

(REFERENCE COPY - Not for submission)

# FCC Form 399: Reimbursement Request

Facility 73136 Service: DTV Call WJHG-TV Channel: 16 (UHF)

Sign:

File **0000028739** 

Number:

ID:

FRN: **0018223693** Date **02/18** 

Submitted: /2019

# Applicant Information

#### **Applicant Name, Type, and Contact Information**

Applicant	Address	Phone	Email	Applicant Type
GRAY TELEVISION LICENSEE, LLC	WJHG 8195 FRONT BEACH ROAD PANAMA CITY, FL 32407 United States	+1 (850) 234-7777	robert. folliard@gray. tv	Limited Liability Company

# Reimbursement Contact Name and Information Reimbursement Contact Information

Applicant	Address	Phone	Email	
[Confidential]				

#### Preparer Contact Information

#### **Preparer Contact Name and 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 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.	Yes
Briefly describe transition plan	See attached narrative

### **Transmitters**

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

## Primary Transmitter

### **Existing Transmitter Information**

Section	Question	Response
Existing Transmitter Description	Type of change	Retune Existing
	Use	Primary (Main)
	Ownership	Owned
	Owner	N/A
	Is this transmitter currently shared with another station?	No
	Is this transmitter currently in operating condition?	Yes
Existing Transmitter	Manufacturer	GatesAir
Manufacturer and Type	Model	Maxiva ULXT-80AT UHV
	Year	2014

Туре	Solid State
Solid State Cooling	Liquid Cooled
Solid State Power capacity	54.8 kW

## Primary Transmitter

# **Retuning Transmitter Costs**

Section	Question	Response
New IOT Tubes	Number of Tubes (including accessories) needed	N/A
New Mask Filter	Power	Other
	Other Power	50 kW
New Exciter	Is a new exciter needed?	No

## 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
	Туре	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 leashold 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 Information not provided.

#### **Other Transmitter Cost Not Listed**

#### Interim **Transmitter**

#### **New Transmitter Costs**

Section	Question	Response
New Transmitter	Use	Interim
	Description of Use	N/A
	Change Type	Purchase
	Manufacturer	
	Model	ULXTE-12
	Transmitter Type	Solid State
	Solid State Cooling	Liquid Cooled
	Solid State Power capacity	6.46 kW

Justification for New Transmitter	Interim
	transmitter
	installed at
	the alternate
	transmitter
	site needed
	to continue
	broadcasting
	through the
	transition
	period

#### Interim 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	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 Improvement	Does the Transmitter Building require an addition, modification, other leashold 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
Inside RF System	Is an additional interior RF system required to support this interim transmitter?	No

#### Interim Transmitter

#### **Other Transmitter Cost Not Listed**

Name	Description	
Microwave Components	Microwave Dishes, Line, etc.	
Microwave Radios	STL Extension to alternate transmitter site	
Monitoring	Monitoring for Interim transmitter	
Concrete Slab	10'x10' Slab	
Generator Repairs	It needs to be repaired	

#### **Antennas**

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

### **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?	Yes
	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	Side Mount
	Antenna position in stack	Not in Stack
	Polarization	Elliptical
	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)	1000.0 kW

Manufacturer	
Model	TFU-28JSC /VP-R 4C140 D18
Year	2014

#### **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?	Yes
	Will antenna be located on or in close proximity to an antenna farm?	No
New Antenna	Class	Full Power
Manufacturer and Types	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)	1000.0 kW
	Manufacturer	
		1

Model	TFU-28JSC /VP-R C140
Year	2017
Justification for New Antenna	The existing antenna is for channel 18 only and will not work for the designated re-pack channel 16.

#### **Other Antenna Costs**

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?	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

#### **Other Antenna Cost Not Listed**

Name	Description
Sweep Test Primary Chan 18 Antenna	Sweep test of existing channel 18 antenna to determine if it can be used for new repack channel

#### Interim Antenna

### **New Antenna Costs**

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?	Yes
	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	Horizontal
	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)	72.0 kW
	Manufacturer	
	Model	TLP16B
	Year	2017

Justification for New Antenna	Interim
	antenna
	needed to
	continue
	broadcasting
	through the
	transition
	period
	•

#### Interim Antenna

#### **Other Antenna Costs**

Section	Question	Response
Elbow Complex	Do you require the separate purchase of the Elbow Complex?	No
	Broadband or Single Channel?	N/A
	Feed Line Size	N/A
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

