

KVCR UHF to VHF Transition / KVCR Technology Core Modernization Project Updates

UHF-to-VHF TRANSITION

SCOPE

KVCR will be transitioning from ultra-high frequency (UHF) channel 24 to very-high frequency (VHF) channel 5. The scope includes replacing the existing transmitter and antenna solutions systems located at 10550 Box Springs Mountain Rd., Moreno Valley, CA 92324. District Facilities Planning & Construction and KVCR have formed a collaborative and expert team and are working towards the successful delivery of this project.

SCHEDULE

The project has five major milestones. The District has successfully fulfilled the first two.

1. File FCC construction permit by July 12, 2017. ✓
2. Tower permit received on October 2, 2018. ✓
3. Complete construction of new tower by January 31, 2019.
4. Complete installation of both antenna and transmitter solution systems by February 28, 2019.
5. KVCR goes live with VHF transmission by April 12, 2019.

CHALLENGES

- The existing KVCR FM antenna attached to the existing tower (3-leg) would not fit into the configuration of the new 345-foot broadcasting tower (4-leg). This will require a new FM antenna. After further negotiation with Jampro Antenna, Inc., the new FM antenna will cost the District about \$148,000 for labor, materials, equipment, taxes, shipping and handling. The amendment was approved by the Board of Trustees on September 13, 2018. Coordination work is still ongoing between different vendors and consultants.
- It has been recently uncovered that the antenna systems at the KVCR studio tower at SBVC need to be replaced and raised higher on the tower profile in order to provide the proper transmission frequency to the new antenna systems at the new tower at Box Springs in Moreno Valley. This may require Division of the State Architect (DSA) involvement in order to justify the loading requirements and procurement and installation of these antenna systems. The program team is in the process of evaluating the requirements and finalizing the assessment and recommendation.
- The installation of a new TV transmitter system will require mechanical, electrical, plumbing and structural upgrades to the existing facility. The District engaged DLR Group architects under a master services agreement to provide a professional design services for this scope of work.

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PROCUREMENT

- TV Antenna: Jampro Antenna, Inc. (BOT approved on October 12, 2017 and subsequently September 13, 2018) is procuring the TV and FM antenna at the Box Springs facility.
- TV Transmitter: GatesAir (BOT approved on March 8, 2018) is procuring Transmitter equipment/system at Box Springs Facility. The District selected GatesAir and Salvador Castillo (BOT approval requested October 11, 2018) as independent contractors to provide technical services for the transmitter facility and the integration scope with the new antenna/tower systems. The District hired Allen Communications, Inc. to remove a portion of the existing transmitter equipment that is not operational.
- New Broadcasting Tower: Sabre Communications Corporation (BOT approved on March 8, 2018) is procuring the new tower.
- Studio FM Antenna: SBCCD procured the KVCR studio FM antenna system at SBVC.
- FM Antenna & TV Transmitter Install: SBCCD procured Allen Holding, Inc. for construction services to install the FM Antenna at SBVC and TV Transmitter at Box Springs.

CONSTRUCTION PROGRESS

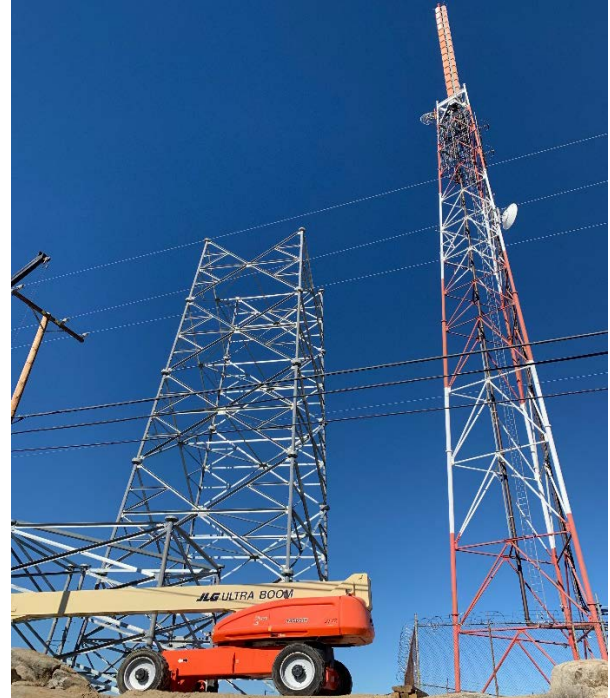
- The new tower design has received all federal, states, and local permits, and construction will start the week of October 8, 2018. ✓
- The design of the new TV antenna system by Jampro Antenna is complete; it is now in production and testing.
- The design of the new TV transmitter by GatesAir Inc. has been completed and shipped to the Box Springs facility.
- Survey of the new tower facility area per the approved design at Box Springs has been completed. The footprint required for KVCR's new tower will require expanding the overall lease with the owner, Henry Broadcasting.

