

Federal Communications Commission

# (REFERENCE COPY - Not for submission)

# FCC Form 399: Reimbursement Request

Facility <b>594</b> S ID: File <b>000002</b> Number:	Service: <b>DTV</b> 8737	Call Sign:	WITN-TV	Channel: <b>34 (UHF)</b>
FRN: 0018223693	Date Submitted:	11/07 /2019		

#### Applicant Name, Type, and Contact Information Applicant Information Applicant Address Phone Email **Applicant Type GRAY TELEVISION** WITN-TV +1 (252) robert. Limited Liability LICENSEE, LLC 275 E. 439-7777 folliard@gray. Company Arlington tv Blvd Greenville, NC 27858 **United States**

### Reimbursement Contact Name and Information Reimbursement Contact Information

Applicant	Address	Phone	Email
[Confidential]			

Preparer	Preparer Contac	t Name and Inform	nation	
Contact Information	Applicant	Address	Phone	Email
	Samuel Hariton Widelity	Samuel Hariton 4031 University Dr Suite 100 Fairfax, VA 22030 United States	+1 (339) 222-8107	sam.hariton@widelity.com

Broadcaster	Question	Response
Information and Transition Plan	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.	Yes
	Briefly describe transition plan	WITN will be transitioning from channel 32 to channel 34. The station will be replacing its existing antenna, transmitter. The station will be installing an interim transmitter, antenna, and transmission line.

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

Primary	Existing Transmitter Information			
Transmitter	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		
	Manufacturer and Type	Model	Sigma CD	
		Year	2003	
		Туре	Inductive Output Tube	
		IOT Power Type	Тwo	
		Power Capacity	52 kW	

# **Existing Transmitter Information**

Primary	New Transmitter Costs		
Transmitter	Section	Question	Response
	New Transmitter	Use	Primary (Main)
		Change Type Is this a request for upgraded equipment?	Purchase New
			Yes
		Manufacturer	
		Model	ULXTE-120
		Transmitter Type	Solid State
		Solid State Cooling	Liquid Cooled
		Solid State Power capacity	75.1 kW
		Justification for New Transmitter	Existing transmitter can't be retuned. Solid state replacement is cheaper than IOT replacement.

# **Other Transmitter Costs**

### Primary Transmitter 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	Yes
	Description	The new transmitter will require reconfiguration of the electrical service on site. The electrical work cost has been estimated based on verbal guidance from local electrical contractors.
HVAC Service	Does the replacement transmitter require HVAC Service?	No
	Туре	N/A
	Size	N/A
	Other Size	N/A
Transmitter Building Addition/Modification or Leasehold	Does the Transmitter Building require an addition, modification, other leashold improvement?	No
Improvement	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	Other Transmitter Cost Not Listed		
Transmitter	Name	Description	
	Pad and Ice Shield for Heat Exchangers	Pad and Ice Shield for New Heat Exchangers/Transformers	

Interim	New Transmitter Costs		
Transmitter	Section	Question	Response
	New Transmitter	Use	Interim
		Description of Use	N/A
		Manufacturer ULX	Purchase
		Model	ULXTE80
		Transmitter Type	Solid State
		Solid State Cooling	Liquid Cooled
		Solid State Power capacity	50.1 kW
		Justification for New Transmitter	Interim transmitter needed to continue broadcasting through the transition period.

Interim	Other Transmitter Cost	S	
Transmitter	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	Yes
			1

	Description	The new transmitter will require reconfiguration of the electrical service on site. The electrical work cost has been estimated based on verbal guidance from local electrical contractors.
HVAC Service	Does the replacement transmitter require HVAC Service?	No
	Туре	N/A
	Size	N/A
	Other Size	N/A
Transmitter Building Addition/Modification or Leasehold	Does the Transmitter Building require an addition, modification, other leashold improvement?	No
Improvement	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
Inside RF System	Is an additional interior RF system required to support this interim transmitter?	No

# Interim Other Transmitter Cost Not Listed

**Transmitter** Information not provided.

Antennas Section		Question	Response
Antenna Rela	ated Expenses	Do you have antenna related expenses?	Yes

Primary	Existing Antenna Information			
Antenna	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	Class	Full Power	
	Manufacturer and Type	Mounting	Top Mount	
		Antenna position in stack	Тор	
		Polarization	Horizontal	
		Туре	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)	795.0 kW	

