



(REFERENCE COPY - Not for submission)

FCC Form 399: Reimbursement Request

Facility **69124** | Service: **DTV** | Call **WUNG-TV** | Channel: **21 (UHF)**
ID: | Sign:
File **0000025415**
Number:
FRN: **0001910066** | Date **11/19**
Submitted: **/2020**

Applicant Information

Applicant Name, Type, and Contact Information

Applicant	Address	Phone	Email	Applicant Type
University of North Carolina	PO Box 14900 Research	+1 (919)	fcc_notice@unctv. org	Government Entity
Doing Business As:	Triangle Park,	549-		
University of North Carolina	NC 27709 United States	7000		

Reimbursement Contact Information

Reimbursement Contact Name and Information

Applicant	Address	Phone	Email
[Confidential]			

Preparer Contact Information

Preparer Contact Name and Information

Applicant	Address	Phone	Email
Donald Smith	Donald Smith	+1 (919)	dsmith@unctv.
<i>Director of New Technologies</i>	10 UNC-TV Drive	549-7000	org
<i>Compliance & Planning</i>	Research Triangle		
<i>University of North Carolina</i>	Park, NC 27709		
<i>Center for Public television</i>	United States		

**Broadcaster
Information
and
Transition
Plan**

Question		Response
Will the station be sharing equipment with another broadcast television station or stations (e.g., a shared antenna, co-location on a tower, use of the same transmitter room, multiple transmitters feeding a combiner, etc.)? If yes, enter the facility ID's of the other stations and click 'prefill' to download those stations' licensing information.		No
Briefly describe transition plan		The transition plan is to construct an interim facility at the existing site. The interim facility would be used when operation on the new channel begins. After that the necessary changes would be made to the primary transmission system.

Transmitters

Section	Question	Response
Transmitter Related Expenses	Do you have transmitter related expenses?	Yes

**Auxiliary
Transmitter****Existing Transmitter Information**

Section	Question	Response
Existing Transmitter Description	Type of change	Purchase New
	Use	Auxiliary (Backup)
	Description of Use	Backup to Main
	Ownership	Owned
	Owner	N/A
	Site	N/A
	Is this transmitter currently shared with another station?	No
	Is this transmitter currently in operating condition?	Yes
Existing Transmitter Manufacturer and Type	Manufacturer	
	Model	DHD30P1
	Year	2001
	Type	Solid State
	Solid State Cooling	Air Cooled
	Solid State Power Capacity	7.25 kW

**Auxiliary
Transmitter****New Transmitter Costs**

Section	Question	Response
New Transmitter	Use	Auxiliary (Backup)
	Change Type	Purchase New
	Is this a request for upgraded equipment?	No
	Manufacturer	
	Model	ULXTE-20
	Transmitter Type	Solid State
	Solid State Cooling	Liquid Cooled
	Solid State Power capacity	12.9 kW
	Justification for New Transmitter	At the request of FCC reviewers the power capacity of the transmitter has been changed from post-filter output power to pre-filter output power. There is no change in the transmitter supplied.

**Auxiliary
Transmitter****Other Transmitter Costs**

Section	Question	Response
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Electrical Service	Service Entrance (3 phases 800A 208V)	No
	Switchgear (industrial 800 amp)	No
	Transformer (480V)	No
	Power	N/A
	Rigid Conduit and Wiring	No
	Size	N/A
	Length	N/A
	Other Electrical Service	No
	Description	N/A
HVAC Service	Does the replacement transmitter require HVAC Service?	No
	Type	N/A
	Size	N/A
	Other Size	N/A
Transmitter Building Addition/Modification or Leasehold Improvement	Does the Transmitter Building require an addition, modification, other leasehold improvement?	No
	Size	N/A
Channel 14 Costs	Is an RF Consulting Engineer needed?	N/A
	Is a channel 14 Mask Filer needed?	N/A
	Is additional field engineering time needed?	N/A
	Number of Days	N/A

Auxiliary Transmitter **Other Transmitter Cost Not Listed**
Information not provided.

**Primary
Transmitter**

Existing Transmitter Information

Section	Question	Response
Existing Transmitter Description	Type of change	Purchase New
	Use	Primary (Main)
	Description of Use	N/A
	Ownership	Owned
	Owner	N/A
	Site	N/A
	Is this transmitter currently shared with another station?	No
	Is this transmitter currently in operating condition?	Yes
Existing Transmitter Manufacturer and Type	Manufacturer	
	Model	DCX-2
	Year	1996
	Type	Inductive Output Tube
	IOT Power Type	Two
	Power Capacity	40 kW

**Primary
Transmitter**

New Transmitter Costs

Section	Question	Response
New Transmitter	Use	Primary (Main)
	Change Type	Purchase New
	Is this a request for upgraded equipment?	Yes
	Manufacturer	
	Model	ULXTE-40
	Transmitter Type	Solid State
	Solid State Cooling	Liquid Cooled
	Solid State Power capacity	25.3 kW
	Justification for New Transmitter	The transmitter power capacity was changed from post output filter to pre-output filter at the request of the fund administrator. No actual change of equipment is being made.

**Primary
Transmitter**

Other Transmitter Costs

Section	Question	Response
Electrical Service	Service Entrance (3 phases 800A 208V)	No
	Switchgear (industrial 800 amp)	No
	Transformer (480V)	No
	Power	N/A

	Rigid Conduit and Wiring	No
	Size	N/A
	Length	N/A
	Other Electrical Service	No
	Description	N/A
HVAC Service	Does the replacement transmitter require HVAC Service?	No
	Type	N/A
	Size	N/A
	Other Size	N/A
Transmitter Building Addition/Modification or Leasehold Improvement	Does the Transmitter Building require an addition, modification, other leasehold improvement?	No
	Size	N/A
Channel 14 Costs	Is an RF Consulting Engineer needed?	N/A
	Is a channel 14 Mask Filer needed?	N/A
	Is additional field engineering time needed?	N/A
	Number of Days	N/A

Primary

Transmitter

Other Transmitter Cost Not Listed

Information not provided.

Antennas

Section	Question	Response
Antenna Related Expenses	Do you have antenna related expenses?	Yes

Auxiliary Antenna

Existing Antenna Information

Section	Question	Response
Existing Antenna Description	Type of change	Purchase New
	Antenna Use	Auxiliary (Backup)
	Description of Use	Auxiliary
	Ownership	Owned
	Owner	N/A
	Site	N/A
	Is the existing antenna shared with another station or stations?	No
	Is the existing antenna directional?	No
	Is antenna in operating condition?	Yes
	Is antenna located on or in close proximity to an antenna farm?	No
Existing Antenna Manufacturer and Type	Class	Full Power
	Mounting	Side Mount
	Antenna position in stack	Not in Stack
	Polarization	Horizontal
	Type	Slotted Coaxial
	Number of Stations Supported	N/A
	Number of Panels	N/A
	Design power capacity in use	N/A
	Lower Limit	N/A
	Upper Limit	N/A
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power)	422.0 kW

Manufacturer	
Model	TFU-30GTH-R O4
Year	2001

Auxiliary Antenna

New Antenna Costs

Section	Question	Response
New Antenna Description	Use	Auxiliary (Backup)
	Description of Use	Interim Facility
	Change Type	Purchase New
	Is this a request for upgraded equipment?	No
	Ownership	Owned
	Owner	N/A
	Is antenna shared?	No
	Is antenna directional?	No
	Will antenna be located on or in close proximity to an antenna farm?	No
New Antenna Manufacturer and Types	Class	Full Power
	Mounting	Side Mount
	Antenna position in stack	Not in Stack
	Polarization	Elliptical
	Type	Slotted Coaxial
	Number of Stations Supported	N/A
	Number of Panels/Bays	N/A
	Lower Limit	N/A
	Upper Limit	N/A
	Design power capacity in use	N/A
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power)	397.0 kW
	Manufacturer	

Model	SAA28-O3-G300-ES6R-21
Year	2019
Justification for New Antenna	The antenna can only operate on channel 44. The replacement antenna will be initially used as part of the interim facility during the transition. Following the transition it will become a permanent auxiliary antenna.

