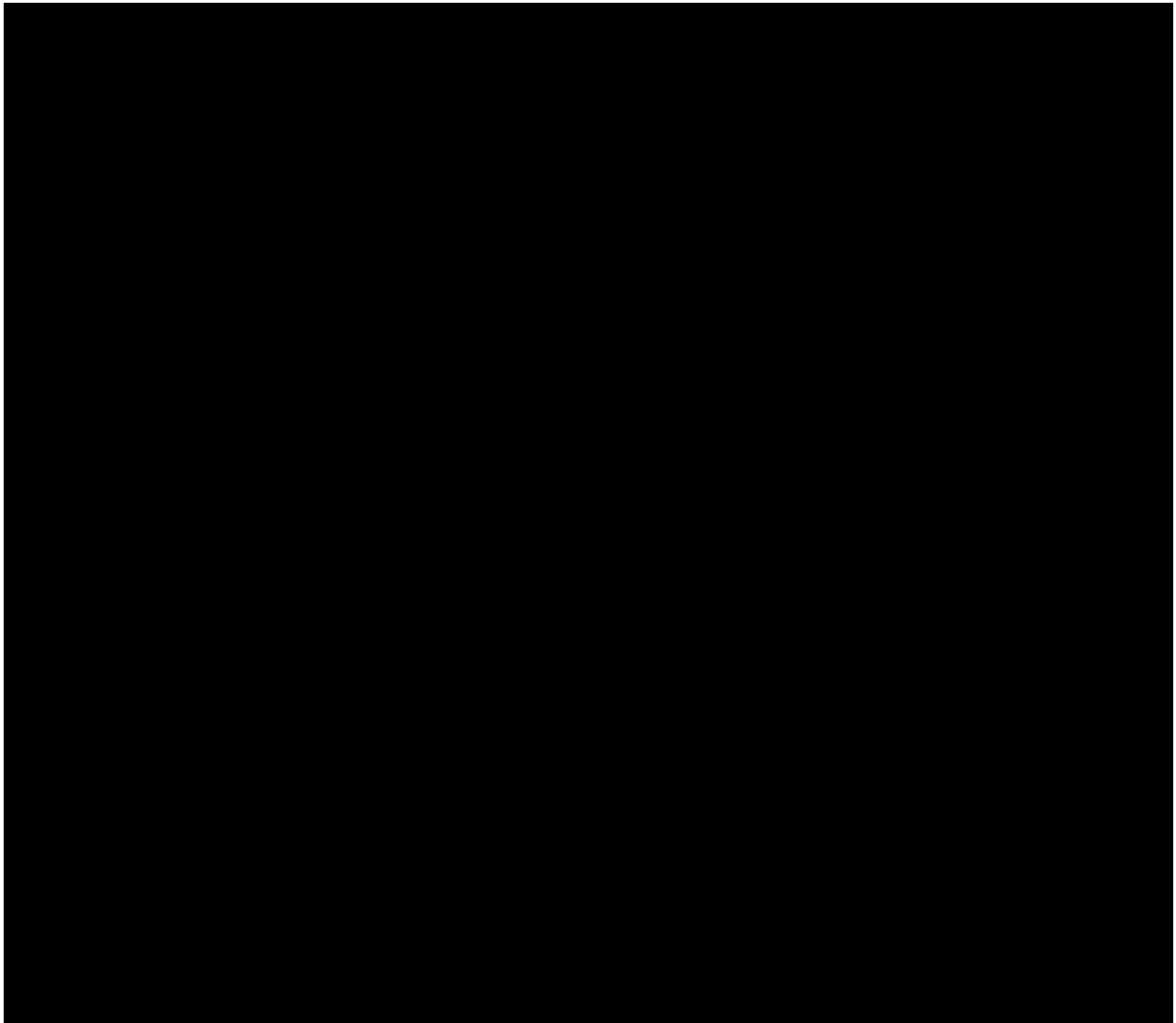
The transportable site will include a telescopic mast capable of extending to a height of approximately 60 feet. The tower will be fabricated from aluminum to provide light weight for on location setup. The tower will be composed of sections that collapse for storage and will be

mounted to the trailer enclosure for transporting. The mast will include self-furling coax feedline for connection to one LMR antenna mounted approximately at the center of the mast.

### **SOW ANTENNA SYSTEM**

Due to transportable tower weight and wind restrictions it is desirable to keep the antenna system as light as possible. Harris will provide a single antenna mounted at the top of the tower for both transmit and receive. The antenna system pictured in Figure 13 will be connected to the repeaters located inside the trailer enclosure. Polyphasers are provided for lightening protection in combination with inside and outside ground bar when connected to a temporary ground system on location.

**Figure 13. Antenna System Configuration**



### **SOW P25 Site Equipment – 4 Channels**

Harris will provide a 4-channel MASTR V base station for a single trailer. Channel hardware is modularized and has some special requirements for heat transfer and grounding to maintain FCC compliance and certification. Harris will integrate the P25 radio system into the enclosed trailer. The equipment rack includes the following equipment for a for fully trunked site operation:

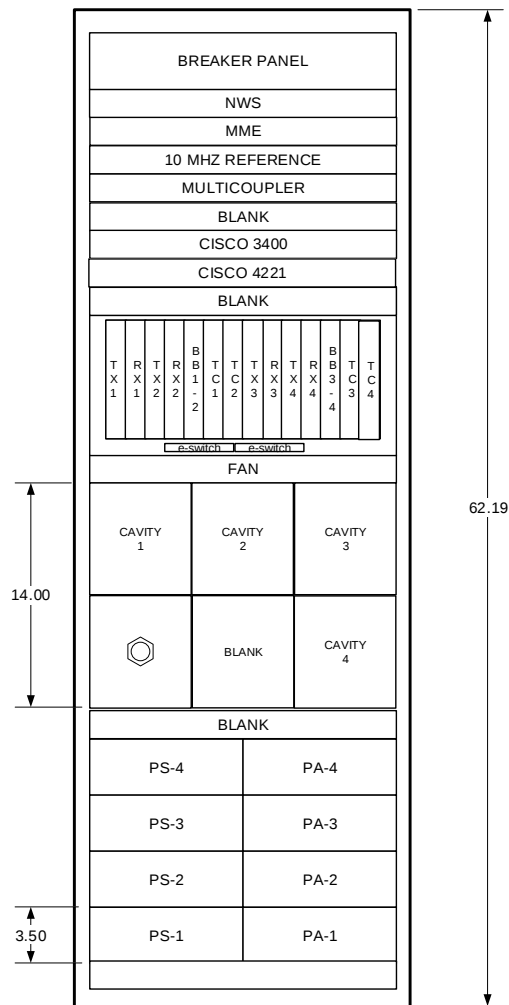
1. Transceiver Chassis – consists of:
  - a. Channel 1-4 Traffic Controller
  - b. Channel 1-4 Baseband Module (2 required for 4 Channels)
  - c. Channel 1-4 Receive Modules
  - d. Channel 1-4 Transmit Modules
  - e. Channel 1-4 Backplane Switch - primary
  - f. Channel 1-4 Backplane Switch - secondary
2. High Power Amplifiers Section – consists of:
  - a. Channel 1-4 High Power Amplifier Chassis
  - b. Channel 1-4 High Power Amplifier
  - c. Channel 1-4 Power Supplies (-48VDC)
3. Combiner Section – consists of:
  - a. Channel 1-4 Ceramic Combiner
  - b. Combiner Junction
  - c. Optional Power Meter
4. Network and Ancillary Equipment – Consists of:
  - a. CISCO Router
  - b. CISCO Switch
  - c. Network Sentry Alarm Monitor
  - d. 10 MHz Reference
  - e. Receiver Multi-coupler

- f. Data Proxy (MME)
- 5. Power Distribution- consists of:
  - a. DC Breaker Panel
  - b. Power Block Wiring

## SOW P25 SITE RACK

The P25 site rack in Figure 14 will contain all P25 related hardware and have a footprint of 24 inches wide by 24 inches deep. The height of the rack will be 72 inches maximum.

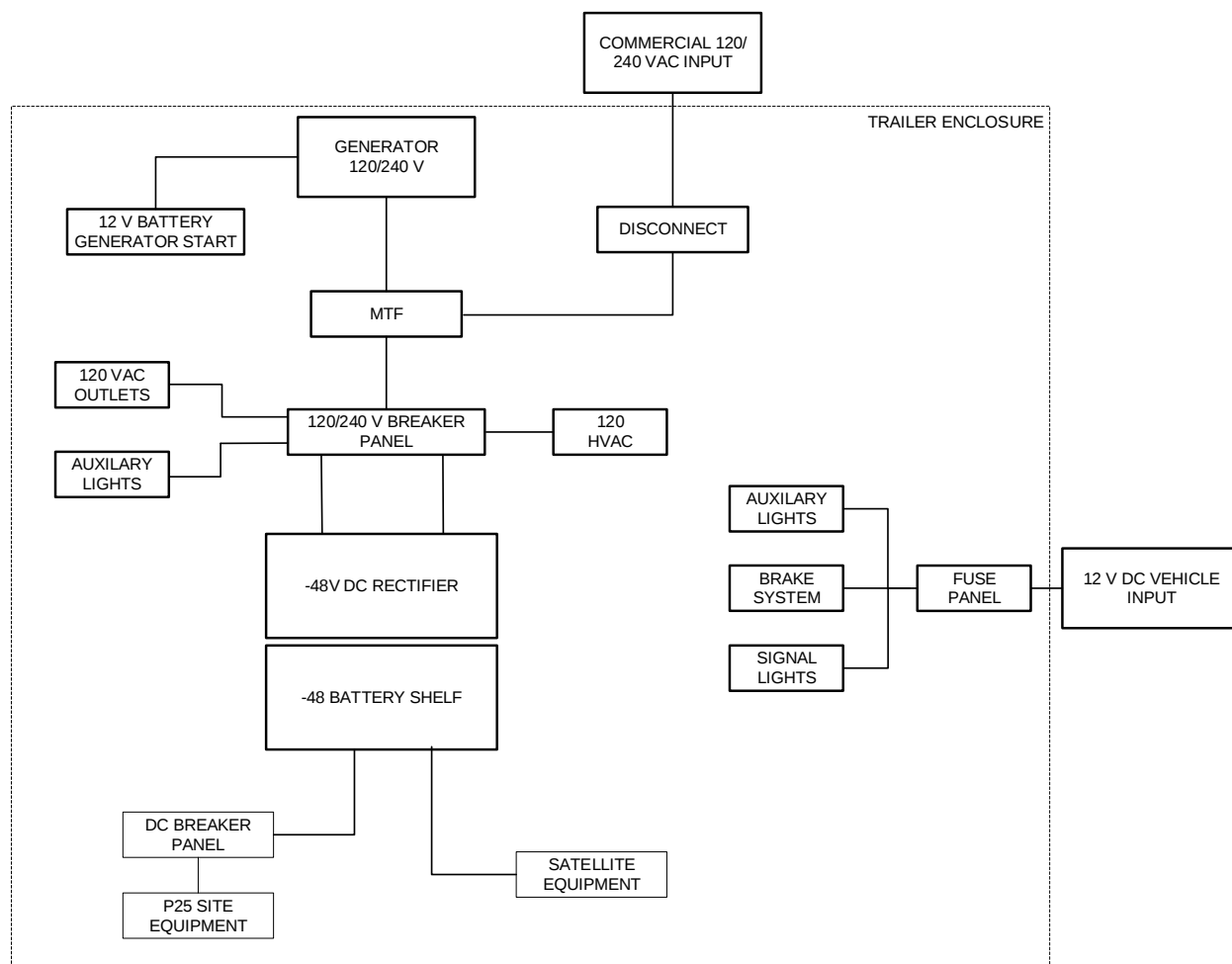
**Figure 14. P25 Site Rack**



## SOW Power and Generator System

Harris recommends the transportable site operate for an extended period without connection to a commercial power source or without fuel for the auxiliary generator. The tiered backup power approach allows flexibility for different event locations. The fundamental power system will deliver both -48 VDC for the P25 site equipment and 120 VAC for auxiliary devices. The power distribution system will include surge suppression for commercial and generator power. A block diagram of the power system is shown in Figure 15.

**Figure 15. Power and Generator System**



### SOW EQUIPMENT POWER REQUIREMENTS

Harris equipment will be powered by rectified AC input with -48V DC output. The remaining equipment listed below will be powered by -48 V DC. Backup DC power will be included in the rack with additional equipment required for the site. The equipment planned for the transportable site is listed in Figure 16.

**Figure 16. P25 Site Equipment Power Requirements**

| Equipment                        | Voltage  |
|----------------------------------|----------|
| <b>Base Stations / Repeaters</b> | -48V DC  |
| MASTR V P25 Trunked              | -48V DC  |
| Misc RF Site Equipment           | -48V DC  |
| Network Sentry                   | -48V DC  |
| MME SitePro                      | -48V DC  |
| Cisco Router 4221                | -48V DC  |
| Cisco Switch 2960                | -48V DC  |
| MASTR V Fan Tray                 | -48V DC  |
| Rx Multicoupler (8-channel)      | -48V DC  |
| Cabinet Fans                     | -48V DC  |
| Brandywine Reference Oscillator  | -48V DC  |
| <b>Microwave Equipment</b>       | -48V DC  |
| MW Radio Equipment               | -48V DC  |
| <b>Miscellaneous</b>             | -48V DC  |
| HVAC System                      | 120 V AC |
| Auxiliary Outlets                | 120 V AC |

#### **SOW -48 VDC PLANT POWER REQUIREMENTS**

DC plant power requirements are in Figure 17.

**Figure 17. DC Plant Power Requirements**

|                                    |             |
|------------------------------------|-------------|
| <b>Battery Recharge Time-Hours</b> | 24          |
| <b>Battery Run Time-Hours</b>      | .5          |
| Battery Amp Hours                  | 147         |
| Battery re-charge Current          | 6.7         |
| <b>Rectifier Size-Load Amps</b>    | <b>80.2</b> |

#### **SOW 120 VAC REQUIREMENTS**

AC power requirements are in Figure 18.

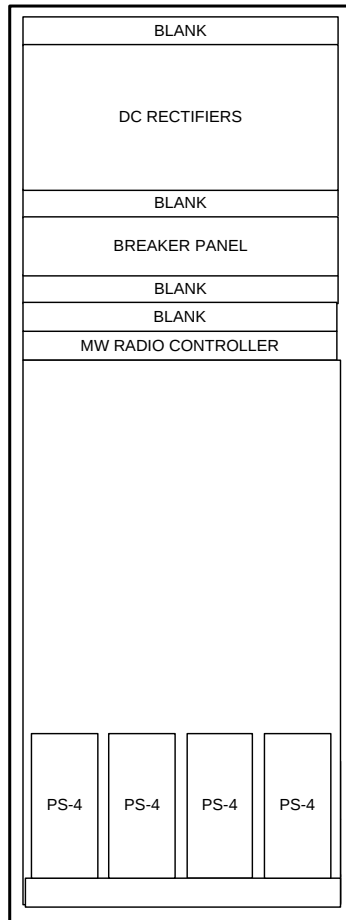
**Figure 18. AC Equipment Power Requirements**

|                                    |    |
|------------------------------------|----|
| <b>120 V Equipment</b>             | 2  |
| Auxiliary Equipment Breaker (Amps) | 15 |
| HVAC Breaker (Amps)                | 20 |

## SOW DC PLANT RACK

The DC Rack pictured in Figure 19 will have a footprint of 24 inches wide by 26 inches deep.

**Figure 19. DC Plant Rack**



## SOW GENERATOR REQUIREMENTS

A Generator will provide power to all equipment at full load and provide power for the duration of the fuel supply. The Generator requirements to support the P25 site equipment, DC power plant and HVAC are listed in Figure 20.

**Figure 20. Generator Requirements**

| Requirement      | Rating  |
|------------------|---------|
| Generator Rating | 16KW    |
| Fuel Type        | Propane |
| Voltage Output   | 120/240 |
| Fuel Supply      | 80 Gal  |
| Electric Start   | 12 VDC  |

#### **SOW AIR CONDITIONING REQUIREMENTS**

The AC system will provide cooling and heating for the enclosure space based on the heat load of the equipment. The requirements for cooling are in Figure 21 below.

**Figure 21. Air Conditioning Requirements**

| Description                   | Requirement                |
|-------------------------------|----------------------------|
| Voltage                       | 230 V                      |
| Width                         | 50 inches                  |
| Depth                         | 25 inches                  |
| Ambient Temperature           | 125° F                     |
| Enclosure Temperature Desired | 75° F                      |
| Heat Load                     | 3812 watts                 |
| Insulation                    | No                         |
| Location                      | Outside in direct Sunlight |
| Air Flow Conditions           | Calm                       |
| <b>Required Capacity</b>      | <b>1400 BTUH</b>           |

#### **SOW GROUNDING SYSTEM**

The grounding system will include interior and exterior ground principles according to the Harris grounding specification for sites. While this a transportable site, proper grounding is extremely important to provide safety for the equipment and any personnel within proximity of the trailer and tower. Temporary grounding posts at the location must be provided once the trailer location is established. All site grounding is the responsibility of Washoe County.

#### **SOW MICROWAVE LINK**

Harris will provide a Microwave link option to connect the transportable site to the VIDA Core. Because the endpoint locations are undefined, Harris has estimated a typical site to site link scenario. The microwave dish will be mounted on the trailer. Mounting and aligning a MW dish/radio on the transportable unit to a peer radio at a fixed location, would be difficult to setup

in most situations. Washoe County may want to consider a separate mount mast for the MW dish. Harris has included equipment for a generic link with positioning system for a point to point ethernet link for quick deployment. The microwave link includes the following:

1. MW radio for transportable site
2. MW radio for fixed peer location
3. Power allocation at transportable site
4. Integration at the transportable site

Integration and proper licensing of the MW radio or any backhaul connectivity at a peer location is not included and is the responsibility of Washoe County.

### **Nevada Dispatch Interconnect Project**

Nevada Dispatch Interconnect Project (NDIP) consists of 31 locations across the state of Nevada. Twenty-four locations have existing Interoperability Gateway equipment and older model routers and switches. These sites will be included in this project scope. Harris will reconfigure the NDIP equipment currently connected to the existing VIDA Core into the new VIDA Core. Harris will provide new switches and redundant routers at 24 locations as identified below:

- Douglas County
- Carson City
- Lyon County
- Storey County
- Lander County
- Mineral County
- Pershing County

The following locations are configured on the existing VIDA Core and connected via gateways at the FAST Center in Las Vegas to SNACC.

- LVMPD
- FAO

- Henderson
- North Las Vegas
- Mesquite
- Nellis AFB
- Clark County

The following locations are supported by a talkgroup directly connected to existing NSRS/WCRCS core:

- Reno
- NHP Carson
- NHP Elko
- NHP Las Vegas
- NDOT District I
- NDOT District II
- NDOT District III
- Elko County
- Washoe County
- Sparks

Harris will perform the following services for each NDIP location:

- New IP scheme on existing equipment
- New configs for existing gateway equipment
- Move talkgroups from current Core to new Core
- Add talkgroups to new Core

## Site Equipment

The MASTR V base stations will operate in both the simulcast and multicast systems at the radio sites. They will support P25 Phase 1 (FDMA) and P25 Phase 2 (TDMA) trunking operations. All base station equipment and antenna combining equipment will be housed in 84-inch, seismic-Zone-4-rated, open-equipment racks.

Harris will furnish and install new antenna system equipment (antenna, transmission line, transmitter combiners, receiver multicouplers, TTAs, and connectors) for all P25-Trunked RF sites. Harris will source all RF materials from suppliers, including transmission line of appropriate length. The P25 site configuration is in the Site Details attachment, Exhibit 1a.

### **Cross Band Repeater System**

NCRN VHF to 800 MHz cross-band repeater equipment owned by NDOT will reside at Washoe's Peavine and Poito sites. [REDACTED].

[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

## Network Management Systems

Harris will provide a solid Unified Network Management System (UNMS) that enables monitoring, control and configuration of P25 trunked and conventional communication systems with high availability and performance. The Network Sentry (NWS) will monitor and alert the status of site equipment and facilities to the Regional Network Manager (RNM). The RNM will monitor network utilization, performance, health, consolidates the region wide alarm information and report it to the Enterprise Network Manager (ENM). The ENM and other applications in the UNMS suite will provide a comprehensive system. The UNMS will host the following applications on Virtual Access Server(VAS) located on the NDOT VIDA Premier Core:

- Enterprise Network Manager (ENM)
- Unified Administrative System (UAS)
- Activity Warehouse

Harris will provide each Premier and Connect core with a Device Manager license for its RSM Pro. The entire NSRS system includes 6 Device Managers. Washoe County will be able to remote into the RSM pro to run Device Manager.

## Unified Network Management System

The ENM and UAS web interfaces will support 50 concurrent sessions across the network and will be protected by role-based authentication defined on the Microsoft Active Directory server. Network monitoring applications support SNMP V2c and V3 for secured communications. The following applications are available on a per user license basis:

- Radio Personality Manager 2 (RPM2)
- Profile Manager

Harris will provide Washoe County 4 each of these licenses.

**Figure 22. List of Features and Harris' Offerings**

| Requirement                                                                                                                                                                                        | Harris Offering                                                      |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|
| Monitor health, keep alive, failures of all network devices. Generate statistical reports, interrogate, troubleshoot and maintain network components, send control commands, optimize performance. | Enterprise Network Manager (ENM)                                     |
| Paging and email notifications.                                                                                                                                                                    | ENM / Regional Network Manager (RNM)                                 |
| Configure components, backup and restore configuration remotely.                                                                                                                                   | Device Manager & Console(DMC) and Radio Personality Manager 2 (RPM2) |
| Push updates to remote equipment and upgrade if necessary                                                                                                                                          | DMC                                                                  |
| Manage encryption capabilities and over-the-air features                                                                                                                                           | Unified Administrative System (UAS)                                  |
| Manage intersystem interoperability                                                                                                                                                                | ISSI                                                                 |
| Local administration database                                                                                                                                                                      | UAS                                                                  |
| Real-time airtime usage, site affiliations                                                                                                                                                         | Activity Warehouse, RNM                                              |
| Real-time monitoring of network usage, network elements, GPS system, external interface detection                                                                                                  | ENM/ RNM                                                             |

## Network Management Terminal (NMT)

Harris will provide 10 Network Management Terminals (NMT), at locations provided below. Network connections will be provided by Washoe County at the time of installation.

1. Washoe County – 10
  - a. Edison – 7
  - b. Spectrum - 3

Each NMT will be comprised of a PC running Windows OS, a monitor, keyboard and mouse. The NMT is configured to operate on the local network at the specified location. Each terminal will be attached to the Active Directory domain with the proper machine credentials and varying

levels of operator privileges. The NMTs will have necessary licenses and permissions to access the entire suite of management applications.

## Network Management Systems – Asset Management

Harris will upgrade Washoe County's existing Asset Management System from MCM to include ID Management. ID Management is a dynamic radio ID management utility that will reside on Washoe County's existing CommSHOP 360 Asset & Work Order Management Solution. MCM's ID Management Enhancement App is designed to automate and streamline the radio ID management process.

The integration between the asset management system and Harris' VIDA system will occur in the Unified Administration System (UAS). The UAS will support a Bulk Import tool to allow the administrator to import data (such as users) to external applications. The UAS will support an User Export function from the user interface to export data to external applications.

Washoe County has agreed to use the existing asset management to VIDA system integration until automated integration becomes available. Automated integration between the asset management system and Harris VIDA system will be supplied on a later software release.

## Remote Terminal Unit (RTU)

**Harris VIDA Network Sentry(NWS)** hosts site management services for controlling, managing and reporting site alarms and faults to the Regional Network Manager (RNM) and other external management systems via SNMP. Site network devices such as routers and switches report status information to the RNM providing an overall picture of the network. NWS downloads, maintains and distributes the database provisions to the site devices; archives and reports site call activity to the Regional Site Manager (RSM). The NWS is fully compatible with NMT and NMS, presenting a detailed snapshot of monitored devices, enabling technicians to make quick decisions.



The NWS is equipped with an array of digital Inputs, (expandable to 256 with additional hardware), digital outputs and analog inputs. These I/O (input/output) points can be configured to monitor various non-P25 devices such as RF Sensors, temperature alarms, doors, tower

beacons, antenna systems, etc. The cross-connect panel is at the back of the rack with punch-blocks simplifying installation, testing and maintenance for the operators. It synchronizes time with system domain clock through AD policies. NWS' at every site create a flexible work environment and help improve efficiency and productivity.

## Microwave System

Harris will design and implement the new Washoe County microwave network that will provide high-speed wireless Ethernet transmission via the Nokia 7705 SAR-8 MPLS router installed at each Washoe County site. The new Washoe County microwave network will interconnect with the NDOT microwave network to form the NSRS. Harris will perform all services to implement all new equipment that includes microwave dishes, waveguide, radios, dehydrators, Network Management System and MPLS routers to provide network connectivity between the RF sites, cores, and existing PSAPs in Washoe County.

Harris has reviewed the existing Comsearch Microwave Path Data Sheet provided by Washoe County and have used this data along with the selected RF sites in Washoe County to provide a microwave backhaul network solution that will interconnect to the NDOT microwave network which forms the NSRS. [REDACTED]

[REDACTED] which is a combination of loop-protected microwave links and monitor hot standby (MHSB) links. These links will interconnect the cores, RF sites and PSAPs to the NSRS.

Each link will be designed with a path availability of 99.999% based on the receive threshold to provide the required link bandwidth. The new Washoe County microwave network will include the Nokia 7705 SAR-8 MPLS router for routing all packets between microwave sites, core locations and between NDOT and Washoe County microwave networks. In the event of a microwave path failure within the microwave loop, the 7705 SAR-8 will automatically reroute traffic to the opposite direction of the network. For RF sites that are connected by microwave spurs, a 1+1 MHSB radio will be installed to increase the reliability of the link.

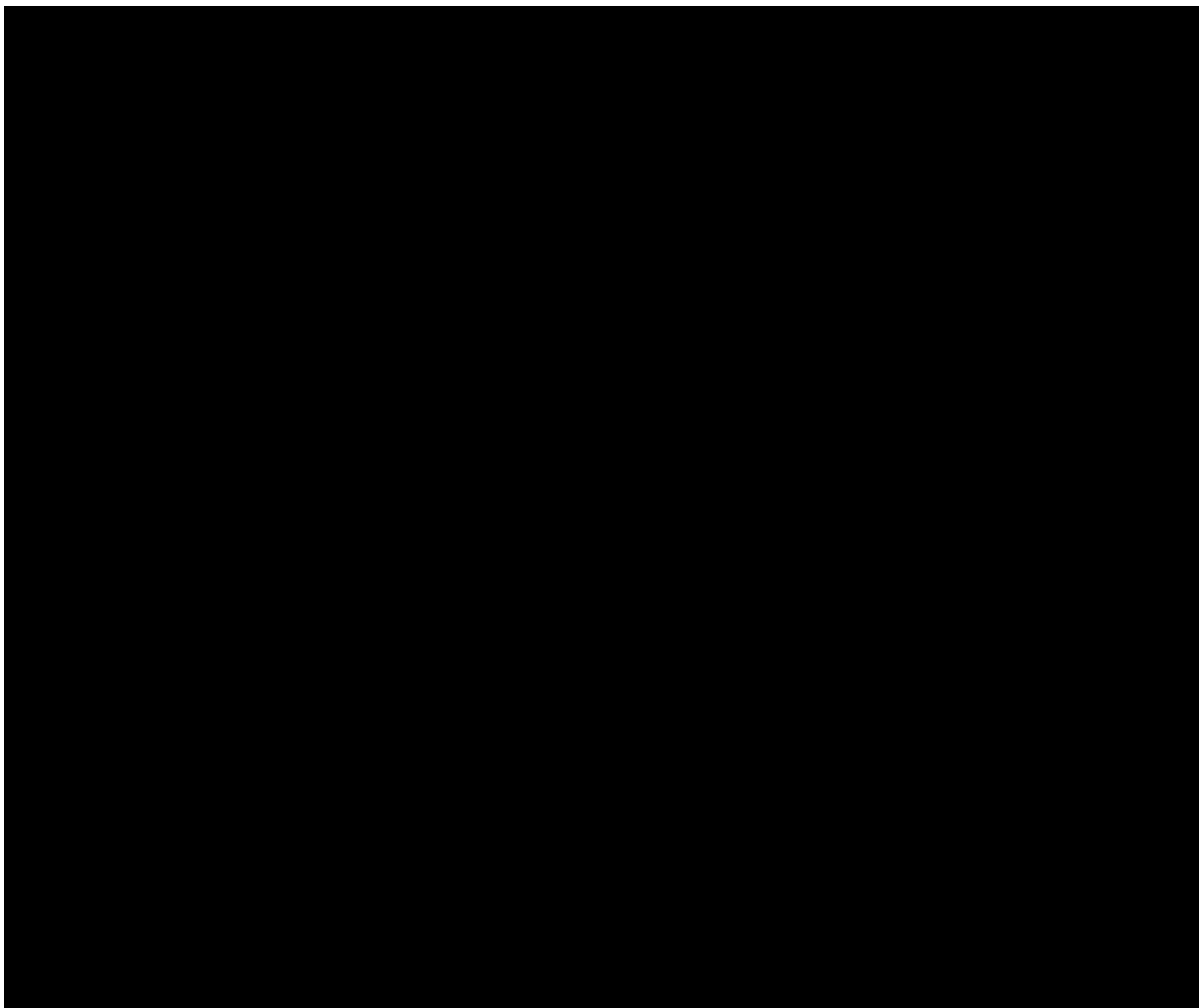
Harris has designed the microwave network based on the topology provided in Figure 23 below. Figure 24 and Figure 25 provide a closer view of the microwave topology details. The main microwave loop for interconnecting the two core sites in Washoe County consist of links that will support a minimum of 161 Mbps. The two cores are located at the EOC Dispatch and Edison Way locations. The northern loop and all spur sites will have links that support a minimum of 22

Mbps. The Washoe County microwave network will interconnect with the NDOT microwave solution which share network nodes at Peavine Mtn and Virginia Peak site locations. Harris will coordinate with NDOT to support the routing of packets between the cores, RF sites and PSAPs located on the Washoe County side and the NDOT side of the NSRS.

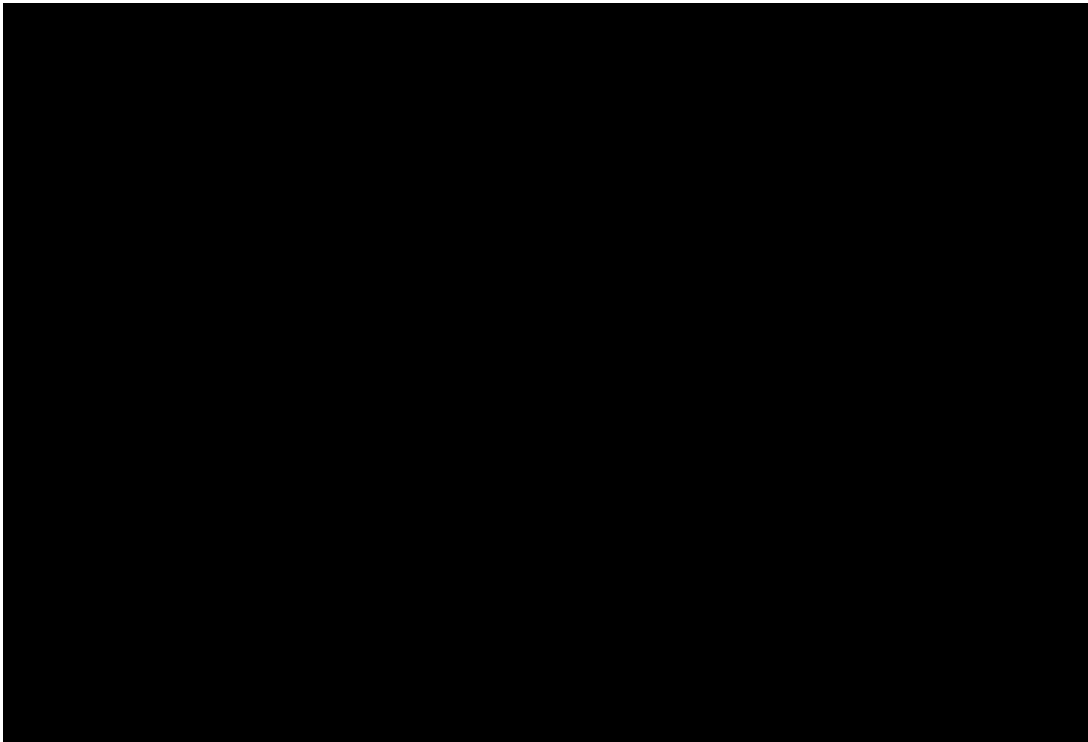
**Figure 23. Overall Microwave Topology**



**Figure 24. Microwave Topology Part A**



**Figure 25. Microwave Topology Part B**



The existing microwave links in Washoe County were considered and are based mainly on Nokia (formerly Alcatel) DS1 microwave circuits. Analysis of the existing microwave paths that will be reused are limited in bandwidth due to the nature of the existing DS1 signaling and will need to be replaced with all new Ethernet based radios to meet the NSRS bandwidth requirements. The existing DS1 links will remain operational until full cutover to the new NSRS. At that point, the equipment for ten existing links that are being replaced will be removed only.

## **Dispatch Console System**

The Symphony Console consists of two components - the Symphony Dispatch Platform (SDP) and the Symphony application. The SDP is a Windows 10, Intel i7-based industrial grade computer with an integrated custom audio processor that supports 24-hour dispatch operations.

## **Dispatch Equipment**

### **SYMPHONY DISPATCH PLATFORM**

Figure 26 shows the main hardware component of Symphony. The SDP is fully IP-based and connects directly to the redundant radio network core using redundant Ethernet interfaces.

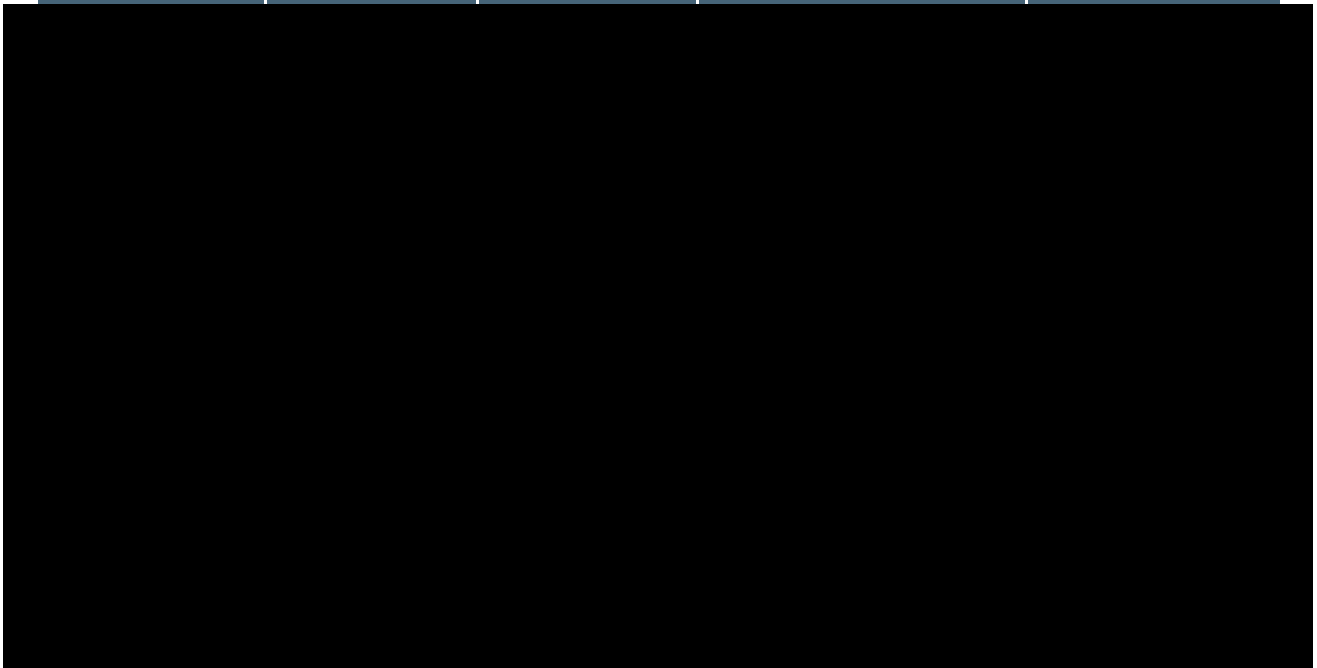
Figure 26. Symphony Dispatch Platform



Washoe County will receive 12 new Symphony consoles at five locations across the State of Nevada as listed below in Figure 27. Twenty-seven existing Symphony consoles will be upgraded to Windows 10.

Figure 27. Dispatch Locations

| Location | Total Positions | Existing Symphony Consoles Upgrade to Windows 10 | New Symphony Consoles required | Core Assignment |
|----------|-----------------|--------------------------------------------------|--------------------------------|-----------------|
|----------|-----------------|--------------------------------------------------|--------------------------------|-----------------|



Each new dispatch console will include the following:

- Symphony Dispatch Platform (SDP) - Premier Bundle. This includes a local screen and baton, 8 patch activations, 16 patch definitions, 16 simulselect definitions, I-calls, four user setups, 16 workspace tabs, 12 flexpaths, and a remote Baton.
- Integrated Instant Recall Recorder for playback independent of the logging recorder
- Call Director Telephone Interface
- AES-256 Encryption and DES-64 Encryption
- Conventional Controls
- Marker Tone
- 2 speakers
- 21.5" full HD monitor (other monitor options available)
- 104-key keyboard
- Standard mouse
- Two single heavy-duty footswitches (Operator and Supervisor)
- Standard desk microphone
- Two headsets (Operator and Supervisor)
- Two headset jack boxes with adapters (Operator and Supervisor)

**Figure 28. Typical Symphony Console Position**



Each dispatch location has redundant routers and redundant network interface cards (NICs).

### Control Stations

Twenty dispatchers will have backup control stations connected to the Symphony console. Backup control stations allow dispatchers to continue dispatch operations during a loss of connectivity from the SDP to the VIDA Premier/Connect core switch. The PTT and audio signals from the desk microphone, headset, speakers, and footswitch sum and route to the radio in backup mode. The three-position Backup Radio switch located on the front of the Symphony Dispatch Platform is used to select from the following choices:

- **Auto:** The Backup Radio is in an active or inactive state controlled automatically by the console.
- **Disable:** The Backup Radio is disabled and cannot be turned on by the console.
- **Manual:** The Backup Radio control is enabled if the radio is powered on.

Two of the stations are existing and will be upgraded accordingly with the following feature set.

- CS7000 (M7300) – P25 Trunking, LLA, TDMA
- M7300 DCS – P25 Trunking, LLA, TDMA

Harris will provide 114 new CS7000 (XG-75M) control stations. Ninety-four stations will be locally controlled and non-encrypted. Twenty stations will be remotely controlled by the Symphony console include AES encryption. All control stations will be configured with the following public safety features:

94 Local Control Stations (Non-Public Safety)

- LLA
- TDMA
- P25T
- OTAP
- EDACS
- System CH-721 Control Head
- MAX SYSGRPS

20 Local Control Stations (Public Safety)

- LLA
- TDMA
- P25T
- OTAP
- OTAR
- EDACS
- System CH-721 Control Head
- ProVoice
- Multikey AES Encryption
- MAX SYSGRPS

## Voice Logging Recorder and Interface

### Overview

Harris will provide Washoe County and Washoe County School District with Exacom Hindsight-600, Multi Media Recording platform P25 Phase 2-compatible logging recorders to record all trunked radio traffic, all conventional radio traffic, all 911 trunks, and call taker administrative calls.