Manufacturer	
Model	TFU30GTH- R-06
Year	2003

Primary	New Antenna Costs			
Antenna	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?	Yes	
		Ownership	Owned	
		Owner	N/A	
		Is antenna shared?	No	
New Antenna Manufacturer and Types		Is antenna directional?	No	
		Will antenna be located on or in close proximity to an antenna farm?	No	
		Class	Full Power	
	Manufacturer and Types	Mounting	Top Mount	
		Antenna position in stack	Тор	
		Polarization	Elliptical	
		Туре	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)	828.0 kW	
		Manufacturer		
			1	

Model	TFU-30GTH /VP-R 06
Year	2017
Justification for New Antenna	Existing antenna is single channel and cannot be retuned to the new channel.

# Other Antenna Costs

# Primary Antenna

Section	Question	Response
Combiner for Shared Antenna	Do you need a Combiner for a Shared Antenna?	No
	Туре	
	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	Yes
	transmission line and antenna?	

Primary	Other Antenna Cost Not Listed		
Antenna	Name	Description	
	Top Plate Adapter	Adapter for the top of the tower to match the bolt pattern of the antenna	

Interim	New Antenna Costs			
Antenna	Section	Question	Response	
	New Antenna Description	Use	Interim	
		Description of Use	N/A	
		Change Type	Purchase New	
		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	Class	Full Power	
	Manufacturer and Type	Mounting	Side Mount	
		Antenna position in stack	Not in Stack	
		Polarization	Elliptical	
		Туре	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)	300.0 kW	
		Manufacturer		
		Model	TFU26DSC- R-04-TC	
		Year	2017	

Justification for New Antenna	Interim
	antenna needed to continue broadcasting during transition period.

# Interim Antenna Section

Section	Question	Response
Elbow Complex	Do you require the separate purchase of the Elbow Complex?	Yes
	Broadband or Single Channel?	В
	Feed Line Size	6 1/8 inches
Side Mount Brackets	Do you require the separate purchase of side mount brackets for an antenna?	Yes
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

# Enter a list of RF channel numbers.

RF Channel Number 34 32 33

Interim	Other Antenna Cost Not Listed		
Antenna	Name	Description	
	Splitter	Splitter at antenna	

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

# Existing Transmission Line Primary Existing Transmission

missio	n Line Section	Question	Response
	Existing Transmission Line Description	Type of change	Utilize Existing
		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	Manufacturer	Dielectric
	Line Manufacturer and Type	Туре	Rigid
		Diameter	7 3/16 inches
		Other Diameter	N/A
		Segment Length	Other
		Other Segment Length	18.76 feet
		Number of parallel runs	1
		Length	2000 feet per run

# Primary Other Transmission Line Expenses Not Listed Transmission

SIO	Name	Description	
	Sweep Test	Sweep test needed for existing transmission line.	
	Sweep Test Adapter Rental	Rental of transmission line adapter for sweep test of existing transmission line.	

### Interim Transmission Question Response **New Transmission Line** Use Interim Costs Description of Use N/A Change Type Purchase New Туре Rigid Diameter 6 1/8 inches Segment Length Broadband Other Segment Length Number of parallel runs 1 1747 feet Length per run Justification for New Transmission Line Interim transmission line needed to continue broadcasting during transition period

### New Transmission Line

Other Transmission Line Expenses Not Listed Transmission

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

# **Existing Tower**

Primary	Existing Tower					
Tower	Section	Question	Response			
	Existing Tower	Type of change	Modify Existing			
	Description	Tower Use	Primary (Main)			
		Description of Use	Modify Existing         Primary (Main)         N/A         Owned         Yes         Yes         No         Yes         No         Yes         1006359         35° 21' 55.9" N-         077° 23' 34.6" W-         1984.88 feet         1856.93 feet			
		Ownership	Owned			
		Is this tower consider Complex?				
		Is this tower currently shared with any other stations?	Yes			
		One or more FM, AM or TV radio broadcaster(s)	Yes			
		Others Types of Users	No			
		Is tower documented for structural analysis?	Yes			
		Is tower compliant with Rev G?	No			
	Existing Tower	Do you have a tower registration number?	Yes			
	Structure Registration	ASR Number	1006359			
	Coordinates (NAD83 (	Latitude (NAD83)	35° 21' 55.9" N-			
	North American Datum of 1983))	Longitude (NAD83)	Modify Existing         Primary (Main)         N/A         Owned         Yes         Yes         Yes         No         Yes         No         Yes         No         Yes         1006359         35° 21' 55.9" N-         077° 23' 34.6" W-         1984.88 feet			
		Overall Structure Height	1984.88 feet			
		Support Structure Height	1856.93 feet			
		Ground Elevation Above Mean Sea Level (AMSL)	25.92 feet			
			25.92 feet			