Auxiliary Antenna

Other Antenna Costs

Section	Question	Response
Combiner for Shared Antenna	Do you need a Combiner for a Shared Antenna?	No
	Type	
	Number of channels supported	N/A
	Frequencies of channels supported	N/A
	Frequency	N/A
	Do you need a combiner output splitter /switcher for dual feed lines?	N/A
Elbow Complex	Do you require the separate purchase of the Elbow Complex?	Yes

	Broadband or Single Channel?	Single Channel
	Feed Line Size	6 1/8 inches
Side Mount Brackets	Do you require the separate purchase of side mount brackets for a high power antenna?	Yes
Pattern Scatter Analysis	Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna?	Yes
Sweep Test	Do you require the sweep testing of transmission line and antenna?	Yes

Auxiliary Antenna

Other Antenna Cost Not Listed

Information not provided.

**Primary
Antenna**

Existing Antenna Information

Section	Question	Response
Existing Antenna Description	Type of change	Purchase New
	Antenna Use	Primary (Main)
	Description of Use	N/A
	Ownership	Owned
	Owner	N/A
	Site	N/A
	Is the existing antenna shared with another station or stations?	No
	Is the existing antenna directional?	No
	Is antenna in operating condition?	Yes
	Is antenna located on or in close proximity to an antenna farm?	No
Existing Antenna Manufacturer and Type	Class	Full Power
	Mounting	Top Mount
	Antenna position in stack	Not in Stack
	Polarization	Elliptical
	Type	Slotted Coaxial
	Number of Stations Supported	N/A
	Number of Panels	N/A
	Design power capacity in use	N/A
	Lower Limit	N/A
	Upper Limit	N/A
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power)	160.0 kW

Manufacturer	
Model	ATW15H3- ETO-44H
Year	2010

Primary
Antenna

New Antenna Costs

Section	Question	Response
New Antenna Description	Use	Primary (Main)
	Description of Use	N/A
	Change Type	Purchase New
	Is this a request for upgraded equipment?	No
	Ownership	Owned
	Owner	N/A
	Is antenna shared?	No
	Is antenna directional?	No
	Will antenna be located on or in close proximity to an antenna farm?	No
New Antenna Manufacturer and Types	Class	Full Power
	Mounting	Top Mount
	Antenna position in stack	Not in Stack
	Polarization	Elliptical
	Type	Slotted Coaxial
	Number of Stations Supported	N/A
	Number of Panels/Bays	N/A
	Lower Limit	N/A
	Upper Limit	N/A
	Design power capacity in use	N/A
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power)	260.0 kW
	Manufacturer	

Model	SAA24-O4A-G400-ET5R-21
Year	2019
Justification for New Antenna	The antenna is a single channel slotted pylon style antenna. It cannot operate on a channel other than what it was designed, channel 44. The only viable option is to replace the antenna.

Primary Antenna

Other Antenna Costs

Section	Question	Response
Combiner for Shared Antenna	Do you need a Combiner for a Shared Antenna?	No
	Type	
	Number of channels supported	N/A
	Frequencies of channels supported	N/A
	Frequency	N/A
	Do you need a combiner output splitter /switcher for dual feed lines?	N/A
Elbow Complex	Do you require the separate purchase of the Elbow Complex?	Yes
	Broadband or Single Channel?	Single Channel

	Feed Line Size	6 1/8 inches inches
Side Mount Brackets	Do you require the separate purchase of side mount brackets for a high power antenna?	No
Pattern Scatter Analysis	Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna?	No
Sweep Test	Do you require the sweep testing of transmission line and antenna?	Yes

**Primary
Antenna**

Other Antenna Cost Not Listed

Information not provided.

Transmission Line

Section	Question	Response
Transmission Line Related Expenses	Do you have transmission line related expenses?	Yes

Auxiliary **Existing Transmission Line**
Transmission Line

Section	Question	Response
Existing Transmission Line Description	Type of change	Purchase New
	Use	Auxiliary (Backup)
	Description of Use	Auxiliary
	Ownership	Owned
	Owner	N/A
	Site	N/A
	Is the existing transmission line shared with another station or stations?	No
	Is Transmission Line in operating condition?	Yes
Existing Transmission Line Manufacturer and Type	Manufacturer	
	Type	Rigid
	Diameter	6 1/8 inches
	Other Diameter	N/A
	Segment Length	20 inches
	Other Segment Length	N/A
	Number of parallel runs	1
	Length	800 feet per run

**Auxiliary
Transmission Line**

New Transmission Line

Section	Question	Response
New Transmission Line Costs	Use	Auxiliary (Backup)
	Description of Use	Interim and Eventual Auxiliary
	Change Type	Purchase New
	Is this a request for upgraded equipment?	No
	Type	Rigid
	Diameter	6 1/8 inches
	Other Diameter	N/A
	Segment Length	19 1/2 inches
	Other Segment Length	N/A
	Number of parallel runs	1
	Length	800 feet per run
	Justification for New Transmission Line	The existing transmission line has a stick length of 20 feet, a length that is inconsistent with operations on channel 21. The only option is to replace the transmission line.

Auxiliary	Other Transmission Line Expenses Not Listed
Transmission Line	Information not provided.

Primary
Transmission Line

Existing Transmission Line

Section	Question	Response
Existing Transmission Line Description	Type of change	Purchase New
	Use	Primary (Main)
	Description of Use	N/A
	Ownership	Owned
	Owner	N/A
	Site	N/A
	Is the existing transmission line shared with another station or stations?	No
	Is Transmission Line in operating condition?	Yes
Existing Transmission Line Manufacturer and Type	Manufacturer	
	Type	Rigid
	Diameter	6 1/8 inches
	Other Diameter	N/A
	Segment Length	20 inches
	Other Segment Length	N/A
	Number of parallel runs	1
	Length	1500 feet per run

Primary
Transmission Line

New Transmission Line

Section	Question	Response
New Transmission Line Costs	Use	Primary (Main)
	Description of Use	N/A
	Change Type	Purchase New
	Is this a request for upgraded equipment?	No
	Type	Rigid
	Diameter	6 1/8 inches
	Other Diameter	N/A
	Segment Length	19 1/2 inches
	Other Segment Length	N/A
	Number of parallel runs	1
	Length	1500 feet per run
	Justification for New Transmission Line	The existing transmission line has a stick length of 20 feet, a length that is inconsistent for operations on channel 21. The only option is to replace the transmission line.

Primary Transmission Line	Other Transmission Line Expenses Not Listed
Information not provided.	

**Tower
Equipment
And
Rigging
Costs**

Section	Question	Response
Tower Equipment or Rigging Costs Changes	Do you have tower equipment or rigging costs changes?	Yes

**Primary
Tower**

Existing Tower

Section	Question	Response
Existing Tower Description	Type of change	Move Equipment
	Tower Use	Primary (Main)
	Description of Use	N/A
	Ownership	Owned
	Is this tower consider Complex?	No
	Is this tower currently shared with any other stations?	No
	One or more FM, AM or TV radio broadcaster(s)	N/A
	Others Types of Users	N/A
	Is tower documented for structural analysis?	Yes
	Is tower compliant with Rev G?	Yes
Existing Tower Structure Registration	Do you have a tower registration number?	Yes
	ASR Number	1014573
Coordinates (NAD83 (North American Datum of 1983))	Latitude (NAD83)	35° 21' 30.7" N-
	Longitude (NAD83)	080° 36' 36.4" W-
	Overall Structure Height	1394.01 feet
	Support Structure Height	1358.25 feet
	Ground Elevation Above Mean Sea Level (AMSL)	632.87 feet

	Structure Type	TOWER - Free Standing or Guyed Structure
	Tower Owner	UNIVERSITY OF NORTH CAROLINA
	Date Constructed	08/11/2010

Primary Tower

Tower Rigging Costs

Section	Question	Response
Tower Rigging Costs	Complex Tower	N/A
Helicopter Services Required	Are helicopter services required?	No

Primary Tower

Other Tower Expenses Not Listed

Information not provided.