THINGS TO FOLLOW

- Potentially amending the lease agreement with the property owner at Moreno Valley.
- Installing Tower by January 31, 2019. TV and FM antenna installation by February 28, 2019; Transmitter installation by February 28, 2019.
- Installing new KVCR FM studio antenna system at SBVC by February 28, 2019.

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Photos of New Tower Installation Progress:



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TECHNOLOGY CORE MODERNIZATION

SCOPE

KVCR will be transitioning from ultra-high frequency (UHF) channel 24 to very-high frequency (VHF) channel 5 and will need to upgrade its existing technology and equipment to accommodate the transition. The project scope includes modernizing and updating the TV and radio studio to better serve the station and community.

The overall scope of this initiative includes two major components:

1. Technology & Equipment Upgrades to TV and Radio Station at KVCR facility.
2. Space Repurposing, Reutilization, and Maximization.

SCHEDULE

- Hire a professional consultant (program manager) to oversee the project from programming development to closeout under the supervision of District staff. ✓
- Scope development, perform needs assessment, and develop an overall budget. ✓
- Solicit a design professional team to design the system upgrade by February 8, 2018. ✓
- Procure TV and Radio station equipment separately by August 2018. Recommendation has been submitted to the BOT in August 9, 2018. ✓
- Solicit an integrator (contractor) to procure, install the technology upgrade by February 21, 2019 board date.
- Received DSA permit for the building repurposing on January 2, 2019. Construction services procurement is in the process and will be submitted to for approval on February 21, 2019.
- Complete the building repurposing, procure furniture, and staff move by June 30, 2019.

CHALLENGES

- It is imperative that the “portion of” technology core equipment and system upgrades are complete and the transition is complete to maintain FCC deadline in order to mitigate any potential penalties and loss of license.
- System design implementations:
 - Introduce and implement advanced television system committee (ATSC 3.0) for KVCR.
 - Introduce and implement offsite master control, which could potentially save in the technology core upgrade project budget and will lower KVCR annual operating cost.
- Due to the technology rapid evolving and new ATSC 3.0 generation, many new high tech companies are warping up their design packages to launch the new system generation. Therefore, the District, KVCR alongside with the system engineer teams have decided to re-strategize integration procurement package.

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- Since KVCR is looking at repurposing more of the broadcast areas to maximize their efficiency and accommodate the new technology, some of the large pieces of the integration equipment will move after the repurposing is complete.
- The District is working with CHC to move KVCR staff temporarily to Crafton Hall (Building 3) during the construction of the tech core and building repurpose.

PROCUREMENT

- Procure a professional design team through an RFQ/RFP. ✓
- Engage the District with Public Media Management (PMM) for the master joint control. Some of the benefits to the District/KVCR for the master control system are: no up-front investment is required, cloud -based sourcing, reduced cost of station operation, significant reduction of capital investment at the station level, retention of control over KVCR local schedule deadlines, no need for expensive dedicated high-capacity fiber connectivity, general reduction in KVCR's need for storage, built-in disaster recovery, etc. BOT approved this contract on July 12, 2018. ✓
- Procure the radio and TV production systems and equipment. To be installed by the integrator. Pending BOT approval August 9, 2018. ✓
- For the technology core modernization scope, the District staff issued a request for qualification (RFQ) and secured (3) prequalified vendors. RFP is due in January 8, 2019 for February 21, 2019 BOT approval.
- Procure a general contractor for building repurpose via RFQ/RFP process and recommend approval to BOT for approval on February 21, 2019.