Structure Type	GTOWER - Guyed Structure Used for Communication Purposes
Tower Owner	Tall Towers, Inc.
Date Constructed	02/12/2016

# FM, AM or TV radio broadcasters. Facility ID's, **Call Signs and Services of** other broadcast stations with whom the tower is shared

Facility ID	Call Sign	Service
64609	WERO	FM
54388	WNCT-FM	FM
57838	WNCT-TV	DTV

#### **Tower Modification Costs** Primarv

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Section	Question	Response
Engineering Study	Please what type of engineering study is required, if any:	Study needed for documented tower
Tower Reinforcements	Please select whether tower reinforcements are needed:	Serious Reinforcements needed

#### **Tower Rigging Costs** Primary

# Tower

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

Primary Tower	Other Tower Expenses Not Listed		
	Name	Description	
	Tower Mapping	Mapping for tower	

Outside	Section	Question	Response
Professional	Services Costs Outside Project Management Services	Do you require outside project management services?	Yes
		Number of Hours	900
		Explanation	Strategic Support
	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	No
		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
	Services	For Auxiliary Facility	No
		For Main Facility	Yes
		Prepare and file Form FCC License to Cover Application	Yes
		For Auxiliary Facility	No
		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

# Outside Other Professional Services Expenses Not Listed

Professional	Services Costs	Description	
	Attorney Fees - Other Matters	Legal Services	
	Attorney Fees - Other Matters	Legal Services (2)	

Other	Section	Question	Response
Expenses	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	Yes
		BLM or NFS Coordination	No
		FCC Construction Permit Minor Change	Yes
		FCC License to Cover Application	Yes
		FCC Special Temporary Authority Application	Yes
	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?	Yes
		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 Not Listed

Other Expenses	Other Expenses Not Listed				
	Name	Description			
	Security	Security at site while equipment is being stored.			

# Transmitters

# Cost Information

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

	Predetermined	Estimated	Estimated Cost		Actual Cost
Description	Cost Estimate	Cost	Justification	Actual Cost	Justification
Interim Transmitter ULXTE80	\$1,349,914.03	\$1,349,914.03		\$0.00	
UHF - Liquid Cooled Solid State Transmitter 50.1 kW	\$1,347,914.03	\$1,347,914.03	N/A	N/A	N/A
Other Electrical Service: The new transmitter will require reconfiguration of the electrical service on site. The electrical work cost has been estimated based on verbal guidance from local electrical contractors.	\$2,000.00	\$2,000.00	N/A	N/A	N/A
Primary Transmitter ULXTE-120	\$2,071,991.92	\$2,071,991.92		\$1,847,550.10	
Pad and Ice Shield for Heat Exchangers	\$39,654.00	\$39,654.00	See attached T. D. Goodwin Construction quote	\$25,781.28	N/A

UHF - Liquid Cooled Solid State Transmitter 75.1 kW	\$1,954,587.92	\$1,954,587.92	N/A	\$1,821,768.82	N/A
Other Electrical Service: The new transmitter will require reconfiguration of the electrical service on site. The electrical work cost has been estimated based on verbal guidance from local electrical contractors.	\$77,750.00	\$77,750.00	See Pitt Electric Quote	N/A	N/A
Sub-total	\$3,421,905.95	\$3,421,905.95	N/A	\$1,847,550.10	N/A
Total for all systems	\$6,311,898.95	\$6,050,605.14	N/A	\$3,565,339.89	N/A

# Components

Actual Information Description	File Name
UHF - Liquid Cooled Solid State Transmitter 50.1 kW	Information not provided.
Other Electrical Service: The new transmitter will require reconfiguration of the electrical service on site. The electrical work cost has been estimated based on verbal guidance from local electrical contractors.	Information not provided.