**Outside
Professional Services Costs**

Section	Question	Response
Outside Project Management Services	Do you require outside project management services?	Yes
	Number of Hours	120
	Explanation	Because the transmission site is owned by the State of North Carolina, it is subject to various state construction project rules. One rule is the hiring of a designer to create submittals for project review and approval by the state.
Outside RF consulting Engineering Services	Perform engineering study for new channel assignment and antenna development	Yes
	Prepare engineering section of Form FCC Construction Permit Application	Yes
	For Auxiliary Facility	Yes
	For Main Facility	Yes
	Prepare engineering section of Form FCC License to Cover Application	Yes
	For Auxiliary Facility	Yes
	For Main Facility	Yes
	Prepare request for Special Temporary Authority	Yes
	Quantity	1

	Do you have Distributed Transmission System engineering services?	N/A
	Critical Facility	N/A
	Terrain-Shielded Facility	N/A
Attorney and Other Outside Consulting Services	Prepare and file Form FCC Construction Permit Application	Yes
	For Auxiliary Facility	Yes
	For Main Facility	Yes
	Prepare and file Form FCC License to Cover Application	Yes
	For Auxiliary Facility	Yes
	For Main Facility	Yes
	Prepare request for Special Temporary Authority	Yes
	Quantity	1
	NEPA Section 106 environmental review	No
	Environmental Assessment	No
	ASR Modification	Yes
	FAA Consultation (including preparation of FAA Form 7460)	Yes
	Negotiation of Lease and other Matter for Shared Locations	No
	Prepare or Review FCC Form 399 for Reimbursement	Yes
	Address transition timing and coordination issues w/ other stations and wireless providers	Yes
RF Field Engineering Services	Comprehensive coverage verification via field study	No
	RF exposure measurements	No
	Additional Field Engineering Service	No
	Number of Days	N/A

	Justification	N/A
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Outside Professional Services Costs

Other Professional Services Expenses Not Listed

Name	Description
Tower Structural Analysis	Required by State Building Code
Additional Legal Expenses	Legal expenses for non-catalog advice and review, including transition status reports and other miscellaneous legal needs.

Other Expenses

Section	Question	Response
AM Pattern Disturbance	Is an Impact Study needed?	No
	Is Remediation needed?	No
Facility Expenses	Name	N/A
	Other Distributed Transmission System Expenses Not listed	N/A
	Name	N/A
	Is Notification of a Medical Facility required as a result of DTV broadcasting?	Yes
Permit and Filing Costs	Local Zoning	No
	Non-zoning permits	No
	BLM or NFS Coordination	No
	FCC Construction Permit Minor Change	No
	FCC License to Cover Application	No
	FCC Special Temporary Authority Application	No
Other Miscellaneous Expenses	Does this relocation require paying Disposal Costs (for equipment and other waste, net of any salvage value)?	Yes
	Does this relocation require Equipment Delivery or Handling Charges not otherwise included in individual item costs?	Yes
	Does this relocation require Equipment Storage?	No
	Does this relocation require the Development and Airing of an Announcement regarding an upcoming channel change?	Yes
	Does this relocation require MVPD Notification of a Channel Change?	Yes

**Other
Expenses**

Other Expenses Not Listed

Name	Description
Electrical Construction	Construction and modifications to the electrical infrastructure of the existing building as required to support the new transmitters
General Construction	General Construction and administrative costs necessary for the installation of transmitters in the existing building.
Main Antenna System	Fine matcher assemblies necessary in order for the antenna system to meet the required performance requirements
Mechanical Construction	Construction and modifications to the HVAC infrastructure of the existing building as required to support the new transmitters.
Network Switch	Cisco 52-port Gigabit Switch connects devices together on computer network by using packet switching to receive, process, and forward data to destination device
Antenna Aux Other	Fine matcher assemblies necessary in order for the antenna system to meet the required performance requirements

Cost
Information

Transmitters

Where no predetermined cost estimate is available, any estimate provided will also become the predetermined cost (displayed in italics).

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Primary Transmitter ULXTE-40	\$972,550.00	\$397,458.60		\$397,373.02	
Transformer 3 phase /480v - 150 KVA	\$25,550.00	\$1,958.60	***System Notice: Estimate adjusted and locked because line has been superseded. ***	\$1,958.60	N/A

UHF - Liquid Cooled Solid State Transmitter 21 - 31 kW	\$947,000.00	\$395,500.00	The estimated cost is for the approved GatesAir ULXTE-30 transmitter. The transmitter purchase has been upgraded to a ULXTE-40. It is understood that the station is responsible for the upgrade portion of the purchase price. See invoice Gates US0339411	\$395,414.42	Budget Revision
Auxiliary Transmitter ULXTE-20	\$494,500.00	\$309,022.67		\$231,500.34	
UHF - Liquid Cooled Solid State Transmitter 8.2 - 13 kW	\$494,500.00	\$309,022.67	See narrative and quote	\$231,500.34	N/A
Sub-total	\$1,467,050.00	\$706,481.27	N/A	\$628,873.36	N/A
Total for all systems	\$3,501,574.80	\$2,680,779.89	N/A	\$2,327,434.50	N/A

Components

Actual Information
Description

File Name

Transformer 3 phase/480v - 150 KVA	<p>Component Description: 50% Transformer, see line 16 on Quotes. Separate 399 Item #. Purchase Order for all 11 sites.</p> <p>Amount: \$1,958.60</p>
UHF - Liquid Cooled Solid State Transmitter 21 - 31 kW	<p>Component Description: Final Main Transmitter See attach pg 1 for payment details, see pay obligation column see attach pg 3 for quote 87381</p> <p>Amount: \$44,257.04</p>
	<p>Component Description: Prim Trans, see attach pg 2-3 for pay details, due date revised to vendor terms, net 60 days. Transformer credit taken w/transmitter per Paige, PO for multiple sites.</p> <p>Amount: \$161,581.99</p>
	<p>Component Description: 50% Main Transmitter & Installation. Installation included w/Transmitter on Form 399. Transformer separate 399 Line Item. Purchase Order for all 11 Sites.</p> <p>Amount: \$189,575.39</p>

UHF - Liquid Cooled Solid
State Transmitter 8.2 - 13
kW

Component Description:

Aux. Transm. Due date revised to vendor terms, net 60. See attach pg. 2 for payment details. PO for multiple sites. Note vendor used incorrect year (2018) on invoice date, but FCC Reimbursement Team requested invoice date be listed with year 2018.

Amount:

\$92,554.05

Component Description:

Final Invoice Aux Transmitter See attach pg 1 for payment details, See attach pg 3 for quote 87380

Amount:

\$62,156.94

Component Description:

50% Aux Transmitter & Installation. Installation included w/Transmitter on Form 399. Purchase Order for all 11 sites.

Amount:

\$138,946.29

Cost Information

Antennas

Where no predetermined cost estimate is available, any estimate provided will also become the predetermined cost (displayed in italics).