### Voice Logging Recorder Equipment

For Washoe County, the Hindsight-600 provides a solution based on 2 redundant 176 channel recording servers (Dell T-640), each with 144 IP channels for Harris P25 audio and data, 32 analog channels and 6 TB of storage that is RAID 5. The servers will simultaneously record all Harris P25 vocoded communications and In-band GPS data. Once these recordings have been captured by the redundant recorders, the recordings will be stored in the core location recording servers as well as be made available for the Access Server that provide Washoe County the ability to search, playback and save P25 audio and data. The Access server will assist with incident recreation and playback of recorded calls for complete incident recreation. It is important to note that radio recording access will be administered and governed by the local system administrator and users will have permissions and access provided by the system administrator.

For Washoe County School District, the logging recorder solution is based on 2 redundant 80 channel recording servers (Dell T-640), each with 48 IP channels for Harris P25 audio and data, 32 analog channels and 3 TB of storage that is RAID 5. The servers will simultaneously record all Harris P25 vocoded communications. Once these recordings have been captured by the redundant recorders, the recordings will be stored in the core location recording servers as well as be made available for the Access Server that provide Washoe County School District the ability to search, playback and save P25 audio and data. The Access server will assist with incident recreation and playback of all calls for complete incident recreation. It is important to note that radio recording access will be administered and governed by the local system administrator and users will have permissions and access provided by the system administrator.

The Hindsight-600 is EIA/TIA 19" rack-mountable. It will meet or exceed all FCC, IEEE, EIA/TIA, NENA, and APCO standards. All sites feature a NAS device for backup storage for each of the recording servers. All sites have client licenses associated with the Access Server.

## Equipment Reuse

Washoe County has an existing 2-site, 4-channel, 700 MHz P25 simulcast system at Peavine and Red Peak. In the new P25 system these sites are part of a 3-site, 16 channel simulcast system. These sites will undergo hardware and software upgrades. Twelve MASTR V stations will be added to each site to go from 4 channels to 16 channels. Existing site routers and switches will be replaced with newer Cisco 4000 series routers and switches. The following existing assets will be used in the new P25 radio communication system as indicated.

- Peavine site equipment, 700 MHz P25 simulcast
  - 4 channel MASTR V station
  - Existing racks
  - DCP
  - Network Sentry

Antennas, combiners, receiver multicoupler and tower amplifier equipment will be replaced.

- Red Peak site equipment, 700 MHz P25 simulcast
  - 4 channel MASTR V station
  - Existing racks
  - DCP
  - Network Sentry

Antennas, combiners, receiver multicoupler and tower amplifier equipment will be replaced.

Washoe County recently purchased a redundant EDACS Migration Gateway. This gateway will be used to transition EDACS users from the existing EDACS system to the new P25 radio system. Please note this new gateway will need new licenses.

The following is a list of additional existing equipment and/or licenses that will be reused in the new P25 radio system.

- Existing BeOn client licenses
- Existing Symphony console & talkpath licenses will be transferred to the new Core.
- Existing Peavine/Red Peak P25 simulcast system talkpath and site licenses
- Existing Interoperability Gateway and associated licenses
- Existing KMF licenses
- Existing Logging Recorder licenses attached to an existing Verint logging recorder will be transferred to the new system when the Verint recorder is transferred to the new radio system. Harris will provide a quote for equipment and services to connect the existing Verint logging recorder to the new P25 VIDA Core when requested by Washoe County

Non-Harris equipment and licenses are not transferrable to the new system. See list below.

- Existing Syslog Server

## **Subscriber Equipment**

### **User Radio Equipment**

All radios will be software-programmable and configurable to match the mission, needs, and budget of each user agency. Many of the existing models, like the XG-series mobiles and portables, will continue to be compatible with the new P25 system and are P25 Phase 2 upgradeable. All Harris portable and legacy mobile radios are certified to meet FCC PART 90 and environmentally tested to MIL-STD 810G. All new radios will feature link layer authentication.

Harris will provide radio models as identified below and in Exhibit 6 SOW Pricing Schedule. The Price Schedule supersedes the radio information in the 'Copy of Terminals\_WCRCS' Excel file provided by Washoe County. New radios include Public Safety and Non-Public Safety mobile and portable radios and desktop control stations. Desktop stations are locally controlled and will be installed at the desk.

Portable Radios:

- XL- 200P
- XL-185P
- XG-75Pe
- XG-25P
- XG-15P

Mobile Radios:

- XL-200M
- XG-75M
- XG-25M

Control Stations – local control

- XG-75M

The following radios requested by Washoe are outside Harris' original proposal and may not have support for the RFP mandated 4-year support requirement.

- XG-100M
- XG-75Pe
- XG-15P

## Upgrade Radios

Harris will upgrade the radios as listed in Exhibit 6 SOW Pricing Schedule. EDACS is assumed to be an existing feature on all radios. P25 Trunking feature is required for a radio to have the features listed below. P25 Trunking feature will be provided at no charge to any upgrade radio requiring the following feature upgrades:

- LLA
- TDMA
- OTAR
- AES
- Profile

The P25 trunking feature only includes P25 trunking.

## Spares – Infrastructure Equipment

Spare equipment housed locally by Washoe County will be used to quickly replace failed equipment components. Please see Exhibit 5 Equipment List SOW for details. As instructed by Washoe County, spares will be included as follows:

- 1 – 10 Channel Combiner
- 1 – 8 Port Receiver Multicoupler
- 1 – 16 Port Receiver Multicoupler
- 1 – 24 Port Receiver Multicoupler
- 1 – Tower Top Amplifier
- 1 – Each, make & model of RF site antennas
- 2 – Each, make & model of site surge suppression
- 1 – 4 Channel MASTR V, 700 MHz
- 1 – 4 Channel MASTR V, 800 MHz
- 2 – MASTR V -48VDC Power Supplies

- 2 – MASTR V Linear Power Amps, 700 MHz
- 2 – MASTR V Linear Power Amps, 800 MHz
- 1 – Interoperability Gateway, 36 interfaces
- 4 – Interoperability Gateway AC Power Supplies
- 4 – Interoperability Gateway 48VDC Power Supplies
- 1 – Nclock GPS Master Clock
- 1 – NSC Premier Server
- 2 – Power Sensor, 403-1000MHz
- 1 – Network Sentry IP Simulcast DC powered
- 1 – Network Sentry IP Multicast DC powered
- 2 – Assembly Controller, SitePro, MME w/cables, DC powered, additional site/channel
- 1 – MASTR V IP Simulcast, TX site, Common Equipment
- 3 – Oscillators, 10 MHz reference DC powered 6 ports
- 2 – VSCU3H Cisco 2960 Plus Switch, DC powered
- 1 – VSMA6N Mounting Kit, Hardware for Cisco 2960 MSTR III/V cabinet
- 1 – VSCN1J Unitrends ServerRS606 Backup Appliance
- 1 – VSCR28 1921 Advanced Security Router, AC powered
- 1 – VS-CR72 ISR4331 AX APP Router and Security LIC
- 1 – VS-CR90 ISR4321 Router with Security BDL License, DC powered
- 1 – VSCR29 1921 Advanced Security Router, DC powered
- 1 – VS-CU5C Cisco ME 3400E Switch, 24 ports, DC powered
- 1 – VS-CU6G Cisco EHWIC-4ESG 4-port GIG INT Module
- 2 – VS-CU7Y Module SFP GBIC

Harris is adding the following items as spares:

- 1 – VS-CR1G 4221 Site Router SEC/K9

- 1 – VS-CR1F 4221/K9 Router (Dispatch locations)
- 1 – VS-CR92 3650 Switch Catalyst, 24 ports, IP
- 1 – VS-CU5H Cisco SX Multimode Fiber Module
- 6 – VS-CR1H Nokia Router

| NSRS Sites by Entity |        |        |                                   |        |           |       |                                      |           |
|----------------------|--------|--------|-----------------------------------|--------|-----------|-------|--------------------------------------|-----------|
|                      |        |        |                                   |        |           |       |                                      |           |
|                      | Member | Region | Core Assignment<br>North or South | COUNTY | SITE NAME | STATE | CHS.<br>P25 Phase 1<br>*Virtual Site | SITE TYPE |

WASHOE COUNTY  
2nd Half of VIDA Premier Core - Washoe NOC  
VIDA Premier/Connect HA #2A -Washoe NOC  
*Note: NVE owns other half of VIDA Premier/Connect  
HA*

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| SITE NAME | TX<br>Antennas | TX<br>Antenna<br>Height | Combiner Size | Additional Equipment at site | Receiver<br>Multicoupler Size | Rx<br>Antenna<br>Height | # of Racks | Latitude | Longitude | Site Elevation (ft) | Combiner | Combiner Channels |
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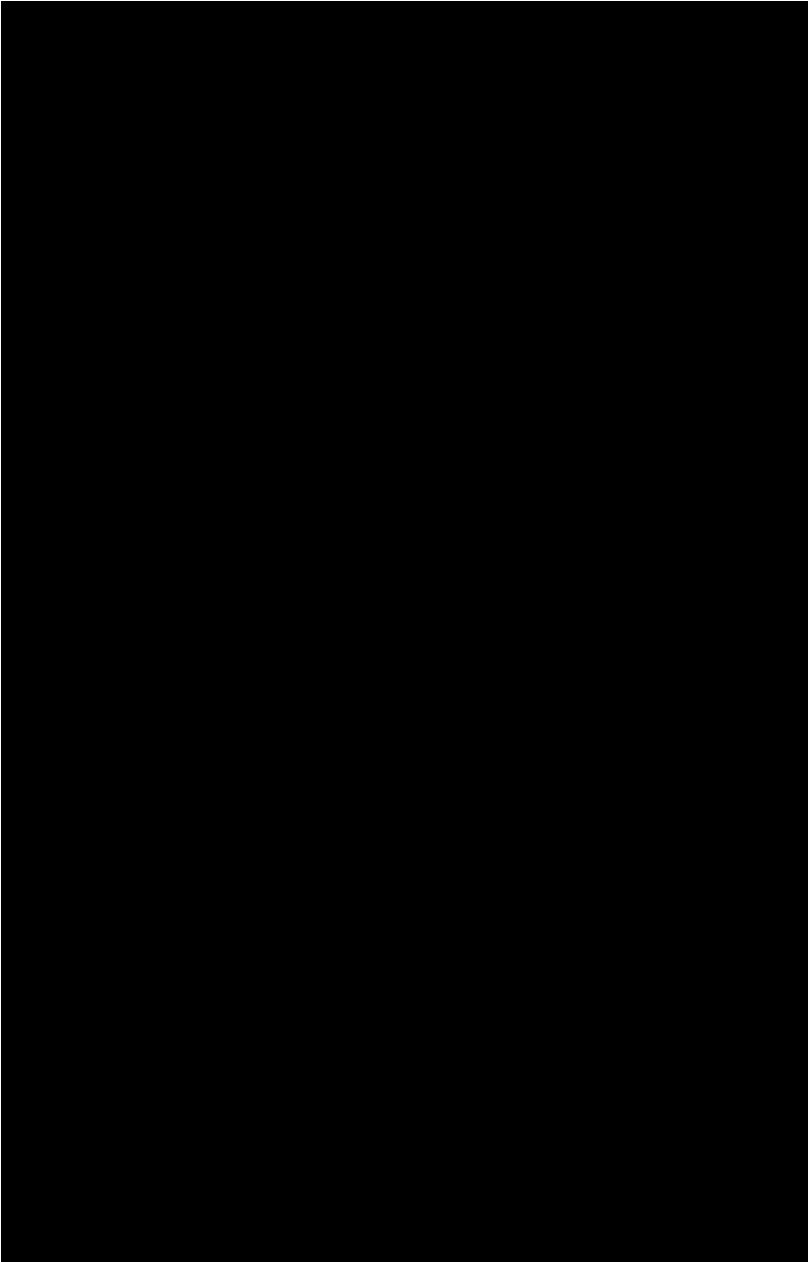
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| SITE NAME | Tx Ant Ht (ft) | Tx Ant Model | Tx Ant Gain (dBd) | Multicoupler | Tower Top Amp | Rx Ant Ht (ft) | Rx Ant Model | Rx Ant Gain(dBd) |
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| SITE NAME | Rx Ant Gain (dBd Hzn) |
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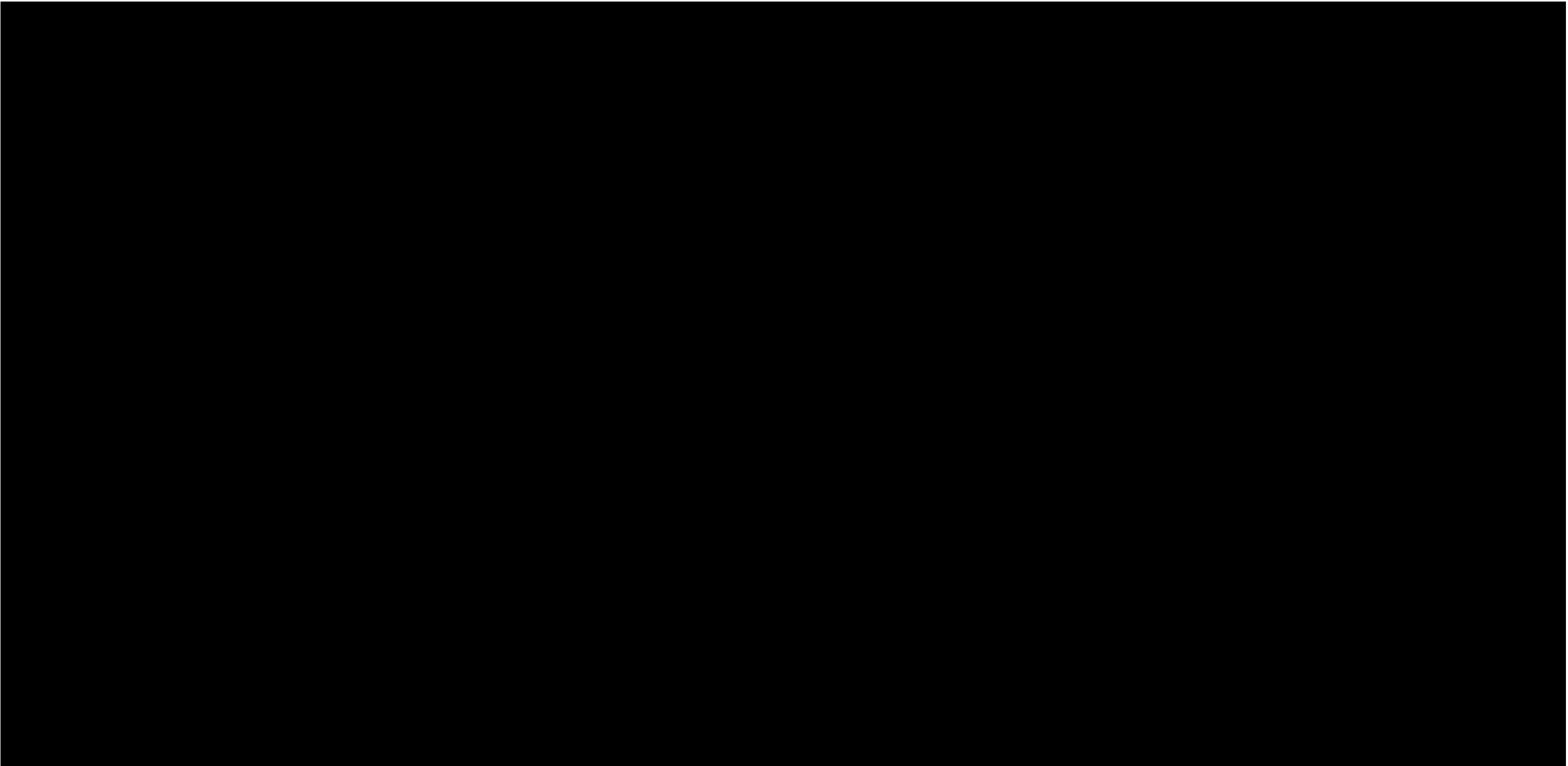


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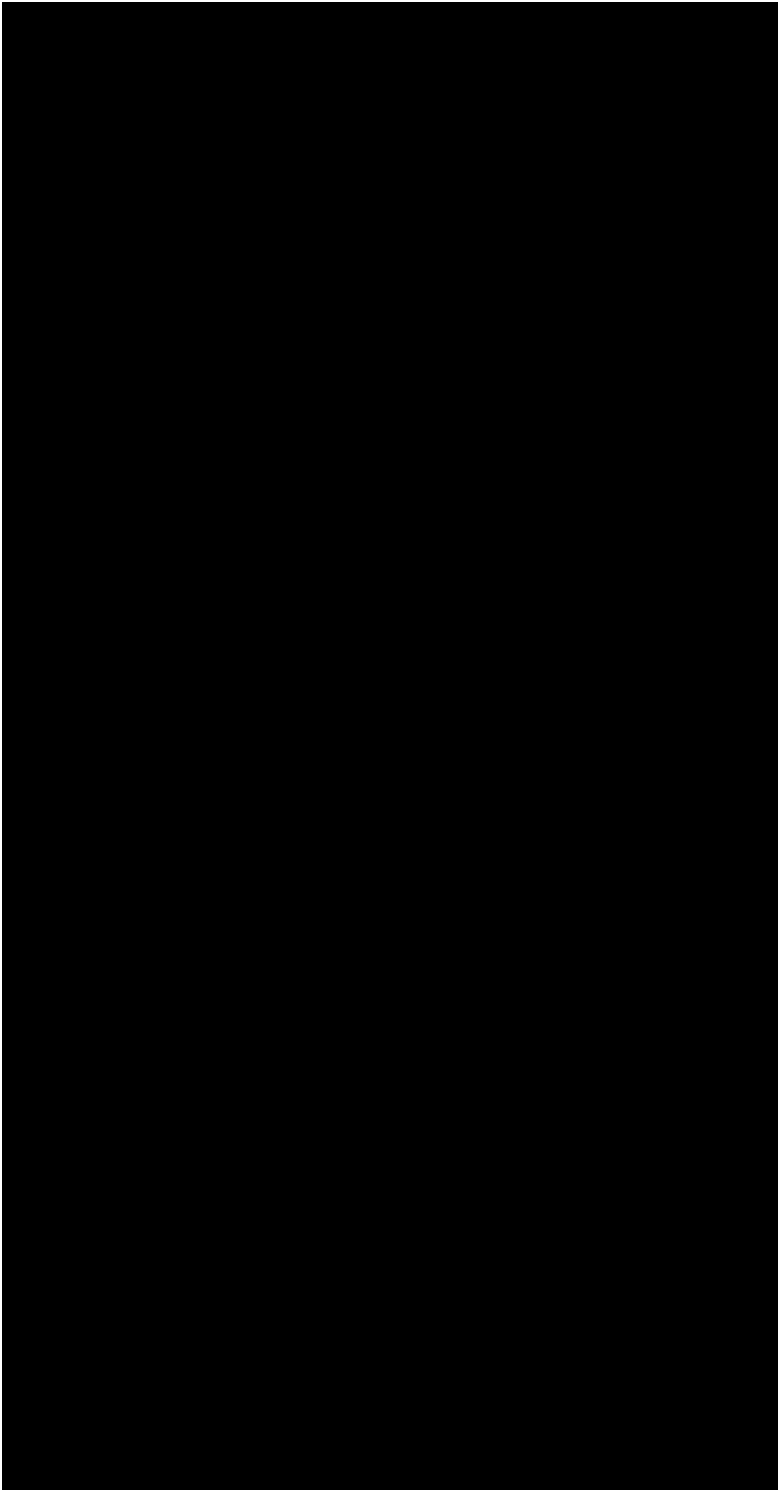
| SITE NAME | TX<br>Antennas | TX<br>Antenna<br>Height | Combiner Size | Additional Equipment at site | Receiver<br>Multicoupler Size | Rx<br>Antenna<br>Height | # of Racks | Latitude | Longitude | Site Elevation (ft) | Combiner | Combiner Channels |
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| SITE NAME | Tx Ant Ht (ft) | Tx Ant Model | Tx Ant Gain (dBd) | Multicoupler | Tower Top Amp | Rx Ant Ht (ft) | Rx Ant Model | Rx Ant Gain(dBd) |
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| SITE NAME | Rx Ant Gain (dBd Hzn) |
|-----------|-----------------------|
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|  | Member | Region | Core Assignment<br>North or South | COUNTY | SITE NAME | STATE | CHS.<br>P25 Phase 1<br>*Virtual Site | SITE TYPE |
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|  |        |        |                                   |        |           |       |                                      |           |

| SITE NAME | TX<br>Antennas | TX<br>Antenna<br>Height | Combiner Size | Additional Equipment at site | Receiver<br>Multicoupler Size | Rx<br>Antenna<br>Height | # of Racks | Latitude | Longitude | Site Elevation (ft) | Combiner | Combiner Channels |
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| SITE NAME | Tx Ant Ht (ft) | Tx Ant Model | Tx Ant Gain (dBd) | Multicoupler | Tower Top Amp | Rx Ant Ht (ft) | Rx Ant Model | Rx Ant Gain(dBd) |
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| SITE NAME  | Rx Ant Gain (dBd Hzn) |
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|  | Member | Region | Core Assignment<br>North or South | COUNTY | SITE NAME | STATE | CHS.<br>P25 Phase 1<br>*Virtual Site | SITE TYPE |
|--|--------|--------|-----------------------------------|--------|-----------|-------|--------------------------------------|-----------|
|  |        |        |                                   |        |           |       |                                      |           |

| SITE NAME | TX<br>Antennas | TX<br>Antenna<br>Height | Combiner Size | Additional Equipment at site | Receiver<br>Multicoupler Size | Rx<br>Antenna<br>Height | # of Racks | Latitude | Longitude | Site Elevation (ft) | Combiner | Combiner Channels |
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| SITE NAME | Tx Ant Ht (ft) | Tx Ant Model | Tx Ant Gain (dBd) | Multicoupler | Tower Top Amp | Rx Ant Ht (ft) | Rx Ant Model | Rx Ant Gain(dBd) |
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| SITE NAME | Rx Ant Gain (dBd Hzn) |
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|--------------------|--|
| [Redacted Content] |  |
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|  | Member | Region | Core Assignment<br>North or South | COUNTY | SITE NAME | STATE | CHS.<br>P25 Phase 1<br>*Virtual Site | SITE TYPE |
|--|--------|--------|-----------------------------------|--------|-----------|-------|--------------------------------------|-----------|
|  |        |        |                                   |        |           |       |                                      |           |

| SITE NAME | TX<br>Antennas | TX<br>Antenna<br>Height | Combiner Size | Additional Equipment at site | Receiver<br>Multicoupler Size | Rx<br>Antenna<br>Height | # of Racks | Latitude | Longitude | Site Elevation (ft) | Combiner | Combiner Channels |
|-----------|----------------|-------------------------|---------------|------------------------------|-------------------------------|-------------------------|------------|----------|-----------|---------------------|----------|-------------------|
|-----------|----------------|-------------------------|---------------|------------------------------|-------------------------------|-------------------------|------------|----------|-----------|---------------------|----------|-------------------|

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| SITE NAME | Tx Ant Ht (ft) | Tx Ant Model | Tx Ant Gain (dBd) | Multicoupler | Tower Top Amp | Rx Ant Ht (ft) | Rx Ant Model | Rx Ant Gain(dBd) |
|-----------|----------------|--------------|-------------------|--------------|---------------|----------------|--------------|------------------|
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| SITE NAME  | Rx Ant Gain (dBd Hzn) |
|------------|-----------------------|
| [REDACTED] |                       |

[REDACTED]

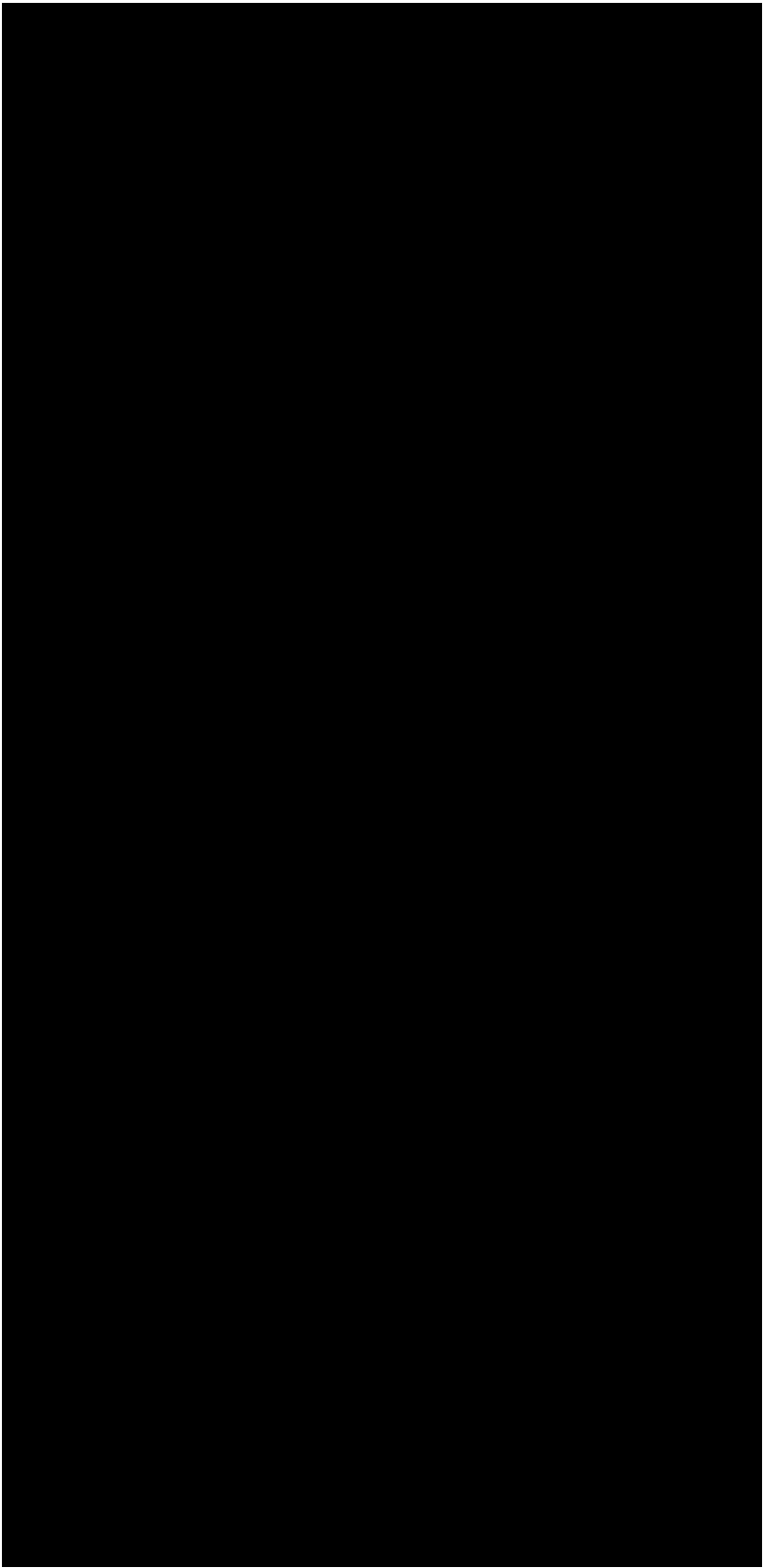
|  | Member | Region | Core Assignment<br>North or South | COUNTY | SITE NAME | STATE | CHS.<br>P25 Phase 1<br>*Virtual Site | SITE TYPE |
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| SITE NAME | TX<br>Antennas | TX<br>Antenna<br>Height | Combiner Size | Additional Equipment at site | Receiver<br>Multicoupler Size | Rx<br>Antenna<br>Height | # of Racks | Latitude | Longitude | Site Elevation (ft) | Combiner | Combiner Channels |
|-----------|----------------|-------------------------|---------------|------------------------------|-------------------------------|-------------------------|------------|----------|-----------|---------------------|----------|-------------------|
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| SITE NAME | Tx Ant Ht (ft) | Tx Ant Model | Tx Ant Gain (dBd) | Multicoupler | Tower Top Amp | Rx Ant Ht (ft) | Rx Ant Model | Rx Ant Gain(dBd) |
|-----------|----------------|--------------|-------------------|--------------|---------------|----------------|--------------|------------------|
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| SITE NAME | Rx Ant Gain (dBd Hzn) |
|-----------|-----------------------|
|-----------|-----------------------|



|  | Member | Region | Core Assignment<br>North or South | COUNTY | SITE NAME | STATE | CHS.<br>P25 Phase 1<br>*Virtual Site | SITE TYPE |
|--|--------|--------|-----------------------------------|--------|-----------|-------|--------------------------------------|-----------|
|  |        |        |                                   |        |           |       |                                      |           |

| SITE NAME | TX<br>Antennas | TX<br>Antenna<br>Height | Combiner Size | Additional Equipment at site | Receiver<br>Multicoupler Size | Rx<br>Antenna<br>Height | # of Racks | Latitude | Longitude | Site Elevation (ft) | Combiner | Combiner Channels |
|-----------|----------------|-------------------------|---------------|------------------------------|-------------------------------|-------------------------|------------|----------|-----------|---------------------|----------|-------------------|
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| SITE NAME | Tx Ant Ht (ft) | Tx Ant Model | Tx Ant Gain (dBd) | Multicoupler | Tower Top Amp | Rx Ant Ht (ft) | Rx Ant Model | Rx Ant Gain(dBd) |
|-----------|----------------|--------------|-------------------|--------------|---------------|----------------|--------------|------------------|
|           |                |              |                   |              |               |                |              |                  |

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## Responsibility Matrix

### Detailed Design Review (DDR) Responsibility Matrix

The Harris Team uses the information obtained during the Kick-Off Meeting, Preliminary Design Review, site surveys, and regulatory and engineering documentation to deliver the final system design at the DDR. This will be updated per regional cutover.

The Harris Team presents design drawings and documentation during the DDR with Washoe County.

Figure 1. Detailed Design Review Responsibility Matrix

| Tasks                                                                                                                             | Harris | WASHOE COUNTY |
|-----------------------------------------------------------------------------------------------------------------------------------|--------|---------------|
| <b>Prepare for Detailed Design Review</b>                                                                                         |        |               |
| Assemble project team and travel to the WASHOE COUNTY location                                                                    | X      |               |
| Assemble WASHOE COUNTY team for Kick-Off Meeting                                                                                  |        | X             |
| Provide location in appropriate conference room or training facility                                                              |        | X             |
| Present preliminary information on sites and design                                                                               | X      |               |
| Provide available information and status on sites, leases, etc.                                                                   |        | X             |
| Provide a team and propose a schedule for site surveys                                                                            | X      |               |
| Arrange access to sites and confirm site survey schedule                                                                          |        | X             |
| Provide site-knowledgeable personnel (customer and site owner reps, as appropriate) to accompany the project team on site surveys |        | X             |
| Conduct site surveys                                                                                                              | X      |               |
| Provide available site plans and applicable electrical and layout plans for existing sites                                        |        | X             |
| Provide available up-to-date tower and foundation drawings along with a current mapping of installed antennas and cabling         |        | X             |
| Perform grounding analyses                                                                                                        | X      |               |
| Perform tower structural analyses                                                                                                 | X      |               |

| Tasks                                                                         | Harris | WASHOE<br>COUNTY |
|-------------------------------------------------------------------------------|--------|------------------|
| Develop required system drawings                                              | X      |                  |
| Develop network plans and IP backhaul requirements                            | X      |                  |
| Develop tower antenna placement plans                                         | X      |                  |
| Develop frequency plans                                                       | X      |                  |
| Develop coverage maps                                                         | X      |                  |
| Develop site electrical loads                                                 | X      |                  |
| Develop preliminary cutover plan                                              | X      |                  |
| Develop formal project schedule                                               | X      |                  |
| Prepare Functional Acceptance Test Plan (FATP) documents                      | X      |                  |
| Prepare one set of FCC License applications for WASHOE<br>COUNTY's submission | X      |                  |
| Submit FCC license applications and pay requisite fees                        |        | X                |
| Arrange for site lease for any non-customer-owned sites                       |        | X                |
| <b>Detailed Design Review Deliverables</b>                                    |        |                  |
| System block diagrams                                                         | X      |                  |
| List of deliverable equipment for each site                                   | X      |                  |
| Network connection plan and backhaul requirements                             | X      |                  |
| Tower antenna placement drawings                                              | X      |                  |
| Antenna system drawings                                                       | X      |                  |
| Coverage prediction maps                                                      | X      |                  |
| Frequency plans                                                               | X      |                  |
| Combiner plans                                                                | X      |                  |
| Greenfield site plot drawings (after site surveys have been<br>performed)     | X      |                  |
| Shelter floor plan drawings                                                   | X      |                  |
| Rack elevation drawings                                                       | X      |                  |
| AC power and BTU requirements                                                 | X      |                  |
| Preliminary Cutover Plan                                                      | X      |                  |
| Functional Acceptance Test Plan (FATP)                                        | X      |                  |
| Project schedule                                                              | X      |                  |

| Tasks                                                                                                                     | Harris | WASHOE COUNTY |
|---------------------------------------------------------------------------------------------------------------------------|--------|---------------|
| FCC licensed frequencies that meet contour limits and fulfill the frequency plan, in accordance with the Project Schedule | X      |               |
| Final staging acceptance test plan (SATP)                                                                                 | X      |               |
| Final coverage acceptance test plan (CATP)                                                                                | X      |               |
| Fleet map plan                                                                                                            | X      |               |
| Training plan                                                                                                             | X      |               |
| <b>Detailed Design Review</b>                                                                                             |        |               |
| Provide deliverables for review 10 business days prior to review                                                          | X      |               |
| Review documents                                                                                                          |        | X             |
| Provide location for DDR meeting                                                                                          |        | X             |
| Approve the design following DDR meeting (20 business days)                                                               |        | X             |

## Manufacturing and Staging Responsibility Matrix

The responsibility matrix shown in Figure 2 provides the staging activities that the Harris Team is responsible for and those activities that are the responsibility of WASHOE COUNTY. Each region of the State system repeats the manufacturing, staging, and factory acceptance test (FAT) processes to meet the dates on the project schedule.

**Figure 2. System Integration and Test - Staging Responsibility Matrix**

| Tasks                                                                        | Harris | WASHOE COUNTY |
|------------------------------------------------------------------------------|--------|---------------|
| Insert equipment delivery dates into the material planning system per region | X      |               |
| Place orders with the factory per region                                     | X      |               |
| Place orders with key suppliers per region                                   | X      |               |
| Manufacture all infrastructure equipment per region                          | X      |               |
| Assemble equipment in staging area on a per site basis                       | X      |               |
| Provide appropriate personnel to participate in/witness each region's FAT    |        | X             |
| Run a FAT in each region                                                     | X      |               |

| Tasks                                                                                         | Harris | WASHOE COUNTY |
|-----------------------------------------------------------------------------------------------|--------|---------------|
| Provide approval for each FAT and authorize the region to be shipped (within 5 business days) |        | X             |

## Shipping, Warehousing, and Inventory Responsibility Matrix

Figure 3 shows the shipping and inventory activities that the Harris Team is responsible for and those activities that the Team believes are the responsibilities of WASHOE COUNTY that will be repeated for each region.

Figure 3. Shipping & Inventory Responsibility Matrix

| Tasks                                                            | Harris | WASHOE COUNTY |
|------------------------------------------------------------------|--------|---------------|
| Break down equipment and ship to storage area                    | X      |               |
| Provide temporary storage in the state of Nevada                 | X      |               |
| Inventory equipment                                              | X      |               |
| Validate Harris equipment inventory                              |        | X             |
| Sort equipment in preparation for site delivery and installation | X      |               |

## System Installation Responsibility Matrix

Figure 4 provides a system installation responsibility matrix for antenna systems and infrastructure equipment, that is repeated for each region.

Figure 4. System Infrastructure Installation Responsibility Matrix

| Tasks                                                       | Harris | WASHOE COUNTY |
|-------------------------------------------------------------|--------|---------------|
| Deliver equipment to each site                              | X      |               |
| Install equipment, connect to ground system and apply power | X      |               |
| Connect all RF cables                                       | X      |               |
| Interface to network, verify network connectivity           | X      |               |
| Set all P25 system levels and parameters                    | X      |               |
| Connect all P25 system alarms                               | X      |               |

## System Optimization Responsibility Matrix

Harris will conduct a preliminary Acceptance Test to determine that the systems are fully optimized and ready for the Acceptance Test with WASHOE COUNTY. Figure 5 describes those tasks to be performed in System Optimization for each Region.

**Figure 5. System Optimization Matrix**

| Tasks                                                                                                            | Harris | WASHOE COUNTY |
|------------------------------------------------------------------------------------------------------------------|--------|---------------|
| Prepare all installed sites for site inspections                                                                 | X      |               |
| Verify microwave/backhaul system is functional and meets reliability specifications                              | X      |               |
| Provide frequencies to use for optimization and testing (if frequencies are currently in use in existing system) |        | X             |
| Verify P25 levels and parameters are set                                                                         | X      |               |
| Verify P25 alarm and system monitoring system are operational                                                    | X      |               |
| Verify system database is installed and operating correctly                                                      | X      |               |
| Verify proper dispatch operation                                                                                 | X      |               |
| Verify proper P25 functional operation                                                                           | X      |               |
| Verify proper network switching operation                                                                        | X      |               |
| Verify proper mutual aid operation                                                                               | X      |               |
| Coordinate testing of the desired interoperability channels                                                      |        | X             |
| Verify proper interoperability from gateways                                                                     | X      |               |

## Final Acceptance Testing Responsibility Matrix

Figure 6 provides a detailed listing of those Final Acceptance Testing activities performed by Harris, and those activities that WASHOE COUNTY will perform for each region.

**Figure 6. Acceptance Testing Responsibility Matrix**

| Tasks                                                                                          | Harris | WASHOE COUNTY |
|------------------------------------------------------------------------------------------------|--------|---------------|
| Provide appropriate team members to participate in acceptance tests                            | X      | X             |
| Inspect each RF site, noting discrepancies on the punch list                                   | X      |               |
| Inspect each dispatch center, noting discrepancies on the punch list                           | X      |               |
| Inspect each network center, noting discrepancies on the punch list                            | X      |               |
| Submit site inspection results                                                                 | X      |               |
| Approve site inspection results within 15 business days                                        |        | X             |
| Perform functional ATP on radio system, dispatch consoles, network monitoring, and user radios | X      |               |
| Submit functional ATP results                                                                  | X      |               |
| Approve functional ATP results (within 15 business days)                                       |        | X             |
| Provide team members to participate in coverage tests                                          |        | X             |
| Provide test vehicles and drivers for acceptance testing                                       | X      |               |
| Provide test radios for automatic coverage tests                                               | X      |               |
| Perform automated coverage test of P25 per system contract                                     | X      |               |
| Provide test radios for voice quality test                                                     | X      |               |
| Perform voice quality test of P25 per system contract                                          | X      | X             |
| Submit coverage ATP results                                                                    | X      |               |
| Approve coverage ATP results                                                                   |        | X             |
| Cut users over to the new P25 system                                                           | X      | X             |
| Decommission legacy system                                                                     | X      |               |

## User Radio Equipment Responsibility Matrix

All mobile radio installations will be closely coordinated with WASHOE COUNTY and participating user agencies, to minimize disruption to their operation, and to reduce out-of-service and unproductive time. Figure 7 describes the activities in User Radio Equipment Implementation performed by Harris, and those activities that WASHOE COUNTY will perform for each region.

**Figure 7. User Radio Equipment Responsibility Matrix**

| Tasks                                                                                                                                   | Harris | WASHOE COUNTY |
|-----------------------------------------------------------------------------------------------------------------------------------------|--------|---------------|
| Program and distribute Harris portable units with accessories                                                                           | X      |               |
| Provide central facilities for regional mobile vehicle installation                                                                     |        | X             |
| Provide vehicles to meet the project schedule timeline                                                                                  |        | X             |
| Program and install Harris mobile units and remove existing radios                                                                      | X      |               |
| Provide pre- and post- installation vehicle assessments, presenting installation documentation for customer acceptance for each vehicle | X      |               |
| Provide a temporary storage facility for equipment that Harris removes from the vehicles                                                | X      |               |
| Provide a representative to review installation documentation and provide acceptance for each vehicle                                   |        | X             |

## General and Site Development Responsibility Matrices

The general responsibility matrix describes the general project responsibilities of both parties that are not associated with any specific site.