Pad and Ice Shield for Heat Exchangers	Component Description: Amount:	8/15/19welded angle iron \$1,181.28
	Component Description: Amount:	Labor and materials to build and install 8' x 20' iceshield 10' high \$24,600.00
UHF - Liquid Cooled Solid State Transmitter 75.1 kW	Component Description: Amount:	ULXTE-120 Transmitter \$1,364,501.66
	Component Description: Amount:	ULXTE-120 Transmitter \$457,267.16
Other Electrical Service: The new transmitter will require reconfiguration of the electrical service on site. The electrical work cost has been estimated based on verbal guidance from local electrical contractors.	Information not provided.	

# Antennas

# Cost Information

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
Interim Antenna TFU26DSC- R-04-TC	\$354,780.00	\$324,714.00		\$110,304.70	
Splitter	\$0.00	\$0.00	Cost included with combiner system	N/A	N/A
Elbow complex, broadband, at antenna input, per 6 1/8. feedline (if needed)	\$13,700.00	\$12,768.00	N/A	\$6,041.20	N/A
New combiner, cost per channel (without antenna)	\$84,200.00	\$45,000.00	See attached Jim Heard email "WITN- Gray- Nexstar- Update" regarding combiner /splitter cost. Includes cost of splitter at antenna	N/A	N/A
Sweep test of existing antenna	\$6,730.00	\$6,400.00	N/A	\$3,520.00	N/A

Side mount brackets for high power antennas (if not included in antenna base cost)	\$23,150.00	\$19,520.00	N/A	\$10,736.00	N/A
UHF - Lower Power Side Mount, One station antenna 200-500 kW, elliptically or circularly polarized	\$227,000.00	\$241,026.00	See vendor quote JEHQ1306	\$90,007.50	N/A
Primary Antenna TFU-30GTH /VP-R 06	\$328,082.00	\$265,863.00		\$134,854.77	
UHF - High Power Top Mount (200-1000 kW), One station antenna , elliptically or circularly polarized	\$289,500.00	\$227,143.00	N/A	\$113,558.77	N/A

Elbow complex, single channel, at antenna input, per 6 1/8. feedline (if needed)	\$12,300.00	\$12,768.00	JEHQ1278- 01	\$7,022.40	N/A
Top Plate Adapter	\$19,552.00	\$19,552.00	N/A	\$10,753.60	N/A
Sub-total	\$682,862.00	\$590,577.00	N/A	\$245,159.47	N/A
Total for all systems	\$6,311,898.95	\$6,050,605.14	N/A	\$3,565,339.89	N/A

# Components

Actual Information Description	File Name	
Splitter	Information not provided.	
Elbow complex, broadband, at antenna input, per 6 1/8. feedline (if needed)	Component Description: Amount:	WITN-280-Interim Antenna - Elbow Complex, 6 1/8" \$2,746.00
	Component Description: Amount:	Elbow Complex Interim Antenna \$3,295.20
New combiner, cost per channel (without antenna)	Information not provided.	

Sweep test of existing antenna	Component Description: Amount:	WITN-280-Interim Antenna - Sweep Test \$1,600.00		
	Component Description: Amount:	Sweep Test Interim Antenna \$1,920.00		
Side mount brackets for high power antennas (if not included in antenna base cost)	Component Description: Amount:	WITN-280-Interim Antenna - Side Mount Brackets \$4,880.00		
	Component Description: Amount:	Side Mount Brackets Interim Antenna \$5,856.00		
UHF - Lower Power Side Mount, One station antenna 200-500 kW, elliptically or circularly polarized	Component Description: Amount:	UHF-LOW POWER SIDE MOUNT \$40,912.50		
	Component Description: Amount:	UHF-Low Power Side Mount \$49,095.00		

Mount (200-1000 kW), One station antenna , elliptically or circularly polarized	Component Description:	UHF-HIGH POWER TOP MOUNT (200-
	Amount:	1000KW) \$51,617.62
	Component Description:	UHF-High Pow Top Mount
	Amount:	\$61,941.15
Sweep test of existing antenna		
	Component Description:	WITN-210- Primary Antenn - Sweep Test
	Amount:	\$1,600.00
	Component Description:	Sweep Test Ne
	Amount:	Primary Antenn \$1,920.00
Elbow complex, single		
channel, at antenna input, per 6 1/8. feedline (if needed)	Component Description:	WITN-210- Primary Antenn
	Amount	- Elbow Comple 6 1/8" \$3 192 00
	Amount:	\$3,192.00
	Component Description:	New Primary Antenna Elbow
		Complex