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Primary Antenna SAA24-O4A-G400-ET5R-21	\$308,530.00	\$201,800.00		\$178,483.50	
Elbow complex, single channel, at antenna input, per 6 1/8. feedline (if needed)	\$12,300.00	\$11,700.00	N/A	N/A	N/A
UHF - High Power Top Mount (200-1000 kW), One station antenna , elliptically or circularly polarized	\$289,500.00	\$183,700.00	See attached narrative with quotes See invoice 27011705 w/quote for Main Fine Matchers	\$178,483.50	N/A
Sweep test of existing antenna	\$6,730.00	\$6,400.00	N/A	N/A	N/A
Auxiliary Antenna SAA28-O3-G300-ES6R-21	\$274,440.00	\$192,500.00		\$142,204.50	

Pattern scatter analysis for side mount high /med power antennas (if not included in antenna base cost)	\$5,260.00	\$5,000.00	N/A	N/A	N/A
Side mount brackets for high power antennas (if not included in antenna base cost)	\$23,150.00	\$22,000.00	N/A	N/A	N/A
Elbow complex, single channel, at antenna input, per 6 1/8. feedline (if needed)	\$12,300.00	\$11,700.00	N/A	N/A	N/A
Sweep test of existing antenna	\$6,730.00	\$6,400.00	N/A	N/A	N/A

UHF - Lower Power Side Mount, One station antenna -- 200-500 kW, elliptically or circularly polarized	\$227,000.00	\$147,400.00	See attached narrative with quotes See Invoice 27011704 w/quote for Fine Matchers	\$142,204.50	Budget Revision
Sub-total	\$582,970.00	\$394,300.00	N/A	\$320,688.00	N/A
Total for all systems	\$3,501,574.80	\$2,680,779.89	N/A	\$2,327,434.50	N/A

Components

Actual Information	
Description	File Name
Elbow complex, single channel, at antenna input, per 6 1/8. feedline (if needed)	Information not provided.

<p>UHF - High Power Top Mount (200-1000 kW), One station antenna , elliptically or circularly polarized</p>	<table> <tr> <td data-bbox="719 174 1027 210">Component Description:</td><td data-bbox="1161 174 1378 445">50% Main/Primary Antenna Previous 50% paid on invoice 27011328 Balance of invoice on separate Form 399 Category</td></tr> <tr> <td data-bbox="719 456 831 492">Amount:</td><td data-bbox="1161 456 1294 492">\$89,241.75</td></tr> <tr> <td data-bbox="719 595 1027 631">Component Description:</td><td data-bbox="1161 595 1337 745">Prim/Main Antenna Fine Matchers See attached quote</td></tr> <tr> <td data-bbox="719 757 831 792">Amount:</td><td data-bbox="1161 757 1209 792">N/A</td></tr> <tr> <td data-bbox="719 896 1027 931">Component Description:</td><td data-bbox="1161 896 1362 1283">See attachment page 6 for diagram and clarification. 50% Primary Antenna included in Inv & PO Line 9. Invoice & Purchase Order are for 10 sites.</td></tr> <tr> <td data-bbox="719 1294 831 1330">Amount:</td><td data-bbox="1161 1294 1294 1330">\$89,241.75</td></tr> </table>	Component Description:	50% Main/Primary Antenna Previous 50% paid on invoice 27011328 Balance of invoice on separate Form 399 Category	Amount:	\$89,241.75	Component Description:	Prim/Main Antenna Fine Matchers See attached quote	Amount:	N/A	Component Description:	See attachment page 6 for diagram and clarification. 50% Primary Antenna included in Inv & PO Line 9. Invoice & Purchase Order are for 10 sites.	Amount:	\$89,241.75
Component Description:	50% Main/Primary Antenna Previous 50% paid on invoice 27011328 Balance of invoice on separate Form 399 Category												
Amount:	\$89,241.75												
Component Description:	Prim/Main Antenna Fine Matchers See attached quote												
Amount:	N/A												
Component Description:	See attachment page 6 for diagram and clarification. 50% Primary Antenna included in Inv & PO Line 9. Invoice & Purchase Order are for 10 sites.												
Amount:	\$89,241.75												
<p>Sweep test of existing antenna</p>	<p>Information not provided.</p>												
<p>Pattern scatter analysis for side mount high/med power antennas (if not included in antenna base cost)</p>	<p>Information not provided.</p>												
<p>Side mount brackets for high power antennas (if not included in antenna base cost)</p>	<p>Information not provided.</p>												
<p>Elbow complex, single channel, at antenna input, per 6 1/8. feedline (if needed)</p>	<p>Information not provided.</p>												

Sweep test of existing antenna	Information not provided.	
UHF - Lower Power Side Mount, One station antenna -- 200-500 kW, elliptically or circularly polarized	Component Description: Amount:	50% Aux Antenna Initial 50% paid invoice 27011328 \$71,102.25
	Component Description: Amount:	See Attachment Page 6 for diagram /comments. 50% Auxilliary Antenna included in Inv & PO Line 9. Invoice & Purchase Order are for 10 sites. \$71,102.25
	Component Description: Amount:	Aux Antenna Fine Matchers See attached quote N/A

Cost
Information

Transmission Line

Where no predetermined cost estimate is available, any estimate provided will also become the predetermined cost (displayed in italics).

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Primary Transmission Line	\$303,000.00	\$213,740.02		\$213,740.02	
Rigid Transmission Line - copper, 6 1/8"	\$303,000.00	\$213,740.02	See attached antenna narrative with quotes	\$213,740.02	N/A
Auxiliary Transmission Line	\$161,600.00	\$132,545.98		\$132,545.98	
Rigid Transmission Line - copper, 6 1/8"	\$161,600.00	\$132,545.98	See attached antenna narrative with quotes	\$132,545.98	N/A
Sub-total	\$464,600.00	\$346,286.00	N/A	\$346,286.00	N/A
Total for all systems	\$3,501,574.80	\$2,680,779.89	N/A	\$2,327,434.50	N/A

Components

Actual Information Description	File Name
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Rigid Transmission Line - copper, 6 1/8"	<table> <tr> <td data-bbox="715 98 1145 600"> Component Description: </td><td data-bbox="1153 98 1426 600"> 50% Primary Transmission Line Previous 50% paid on invoice 27011328 Invoice Balance on separate Form 399 Category </td></tr> <tr> <td data-bbox="715 611 1145 1081"> Amount: </td><td data-bbox="1153 611 1426 1081"> \$106,870.01 </td></tr> </table> <table> <tr> <td data-bbox="715 633 1145 992"> Component Description: </td><td data-bbox="1153 633 1426 992"> See attachment page 6 for diagram /comments. 50% Primary Transmission Line included in Inv & PO Line 9. Invoice & Purchase Order are for 10 sites. </td></tr> <tr> <td data-bbox="715 1003 1145 1081"> Amount: </td><td data-bbox="1153 1003 1426 1081"> \$106,870.01 </td></tr> </table>	Component Description:	50% Primary Transmission Line Previous 50% paid on invoice 27011328 Invoice Balance on separate Form 399 Category	Amount:	\$106,870.01	Component Description:	See attachment page 6 for diagram /comments. 50% Primary Transmission Line included in Inv & PO Line 9. Invoice & Purchase Order are for 10 sites.	Amount:	\$106,870.01
Component Description:	50% Primary Transmission Line Previous 50% paid on invoice 27011328 Invoice Balance on separate Form 399 Category								
Amount:	\$106,870.01								
Component Description:	See attachment page 6 for diagram /comments. 50% Primary Transmission Line included in Inv & PO Line 9. Invoice & Purchase Order are for 10 sites.								
Amount:	\$106,870.01								
Rigid Transmission Line - copper, 6 1/8"	<table> <tr> <td data-bbox="715 1104 1145 1384"> Component Description: </td><td data-bbox="1153 1104 1426 1384"> 50% Auxilliary Transmission Line Initial 50% paid on invoice 27011328. </td></tr> <tr> <td data-bbox="715 1395 1145 1908"> Amount: </td><td data-bbox="1153 1395 1426 1908"> \$66,272.99 </td></tr> </table> <table> <tr> <td data-bbox="715 1462 1145 1821"> Component Description: </td><td data-bbox="1153 1462 1426 1821"> See attachment page 6 for diagram /comments. 50% Auxilliary Transmission Line included in Inv & PO Line 9. Invoice & Purchase Order are for 10 sites. </td></tr> <tr> <td data-bbox="715 1832 1145 1908"> Amount: </td><td data-bbox="1153 1832 1426 1908"> \$66,272.99 </td></tr> </table>	Component Description:	50% Auxilliary Transmission Line Initial 50% paid on invoice 27011328.	Amount:	\$66,272.99	Component Description:	See attachment page 6 for diagram /comments. 50% Auxilliary Transmission Line included in Inv & PO Line 9. Invoice & Purchase Order are for 10 sites.	Amount:	\$66,272.99
Component Description:	50% Auxilliary Transmission Line Initial 50% paid on invoice 27011328.								
Amount:	\$66,272.99								
Component Description:	See attachment page 6 for diagram /comments. 50% Auxilliary Transmission Line included in Inv & PO Line 9. Invoice & Purchase Order are for 10 sites.								
Amount:	\$66,272.99								

Cost
Information

Tower Equipment and Rigging Costs

Where no predetermined cost estimate is available, any estimate provided will also become the predetermined cost (displayed in italics).