**Figures 8 thru 11 represent the general and site development responsibilities if Washoe County chooses to issue Harris a change order to perform the site development and site civil requirements.**

**Figure 8. General Responsibility Matrix**

| Tasks                                                                                                                            | Harris | WASHOE COUNTY |
|----------------------------------------------------------------------------------------------------------------------------------|--------|---------------|
| Coordinate with federal, state, and local government agencies, as required                                                       |        | X             |
| Provide access to all buildings and sites, including temporary ID badges for Harris project team                                 |        | X             |
| Provide parking permits for Harris project team for any restricted parking areas                                                 |        | X             |
| Provide adequate road access for delivery vehicles                                                                               |        | X             |
| Arrange for temporary parking to off-load equipment at all buildings and sites                                                   |        | X             |
| Clean up site and remove all installation debris                                                                                 | X      |               |
| Remove any hazardous material found on site                                                                                      |        | X             |
| Ensure that no utility transformers additions or upgrades will be required to provide the adequate AC power needed for each site |        | X             |
| Develop sites and install civil materials in accordance with industry and Harris standards, pending Washoe County approval       | X      |               |
| Provide final backhaul requirements to the WASHOE COUNTY                                                                         | X      |               |
| Provide backhaul which meets the final backhaul requirements provided by Harris                                                  | X      |               |

The site responsibility matrices below define the responsibilities of both parties for the implementation of the P25 Project.

**Figure 9. Existing Customer-Owned Sites Responsibility Matrix**

| Tasks                                                                                                                                                                                                                    | Harris | WASHOE COUNTY |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|---------------|
| <b>Customer-Owned Site Tasks</b>                                                                                                                                                                                         |        |               |
| Obtain any necessary zoning approval for site changes                                                                                                                                                                    |        | X             |
| Perform physical path surveys for each microwave path                                                                                                                                                                    | X      |               |
| Provide existing site plans                                                                                                                                                                                              |        | X             |
| Perform grounding analysis                                                                                                                                                                                               | X      |               |
| Provide WASHOE COUNTY site survey results report and recommendations                                                                                                                                                     | X      |               |
| <b>Existing Tower</b>                                                                                                                                                                                                    |        |               |
| Provide current tower and foundation drawings along with a current mapping of installed antennas and cabling                                                                                                             |        | X             |
| Identify specific tower attachment points to mount new antennas per the system design                                                                                                                                    | X      |               |
| Confirm availability of tower attachment points for Harris antennas                                                                                                                                                      |        | X             |
| Perform tower analysis on existing tower and provide results at DDR. If tower fails load analysis, Harris can provide quotes to strengthen tower (if possible), replace the tower, or provide site acquisition services. | X      |               |
| Strengthen or replace tower (if required by structural analysis results, Harris will replace tower if requested through the change order process)                                                                        |        | X             |
| Provide space on existing tower to mount new system antennas at Harris specified locations                                                                                                                               |        | X             |
| Ensure adequate space is available on cable ice bridge, and                                                                                                                                                              |        | X             |

| Tasks                                                                                                                                                             | Harris | WASHOE COUNTY |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|---------------|
| tower cable ladders, to support new cable runs                                                                                                                    |        |               |
| Install new antenna(s) using appropriate 6 ft. side arms and mounting hardware                                                                                    | X      |               |
| Install antenna coax, connectors and jumpers, using cable clamps to properly secure cable to tower, and add grounding kits at the top, bottom, and on ice bridge  | X      |               |
| If required by the system design, Harris will install a new tower top amplifier                                                                                   | X      |               |
| Install antenna lightning protection devices on each transmission line LMR run after it enters shelter via cable entry port; ground device to main ground bus bar | X      |               |
| If required, install new microwave dish(es) on pipe mounts with anti-sway kits                                                                                    | X      |               |
| Install new microwave waveguide or coaxial feed lines, secure to cable ladder(s), and add grounding kits at the top, bottom, and on ice bridge                    | X      |               |
| Tag and identify each new antenna line                                                                                                                            | X      |               |
| Sweep test each new antenna line in accordance with Harris' "Transmission Line Analysis (Antenna Sweep) Procedure, and maintain copies in site logbook            | X      |               |
| <b>Existing Shelter</b>                                                                                                                                           |        |               |
| Provide floor space in existing RF shelter for new equipment racks used in the new design                                                                         |        | X             |
| Provide adequate shelter/equipment room utility AC electrical power, single-point ground system HVAC, and backup generator power                                  | X      |               |
| If existing entrance ports are not available                                                                                                                      | X      | WASHOE COUNTY |

| Tasks                                                                                                     | Harris | WASHOE COUNTY |
|-----------------------------------------------------------------------------------------------------------|--------|---------------|
| will provide Harris with a change order to provide new cable entry ports                                  |        |               |
| Upgrade existing interior ground system (requires change order)                                           | X      |               |
| Provide additional cable ladder for new equipment row                                                     | X      |               |
| If needed, Harris will prepare and submit electrical permits on behalf of the customer                    | X      |               |
| Install new DC power plant and wire to racks if required (requires change order)                          | X      |               |
| Provide floor space at the dispatch center and network center for new system equipment                    |        | X             |
| Provide backup power (UPS) for NSC                                                                        |        | X             |
| Provide backup power (UPS) for consoles                                                                   |        | X             |
| Provide demarcation blocks for connection to existing legacy radios to be used in interoperability system |        | X             |

**Figure 10. Greenfield Site Responsibility Matrix**

| Tasks                                                                      | Harris | WASHOE COUNTY |
|----------------------------------------------------------------------------|--------|---------------|
| Obtain land through lease or purchase for use in the new radio project     |        | X             |
| Perform physical path surveys for each new microwave path                  | X      |               |
| Provide WASHOE COUNTY site survey results report and recommendations       | X      |               |
| Stake out the desired location for tower, shelter, generator, and compound | X      |               |

| Tasks                                                                                                                                                                                                                                            | Harris | WASHOE COUNTY |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|---------------|
| After a change order has been issued and assurances have been made that this site can be developed, Harris will have an architectural firm develop site plot drawings of compound showing new tower, shelter, generator, and fuel tank locations | X      |               |
| Obtain all required zoning approvals to construct the site                                                                                                                                                                                       |        | X             |
| Prepare FAA/FCC applications for new tower                                                                                                                                                                                                       | X      |               |
| Submit FAA/FCC forms for new tower                                                                                                                                                                                                               |        | X             |
| Prepare new tower NEPA/SHPO environmental studies and THPO filings                                                                                                                                                                               | X      |               |
| Arrange and pay for electric power/service at each site getting a new shelter or improved electrical service. Terminate AC power within 50 ft. of new shelter. Provide utility transformers, if necessary, to provide the required AC power.     |        | X             |
| Prepare and submit construction permits for new tower or shelter (requires change order)                                                                                                                                                         | X      |               |
| Prepare and submit electrical permits                                                                                                                                                                                                            | X      |               |
| If required, create an access road that will be 10 ft. wide. (pricing for access road will be determined after site surveys are complete)                                                                                                        | X      |               |
| Schedule soil boring test for tower leg foundations in accordance with TIA-222 standards for new towers, and review results with (WASHOE COUNTY)                                                                                                 | X      |               |
| If soil boring test results indicate a foundation design is required to address other than typical soil conditions. Harris will submit a site-specific foundation design, and pricing change request                                             | X      |               |
| Level land, construct silt fences, and remove weeds and brush                                                                                                                                                                                    | X      |               |

| Tasks                                                                                                           | Harris | WASHOE COUNTY |
|-----------------------------------------------------------------------------------------------------------------|--------|---------------|
| Construct tower foundation                                                                                      | X      |               |
| Erect new tower (type and height to be determined after site surveys)                                           | X      |               |
| Construct full-slab shelter foundation                                                                          | X      |               |
| Transport, off-load and set new shelter (shelter type and generator size will be determined after site surveys) | X      |               |
| Trench in 200A single-phase 240V AC electrical service to new shelter                                           | X      |               |
| Provide new cable entry ports                                                                                   | X      |               |
| Construct generator foundation (if required)                                                                    | X      |               |
| Transport, off-load, and set new generator on pad                                                               | X      |               |
| Trench in generator electrical service and control circuits to shelter-mounted ATS                              | X      |               |
| Construct generator LP-fuel tank pad (if required)                                                              | X      |               |
| Transport, off-load, and set new LP-fuel tank on pad                                                            | X      |               |
| Trench in fuel lines between tank and generator                                                                 | X      |               |
| Fill generator fuel tank (first fill)                                                                           | X      |               |
| Provide factory generator technician to provide first start service                                             | X      |               |
| Install new perimeter fence with gate (if required)                                                             | X      |               |
| Construct exterior ground system for tower, shelter, generator, fuel tank, and fence corner posts               | X      |               |
| Spread new compound gravel/crushed stone                                                                        | X      |               |
| Construct new cable ice bridge for sites with new towers and/or shelters                                        | X      |               |

| Tasks                                                                                                                                                                 | Harris | WASHOE COUNTY |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|---------------|
| Supply copper ground plate for mounting on tower to ground all coaxial cables as they leave the tower on the cable ice bridge                                         | X      |               |
| Install new LMR antenna(s), using appropriate 6 ft. side arms and mounting hardware                                                                                   | X      |               |
| Install LMR antenna coax, connectors, and jumpers, using cable clamps to properly secure cable to tower and add grounding kits at the top, bottom, and on ice bridge. | X      |               |
| Install new tower top amplifier                                                                                                                                       | X      |               |
| Install antenna lightning protection devices on each LMR run after it enters shelter via cable entry port; ground device to main ground bus bar                       | X      |               |
| Install new microwave dish(es) on pipe mounts with anti-sway kits                                                                                                     | X      |               |
| Install new microwave waveguide or coaxial feed lines, secure to cable ladder(s), and add grounding kits at the top, bottom, and on ice bridge                        | X      |               |
| Tag and identify each new antenna line                                                                                                                                | X      |               |
| Sweep test each new antenna line in accordance with Harris' "Transmission Line Analysis (Antenna Sweep) Procedure, and maintain copies in site logbook                | X      |               |
| Install new DC power plant and wire to racks                                                                                                                          | X      |               |

**Figure 11. Existing Collocation Sites Responsibility Matrix**

| Tasks                                                                                                                                                                                                                                                                                  | Harris | WASHOE COUNTY |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|---------------|
| <b>Collocated Site Tasks</b>                                                                                                                                                                                                                                                           |        |               |
| Arrange for access to third party collocated site                                                                                                                                                                                                                                      |        | X             |
| Negotiate and obtain lease (or modify existing lease) for third party co-location site, ensuring the site lease includes required space on the tower, cable ice bridge, and tower cable ladders to support new cable runs, space-in compound for new shelter, generator, and fuel tank |        | X             |
| Ensure co-location agreements address site compound space requirements to include confirmation that no subsurface obstructions preclude running conduits for power or leased circuits, as well as running lines between shelters, generators, and fuel tanks                           |        | X             |
| Arrange with third party site owner to perform tower analysis                                                                                                                                                                                                                          | X      |               |
| Perform physical path surveys for each microwave path                                                                                                                                                                                                                                  | x      |               |
| Provide available existing site plans                                                                                                                                                                                                                                                  |        | X             |
| Perform grounding analysis                                                                                                                                                                                                                                                             | X      |               |
| Provide site survey and grounding results report and recommendations                                                                                                                                                                                                                   | X      |               |
| <b>Existing Tower</b>                                                                                                                                                                                                                                                                  |        |               |
| Provide current tower and foundation drawings, from site owner, along with a current mapping of installed antennas and cabling                                                                                                                                                         |        | X             |
| Identify specific tower attachment points to mount new antennas per the system design                                                                                                                                                                                                  | X      |               |

| Tasks                                                                                                                                                                                                                    | Harris | WASHOE COUNTY |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|---------------|
| Confirm availability of tower attachment points for Harris antennas                                                                                                                                                      | X      |               |
| Perform tower analysis on existing tower and provide results at DDR. If tower fails load analysis, Harris can provide quotes to strengthen tower (if possible), replace the tower, or provide site acquisition services. | X      |               |
| Strengthen or replace tower (if required by structural analysis results, Harris will replace if requested by change order)                                                                                               | X      |               |
| Provide space on existing tower to mount new system antennas at Harris specified locations (defined in site lease)                                                                                                       |        | X             |
| Ensure adequate space is available on cable ice bridge, and tower cable ladders, to support new cable runs                                                                                                               |        | X             |
| Install new antenna(s) using appropriate 6 ft. side arms and mounting hardware                                                                                                                                           | X      |               |
| Install antenna coax, connectors and jumpers, using cable clamps to properly secure cable to tower, and add grounding kits at the top, bottom, and on ice bridge                                                         | X      |               |
| If required by the system design, Harris will install a new tower top amplifier                                                                                                                                          | X      |               |
| Install antenna lightning protection devices on each transmission line LMR run after it enters shelter via cable entry port; ground device to main ground bus bar                                                        | X      |               |
| If required, install new microwave dish(es) on pipe mounts with anti-sway kits                                                                                                                                           | X      |               |
| Install new microwave waveguide or coaxial feed lines, secure to cable ladder(s), and add grounding kits at the top, bottom, and on ice bridge                                                                           | X      |               |

| Tasks                                                                                                                                                                                                                                            | Harris | WASHOE COUNTY |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|---------------|
| Tag and identify each new antenna line                                                                                                                                                                                                           | X      |               |
| Sweep test each new antenna line in accordance with Harris' "Transmission Line Analysis (Antenna Sweep) Procedure, and maintain copies in site logbook                                                                                           | X      |               |
| <b>New Shelter</b>                                                                                                                                                                                                                               |        |               |
| Stake out the desired location for new shelter                                                                                                                                                                                                   | X      |               |
| Have an architectural firm develop site compound plot drawings of compound showing tower, new shelter, generator, and fuel tank locations                                                                                                        | X      |               |
| Obtain any required zoning approvals                                                                                                                                                                                                             |        | X             |
| Prepare and submit construction permits for new shelter                                                                                                                                                                                          | X      |               |
| Arrange for and pay for electric power/service at each site getting a new shelter or improved electrical service. Terminate AC power within 50 ft. of new shelter. Provide utility transformers, if necessary, to provide the required AC power. |        | X             |
| Harris Prepare and Washoe submit electrical permits                                                                                                                                                                                              | X      | X             |
| Level land, construct silt fences, and remove weeds and brush                                                                                                                                                                                    | X      |               |
| Construct full-slab shelter foundation                                                                                                                                                                                                           | X      |               |
| Transport, off-load, and set new shelter                                                                                                                                                                                                         | X      |               |
| Trench in 200A single phase 240 V AC electrical service to new shelter                                                                                                                                                                           | X      |               |
| Construct exterior ground system for new shelter and tie into existing tower, generator, fuel tank, and fence corner posts ground                                                                                                                | X      |               |
| Install new DC power plant and wire to racks                                                                                                                                                                                                     | X      |               |

| Tasks                                                                                                                                                                                                                                        | Harris | WASHOE COUNTY |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|---------------|
| <b>New Generator</b>                                                                                                                                                                                                                         |        |               |
| Stake out the desired location for new generator and diesel tank pad                                                                                                                                                                         | X      |               |
| Have an architectural firm develop site compound plot drawings of compound showing tower, shelter, new generator, and Diesel tank locations                                                                                                  | X      |               |
| Obtain all required zoning permits and approvals                                                                                                                                                                                             |        | X             |
| Prepare and submit construction permits for new generator                                                                                                                                                                                    | X      |               |
| Arrange and pay for electric power/service at each site getting a new shelter or improved electrical service. Terminate AC power within 50 ft. of new shelter. Provide utility transformers, if necessary, to provide the required AC power. |        | X             |
| Prepare and submit electrical permits                                                                                                                                                                                                        | X      |               |
| Level land, construct silt fences, and remove weeds and brush                                                                                                                                                                                | X      |               |
| Construct/pour generator & fuel tank pads (if required)                                                                                                                                                                                      | X      |               |
| Transport, off-load, and set new generator on pad                                                                                                                                                                                            | X      |               |
| Trench in generator electrical service and control circuits to shelter-mounted ATS                                                                                                                                                           | X      |               |
| Transport, off-load, and set new Diesel-fuel tank on pad                                                                                                                                                                                     | X      |               |
| Trench in fuel lines between tank and generator                                                                                                                                                                                              | X      |               |
| Ground generator and fuel tank to tower/shelter ground system                                                                                                                                                                                | X      |               |
| Fill generator fuel tank (first fill)                                                                                                                                                                                                        | X      |               |
| Provide factory generator technician for first-start service                                                                                                                                                                                 | X      |               |
| <b>Expand Compound</b>                                                                                                                                                                                                                       |        |               |
| Have an architectural firm develop site compound plot drawings                                                                                                                                                                               | X      |               |

| Tasks                                                                    | Harris | WASHOE COUNTY |
|--------------------------------------------------------------------------|--------|---------------|
| of compound showing tower, shelter, generator, and Diesel tank locations |        |               |
| Level land, construct silt fences, and remove weeds and brush            | X      |               |
| Install new. perimeter fence with gate                                   | X      |               |
| Expand existing compound                                                 | X      |               |
| Expand existing compound fence line                                      | X      |               |
| Tie fence corner posts back to tower/shelter exterior ground system      | X      |               |
| Spread new compound gravel/crushed stone                                 | X      |               |

**Figures 12 thru 15 represent the general and site development responsibilities if Washoe County chooses to self-perform the site development and site civil requirements.**

**Figure 12. General Responsibility Matrix**

| Tasks                                                                                            | Harris | WASHOE COUNTY |
|--------------------------------------------------------------------------------------------------|--------|---------------|
| Coordinate with federal, state, and local government agencies, as required                       |        | X             |
| Provide access to all buildings and sites, including temporary ID badges for Harris project team |        | X             |
| Provide parking permits for Harris project team for any restricted parking areas                 |        | X             |
| Provide adequate road access for delivery vehicles                                               |        | X             |
| Arrange for temporary parking to off-load equipment at all buildings and sites                   |        | X             |
| Clean up site and remove all installation debris                                                 | X      |               |

|                                                                                                                                  |   |   |
|----------------------------------------------------------------------------------------------------------------------------------|---|---|
| Remove any hazardous material found on site                                                                                      |   | X |
| Ensure that no utility transformers additions or upgrades will be required to provide the adequate AC power needed for each site |   | X |
| Develop sites and install civil materials in accordance with industry and Harris standards                                       |   | X |
| Provide final backhaul requirements to the WASHOE COUNTY                                                                         | X |   |
| Provide backhaul which meets the final backhaul requirements provided by Harris                                                  | X |   |

The site responsibility matrices below define the responsibilities of both parties for the implementation of the P25 Project.

**Figure 13. Existing Customer-Owned Sites Responsibility Matrix**

| Tasks                                                                                                                  | Harris | WASHOE COUNTY |
|------------------------------------------------------------------------------------------------------------------------|--------|---------------|
| <b>Customer-Owned Site Tasks</b>                                                                                       |        |               |
| Obtain any necessary zoning approval for site changes                                                                  |        | X             |
| Perform physical path surveys for each microwave path                                                                  | X      |               |
| Provide existing site plans                                                                                            |        | X             |
| Perform grounding analysis                                                                                             | X      |               |
| Provide WASHOE COUNTY site survey results report and recommendations                                                   | X      |               |
| <b>Existing Tower</b>                                                                                                  |        |               |
| Provide available current tower and foundation drawings along with a current mapping of installed antennas and cabling |        | X             |
| Identify specific tower attachment points to mount new antennas                                                        | X      |               |

| Tasks                                                                                                                                                                                                                    | Harris | WASHOE COUNTY |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|---------------|
| per the system design                                                                                                                                                                                                    |        |               |
| Confirm availability of tower attachment points for Harris antennas                                                                                                                                                      |        | X             |
| Perform tower analysis on existing tower and provide results at DDR. If tower fails load analysis, Harris can provide quotes to strengthen tower (if possible), replace the tower, or provide site acquisition services. | X      |               |
| Strengthen or replace tower (if required by structural analysis results, Harris will replace tower if requested through the change order process)                                                                        |        | X             |
| Provide space on existing tower to mount new system antennas at Harris specified locations                                                                                                                               |        | X             |
| Ensure adequate space is available on cable ice bridge, and tower cable ladders, to support new cable runs                                                                                                               |        | X             |
| Install new antenna(s) using appropriate 6 ft. side arms and mounting hardware                                                                                                                                           | X      |               |
| Install antenna coax, connectors and jumpers, using cable clamps to properly secure cable to tower, and add grounding kits at the top, bottom, and on ice bridge                                                         | X      |               |
| If required by the system design, Harris will install a new tower top amplifier                                                                                                                                          | X      |               |
| Install antenna lightning protection devices on each transmission line LMR run after it enters shelter via cable entry port; ground device to main ground bus bar                                                        | X      |               |
| If required, install new microwave dish(es) on pipe mounts with anti-sway kits                                                                                                                                           | X      |               |
| Install new microwave waveguide or coaxial feed lines, secure to cable ladder(s), and add grounding kits at the top, bottom, and on                                                                                      | X      |               |

| Tasks                                                                                                                                                  | Harris | WASHOE COUNTY |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|--------|---------------|
| ice bridge                                                                                                                                             |        |               |
| Tag and identify each new antenna line                                                                                                                 | X      |               |
| Sweep test each new antenna line in accordance with Harris' "Transmission Line Analysis (Antenna Sweep) Procedure, and maintain copies in site logbook | X      |               |
| <b>Existing Shelter</b>                                                                                                                                |        |               |
| Provide floor space in existing RF shelter for new equipment racks used in the new design                                                              |        | X             |
| Provide adequate shelter/equipment room utility AC electrical power, single-point ground system HVAC, and backup generator power                       |        | X             |
| If existing entrance ports are not available WASHOE COUNTY will provide Harris with a change order to provide new cable entry ports                    |        | X             |
| Upgrade existing interior ground system (requires change order)                                                                                        | X      |               |
| Provide additional cable ladder for new equipment row                                                                                                  | X      |               |
| If needed, Harris will prepare and submit electrical permits on behalf of the customer                                                                 | X      |               |
| Install new DC power plant and wire to racks if required (requires change order)                                                                       | X      |               |
| Provide floor space at the dispatch center and network center for new system equipment                                                                 |        | X             |
| Provide backup power (UPS) for NSC                                                                                                                     |        | X             |
| Provide backup power (UPS) for consoles                                                                                                                |        | X             |
| Provide demarcation blocks for connection to existing legacy radios to be used in interoperability system                                              |        | X             |

**Figure 14. Greenfield Site Responsibility Matrix**

| Tasks                                                                                                                                                                                                                                            | Harris | WASHOE COUNTY |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|---------------|
| Obtain land through lease or purchase for use in the new radio project                                                                                                                                                                           |        | X             |
| Perform physical path surveys for each new microwave path                                                                                                                                                                                        | X      |               |
| Provide WASHOE COUNTY site survey results report and recommendations                                                                                                                                                                             | X      |               |
| Stake out the desired location for tower, shelter, generator, and compound                                                                                                                                                                       | X      |               |
| After a change order has been issued and assurances have been made that this site can be developed, Harris will have an architectural firm develop site plot drawings of compound showing new tower, shelter, generator, and fuel tank locations | X      |               |
| Obtain all required zoning approvals to construct the site                                                                                                                                                                                       |        | X             |
| Prepare FAA/FCC applications for new tower                                                                                                                                                                                                       |        | X             |
| Submit FAA/FCC forms for new tower                                                                                                                                                                                                               |        | X             |
| Prepare new tower NEPA/SHPO environmental studies and THPO filings                                                                                                                                                                               |        | X             |
| Arrange and pay for electric power/service at each site getting a new shelter or improved electrical service. Terminate AC power within 50 ft. of new shelter. Provide utility transformers, if necessary, to provide the required AC power.     |        | X             |
| Prepare and submit construction permits for new tower or shelter (requires change order)                                                                                                                                                         |        | X             |
| Prepare and submit electrical permits                                                                                                                                                                                                            |        | X             |
| If required, create an access road that will be 10 ft. wide.                                                                                                                                                                                     |        | X             |

| Tasks                                                                                                                                                                                                | Harris | WASHOE COUNTY |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|---------------|
| Schedule soil boring test for tower leg foundations in accordance with TIA-222 standards for new towers, and review results with (WASHOE COUNTY)                                                     |        | X             |
| If soil boring test results indicate a foundation design is required to address other than typical soil conditions. Harris will submit a site-specific foundation design, and pricing change request |        | X             |
| Level land, construct silt fences, and remove weeds and brush                                                                                                                                        |        | X             |
| Construct tower foundation                                                                                                                                                                           |        | X             |
| Erect new tower (type and height to be determined after site surveys)                                                                                                                                |        | X             |
| Construct full-slab shelter foundation                                                                                                                                                               |        | X             |
| Transport, off-load and set new shelter (shelter type and generator size will be determined after site surveys)                                                                                      |        | X             |
| Trench in 200A single-phase 240V AC electrical service to new shelter                                                                                                                                |        | X             |
| Provide new cable entry ports                                                                                                                                                                        |        | X             |
| Construct generator foundation (if required)                                                                                                                                                         |        | X             |
| Transport, off-load, and set new generator on pad                                                                                                                                                    |        | X             |
| Trench in generator electrical service and control circuits to shelter-mounted ATS                                                                                                                   |        | X             |
| Construct generator Diesel-fuel tank pad (if required)                                                                                                                                               |        | X             |
| Transport, off-load, and set new Diesel-fuel tank on pad                                                                                                                                             |        | X             |
| Trench in fuel lines between tank and generator                                                                                                                                                      |        | X             |
| Fill generator fuel tank (first fill)                                                                                                                                                                |        | X             |
| Provide factory generator technician to provide first start service                                                                                                                                  |        | X             |

| Tasks                                                                                                                                                                 | Harris | WASHOE COUNTY |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|---------------|
| Install new perimeter fence with gate (if required)                                                                                                                   |        | X             |
| Construct exterior ground system for tower, shelter, generator, fuel tank, and fence corner posts                                                                     |        | X             |
| Spread new compound gravel/crushed stone                                                                                                                              |        | X             |
| Construct new cable ice bridge for sites with new towers and/or shelters                                                                                              |        | X             |
| Supply copper ground plate for mounting on tower to ground all coaxial cables as they leave the tower on the cable ice bridge                                         | X      |               |
| Install new LMR antenna(s), using appropriate 6 ft. side arms and mounting hardware                                                                                   | X      |               |
| Install LMR antenna coax, connectors, and jumpers, using cable clamps to properly secure cable to tower and add grounding kits at the top, bottom, and on ice bridge. | X      |               |
| Install new tower top amplifier                                                                                                                                       | X      |               |
| Install antenna lightning protection devices on each LMR run after it enters shelter via cable entry port; ground device to main ground bus bar                       | X      |               |
| Install new microwave dish(es) on pipe mounts with anti-sway kits                                                                                                     | X      |               |
| Install new microwave waveguide or coaxial feed lines, secure to cable ladder(s), and add grounding kits at the top, bottom, and on ice bridge                        | X      |               |
| Tag and identify each new antenna line                                                                                                                                | X      |               |
| Sweep test each new antenna line in accordance with Harris' "Transmission Line Analysis (Antenna Sweep) Procedure, and maintain copies in site logbook                | X      |               |
| Install new DC power plant and wire to racks                                                                                                                          |        | X             |

**Figure 15. Existing Collocation Sites Responsibility Matrix**

| Tasks                                                                                                                                                                                                                                                                                   | Harris | WASHOE COUNTY |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|---------------|
| <b>Collocated Site Tasks</b>                                                                                                                                                                                                                                                            |        |               |
| Arrange for access to third party collocated site                                                                                                                                                                                                                                       |        | X             |
| Negotiate and obtain lease (or modify existing lease) for third party co-location site, ensuring the site lease includes required space on the tower, cable ice bridge, and tower cable ladders to support new cable runs, space-in compound for new shelter, generator, and fuel tank  |        | X             |
| Ensure co-location agreements address site compound space requirements to include confirmation that no subsurface obstructions preclude running conduits for power or leased circuits, as well as running lines between (Informal WASHOE COUNTY)'s shelters, generators, and fuel tanks |        | X             |
| Arrange with third party site owner to perform tower analysis                                                                                                                                                                                                                           | X      |               |
| Perform physical path surveys for each microwave path                                                                                                                                                                                                                                   | X      |               |
| Provide existing site plans                                                                                                                                                                                                                                                             |        | X             |
| Perform grounding analysis                                                                                                                                                                                                                                                              | X      |               |
| Provide site survey and grounding results report and recommendations                                                                                                                                                                                                                    | X      |               |
| <b>Existing Tower</b>                                                                                                                                                                                                                                                                   |        |               |
| Provide current tower and foundation drawings, from site owner, along with a current mapping of installed antennas and cabling                                                                                                                                                          |        | X             |
| Identify specific tower attachment points to mount new antennas per the system design                                                                                                                                                                                                   | X      |               |

| Tasks                                                                                                                                                                                                                    | Harris | WASHOE COUNTY |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|---------------|
| Confirm availability of tower attachment points for Harris antennas                                                                                                                                                      |        | X             |
| Perform tower analysis on existing tower and provide results at DDR. If tower fails load analysis, Harris can provide quotes to strengthen tower (if possible), replace the tower, or provide site acquisition services. | X      |               |
| Strengthen or replace tower (if required by structural analysis results, Harris will replace if requested by change order)                                                                                               |        | X             |
| Provide space on existing tower to mount new system antennas at Harris specified locations (defined in site lease)                                                                                                       |        | X             |
| Ensure adequate space is available on cable ice bridge, and tower cable ladders, to support new cable runs                                                                                                               |        | X             |
| Install new antenna(s) using appropriate 6 ft. side arms and mounting hardware                                                                                                                                           | X      |               |
| Install antenna coax, connectors and jumpers, using cable clamps to properly secure cable to tower, and add grounding kits at the top, bottom, and on ice bridge                                                         | X      |               |
| If required by the system design, Harris will install a new tower top amplifier                                                                                                                                          | X      |               |
| Install antenna lightning protection devices on each transmission line LMR run after it enters shelter via cable entry port; ground device to main ground bus bar                                                        | X      |               |
| If required, install new microwave dish(es) on pipe mounts with anti-sway kits                                                                                                                                           | X      |               |
| Install new microwave waveguide or coaxial feed lines, secure to cable ladder(s), and add grounding kits at the top, bottom, and on ice bridge                                                                           | X      |               |

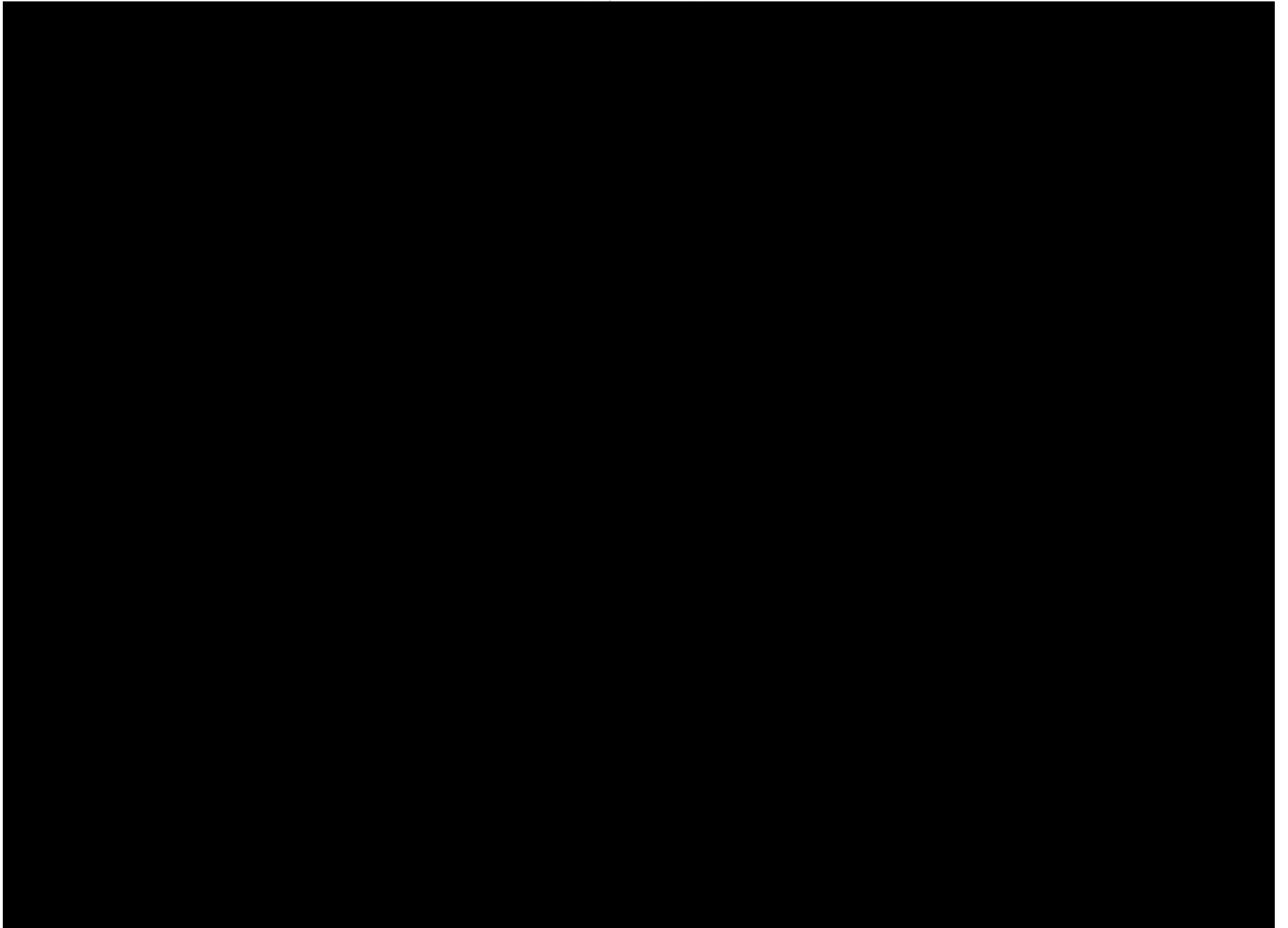
| Tasks                                                                                                                                                                                                                                            | Harris | WASHOE COUNTY |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|---------------|
| Tag and identify each new antenna line                                                                                                                                                                                                           | X      |               |
| Sweep test each new antenna line in accordance with Harris' "Transmission Line Analysis (Antenna Sweep) Procedure, and maintain copies in site logbook                                                                                           | X      |               |
| <b>New Shelter</b>                                                                                                                                                                                                                               |        |               |
| Stake out the desired location for new shelter                                                                                                                                                                                                   |        | X             |
| Have an architectural firm develop site compound plot drawings of compound showing tower, new shelter, generator, and fuel tank locations                                                                                                        |        | X             |
| Obtain any required zoning approvals                                                                                                                                                                                                             |        | X             |
| Prepare and submit construction permits for new shelter                                                                                                                                                                                          |        | X             |
| Arrange for and pay for electric power/service at each site getting a new shelter or improved electrical service. Terminate AC power within 50 ft. of new shelter. Provide utility transformers, if necessary, to provide the required AC power. |        | X             |
| Harris Prepare and Washoe submit electrical permits                                                                                                                                                                                              | X      | X             |
| Level land, construct silt fences, and remove weeds and brush                                                                                                                                                                                    |        | X             |
| Construct full-slab shelter foundation                                                                                                                                                                                                           |        | X             |
| Transport, off-load, and set new shelter                                                                                                                                                                                                         |        | X             |
| Trench in 200A single phase 240 V AC electrical service to new shelter                                                                                                                                                                           |        | X             |
| Construct exterior ground system for new shelter and tie into existing tower, generator, fuel tank, and fence corner posts ground                                                                                                                |        | X             |
| Install new DC power plant and wire to racks                                                                                                                                                                                                     |        | X             |

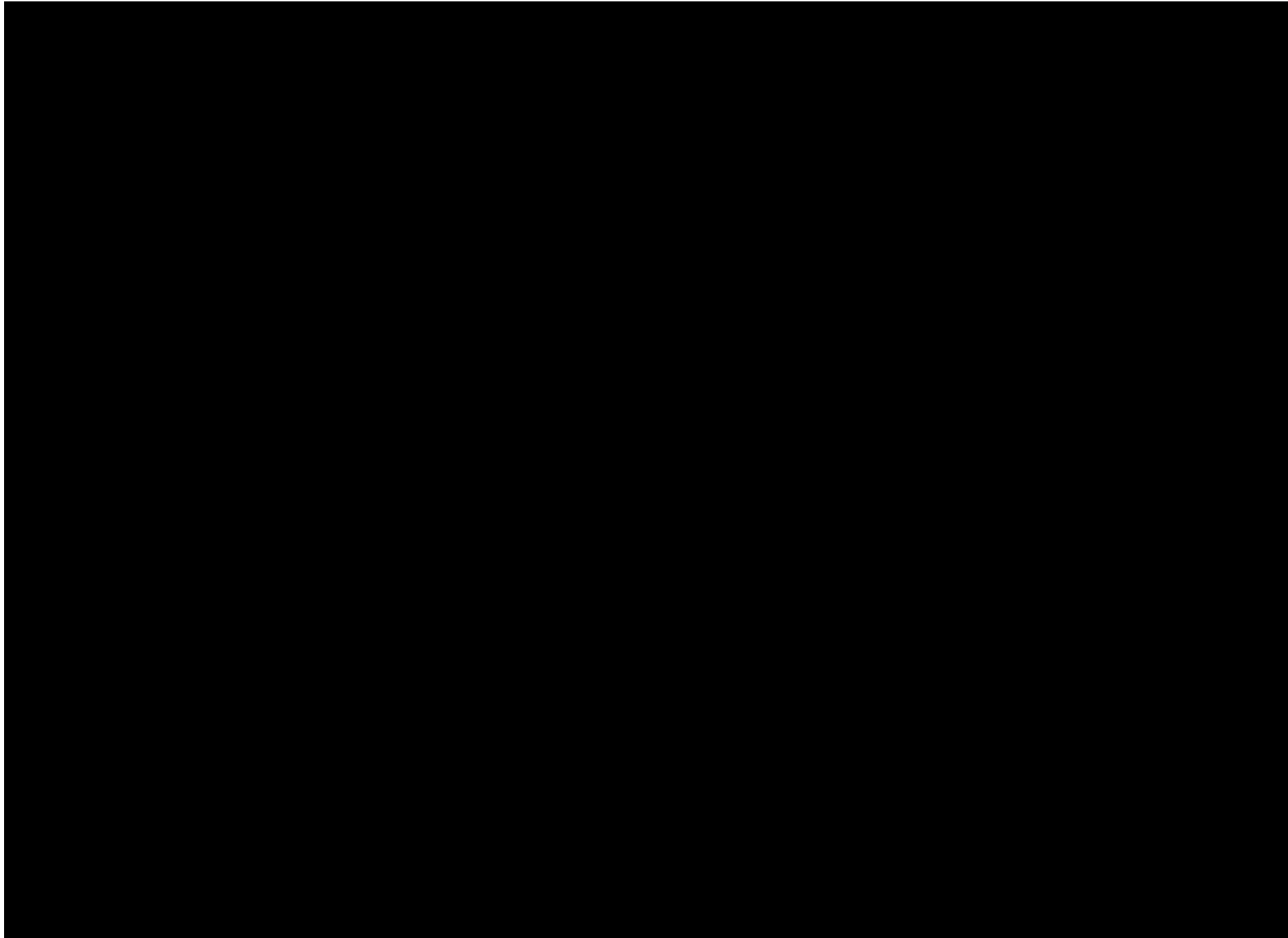
| Tasks                                                                                                                                                                                                                                        | Harris | WASHOE COUNTY |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|---------------|
| <b>New Generator</b>                                                                                                                                                                                                                         |        |               |
| Stake out the desired location for new generator and diesel tank pad                                                                                                                                                                         |        | X             |
| Have an architectural firm develop site compound plot drawings of compound showing tower, shelter, new generator, and Diesel tank locations                                                                                                  |        | X             |
| Obtain all required zoning permits and approvals                                                                                                                                                                                             |        |               |
| Prepare and submit construction permits for new generator                                                                                                                                                                                    |        | X             |
| Arrange and pay for electric power/service at each site getting a new shelter or improved electrical service. Terminate AC power within 50 ft. of new shelter. Provide utility transformers, if necessary, to provide the required AC power. |        | X             |
| Prepare and submit electrical permits                                                                                                                                                                                                        |        | X             |
| Level land, construct silt fences, and remove weeds and brush                                                                                                                                                                                |        | X             |
| Construct/pour generator & fuel tank pads (if required)                                                                                                                                                                                      |        | X             |
| Transport, off-load, and set new generator on pad                                                                                                                                                                                            |        | X             |
| Trench in generator electrical service and control circuits to shelter-mounted ATS                                                                                                                                                           |        | X             |
| Transport, off-load, and set new Diesel-fuel tank on pad                                                                                                                                                                                     |        | X             |
| Trench in fuel lines between tank and generator                                                                                                                                                                                              |        | X             |
| Ground generator and fuel tank to tower/shelter ground system                                                                                                                                                                                |        | X             |
| Fill generator fuel tank (first fill)                                                                                                                                                                                                        |        | X             |
| Provide factory generator technician for first-start service                                                                                                                                                                                 |        | X             |
| <b>Expand Compound</b>                                                                                                                                                                                                                       |        |               |