CONSTRUCTION PROGRESS

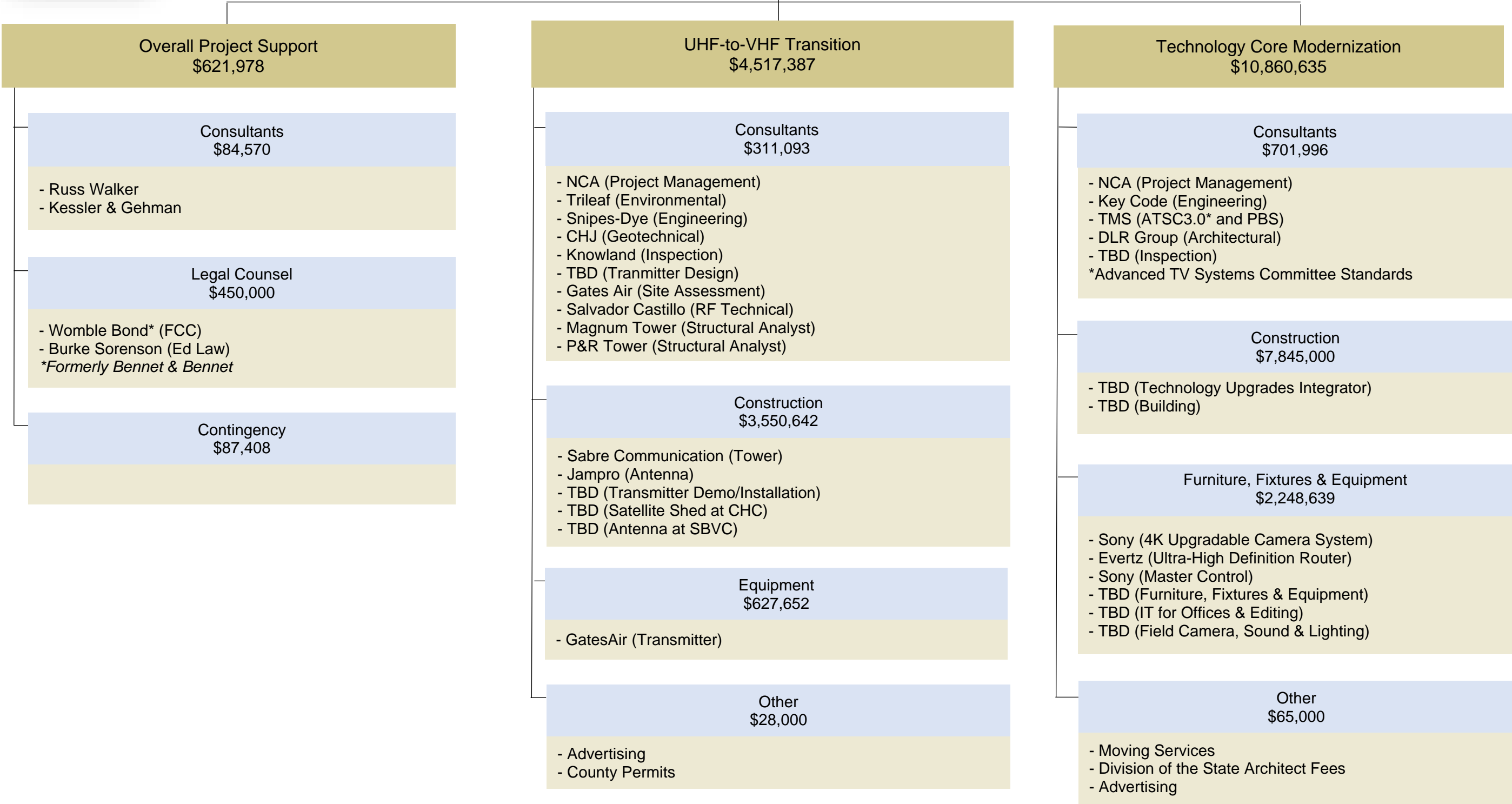
- The tech core (technology and equipment upgrade) system design by Key Code Media is in the progress. Bids due on January 30, 2019.
- The district has engaged DLR Group for architectural services, under a district master services agreement, to start the space design and repurposing for phase1 (broadcast space associated with technology upgrade) and phase 2 (open offices and FF&E upgrades and space maximization). KVCR received DSA approval for the building repurpose and it is in bidding phase.

THINGS TO FOLLOW

- Receive a Request for Proposal (RFP) for the technology core project and submit to the board for approval February 21, 2019. Start construction from March 1, 2019 through July 31, 2019.
- Receive bids for the KVCR building repurposing of phase 1 and phase 2. Start construction from March 1, 2019 through July 31, 2019.



KVCR UHF to VHF Transition / KVCR Technology Core Modernization \$16,000,000 Budget Update