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Primary Tower TOWER	\$210,500.00	\$373,543.18		\$259,118.88	
Tall Tower (greater than 500')	\$210,500.00	\$373,543.18	See attached antenna narrative with quotes	\$259,118.88	N/A
Sub-total	\$210,500.00	\$373,543.18	N/A	\$259,118.88	N/A
Total for all systems	\$3,501,574.80	\$2,680,779.89	N/A	\$2,327,434.50	N/A

Components

Actual Information	
Description	File Name

Tall Tower (greater than 500')

Component Description:

Primary/Tall Tower Installation for Auxilliary Antenna, See attach pg. 2 for payment details. PO Line 10. Purchase Order are for 10 sites. \$72,347.29

Amount:

Component Description:

See attachment page 6 for diagram /comments. 50% Primary/Tall Tower Installation for Primary Antenna included in Inv & PO Line 10. Invoice & Purchase Order are for 10 sites. \$114,424.29

Amount:

Component Description:

See attachment page 6 for diagram /comments. 50% Primary/Tall Tower Installation for Auxilliary Antenna included in Inv & PO Line 10. Invoice & Purchase Order are for 10 sites. \$72,347.30

Amount:

Cost Information

Outside Professional Services

Where no predetermined cost estimate is available, any estimate provided will also become the predetermined cost (displayed in italics).

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Outside Professional Services	\$93,275.00	\$182,539.64		\$125,689.91	
Additional Legal Expenses	<i>\$24,500.00</i>	\$24,500.00	Estimate for legal expenses for non-catalog advice and review including transition status reports and other miscellaneous legal needs.	\$4,335.01	N/A
FAA consultant, including cost of preparing FAA Form 7460 (Notice of Proposed Construction), if needed for height increase	\$2,105.00	\$2,000.00	N/A	N/A	N/A
ASR modification (prepare FCC Form 854)	\$2,105.00	\$2,000.00	N/A	N/A	N/A
Attorney Fees - Prepare and File request for Special Temporary Authorization	\$3,680.00	\$3,500.00	N/A	N/A	N/A

Attorney Fees - Prepare and File FCC Form 2100 (main), License to Cover Application	\$2,365.00	\$2,250.00	N/A	N/A	N/A
Attorney Fees - Aux Antenna, prepare and File Form 2100 Construction Permit or License Application	\$4,210.00	\$4,000.00	N/A	\$0.00	N/A
Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	\$5,260.00	\$5,000.00	N/A	N/A	N/A
Prepare request for Special Temporary Authorization	\$2,050.00	\$1,500.00	N/A	N/A	N/A
RF Consulting Engineer Fees- Aux Antenna: Prepare engineering section of FCC Form 2100, License to Cover Application	\$1,580.00	\$1,500.00	N/A	N/A	N/A

Prepare engineering section of FCC Form 2100 (main), License to Cover Application	\$1,580.00	\$1,500.00	N/A	N/A	N/A
RF Consulting Engineer Fees- Aux Antenna: Prepare engineering section of FCC Form 2100, Construction Permit Application	\$2,105.00	\$2,000.00	N/A	\$525.00	N/A
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	\$3,155.00	\$3,000.00	N/A	\$1,687.50	N/A
Perform engineering study for new channel assignment and antenna development	\$7,360.00	\$2,000.00	N/A	\$750.00	N/A
Address transition timing and coordination issues w/ other stations and wireless	\$2,630.00	\$2,500.00	N/A	N/A	N/A
Prepare and or review reimbursement form	\$2,630.00	\$2,500.00	N/A	\$102.76	N/A

Project management of the transition	\$18,960.00	\$115,789.64	See attachment "WUNG Program Designer - Manager Narrative" for details on estimated cost Amendment #3 attached to Invoice 157570 Amendment #4 attached to Invoice 160595	\$115,789.64	N/A
Tower Structural Analysis	\$7,000.00	\$7,000.00	N/A	\$2,500.00	N/A
Sub-total	\$93,275.00	\$182,539.64	N/A	\$125,689.91	N/A
Total for all systems	\$3,501,574.80	\$2,680,779.89	N/A	\$2,327,434.50	N/A

Components

Actual Information	
Description	File Name
Additional Legal Expenses	<p>Component Description:</p> <p>Outside Professional Services Additional Legal Expenses Legal services benefit entire FCC Repack project across all 11 Call Signs/Facility IDs, 572.90/11 equal 52.08 as outlined on page 1 of invoice.</p> <p>Amount: \$52.08</p>

Component Description:	Outside Professional Services Additional Legal Expenses Legal services benefit entire FCC Repack project across all 11 Call Signs/Facility IDs, 2594.40/11 equal 235.86 as outlined on page 1 of invoice.
Amount:	\$235.86

Component Description:	Outside Professional Services Additional Legal Expenses Invoice applies to all 11 repack stations, amount requested reflects portion payable per Station: \$70.00/11 as indicated on page 1 of Invoice
Amount:	\$6.36

Component Description:	Outside Professional Services Additional Legal Expenses Legal services benefit entire FCC Repack project across all 11 Call Signs/Facility IDs, 959.50/11 equal 87.23 as outlined on page 1 of invoice.
Amount:	\$87.23

Component Description:	Outside Professional Services Additional Legal Expenses
Amount:	\$109.50

Component Description:	Outside Professional Services Additional Legal Expenses
Amount:	\$67.40

Component Description:	Outside Professional Services Additional Legal Expenses
Amount:	\$182.50

Component Description:	Outside Professional Services Additional Legal Expenses
Amount:	\$36.50

Component Description:	Outside Professional Services Additional Legal Expenses
Amount:	\$67.40

Component Description:	Outside Professional Services Additional Legal Expenses
Amount:	\$70.00

Component Description:	Outside Professional Services Additional Legal Expenses Legal services benefit entire FCC Repack project across all 11 Call Signs/Facility IDs, 402.00/11 equal 36.54 as outlined on page 1 of invoice.
Amount:	\$36.54

Component Description:	Outside Professional Services Additional Legal Expenses
Amount:	\$33.70

Component Description:	Outside Prof. Svcs Additional Legal Expenses
Amount:	\$73.00

Component Description:	Outside Professional Services Additional Legal Expenses
Amount:	\$280.00

Component Description:

Outside
Professional
Services Additional
Legal Expenses
Legal services
benefit entire FCC
Repack project
across all 11 Call
Signs/Facility IDs,
2059.90/11 equal
187.26 as outlined
on page 1 of
invoice.

Amount:

\$187.26

Component Description:

Outside
Professional
Services Additional
Legal Expenses
Legal services
benefit entire FCC
Repack project
across all 11 Call
Signs/Facility IDs,
765.00/11 equal
69.54 as outlined
on page 1 of
invoice.

Amount:

\$69.54

Component Description:

Outside
Professional
Services Additional
Legal Expenses
Legal services
benefit entire FCC
Repack project
across all 11 Call
Signs/Facility IDs,
1617.10/11 equal
147.01 as outlined
on page 1 of
invoice.