#### Interim Antenna

#### **Other Antenna Cost Not Listed**

Name	Description
Sweep Test Existing Antenna and Line	Sweep test of existing antenna/line at auxiliary site to determine viability on new repack channel

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

# Primary Transmission Se

### **Existing Transmission Line**

on 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	
	Туре	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	1400 feet per run

#### **New Transmission Line**

Primary	J
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Transmission Line Question Response **New Transmission Line** Use Primary Costs (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 Length 1400 feet per run Justification for New Transmission Line Sweep on existing line measured 490.460 MHz. Channel 16 needs to be within the range of 482 MHz and 488 MHz, line must be replaced.

Primary
Other Transmission Line Expenses Not Listed
Transmission of provided.

### Interim

#### **New Transmission Line**

Transmissio	n <mark>Line</mark> n	Question	Response
	New Transmission Line	Use	Interim
	Costs	Description of Use	N/A
		Change Type	Purchase New
		Туре	Flexible Air
		Diameter	3 inches
		Segment Length	N/A
		Other Segment Length	
		Number of parallel runs	1
		Length	825 feet per run
		Justification for New Transmission Line	Performed Line Sweep on existing 4" Rigid Line and it measured 490 MHz. The range for Channel 16 is 482 MHz - 488 MHz.

# Interim

# Other Transmission Line Expenses Not Listed

Transmission	n Naine	Description
	Sweep Existing Transmission Line	Sweep test of existing transmission line to determine if it is suitable for use

#### Tower Equipment And Rigging Costs

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

## Auxiliary Tower

#### **Add Tower**

Section	Question	Response
Existing Tower Description	Type of change	Modify Existing
	Tower Use	Auxiliary (Backup)
	Description of Use	Alternate Tower Site
	Ownership	Owned
	Is this tower consider Complex?	No
	Is this tower currently shared with any other stations?	Yes
	One or more FM, AM or TV radio broadcaster(s)	No
	Others Types of Users	Yes
	Is tower documented for structural analysis?	No
	Is tower compliant with Rev G?	No
Existing Tower Structure	Do you have a tower registration number?	No
Registration	ASR Number	
Coordinates (NAD83 ( North American Datum of	Latitude (NAD83)	30° 26' 00.1" N-
1983))	Longitude (NAD83)	085° 24' 51.0" W-
	Overall Structure Height	1499.98 feet
	Support Structure Height	1499.98 feet

Ground Elevation Above Mean Sea Level (AMSL)	138.12 feet
Structure Type	TOWER - Free Standing or Guyed Structure
Tower Owner	Gray Television Group, Inc.
Date Constructed	01/01/1962

# Other Types of Users

Users	
US Customs	

## Auxiliary Tower

#### **Tower Modification Costs**

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:	Major Reinforcements needed

## Auxiliary Tower

# **Tower Rigging Costs**

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

## Auxiliary Tower

## Other Tower Expenses Not Listed

Information not provided.

## Primary Tower

## **Existing Tower**

Section	Question	Response
Existing Tower Description	Type of change	Modify Existing
	Tower Use	Primary (Main)
	Description of Use	N/A
	Ownership	Leased
	Is this tower consider Complex?	No
	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	Yes
	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	1043251
Coordinates (NAD83 ( North American Datum	Latitude (NAD83)	30° 21' 09.0" N-
of 1983))	Longitude (NAD83)	085° 23' 28.0" W-
	Overall Structure Height	1465.53 feet
	Support Structure Height	1403.20 feet
	Ground Elevation Above Mean Sea Level (AMSL)	78.74 feet
	Structure Type	TOWER - Free Standing or Guyed Structure

Tower Owner	Nexstar Broadcasting, Inc.
Date Constructed	08/01/1990

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
42372	WPFM	FM
66398	WMBB	DTV

#### **Other Types of Users**

Users	
Verizon	

#### Primary Tower

#### **Tower Modification Costs**

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:	Major Reinforcements needed

#### 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

Name	Description
Microwave Installation	Installation of Microwave Gear on towers

### Outside Professional

Section	Question	Response
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	No
	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	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	No
	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 Professional

# Other Professional Services Expenses Not Listed

I Services Costs	Description
RF Engineer-Microwave Link	Develop technical parameters for new 13 GHz duplex microwave system and commercial frequency coordination