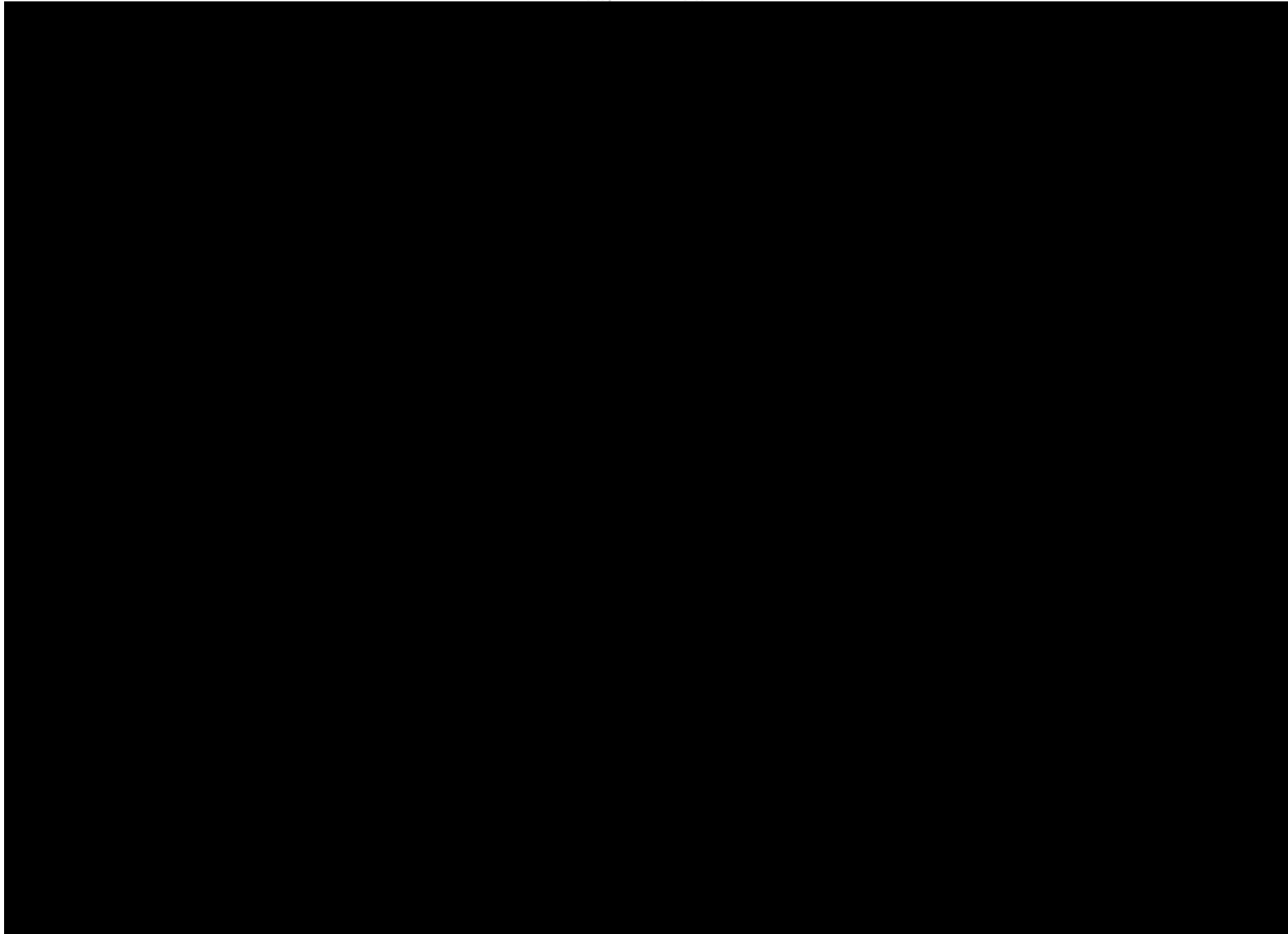
| Tasks                                                                                                                               | Harris | WASHOE COUNTY |
|-------------------------------------------------------------------------------------------------------------------------------------|--------|---------------|
| Have an architectural firm develop site compound plot drawings of compound showing tower, shelter, generator, and LP tank locations |        | X             |
| Level land, construct silt fences, and remove weeds and brush                                                                       |        | X             |
| Install new. perimeter fence with gate                                                                                              |        | X             |
| Expand existing compound                                                                                                            |        | X             |
| Expand existing compound fence line                                                                                                 |        | X             |
| Tie fence corner posts back to tower/shelter exterior ground system                                                                 |        | X             |
| Spread new compound gravel/crushed stone                                                                                            |        | X             |

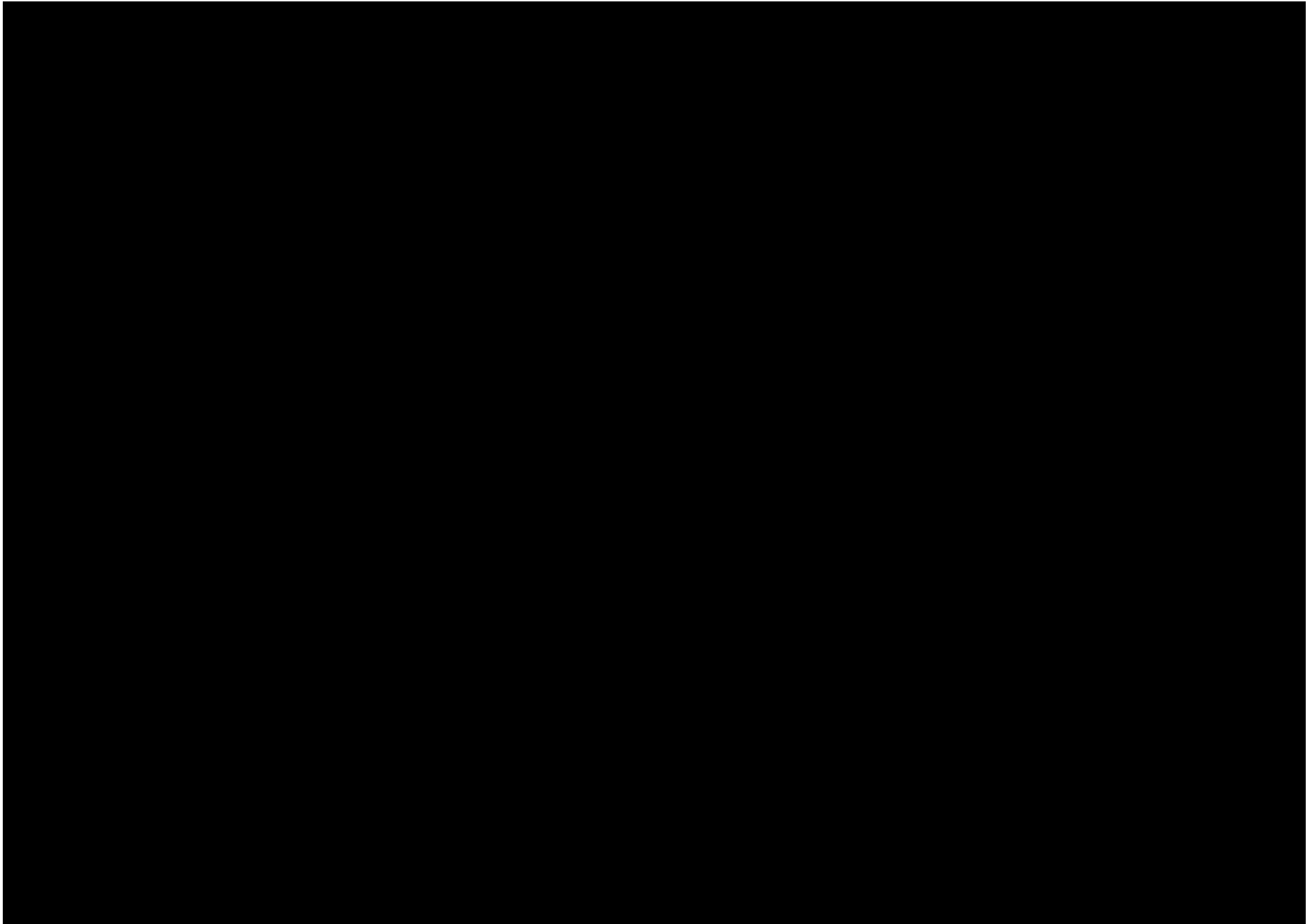
**NOTE: All site development activities are optional and site development requirements for all locations will be determined after site surveys are performed. Once site development requirements are identified WASHOE COUNTY will have the option to submit a change order to Harris to perform the site development activities. Harris specifically excludes solar sites from the optional pricing that has been submitted.**

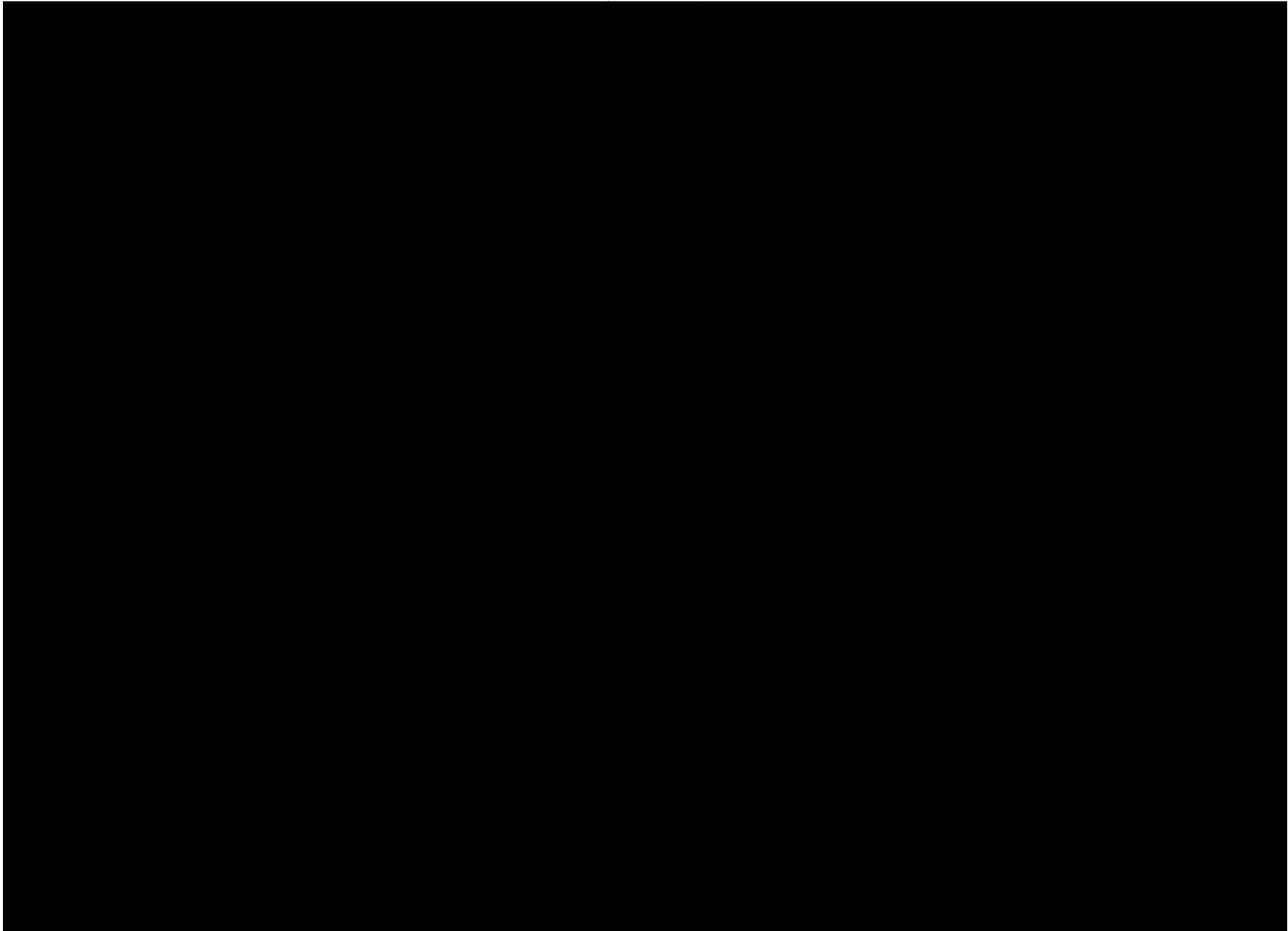
During site surveys it will be determined if any sites require non-standard vehicle access (i.e. helicopter) and will be priced accordingly through the change order process. Project schedule needs to align with typical seasonal weather for 4-wheel drive access to all sites.

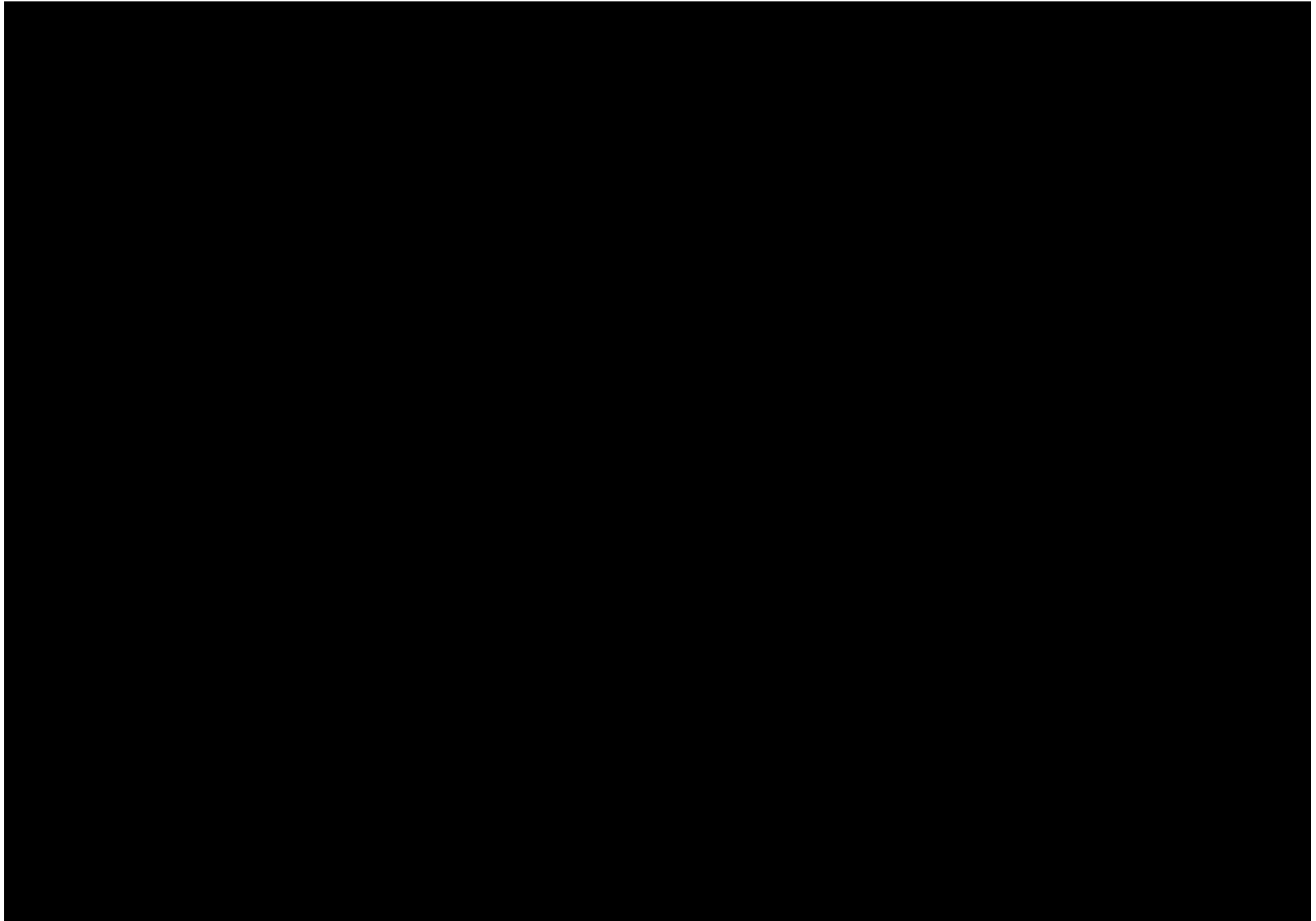




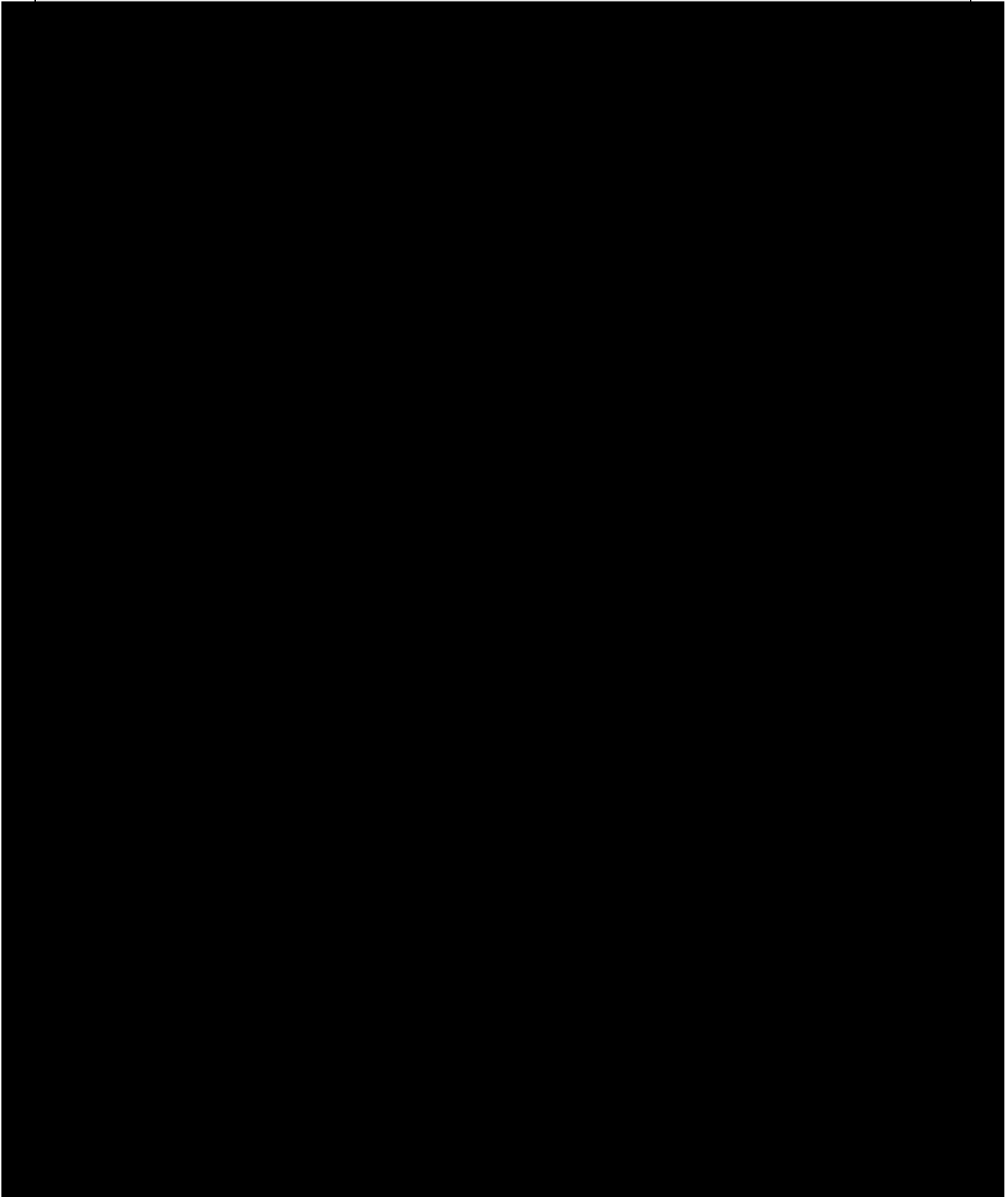








| Part Number              | Description | Quantity |
|--------------------------|-------------|----------|
| NORTH                    |             |          |
| ANTENNA SYSTEM EQUIPMENT |             |          |



| Part Number | Description | Quantity |
|-------------|-------------|----------|
|-------------|-------------|----------|



| Part Number | Description | Quantity |
|-------------|-------------|----------|
|             |             |          |

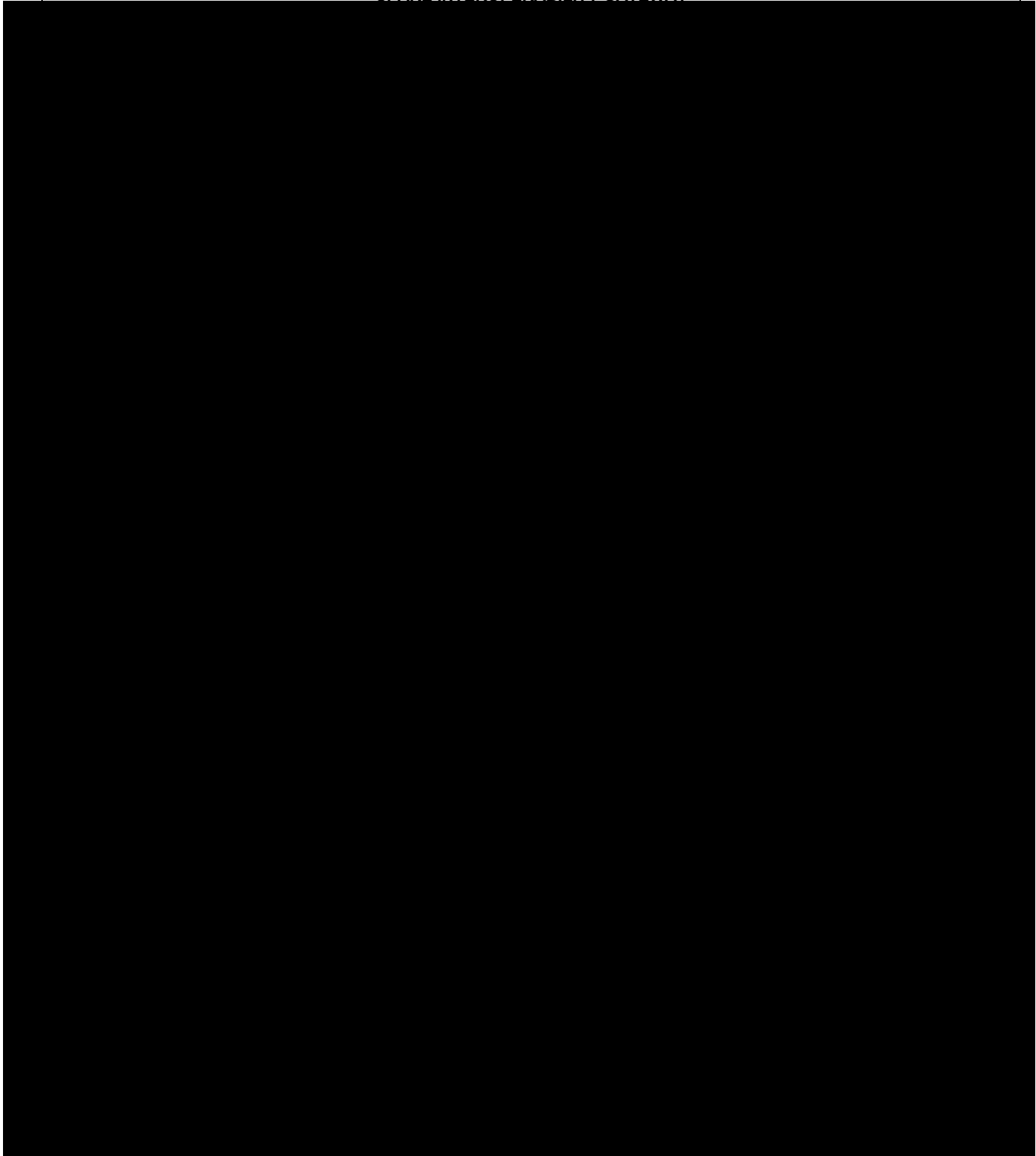
The image is a solid black rectangle. A thin, light blue horizontal bar is visible along the top edge, spanning the entire width of the image. This bar appears to be a header or a decorative element. The rest of the image is a uniform black field.

| Part Number | Description | Quantity |
|-------------|-------------|----------|
|             |             |          |

100



| Part Number                    | Description | Quantity |
|--------------------------------|-------------|----------|
| SPARE INTEROPERABILITY GATEWAY |             |          |



| Part Number | Description | Quantity |
|-------------|-------------|----------|
|             |             |          |





































































































































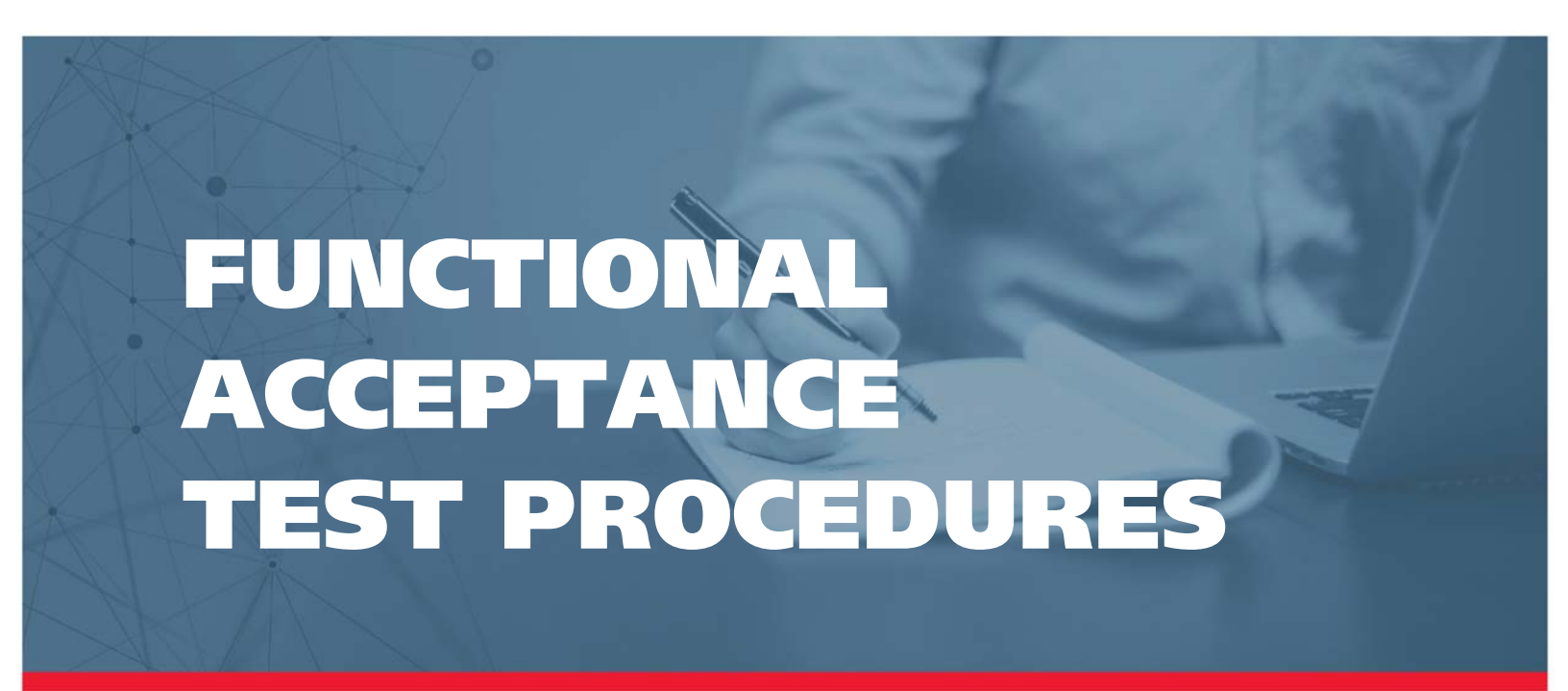












# **FUNCTIONAL ACCEPTANCE TEST PROCEDURES**

|                                                                             |    |
|-----------------------------------------------------------------------------|----|
| 1. CUSTOMER APPROVAL .....                                                  | 8  |
| 2. SYSTEM ACCEPTANCE .....                                                  | 9  |
| 3. Facility Test [Field Tests] .....                                        | 10 |
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# **COVERAGE CHARACTERIZATION TEST PROCEDURES**

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## Project Implementation Plan

Harris provides radio communication systems that support critical public safety operations, fulfilling the specific needs of its customers. The flowchart below shows the steps necessary to deliver a radio system that will replace the Washoe County's legacy system.



The implementation of such a large system will be completed in a phased, or regional approach. Each region will be handled as its own system, but with maintained focus on the interdependencies with surrounding regions and/or systems. A design period occurs first for the entire statewide system. Then the equipment for WASHOE COUNTY will be staged, installed, tested and cutover, region by region until the entire state-wide system is complete. The regions overlap to optimize the schedule and are staggered in time to optimize resources.

## Design Reviews

### Kick-Off Meeting and Preliminary Design Review

The project manager initiates project implementation with a Project Kick-Off Meeting, followed by a Preliminary Design Review. The Harris Team and WASHOE COUNTY will mutually agree on the timing of these meetings. The objectives of the meeting include:

- Introduction of all project participants
- Review of the roles of the project participants
- Review of the overall project scope, objectives, and deliverables
- Review of the current site status
- Review of WASHOE COUNTY owned site documentation
- Review status of WASHOE COUNTY site acquisition efforts, where applicable
- Review of the preliminary schedule
- Schedule detailed site surveys with WASHOE COUNTY, and/or site owner designated representatives.

- Following site surveys, the project schedule will be updated to reflect actual site conditions. The updated schedule will also account for site accessibility conditions during the winter months
- The project schedule will also reflect updated billing milestones
- Review progress of Microwave Upgrade
- Review Greenfield site development.
- Establish the communication methods, main POC's from each party

After the Kick-Off meeting, the Team will conduct detailed site surveys with WASHOE COUNTY. Harris will present the results of the detailed site surveys at the Preliminary Design Review Meeting.

### **Detailed Design Review (DDR)**

The Harris Team uses the information obtained during the Kick-Off Meeting, Preliminary Design Review, site surveys, and regulatory and engineering documentation to deliver the final system design at the DDR. This will be defined on a per region basis.

The Harris Team presents rack elevation drawings, antennas placement drawings, antenna system drawings and documentation and all acceptance test plans during the DDR with WASHOE COUNTY. SOW Exhibit 3 contains the Responsibility Matrix for the DDR phase of the project.

### **Manufacturing and Staging**

Immediately following WASHOE COUNTY's approval of the final design, the Harris Team procures material and schedules System Integration and Test using its Material Requirements Planning (MRP) system for the first region. Harris' Eagle Focus Factory assembles the RF equipment, integrates it with the key supplier items, and then tests each rack of equipment.

After assembly and test, each RF site rack will go through configuration, which consists of loading customer specific parameters and personalities into each applicable piece of equipment. The Network Switching Center (NSC) will undergo an imaging process. After imaging is complete, a Staging technician will perform a build and validation check against the NSC image.

Staging technicians position the racks of equipment under factory Staging halos. The Staging technicians make all network connections for each site's equipment including RF, NSC, dispatch, interop, and other site types. Ethernet and/or fiber cable connections are made to simulate backhaul networks and ensure the equipment connects to the network switches. The Staging Team programs radios to operate on a test user database programmed into the system during the NSC imaging process. The Staging Team verifies system levels and tests all features to confirm the system is ready for Factory Acceptance Test (FAT). Once a dry run FAT is completed by the Staging Team, the system transitions over to the system engineer for a week-long dry run of the FAT. During the following week, WASHOE COUNTY will visit the Eagle Focus Factory for a facility tour, introduction to the staged system, and to formally witness the FAT. The System Integration and Test responsibility matrix shown in SOW Exhibit 3 provides the staging activities that the Harris Team is responsible for and those activities that are the responsibility of WASHOE COUNTY. Each region of the State system repeats the manufacturing, staging, and FAT processes to meet the dates on the project schedule.

## **Shipping, Warehousing, and Inventory**

After a successful Factory Acceptance Test (FAT), the Harris Team packages all system elements using established procedures depending on the mode of transportation. The Team engages appropriate freight carrier services to deliver WASHOE COUNTY's regional equipment to the Harris warehouse location in the State of Nevada or other mutually agreed to location.

Subscriber equipment may ship with the region or separately as determined by the Harris and Washoe County Project Team in coordination with Customer Care.

SOW Exhibit 3 contains the Responsibility Matrix for the shipping and inventory activities that the Harris Team is responsible for and those activities that are the responsibilities of WASHOE COUNTY.

## **System Installation**

The Harris Team develops the installation plan during the detailed design phases of the project and presents it to WASHOE COUNTY for review and approval. The installation plan includes equipment rack-up drawings, antenna location details, and installation procedures based on site surveys conducted by the Team, or designated subcontractors. The installation plan coordinates all activities of the project team, minimizing installation conflicts, and ensures that system

implementation proceeds efficiently. The project team takes great care to ensure minimal disruption to existing EDACS service when installing the new P25 system in existing equipment locations. Site equipment installations follow industry standards, including Harris Grounding and Lightning Protection. The Team reviews the installation work to ensure implementation of these standards.

### **Antenna Systems**

A key aspect of the infrastructure equipment work is installation of the new P25 antenna systems. Installation of new antenna systems may occur on a newly constructed tower, existing towers in use by WASHOE COUNTY as part of their legacy radio system, or on existing towers that are not part of the legacy radio system. In the case of newly constructed WASHOE COUNTY-owned towers, antenna system installation is straightforward per the system design. For towers that are part of WASHOE COUNTY's legacy system, new antenna system installations must consider the location of the existing WASHOE COUNTY antennas, and the timing of their removal. Antenna system installation on existing towers that are not part of WASHOE COUNTY's current system are not impacted by the presence of legacy system antennas. However, WASHOE COUNTY must coordinate the location of the antenna systems on the tower with the tower owner when it is a leased site.

The Harris Team uses experienced tower crews to install the antenna systems. The antennas mount on side arm mounts and support the RF cables with transmission line hangers secured to the tower cable ladder. The cables have ground kits that will be installed at the top, at the bottom as the cable leaves the tower, and at the end of the ice bridge before the cable entry port. Where applicable, grounding kits will be installed in the middle every 75 feet, so that there is no more than a 75-foot gap between grounds. The tower crew runs coaxial cables down the tower cable ladder, and onto the ice bridge terminating just inside the cable entry port.

After installation, the Team sweeps the RF transmission lines and antennas with a calibrated Anritsu Site Master, or equivalent cable-testing device, on the appropriate frequency band(s) to ensure proper performance. The Team records the baseline test data and provides it to WASHOE COUNTY. A copy will remain on-site for future reference.

### **Infrastructure Equipment**

Upon completion of the tower work, installation crews install the base-stations, and associated

equipment. The MASTR V P25 trunked stations and associated equipment typically mounts in 86-inch standard aluminum EIA 19-inch open-frame racks. The RF connections extend to the coaxial cables using appropriately sized jumper cables.

Harris assumes that WASHOE COUNTY-provided shelters will accommodate the height of these open racks and allow them to position to maintain the desired 36 inches of free aisle space (in front and in the rear). Racks and cabinets anchor to the floor using at least four anchor points. All racks will be installed in accordance to seismic zone 4 requirements.

Harris assumes that WASHOE COUNTY-provided shelters will have sufficient primary and back-up power systems. If shelters are found to have insufficient primary and back-up power systems during site surveys they will be priced through the change order process.

Once the infrastructure racks secure in place, we ground and connect them to power, and technicians verify proper levels and settings preparing the site for the acceptance test.

WASHOE COUNTY personnel and/or their representatives are given advanced notice to prepare for their participation in acceptance testing. The installation team records the alignment and test data and provides copies to WASHOE COUNTY. Copies of the individual site alignment and test data will be available at the sites. Installation crews also install and commission the network switches, dispatch consoles, logging recorders, alarm terminals, and other infrastructure equipment, per the detailed implementation plan.

SOW Exhibit 3 contains the Responsibility Matrix for antenna systems and infrastructure equipment, that is repeated for each region.

## System Optimization

Upon installation of infrastructure equipment, the system engineer(s) works with the on-site technicians to optimize the equipment in preparation for acceptance testing.

- **Simulcast** – Each Simulcast cell, includes verify launch timing, verify timing drive test, iterative adjustments, repeat timing drive test (if required due to non-compliance to specifications), verify configuration, test voter, test network latency, verify network switches, and dispatch console operation.

- **Multisite** – Includes setting up site adjacency in the virtual network interface controller (VNIC), build roaming personality, drive test roaming and hand-off, and finalize roaming personalities.

Harris will conduct a preliminary Acceptance Test to determine that the systems are fully optimized and ready for the Acceptance Test with WASHOE COUNTY. SOW Exhibit 3 contains the Responsibility Matrix for those tasks to be performed during the System Optimization phase for each Region.

## Fleet Mapping

Fleet Mapping is the process used by the Radio System Administrator (RSA) to define regions, agencies, and talkgroups. WASHOE COUNTY's administrators create agencies by assigning an identifier to each agency, creating one or more administrators for the agency, and defining the "pools" of resources for the agency. The Agency administrators organize and configure their users, subscriber units (mobile radios), and consoles.

Harris will rely on input and direction from WASHOE COUNTY and other Members in the development of the fleet map. The new fleet map can be a carry-over from the existing one used today, or this can be an opportunity to streamline and generate a completely new fleet map. Either way, the fleet map will contain:

- Talkgroup IDs
- Agency definitions based on Work Unit or Division
- Emergency actions to be taken when a user declares an emergency
- Encryption capability for either persistent encryption or toggling on/off
- Roaming capability amongst WASHOE COUNTY sites, as well as surrounding systems
- Scan Priority and lists

Defining fleet maps as early in the project as possible allows flexibility for WASHOE COUNTY and the Harris Team to deliver and utilize radios early in the implementation. The Harris Team will work with WASHOE COUNTY's staff to develop templates for user radio programming promptly. Each template will have the basic features and functions defined for a user radio and

user type (e.g. high-tier portable for public safety) such as talkgroups for their work department, control head displays, alias displays, and other information necessary for each user. In prior implementations, Harris customers benefitted by programming a small set of radios with the new fleet map templates. This approach affords them the opportunity to verify that a radio with the intended programming is really what is desired or make changes to only a small subset of users.