Amount:

\$147.01

Component Description:

Outside
Professional
Services Additional
Legal Expenses
Legal services
benefit entire FCC
Repack project
across all 11 Call
Signs/Facility IDs,
323.00/11 equal
29.36 as outlined
on page 1 of
invoice.

Amount:

\$29.36

Component Description:

Outside
Professional
Services Additional
Legal Expenses
Legal services
benefit entire FCC
Repack project
across all 11 Call
Signs/Facility IDs,
315.00/11 equal
28.64 as outlined
on page 1 of
invoice.

Amount:

\$28.64

Component Description:

Outside
Professional
Services Additional
Legal Expenses

Amount:

\$35.00

Component Description:	Outside Professional Services Additional Legal Expenses Legal services benefit entire FCC Repack project across all 11 Call Signs/Facility IDs, 175.00/11 equal 15.91 as outlined on page 1 of invoice.
Amount:	\$15.91

Component Description:	Outside Professional Services Additional Legal Expenses
Amount:	\$105.00

Component Description:	Outside Professional Services Additional Legal Expenses
Amount:	\$219.00

Component Description:	Outside Professional Services Additional Legal Expenses
Amount:	\$35.00

Component Description:	Outside Professional Services Additional Legal Expenses
Amount:	\$539.20

Component Description:	Outside Professional Services Additional Legal Expenses
Amount:	\$70.00

Component Description:	Outside Professional Services Additional Legal Expenses
Amount:	\$70.00

Component Description:	Outside Professional Services Additional Legal Expenses Legal services benefit entire FCC Repack project across all 11 Call Signs/Facility IDs, 350.00/11 equal 31.82 as outlined on page 1 of invoice.
Amount:	\$31.82

Component Description:	Outside Professional Services Additional Legal Expenses 6 /05 thru 6/24 1.30 times 365.00
Amount:	\$474.50

Component Description:	Outside Professional Services Additional Legal Expenses
Amount:	\$683.50

Component Description:	Outside Professional Services Additional Legal Expenses Legal services benefit entire FCC Repack project across all 11 Call Signs/Facility IDs, 3472.00/11 equal 315.64 as outlined on page 1 of invoice.
Amount:	\$315.64

Component Description:	Outside Professional Services Additional Legal Expenses Legal services benefit entire FCC Repack project across all 11 Call Signs/Facility IDs, 368.00/11 equal 33.45 as outlined on page 1 of invoice.
Amount:	\$33.45

Component Description:	Outside Professional Services Additional Legal Expenses Legal services benefit entire FCC Repack project across all 11 Call Signs/Facility IDs, 67.40/11 equal 6.13 as outlined on page 1 of invoice.
Amount:	\$6.13

Component Description:	Outside Professional Services Additional Legal Expenses Legal services benefit entire FCC Repack project across 10 of 11 Call Signs/Facility IDs, 3378.88/10 equal 337.89 as outlined on page 1 of invoice.
Amount:	\$337.89

Component Description:	Outside Professional Services Additional Legal Expenses Legal services benefit entire FCC Repack project across all 11 Call Signs/Facility IDs, 168.50/11 equal 15.32 as outlined on page 1 of invoice.
Amount:	\$15.32

Component Description:	Outside Professional Services Additional Legal Expenses Invoice applies to all 11 repack stations, amount requested reflects portion payable per Station: \$245.00/11 as indicated on page 1 of Invoice
Amount:	\$22.27

FAA consultant, including cost of preparing FAA Form 7460 (Notice of Proposed Construction), if needed for height increase	Information not provided.
ASR modification (prepare FCC Form 854)	Information not provided.
Attorney Fees - Prepare and File request for Special Temporary Authorization	Information not provided.
Attorney Fees -Prepare and File FCC Form 2100 (main), License to Cover Application	Information not provided.
Attorney Fees - Aux Antenna, prepare and File Form 2100 Construction Permit or License Application	<div> <div>Component Description:</div> <div>Outside Professional Services Attorney Fees CP Aux Antenna 6/28/2019 .</div> </div> <div> <div>Amount:</div> <div>30 times 365.00</div> <div>\$109.50</div> </div>
Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	Information not provided.
Prepare request for Special Temporary Authorization	Information not provided.
RF Consulting Engineer Fees- Aux Antenna: Prepare engineering section of FCC Form 2100, License to Cover Application	Information not provided.
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	Information not provided.

RF Consulting Engineer Fees- Aux Antenna: Prepare engineering section of FCC Form 2100, Construction Permit Application	Component Description: Amount:	Outside Prof Svcs Consult Engineer CP for Aux \$525.00
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	Component Description: Amount:	Outside Professional Services Engineering Section FCC Form 2100 Construction Permit Application (Main/Primary) \$1,687.50
Perform engineering study for new channel assignment and antenna development	Component Description: Amount:	Outside Professional Services Engineering Study New Channel Assignment Antenna Development \$750.00
Address transition timing and coordination issues w/ other stations and wireless	Information not provided.	

<p>Prepare and or review reimbursement form</p>	<table> <tr> <td data-bbox="687 87 1102 786">Component Description:</td><td data-bbox="1102 87 1426 786"> <p>Outside Professional Services Prepare Reimbursement Wages & Employer Portion Social Security for Temp Employee. Tasks applicable to all 11 repack sites, amount requested reflects portion payable per site.</p> </td></tr> <tr> <td data-bbox="687 674 1102 786">Amount:</td><td data-bbox="1102 674 1426 786">\$102.76</td></tr> </table>	Component Description:	<p>Outside Professional Services Prepare Reimbursement Wages & Employer Portion Social Security for Temp Employee. Tasks applicable to all 11 repack sites, amount requested reflects portion payable per site.</p>	Amount:	\$102.76				
Component Description:	<p>Outside Professional Services Prepare Reimbursement Wages & Employer Portion Social Security for Temp Employee. Tasks applicable to all 11 repack sites, amount requested reflects portion payable per site.</p>								
Amount:	\$102.76								
<p>Project management of the transition</p>	<table> <tr> <td data-bbox="687 786 1102 1234">Component Description:</td><td data-bbox="1102 786 1426 1234"> <p>Outside Professional Services Project Management See attachment pg. 3 & 4 for Project Summary</p> </td></tr> <tr> <td data-bbox="687 1122 1102 1234">Amount:</td><td data-bbox="1102 1122 1426 1234">\$9,022.50</td></tr> <tr> <td data-bbox="687 1234 1102 2134">Component Description:</td><td data-bbox="1102 1234 1426 2134"> <p>Outside Prof Svcs Proj Mgmt of Transition See attach pg. 2-5 for Contract/Invoice Summary. Amendment #3 on pg. 6. 12,800 divided by 11 equal 1,164.64 for 7 sites, 1,164.63 for 4 sites. PO/Contract for all eleven transmitter sites.</p> </td></tr> <tr> <td data-bbox="687 1816 1102 2134">Amount:</td><td data-bbox="1102 1816 1426 2134">\$2,285.64</td></tr> </table>	Component Description:	<p>Outside Professional Services Project Management See attachment pg. 3 & 4 for Project Summary</p>	Amount:	\$9,022.50	Component Description:	<p>Outside Prof Svcs Proj Mgmt of Transition See attach pg. 2-5 for Contract/Invoice Summary. Amendment #3 on pg. 6. 12,800 divided by 11 equal 1,164.64 for 7 sites, 1,164.63 for 4 sites. PO/Contract for all eleven transmitter sites.</p>	Amount:	\$2,285.64
Component Description:	<p>Outside Professional Services Project Management See attachment pg. 3 & 4 for Project Summary</p>								
Amount:	\$9,022.50								
Component Description:	<p>Outside Prof Svcs Proj Mgmt of Transition See attach pg. 2-5 for Contract/Invoice Summary. Amendment #3 on pg. 6. 12,800 divided by 11 equal 1,164.64 for 7 sites, 1,164.63 for 4 sites. PO/Contract for all eleven transmitter sites.</p>								
Amount:	\$2,285.64								