# 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	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

## Other Expenses Not Listed

Name	Description
Antenna Storage Cost	Antenna storage cost at Dielectric prior to shipment to station
Emergency Road Repair	Immediate repairs to access road to reach out to final facility to complete repack work

# **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
Interim Transmitter ULXTE-12	\$420,333.26	\$449,198.36		\$398,010.88	
Monitoring	\$5,975.00	\$5,975.00	N/A	N/A	N/A
Microwave Radios	\$114,301.10	\$114,301.10	N/A	\$96,767.79	N/A
Microwave Components	\$21,636.96	\$21,636.96	N/A	N/A	N/A
Generator Repairs	\$1,208.20	\$1,208.20	N/A	N/A	N/A
Concrete Slab	\$1,712.00	\$1,712.00	N/A	\$0.00	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	\$1,789.93	N/A

UHF - Liquid Cooled Solid State Transmitter 4.9 . 6.5 kW	\$273,500.00	\$302,365.10	Gates Air quote: Q- 73509 Fuqua & Sons PO: 1617	\$299,453.16	N/A
Primary Transmitter Maxiva ULXT- 80AT UHV	\$189,071.09	\$115,053.34		\$78,496.22	
UHF and VHF - minor banding issues	\$105,200.00	\$31,182.25	GA- 00021465	\$21,930.51	N/A
Other 50 kW mask filter	\$83,871.09	\$83,871.09	Includes shipping and state and local taxes	\$56,565.71	N/A
Sub-total	\$609,404.35	\$564,251.70	N/A	\$476,507.10	N/A
Total for all systems	\$2,946,787.63	\$2,666,035.74	N/A	\$1,307,877.83	N/A

### Components

Actual Information Description	File Name	
Monitoring	Information not provided.	
Microwave Radios		
	Component Description:  Amount:	13GHz IPLink HS STL, TSL IPLi GHz high RF output hot standby duplex IP microwave terminal w/ data throughout licensable to 360 Mbps full duplex. \$96,767.79
Microwave Components	Information not provided.	

Generator Repairs	Information not provided.	
Concrete Slab	Component Description:	Construct 10X10
	Component Becompacin.	equipment pad.
	Amount:	\$1,600.00
Other Electrical Service: The new transmitter will require reconfiguration of the electrical service on site.	Component Description:	Transmitter - demo circuite no
The electrical work cost has been estimated based on		longer in use/ Wiring for transmitter
verbal guidance from local electrical contractors.	Amount:	\$1,789.93
UHF - Liquid Cooled Solid State Transmitter 4.9 . 6.5		
kW	<b>Component Description:</b>	UXLTE-12
		Transmitter
	Amount:	\$89,297.45
	Component Description:	Installation of roof structure over
		equipment tower
		site.
	Amount:	\$1,795.00
	Component Description:	ULXTE-12
		Transmitter
	Amount:	\$208,360.71
UHF and VHF - minor		
banding issues	<b>Component Description:</b>	Transmitter
		UXLTD-80
		Retuning
	Amount:	\$21,930.51

Other 50 kW mask filter		
	Component Description:	New Mask Filter
		for Existing
		Primary
		Transmitter
	Amount:	\$56,565.71

# **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
Interim Antenna TLP16B	\$124,130.00	\$90,342.65		\$35,764.88	
UHF - Lower Power Side Mount, One station antenna - medium power (50- 200 kW), horizontally polarized	\$89,400.00	\$75,099.65	N/A	\$24,226.88	N/A
Sweep test of existing antenna	\$6,730.00	\$6,400.00	N/A	\$5,120.00	N/A
Sweep Test Existing Antenna and Line	\$4,850.00	\$4,850.00	See attached quote	\$2,425.00	N/A
Side mount brackets for high power antennas (if not included in antenna base cost)	\$23,150.00	\$3,993.00	DTVPros Invoice # 152-4	\$3,993.00	N/A
Primary Antenna TFU-28JSC /VP-R C140	\$298,484.92	\$276,497.72		\$150,271.58	