Once the project team finalizes and WASHOE COUNTY approves the fleet map and templates, Harris starts mobilizing adequate resources to ensure timely fleet mapping and radio programming. Given the added benefit that Harris radios support both the existing EDACS technology and the new P25 communication protocols, this step can and should be taken prior to the migration over to the new system. All finalized fleet map documentation and templates will be provided as part of the final as-built documentation.

## Coverage Testing

After the project team completes installation in a region, coverage testing will be executed. The Coverage Acceptance Test Plan (CATP) provided in this contract is preliminary. A final CATP will be submitted to WASHOE COUNTY for approval at the DDR and again 30 days prior to starting the coverage test.

Harris will complete coverage tests in cooperation with WASHOE COUNTY representatives. These tests include automated BER testing and Delivered Audio Quality (DAQ) tests. Harris will provide the lab test reports indicating that the radios have been tested and confirmed to meet the bit error rate that is equivalent to the required DAQ 3.4 audio quality. Both inbound and outbound automated BER tests will be performed over the entire service area. The DAQ voice call testing will be sampled over 10% of the number of tiles in urban areas across Nevada.

Harris' CATP is in conformance with the Telecommunications Industry Association (TIA) Telecommunications Systems Bulletin TSB-88-D titled "Wireless Communications Systems - Performance in Noise and Interference-Limited Situations - Recommended Methods for Technology-Independent Modeling, Simulation, and Verification." TSB-88-D has defined Channel Performance Criterion (CPC) as the specified minimum design performance level in a faded channel and provides a set of Delivered Audio Quality (DAQ) CPCs that define subjective voice quality performance applicable to both analog voice and digital voice systems.

Harris fully complies with the Test Configurations section 6.5.D.5 of the Attachment 1 Scope of Services document. Coverage testing of a region will only commence after the components in that region have been fully tested at the system level.

## Cutover & Migration Plan

Harris understands the importance of continuous end user communications for all personnel. These users should be focused on carrying out their duties and should not need to worry about what features their radio can support before, during or after the migration phase. The Harris strategy is to make the migration transparent to the end user by maintaining functionality throughout the migration process.

A safe and seamless transition from the current EDACS system to the new Harris P25 communication system is a critical advantage unique to the Harris solution. Safe means the transition over to the new system minimizes communications or system outages, while ensuring the safety for every user that carries a Harris radio. Seamless means that the expected functionality that WASHOE COUNTY uses every day is still available, while at the same time being complemented by the new functionality the VIDA system offers.

Harris fully understands that the migration plan is one of the critical components of the overall project. As such, the plans' goal is to meet the following objectives:

- Maintain reliable and stable mission-critical communications
- Complete, functional system deployment in a timely manner
- Integrate with existing systems
- Smooth transition from existing operations for users
- Definition of clear roles and responsibilities between Harris and WASHOE COUNTY
- Provide training for all users, administrators and service personnel

The implementation and migration of such a large system will be completed in a phased, or regional approach. Each region will be handled as its own system, but with maintained focus on the interdependencies with surrounding regions and/or systems. The regions will be installed, tested and activated one by one until the entire statewide system is complete. As regions are

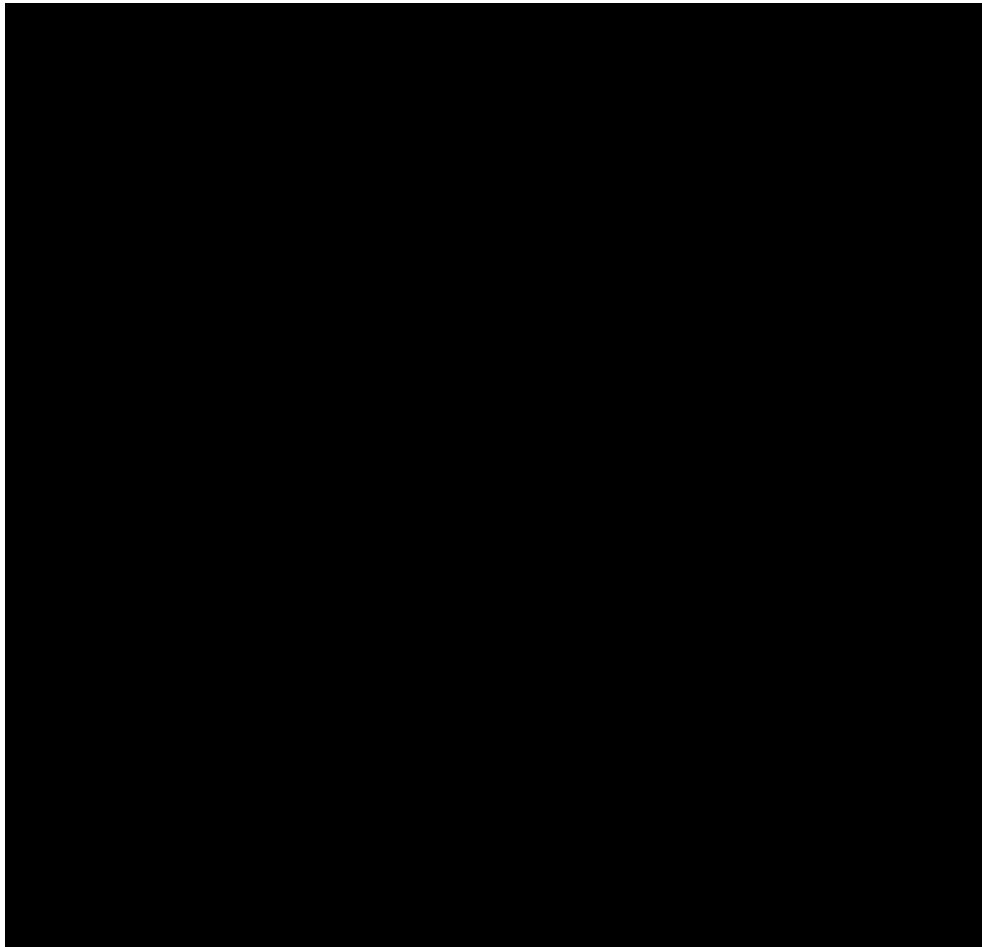
completed, WASHOE COUNTY agencies can be cutover for operational use. Figure 1 shows the preliminary regional breakdown. This plan is flexible and can be adjusted to WASHOE COUNTY's needs.

Harris will provide a detailed migration plan to WASHOE COUNTY at the Detailed Design Review. The final migration plan will detail the dispatch installation, migration phases, radio fleet transition, and details the site by site floor plans showing before, during, and after transition arrangements. Planned system outages will also be covered in the plan, with the goal of minimizing or mitigating any from being required. WASHOE COUNTY will have a single point of contact and a backup for technical and logistical communications.

The plans presented to each Member will be very similar in nature, though the scope may change slightly depending on the encompassed entities within the defined boundary. Each plan will detail the fallback procedures should it be necessary to pull back off the P25 system. With proper planning and upfront communication, this event is unlikely to occur. One of the added benefits of the regional approach is that the scope of such an effort is smaller and can be refined as information and lessons learned are gained from earlier region's implementations.

Harris will work with WASHOE COUNTY on migration coverage areas, especially along regional borders, to ensure that WASHOE COUNTY's coverage needs are met prior to cutover and are aligned with expected coverage during the design. The individual agency cutover timelines will be dependent on the new coverage footprints being operational.

**Figure 1. NSRS Regional Map**



Harris implementation teams have been very successful in cutting over new systems. This is attributable to proper planning and execution by both the project team and the customer. Tools to achieve this include:

- Dedicated project team assigned to WASHOE COUNTY project implementation
- Developing a solid cutover plan between Harris and WASHOE COUNTY
- A customer-focused collaboration during the planning phases to build consensus and buy-in from user groups
- Mobilizing adequate resources to ensure timely fleet mapping and radio programming
- Providing seamless communications between the legacy system and the new infrastructure (i.e. use of the EDACS Migration Gateway outlined below)
- Continual dialogue and cutover support to address user concerns

Experience shows that when the user community is fully involved and can ask questions and voice concerns, the cutover experience is much more efficient with greater end-user acceptance. From the program's start, through fleet mapping and user training, the local Harris team works directly with WASHOE COUNTY's project team to capture concerns, answer questions, and modify the final plan to suit each user's needs.

Throughout the transition process, the Harris team will monitor the system and respond to every reported communication incident. This methodical and detailed process provides the highest level of quality and oversight throughout the transition and cutover needs.

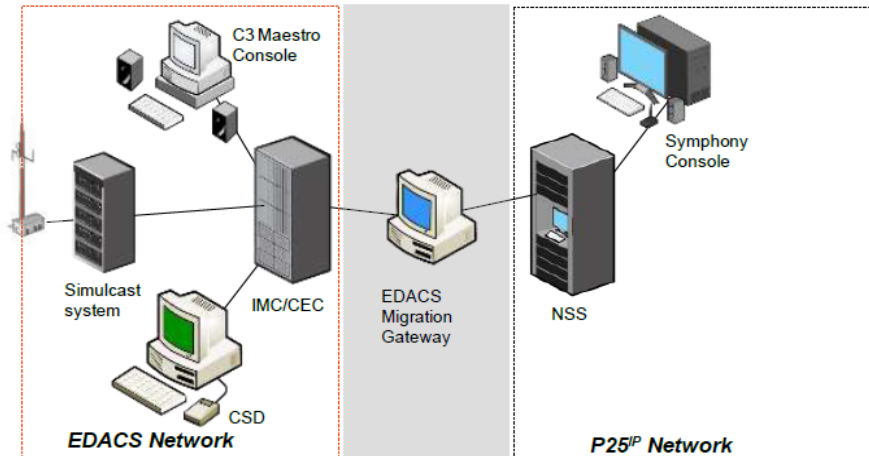
## **Migrating to the Power of IP**

Many of WASHOE COUNTY's radios are capable of both EDACS and P25 modes, including Phase 1, with potential upgrade to Phase 2. Harris is providing WASHOE COUNTY with free EDACS software on any new P25 radios purchased as replacements for those radios that cannot operate on P25 as part of the system offering. The existing EDACS system will remain online and provide the existing coverage during the migration. As users are cutover to the new system, they will require reach back capability to the legacy EDACS system. Powered by the EDACS Migration Gateway (EMG), the Harris solution will provide full integration between the existing EDACS system and the P25 Phase 2 system. Unlike traditional gateways, the EMG is the only solution that can pass the following features from EDACS users to P25 users during migration:

- Full range of P25 & EDACS IDs
- Transmission trunked group calls
- Patch and simulselect
- Emergency indicators/clears
- Caller IDs across the two systems
- Pre-empt EDACS calls from the Symphony consoles
- Encrypted call support
- Individual calls

A network diagram for the EMG is shown below. The EMG provides a suitable migration tool for maintaining interoperability with legacy EDACS systems via the latest VIDA network technology. Providing dispatch connectivity to both systems using a single screen and single headset, to listen to both systems, is a critical advantage of the Harris system during the transition period.

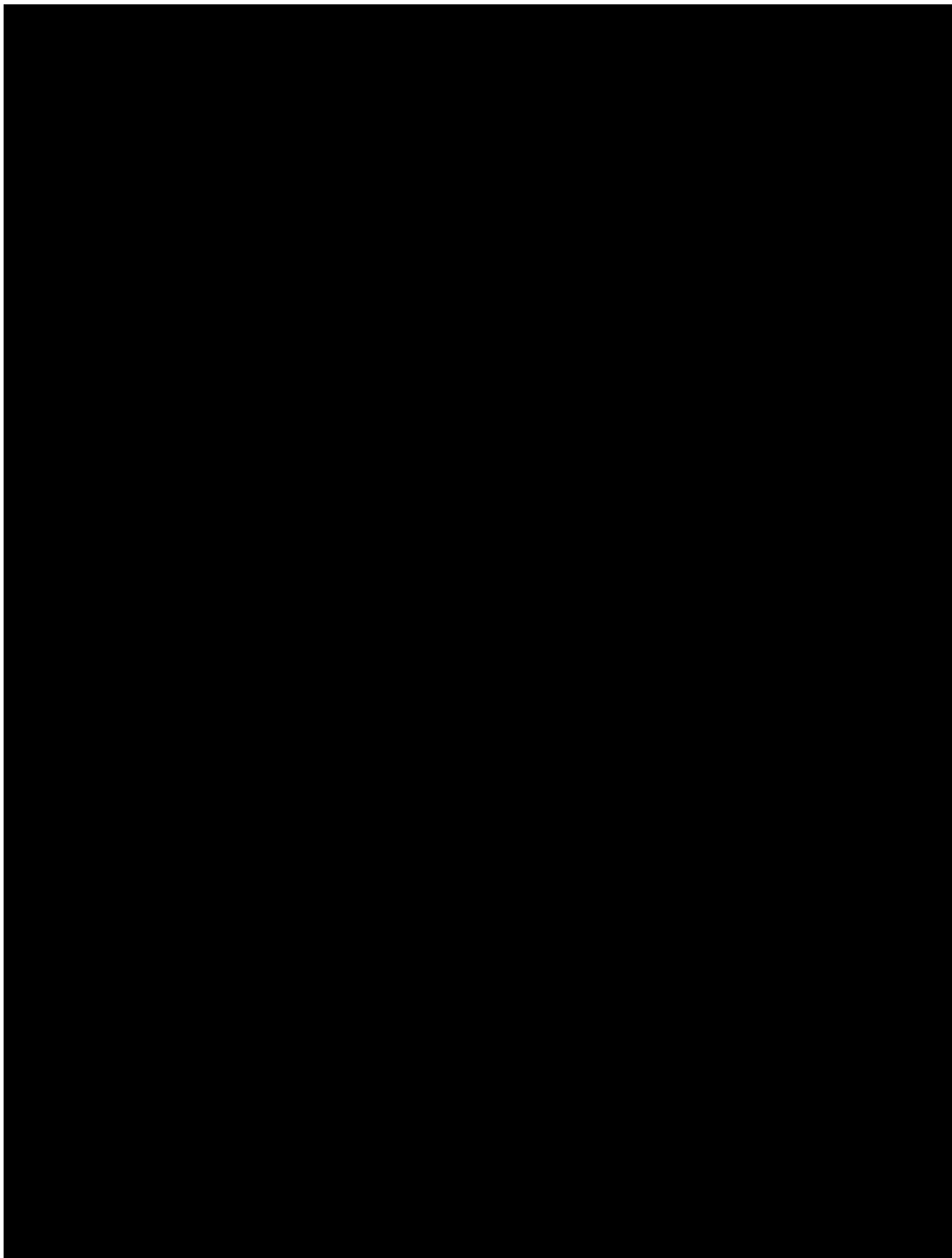
With the provided dispatch configuration, the Harris Symphony console dispatches over both the existing EDACS network and the new P25 network. Dispatchers see full information and have full control over both networks from a single console.

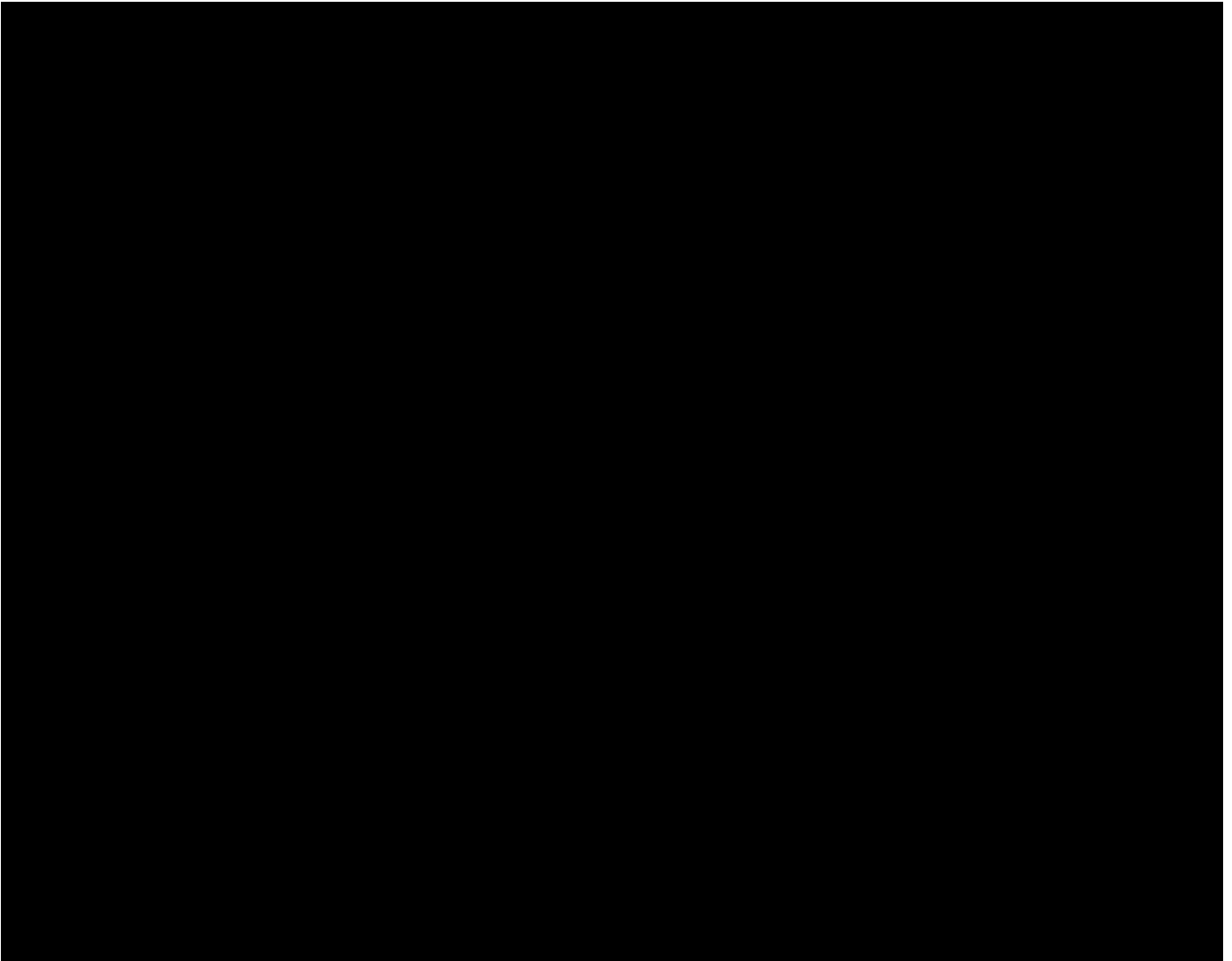


Harris will be responsible for designing and implementing Washoe County's IP-based microwave system and integrating it with the other NSRS members back-haul network.

## Key Components of the Migration

Harris' primary goal for migration is to make the transition as transparent to the end user as possible by maintaining functionality throughout the migration process. Whether a user needs their Harris radio for administrative use or emergency response, the operational requirements they meet to perform their job will be enhanced on the Harris P25 system. The migration and cutover plan laid out in the following sections highlights the Harris strategy for each facet of the design, providing a summary of the strategy for each of the various subsystems in WASHOE COUNTY's portion of the NSRS P25 system. The following table identifies the RF sites in accordance to their assigned region.





| 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                  | 6                                                                                   | 7                                                                                   |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Site Inspection, Scope Finalization                                               | Frequency Migration Plan                                                          | Install Core Equipment, Gateways, Dispatch Centers                                | System Install, Optimization, Testing                                             | Subscriber Rollout Plan, Execution                                                 | Cutover from EDACS to P25                                                           | "Burn-In" Test                                                                      |
|  |  |  |  |  |  |  |

### Stage 1 – Site Inspection and Scope Finalization

Harris' design approach uses as many of the existing sites in the current system as possible. There will be additional sites required as well. Harris outlines our site development and site equipment costs critical to support the P25 system in the pricing pages. We will finalize these costs from site surveys, and collected quotes from local contractors to perform the expansion work. Equipment installation are dependent on-site readiness and weather conditions, and will be determined after site surveys.

Harris' solution accounts for these intrinsically challenging upgrades and new installations. The efforts require coordination, planning, and risk mitigation. Harris understands these efforts and is uniquely positioned to tackle them in this upgrade. After project kick-off, Harris will start this process with the following critical activities to inspect sites, finalize scopes, and complete the Detail Design Review.

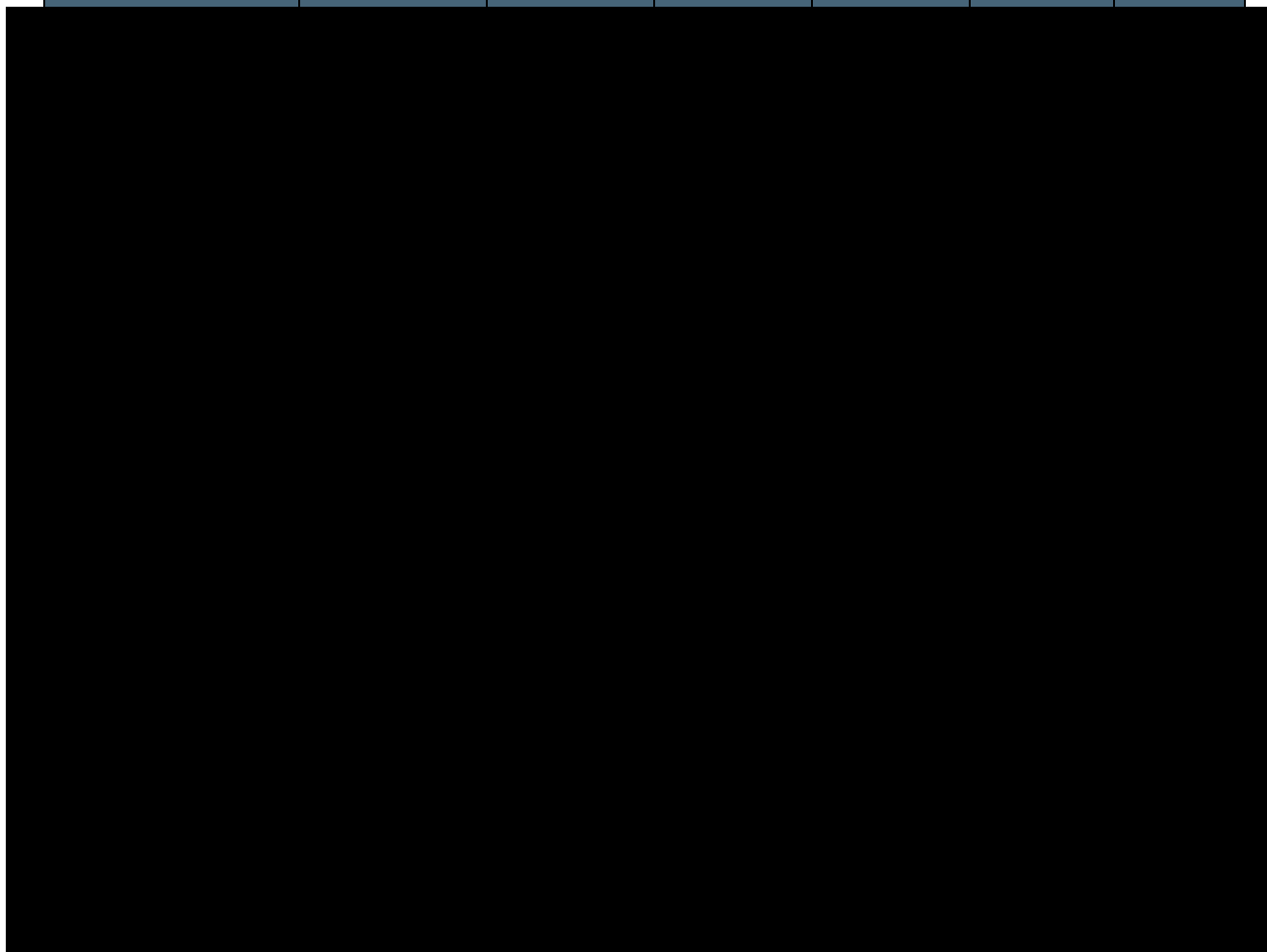
- Schedule site surveys with WASHOE COUNTY
- Perform structural analysis on the existing antenna structures to determine the capabilities to support the P25 antenna design loads
  - Any underperforming towers will require detailed costs from Harris to remedy the tower, and an additional change order and approved engineering drawings before antenna mounting work may proceed
- Perform an electrical load study at each site to determine the spare load available in the local panel. This information will inform the final Harris load transition plan to support the DC Power upgrade from the legacy system to the new P25 system.
  - Identified additional power needs will result in a change order and possible delays at the site.

- Finalize the physical rack and antenna installation plan given the constraints imposed by the RF equipment space.
- During site survey inspections the Harris team will identify and document any site upgrades that are required or recommended to support the new P25 system. During the DDR the Harris team will work with WASHOE COUNTY to finalize site civil requirements and submit a change order documenting the final site designs.

Below are the recommended site civil requirements to support the new P25 communications system. Following site surveys Harris will submit a report identifying required site upgrades, upon WASHOE COUNTY's approval a change order will be submitted to complete the necessary upgrades

| Site Name | 48 VDC<br>Plant<br>Current | Back-up<br>Generator | Space<br>Available<br>for TX<br>Antenna | Space<br>Available<br>for RX<br>Antenna | Space<br>Availabl<br>e for #<br>Racks | Dual<br>HVAC |
|-----------|----------------------------|----------------------|-----------------------------------------|-----------------------------------------|---------------------------------------|--------------|
|-----------|----------------------------|----------------------|-----------------------------------------|-----------------------------------------|---------------------------------------|--------------|

| Site Name | 48 VDC<br>Plant<br>Current | Back-up<br>Generator | Space<br>Available<br>for TX<br>Antenna | Space<br>Available<br>for RX<br>Antenna | Space<br>Availabl<br>e for #<br>Racks | Dual<br>HVAC |
|-----------|----------------------------|----------------------|-----------------------------------------|-----------------------------------------|---------------------------------------|--------------|
|-----------|----------------------------|----------------------|-----------------------------------------|-----------------------------------------|---------------------------------------|--------------|



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## Stage 2 – Frequency Migration Plan

The process for developing a Statewide frequency plan is a long, intensive and often iterative process. Harris has taken the first step in developing a frequency plan for the P25 system by evaluating spectrum availability. Harris' goal is to reuse as many of WASHOE COUNTY's current spectrum holdings as possible while also looking to implement *additional channels* to provide for coverage testing and avoid impacting the EDACS users during the multi-year cutover period. A final and comprehensive frequency plan will be provided at the DDR. Harris will work to completely build out the P25 site alongside the existing EDACS sites, allowing for a smooth and logical cutover.

Harris plans to implement a phased, or regional, cutover, thus allowing the 800 MHz EDACS frequencies to be placed back into the P25 pool for reuse. This plan mitigates risk, and allows the new P25 system to be fully vetted, and loaded at WASHOE COUNTY's discretion. In addition, Harris will put forth the due diligence in determining the viability of using any available 700 MHz channels.

Harris will provide WASHOE COUNTY with a draft frequency plan before DDR. In addition to the plan, a report will be provided which substantiates the ability to license frequencies associated with the plan.

Finally, Harris' frequency plan mitigates these additional risks.

- Minimum of 250 kHz of channel separation within any sites' transmitter combiner
- Minimum of 50 kHz of channel separation between any channel assigned in overlap areas of the network
- No interference with existing system frequencies during the various migration phases

| 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                  | 6                                                                                   | 7                                                                                   |
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### Stage 3 – Installation of Core Equipment, Gateways, and Dispatch Centers

New core equipment is being provided for WASHOE COUNTY, which gives Harris the ability to build out in parallel with the existing EDACS core, and move resources over to the new core while maintaining a connection back to the EDACS system via the EMG.

Harris will install the core equipment for all NSRS members during the rollout of region 0 allowing the Harris team to turn RF sites on as we move through the regions.

Once the new core is in place and connected to the microwave ring, Harris will make it operational and begin the testing of the new core. Other subsystems that will be installed in the system with the new core include:

- New Network Management System (NMS)
- EDACS Migration Gateway (EMG)
- New centralized Logging Recorder

These devices must be cutover to the new core prior to the transition of dispatch operations.

The migration plan includes steps to evaluate the maintenance or replacement of current gateways, or other interfaces to analog or non-P25 systems. This will prevent loss or degradation of connectivity during migration. Users on either the existing EDACS system or new P25 system will have access to all system resources prior to transition. Harris will work with WASHOE COUNTY to prevent loss or degradation of connectivity with outside agencies by determining what systems and interop agencies are critical to the operations within a region during the migration. This step is critical in terms of *risk mitigation*, allowing WASHOE COUNTY to maintain operation on the current EDACS system before any sites or dispatch consoles are moved to the new network.

## DISPATCH MIGRATION

Harris understands the important role of the dispatcher regarding critical communications, and we developed our newest Symphony console to simplify dispatch operations and empower dispatchers. With console space restrictions in mind, Harris designed the Symphony console to require minimal space in already tight dispatch centers.

Harris installers will work with WASHOE COUNTY's Dispatch Centers to custom design their console screen layout to meet the individual dispatcher needs. Likewise, the Symphony console supports individual dispatcher login and personalization to provision dispatcher specific settings from the network so dispatchers can access their specific settings at any dispatch console location and not be tied to a specific workstation location.

With the EDACS Migration Gateway, dispatchers can access both P25 and EDACS talkgroups, allowing a seamless transition to the new system. As users transition to P25 from EDACS, dispatchers will be there every step of the way, leveraging their new dispatch consoles to operate both systems. The EMG provides the capability to operate all the scenarios outlined below:

- New Symphony Consoles dispatching on EDACS
- Existing Consoles dispatching on P25
- Backup control stations can also operate on both systems with multi-mode software
- Having both existing and new consoles in operation at the same time

A Harris technician or console trainer will be on hand during the cutover period as each shift begins to train the dispatchers on use of the new consoles. The guidance provided to the dispatchers will ensure a smoothly running operation. Dispatch consoles can be installed prior to or during migration thanks to the benefits the EMG provides.

Installing consoles in a 24-hour dispatch center requires consideration of minimum staffing as well as operational peak times. Harris will interview the dispatch center managers to identify downtimes, console availability and operational peak times to schedule console installs accordingly. Evening or weekend console installation can be scheduled as well, should WASHOE COUNTY feel it is beneficial to install consoles at non-peak operational times.

Realizing that operations must continue while consoles are being installed, console installations will occur using hand tools rather than power tools (as much as practical) to limit background noise in the dispatch center. Typical console installation requires approximately two to three hours per installer. Harris will provide additional installers as necessary to meet console availability and to install consoles at the allowable pace at each individual dispatch center.

Once up and running, dispatchers can transition to the new platform with proper training to *handle all operational requirements* including administration, day-to-day operations, emergency response, and how to handle catastrophic events on the new platform.

#### **NEW NETWORK MANAGEMENT SYSTEM INTEGRATION**

The new core equipment has its own built in network management platform. Harris *recommends system training* on the new platform to bring system administrators up to speed on the latest feature available. Once the core is in place, WASHOE COUNTY administrators can begin using the new Network Management System immediately.

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#### Stage 4 – System Installation, Optimization & Testing

Once the VIDA core and dispatch capabilities are operational, Harris is ready to finalize the installation, optimization and cutover to the P25 system on a regional basis. Harris will install all P25 site equipment in parallel to existing EDACS equipment at existing facilities. Prior to commencing user cutover within a region, Harris will fully test and optimize the new system to ensure that all functional and coverage acceptance test plans have been completed, and the system is ready. This includes the completion and signoff of the Functional Acceptance Test Plan (FATP) and Coverage Acceptance Test Plan (CATP) procedures, per region. This critical step minimizes risk and ensures the region is ready for cutover.

| 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                  | 6                                                                                   | 7                                                                                   |
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## Stage 5 – Subscriber Rollout Plan and Execution

Harris can safely move EDACS users over to P25 during the transition with a single radio device. This is accomplished using dual programming of both EDACS and P25 modes. All existing subscribers capable of P25 Phase 1 or Phase 2 operation can be upgraded and programmed ahead of the transition date. Harris strongly encourages WASHOE COUNTY to provide new radios to users that will be operating in a region before migration starts for that region. By orchestrating this programming effort ahead of the actual migration, radios can be fielded in advance to minimize disruption, and not require the need to pull users out of service. This also prevents users from having to carry two radios at any point during the transition. EDACS operators will continue to use their EDACS talkgroups all the way up to their transition date. For mobile users, their radios can be installed and programmed ahead of time, which limits how many users need to be taken out of service for the cutover date.

On their cutover date, users will be trained on how to switch modes on the radio, the differences between analog and digital modes of operation, and what talkgroups are available to them in P25 mode. This training will cover administrative use, day-to-day operations, how to handle emergency events, and what occurs on the radio in the event of catastrophic failures. Careful consideration of fleet mapping up front will minimize reprogramming efforts that can prove costly and timely for the users. The new fleet map structure will closely resemble the existing EDACS structure since primary EDACS talkgroups will be bridged to the same P25 talkgroups. Once on the P25 system, users will likely not know the difference between users that have transitioned, and those that haven't on their primary talkgroups.

The final radio procurement and upgrade plan will be finalized at Detail Design Review (DDR). Harris will work with WASHOE COUNTY to identify the number and type of existing radios they wish to upgrade, as well as the quantity of new radios they want to procure. Once these radio quantities are finalized, Harris will provide a detailed plan to accommodate the programming, training, install and removal of radios into the final migration plan. In general, Harris intends on using the EDACS migration gateway and mixed mode radios (i.e. radios that support both

EDACS and P25 operation) to provide a flexible and seamless migration.

Once an entire talkgroup moves to the new P25 network, the EMG talkpaths are available for the next talkgroup. Throughout the transition, legacy system users will always hear audio and see emergencies from those that are on the new P25 network and vice versa. Training will be provided in alignment with the migration plan to ensure each user is fully capable of operating the new radio.

User cutover within a region occurs once the new P25 network system is tested and accepted. Once ready for transition, Harris' strategy is to move radio users by functionality (public services, police, fire, etc.) but is flexible in their approach and looks forward to working with WASHOE COUNTY to finalize the plan. Throughout the transition, the Harris team will monitor the system and respond to communication incidents. With dual operation, fallback is seamless to the existing EDACS system.

## **User Radio Equipment Implementation**

Harris will be responsible for programming and installing radios. The project team will coordinate the distribution of portable radios and accessories with WASHOE COUNTY. In addition, the project team will begin mobile installations for the initial group in concert with the training schedule. Technicians and subcontractors will equip vehicles with new mobiles in accordance with a schedule created by WASHOE COUNTY and mutually agreed upon by Harris. WASHOE COUNTY will direct vehicles to a regional installation area where old mobile radios will be swapped out for new mobile radios.

Technicians and subcontractors experienced with user radio operations will be available to answer any last-minute questions. Harris will ensure that the subcontractors perform the work to Harris specifications and that they leave the work area as it was found at the end of each day.

To identify the specific radios assigned to individuals and vehicles, the project team will provide Washoe County an inventory list of all radios, including serial numbers, calibration data, and radio programming information. The cutover team will work together to schedule the delivery of the radios to each user shortly before they go live on the new P25 system. As required, installations will consist of completely placed, anchored, and installed equipment, including the placement of associated cabling, appropriate layout, and full testing of the radio. Harris will

provide associated power supplies and any other hardware, adapters, and/or connections to deliver a complete operable user radio to WASHOE COUNTY at the time of field acceptance.

## User Equipment

The Harris Team and WASHOE COUNTY personnel will develop a mutually agreeable cutover schedule. The Harris Team will provide overall management and planning of the installation and test activities, while its subcontractors perform the installations. The Harris Team will schedule and coordinate the user training and distribution of the portable and mobile user equipment per the cutover plan installation schedule. All mobile radio installations will be closely coordinated with WASHOE COUNTY and participating user agencies, to minimize disruption to their operation, and to reduce out-of-service and unproductive time.

## Radio Installation Planning

| Mobile Radio Installations*                                                                                                                                                                                                                                                                                                                                                                                                  | Portable Radio Distribution*                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Harris <u>Knows</u> mobile installs:</p> <ul style="list-style-type: none"><li>Require extensive planning and coordination</li><li>Remain with the vehicle for years</li><li>Have a need for collaborative planning/continuous quality management = decreased end-user agency impact</li><li>Can be accomplished ahead of cutover dates due to Harris' ability to support both EDACS and P25 modes of operation</li></ul> | <p>Harris <u>Knows</u> portable distribution:</p> <ul style="list-style-type: none"><li>Can occur concurrently with mobile installs, but <b>encourages</b> distributing ahead of time due to the capability of supporting both EDACS and P25 modes of operation</li><li>And if the user's legacy radio is not a P25 Phase 1 or 2 capable radio, the user will turn it in and walk away with the new P25 Phase 2 radio(s)</li><li>And if the user's existing radio is P25 Phase 1 or 2 capable, WASHOE COUNTY has the option to upgrade the radio to P25 Phase 1 or 2</li></ul> |

\*Harris will be responsible for updating each system users radio equipment to operate on the network before, during, and after system migration.

| 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                  | 6                                                                                   | 7                                                                                   |
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## Stage 6 – System Cutover from EDACS to P25

Our migration solution installs the new system in parallel with the legacy system. All installations and verifications will complete prior to starting the migration. Therefore, Harris expects little downtime as users migrate from the EDACS system to the new P25 system because of the parallel systems approach. Momentary downtimes may occur when de-activating a frequency on the legacy system and activating that frequency on the new P25 system. However, as the frequency plan outlines, the new system only uses a small subset of channels from the legacy system. Harris expects to perform frequency migrations during off-peak hours during scheduled windows of time to reduce impacts.

With the EDACS Migration Gateway in operation, WASHOE COUNTY can migrate users to the new system as entire disciplines, while maintaining the legacy communication infrastructure if users need to switch back to the legacy system. Since critical communications between systems will support trunking features such as IDs and emergencies, end users will have constant communications between both the EDACS and P25 system so that they can still communicate with users that have not completed migration.

Harris will provide a detailed cutover plan as part of Detail Design Review, which will incorporate WASHOE COUNTY's suggestions for which regions should be upgraded first, the order of those regions, and traffic analysis outlining the results on both the legacy EDACS and new P25 system during each transition step.

## Final Acceptance Testing

The Harris Team will perform systems acceptance testing per the agreed upon final acceptance test plan (FATP) for each region. The Harris Team will provide two weeks written notice to WASHOE COUNTY when installation and optimization are complete, the FATP has been fully dry-run successfully and the system is ready for acceptance testing. The following is a sample outline of Harris' FATP.

- Facility Test - Visual Inspection
- VIDA Universal Administration Server (UAS) Operation
- Encrypted Voice Operations
  - Single site, Multisite and Console encrypted group calls
  - Encrypted Individual (Private) Calls
- Over the Air Rekeying (OTAR)
  - Includes Rekeying and Changing Over a Crypto Net, plus Zeroing subscribers
  - Rekeying a Console
- Redundant Wide Area and High Availability Router Failover
- Site Activity using the Activity Warehouse
- VIDA Regional Network Manager
  - Reporting of RF System Alarm Indications
- Enterprise Network Manager (ENM)
- P25 Station Reconfiguration using the Device Manger
- NSS Switchover
- Control Point Movement
  - DCP Forced Control Point Movement
  - DCP Control Point Movement in response to Faults at the Active Control Point
- P25 Trunked Calls and Site Features
  - Includes Emergency calls, All-Call, Call Priority and Scanning
- Transcoder Operation
- P25 Phase 2 Functionality
  - Includes Mixed-Mode and standard call operation
- Symphony Dispatch Platform Features and Operation
  - Includes Emergency Calls, Pre-empt, Patching, Simulselecting, Console Cross-mute

- Trunked Logging Recorder Operation
- P25 Simulcast Bypass Operation
- VIDA Interoperability Gateway Tests

The system engineer provides documentation defining each of the test areas. The FATP procedures contain a short description, test methodology, and a record form for logging results and acceptance signatures for each test. The Harris Team uses a punch list to document any issues found, so the team can quickly resolve them. Follow-up tests and documentation will show the correction of open items. Upon satisfactory completion of each testing phase, the project manager will present the system acceptance documentation to WASHOE COUNTY's project manager(s). The project team and WASHOE COUNTY can proceed with cutover of a region with each approval WASHOE COUNTY provides.