Top Plate Adapter		
	<b>Component Description:</b>	WITN-210-
		Primary Antenna
		- Top Plate
		Adapter
	Amount:	\$4,888.00
	Component Description	Now Primory
	Component Description:	New Primary
		Antenna Top
		Plate
	Amount:	\$5,865.60

# **Transmission Line**

### Cost Information

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
Interim Transmission Line	\$405,304.00	\$275,216.00		\$141,323.14	
Rigid Transmission Line - copper, 6 1 /8" broadband	\$405,304.00	\$275,216.00	N/A	\$141,323.14	N/A
Primary Transmission Line	\$9,200.00	\$9,200.00		\$956.66	
Sweep Test Adapter Rental	\$2,800.00	\$2,800.00	See vendor invoice.	\$956.66	N/A
Sweep Test	\$6,400.00	\$6,400.00	N/A	N/A	N/A
Sub-total	\$414,504.00	\$284,416.00	N/A	\$142,279.80	N/A
Total for all systems	\$6,311,898.95	\$6,050,605.14	N/A	\$3,565,339.89	N/A

### Components

Actual Information	
Description	File Name

Rigid Transmission Line - copper, 6 1/8" broadband	Component Description: Amount:	WITN-380-Interim Transmission Line - Rigid Copper, Broadband, 6 1/8" \$64,237.78
	Component Description: Amount:	Interim Transmission Line \$77,085.36
Sweep Test Adapter Rental		
	Component Description: Amount:	Scissor Lift 19FT Narrow Elec \$956.66
	Component Description: Amount:	Transmitter Tuning \$2,800.00
Sweep Test	Information not provided.	

# **Tower Equipment and Rigging Costs**

### Cost Information

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

	Predetermined	Estimated	Estimated Cost		Actual Cost
Description	Cost Estimate	Cost	Justification	Actual Cost	Justification
Primary Tower GTOWER	\$1,503,550.00	\$1,483,671.69		\$1,249,228.52	
Complex Tower (includes, for example, those with candelabras and/or stacked antennas)	\$421,000.00	\$469,121.69	Complex tower - Stacked Antennas. Catalog Cost; GTI America Inc., Quote #Q17-06- 012b	\$284,908.52	N/A
Serious tower reinforcement /modifications	\$1,052,000.00	\$980,600.00	Please see Turris Engineering Inc. proposal 19- 0029	\$931,570.00	N/A
Tower Mapping	\$17,950.00	\$17,950.00	See attached quote from Turris Engineering Inc.	\$17,950.00	N/A
Structural engineering tower load study for well documented tower	\$12,600.00	\$16,000.00	Initial plus two additional studies for shared tower	\$14,800.00	N/A
Sub-total	\$1,503,550.00	\$1,483,671.69	N/A	\$1,249,228.52	N/A
Total for all systems	\$6,311,898.95	\$6,050,605.14	N/A	\$3,565,339.89	N/A

#### Components

Actual Information Description	File Name	
Complex Tower (includes, for example, those with candelabras and/or stacked antennas)	Component Description: Amount:	Mobilize crew to WITN tower \$61,505.26
	Component Description: Amount:	Tower Rigging Service \$106,216.27
	Component Description: Amount:	Dates completed 6 /22 and 6/23/19 \$4,900.00
	Component Description:	Remove existing top mounted Ch 32 TFU30 antenna
	Amount:	\$112,286.99
Serious tower reinforcement /modifications	Component Description: Amount:	30% In Progress Payment During Field Installation \$294,180.00
	Component Description:	25% Down payment Due Upon acceptance
	Amount:	of order \$245,150.00
	Component Description: Amount:	Tower Reinforcing Project \$392,240.00

Tower Mapping		
	Component Description:	Equipment
		mapping
	Amount:	\$8,975.00
	Component Description:	Equipment
		mapping
	Amount:	\$8,975.00
Structural engineering tower load study for well documented tower	Component Description:	Specific Wind Study & Structural Re-Analysis and
		Report
	Amount:	\$6,000.00
	Component Description:	Tower Structural Analysis Report for load case
	Amount:	specified \$8,800.00
		ψ0,000.00