Component Description:	Outside Proj Svcs Proj Mgmt of Transition PO for eleven multiple sites See attach pg 3-6 for Contract /Invoice summary
Amount:	\$1,394.20

Component Description:	Outside Professional Services Project Management of Transition See attachment pg 3-5 for Contract/Invoice Summary.
Amount:	\$4,795.66

Component Description:	Outside Professional Services Project Management of Transition See attachment pg. 3-6 for Contract/Invoice Summary. PO /Contract for all eleven transmitter sites.
Amount:	\$3,545.38

Component Description:	Outside Professional Services Project Management of Transition See attachment pg 3-5 for Contract/Invoice Summary.
Amount:	\$46,536.60

Component Description:	Outside Professional Services Project Management of Transition See attachment pg 3-5 for Contract/Invoice Summary.
Amount:	\$11,093.20

Component Description:	Outside Professional Svcs Proj Mgmt of Transition PO for eleven multiple sites See attach pg 2-7 for Contract /Invoice summary
Amount:	\$1,089.00

Component Description:	Outside Prof Services Project Management See Contract/Invoice summary for 11 sites attach pgs 5- 15
Amount:	\$4,600.00

Component Description:	Outside Professional Services Project Management of Transition See attachment pg 3-5 for Contract/Invoice Summary.
Amount:	\$4,053.78

Component Description:	Outside Professional Services Project Management of Transition See attachment pg. 3-6 for Contract/Invoice Summary. PO /Contract for all eleven transmitter sites.
Amount:	\$2,154.20

Component Description:	Outside Professional Services Project Management of Transition See attachment pg 3-6 for Contract/Invoice Summary. PO /Contract for all eleven transmitter sites.
Amount:	\$9,591.32

Component Description:	Outside Professional Services Project Management
Amount:	\$9,022.50

Component Description:	Outside Prof Svcs Project Mgmt Attach pg 1-2 Invoice Attach pg 3- 19 Contracts Attach pg 10-30 Project Summary
Amount:	\$3,040.00

	<p>Component Description:</p> <p>Outside Professional Services Project Management of Transition See attachment pg 3-5 for Contract/Invoice Summary. PO /Contract for all eleven transmitter sites.</p> <p>Amount:</p> <p>\$4,795.66</p>	
	<p>Component Description:</p> <p>Outside Professional Svcs Proj Mgmt of Transition PO for eleven multiple sites See attach pg 2-7 for Contract /Invoice summary</p> <p>Amount:</p> <p>\$1,089.00</p>	
	<p>Component Description:</p> <p>Outside Professional Services Project Management See attachment pg. 3 & 4 for Project Summary</p> <p>Amount:</p> <p>\$6,703.50</p>	
Tower Structural Analysis	<p>Component Description:</p> <p>Outside Professional Services Tower Structural Analysis See attachment page 7 for schedule of services.</p> <p>Amount:</p> <p>\$2,500.00</p>	

Cost Information

Other Expenses

Where no predetermined cost estimate is available, any estimate provided will also become the predetermined cost (displayed in italics).

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Other Expenses	\$683,179.80	\$677,629.80		\$646,778.35	
Mechanical Construction	<i>\$261,895.40</i>	\$261,895.40	See the attached WUNG GC Budget for more details See Heartland 18865WUNG-9	\$261,895.40	N/A
Main Antenna System	<i>\$5,164.60</i>	\$5,164.60	Fine matcher assemblies required for antenna system to meet the required performance specifications	\$5,164.60	N/A
General Construction	<i>\$153,698.19</i>	\$153,698.19	See the attached document WUNG GC Budget for more details See Heartland 18865WUNG-9	\$153,698.19	N/A

Electrical Construction	\$160,005.91	\$160,005.91	See the attached document WUNG GC Budget for more details See Heartland 18865WUNG-9	\$160,005.90	Budget Revision
MVPD Notification of Channel Change	\$5,500.00	\$5,500.00	Preliminary estimate of services	\$463.64	N/A
Develop and air announcement of upcoming channel change	\$2,000.00	\$2,000.00	Preliminary estimate	N/A	N/A
Equipment Delivery and Handling Charges	\$6,000.00	\$6,000.00	Preliminary estimate	N/A	N/A
Disposal Costs (for equipment and other waste, net of any salvage value)	\$71,153.10	\$71,153.10	Per invoiced cost from competitive bid process.	\$55,588.05	N/A
DTV Medical Facility Notification	\$11,550.00	\$6,000.00	Preliminary estimate of services	\$3,750.00	N/A
Antenna Aux Other	\$5,164.60	\$5,164.60	See RFS Inv 27011704 with attached quote	\$5,164.60	N/A
Network Switch	\$1,048.00	\$1,048.00	See attachment - WUNG Network Switch Justification	\$1,047.97	N/A

Sub-total	\$683,179.80	\$677,629.80	N/A	\$646,778.35	N/A
Total for all systems	\$3,501,574.80	\$2,680,779.89	N/A	\$2,327,434.50	N/A

Components

Actual Information Description	File Name
Mechanical Construction	<p>Component Description: Mechanical Contract See attach pg 1 for invoice details and project recon.</p> <p>Amount: \$13,094.77</p> <p>Component Description: Mechanical/HVAC Contract PO for multiple sites</p> <p>Amount: \$136,610.00</p> <p>Component Description: Other Expenses Mechanical Contract Attachment pg 1 specifics of payment Attachment pg 2-8 Vendor supplied invoice Attachment pg 9 begins PO Summary & associated documentation. PO for multiple sites.</p> <p>Amount: \$9,370.23</p>

	<p>Component Description:</p> <p>Other Expenses Mechanical Contract Payment details begin on attachment pg 11. PO for multiple sites.</p> <p>Amount:</p> <p>\$3,659.40</p>
	<p>Component Description:</p> <p>Other Expenses Mechanical Contract Payment details begin on attachment pg 4. PO for multiple sites.</p> <p>Amount:</p> <p>\$93,917.00</p>
	<p>Component Description:</p> <p>Other Expenses Mechanical Contract Payment details begin on attachment pg 27. PO for multiple sites.</p> <p>Amount:</p> <p>\$5,244.00</p>
Main Antenna System	<p>Component Description:</p> <p>Main Antenna Fine Matchers See attached quote</p> <p>Amount:</p> <p>\$5,164.60</p>
General Construction	<p>Component Description:</p> <p>General Contract See attach pg 1 for invoice details and project recon.</p> <p>Amount:</p> <p>\$7,684.91</p>

Component Description:	General Contract PO for multiple sites
Amount:	\$37,637.10

Component Description:	Other Expenses Electrical Contract Attachment pg 1 specifics of payment Attachment pg 2-10 Vendor supplied invoice Attachment pg 11 begins PO Summary & associated documentation. PO for multiple sites.
Amount:	\$3,325.00

Component Description:	Other Expenses General Contract Attachment pg 1 specifics of payment Attachment pg 2-8 Vendor supplied invoice Attachment pg 9 begins PO Summary & associated documentation. PO for multiple sites.
Amount:	\$22,642.92

Component Description:	Other Expenses General Contract Payment details begin on attachment pg 11. PO for multiple sites.
Amount:	\$10,450.00

	Component Description:	Other Expenses General Contract Payment details begin on attachment pg 14. PO for multiple sites.
	Amount:	\$11,931.88
	Component Description:	General Contract PO for multiple sites
	Amount:	\$29,953.50
	Component Description:	Other Expenses General Contract Payment details begin on attachment pg 4. PO for multiple sites.
	Amount:	\$26,623.69
	Component Description:	Other Expenses General Contract Payment details begin on attachment pg 27. PO for multiple sites.
	Amount:	\$3,449.19
<hr/>		
Electrical Construction	Component Description:	Electrical Contract See attach pg 1 for invoice details, project recon.
	Amount:	\$8,000.29
	Component Description:	Electrical Contract PO for multiple sites
	Amount:	\$37,602.90