UHF - High Power, Side Mount, basic slot antenna, 1000 kW input, directional,, elliptically or circularly polarized	\$248,104.92	\$248,104.92	N/A	\$122,878.78	N/A
Elbow complex, single channel, at antenna input, per 6 1/8. feedline (if needed)	\$12,300.00	\$7,660.80	Per DTV Pros quote JEHQ1231- 02	\$7,660.80	Per DTV Pros quote JEHQ1231- 02
Side mount brackets for high power antennas (if not included in antenna base cost)	\$23,150.00	\$6,132.00	Included in antenna cost	\$10,512.00	Side Mount Brackets for Primary Antenna
Sweep Test Primary Chan 18 Antenna	\$8,200.00	\$8,200.00	See attached invoice.	\$4,100.00	invoice
Sweep test of existing antenna	\$6,730.00	\$6,400.00	N/A	\$5,120.00	N/A
Sub-total	\$422,614.92	\$366,840.37	N/A	\$186,036.46	N/A
Total for all systems	\$2,946,787.63	\$2,666,035.74	N/A	\$1,307,877.83	N/A

Actual Information Description	File Name	
UHF - Lower Power Side Mount, One station antenna - medium power (50-200 kW), horizontally polarized	Component Description:	UHF - Low Power Side Mount TV Ant TLP16B
	Amount:	\$6,601.52
	Component Description: Amount:	25% payment on Interim Antenna \$5,507.93
	Component Description: Amount:	Interim Antenna \$6,609.51
	Component Description:  Amount:	UHF Low Power Side Mount TV Antenna TLP16B \$5,507.92
Sweep test of existing antenna	Component Description: Amount:	Sweep Test Auxiliary Antenna \$1,600.00
	Component Description: Amount:	Sweep Test New Interim Antenna \$1,600.00
	Component Description: Amount:	Sweep test Aux. Antenna \$1,920.00
Sweep Test Existing Antenna and Line	Component Description:	Sweep Test of Existing Auxiliary
	Amount:	Transmission Line \$2,425.00

Side mount brackets for high power antennas (if not included in antenna base cost)

Component Description: Side mount

brackets Interim

Antenna

**Amount:** \$1,088.04

Component Description: Interim Antenna

Side mount bracket

**Amount:** \$907.80

Component Description: Side Mount

Brackets for Lower

Power Antenna

**Amount:** \$907.80

Component Description: Site mount bracket

**Amount:** \$1,089.36

UHF - High Power, Side Mount, basic slot antenna, 1000 kW input, directional,, elliptically or circularly polarized

Component Description:

Please deny this

invoice

Amount:

N/A

**Component Description:** 

Primary Antenna -UHF - High Power

Side mount

Amount:

\$71,679.29

**Component Description:** 

UHF High Power side mount

Amount:

\$51,199.49

**Component Description:** 

Primary Antenna Elbow Complex

Amount:

**Amount:** 

**Amount:** 

Amount:

**Amount:** 

\$4,468.80

**Component Description:** 

Primary Antenna Side-Mount

Brackets \$6,132.00

**Component Description:** 

Please deny this

invoice

N/A

Elbow complex, single channel, at antenna input, per 6 1/8. feedline (if needed)

**Component Description:** 

Elbow Complex for

Primary Antenna

\$4,468.80

**Component Description:** 

Elbow Complex for

Primary Antenna

\$3,192.00

Side mount brackets for nigh power antennas (if not ncluded in antenna base cost)	Component Description:	Side Mount Brackets for
,	Amount:	Primary Antenna \$6,132.00
	Component Description:	Side Mount Brackets for
	Amount:	Primary Antenna \$4,380.00
Sweep Test Primary Chan 18 Antenna		
TO AIRCHINA	Component Description:	Sweep test of existing primary
	Amount:	antenna system \$4,100.00
Sweep test of existing		
antenna	Component Description:	Sweep test Interim
		Antenna
	Amount:	\$1,280.00
	Component Description:	Sweep Test of
		New Primary
	Amount:	Antenna \$2,240.00
	Amount.	φ∠,∠40.00
	Component Description:	New Primary
		Antenna, Sweep
		Test

### **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
Interim Transmission Line	\$61,725.00	\$53,324.65		\$40,274.65	
Flexible Air Transmission Line - dielectric, 3"	\$48,675.00	\$40,274.65	See vendor quote JEHQ1257- 01	\$40,274.65	N/A
Sweep Existing Transmission Line	\$13,050.00	\$13,050.00	See vendor invoice	\$0.00	N/A
Primary Transmission Line	\$282,800.00	\$263,955.76		\$121,887.86	
Rigid Transmission Line - copper, 6 1/8"	\$282,800.00	\$263,955.76	N/A	\$121,887.86	N/A
Sub-total	\$344,525.00	\$317,280.41	N/A	\$162,162.51	N/A
Total for all systems	\$2,946,787.63	\$2,666,035.74	N/A	\$1,307,877.83	N/A