SOW Exhibit 3 contains the Responsibility Matrix for Final Acceptance Testing activities performed by Harris, and those activities that WASHOE COUNTY will perform for each region.

| 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                  | 6                                                                                   | 7                                                                                   |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |  |  |  |  |

## Stage 7 – “Burn-In” Test

The new P25 radio system will undergo a 30-day burn-in period encompassing 30 consecutive days of uninterrupted operation following cutover. The 30-day burn-in period is intended to demonstrate reliable system operation. Several important aspects of the reliability test are to have no disruption in communication, and to have no reduction in the quality of communication. Failure modes, categories, and correction scenarios will be topics to be discussed.

Major failures might include items such as a complete loss of network switching capability, loss of wide area trunking mode operation, complete loss of simulcast control point equipment, etc. In general, a major system failure will result in the test period being stopped and restarted from zero after correction of the issue.

Minor failures could include any non-critical failures that don't affect trunking or system operation. In general, minor system failures do not result in testing being suspended. Minor system failures are added to an incident report tracking document and these items are addressed while reliability testing is on-going.

At the successful completion of the 30-day burn-in period, the project manager will arrange a meeting with the field service team to review maintenance support during the warranty period. The team will provide the contact information and procedures used to obtain service during the warranty period for standard business hours and after hours.

## APPROACH

The Burn-in Period Test will be conducted once the System Acceptance Test Plan and Coverage Acceptance Test Plan have been successfully completed and users loaded on the system for that region. During the test, the region shall operate for a period of 30 accumulated calendar days without a major failure relating to hardware or software infrastructure. Neither the (Customer) nor Harris shall perform any system maintenance during the test unless mutually agreed upon in writing.

During the test, records of hardware and software failures will be collected, evaluated and resolved as required. The failures will be classified as a “Major System Failure”, an “Intermediate System Failure”, or a “Minor Failure” (as defined below in table 2). The test will be successfully completed upon the completion of a 30-calendar day period without the occurrence of a “Major System Failure”. Event failures could either stop and reset the cycle time, or temporarily pause the Burn-in Period test.

Harris and WASHOE COUNTY shall assign a primary and secondary point of contact which will be available at all times during active testing of the region. These contacts will comprise the “test committee”. Any in-process failures will be reviewed by both parties, a determination made as to the actions to be taken, and the effect on the test clock following the guidelines and definitions of failures below. During this time, all documented issues will be logged, evaluated, resolved and reviewed by the test committee.

#### **MONITOR AND CONTROL**

The Regional Network Manager (RNM) application will be used to monitor system health status. The Harris project engineering team will require VPN Remote Access to WASHOE COUNTY’s network in order to perform remote monitoring and diagnosis of the LMR System.

Site and terminal configurations will be locked during the Burn-in Period Test preparation. Any mutually agreed changes will be documented and become a part of the test report.

## FAILURE DEFINITIONS AND SAMPLES

Figure 2. Failure Types

| Failure Types  | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Major/Critical | <p>A Critical failure of the system during this test will cause the thirty (30) day burn-in period and warranty to reset and restart from the beginning after completion the repair. A critical failure is defined as follows:</p> <ul style="list-style-type: none"> <li>Any failure which causes a loss of fifteen percent or more in capacity or coverage in any cell</li> <li>Any failure which causes a loss of the primary core</li> <li>Any failure which causes a loss of simulcast capability</li> <li>Any system failure that causes the loss of two or more console positions</li> <li>Any failure that renders the logging recorder inoperable or causes the irretrievable loss of recorded audio</li> <li>The concurrent failure of two (2) or more repeaters</li> <li>Concurrent failure of two (2) or more switches and/or routers</li> <li>Failure of the receiver voting system</li> <li>Two (2) or more repetitive minor failures of the same functionality with or without the same root cause</li> </ul> |
| Intermediate   | <p>Defined as Harris supplied hardware or software failure which INTERRUPTS 30-Day Burn-in Period Test and will STOP testing. Harris and/or its authorized repair service will make the necessary repairs/adjustments, and the 30-calendar day test period will be re-started at the point that it was discontinued and will continue until the thirtieth day occurs without further interruptions. For example, if failure occurs on Day 15 of the reliability test, repairs will be made, and the Burn-in Period Test will restart and continue on Day 15. The Burn-in Period Test will then be deemed successfully completed when Day 30 is completed without further interruptions of failures.</p>                                                                                                                                                                                                                                                                                                                      |

| Failure Types | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Minor         | <p>A minor failure will cause the burn-in period to temporarily hold until the issue has been fully resolved to the Members satisfaction. On approval, the burn-in period can resume. The Members will accept a maximum two (2) minor failures before a full reset of the burn-in period will be required.</p> <p>Two (2) or more repetitive minor failures of the same functionality with or without the same root cause shall be defined as a major failure.</p> <p>Two (2) or more of the same minor failure without the determination of cause will temporarily hold the burn-in test until a cause is found, confirmed and corrected, or the Members are satisfied there is little likelihood of a systemic recurring issue</p> |
| Other         | Defined as one or any combination of the following type of events considered out of Harris' Control: Radio call failures in "known" poor coverage areas, non-Harris customer provided equipment such as the backhaul, commercial power failures, customer staff/operator errors, previously agreed system maintenance downtime and/ or harsh environmental conditions or acts which cannot be prevented.                                                                                                                                                                                                                                                                                                                             |

System failure definitions are shown in Figure 3.

**Figure 3. System Failure Definitions**

| Item | Failure Description                                                           | Major | Intermediate | Minor |
|------|-------------------------------------------------------------------------------|-------|--------------|-------|
| A    | Complete Loss of Network Switching capability.                                | X     |              |       |
| B    | Loss of wide area trunking mode of operation.                                 | X     |              |       |
| C    | Base station failure                                                          | X     |              |       |
| D    | Loss of simulcast control point equipment.                                    | X     |              |       |
| E    | Failure of 20% or more dispatch console positions including control stations. | X     |              |       |

| Item | Failure Description                                                                                                                                                                                                                | Major | Intermediate | Minor |
|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|--------------|-------|
| F    | A software failure or download or any intervention by a Harris software developer or programmer on the radio system infrastructure components resulting in a service outage that would otherwise be classified as a major failure. | X     |              |       |
| G    | Failure of the radio system infrastructure to properly recognize the emergency alert from a terminal subscriber.                                                                                                                   | X     |              |       |
| H    | Complete Loss of Network Management capability.                                                                                                                                                                                    |       | X            |       |
| I    | Loss of more than ten percent traffic capacity of the user base.                                                                                                                                                                   |       | X            |       |
| J    | Failure of any single Network First Gateway interface equipment between the Gateway                                                                                                                                                |       | X            |       |
| K    | Any non-critical failure that does not affect trunking operation                                                                                                                                                                   |       |              | X     |
| L    | Any user terminal equipment                                                                                                                                                                                                        |       |              | X     |
| M    | Single Console position                                                                                                                                                                                                            |       |              | X     |

## Test Planning Procedures

Prior to the start of the 30-Day Burn-in Period Test, the following activities must take place:

- System Acceptance Test Plan completed
- xxxx users identified during DDD (full radio cutover completed for the region)
- User training completed
- Test Committee members identified
- Team meeting with users and test committee to review the test plan and failure definitions and examples

- Issue reporting process reviewed and approved

## FAILURE REPORTING

Upon observing a system issue, the user will complete the Radio System Issue Report (Figure 4) and submit it to the test committee within 12 hours. Upon receipt of the issue report, the Harris representative will log the report and make a preliminary classification of the issue and report it to the Test Committee within 12 hours of receiving the report. Should the issue be classified a major failure, the test will be halted until resolved.

All reported issues will be logged documenting the details of the issue resolution. Should the initial classification be disputed by another member of the test committee, the committee will meet within 24 hours to review the issue and reach agreement on the classification. The test will continue until the team meets and reaches agreement.

In the unlikely event that the test committee cannot reach consensus on the issue classification, or restart of the test after a major failure, the Harris Project Manager and WASHOE COUNTY Project Manager will meet and discuss. If they cannot reach agreement, the test will resume and the issue will be referred to the Dispute Resolution Board.

Weekly meetings will take place to review the progress of the test, discuss issues identified and their resolution. Attendees of the meetings will include the Test Committee and others as identified by APS and Harris Project Managers. The Harris Project Manager will document and distribute meeting minutes and action items for each meeting.

**Figure 4. WASHOE COUNTY P25 Radio System Issue Report Form**

|                            |  |  |  |  |
|----------------------------|--|--|--|--|
| <b>Name/User:</b>          |  |  |  |  |
| <b>Date:</b>               |  |  |  |  |
| <b>Time:</b>               |  |  |  |  |
| <b>Location:</b>           |  |  |  |  |
| <b>In Building (Y/N):</b>  |  |  |  |  |
| <b>GPS Coordinates:</b>    |  |  |  |  |
| <b>Agency:</b>             |  |  |  |  |
| <b>User ID:</b>            |  |  |  |  |
| <b>Talk Group/Channel:</b> |  |  |  |  |
| <b>Selected System:</b>    |  |  |  |  |

| Issue Description |
|-------------------|
|                   |
|                   |
|                   |
|                   |
|                   |

### **Scheduled Maintenance or Intermediate Failure**

Upon completion of the maintenance or resolution of the failure, the test shall resume as if the maintenance or failure had not occurred (i.e. if the test is stopped on day 5 for maintenance, it would then resume on day 6 after the maintenance is complete).

### **MAJOR FAILURE**

Should a major failure occur, the Harris team will take prompt action to evaluate the issue and implement corrective action. After resolving the issue, the Harris project manager or engineering manager will document the resolution and provide notice of restarting the test at day 1.

### **RESOURCES AND DESIGNATIONS**

Harris and WASHOE COUNTY will determine the necessary resources to execute and monitor the testing and ensure they are available to meet, perform, and complete the technical requirements as agreed upon. Such resources include personnel, facilities, site access, and the assistance of required WASHOE COUNTY personnel to conduct testing. Identified and agreed upon resources will be made available such that there is no impact to the cycle-time of the reliability test and performance of the task.

### **ACCEPTANCE**

As identified on the project schedule, upon successful completion of the 30-Day Burn-in Period Test, Harris will submit the results of the test including a summary of issues and descriptions of resolutions performed. A joint meeting will follow, at a mutually agreeable location, to review the test documentation and obtain acceptance and agreement that the Burn-in Period Test was successfully executed, completed and approved.

## Conclusion

Our philosophy is to maintain existing operations throughout the transition process. This continuous radio communications operations approach minimizes impact on the users until and during the time of transition. Harris will commit to the following:

- Uninterrupted operability between the new and existing radio system during transition
- Continued communications on normal and interoperability talkgroups in place today
- Single radio use during the transition and the operation of the new Harris radio device will stay consistent with existing operations
- Single dispatch console use during the transition

## Warranty Plan

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## Scope of Warranty Plan

SERVICE PROVIDER will provide this Warranty Plan ("Warranty Plan") for a projected [REDACTED] [REDACTED] such that all warranties end on the same date for Infrastructure Equipment and Software per the preliminary implementation schedule contained in Exhibit 4 – Project Schedule

If there are WASHOE COUNTY caused schedule delays beyond the projected implementation schedule from the acceptance of Region 1 to the acceptance of Region 3, SERVICE PROVIDER reserves the right to charge the WASHOE COUNTY an additional amount to compensate for schedule delays (i.e. Warranty extension).

Harris will also provide a 2-year warranty on Terminal Hardware from the date the hardware is put in service by the WASHOE COUNTY.

SERVICE PROVIDER is providing standard Warranty services packaged with additional Premium Warranty services for the Warranty Plan. The scope of the Warranty Plan is listed in Figure 1 and described individually in Statement of Works (SOWs).

**Figure 1. Warranty Plan Scope of Services**

| Scope of Services                                                | Standard and Premium Services During Warranty |     |        |
|------------------------------------------------------------------|-----------------------------------------------|-----|--------|
|                                                                  | NDOT                                          | NVE | Washoe |
| Depot Repair and Return                                          | YES                                           | YES | YES    |
| Priority Technical Assistant Center (P-TAC)                      | YES                                           | YES | YES    |
| Tech-Link (included in P-TAC)                                    | YES                                           | YES | YES    |
| Software FX with SUMS - Harris Infrastructure and Subscribers    | YES                                           | YES | YES    |
| Software Maintenance - Tait Infrastructure and Subscribers       | YES                                           | YES | YES    |
| Software FX with SUMS and Tait Software Maintenance Installation | YES                                           | YES | YES    |
| Issue Resolution Support                                         | YES                                           | YES | YES    |
| Preventive Maintenance (Infrastructure)                          | YES                                           | YES | YES    |

## Equipment Covered

The Warranty Plan covers all Equipment and Services provided by SERVICE PROVIDER under the Agreement as listed in Exhibit 5 – Equipment List.

Reused equipment is not covered by this Warranty Plan. Console upgrade software to Windows 10 is covered by this Warranty Plan but not the physical console hardware. The physical hardware is considered reused equipment.

## WASHOE COUNTY Performed Warranty Repair

SERVICE PROVIDER provides WASHOE COUNTY the ability to perform maintenance and/or repairs during the Warranty Period without voiding or affecting the SERVICE PROVIDER's warranty or other responsibilities with proper, documented training. WASHOE COUNTY will provide all First Echelon support as outlined in the Issue Resolution Support SOW contained in this Warranty Plan.

WASHOE COUNTY technicians conducting warranty service work must complete the following technical training to be authorized to conduct the service work.

**Figure 2. Technical Training Required**

### System Administration Training

| Course Name                   | Course No. |
|-------------------------------|------------|
| P25 System Overview           | YTSN4F     |
| Unified Administration System | YTSN6B     |
| Regional Network Manager      | YTSN3V     |
| Over-The-Air Rekeying         | YTSN6C     |
| Radio Programming & OTAP      | YTSN6X     |

In addition to the classroom training, the technicians need to take the online System Administrator/Manager web-based training package through HTU.

- P25 Fleet Mapping Overview
- XL-200P Radio Operation
- Symphony Console Operation
- Radio Programming Overview
- Advanced Access Control (AAC)
- Radio Personality Manager (RPM & RPM 2)
- Unified Administration System (UAS) Overview
- Regional Network Manager (RNM) Overview
- Enterprise Network Manager (ENM)
- Over-The-Air Programming (OTAP)

- Active Directory
- Activity Warehouse
- Over-The-Air Rekeying (OTAR) Fundamentals
- Inter-RF Subsystem Interface (ISSI) Fundamentals

### Radio Infrastructure Training

| Course Name                                       | Course No. |
|---------------------------------------------------|------------|
| P25 System Maintenance                            | YTSN6D     |
| Network Operation and Maintenance                 | YTSN3W     |
| MASTR V Station Maintenance                       | YTSN8G     |
| P25 Simulcast System Maintenance                  | YTSN8H     |
| Tait P25 Conventional Configuration & Maintenance | YTSN4M     |
| Regional Network Manager                          | YTSN3V     |

### Radio Subscriber Training

| Course Name    | Course No. |
|----------------|------------|
| RF Maintenance | YTSP7P     |

Work that is performed by a WASHOE COUNTY technician that has not been certified by receiving the prerequisite training will void the warranty for portions of the subsystems or components that they attempted to service. SERVICE PROVIDER will keep a list of all certified, trained technicians that have met the training requirements. If new technicians join the WASHOE COUNTY's staff, they must receive training and certification before working on the system.

## Warranty Plan Statement of Works

### Depot Repair and Return

#### SERVICE PROVIDER RESPONSIBILITIES

1. Provide a Return Material Authorization (“RMA”) within two business days from the date of receipt of WASHOE COUNTY request.
2. Depot Repair and Return receipt and inspection.
  - Receive Equipment from WASHOE COUNTY.
  - Verify against WASHOE COUNTY submitted RMA.
  - Perform a visual inspection.
  - Perform an operational check to determine if there is a problem and the nature of the problem.
3. Standard Repair
  - Schedule the standard repairs to be made to the Equipment.
  - Make the required repairs and test the functionality of the repaired Equipment.
  - Package, ship, and return the repaired Equipment to WASHOE COUNTY at SERVICE PROVIDER expense.
  - Provide a Summary Report, per repair as exemplified below, or another format as determined by SERVICE PROVIDER.

| Repair Order | Date     | Problem                | Resolution                                                 | Resolution Date |
|--------------|----------|------------------------|------------------------------------------------------------|-----------------|
| 123456       | 7/4/2017 | No card communication. | Corrupt software. Reloaded.<br>Passed communication tests. | 7/4/2017        |

4. Standard Third-Party Original Equipment Manufacturer (“OEM”) Equipment

- Provide proper method for processing RMA against Third- Party Equipment.
- Track Equipment sent to the OEM.
- Provide status updates to WASHOE COUNTY.
- Package, ship, and return the repaired Equipment to WASHOE COUNTY at SERVICE PROVIDER expense.

5. Non-standard Repair

- SERVICE PROVIDER may determine with mutual agreement with the WASHOE COUNTY, that the repair of Equipment is not within the scope of Services of this SOW due to:
  - Extraordinary physical and other damages.
  - Equipment misuse, mishandling, improper storage, unauthorized Equipment modifications, detrimental exposure, or involvement in an accident (including without limitation liquid intrusions), Acts of God, including, without limitation, lightning damages.
- If the Parties determine, for the reasons set forth above, that the Equipment is not within the scope of Services of this SOW, SERVICE PROVIDER shall either:
  - Determine and provide to WASHOE COUNTY an estimate of all additional charges required to perform repairs on the Equipment; or
  - Determine and provide to WASHOE COUNTY an estimate of all additional charges for replacement Equipment.
- If WASHOE COUNTY approves the additional charges, the repaired or replacement Equipment shall be shipped to WASHOE COUNTY.
- If WASHOE COUNTY disapproves the additional charges, SERVICE PROVIDER will charge a Diagnostic Fee of \$105 per incident and return the unrepaired Equipment to WASHOE COUNTY.

## 6. Schedule

- Fixed equipment mail-in board repair shall be completed within seven calendar days of receipt. Equipment will be returned to the WASHOE COUNTY via second-day shipping, with tracking number provided to the WASHOE COUNTY.
- Standard Repairs – The time for completion for standard repairs is approximately ten business days from the date of receipt of the Equipment to the date of shipment of the repaired Equipment to WASHOE COUNTY.
- Standard Third-Party Original Equipment Manufacturer (“OEM”) Equipment Repairs – The time for completion for standard Third-Party OEM Equipment repairs is approximately 30 business days from the date of receipt of the Equipment to the date of shipment of the repaired Equipment to WASHOE COUNTY.
- Non-standard Repairs – Non-standard repairs may take longer than standard repairs. SERVICE PROVIDER will notify WASHOE COUNTY of any repairs that take longer than ten business days.

## 7. Return Shipments to WASHOE COUNTY

- Equipment shipments shall occur as the individual RMA Equipment is repaired.
- Multiple Equipment listed on a single RMA shall be shipped together to WASHOE COUNTY if complete shipment is specifically requested by WASHOE COUNTY.
- SERVICE PROVIDER will properly pack outbound shipments and bears the responsibility for damage that occurs prior to delivery to WASHOE COUNTY.

## WASHOE COUNTY RESPONSIBILITIES

1. Request RMA using SERVICE PROVIDER provided process.
2. Follow the current RMA instructions.
3. Pack Equipment adequately to prevent damages during transit. Equipment damaged in transit will be returned to WASHOE COUNTY un-repaired and may incur a Diagnostic Fee.
4. Ship, at SERVICE PROVIDER'S expense, the Equipment listed in the RMA either to SERVICE PROVIDER' Depot Repair and Return or another mutually agreed facility.
5. If WASHOE COUNTY wants multiple items listed on a single RMA to be returned together, WASHOE COUNTY shall request complete shipment.
6. Approve or disapprove additional charges within five business days.
7. Pay a Diagnostic Fee if WASHOE COUNTY disapproves the additional charges.
8. Contact SERVICE PROVIDER and arrange for advanced replacement.

## **Priority Technical Assistance Center (P-TAC)**

### **DESCRIPTION OF SERVICES**

1. Priority TAC provides technical telephone support twenty-four (24) hours per day, seven (7) days a week, including holidays via a dedicated telephone number and access to Tech-Link. Knowledgeable and experienced TAC personnel provide support on product operation, programming, maintenance and troubleshooting for SERVICE PROVIDER fixed site equipment, mobiles, and portables. Priority TAC also guarantees a two (2) hour response time if TAC personnel are not readily available to answer the call and a one (1) hour response time for Emergency Calls.

### **SERVICE PROVIDER RESPONSIBILITIES**

1. Provide WASHOE COUNTY with twenty-four (24) hours per day - seven (7) days a week - three hundred sixty-five (365) days a year technical telephone assistance for resolving problems with their SERVICE PROVIDER fixed site equipment, mobile and portable Subscriber equipment. TAC support personnel will endeavor to respond to calls as quickly as they are received; however, if all support personnel are busy, a call back will be made within one (1) hour from the time the first support request was received.
2. Provide emergency assistance twenty-four (24) hours per day- seven (7) days a week - three hundred sixty-five (365) days a year. TAC support personnel will return all Emergency Calls within one (1) hour.
3. Provide WASHOE COUNTY with access to Tech-Link. Tech-Link provides access to various on-line support tools via a secure website; WASHOE COUNTY will receive a user ID and password allowing them access to the secured website. This secure website gives WASHOE COUNTY 24x7x365 access to technical service memos, the technical library, current software release notes, user documentation and answers to frequently asked questions.
4. If on-site support is required, the TAC personnel will coordinate with the appropriate SERVICE PROVIDER personnel to provide the needed on-site support.

## **Software FX with SUMS – SERVICE PROVIDER Infrastructure and Subscribers**

### **DESCRIPTION OF SERVICES**

SERVICE PROVIDER's Software FX is a comprehensive software maintenance program that provides periodic Software Updates to SERVICE PROVIDER developed software applications and system Security Updates. Software FX is made of three elements. This SOW covers system software release 10A and succeeding versions.

1. The first element provides updates to SERVICE PROVIDER developed software programs. These Software Updates are baseline tested as system level releases and provided as a package to ensure compatibility across system infrastructure, radio components, and programming utilities. The Software Updates include enhancements to the existing software baseline, corrections to issues, and the ability to purchase and enable newly developed licensed features. All software media and revised software manuals are provided at the time of any software revisions and are available in manual form or on-line through SERVICE PROVIDER's Tech-Link web portal. SERVICE PROVIDER will separate corrective revisions from enhancements; however, if new releases are necessary to provide corrections, then the entire release (including enhancements) shall be provided.
2. The second element, SUMS, for SERVICE PROVIDER Infrastructure only, provides periodic security-related updates to mitigate identified software vulnerabilities. SERVICE PROVIDER monitors governmental and open source information databases to identify vulnerabilities applicable to the Designated System. Updates are tested on dedicated security verification test systems to ensure proper system operation prior to general release. Security Updates may include Microsoft security updates, Sybase, SQL, Red Hat Linux and other security-related updates that are relevant to the Designated System. Security Updates are electronically distributed to target devices via a client - server application running within the designated system. This application provides the full scheduling capabilities should an application restart or server reboot be necessary to complete the update process.
3. The third element, Tech-Link, provides WASHOE COUNTY access to various on-line support tools via a secure website. WASHOE COUNTY will receive a user ID and password allowing them access to the secured website. In addition to providing access to Software Updates, the secure website gives WASHOE COUNTY

24x7x365 access to technical service memos, the technical library, current software release notes, user documentation and answers to frequently asked questions.

4. All updates shall be shipped to the WASHOE COUNTY's Software FX contact as designated below and installed by SERVICE PROVIDER.

#### **SERVICE PROVIDER RESPONSIBILITIES**

1. SERVICE PROVIDER will provide WASHOE COUNTY Software Updates, documentation updates and software release notes.
2. Prior to the general release of a major system release, SERVICE PROVIDER shall make available a system level release document announcing the impending release and detailing its contents and impact.
3. Provide Security Updates, security release notes, and installation instructions at periodic intervals targeting bi-monthly releases. More frequent Security Update distributions may be required to address urgent product security vulnerabilities. Security Update distributions on other than a bi-monthly basis does not constitute a contractual default or breach by SERVICE PROVIDER.
4. Provide method to deliver Security Updates to the target devices within the WASHOE COUNTY's Designated System via an automated client - server distribution application.
5. Monitor pertinent governmental, vendor, independent and open source databases for security vulnerabilities and any subsequent resolutions that affect products provided by SERVICE PROVIDER that are part of the WASHOE COUNTY's Designated System.
6. Identify and document latest system vulnerabilities and compliance issues discovered. Provide a status and recommendations report via Tech-Link.
7. Pretest the Security Updates to ensure that they do not adversely affect SERVICE PROVIDER' stated performance of the WASHOE COUNTY's Designated System. Testing is performed on dedicated security verification test systems to ensure proper operation prior to general release.
8. Reassess the system configuration annually and provide revised pricing should any significant changes be made to WASHOE COUNTY's Designated System(s)

configuration. Unless otherwise identified in this SOW, revised pricing will be reflected in the following year's Software FX fee. If SERVICE PROVIDER's rates for Software FX should increase, the WASHOE COUNTY will be notified in writing of any such increases at least 120 days prior to the end of Subscriber's yearly Software FX period then in effect.

9. Replace any hardware that is impacted by software updates during the Warranty Period

#### WASHOE COUNTY RESPONSIBILITIES

1. Properly install or allow SERVICE PROVIDER to install the Software Updates provided by SERVICE PROVIDER in order of receipt from SERVICE PROVIDER. WASHOE COUNTY recognizes that software support provided by SERVICE PROVIDER is limited to SERVICE PROVIDER's current and current minus 2 software release levels of software programs.
2. Complete or allow SERVICE PROVIDER to complete the Security Update process on the target devices (e.g. rebooting the target devices) following the instructions accompanying each Security Update distribution.
3. Cooperate with SERVICE PROVIDER and perform all acts that are reasonable or necessary to enable SERVICE PROVIDER to provide the services in this SOW to WASHOE COUNTY.
4. Designate a contact individual(s) or group(s) with sufficient technical expertise to be able to interact knowledgeably with SERVICE PROVIDER's technical support personnel.
5. Purchase of all necessary software licenses to enable the automated distribution of Security Updates for new and existing devices not previously licensed as part of the original Designated System purchase.
6. WASHOE COUNTY hereby delegates, grants, and assigns to SERVICE PROVIDER, acting as the WASHOE COUNTY's agent, all approval rights relating to the selection of vendor patches. All approvals given to Third-Party vendors shall be deemed as being granted by the WASHOE COUNTY.

7. Provide the below designated contact information. The below designated contact will receive all notices and software and Security Updates provided under this SOW.

Name Shawn Tayler – Washoe County Regional Communications System  
Title Regional Communications Coordinator  
Phone 1-775-85-5952  
Email stayler@washoecounty.us

#### OTHER CHARGES

1. WASHOE COUNTY may be required to have currently executed service(s)/support agreement(s) with Third-Party vendor(s) separate from this SOW to receive certain Security Updates. Failure to do so may limit the WASHOE COUNTY's right to receive the Third-Party software.

#### EXCLUSIONS

1. Any Software products released by SERVICE PROVIDER for which an earlier generation or release level of software is not already contained within WASHOE COUNTY's Designated System is not included in this SOW.

## **Software Maintenance – Tait Infrastructure and Subscribers**

### **WASHOE COUNTY IS ENTITLED TO RECEIVE**

1. Software and firmware releases relevant to and within the licensed feature set of Equipment.
2. Access to the Software releases referred to in this SOW shall be through PSPC Info Center or via email PSPC\_TAC@Harris.com.
3. SERVICE PROVIDER will provide technical support described in this SOW for the current and up to three previous releases of Software and firmware. Technical support for previous software releases is at SERVICE PROVIDER's discretion and may require additional payment by WASHOE COUNTY.
4. SERVICE PROVIDER shall maintain only the current Software release for Tait Equipment. If WASHOE COUNTY has a problem with a non-current release of Software, WASHOE COUNTY may be required to install, at WASHOE COUNTY's expense, the most current version of Software to remedy such problem.
5. This SOW does not include the provision of WASHOE COUNTY requested enhancements, modifications, or developments. Any such enhancement, modification or development may be requested by WASHOE COUNTY, for an additional fee, via the Help Desk, for consideration by SERVICE PROVIDER.

## Software FX with SUMS and Tait Software Maintenance Installation

### SERVICE PROVIDER RESPONSIBILITIES

1. Provide WASHOE COUNTY with a Business Hours installation schedule and approximate Equipment outage times (if applicable).
2. Install Software FX and SUMS updates and Tait Software Maintenance updates.
3. Provide WASHOE COUNTY with a Summary Report as part of a monthly reporting cycle as exemplified below, or another format as determined by SERVICE PROVIDER:

| WO No. | Date     | Problem               | Resolution                             | Resolution Date |
|--------|----------|-----------------------|----------------------------------------|-----------------|
| 123456 | 7/4/2017 | Software FX received. | Loaded new Software per release notes. | 7/4/2017        |

4. Provide software update for all SERVICE PROVIDER and Tait Infrastructure, Dispatch and User Radio equipment to the same and latest software release prior to the end of Warranty.

### WASHOE COUNTY RESPONSIBILITIES

1. Decide whether to install or not install Software Updates based on the risks and benefits involved and waive all SERVICE PROVIDER liability for such decision.
2. Provide a suitable service environment (HVAC, power, illumination, grounding, internet access if applicable).
3. Provide SERVICE PROVIDER unlimited, safe, physical, and remote access to WASHOE COUNTY sites and Equipment to support delivery of Services.
4. Notify SERVICE PROVIDER when there is any activity that impacts the system, Equipment, or Services.
5. Provide SERVICE PROVIDER instant and easy access to all Equipment, data, and power points.

6. Provide Subscriber equipment collected in at several, mutually agreed, central points.
7. Ensure SERVICE PROVIDER can perform Services in one continuous effort.
8. Waive Services and reimbursement for Services when access is not provided to SERVICE PROVIDER for scheduled Services or the Software installation is deemed not necessary by SERVICE PROVIDER or SERVICE PROVIDER is unable to provide Services due to WASHOE COUNTY responsibilities.
9. Pay Demand Services for additional efforts including, delays in work, non-SERVICE PROVIDER Software or cable interface acquisition, configuration or engineering services, or repairs.
10. Cooperate with SERVICE PROVIDER and perform all efforts that are necessary to enable SERVICE PROVIDER to provide the Services to WASHOE COUNTY.

#### EXCLUSIONS

1. No Software Installation will be provided on Equipment unless targeted by the SERVICE PROVIDER Software FX Software Update or Tait Software Maintenance update.

## **Issue Resolution Support**

### **INTRODUCTION**

This SOW describes the procedure and SERVICE PROVIDER's involvement to address periodic system issues as they arise during the Warranty period. To facilitate understanding, flow charts will be utilized for each step of escalation.

### **STEP 1: First Echelon WASHOE COUNTY Support**

The first step in exploring an issue is for the WASHOE COUNTY to attempt to correct an issue on their own (i.e. First Echelon support). The WASHOE COUNTY will attempt to resolve the issue remotely with their own staff. If not correctable remotely, the WASHOE COUNTY will dispatch a WASHOE COUNTY technician to go to the location and work with the remote WASHOE COUNTY in an attempt to resolve the issue.

Figure 3 – First Echelon Support Flow provides a visual of the process flow for First Echelon support.

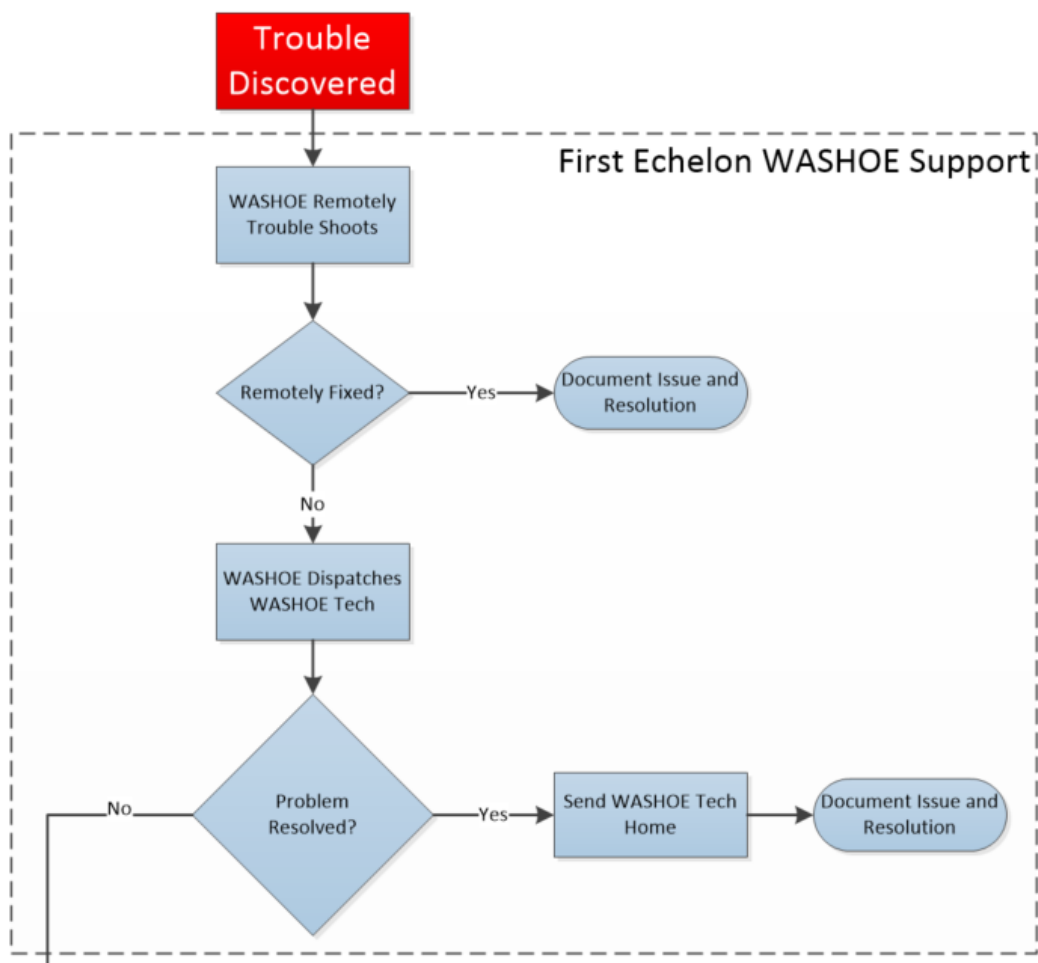
### **SERVICE PROVIDER Responsibilities:**

- None

### **WASHOE COUNTY Responsibilities:**

- Provide technical personnel and networked based computing resources that can remotely examine system performance.
- Provide technical personnel that can troubleshoot issues at a site.
- Provide computers, networking equipment and calibrated test equipment to WASHOE COUNTY staff that will adequately allow the staff to troubleshoot issues.
- Maintain adequate spares to support quick issue resolution.
- Log each ticket in the AMPS system or similar platform.

Figure 3. First Echelon Support Flow



## **STEP 2: SERVICE PROVIDER Level 1 (L1) Support**

The second step in the process is initiated if WASHOE COUNTY team cannot solve the issue remotely or with a WASHOE COUNTY technician on site.

WASHOE COUNTY would then call an answering service who would attempt to call the on-call technician. If the on-call technician does not reply within 15 minutes of WASHOE COUNTY's call to the answering service, the answering service will continue to call the on-call tech plus call the Western Regional Service Manager. If neither reply within 25 minutes of WASHOE COUNTY's call to the answering service, the answering service will call the Director of Field Services. This is the Escalation Plan that will be followed to ensure the WASHOE COUNTY receives a call back acknowledging receipt of an issue reported within 30 minutes of WASHOE COUNTY contacting the answering service. The requirement is for a SERVICE PROVIDER person to call the WASHOE COUNTY back within 30 minutes acknowledging awareness of the issue.

The support structure is identified below in the flow chart as "Nevada 24x7". Nevada 24x7 is a group of in-state personnel that will support the WASHOE COUNTYS in their efforts to trouble shoot issues. The Western Regional Service Manager and his direct staff and indirect channel partners will provide the second line of defense for system issues that arise.

The process flow for L2 support is shown in **Figure 4 – L1 Support Flow**.

### **The Escalation Plan:**

- Step 1
  - WASHOE COUNTY's single point of contact or on-call personnel will call a defined local number for an answering service. The answering service will take WASHOE COUNTY's name, number and reason for the call. The answering service will then attempt to contact the SERVICE PROVIDER on-call technician.
- Step 2
  - If after fifteen (15) minutes of WASHOE COUNTY's call to the answering service the SERVICE PROVIDER on-call technician has not responded to the answering service and WASHOE COUNTY, the answering service will continue to call the SERVICE PROVIDER on-call technician plus the Regional Service Manager.

- Step 3
  - If after twenty-five (25) minutes of WASHOE COUNTY's call to the answering service neither the SERVICE PROVIDER on-call technician or the Regional Service Manager have responded to the answering service and WASHOE COUNTY, the answering service will call the SERVICE PROVIDER's Director of Field Services.
- Step 4
  - If SERVICE PROVIDER does not reply to the answering service within 30 minutes, answering service will call WASHOE COUNTY with a status update and continue to call all three levels of SERVICE PROVIDER escalation.

For L1 support, SERVICE PROVIDER will also attempt to remotely diagnose the issue along with the WASHOE COUNTY remote support person and on-site WASHOE COUNTY technician.

If SERVICE PROVIDER L1 remote person cannot assist in the resolution, the next step in the L1 process is for the SERVICE PROVIDER remote person to contact SERVICE PROVIDER's PTAC group for assistance.

If SERVICE PROVIDER L1 remote person, PTAC, WASHOE COUNTY remote person and WASHOE COUNTY on site technician cannot resolve the issue, the issue is escalated to Level 2 (L2). The Regional Service Manager will be responsible for driving the actions to resolve the issue.

