Approved by OMB (Office of Management and Budget) 3060-1178

Federal Communications Commission

(REFERENCE COPY - Not for submission)

FCC Form 399: Reimbursement Request

Facility ID: **4688** | Service: **DTV** | Call Sign: **WHSV-TV** | Channel: **20 (UHF)**

File Number: **0000036132**

FRN: **0018223693** | Date Submitted: **08/26/2019**

Applicant Information

Applicant Name, Type, and Contact Information

Applicant	Address	Phone	Email	Applicant Type
GRAY TELEVISION LICENSEE, LLC	WHSV-TV 50 NORTH MAIN STREET HARRISONBURG, VA 22802 United States	+1 (540) 433-9191	robert.folliard@gray.tv	Limited Liability Company

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
Samuel Hariton *Widelity, Inc.*	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.	No
Briefly describe transition plan	See attached narrative.

Transmitters

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	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	Ultimate /Optimum Dual Drive 5K
	Year	2002
	Type	Solid State
	Solid State Cooling	Air Cooled
	Solid State Power Capacity	5 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	MPTV-Parallax U8
	Transmitter Type	Solid State
	Solid State Cooling	Liquid Cooled
	Solid State Power capacity	13 kW
	Justification for New Transmitter	Existing transmitter cannot be retuned, therefore need a new transmitter.

Primary Transmitter

Other Transmitter Costs

Section	Question	Response
Electrical Service	Service Entrance (3 phases 800A 208V)	No
	Switchgear (industrial 800 amp)	Yes
	Transformer (480V)	No
	Power	N/A
	Rigid Conduit and Wiring	No
	Size	N/A
	Length	N/A

	Other Electrical Service	Yes
	Description	Bringing electrical service to the new site for the new transmitter because existing service at new site is insufficient.
HVAC Service	Does the replacement transmitter require HVAC Service?	Yes
	Type	Heating and Cooling
	Size	20 tons
	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

Other Transmitter Cost Not Listed

Information not provided.

Antennas

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

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?	Yes
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)	65.0 kW

Manufacturer	
Model	ALP1212-HSOC-49
Year	2002

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?	Yes
	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?	Yes
New Antenna Manufacturer and Types	Class	Full Power
	Mounting	Side Mount
	Antenna position in stack	Not in Stack
	Polarization	Elliptical
	Type	Broadband Panel
	Number of Stations Supported	1
	Number of Panels/Bays	12
	Lower Limit	470.00 MHz
	Upper Limit	608.00 MHz
	Design power capacity in use	100.0 %
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power)	271.0 kW
	Manufacturer	

	Model	ETU6U4-ESP2C-20
	Year	2018
	Justification for New Antenna	Existing antenna cannot be retuned and will be used on the existing channel during transition. Antenna provides directional pattern to protect quiet zone Green Bank, WV.

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?	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 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

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	Flexible Air
	Diameter	1 5/8 inches
	Other Diameter	N/A
	Segment Length	N/A
	Other Segment Length	N/A
	Number of parallel runs	1
	Length	485 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?	Yes
	Type	Flexible Air
	Diameter	3 inches
	Other Diameter	N/A
	Segment Length	N/A
	Other Segment Length	N/A
	Number of parallel runs	1
	Length	95 feet per run
	Justification for New Transmission Line	Relocating to a new site, require new line because the existing line will be used with existing antenna during the transition.

Primary Transmission Line

Other Transmission Line Expenses Not Listed

No 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	Construct New
	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?	No
Existing Tower Structure Registration	Do you have a tower registration number?	Yes
	ASR Number	1017951
Coordinates (NAD83 (North American Datum of 1983))	Latitude (NAD83)	38° 36' 05.0" N-
	Longitude (NAD83)	078° 37' 56.0" W-
	Overall Structure Height	336.94 feet
	Support Structure Height	299.87 feet
	Ground Elevation Above Mean Sea Level (AMSL)	2956.00 feet

Structure Type	TOWER - Free Standing or Guyed Structure
Tower Owner	Gray Television Group, Inc.
Date Constructed	12/01/1973

Primary Tower

Tower Construction Costs

Section	Question	Response
Construct New Tower	Use	Primary (Main)
	Description of Use	N/A
	Is this a request for upgraded equipment?	No
	Height	100.00 feet
	Justification for New Tower	Must change transmitter site to new location per Green Bank (NRAO), new site requires new tower.