<b>Actual Information</b>		
Description	File Name	

	Amount:	Transmission Line \$71,101.25
	Component Description:	Primary
	Amount:	\$50,786.61
Rigid Transmission Line - copper, 6 1/8"	Component Description:	New Primary Transmission Line
Sweep Existing Transmission Line	Information not provided.	
	Amount:	\$10,455.80
	Component Description:	Aux. Transmission Line
	Amount:	\$8,713.16
	Component Description:	New Auxiliary Transmission Line
	Amount:	Transmission Line \$8,713.15
	Component Description:	Interim Antenna
	Amount:	\$12,392.54
	Component Description:	Transmission Line
ine - dielectric, 3"	Component Description	Interim

### **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  Auxiliary  Tower	Predetermined Cost Estimate \$644,100.00	Estimated Cost \$599,978.95	Estimated Cost Justification	Actual Cost \$360,226.95	Actual Cost Justification
Structural engineering tower load study for well documented tower	\$12,600.00	\$15,000.00	2017-Gray- WJHG- AUX-0406- N plus invoice for \$1,750 for feasibility analysis	\$15,000.00	N/A
Tall Tower (greater than 500')	\$210,500.00	\$184,978.95	Per Quote JEHQ1302- 02 and Invoice 165	\$184,978.95	N/A
Major tower reinforcement /modifications	\$421,000.00	\$400,000.00	N/A	\$160,248.00	N/A
Primary Tower TOWER	\$670,300.00	\$579,880.00		\$51,369.40	
Tall Tower (greater than 500')	\$210,500.00	\$146,180.00	N/A	\$43,504.90	N/A
Microwave Installation	\$26,200.00	\$26,200.00	N/A	\$364.50	N/A
Major tower reinforcement /modifications	\$421,000.00	\$400,000.00	N/A	\$0.00	N/A

Structural engineering tower load study for well documented tower	\$12,600.00	\$7,500.00	N/A	\$7,500.00	N/A
Sub-total	\$1,314,400.00	\$1,179,858.95	N/A	\$411,596.35	N/A
Total for all systems	\$2,946,787.63	\$2,666,035.74	N/A	\$1,307,877.83	N/A

Actual Information Description	File Name	
Structural engineering tower load study for well documented tower	Component Description: Amount:	Structural engineering Tower Load study \$1,750.00
	Component Description:  Amount:	Structural Analysis of Auxiliary Tower \$6,625.00
	Component Description: Amount:	Tower Mapping \$6,625.00
	Component Description:	Structural engineering
	Amount:	Tower Load study \$1,750.00

Tall Tower (greater than		
500')	Component Description:	Tower rigging for
		interim antenna
	Amount:	site \$41,706,25
	Amount:	\$41,706.25
	Component Description:	Installation
	i i	services: Provide
		tower crew
	Amount:	\$125,118.75
	Component Description:	Install antennas
		and line Existing
		<b>Auxiliary Tower</b>
	Amount:	\$18,153.95
Major tower reinforcement		
modifications	<b>Component Description:</b>	Installation of
		tower lighting
		system at
	Amount:	Youngstown tower \$41,498.00
	Component Description:	Supply of new
		Dialight high
		intensity LED lighting system to
		replace existing
		red lights on tower
	Amount:	\$118,750.00
Tall Tower (greater than		
500')	Component Description:	UXA4-127DB 4FT
		13GHz
	Amount:	\$8,679.90
	Component Description:	Rig tower to 1361'
	,	for side mount
		antenna work
	Amount:	\$34,825.00

Microwave Installation		
	<b>Component Description:</b>	WJHG-410-Install
		microwave 
		equipment
		Existing Primary Tower
	Amount:	\$364.50
Major tower reinforcement /modifications	Information not provided.	
Structural engineering tower		
load study for well documented tower	Component Description:	Structural
documented tower		engineering
		Tower Load study
	Amount:	\$3,750.00
	Component Description:	Tower Mapping
	Amount:	\$3,750.00