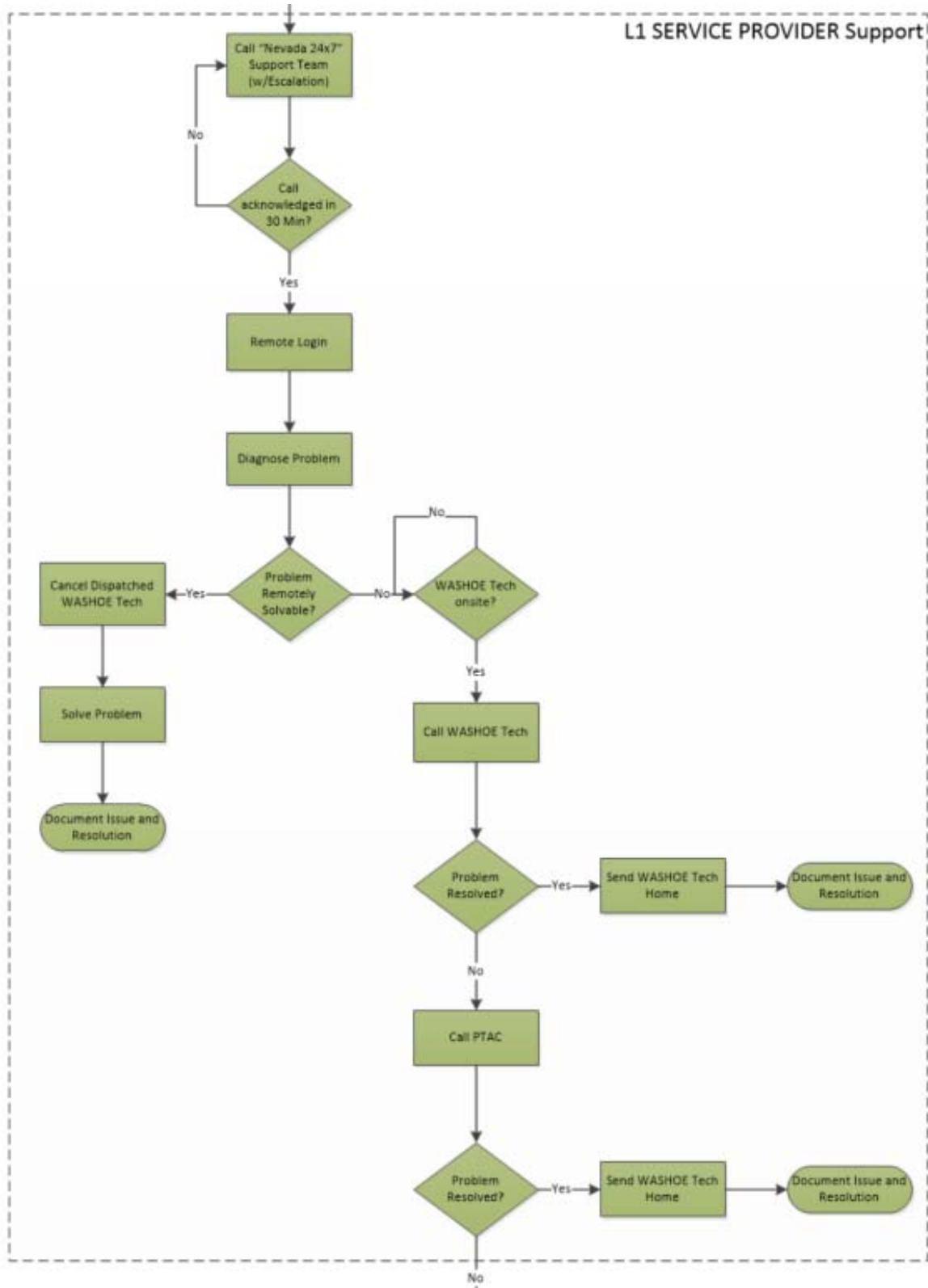
**SERVICE PROVIDER Responsibilities:**

- Provide qualified technical people to be on-call 24x7 that meet WASHOE COUNTY access policies.
- Provide the tools and equipment to the SERVICE PROVIDER staff for being able to remotely diagnose
- Provide PTAC assistance (separate service/SOW that is being procured by the WASHOE COUNTYs).

**WASHOE COUNTY Responsibilities:**

- Provide remote access to the NSRS systems for approved SERVICE PROVIDER staff.
- Provide technical personnel and networked computing resources that can remotely examine system performance
- Provide technical personnel that can troubleshoot issues at a site
- Provide computers, networking equipment and calibrated test equipment to WASHOE COUNTY staff that will adequately allow the staff to troubleshoot issues.
- Maintain adequate spares to support quick issue resolution.
- Ensure WASHOE COUNTY technician will remain on site throughout the duration of resolution

Figure 4. L1 Support Flow



### STEP 3: SERVICE PROVIDER Level 2 (L2) Support

The third step in the process is initiated if the First Echelon and L1 support are unsuccessful in solving the issue.

If the issue is escalated to L2, the first step in the process is to conduct a Joint Action Plan meeting between WASHOE COUNTY and SERVICE PROVIDER. The goal of the meeting is to coordinate efforts, determine if a SERVICE PROVIDER direct staff technician or SERVICE PROVIDER indirect channel partner technician should be dispatched and to determine severity of the issue. The Regional Service Manager will be responsible for driving the actions from the Joint Action meeting.

If the decision is made to dispatch a SERVICE PROVIDER technician, the timing and logistics of getting SERVICE PROVIDER technician on site to join the WASHOE COUNTY technician will be mutually agreed upon. The goal for easily accessible sites with a Critical Service issue will be 8 hours. For remote and special vehicle access sites, best effort will be utilized with the goal of having the SERVICE PROVIDER technician on site within 24 hours. SERVICE PROVIDER and the WASHOE COUNTY will mutually agree on the best method and timing to reach remote sites. will mutually agree on the best method and timing to reach remote sites.

Figure 5 – Critical Service Issues identifies the issues that are deemed “Critical” and require the utmost urgency to resolve and Figure 6 – L2 Support Flow outlines the process flow for L2 support.

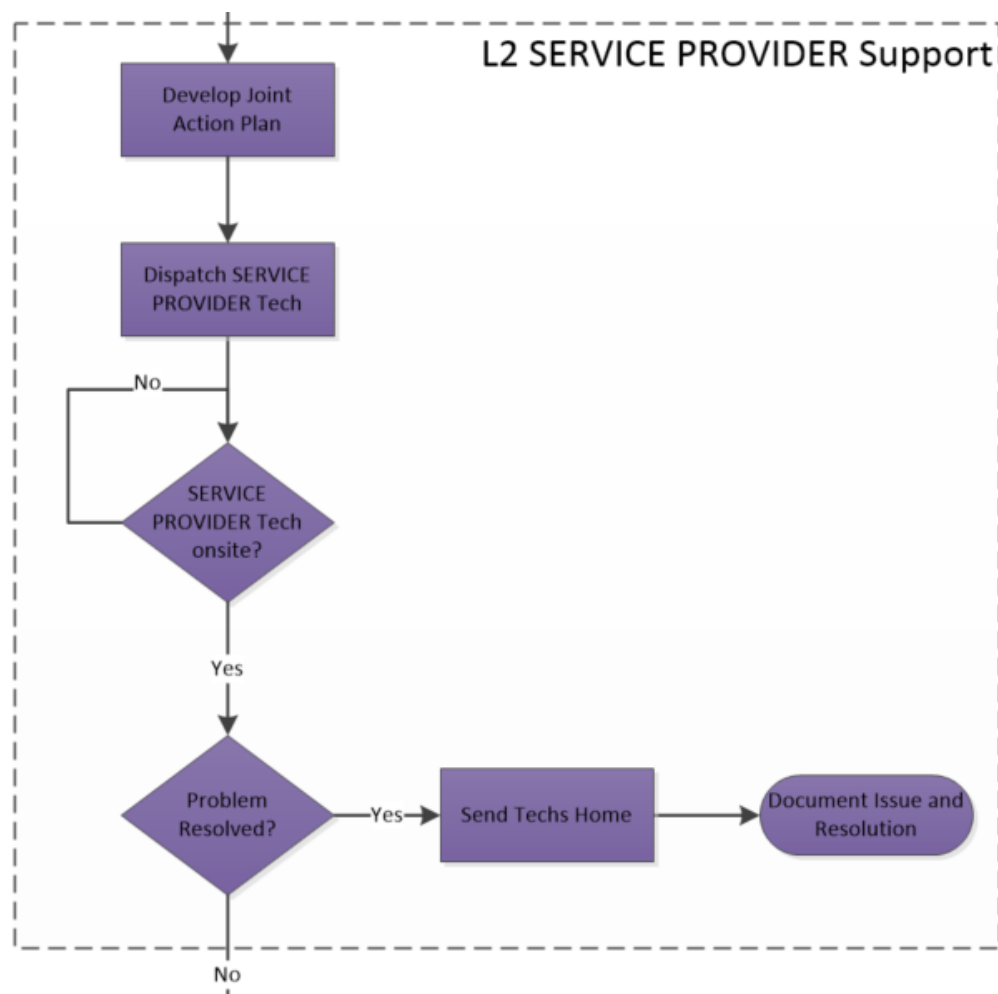
**Figure 5. Critical Service Issues**

| Critical Service Issues                                                                     |
|---------------------------------------------------------------------------------------------|
| Any failure which causes a loss of 15% or more in capacity or coverage in any cell          |
| Any failure which causes a loss of simulcast capability                                     |
| Any failure which causes a loss of the primary core                                         |
| Any system failure that causes the loss of two or more console positions                    |
| Any failure that renders the logging recorder inoperable or causes a loss of recorded audio |
| The failure of two or more repeaters                                                        |
| Concurrent failure of two or more switches and/or routers                                   |
| Failure of the receiver voting system                                                       |

Once the technician is on site, five different technical personnel will be attempting to diagnose the issue.

1. WASHOE COUNTY Remote support
2. SERVICE PROVIDER Remote support
3. P-TAC
4. WASHOE COUNTY on site technician
5. SERVICE PROVIDER on site technician

Figure 6. L2 Support Flow



**SERVICE PROVIDER Responsibilities:**

- Provide qualified technical people to be on-call 24x7 that meet WASHOE COUNTY access policies.
- Provide the tools and equipment to the SERVICE PROVIDER staff for being able to remotely diagnose
- Provide PTAC assistance (separate service/SOW that is being procured by the WASHOE COUNTY).
- Provide technical personnel that can troubleshoot issues at a site that meet WASHOE COUNTY access policies.
- Provide computers, networking equipment and calibrated test equipment to SERVICE PROVIDER staff that will adequately allow the staff to troubleshoot issues.
- Ensure SERVICE PROVIDER technician will remain on site throughout the duration of resolution.

**WASHOE COUNTY Responsibilities:**

- Provide remote access to the NSRS systems for approved SERVICE PROVIDER staff.
- Provide technical personnel and networked computing resources that can remotely examine system performance
- Provide technical personnel that can troubleshoot issues at a site
- Provide computers, networking equipment and calibrated test equipment to WASHOE COUNTY staff that will adequately allow the staff to troubleshoot issues.
- Maintain adequate spares to support quick issue resolution.
- Ensure WASHOE COUNTY technician will remain on site throughout the duration of resolution

#### **STEP 4: SERVICE PROVIDER Level 3 (L3) Support**

The fourth step in the process is initiated if the First Echelon support, L1 support and L2 support are unsuccessful in solving the issue.

If the issue is escalated to L3, the first step in the process is to conduct a Joint Action Plan meeting between WASHOE COUNTY and SERVICE PROVIDER. The goal of the meeting is to coordinate efforts, determine if a SERVICE PROVIDER engineer should be dispatched. The Regional Service Manager will be responsible for driving the actions from the Joint Action meeting.

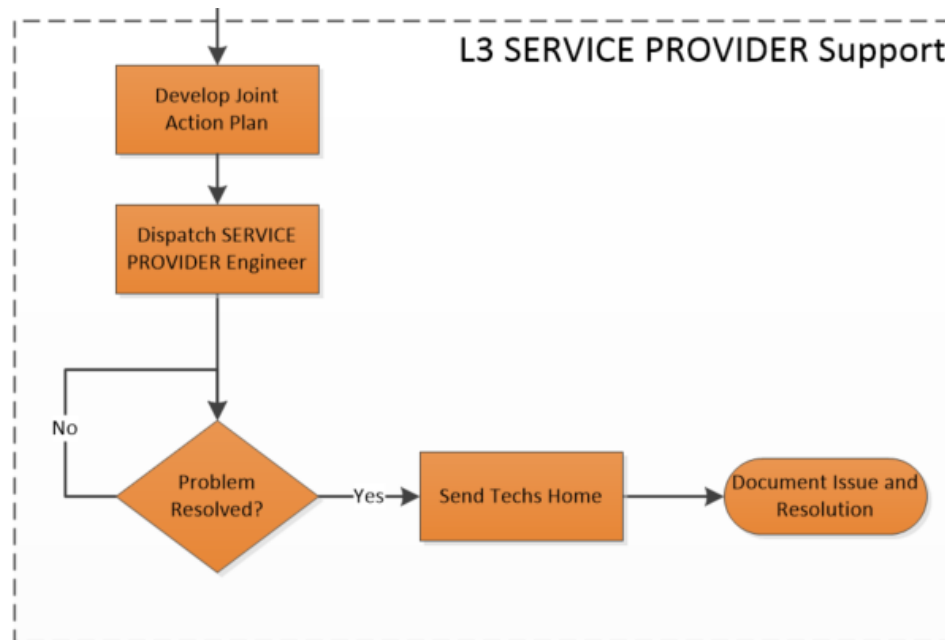
If the decision is made to dispatch a SERVICE PROVIDER engineer, the timing and logistics of getting the SERVICE PROVIDER engineer on site to join the WASHOE COUNTY technician and SERVICE PROVIDER technician will be mutually agreed upon. The goal for easily accessible sites with a Critical Service issue will be 8 hours. For remote and special vehicle access sites, best effort will be utilized with the goal of having the SERVICE PROVIDER engineer on site within 24 hours. SERVICE PROVIDER and the WASHOE COUNTY will mutually agree on the best method and timing to reach remote sites.

Figure 7 – L3 Support Flow outlines the process flow for L3 support. Notice that the issue will remain at L3 status until resolved.

Once the SERVICE PROVIDER engineer is on site, six different technical personnel will be attempting to diagnose the issue.

1. WASHOE COUNTY Remote support
2. SERVICE PROVIDER Remote support
3. P-TAC
4. WASHOE COUNTY on site technician
5. SERVICE PROVIDER on site technician
6. SERVICE PROVIDER on site engineer

Figure 7. L3 Support Flow



**SERVICE PROVIDER Responsibilities:**

- Provide qualified technical people to be on-call 24x7 that meet WASHOE COUNTY access policies.
- Provide the tools and equipment to the SERVICE PROVIDER staff for being able to remotely diagnose
- Provide PTAC assistance (separate service/SOW that is being procured by the WASHOE COUNTY).
- Provide technical personnel that can troubleshoot issues at a site that meet WASHOE COUNTY access policies.
- Provide computers, networking equipment and calibrated test equipment to SERVICE PROVIDER staff that will adequately allow the staff to troubleshoot issues.
- Ensure SERVICE PROVIDER technician and engineer will remain on site throughout the duration of resolution.

### **WASHOE COUNTY Responsibilities:**

- Provide remote access to the NSRS systems for approved SERVICE PROVIDER staff.
- Provide technical personnel and network-based computing resources that can remotely examine system performance
- Provide technical personnel that can troubleshoot issues at a site
- Provide computers, networking equipment and calibrated test equipment to WASHOE COUNTY staff that will adequately allow the staff to troubleshoot issues.
- Maintain adequate spares to support quick issue resolution.
- Ensure WASHOE COUNTY technician will remain on site throughout the duration of resolution

### **REPORT GENERATION**

If the issue is resolved by the WASHOE COUNTY First Echelon team, the WASHOE COUNTY will be responsible for generating the issue resolution report.

If the issue is resolved by SERVICE PROVIDER at the L1, L2 or L3 levels of support, SERVICE PROVIDER will be responsible for generating the issue resolution report.

SERVICE PROVIDER and the WASHOE COUNTY will mutually agree on the format of the issue resolution report but, at a minimum, it must include:

- Time issue was reported
- Location where issue is being observed
- Symptoms of the issue
- Information regarding Group ID, Unit ID and functionality impacted.
- Time to resolve issue
- Disposition of issue
- Date of issue closure
- Corrective Action if applicable

## **SPARE PART CONTROL**

WASHOE COUNTY will be responsible for Spare Part Control including replenishment and usage reporting.

## **ADDITIONAL CONDITIONS REGARDING SITE ACCESS AND RESPONSE TIMES**

1. The goal for easily accessible sites with a Critical Service issue will be 8 hours. For remote and special vehicle access sites, best effort will be utilized with the goal of having the SERVICE PROVIDER engineer on site within 24 hours. SERVICE PROVIDER and the WASHOE COUNTY will mutually agree on the best method and timing to reach remote sites.
2. WASHOE COUNTY is responsible to ensure that all necessary clearances, escorts, ID cards, network access requirements including custom software or security credentials, or other special requirements have been provided to SERVICE PROVIDER in advance to allow technicians and engineers prompt access to any Equipment requiring service that may be in a secured or limited access area under WASHOE COUNTY's control.
3. WASHOE COUNTY agrees to provide SERVICE PROVIDER an appropriate work environment and unlimited access, working space including heat, light ventilation, electric current and outlets, and local wireless, telephone access or networking port for the use of SERVICE PROVIDER' service personnel in the Equipment's physical location if reasonably possible.
4. WASHOE COUNTY agrees to setup a communications coordination talk group on the system for troubleshooting purposes in support of this Issue Resolution plan primarily for use at remote sites.

## **Preventive Maintenance on SERVICE PROVIDER Infrastructure and Tait Infrastructure**

### **SERVICE PROVIDER RESPONSIBILITIES**

1. Perform Preventive Maintenance which provides tests, checks, and alignment WASHOE COUNTY's Equipment to ensure the Equipment meets specifications. 's Equipment to ensure the Equipment meets specifications.
2. At WASHOE COUNTY's request, at Demand Services rates, perform services for work other than tests, checks, and alignment.
3. Provide WASHOE COUNTY with a Preventive Maintenance Work Hours schedule and approximate Equipment outage times (if any).
4. Provide optimization of Equipment to SERVICE PROVIDER' best practices or third party best practices as applicable.
5. Provide WASHOE COUNTY with a Summary Report as part of a monthly reporting cycle as exemplified by Preventive Maintenance SERVICE PROVIDER Infrastructure Table, or another format as determined by SERVICE PROVIDER.
6. If spares are consumed during a Preventative Maintenance, include the model and serial number of both the defective unit and the spare in the Summary Report.

### **WASHOE COUNTY RESPONSIBILITIES**

1. Provide a suitable service environment (HVAC, power, illumination, grounding, internet access if applicable).
2. Provide SERVICE PROVIDER unlimited, safe, physical and remote access to WASHOE COUNTY sites and equipment to support delivery of Service.
3. Notify SERVICE PROVIDER when there is any activity that impacts the system, Equipment, or Services.
4. Provide SERVICE PROVIDER instant and easy access to all Equipment, data, and power points.
5. Ensure SERVICE PROVIDER can perform Services in one continuous effort.

6. Waive Services and reimbursement for Services when access is not provided to SERVICE PROVIDER for scheduled Services or SERVICE PROVIDER is unable to provide Services due to WASHOE COUNTY responsibilities.
7. Pay Demand Services for additional efforts including Equipment removal, Equipment aggregation management, delays in work, repairs or replacement.
8. Cooperate with SERVICE PROVIDER and perform all efforts that are necessary to enable SERVICE PROVIDER to provide the Services to WASHOE COUNTY.
9. Review Summary Report, and within 30 days of receipt, provide direction for further action.

#### **ADDITIONAL CONDITIONS**

1. WASHOE COUNTY is responsible to ensure that all necessary clearances, escorts, ID cards, network access requirements including custom software or security credentials, or other special requirements have been provided to SERVICE PROVIDER in advance to allow technicians prompt access to any Equipment requiring service that may be located in a secured or limited access area under WASHOE COUNTY's control.
2. WASHOE COUNTY shall be billed at Demand Services rates for time lost or changes due WASHOE COUNTY in the provision or execution of the Services. in the provision or execution of the Services.

#### **PREVENTATIVE MAINTENANCE CHECKLIST**

Figure 8 provides Services to be performed as applicable during the Preventive Maintenance Exhibit 5 – Equipment List. The technician will attempt to bring the equipment into specification, if necessary. If repairs are required and authorized by the WASHOE COUNTY, a separate work order will be created and noted in the actions., a separate work order will be created and noted in the actions.

Figure 8. Preventive Maintenance Checklist

Technician \_\_\_\_\_ Date \_\_\_\_\_

| SERVICE PROVIDER<br>Infrastructure Equipment       | Preventive Maintenance (If Applicable & as Necessary)                               | Period                                 | Pass<br>Fail | Notes or Recommended Actions to Take |
|----------------------------------------------------|-------------------------------------------------------------------------------------|----------------------------------------|--------------|--------------------------------------|
| <b>GENERAL</b>                                     | Check RF, data and audio cable condition                                            | Once per year during the Warranty term |              |                                      |
|                                                    | Check general alarm status, troubleshoot and investigate any found alarm conditions | Once per year during the Warranty term |              |                                      |
|                                                    | Check condition of punch blocks                                                     | Once per year during the Warranty term |              |                                      |
|                                                    | Perform a general talkgroup test                                                    | Once per year during the Warranty term |              |                                      |
|                                                    | Perform a multisite test                                                            | Once per year during the Warranty term |              |                                      |
|                                                    | Perform an individual call test                                                     | Once per year during the Warranty term |              |                                      |
| <b>MASTR V BASE STATION (Manual MM-017079-001)</b> | Check simulcast timing, adjust, if needed                                           | Once per year during the Warranty term |              |                                      |

| SERVICE PROVIDER Infrastructure Equipment  | Preventive Maintenance (If Applicable & as Necessary)            | Period                                 | Pass Fail | Notes or Recommended Actions to Take |
|--------------------------------------------|------------------------------------------------------------------|----------------------------------------|-----------|--------------------------------------|
| MASTR V                                    | Check transmitter RF power output per design specifications      | Once per year during the Warranty term |           |                                      |
| MASTR V                                    | Check transmitter frequency stability is within specification    | Once per year during the Warranty term |           |                                      |
| MASTR V                                    | Check modulation deviation is within specification               | Once per year during the Warranty term |           |                                      |
| Receive Multicoupler and connections to RX | Check Receiver sensitivity and BER                               | Once per year during the Warranty term |           |                                      |
| Network Alarm Equipment                    | Verify alarm functionality                                       | Once per year during the Warranty term |           |                                      |
| System                                     | Check call processing, each working (voice) channel              | Once per year during the Warranty term |           |                                      |
| All equipment including network equipment  | Clean physical filters clean or replace, as needed               | Once per year during the Warranty term |           |                                      |
| Antenna System                             | Inspect and sweep RF TX and RX antenna cables. Inspect RF cable, | Once per year during the Warranty term |           |                                      |

| SERVICE PROVIDER Infrastructure Equipment | Preventive Maintenance (If Applicable & as Necessary)                  | Period                                 | Pass Fail | Notes or Recommended Actions to Take |
|-------------------------------------------|------------------------------------------------------------------------|----------------------------------------|-----------|--------------------------------------|
|                                           | connectors and suppressor in the shelter. lines                        |                                        |           |                                      |
| Network and Console Equipment             | Inspect audio and data cables for snug connection and corrosion        | Once per year during the Warranty term |           |                                      |
| Site/system                               | Verify control channel operation and rolling                           | Once per year during the Warranty term |           |                                      |
| Site Equipment                            | Perform power supply voltage checks                                    | Once per year during the Warranty term |           |                                      |
| <b>CONVENTIONAL RADIO BASE STATION</b>    | Check transmitter RF power output doesn't exceed design specifications | Once per year during the Warranty term |           |                                      |
| Tait 800/VHF                              | Check transmitter frequency stability is within specification          | Once per year during the Warranty term |           |                                      |
| Tait 800/VHF                              | Check modulation deviation is within specification on VHF and 800      | Once per year during the Warranty term |           |                                      |

| SERVICE PROVIDER Infrastructure Equipment | Preventive Maintenance (If Applicable & as Necessary)                                                        | Period                                 | Pass Fail | Notes or Recommended Actions to Take |
|-------------------------------------------|--------------------------------------------------------------------------------------------------------------|----------------------------------------|-----------|--------------------------------------|
| Tait 800/VHF                              | Check Receiver sensitivity                                                                                   | Once per year during the Warranty term |           |                                      |
| Tait 800/VHF                              | Verify alarm functionality                                                                                   | Once per year during the Warranty term |           |                                      |
| Tait 800/VHF                              | Perform voice call processing, each 800 and VHF channel                                                      | Once per year during the Warranty term |           |                                      |
| Tait 800/VHF and Network Equipment        | Clean or replace physical filters                                                                            | Once per year during the Warranty term |           |                                      |
| Tait 800/VHF                              | Inspect and sweep RF, TX, and RX antenna cables. Inspect RF cable, connectors and suppressor in the shelter. | Once per year during the Warranty term |           |                                      |
| Tait 800/VHF                              | Inspect audio and data cables for snug connection and corrosion                                              | Once per year during the Warranty term |           |                                      |

| SERVICE PROVIDER Infrastructure Equipment | Preventive Maintenance (If Applicable & as Necessary) | Period                                 | Pass Fail | Notes or Recommended Actions to Take |
|-------------------------------------------|-------------------------------------------------------|----------------------------------------|-----------|--------------------------------------|
| Tait 800/VHF                              | Perform power supply voltage checks                   |                                        |           |                                      |
| GPS RECEIVERS                             | Verify GPS sync                                       | Once per year during the Warranty term |           |                                      |
|                                           | Verify alarm functionality                            | Once per year during the Warranty term |           |                                      |
|                                           | Verify battery functionality                          | Once per year during the Warranty term |           |                                      |
| NETWORK                                   | Check power supply voltage                            | Once per year during the Warranty term |           |                                      |
|                                           | Check and verify RNM alarms                           | Once per year during the Warranty term |           |                                      |
|                                           | Inspect Ethernet cables                               | Once per year during the Warranty term |           |                                      |
|                                           | Check MPLS router voltage                             | Once per year during the Warranty term |           |                                      |

| SERVICE PROVIDER<br>Infrastructure Equipment | Preventive Maintenance (If Applicable & as Necessary)                          | Period                                 | Pass<br>Fail | Notes or Recommended Actions to Take |
|----------------------------------------------|--------------------------------------------------------------------------------|----------------------------------------|--------------|--------------------------------------|
|                                              | Check MPLS router cables                                                       | Once per year during the Warranty term |              |                                      |
|                                              | Check MPLS router alarms                                                       | Once per year during the Warranty term |              |                                      |
|                                              | Check dual CPU operation                                                       | Once per year during the Warranty term |              |                                      |
|                                              | Check servers for dust; clean and replace filter, as necessary                 | Once per year during the Warranty term |              |                                      |
| CONSOLE ACCESSORIES                          | Check microphone, headset jacks, foot switches for condition and functionality | Once per year during the Warranty term |              |                                      |
| CALL DIRECTOR                                | Check functionality                                                            | Once per year during the Warranty term |              |                                      |
| ISSI                                         | Coordinate with WASHOE COUNTY for outside agencies and check functionality     | Once per year during the Warranty term |              |                                      |

| SERVICE PROVIDER<br>Infrastructure Equipment | Preventive Maintenance (If Applicable & as Necessary)                          | Period                                 | Pass<br>Fail | Notes or Recommended Actions to Take |
|----------------------------------------------|--------------------------------------------------------------------------------|----------------------------------------|--------------|--------------------------------------|
| NSS                                          | Check for alarms                                                               | Once per year during the Warranty term |              |                                      |
|                                              | Verify high availability (HA) functionality                                    | Once per year during the Warranty term |              |                                      |
|                                              | Check for alarms                                                               | Once per year during the Warranty term |              |                                      |
|                                              | Check servers for dust                                                         | Once per year during the Warranty term |              |                                      |
|                                              | Check servers are operating on most current software revision                  | Once per year during the Warranty term |              |                                      |
|                                              | Check BeOn functionality                                                       | Once per year during the Warranty term |              |                                      |
| SYMPHONY CONSOLES                            | Check for system connectivity                                                  | Once per year during the Warranty term |              |                                      |
|                                              | Verify console basic call functionality.<br>Perform voice calls on talk groups | Once per year during the Warranty term |              |                                      |

| SERVICE PROVIDER Infrastructure Equipment | Preventive Maintenance (If Applicable & as Necessary)                          | Period                                 | Pass Fail | Notes or Recommended Actions to Take |
|-------------------------------------------|--------------------------------------------------------------------------------|----------------------------------------|-----------|--------------------------------------|
|                                           | Check select and unselect speaker audio output for clarity                     | Once per year during the Warranty term |           |                                      |
|                                           | Check microphone, headset jacks, foot switches for condition and functionality | Once per year during the Warranty term |           |                                      |

## Warranty Plan Definitions

**BUSINESS HOURS.** Business Hours are defined as 8:00 a.m. to 5:00 p.m. PST, Monday through Friday excluding, national, state, and local holidays.

**WASHOE COUNTY.** Means “Buyer”, the end-user entity, named in the Agreement, purchasing Services for its own internal use under this Warranty Plan.

**DEMAND SERVICES.** Means service requests beyond the scope of and not defined in this Warranty Plan. Demand Services may be performed at SERVICE PROVIDER’ rates plus any other applicable expenses, fees, and escalations, as determined by SERVICE PROVIDER. The installation, removal, reinstallation, and/or replacement of equipment not associated with the Services as defined in this Warranty Plan shall be considered Demand Services or Other Services, as applicable. SERVICE PROVIDER has the right to reasonably refuse to provide Demand Services or Other Services. Demand Services may include work performed outside of Business Hours and Other Services, as applicable. Demand Services may be escalated yearly.

**DESIGNATED SYSTEM(S).** Means the SERVICE PROVIDER system(s) purchased by WASHOE COUNTY and identified in Equipment List for the Software FX SOW. The Designated System does not include Third Party Software products, excluded products or other systems to which the Designated System may be linked.

**DIAGNOSTIC FEE.** Means the fee that is charged if WASHOE COUNTY disapproves charges to repair and/or replace Equipment upon SERVICE PROVIDER’ determination for repair or replacement of Equipment, as per applicable SOW. SERVICE PROVIDER will charge WASHOE COUNTY a Diagnostic Fee based on the repair facility used and return the unrepaired Equipment to WASHOE COUNTY.

**EQUIPMENT.** Means the products and related systems, as identified in the Equipment List for which Services are to be provided under and as set forth in this Warranty Plan.

**EQUIPMENT LIST.** Means the specific, serialized list of Equipment for Services to be provided under and is set forth in this Warranty Plan.

**INFRASTRUCTURE.** Means the i) Radio Frequency (RF) site (consisting of only a duplexer, combiner, multicoupler, channels, Internet Protocol (IP) channel routers with interface cards, network sentry, Unified Audio Card (UAC), and Mini-Mobility Exchange (MME); ii) the dispatch site (consisting of only IP consoles, IP console switches, IP console routers, IP console internal interface cards, and IP console power supplies; or iii) an Network Switching Center (NSC) site (consisting of only the NSC IP server, storage array, IP router, backup device, firewall, fault management data collection device, and network management pc interface). Infrastructure and respective quantities are specifically itemized in the Equipment List.

**NON-SERVICE PROVIDER INFRASTRUCTURE.** Means the Equipment not part of Infrastructure or Subscribers. Non SERVICE PROVIDER Infrastructure may comprise of the following: microwave or data transport system components (such as microwave, fiber, multiplexors, and routers), logging recorder timing receiving or generation systems, towers, tower top amplifiers, shelters, fences, landscaping, dehydrators, fuel tanks, bi-directional amplifiers (BDAs), alternating or direct current power systems (uninterruptible power supply (UPS), monitors, inverters, converters, generators, or feeds), heating ventilation air conditioning (HVAC), fire suppression, and/or other environmental monitoring or affecting systems. Non-SERVICE PROVIDER Infrastructure and respective quantities are specifically itemized in the Equipment List.

**NON-SERVICE PROVIDER SOFTWARE.** Means software whose copyright is owned by a party other than SERVICE PROVIDER or its affiliated companies, including but not limited to the applications, anti-virus updates, operating system patches, and signature files.

**OTHER SERVICES.** Means Demand Services as requested by WASHOE COUNTY that entail subcontractors, Third Parties, or non-SERVICE PROVIDER services on a time and material basis plus 35%. SERVICE PROVIDER has the right to reasonably refuse to provide Other Services. Other Services may include work performed outside of Business Hours and Demand Services, as applicable.

**PREVENTIVE MAINTENANCE.** Means tests, checks, and alignment on WASHOE COUNTY's Equipment to ensure that the Equipment meets the specifications of each Equipment's manual.

**RESPONSE TIMES.** Means the expected timeframe to respond to an unscheduled system problem or outage event as described in the applicable SOW. Response Times are based on the assumption that the site is accessible by normal transportation methods and vehicles. On-site Response Time requirements exclude site locations that require extensive drive time due to traffic conditions, obstructions, distances, or site locations where specialized vehicles are required.

**SECURITY UPDATES.** Means Software Updates, as stated in the Software FX SOW to the Designated System, that mitigate, address and/or resolve product security vulnerabilities in system components offered by SERVICE PROVIDER, including but not limited to, operating system updates, antivirus signatures, and other security related Windows-based third-party updates (Microsoft security patches, Red Hat Linux security patches, and vulnerability updates for third party products). Security Updates may include Non-SERVICE PROVIDER software patches and/or a work-around.

**SECURITY UPDATE MANAGEMENT SERVICE (“SUMS”).** Means SERVICE PROVIDER' automated patch management system that provides periodic, security-related Software Updates as stated in the Software FX SOW to the Designated System.

**SOFTWARE UPDATES.** Means SERVICE PROVIDER provided Software Updates to either SERVICE PROVIDER Designated System components or Security Updates. Updates may contain modifications, enhancements, and/or corrections to existing features, as determined solely by SERVICE PROVIDER. Software Updates means commercially available corrections, modifications, or minor enhancements to the licensed programs generally released and/or provided by SERVICE PROVIDER.

**SOFTWARE UPGRADES.** Means a major release that replaces the current version of software and provides new features and/or functionality.

**SPARE PART(S).** Means required additional Equipment to be purchased by WASHOE COUNTY for use to complete repairs of Equipment. Should WASHOE COUNTY not purchase Spare Parts, SERVICE PROVIDER shall not be responsible to provide the Services under the SOWs, in this Warranty Plan that are dependent upon Spare Parts being purchased by WASHOE COUNTY.

**SUBSCRIBERS.** Means mobile radios, portable radios, control stations, vehicle repeaters, modems, routers, Wi-Fi devices, tablets, or back up dispatch radios that consist of mobile or portable radios as their prime radio transmitter, as listed in the Equipment List.

**SUMMARY REPORT.** Means communication to indicate action taken in a report to be provided to WASHOE COUNTY within the frequency and intervals, and as exemplified, under the applicable SOW for Services.

**TECH-LINK.** Means SERVICE PROVIDER' secure web portal containing on-line support tools offered to WASHOE COUNTY as part of the applicable SOW. Access is restricted to authorized WASHOE COUNTYs via user ID and password login.

**THIRD PARTY (IES).** Means any entity other than SERVICE PROVIDER that provides products or services to WASHOE COUNTY, whether managed by or processed through SERVICE PROVIDER.

## Training

### Overview

The Training Plan for Washoe County encompasses *Technical and System Management Training*, *Dispatch Equipment Training*, and *User Radio Equipment Training*. Washoe County will receive the training syllabus for approval prior to the start of any training class. Participants will receive and own hard- and soft-copies of the training materials used in class. Additionally, Washoe County may video the training classes for future purposes.

### Technical and System Management Training

*Technical and System Management Training* is comprised of multiple training courses on System Administration, Radio Infrastructure, and Radio Subscribers so that Washoe County can manage, configure and maintain the NSRS. All traditional classroom training will be conducted in Las Vegas and Reno at facilities provided by an NSRS Member on mutually agreeable dates and at the appropriate time during system implementation. Each course will be conducted three times for up to 12 students per session and will be jointly attended by all three Members.

### System Administration Training

*System Administration Training* will be conducted for technical personnel responsible for defining the fleet map and associated properties, planning radio feature usage and personalities, developing operating procedures, maintaining unit and group databases, generating reports, controlling radios (e.g., enabling and disabling units), and monitoring system performance. Figure 1 defines the training program on system administration.

**Figure 1. The System Administration Training Program**

| Course Name                   | Length               | No. of Times Delivered | Total No. of County Students |
|-------------------------------|----------------------|------------------------|------------------------------|
| P25 System Overview           | Five 4-hour sessions | 3                      | 6                            |
| P25 Fleet Mapping Workshop    | 3 days               | 3                      | 6                            |
| Unified Administration System | 2 days               | 3                      | 6                            |
| Regional Network Manager      | 2 days               | 3                      | 6                            |
| Over-the-Air Rekeying         | 1 day                | 3                      | 6                            |

| Course Name                 | Length | No. of Times Delivered | Total No. of County Students |
|-----------------------------|--------|------------------------|------------------------------|
| Radio Programming & OTAP    | 1 day  | 3                      | 6                            |
| ISSI Configuration & Admin. | 1 day  | 3                      | 6                            |

The *P25 System Overview Course* will be delivered using a virtual classroom setting and is limited to four hours each day.

Participants in the System Administration Training Program will receive unlimited access to the following self-paced, web-based training courses for one year beginning the week participants attend the *P25 System Overview* virtual classroom course.

- P25 Fleet Mapping Overview
- Radio Operation
- Symphony Console Operation
- Radio Programming Overview
- Advanced Access Control
- Active Directory
- Activity Warehouse
- Radio Personality Manager (RPM & RPM 2)
- Unified Administration System (UAS) Overview
- Regional Network Manager (RNM) Overview
- Enterprise Network Manager (ENM)
- Over-the-Air Programming (OTAP)
- Over-the-Air Rekeying (OTAR) Fundamentals
- Inter-RF Subsystem Interface (ISSI) Fundamentals

## Radio Infrastructure Training

*Radio Infrastructure Training* provides technicians with the knowledge and skills needed to conduct preventive maintenance, troubleshoot problems, and take corrective action. Figure 2 defines the training program on radio system infrastructure.

**Figure 2. The Radio Infrastructure Training Program**

| Course Name                      | Length  | No. of Times Delivered | Total No. of County Students |
|----------------------------------|---------|------------------------|------------------------------|
| P25 System Maintenance           | 7 days  | 3                      | 4                            |
| Regional Network Manager         | 2 days  | 3                      | 4                            |
| Network Operation & Maintenance  | 3 days  | 3                      | 4                            |
| MASTR V Station Maintenance      | 1½ days | 3                      | 4                            |
| P25 Simulcast System Maintenance | 3 days  | 3                      | 4                            |

## **Radio Subscriber Training**

*Radio Subscriber Training* will be provided for technical personnel responsible for programming and maintenance of all user radios. Harris will conduct a five-day *RF Maintenance Course* that provides in-depth discussion and hands-on exercises to maintain the Harris XL family of portable and mobile radios. Technicians and engineers will participate in classroom presentations and discussions on radio programming for testing as well as radio personality modification to meet specific needs. Harris will demonstrate and discuss radio disassembly, and identify field replaceable parts and service tools, in addition to covering individual radio field serviceability plans including field replaceable modules and components. Hands-on exercises will include radio programming, testing, and maintenance to the level authorized by the field serviceability plan.

The *RF Maintenance Course* will be conducted three times for up to 12 students per session and will be jointly attended by all three Members. A total of four Washoe County personnel will participate.

## **Dispatch Equipment Training**

*Dispatch Equipment Training* consists of *Console Configuration, Operation & Maintenance Training* for dispatch supervisors and maintenance technicians and *Console Operation Refresher Training* for dispatchers.

### **Console Configuration, Operation & Maintenance Training**

This two-day course will provide designated dispatch supervisors and maintenance technicians with the knowledge and skills to configure the Symphony Dispatch Console to meet operational needs, conduct training for dispatchers, and maintain the console. The training will include a detailed operational overview that introduces the various features and capabilities of the console. Participants will work within the Configuration Utility to explore the various settings and how these settings impact the operation of the console. With an understanding of the Configuration Utility settings, participants will have the requisite knowledge to define the parameters that best suit their operational needs. Washoe County will save these settings and use them as a template to set up additional consoles. The remainder of the course involves defining the operating characteristics of the console and using the Configuration Editor to create setups to address the various functions required. This includes adding, renaming and deleting workspace tabs; designing communications modules (i.e., entities, colors, sizes, etc.); adding,

deleting and moving communication modules; changing the sidebar panel layout; creating, switching, deleting and password protecting console setups; and setting encryption indicators and controls, if applicable.

The console operational portion of the training will be conducted using a train-the-trainer approach and includes performing tasks such as selecting communication modules; transmitting and receiving group and individual calls; transmitting, receiving and clearing emergency calls; reviewing call history and playing back audio; modifying communication modules; creating, modifying and transmitting on patches and simulelects; controlling conventional channels; using the paging function; changing console setups; and using special and enhanced console features.

Harris will conduct three training sessions in the Reno/Sparks area. This training will occur approximately two-to-four weeks prior to the start of the performance period. Each training session may have up to six participants.

### **Console Operation Refresher Training**

Harris will provide unlimited access to the web-based *Symphony Console Operation Course* for all Washoe County dispatch personnel for one year beginning after completion of the train-the-trainer courses. Web-based training is hosted by Harris Technical University (HTU). Each student will require a unique e-mail address and create a unique username and password. Students will be able to access transcript information showing course progress and completion status, and print a completion certificate once all course activities are complete.