Component Description:	Other Expenses Electrical Contract Attachment pg 1 specifics of payment Attachment pg 2-8 Vendor supplied invoice Attachment pg 9 begins PO Summary & associated documentation. PO for multiple sites.
Amount:	\$40,280.00

Component Description:	Other Expenses Electrical Contract Payment details begin on attachment pg 14. PO for multiple sites.
Amount:	\$13,846.44

Component Description:	Other Expenses Electrical Contract Payment details begin on attachment pg 4. PO for multiple sites.
Amount:	\$58,844.62

Component Description:	Other Expenses Electrical Contract Payment details begin on attachment pg 27. PO for multiple sites.
Amount:	\$1,431.65

MVPD Notification of Channel Change	<p>Component Description: MVPD Notify See attach pg. 12-13 \$5,100 for 11 sites equal 463.64 each</p> <p>Amount: \$463.64</p>
Develop and air announcement of upcoming channel change	Information not provided.
Equipment Delivery and Handling Charges	Information not provided.
Disposal Costs (for equipment and other waste, net of any salvage value)	<p>Component Description: Final Invoice Main Disposal See attach pg 1 for payment details</p> <p>Amount: \$20,011.50</p> <p>Component Description: Final Invoice Aux Disposal See attach pg 1 for payment details.</p> <p>Amount: \$15,565.05</p> <p>Component Description: 50% Disposal Aux Transmitter. Purchase Order for all 11 sites.</p> <p>Amount: \$15,565.05</p> <p>Component Description: 50% Disposal Main Transmitter. Purchase Order for all 11 sites.</p> <p>Amount: \$20,011.50</p>

DTV Medical Facility Notification	<div data-bbox="707 174 1011 210">Component Description:</div> <div data-bbox="1147 174 1362 327">Medical Notification, PO /Quote for multiple Call/Locations.</div> <div data-bbox="707 336 815 367">Amount:</div> <div data-bbox="1147 336 1265 367">\$3,750.00</div>
Antenna Aux Other	<div data-bbox="707 506 1011 542">Component Description:</div> <div data-bbox="1147 506 1356 620">Aux Antenna Fine Matchers See attached quote</div> <div data-bbox="707 627 815 658">Amount:</div> <div data-bbox="1147 627 1265 658">\$5,164.60</div>
Network Switch	<div data-bbox="707 799 1011 835">Component Description:</div> <div data-bbox="1147 799 1378 1030">Other Expenses Network Switch 11 Switches for total of 11,527.67 equals 1,047.97 per transmitter site.</div> <div data-bbox="707 1039 815 1070">Amount:</div> <div data-bbox="1147 1039 1265 1070">\$1,047.97</div>

Cost Information	Grand Total		
		Predetermined Cost Estimate	Estimated Cost
			Actual Cost
	Total for all systems	\$3,501,574.80	\$2,680,779.89
			\$2,327,434.50

Reimbursement Status	Question	Response
	The facility has ceased operating on its pre-auction channel.	Yes
	Construction of final facilities or all necessary modifications are complete.	Yes
	All receipts for reimbursement have been submitted no further costs are expected to be incurred. Note this will lock the Form 399 from further editing and begin close-out procedures with the Fund Administrator.	No

Certification	Section	Question	Response
	Submission of Estimated Expenses Statements	<p>WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND /OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a) (1), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503), AND ANY FALSE STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT.</p>	
		<ol style="list-style-type: none"> 1. The Authorized Person signing below certifies that he /she is authorized to submit this TV Broadcaster Relocation Fund Reimbursement Form on behalf of the above-named entity. 2. The above-named entity acknowledges that all certifications and attached documentation are considered material representations. 3. The above-named entity acknowledges the submission of the information herein creates no obligation on the part of the government to pay any amount. 	

4. The above-named entity certifies that the equipment and services paid for with money from the TV Broadcaster Relocation Fund are necessary to change channels (broadcasters) or to continue to carry the signal of a broadcaster that changes channels (MVPD).
5. The above-named entity certifies that all payments from the TV Broadcaster Relocation Fund (Fund) received by the entity listed on this form will be used only for expenses that are eligible for reimbursement from the Fund.
6. The above-named entity certifies that it will maintain and provide to the Commission detailed records, including receipts, of all costs eligible for reimbursement actually incurred.
7. The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission.

<p>8. The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a pre-requisite for obtaining the payments herein requested.</p>	
<p>I declare, under penalty of perjury, that I am an authorized representative of the above-named applicant for the Authorization(s) specified above.</p>	<p>Donald Smith <i>Director of New Technologies Compliance & Planning</i></p> <p>11/19/2020</p>

Certification	Section	Question	Response
	Submission of Actual Cost Documentation Statements	<p>WILLFUL FALSE, FRAUDULENT, OR FICTITIOUS STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a) (1), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503), AND ANY FALSE AND/OR FRAUDULENT STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT (U.S. CODE, TITLE 31, SECTIONS 3729-3733).</p>	
		<ol style="list-style-type: none"> 1. The Authorized Person signing below certifies and represents that he /she is authorized to submit this TV Broadcaster Relocation Fund Reimbursement Form on behalf of the above-named entity. 2. The above-named entity certifies that the statements in this form and attached documentation are true, complete, and correct. 3. The above-named entity acknowledges that all certifications and attached documentation are considered material representations. 	

4. The above-named entity acknowledges the submission of the information herein creates no obligation on the part of the government to pay any amount.
5. The above-named entity certifies that the equipment and services paid for with money from the TV Broadcaster Relocation Fund are necessary to change channels (full power and Class A stations) and/or otherwise modify a television station's facility as a result of the spectrum repack (LPTV/TV Translator stations); or to minimize service disruption resulting from a repacked television station (FM stations); or to continue to carry the signal of a broadcaster that changes channels (MVPD) .
6. The above-named entity certifies that all payments from the TV Broadcaster Relocation Fund (Fund) received by the entity listed on this form will be used only for expenses that are eligible for reimbursement from the Fund.
7. The above-named entity certifies that the cost information /documents submitted reflect costs actually incurred.

<p>8. The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission.</p> <p>9. The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a prerequisite for obtaining the payments herein requested.</p>	
<p>I declare, under penalty of perjury, that I am an authorized representative of the above-named applicant for the Authorization(s) specified above.</p>	<p>Robert Levin <i>Director of Finance and Administration</i></p> <p>11/19/2020</p>

Certification	Section	Question	Response
	Submission of Final Allocation or Accounting Information Statements	<p>WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND /OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a) (1), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503), AND ANY FALSE STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT.</p>	
		<ol style="list-style-type: none"> 1. The Authorized Person signing below certifies and represents that he /she is authorized to submit this TV Broadcaster Relocation Fund Reimbursement Form on behalf of the above-named entity. The above-named entity acknowledges that all certifications and attached documentation are considered material representations. 2. The above-named entity acknowledges the submission of the information herein creates no obligation on the part of the government to pay any amount. 	

3. The above-named entity certifies that all costs identified as "actual costs" herein accurately represent the costs actually paid by the above-named entity, including any discounts, refunds, or rebates.
4. The above-named entity certifies that all payments from the TV Broadcaster Relocation Fund (Fund) received by the entity listed on this form will be used only for expenses that are eligible for reimbursement from the Fund.
5. The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission.
6. The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a pre-requisite for obtaining the payments herein requested.

I declare, under penalty of perjury, that I am an authorized representative of the above-named applicant for the Authorization(s) specified above.

**Robert
Levin**
*Director of
Finance &
Administration*

11/19/2020

Attachments