### **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	\$177,515.00	\$168,582.50		\$63,957.05	
RF Engineer- Microwave Link	\$2,500.00	\$2,500.00	Estimate based upon anticipated billing by RF Engineer and commercial frequency coordination and PCN	\$2,170.00	N/A
FAA consultant, including cost of preparing FAA Form 7460 (Notice of Proposed Construction), if needed for height increase	\$2,105.00	\$2,332.50	Per invoices recieved	\$787.50	N/A
Attorney Fees - Prepare and File request for Special Temporary Authorization	\$3,680.00	\$3,500.00	N/A	\$1,577.50	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	\$533.00	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
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	\$3,155.00	\$3,000.00	N/A	\$2,175.00	N/A
Project management of the transition	\$142,200.00	\$135,000.00	N/A	\$54,549.05	N/A
Prepare and or review reimbursement form	\$2,630.00	\$2,500.00	N/A	\$290.00	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

Perform engineering study for new channel assignment and antenna development	\$7,360.00	\$7,000.00	N/A	\$1,875.00	N/A
Sub-total	\$177,515.00	\$168,582.50	N/A	\$63,957.05	N/A
Total for all systems	\$2,946,787.63	\$2,666,035.74	N/A	\$1,307,877.83	N/A

Actual Information  Description	File Name	
RF Engineer-Microwave Link	Component Description:	Upon conclusion of PCN period for new 13 GHz duplex microwave link between Hwy 20 and Scotts
		Ferry Rd towers, complete technical portions of FCC app.
	Amount:	\$625.00
	Component Description:	Develop technical parameters for new 13 GHz duplex microwave link between Highway 20 and Scotts Ferry Rd towers, engage frequency coordinator to identify frequency pair and issue PCN letters
	Amount:	\$1,545.00

FAA consultant, including cost of preparing FAA Form **Component Description:** Prepare and 7460 (Notice of Proposed submit FAA Form Construction), if needed for 7460-1 height increase \$425.00 Amount: **Component Description:** In support of interim repack operation at Highway 20 tower: Prepare FAA Form 7460-2 to notify that height decrease and lightning change were executed. Amount: \$175.00 **Component Description:** Processing form 7460-1 to request lighting change and notify reduction in overall height. Amount: \$187.50 Attorney Fees - Prepare and File request for Special **Component Description:** For professional **Temporary Authorization** services rendered through November 30, 2018 Amount: \$200.00 **Component Description:** WJHG Attorney STA Amount: \$1,377.50 Attorney Fees -Prepare and Information not provided. File FCC Form 2100 (main),

License to Cover Application

Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	Component Description: Amount:	WJHG Attorney CP \$533.00
Prepare request for Special Temporary Authorization	Information not provided.	
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	Information not provided.	
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	Component Description:	Develop final technical parameters for auxiliary sidemount antenna for use during transition to repack channel \$825.00
	Amount.	ψ023.00
	Component Description:	Develop final ERP and parameters for initial CP application
	Amount:	\$1,350.00
Project management of the transition		
แสทรแบท	Component Description:	Project Management
	Amount:	\$3,925.85
	Component Description:	Project
	Amount:	management \$3,846.85
	Component Description:	Project Management

**Component Description:** P

Amount:

Project

Management \$1,856.30

**Component Description:** 

Project

Amount:

Management \$1,800.00

**Component Description:** 

Project

Management

Amount:

\$3,425.10

**Component Description:** 

Project

Management

Amount:

Amount:

\$868.30

**Component Description:** 

Project

Management

\$2,632.50

**Component Description:** 

Project

management

Amount:

\$1,853.55

**Component Description:** 

**Project** 

Amount:

Management

\$3,199.95

**Component Description:** 

Project

Amount:

Management \$3,124.90

**Component Description:** 

**Project** 

Amount:

Management

\$4,079.35

**Component Description:** Project

Management

Amount:

\$5,007.90

Component Description: Transition Related

Project

**Management Costs** 

**Amount:** \$2,850.00

Component Description: Project

Management

**Amount:** \$3,150.75

Component Description: Project

Management

**Amount:** \$802.25

Component Description: Project

Management

**Amount:** \$2,556.05

Component Description: Project

management

**Amount:** \$2,442.65

Component Description: Project

Management

**Amount:** \$28.20

Component Description: Project

management

**Amount:** \$2,471.90

Component Description: Project

Management

**Amount:** \$3,637.75

Prepare and or review reimbursement form	Component Description:	Professional Services of Senior
		Specialist and Counsel
	Amount:	\$290.00
Address transition timing and coordination issues w/ other stations and wireless	Information not provided.	