### **Outside Professional Services**

#### Cost Information

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	\$180,187.00	\$169,412.00		\$78,012.00	
Attorney Fees - Other Matters	\$962.00	\$962.00	Please see attachment WITN-TV Justification Attorney Fees - Other Matters COMB	\$962.00	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
RF Consulting Engineer Fees- Aux Antenna: Prepare engineering section of FCC Form 2100, Construction Permit Application	\$2,105.00	\$700.00	Please see the invoice Chesapeake RF Consultants, LLC. Invoice #5172	\$700.00	N/A

Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	\$3,155.00	\$3,000.00	N/A	\$1,462.50	N/A
Perform engineering study for new channel assignment and antenna development	\$7,360.00	\$7,000.00	N/A	\$2,687.50	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
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 - Prepare and File FCC Form 2100 (main), Construction Permit Application	\$5,260.00	\$5,000.00	N/A	\$758.00	N/A
Prepare request for Special Temporary Authorization	\$2,050.00	\$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
Project management of the transition	\$142,200.00	\$135,000.00	N/A	\$71,442.00	N/A
Prepare and or review reimbursement form	\$2,630.00	\$2,500.00	N/A	N/A	N/A
Sub-total	\$180,187.00	\$169,412.00	N/A	\$78,012.00	N/A
Total for all systems	\$6,311,898.95	\$6,050,605.14	N/A	\$3,565,339.89	N/A

# Components

Actual Information Description	File Name	
Attorney Fees - Other Matters	Component Description: Amount:	Review linked set for WITN \$962.00

FAA consultant, including cost of preparing FAA Form 7460 (Notice of Proposed Construction), if needed for height increase	Information not provided.	
RF Consulting Engineer Fees- Aux Antenna: Prepare engineering section of FCC Form 2100, Construction Permit Application	Component Description:	WITN-530-Outside Professional Services - Engineering Consulting Services - RF Eng - Construction Permit Application (AUX) \$700.00
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	Component Description:	review proposal fo interim antenna and develop final ERP and parameters for CP application \$1,462.50

Perform engineering study for new channel	Component Description:	Review antenna
assignment and antenna development		manufacturer's
development		alternative
		proposal re: top-
		mount antenna,
		due to structural loading
	Amount:	\$250.00
	Component Description:	Consulting
		Engineer
	Amount:	\$275.00
	Component Description:	Discuss top-moun
		antenna size, gair
		and required TPC
	Amount:	\$625.00
	Component Description:	RF Engineering
		Consulting
	Amount:	\$125.00
	Component Description:	Perform
		engineering study
		for new channel
		assignment
	Amount:	\$1,287.50
	Component Description:	Respond to query
		re: repack Ch-34
		non-maximized
		ERP and
		corresponding TPO.
	Amount:	\$125.00
Address transition timing	Information not provided.	
and coordination issues w/		
other stations and wireless		

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 - Prepare and File FCC Form 2100 (main), Construction Permit Application	Component Description: Amount:	Professional Services \$758.00
Prepare request for Special Temporary Authorization	Information not provided.	
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	Information not provided.	
Project management of the transition	Component Description:	Project Management
	Amount:	\$2,624.20
	Component Description:	Project Management
	Amount:	\$3,155.65
	Component Description:	Project Management
	Amount:	\$1,726.65
	Component Description:	Project Management
	Amount:	\$3,071.30

Component Description: Amount:	Project Management \$2,166.05
Component Description: Amount:	Project Management \$3,493.45
Component Description: Amount:	Project Management \$4,897.00
Component Description: Amount:	Project management \$2,667.65
Component Description: Amount:	Project Management \$2,478.20
Component Description: Amount:	Project management \$3,276.45
Component Description: Amount:	Project Management \$2,585.70
Component Description: Amount:	Project management \$1,328.55
Component Description: Amount:	Project Management \$28.20

Component Description: Amount:	Project Management \$2,728.40
Component Description: Amount:	Project Management \$2,375.10
Component Description: Amount:	Project Management \$770.80
Component Description: Amount:	Project Management \$1,101.45
Component Description: Amount:	Project Management \$2,377.30
Component Description: Amount:	Project management \$2,561.90
Component Description: Amount:	Project management of the transition \$600.00
Component Description: Amount:	Project Management \$1,913.90
Component Description: Amount:	Project Management \$2,386.15

**Component Description:** Project Management \$1,660.60 Amount: **Component Description:** Project Management Amount: \$2,233.15 **Component Description:** Project Management Amount: \$802.25 **Component Description:** Project Management \$2,084.35 Amount: **Component Description:** Project Management Amount: \$1,946.50 **Component Description:** Project Management Amount: \$1,899.15 **Component Description:** Project Management Amount: \$3,943.80 **Component Description:** Project Management Amount: \$2,607.10 **Component Description:** Project Management Amount: \$1,706.25

	Component Description: Amount:	Project Management \$2,244.80
Prepare and or review reimbursement form	Information not provided.	