### **User Radio Equipment Training**

Harris will provide *Radio User Training* based on a train-the-trainer approach. Harris will provide model training and support materials for designated Washoe County trainers to use during the implementation phase. Each train-the-trainer session on radio operation is scheduled for one day and includes an overview of the NSRS P25 radio system, a description of system operation including failure modes, a discussion of radio/system coverage expectations, a discussion and demonstration of the differences between analog and digital voice, a demonstration of basic radio operations including proper radio use, hands-on practice with the radios, and a discussion of basic radio care including battery maintenance.

Harris recommends that Washoe County select trainers from the departments who will use the radio system. The trainers need to be familiar with current operations and aware of any operational issues. Harris will provide customized presentation materials for the instructors and electronic copies of the training materials to allow for additional customization, if desired. Harris will conduct two train-the-trainer sessions approximately two-to-four weeks prior to the start of the performance period. Each session is limited to a maximum of 15 participants. This training will use Harris radios purchased as part of the system.

### **User Radio Operation Refresher Training**

Harris will provide unlimited access to standard web-based radio operation courses for all Washoe County radio users for one year beginning after completion of the train-the-trainer sessions. Web-based training is hosted by Harris Technical University (HTU). Each student will require a unique e-mail address and create a unique username and password. Harris will train and provide a designated individual with administrative rights to the HTU Learning Management System (LMS). The LMS utilizes a tiered structure so that the administrator can create and modify user accounts, distribute account registration links, manage course access, monitor student activity and progress in completing courses, and generate reports.

## **EXHIBIT B**

### **SOFTWARE LICENSE AGREEMENT**

This License Agreement ("License Agreement") is made upon the Effective Date of the Primary Agreement (the "Effective Date") between Harris Corporation, a Delaware Corporation, acting through its Communication Systems Segment, ("LICENSOR") with offices at 221 Jefferson Ridge Parkway, Lynchburg, VA 24501 and Washoe County ("LICENSEE"). LICENSOR is the owner of certain wireless communications software programs and LICENSEE desires to obtain a license from LICENSOR to use such wireless communications programs.

#### **1.0 Definitions.**

1.1 "Designated Systems": Means the Harris System(s), products, and Designated Terminals purchased by Buyer and identified in the Primary Agreement for which the Licensed Programs and documentation are intended to be used.

1.2 "Designated Terminals": Means the LICENSOR's Terminals purchased by LICENSEE.

1.3 "Licensed Programs": The term Licensed Programs shall mean the wireless communications computer programs in software or firmware supplied under this License Agreement by LICENSOR in binary object code format to the LICENSEE (stand alone or in conjunction with the purchase of a LICENSOR wireless communications System.) Licensed Programs shall also include all other material related to the Licensed Programs supplied by LICENSOR to LICENSEE hereunder, and which may be in machine readable or printed form, including but not limited to user documentation and/or manuals.

1.4 "Open Source Software": Means software with either freely obtainable source code, license for modification, or permission for free distribution.

1.5 "Open Source Software License": The terms or conditions under which the Open Source Software is licensed.

1.6 "Primary Agreement": The agreement to which this exhibit is attached.

1.7 "Third Party Software Products": Shall mean programs that are not developed by LICENSOR which are licensed / purchased by LICENSOR for inclusion in its products.

#### **2.0 License Grant for Licensed Programs.**

2.1 Subject to the Contract and the performance by Licensee of its obligations hereunder, LICENSOR hereby grants to Licensee, and Licensee hereby accepts from LICENSOR, (a) a personal, non-transferable, non-exclusive, perpetual, limited license to use the Licensed Programs in object code format only and (b) install and execute such Licensed Programs on Licensee's equipment and (c) are to be used for internal business purposes only. All licensed programs under this License Agreement shall only be used in conjunction with the Designated System. This license does not transfer any right, title, or interest in the Licensed Programs. The license granted authorizes Licensee to use the Licensed Programs in object code format and does not grant any rights to source code.

2.2 LICENSEE will not reproduce, modify, or make derivative works of the Licensed Programs, except that LICENSEE may make one archival, and one inactive backup, copy of the Licensed Programs. In addition, LICENSEE, its agents, consultants and/or its subcontractors will not attempt to reverse engineer,

decompile, or reverse-compile any software contained in the Licensed Programs and any attempt to do so shall be a material breach of this License Agreement. With respect to the Licensed Programs, LICENSEE will not alter, deface, discard, or erase any media, documentation, or LICENSOR or Third Party Licensor's trademarks or proprietary rights notices.

2.3 Third Party Software Products may be subject to additional license terms, which, if applicable, are set out in Product Specific License Terms delivered with each product. To the extent applicable, LICENSEE shall comply with any additional Third Party Software Product license terms.

2.4 If the Software licensed under this License Agreement contains or is derived from Open Source Software, the terms and conditions governing the use of such Open Source Software are in the Open Source Software Licenses of the copyright owner and not this License Agreement and, to the extent applicable, LICENSEE will comply with the Open Source Software terms License terms. Harris warrants that through the term of this Agreement, that no conflicts exist with the usage of any Open Source Software. If there is a conflict between the terms and conditions of this License Agreement and the terms and conditions of the Open Source Software Licenses governing Licensee's use of the Open Source Software, the terms and conditions of the license grant of the applicable Open Source Software Licenses will take precedence over the license grants in this License Agreement. If requested by Licensee, Harris will use commercially reasonable efforts to: (i) determine whether any Open Source Software is provided under this License Agreement; (ii) identify the Open Source Software and provide Licensee a copy of the applicable Open Source Software License (or specify where that license may be found).

### **3.0 Protection and Security of Licensed Programs.**

LICENSEE acknowledges and agrees that the Licensed Programs and any materials and/or documentation related thereto, and any portion thereof, supplied by LICENSOR hereunder are proprietary and confidential to LICENSOR or applicable third party licensors and are a valuable commercial asset of LICENSOR or their third party owners. LICENSEE also acknowledges and agrees that LICENSOR and/or the third party licensors have and shall retain all proprietary rights in their respective portions of the Licensed Programs and any materials and/or documentation related thereto. LICENSEE (i) shall respect such proprietary rights, (ii) shall protect LICENSOR and any third party licensor's proprietary rights at least to the extent that it protects its own proprietary information, or such (iii) shall not use the Licensed Programs nor any materials or documentation related thereto except for the purposes for which they are being made available as set forth in this License Agreement and (iv) shall not reproduce, print, disclose, or otherwise make said Licensed Programs or materials and/or documentation related thereto available to any third party, in whole or in part, in whatever form, except as permitted in the terms of this License Agreement.

### **4.0 Warranty**

Seller warrants, for the greater of a period of one year or, if a longer Warranty Period for the product containing the Licensed Program is set forth in a Primary Agreement, the longer Warranty Period shall apply commencing with the date of Licensee's Acceptance of their Designated System, that any Licensed Program furnished to Licensee under this License Agreement shall be capable of successfully operating on the Designated System in accordance with the logic defined in the operator's manuals when the System is supplied with correct input data. If, on the basis of evidence submitted to LICENSOR within the term of this warranty, it is shown that any Licensed Program does not meet this warranty, LICENSOR will, at its option, either correct the defect or error in the Licensed Program, free of charge, or make available to Licensee a substitute program. The foregoing warranty is exclusive and in lieu of all other warranties whether written, oral, implied or statutory.

Licensed Programs which have been developed or are owned by a third party licensor and which are sublicensed by LICENSOR to LICENSEE hereunder shall be warranted to LICENSEE only to the extent that the licensor of such sublicensed programs warrants such sublicensed programs to LICENSOR.

In the event that the Licensed Programs do not conform to the representation above, LICENSEE's sole remedy and LICENSOR's sole and exclusive liability shall be to replace such Licensed Programs with the then current released version of such Licensed Programs.

## **5.0 Limitation of Liability.**

### **5.1 THE LIMITATION OF LIABILITY PROVISION IN THE PRIMARY AGREEMENT SHALL GOVERN THIS LICENSE AGREEMENT.**

## **6.0 Term and Termination.**

6.1 LICENSOR reserves the right, in addition to any other remedies it may retain in this License Agreement or may be entitled to in law or equity (including immediate injunctive relief and repossession of all non-embedded Licensed Programs and documentation), to terminate this License Agreement at any time prior to the expiration of any Term in the event LICENSEE breaches any material term or condition or fails to perform or observe any obligations or covenants of this License Agreement and such failure and/or breach is not remedied within thirty (30) days of written notice from LICENSOR.

6.2 Within thirty (30) days after termination or expiration of this License Agreement, LICENSEE will return to LICENSOR all confidential material including but not limited to all copies, partial copies, and/or modified copies (if any) of Licensed Programs and any equipment owned by LICENSOR in LICENSEE's possession.

## **7.0 Assignment/Transfer.**

This License Agreement, the licenses granted hereunder and the Licensed Programs provided to LICENSEE under this License Agreement may not be assigned, sub-licensed, or otherwise transferred by LICENSEE to any third party without LICENSOR's prior written consent, except that this license may be assigned if the Products containing the Licensed Programs are transferred but the new owner or user of the Products may only use the Licensed Programs in accordance with terms of this License Agreement. Subject to the foregoing, any assignee hereunder shall be subject to all of the terms, conditions and provisions of this License Agreement. Any attempt by LICENSEE to assign, sub-license, or transfer the Licensed Programs, or any of the rights or duties contained in this License Agreement, without LICENSOR's prior written consent shall be void.

## **8.0 Severability.**

If any provision of this Agreement is held to be illegal, invalid, or unenforceable by a court of competent jurisdiction, the parties shall, if possible, agree on a legal, valid, and enforceable substitute provision that is as similar in effect to the deleted provision as possible. The remaining portion of the Agreement not declared illegal, invalid, or unenforceable shall, in any event, remain valid and effective for the term remaining unless the provision found illegal, invalid, or unenforceable goes to the essence of this Agreement.

## **9.0 Waiver.**

No waiver will be implied from conduct or failure to enforce rights. No waiver will be effective unless in writing signed on behalf of the party against whom the waiver is asserted.

## **10.0 Compliance with Laws.**

Licensee acknowledges that the Licensed Programs are subject to the laws and regulations of the United States and Licensee will comply with all applicable laws and regulations, including export laws and regulations of the United States. Licensee will not, without the prior authorization of Harris and the appropriate governmental authority of the United States, in any form export or re-export, sell or resell, ship or reship, or divert, through direct or indirect means, any item or technical data or direct or indirect products sold or otherwise furnished to any person within any territory for which the United States Government or any of its agencies at the time of the action, requires an export license or other governmental approval. Violation of this provision is a material breach of this License Agreement.

## **11.0 Governing Law.**

This License Agreement is entered into in the State of Nevada and shall therefore be governed by the laws of Nevada without resort to conflict of laws principles. Venue for any legal proceedings shall be in any state or federal court in Washoe County, Nevada, which the Parties agree shall have exclusive jurisdiction over disputes arising out of the interpretation of this Agreement. The terms of the U.N. Convention on Contracts for the International Sale of Goods do not apply. The parties expressly agree that the Uniform Computer Information Transactions Act ("UCITA") applicable in any jurisdiction shall not apply to this License Agreement.

## **12.0 U.S. Government.**

N/A

## **13.0 Agreement.**

This License Agreement may be part of a Primary Agreement between LICENSOR and LICENSEE for the purchased products by LICENSEE from LICENSOR. The Primary Agreement and this License Agreement contain the full understanding of the parties with respect to the subject matter hereof and which supersede all prior understandings and writings relating thereto and which shall become binding on the Effective Date of this License Agreement. No waiver, consent, modification, amendment, or change to the terms of this License Agreement shall be binding unless agreed to in a writing signed by LICENSEE and LICENSOR. If there is any conflict between the terms of the Primary Agreement and this License Agreement as to the Licensed Programs, the terms of the Primary Agreement will prevail.

## **14.0 Notices.**

Notices shall be provided as set forth in the Primary Agreement. In the event there is no notice provision in the Primary Agreement, notices and other communications between the parties shall be transmitted in writing by certified mail or nationally recognized overnight courier service.

## **15.0 Survival.**

Sections 2, 3, 5, 6, 8, 9, 11, and 13 of this License Agreement shall survive termination of this agreement.

*[End of Document]*



**EXHIBIT C**

**FORM OF SURETY BOND FOR PERFORMANCE**

# PERFORMANCE BOND

Bond No.:

**CONTRACTOR:**

(Name, legal status and address)

**SURETY:**

(Name, legal status and principal place of business)

**OWNER:**

(Name, legal status and address)

**CONSTRUCTION CONTRACT**

Date:

Amount:

Description:

(Name and location)

**BOND**

Date:

(Not earlier than Construction Contract Date)

Amount:

Modifications to this Bond: ☐ None ☐ See Section 16

**CONTRACTOR AS PRINCIPAL**

Company: (Corporate Seal)

**SURETY**

Company: (Corporate Seal)

Signature: \_\_\_\_\_

Name and Title:

Signature: \_\_\_\_\_

Name and Title:

(Any additional signatures appear on the last page of this Performance Bond.)

(FOR INFORMATION ONLY — Name, address and telephone)

**AGENT or BROKER:**

**OWNER'S REPRESENTATIVE:**

(Architect, Engineer or other party:)

**§ 1** The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the Owner for the performance of the Construction Contract, which is incorporated herein by reference.

**§ 2** If the Contractor performs the Construction Contract, the Surety and the Contractor shall have no obligation under this Bond, except when applicable to participate in a conference as provided in Section 3.

**§ 3** If there is no Owner Default under the Construction Contract, the Surety's obligation under this Bond shall arise after

**.1** the Owner first provides notice to the Contractor and the Surety that the Owner is considering declaring a Contractor Default. Such notice shall indicate whether the Owner is requesting a conference among the Owner, Contractor and Surety to discuss the Contractor's performance. If the Owner does not request a conference, the Surety may, within five (5) business days after receipt of the Owner's notice, request such a conference. If the Surety timely requests a conference, the Owner shall attend. Unless the Owner agrees otherwise, any conference requested under this Section 3.1 shall be held within ten (10) business days of the Surety's receipt of the

Owner's notice. If the Owner, the Contractor and the Surety agree, the Contractor shall be allowed a reasonable time to perform the Construction Contract, but such an agreement shall not waive the Owner's right, if any, subsequently to declare a Contractor Default;

- .2 the Owner declares a Contractor Default, terminates the Construction Contract and notifies the Surety; and
- .3 the Owner has agreed to pay the Balance of the Contract Price in accordance with the terms of the Construction Contract to the Surety or to a contractor selected to perform the Construction Contract.

§ 4 Failure on the part of the Owner to comply with the notice requirement in Section 3.1 shall not constitute a failure to comply with a condition precedent to the Surety's obligations, or release the Surety from its obligations, except to the extent the Surety demonstrates actual prejudice.

§ 5 When the Owner has satisfied the conditions of Section 3, the Surety shall promptly and at the Surety's expense take one of the following actions:

§ 5.1 Arrange for the Contractor, with the consent of the Owner, to perform and complete the Construction Contract;

§ 5.2 Undertake to perform and complete the Construction Contract itself, through its agents or independent contractors;

§ 5.3 Obtain bids or negotiated proposals from qualified contractors acceptable to the Owner for a contract for performance and completion of the Construction Contract, arrange for a contract to be prepared for execution by the Owner and a contractor selected with the Owner's concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Construction Contract, and pay to the Owner the amount of damages as described in Section 7 in excess of the Balance of the Contract Price incurred by the Owner as a result of the Contractor Default; or

§ 5.4 Waive its right to perform and complete, arrange for completion, or obtain a new contractor and with reasonable promptness under the circumstances:

- .1 After investigation, determine the amount for which it may be liable to the Owner and, as soon as practicable after the amount is determined, make payment to the Owner; or
- .2 Deny liability in whole or in part and notify the Owner, citing the reasons for denial.

§ 6 If the Surety does not proceed as provided in Section 5 with reasonable promptness, the Surety shall be deemed to be in default on this Bond seven days after receipt of an additional written notice from the Owner to the Surety demanding that the Surety perform its obligations under this Bond, and the Owner shall be entitled to enforce any remedy available to the Owner. If the Surety proceeds as provided in Section 5.4, and the Owner refuses the payment or the Surety has denied liability, in whole or in part, without further notice the Owner shall be entitled to enforce any remedy available to the Owner.

§ 7 If the Surety elects to act under Section 5.1, 5.2 or 5.3, then the responsibilities of the Surety to the Owner shall not be greater than those of the Contractor under the Construction Contract, and the responsibilities of the Owner to the Surety shall not be greater than those of the Owner under the Construction Contract. Subject to the commitment by the Owner to pay the Balance of the Contract Price, the Surety is obligated, without duplication, for

- .1 the responsibilities of the Contractor for correction of defective work and completion of the Construction Contract;
- .2 additional legal, design professional and delay costs resulting from the Contractor's Default, and resulting from the actions or failure to act of the Surety under Section 5; and
- .3 liquidated damages, or if no liquidated damages are specified in the Construction Contract, actual damages caused by delayed performance or non-performance of the Contractor.

§ 8 If the Surety elects to act under Section 5.1, 5.3 or 5.4, the Surety's liability is limited to the amount of this Bond.

§ 9 The Surety shall not be liable to the Owner or others for obligations of the Contractor that are unrelated to the Construction Contract, and the Balance of the Contract Price shall not be reduced or set off on account of any such unrelated obligations. No right of action shall accrue on this Bond to any person or entity other than the Owner or its heirs, executors, administrators, successors and assigns.

§ 10 The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders and other obligations.

§ 11 Any proceeding, legal or equitable, under this Bond may be instituted in any court of competent jurisdiction in the location in which the work or part of the work is located and shall be instituted within two years after a declaration of Contractor Default or within two years after the Contractor ceased working or within two years after the Surety refuses or fails

to perform its obligations under this Bond, whichever occurs first. If the provisions of this Paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

**§ 12** Notice to the Surety, the Owner or the Contractor shall be mailed or delivered to the address shown on the page on which their signature appears.

**§ 13** When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

**§ 14 Definitions**

**§ 14.1 Balance of the Contract Price.** The total amount payable by the Owner to the Contractor under the Construction Contract after all proper adjustments have been made, including allowance to the Contractor of any amounts received or to be received by the Owner in settlement of insurance or other claims for damages to which the Contractor is entitled, reduced by all valid and proper payments made to or on behalf of the Contractor under the Construction Contract.

**§ 14.2 Construction Contract.** The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and changes made to the agreement and the Contract Documents.

**§ 14.3 Contractor Default.** Failure of the Contractor, which has not been remedied or waived, to perform or otherwise to comply with a material term of the Construction Contract.

**§ 14.4 Owner Default.** Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.

**§ 14.5 Contract Documents.** All the documents that comprise the agreement between the Owner and Contractor.

**§ 15** If this Bond is issued for an agreement between a Contractor and subcontractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

**§ 16** Modifications to this bond are as follows:

*(Space is provided below for additional signatures of added parties, other than those appearing on the cover page.)*

**CONTRACTOR AS PRINCIPAL**

Company: \_\_\_\_\_ (Corporate Seal)

Signature: \_\_\_\_\_  
Name and Title: \_\_\_\_\_  
Address: \_\_\_\_\_

**SURETY**

Company: \_\_\_\_\_ (Corporate Seal)

Signature: \_\_\_\_\_  
Name and Title: \_\_\_\_\_  
Address: \_\_\_\_\_

# PAYMENT BOND

Bond No.:

**CONTRACTOR:**

*(Name, legal status and address)*

**SURETY:**

*(Name, legal status and principal place of business)*

**OWNER:**

*(Name, legal status and address)*

**CONSTRUCTION CONTRACT**

Date:

Amount:

Description:

*(Name and location)*

**BOND**

Date:

*(Not earlier than Construction Contract Date)*

Amount:

Modifications to this Bond: ☐ None ☐ See Section 18

**CONTRACTOR AS PRINCIPAL**

Company: *(Corporate Seal)*

**SURETY**

Company: *(Corporate Seal)*

Signature: \_\_\_\_\_

Name and Title:

Signature: \_\_\_\_\_

Name and Title:

*(Any additional signatures appear on the last page of this Payment Bond.)*

*(FOR INFORMATION ONLY — Name, address and telephone)*

**AGENT or BROKER:**

**OWNER'S REPRESENTATIVE:**

*(Architect, Engineer or other party:)*

**§ 1** The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the Owner to pay for labor, materials and equipment furnished for use in the performance of the Construction Contract, which is incorporated herein by reference, subject to the following terms.

**§ 2** If the Contractor promptly makes payment of all sums due to Claimants, and defends, indemnifies and holds harmless the Owner from claims, demands, liens or suits by any person or entity seeking payment for labor, materials or equipment

furnished for use in the performance of the Construction Contract, then the Surety and the Contractor shall have no obligation under this Bond.

**§ 3** If there is no Owner Default under the Construction Contract, the Surety's obligation to the Owner under this Bond shall arise after the Owner has promptly notified the Contractor and the Surety (at the address described in Section 13) of claims, demands, liens or suits against the Owner or the Owner's property by any person or entity seeking payment for labor, materials or equipment furnished for use in the performance of the Construction Contract and tendered defense of such claims, demands, liens or suits to the Contractor and the Surety.

**§ 4** When the Owner has satisfied the conditions in Section 3, the Surety shall promptly and at the Surety's expense defend, indemnify and hold harmless the Owner against a duly tendered claim, demand, lien or suit.

**§ 5** The Surety's obligations to a Claimant under this Bond shall arise after the following:

**§ 5.1** Claimants, who do not have a direct contract with the Contractor,

- .1** have furnished a written notice of non-payment to the Contractor, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were, or equipment was, furnished or supplied or for whom the labor was done or performed, within ninety (90) days after having last performed labor or last furnished materials or equipment included in the Claim; and
- .2** have sent a Claim to the Surety (at the address described in Section 13).

**§ 5.2** Claimants, who are employed by or have a direct contract with the Contractor, have sent a Claim to the Surety (at the address described in Section 13).

**§ 6** If a notice of non-payment required by Section 5.1.1 is given by the Owner to the Contractor, that is sufficient to satisfy a Claimant's obligation to furnish a written notice of non-payment under Section 5.1.1.

**§ 7** When a Claimant has satisfied the conditions of Sections 5.1 or 5.2, whichever is applicable, the Surety shall promptly and at the Surety's expense take the following actions:

**§ 7.1** Send an answer to the Claimant, with a copy to the Owner, within sixty (60) days after receipt of the Claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed; and

**§ 7.2** Pay or arrange for payment of any undisputed amounts.

**§ 7.3** The Surety's failure to discharge its obligations under Section 7.1 or Section 7.2 shall not be deemed to constitute a waiver of defenses the Surety or Contractor may have or acquire as to a Claim, except as to undisputed amounts for which the Surety and Claimant have reached agreement. If, however, the Surety fails to discharge its obligations under Section 7.1 or Section 7.2, the Surety shall indemnify the Claimant for the reasonable attorney's fees the Claimant incurs thereafter to recover any sums found to be due and owing to the Claimant.

**§ 8** The Surety's total obligation shall not exceed the amount of this Bond, plus the amount of reasonable attorney's fees provided under Section 7.3, and the amount of this Bond shall be credited for any payments made in good faith by the Surety.

**§ 9** Amounts owed by the Owner to the Contractor under the Construction Contract shall be used for the performance of the Construction Contract and to satisfy claims, if any, under any construction performance bond. By the Contractor furnishing and the Owner accepting this Bond, they agree that all funds earned by the Contractor in the performance of the Construction Contract are dedicated to satisfy obligations of the Contractor and Surety under this Bond, subject to the Owner's priority to use the funds for the completion of the work.

**§ 10** The Surety shall not be liable to the Owner, Claimants or others for obligations of the Contractor that are unrelated to the Construction Contract. The Owner shall not be liable for the payment of any costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligation to make payments to, or give notice on behalf of, Claimants or otherwise have any obligations to Claimants under this Bond.

**§ 11** The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders and other obligations.

**§ 12** No suit or action shall be commenced by a Claimant under this Bond other than in a court of competent jurisdiction in the state in which the project that is the subject of the Construction Contract is located or after the expiration of one year from the date (1) on which the Claimant sent a Claim to the Surety pursuant to Section 5.1.2 or 5.2, or (2) on which the last labor or service was performed by anyone or the last materials or equipment were furnished by anyone under the Construction Contract, whichever of (1) or (2) first occurs. If the provisions of this Paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

**§ 13** Notice and Claims to the Surety, the Owner or the Contractor shall be mailed or delivered to the address shown on the page on which their signature appears. Actual receipt of notice or Claims, however accomplished, shall be sufficient compliance as of the date received.

**§ 14** When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

**§ 15** Upon request by any person or entity appearing to be a potential beneficiary of this Bond, the Contractor and Owner shall promptly furnish a copy of this Bond or shall permit a copy to be made.

#### **§ 16 Definitions**

**§ 16.1 Claim.** A written statement by the Claimant including at a minimum:

- .1 the name of the Claimant;
- .2 the name of the person for whom the labor was done, or materials or equipment furnished;
- .3 a copy of the agreement or purchase order pursuant to which labor, materials or equipment was furnished for use in the performance of the Construction Contract;
- .4 a brief description of the labor, materials or equipment furnished;
- .5 the date on which the Claimant last performed labor or last furnished materials or equipment for use in the performance of the Construction Contract;
- .6 the total amount earned by the Claimant for labor, materials or equipment furnished as of the date of the Claim;
- .7 the total amount of previous payments received by the Claimant; and
- .8 the total amount due and unpaid to the Claimant for labor, materials or equipment furnished as of the date of the Claim.

**§ 16.2 Claimant.** An individual or entity having a direct contract with the Contractor or with a subcontractor of the Contractor to furnish labor, materials or equipment for use in the performance of the Construction Contract. The term Claimant also includes any individual or entity that has rightfully asserted a claim under an applicable mechanic's lien or similar statute against the real property upon which the Project is located. The intent of this Bond shall be to include without limitation in the terms "labor, materials or equipment" that part of water, gas, power, light, heat, oil, gasoline, telephone service or rental equipment used in the Construction Contract, architectural and engineering services required for performance of the work of the Contractor and the Contractor's subcontractors, and all other items for which a mechanic's lien may be asserted in the jurisdiction where the labor, materials or equipment were furnished.

**§ 16.3 Construction Contract.** The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and all changes made to the agreement and the Contract Documents.

**§ 16.4 Owner Default.** Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.

**§ 16.5 Contract Documents.** All the documents that comprise the agreement between the Owner and Contractor.

**§ 17** If this Bond is issued for an agreement between a Contractor and subcontractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

§ 18 Modifications to this bond are as follows:

*(Space is provided below for additional signatures of added parties, other than those appearing on the cover page.)*

**CONTRACTOR AS PRINCIPAL**

Company: \_\_\_\_\_  
(Corporate Seal)

Signature: \_\_\_\_\_

Name and Title: \_\_\_\_\_

Address: \_\_\_\_\_

**SURETY**

Company: \_\_\_\_\_  
(Corporate Seal)

Signature: \_\_\_\_\_

Name and Title: \_\_\_\_\_

Address: \_\_\_\_\_

## **EXHIBIT D**

### **INDEMNIFICATION AND INSURANCE SPECIFICATIONS for Communications Systems Purchase, Construction and Installment**

#### **INTRODUCTION**

BUYER has established specific indemnification, insurance, and safety requirements for public works construction contracts to help assure that reasonable insurance coverage is purchased and safe working conditions are maintained. Indemnification and hold harmless clauses are intended to assure that SELLER accepts and is able to pay for the loss or liability related to its activities.

#### **INDEMNIFICATION AGREEMENT**

Buyer will not waive and intends to assert available NRS chapter 41 liability limitations in all cases. To the fullest extent of limited liability as set forth in this paragraph SELLER agrees to hold harmless, indemnify, and defend BUYER, its boards, commissions, officers, agents, employees, and volunteers from any loss or liability, losses, damages, costs, expenses, financial or otherwise resulting from any third party claim, demand, suit, action, or cause of action based on bodily injury including death or property damage, including damage to SELLER'S property or injury to SELLER'S employee, caused by any action, either direct or passive, the omissions of SELLER, failure to act, or the willful misconduct of SELLER, or negligence acts on the part of SELLER, its employees, agents, representatives, or Subcontractors arising out of the performance of work under this Agreement by SELLER, or by others under the direction or supervision of SELLER. Buyer agrees to notify Seller in writing as soon as practical of any third-party claim, demand or cause of action for which Buyer will request indemnification from Seller. Buyer will provide Seller with the necessary information and assistance to defend or settle such claim, demand or cause of action. The obligations of Seller under this paragraph shall survive the expiration or termination of this Agreement.

SELLER must either defend BUYER or, upon determination that the work performed by SELLER was negligent in any manner or that SELLER failed to perform any duty set forth in this Agreement, pay BUYER'S costs related to the investigation and defense of any third-party claim, demand, action, or cause of action.

If BUYER'S personnel are involved in defending such actions, SELLER shall reimburse BUYER for the time spent by such personnel at the actual cost incurred by BUYER for such services.

In determining the nature of the claim against BUYER, the incident underlying the claim shall determine the nature of the claim, notwithstanding the form of the allegations against BUYER.

#### **GENERAL REQUIREMENTS**

SELLER shall maintain Workers Compensation/Employers Liability, General Liability, Automobile Liability, Property Insurance and Professional Insurance as described below.

#### **WORKERS' COMPENSATION AND EMPLOYER'S LIABILITY**

It is understood and agreed that there shall be no Workers' Compensation or Employer's Liability coverage provided for SELLER or any Subcontractor by BUYER. SELLER and their subcontractors agrees, as a precondition to the performance of any work under this Agreement and as a precondition to any obligation of the BUYER to make any payment under this Agreement to provide BUYER with a certificate of insurance

evidencing such coverage meeting the statutory requirements of each state that the SELLER and any of its subcontractors operate in with respect to this Agreement

It is further understood and agreed by and between BUYER and SELLER that SELLER shall procure, pay for, and maintain SELLER's workers' compensation/employer's liability insurance coverage at SELLER'S sole cost and expense.

Should SELLER be self-funded for Workers Compensation, SELLER shall so notify BUYER in writing prior to the signing of this Agreement. BUYER reserves the right to approve said retentions.

SELLER waives all rights against BUYER and its agents, officers, directors and employees for recovery of damages to the extent these damages are covered by the workers compensation and employer's liability or commercial umbrella liability insurance obtained by Contractor pursuant to this agreement.

## **SCOPE AND LIMITS OF INSURANCE**

SELLER shall maintain coverage and limits:

### **1. Commercial General Liability:**

SELLER shall maintain commercial general liability (CGL) and, if necessary, commercial umbrella insurance with a total limit of not less than \$1,000,000 each occurrence \_ If such CGL insurance contains a general aggregate limit, it shall be increased to equal twice the required occurrence limit or revised to apply separately to each project or location.

CGL insurance shall be written on ISO occurrence form CG 00 01 04 13 (or a substitute form providing equivalent coverage) and shall cover liability caused, in whole or in part, by SELLER's premises, operations, independent contractors, products-completed operations, personal and advertising injury, and liability assumed under an insured contract (including the tort liability of another assumed in a business contract). There shall be no specific exclusion with respects to explosion, collapse, underground property damage, or damage to the named insured's work.

SELLER waives all rights against BUYER and its agents, officers, directors and employees for recovery of damages to the extent these damages are covered by the commercial general liability or commercial umbrella liability insurance maintained pursuant to this agreement.

SELLER shall maintain commercial general liability (CGL) and, if necessary, commercial umbrella liability insurance, both applicable to liability caused, in whole or in part, by the contractor's completed operations, with a limit of \$1,000,000 each occurrence for at least 2 years following substantial completion of the work. Continuing CGL insurance shall be written on ISO occurrence form CG 00 01 (or a substitute form providing equivalent coverage) and shall, , cover liability caused, in whole or in part, by SELLER's products-completed operations and liability assumed under an insured contract. products-completed operations aggregate of at least two times its each occurrence limit.

### **2. Automobile Liability:**

SELLER shall maintain business auto liability and, if necessary, commercial umbrella liability insurance with a limit of \$1,000,000 per occurrence covering any auto (including owned, hired, and non-owned autos) used in the performance of this contract by SELLER.

Business auto coverage shall be written on ISO form CA 00 01, CA 00 05, CA 00 12, CA 00 20, or a substitute form providing equivalent liability coverage. If necessary, the policy shall be endorsed to provide contractual liability coverage equivalent to that provided in ISO form CA 00 01.

Pollution liability coverage equivalent to that provided under the ISO pollution liability-broadened coverage for covered autos endorsement (CA 99 48) shall be provided, and the Motor Carrier Act endorsement (MCS 90) shall be attached (if applicable).

SELLER waives all rights against BUYER and its agents, officers, directors and employees for recovery of damages to the extent these damages are covered by the business auto liability or commercial umbrella liability insurance obtained by SELLER pursuant to this agreement.

3. Professional Liability:

SELLER shall maintain professional liability coverage with limits of \$1,000,000 per claim with an annual aggregate of \$3,000,000 for liabilities arising out of actual or alleged acts, errors and omissions of Seller while performing or failing to perform its professional services as outlined in this contract.

The policy should include coverage for; liabilities arising out of any actual or alleged infringement of copyright by Buyer or a person or entity for whom Buyer is legally responsible relating to software code, user interfaces, or any associated documentation in connection with Buyer's products and professional services as provided in this contract; and arising out of any actual or alleged breach of duty, neglect, error, act, mistake, omission or failure caused, in whole or in part, by Seller's services which results in any of the following:

An attack that has the intent to affect, alter, copy, corrupt, destroy, disrupt, damage, or provide unauthorized access or unauthorized use of Seller's or Buyer's computer system.

If professional liability coverage is provided on a claims-made or claims made and reported basis, any applicable retroactive or pending and prior litigation exclusion date shall precede the effective date of this agreement. Claims made or claims made and reported coverage shall be maintained for a period of at least six (6) years following completion of all work under this agreement. In the event coverage is cancelled or non-renewed after completion of the work under this agreement, SELLER shall purchase an extended reporting period for a period of at least three (3) years following completion of all work under this agreement.

## **DEDUCTIBLES AND SELF-INSURED RETENTIONS**

SELLER will be financially responsible for any deductibles or self-insured retentions. BUYER reserves the right to request additional documentation, financial or otherwise, prior to executing the underlying agreement.

## **OTHER INSURANCE PROVISIONS**

The policies are to contain, or be endorsed to contain, the following provisions:

1. General Liability and Automobile Liability Coverages

- a. BUYER, its officers, agents, employees, and volunteers are to be included as additional insureds with respect to General Liability and Auto Liability as respects bodily

injury and property damage caused, in whole or in part, by activities performed by or on behalf of SELLER under this agreement, including liability products and completed operations of SELLER; premises owned, occupied, or used by SELLER; or automobiles owned, leased, hired, or borrowed by the SELLER.

b. SELLER'S insurance coverage shall be primary insurance as respects BUYER, its officers, agents, employees, and volunteers. Any insurance or self-insurance maintained by BUYER, its officers, employees, or volunteers shall be excess of SELLER'S insurance and shall not contribute with it in any way.

c. SELLER'S insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability and the rights and duties of Seller as the first named insured on the Seller's policies.

2. Property Coverages

SELLER shall provide and maintain builders risk insurance on the entire work on an "All Risk" basis on a policy form satisfactory to BUYER. The insurance shall apply on a replacement cost basis.

Such builders risk insurance shall include as additional insureds the BUYER and all subcontractors and sub-subcontractors in the work.

Such builders risk insurance shall cover the entire work at the sites identified in this agreement, including reasonable compensation for architects' services and expenses made necessary by an insured loss. Insured property shall include property stored offsite but intended for use at the site. The policy shall cover the cost of removing debris, including demolition as may be made legally necessary by the operation of any law, ordinance, or regulation.

SELLER shall provide equipment breakdown/boiler and machinery insurance covering insured objects during installation and until final acceptance by BUYER. and other forms of property insurance as appropriate for the project. If any project site(s) are in a flood plain, BUYER reserves the right to require flood coverage at SELLER'S expense. BUYER shall be included as an insured or loss payee as its interests may appear with respect to property insured with respect to this Agreement.

The insurance as required in this section shall be maintained in effect, unless otherwise provided for in the contract documents, until the earliest of the following dates:

- (a) the date on which all persons and organizations who are insureds under the policy agree that it shall be terminated;
- (b) the date on which final payment, as provided for in Section 9. Payments of this contract, has been made;
- (c) the date on which the insurable interests in the property of all insureds other than SELLER have ceased.

SELLER waives all rights against each other and each of their subcontractors, sub subcontractors, officers, directors, agents, and employees, for recovery for damages caused by fire and other perils to the extent covered by builder's risk insurance purchased pursuant to the requirements of this agreement, or any other property insurance applicable to the work.

Partial occupancy or use of the work shall not commence until the insurance company or companies providing insurance required in this section have consented to such partial occupancy or use. SELLER shall take reasonable steps to obtain consent of the insurance company or companies, and agree to take no action, other than upon mutual written consent, with respect to occupancy or use of the work that could lead to cancellation, lapse, or reduction of insurance.

3. All Coverages

SELLER will provide notice of cancellation for all policies as soon as practicable upon receipt of any such notice from its insurers.

### ACCEPTABILITY OF INSURERS

Insurance is to be placed with insurers with a Best's rating of no less than A-: VII. BUYER, with the approval of the Risk Manager, may accept coverage with carriers having lower Best's ratings upon review of financial information concerning SELLER and insurance carrier. BUYER reserves the right to require that SELLER'S insurer be a licensed and admitted insurer in the State of Nevada, or on the Insurance Commissioner's approved but not admitted list.

### VERIFICATION OF COVERAGE

SELLER shall furnish BUYER with certificates of insurance and with endorsements (Additional Insured for CGL and Auto) affecting coverage required by this exhibit. The certificates and endorsements for each insurance policy are to be signed by a person authorized by that insured to bind coverage on its behalf. **All certificates and endorsements are to be addressed to the specific BUYER'S contracting department and be received and approved by BUYER before work commences.**

### SUBCONTRACTORS

SELLER shall include all Subcontractors as insureds under its policies or shall furnish separate certificates and endorsements for each Subcontractor. All coverages for Subcontractors shall be subject to all of the requirements stated herein. Subcontractors shall ensure that BUYER, its officers, agents, employees, and volunteers are to be included as insureds under subcontractor's Commercial General Liability and Automobile Liability without requiring a direct written contract or agreement between BUYER and each Subcontractor.

### MISCELLANEOUS CONDITIONS

1. SELLER shall be responsible for and remedy all damage or loss to property of BUYER, caused in whole or in part by SELLER, any Subcontractor, or anyone employed, directed, or supervised by SELLER under the provisions for the obligations of SELLER under this Agreement.
2. In addition to any other remedies BUYER may have if SELLER fails to provide or maintain any insurance policies or policy endorsements to the extent and within the time herein required, BUYER may, at its sole option:
  - a. Order SELLER to stop work under this Agreement and/or withhold any payments which become due SELLER here under until SELLER demonstrates compliance with the requirements hereof; or,
  - b. Terminate the Agreement.

## **SAFETY PROGRAM**

SELLER shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the work.

SELLER shall take all necessary precautions for the safety of, and shall provide all necessary protection to prevent damage, injury, or loss to:

1. All employees on the work site and all other persons who may be affected thereby.
2. All the work, materials, and equipment to be incorporated therein, whether in storage on or off the site.
3. Other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, and utilities not designated for removal, relocation, or replacement in the course of construction.

SELLER shall comply with all applicable laws, ordinances, rules, regulations, and others of any public authority having jurisdiction for the safety of persons or property or to protect them from damage, injury, or loss. SELLER shall erect and maintain, as required by existing conditions and progress on the work, all necessary safeguards for safety and protection, including posting danger signs, other warnings against hazards, promulgating safety regulations, and notifying owners and users of adjacent utilities. SELLER shall comply with OSHA'S Hazard Communication Standards.

SELLER shall designate a responsible member of its organization at the site whose duty shall be the prevention of accidents. This person shall be SELLER'S superintendent unless otherwise designated in writing by SELLER.