Perform engineering study for new channel assignment and antenna development

Component Description: Regarding request

to change repack
Ch-16 to a later
transition phase,
conduct channel
study to determine
any relevant

linked station, provide summary

dependencies or

to counsel.

**Amount:** \$200.00

Component Description: Perform

engineering study for new channel assignment

**Amount:** \$800.00

Component Description: Review scope of

work regarding modification work of Hwy 20 tower, discuss with J

McKee.

**Amount:** \$187.50

Component Description: Perform

engineering study for new channel assignment

**Amount:** \$687.50

## **Cost Information**

#### **Other Expenses**

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

	Duadatawaii	Entire etc. d	Estimated		A a to a la Caract
Description	Predetermined Cost Estimate	Estimated Cost	Cost Justification	Actual Cost	Actual Cost Justification
Other Expenses	\$78,328.36	\$69,221.81		\$7,618.36	
Emergency Road Repair	\$5,070.00	\$5,070.00	Emergency road repair to reach out to final facility and complete repack work at the site location	\$5,070.00	N/A
FCC Filing Fees - Special Temporary Authorization request	\$195.00	\$190.00	N/A	N/A	N/A
Disposal Costs (for equipment and other waste, net of any salvage value)	\$20,000.00	\$20,000.00	For main and alternate sites	N/A	N/A
Equipment Delivery and Handling Charges	\$2,400.00	\$2,400.00	Main and alternate sites	N/A	N/A
Equipment Storage	\$6,650.00	\$6,650.00	N/A	N/A	N/A
Develop and air announcement of upcoming channel change	\$10,000.00	\$10,000.00	N/A	N/A	N/A

Antenna Storage Cost	\$19,540.00	\$19,540.00	See WJHG storage quote from Dielectric	N/A	N/A
MVPD Notification of Channel Change	\$1,478.36	\$1,478.36	Wiley Rein, Inv #1468343, #1479796	\$1,478.36	per invoices received
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	\$1,070.00	N/A	\$1,070.00	N/A
DTV Medical Facility Notification	\$11,550.00	\$2,498.45	N/A	N/A	N/A
Sub-total	\$78,328.36	\$69,221.81	N/A	\$7,618.36	N/A
Total for all systems	\$2,946,787.63	\$2,666,035.74	N/A	\$1,307,877.83	N/A

Actual Information Description	File Name	
Emergency Road Repair		
	Component Description: Amount:	Dozer, Rock, Delivery \$5,070.00
FCC Filing Fees - Special Temporary Authorization request	Information not provided.	
Disposal Costs (for equipment and other waste, net of any salvage value)	Information not provided.	

Equipment Delivery and Handling Charges	Information not provided.	
Equipment Storage	Information not provided.	
Develop and air announcement of upcoming channel change	Information not provided.	
Antenna Storage Cost	Information not provided.	
MVPD Notification of Channel Change	Component Description: Amount:	WJHG MVPD Notifications \$735.50
	Component Description:  Amount:	Professional Services \$371.43
	Component Description:  Amount:	Prepare and send updated MVPD notifications for new repack transition date. \$371.43
FCC Filing Fees - Form 2100 license to cover application  FCC Filing Fees - Form	Information not provided.	
2100 minor change CP application	Component Description:  Amount:	WJHG FCC Filing Fees 2100 CP app \$1,070.00
DTV Medical Facility Notification	Information not provided.	

# Cost Information

#### **Grand Total**

	Predetermined Cost Estimate	Estimated Cost	Actual Cost
Total for all systems	\$2,946,787.63	\$2,666,035.74	\$1,307,877.83

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

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.

- 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.

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.

I declare, under penalty of perjury, that I am an authorized representative of the abovenamed applicant for the Authorization(s) specified above. Robert Folliard Assistant Secretary

02/18/2019

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).

- 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 certifies that the statements in this form and attached documentation are true, complete, and correct.
- 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.

- 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.

I declare, under penalty of perjury, that I am an authorized representative of the abovenamed applicant for the Authorization(s) specified above. Robert Folliard Assistant Secretary

02/18/2019

#### **Attachments**