### **Other Expenses**

#### Cost Information

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	\$108,890.00	\$100,622.50		\$2,000.00	
Develop and air announcement of upcoming channel change	\$10,000.00	\$10,000.00	N/A	N/A	N/A
Disposal Costs (for equipment and other waste, net of any salvage value)	\$33,700.00	\$33,700.00	See attached Comark quote P#4034- WITN- Equip Removal- 170825.	N/A	N/A
FCC Filing Fees - Special Temporary Authorization request	\$195.00	\$190.00	N/A	N/A	N/A
FCC Filing Fees - Form 2100 license to cover application	\$335.00	\$325.00	N/A	N/A	N/A
FCC Filing Fees - Form 2100 minor change CP application	\$1,110.00	\$1,110.00	Per WITN- TV Justification FCC Filing Fee CP App	N/A	N/A
Security	\$12,000.00	\$12,000.00	N/A	N/A	N/A

MVPD Notification of Channel Change	\$2,000.00	\$2,000.00	Justifying Quote - Wiley Rein MVPD quote	\$2,000.00	N/A
Non-zoning permits	\$11,000.00	\$11,000.00	N/A	N/A	N/A
Equipment Storage	\$12,000.00	\$12,000.00	N/A	N/A	N/A
Equipment Delivery and Handling Charges	\$15,000.00	\$15,000.00	N/A	\$0.00	N/A
DTV Medical Facility Notification	\$11,550.00	\$3,297.50	N/A	N/A	N/A
Sub-total	\$108,890.00	\$100,622.50	N/A	\$2,000.00	N/A
Total for all systems	\$6,311,898.95	\$6,050,605.14	N/A	\$3,565,339.89	N/A

## Components

Actual Information Description	File Name
Develop and air announcement of upcoming channel change	Information not provided.
Disposal Costs (for equipment and other waste, net of any salvage value)	Information not provided.
FCC Filing Fees - Special Temporary Authorization request	Information not provided.
FCC Filing Fees - Form 2100 license to cover application	Information not provided.

FCC Filing Fees - Form 2100 minor change CP application		WITN-610-FCC Filing Fee - CP
	Amount:	Application \$1,110.00
Security	Information not provided.	
MVPD Notification of Channel Change	Component Description: Amount:	Prepare MVPD notification letter for WITN. \$2,000.00
Non-zoning permits	Information not provided.	
Equipment Storage	Information not provided.	
Equipment Delivery and Handling Charges	Information not provided.	
DTV Medical Facility Notification	Information not provided.	

Cost Information	Grand Total				
		Predetermined Cost Estimate	Estimated Cost	Actual Cost	
	Total for all systems	\$6,311,898.95	\$6,050,605.14	\$3,565,339.89	

Reimbursem	entestiatus	Response
	The facility has ceased operating on its pre- auction channel.	No
	Construction of final facilities or all necessary modifications are complete.	No
	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	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.	
		<ol> <li>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.</li> <li>The above-named</li> </ol>	
		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).
- 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.

er is wi ru ar re wi a ob	ne above-named ntity certifies that it in full compliance th all statutes, les, regulations and governmental quirements for nich compliance is pre-requisite for otaining the ayments herein quested.	
an autho	, under penalty of perjury, that I am rized representative of the above- pplicant for the Authorization(s) above.	Robert Folliard , III Assistant Secretary 11/07/2019

Certification	Section	Question	Response
	Submission of Actual Cost Documentation Statements	WILLFUL FALSE, FRAUDULENT, OR FICTITIOUS STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND /OR IMPRISIONMENT (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).	
		<ol> <li>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.</li> </ol>	
		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).
- 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.

8.	The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission.	
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.	
an aut nameo	are, under penalty of perjury, that I am horized representative of the above- d applicant for the Authorization(s) ied above.	Robert Folliard , III Assistant Secretary 11/07/2019

#### Attachments

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