



WASHOE COUNTY

Integrity Communication Service

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STAFF REPORT

800 MHZ JOINT OPERATING COMMITTEE MEETING DATE: May 6, 2022

DATE: Friday, May 06, 2022

TO: 800 MHz Joint Operating Committee

FROM: Melissa Lawney, Regional Communications Coordinator, Washoe County Technology Services 775-858-5952
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THROUGH: Quinn Korbolic, IT Manager – Regional Services, Washoe County Technology Services

SUBJECT: Recommendation to approve and recommend that the Board of County Commissioners approve expenditures for Washoe County Regional Communication System tower and shelter replacement at the Marble Bluff Communication Site at a cost not to exceed [\$920,063] from the Washoe County Regional Communication System fund.

SUMMARY

Recommendation to approve expenditures for Washoe County Regional Communication System (WCRCS) tower and shelter replacement at Marble Bluff Communication Site at a cost not to exceed [\$920,063] from the Washoe County Regional Communication System fund.

The Marble Bluff communication tower needs to be replaced because it is 230% overloaded and fails to meet the minimum ANSI/TIA222-H tower standard. The Telecommunications Industry Association (TIA) is accredited by the American National Standards Institute (ANSI) to develop voluntary, consensus-based industry standards for a wide variety of Information and Communication Technologies (ICT) products. These standards are used as standards for all Telecommunication related projects within the US, typically followed by Professional Engineers. The county assumes a great risk of the tower collapsing under certain weather conditions and poses a safety risk to the general public and anything within the surrounding area. This tower supports public safety radio communication around the pyramid lake area.

Due to the County's relationship with the Pyramid Lake Paiute Tribe PLPT, relative to Marble Bluff, the entities will need to negotiate additional terms that regarding ground disturbance on the reservation, including taxes owed to the Tribe. County Staff is working with PLPT to find a solution that is equitable and flexible enough to fit within our overall P25 Schedule. Additionally, it is believed that going through a smaller bid process separate from the P25/NSRS project will be more efficient for replacement of the tower and shelter.

Washoe County Strategic Objective supported by this item: Safe, Secure and Healthy Communities and Regional and Community Leadership

PREVIOUS ACTION

On July 30, 2021, the Joint Operating Committee approved expenditures for communications tower replacement and communications shelter at a cost not to exceed \$350,000. If this item is approved, it will supersede the prior approval.

On April 16, 2021, the Joint Operating Committee approved an update to the Fiscal Year 2021-2022 budget that included additional budget authority in the amount of \$905,000 for infrastructure upgrades related to aging equipment.

BACKGROUND

In January 2003, Washoe County entered an agreement with the Pyramid Lake Indian tribe for the use of the Communication site at Marble Bluff. The agreement states in section 3.1 “The Government agrees to permit the county use, and the county agrees to use from the government a portion of the existing transmitter site facility and existing building located at Marble Bluff in order for the county to construct, install and operate at its sole expense the WCRCS transmitter site, to include indoor and outdoor transmitter equipment, a generator, air conditioning, and electrical.” On June 17, 2021, WCRCS members met with Key stakeholder for the tribe to discuss this process of moving forward. Per section 5.1 “Except as otherwise provided herein, County agrees not to alter the premises without the prior consent of the tribe, which consent shall not be unreasonably withheld.”

Washoe County staff and staff from WCRCS member agencies have worked together over the last five years with L3Harris on plans to migrate from the Enhanced Digital Access Communication System (EDACS) to the P25 public safety radio standard protocol. The primary goal of the P25 Radio System Project is to provide a robust flexible system that support Public Safety communications with technology and Internet Protocol (IP) capable networking. The Radio system was established by the Washoe County Regional Communication System through a partnership with Nevada Department of transportation (NDOT), and NV Energy in 1990 with the desire to combine resources to build a radio system that covers the state of Nevada. By combining resources, all partners could save money by not having to pay for our own separate systems that would still need to communicate with one another.

Through a rigorous procurement and review process administered by NDOT, NDOT, Washoe County, and NV Energy selected a vendor to construct and implement the statewide radio system. Subsequently, NDOT, Washoe County and NV Energy each successfully negotiated and signed separate contracts for their respective portions of the radio system. Washoe County’s contract with Harris Communications Corp. was signed on September 27, 2018.

Marble Bluff communication tower engineered and constructed by Los Angeles Department of Water and Power (LADWP), built between 1947-1967. This tower is an angle tension steel structure, the same structures used in 110KV transmission towers. This tower is very unique and beautifully constructed for its time. The average recommendation for tower use is 50 years and are considered for replacement thereafter. The complimenting shelter contains asbestos within the brick walls and roof. Asbestos remediation can be expensive. The current HVAC (Heating Ventilation, Air Conditioning) system is in need of replacement, which would require cutting into the side walls of the shelter, and thus requiring asbestos remediation. The roof is also in need of

replacement or repair, the costs of this repair and maintenance combined is the same cost as it would be to replace the entire shelter. The current quote only accounts for tower installation some grounding installation, equaling [\$211,580].

In the Fall of 2021 a Construction Manager at Risk (CMAR), Plenum Builders, was contracted to replace the tower and other structures. During the Engineering review, it was determined that a number of additional upgrades would need to be completed in order to support the EDACS system and prepare for P25 System installation. These upgrades include a new transformer, upgrade of the electrical service from 200Amp to 300Amp, a new generator, battery system, fence repair, and electrical grounding remediation. Together, these upgrades have increased the cost of the site upgrade to a maximum of \$920,063.

FISCAL IMPACT

As noted in previous action, the Joint Operating Committee granted budget authority in the amount of \$905,000 for Fiscal Year 2021-2022 to complete two projects, Fox Mountain Solar upgrade and the Marble Bluff Tower replacement. The Fox Mountain Solar project was completed at a cost of \$385,660.70. Therefore, \$519,339.30 of budget authority remains in Fiscal Year 2021-2022 for the Marble Bluff Project. This request, if approved, would allow use of an additional \$415,000 in Fiscal Year 2022-2023. Specifically, funds from the Washoe County Regional Communication System fund accounts, Operations [\$115,000], Infrastructure [\$150,000], and Expansion [\$150,000], totaling [\$415,000] will be used to complete the Marble Bluff project.

RECOMMENDATION

Approve and recommend that the Board of County Commissioners approve expenditures for Washoe County Regional Communication System tower and shelter replacement at the Marble Bluff Communication Site at a cost not to exceed [\$920,063] from the Washoe County Regional Communication System fund.

POSSIBLE MOTION

Should the committee agree with staff's recommendation, a possible motion would be: "Move to approve and recommend that the Board of County Commissioners approve expenditures for Washoe County Regional Communication System tower and shelter replacement at the Marble Bluff Communication Site at a cost not to exceed [\$920,063] from the Washoe County Regional Communication System fund."