KVCR Transition and Modernization Project Update -- Cost

Special Consultants for KVCR UHF-to-VHF Transition and Tecnology Core Modernization Project				
Vendor Name	Scope of Work or Services	Category	Project #	Forecast to Complete
Russ Walker	Project Management	Consultant	03-1617-06	\$ 11,200.00
Bennet & Bennet	FCC Attorney	Counsel	03-1617-06	\$ 150,000.00
Womble Bond Dickinson	FCC Attorney	Legal Counsel	03-1617-06	\$ 200,000.00
Burke, Williams & Sorensen	Education Law Attorney	Legal Counsel	03-1617-06, 03-1718-10	\$ 100,000.00
Kessler & Gehman Associates	Communication Engineer	Consultant	03-1617-06	\$ 73,370.00
Contingency	TBD	NA	NA	\$ 87,408.00
				\$ 621,978.00
UHF-to-VHF Transition				
Vendor Name	Scope of Work or Services	Category	Project #	Forecast to Complete
Sabre Communication Corp	Construction of new broadcasting tower	Contractor	03-1617-06	\$ 2,292,071.10
Jampro Antenna Inc.	Construction of new TV antenna system;	Contractor	03-1617-06	\$ 796,570.40
GatesAir Inc.	Equipment Transmitters	Equipment	03-1617-06	\$ 627,652.00
GatesAir Inc.	Transmitter Site Assessment	Independent Contractor	03-1617-06	\$ 7,817.00
Trileaf Environmental	Environmental - Workplan & FEMA	Consultant	03-1718-09	\$ 13,400.00
Trileaf Environmental	Environmental - Tibes Monitoring	Consultant	03-1718-09	\$ 13,470.00
Snipes-Dye	Surveyor & Land Use	Consultant	03-1617-06	\$ 15,440.00
CHJ Consultants	Geological/Geotech	Consultant	03-1617-06	\$ 10,900.00
Riverside County	Permit Fees	Permit	03-1617-06	\$ 25,000.00
Allen Communication, Inc.	Transmitter Demo Scope	Contractor	03-1617-06	\$ 22,000.00
Allen Communication, Inc.	Transmitter Installation Scope	Contractor	03-1617-06	\$ 110,000.00
TBD	Transmitter MEP/Structural Scope	Contractor	03-1617-06	\$ 82,500.00
DLR Group	Transmitter MEP/Structural Design Consultant	Consultant	03-1617-06	\$ 44,000.00
Knowland Construction	Inspector of Record	Consultant	03-1617-06	\$ 25,400.00
Daily Journal	Advertisement	Advertisement	03-1617-06	\$ 3,000.00
NCA Studio	Project Management	Consultant	03-1718-09	\$ 50,666.00
Salvador Castillo	RF Technical Consulting Services (tower transition)	Consultant	03-1617-06	\$ 100,000.00
Magnum Tower, Inc.	Structural analysis for the tower	Consultant	03-1617-06	\$ 15,000.00
P&R Tower Company	Structural analysis for the tower	Consultant	03-1617-06	\$ 15,000.00
TBD	KVCR Satellite Shed at CHC	Contractor	03-1819-03	\$ 82,500.00
TBD	KVCR Antenna at SBVC	Contractor	03-1819-03	\$ 165,000.00
				\$ 4,517,387.00
Technology Core Modernization				
Vendor Name	Scope of Work or Services	Category	Project #	Forecast to Complete
Key Code Media, Inc.	Consultant - Engineer Designer	Consultant	03-1718-10	\$ 366,400.00
NCA Studio	Consultant - Project Management	Consultant	03-1718-10	\$ 87,296.00
Daily Journal	Advertisements	Advertisement	03-1718-10	\$ 5,000.00
TBD	Technology Upgrades Integrator/GC	Contractor	03-1718-10	\$ 6,195,000.00
Sony Electronics Inc.	4K Upgradable Camera System; Multi-format Switcher	Vendor	03-1718-10B	\$ 657,051.99

KVCR Transition and Modernization Project Update -- Cost

Vendor Name	Scope of Work or Services	Category	Project #	Forecast to Complete
Evertz	One UHD Video Router	Vendor	03-1718-10B	\$ 331,587.30
Sony Electronics Inc.	Master Control Providers	Vendor	03-1718-10	\$ 630,000.00
TMS, Inc.	Professional consultant for ATSC 3.0, PBS, etc.	Consultant	03-1718-10	\$ 44,000.00
TBD	Field Equipment (camera, sound, lights, etc)	Vendor	03-1718-10	\$ 350,000.00
Knowland Construction	Inspector of Record	Consultant	03-1718-10	\$ 22,000.00
DLR Group	Building Architect (phase 1, 2, and 3)	Consultant	03-1718-10A	\$ 149,300.00
TBD	Moving services - logistical scope	Vendor	03-1718-10A	\$ 33,000.00
TBD	Furniture, Fixture & Equipment (FF&E purchase)	Equipment	03-1718-10A	\$ 180,000.00
DELL EMC	IT equipment for office and editor rooms	Equipment	03-1718-10B	\$ 100,000.00
Knowland Construction	Inspector of Record	Consultant	03-1718-10A	\$ 33,000.00
DSA	Permit Fees - DSA	Permit	03-1718-10A	\$ 27,000.00
TBD	Building Construction	Contractor	03-1718-10A	\$ 1,650,000.00
				\$ 10,860,635.00
KVCR UHF-to-VHF Transition and Technology Core Modernization Project Total				\$ 16,000,000.00