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	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	No
	Quantity	N/A
	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	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	No
	Quantity	N/A
	NEPA Section 106 environmental review	Yes
	Environmental Assessment	Yes
	ASR Modification	Yes
	FAA Consultation (including preparation of FAA Form 7460)	Yes
	Negotiation of Lease and other Matter for Shared Locations	Yes
	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	Yes
	Number of Days	10
	Justification	Adjacent to NRAO site, need to address quiet zone issues.

Outside Professional Services Costs

Other Professional Services Expenses Not Listed

Services not provided.

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	Yes
	Non-zoning permits	Yes
	BLM or NFS Coordination	Yes
	FCC Construction Permit Minor Change	No
	FCC License to Cover Application	Yes
	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
Microwave Equipment	Microwave equipment required to delivery station's signal to new transmitter site.

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 MPTV-Parallax U8	**$702,471.97**	**$627,537.07**		**$590,506.57**	
UHF - Liquid Cooled Solid State Transmitter 8.2 - 13 kW	$494,500.00	$503,190.10	See manufacturer's quote.	$502,459.60	N/A
Switchgear - industrial 800 amp	$38,200.00	$36,300.00	N/A	N/A	N/A
Other Electrical Service: Bringing electrical service to the new site for the new transmitter because existing service at new site is insufficient.	***$54,271.97***	$54,271.97	See electrical company estimate; GenServ LLC Quote #1326 also TTM invoice 70501 for network cabling	$54,271.97	per invoices received
20 Ton system	$115,500.00	$33,775.00	Riddleberger Brothers Invoice #113133	$33,775.00	N/A
Sub-total	$702,471.97	$627,537.07	N/A	$590,506.57	N/A
Total for all systems	$1,905,081.71	$1,496,791.37	N/A	$1,212,649.50	N/A

Components

Actual Information Description	File Name
UHF - Liquid Cooled Solid State Transmitter 8.2 - 13 kW	**Component Description:** Primary Transmitter System, WHSV PRLX U8 D20 **Amount:** $178,757.60 **Component Description:** Invalid invoice **Amount:** N/A **Component Description:** Hardware **Amount:** $730.50 **Component Description:** System, WHSV PRLX U8 D20 **Amount:** $25,536.80 **Component Description:** Transmitter **Amount:** $298,165.20
Switchgear - industrial 800 amp	Information not provided.
Other Electrical Service: Bringing electrical service to the new site for the new transmitter because existing service at new site is insufficient.	**Component Description:** One Kohler Generator M #125REOZJG **Amount:** $54,216.86 **Component Description:** CAT 5 OUTDOOR, 5NF4 **Amount:** $55.11

20 Ton system	**Component Description:**	Replace Two (2) 3-ton Units with Two (2) 5-ton Bard Units
	Amount:	$33,775.00

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 ETU6U4-ESP2C-20	**$423,230.00**	**$74,642.13**		**$62,972.70**	
UHF - Lower Power Side Mount, One station antenna -- 200-500 kW, elliptically or circularly polarized	$227,000.00	$42,978.69	Per DTVPros Quote JEHQ1431-01 - the previously reimbursed amount of $25,263.44 has been removed from the previously approved amount of $68,242.13	$31,309.26	N/A
Sweep test of existing antenna	$6,730.00	$6,400.00	N/A	$6,400.00	N/A
UHF - Lower Power Side Mount, One station - 200-500 kW, horizontally polarized	$189,500.00	$25,263.44	***System Notice: Estimate adjusted and locked because line has been superseded. ***Per Quote JEHQ1431-01	$25,263.44	Please deny 174a
Sub-total	$423,230.00	$74,642.13	N/A	$62,972.70	N/A

Total for all systems	$1,905,081.71	$1,496,791.37	N/A	$1,212,649.50	N/A

Components

Actual Information Description	File Name	
UHF - Lower Power Side Mount, One station antenna -- 200-500 kW, elliptically or circularly polarized	**Component Description:**	UHF-High power broadband side mount, Field engineer, etc.
	Amount:	$12,606.19
	Component Description:	Proposal B18-1373
	Amount:	$3,545.00
	Component Description:	New Primary Antenna
	Amount:	$15,158.07

Sweep test of existing antenna	**Component Description:**	WHSV-210- Primary Antenna - Sweep Test
	Amount:	$1,280.00
	Component Description:	Sweep Test New Primary Antenna
	Amount:	$1,920.00
	Component Description:	Sweep Test New Primary Antenna
	Amount:	$1,600.00
	Component Description:	Sweep Test New Primary Antenna
	Amount:	$1,600.00
UHF - Lower Power Side Mount, One station - 200-500 kW, horizontally polarized	**Component Description:**	UHF- High Power Broadband Side Mount
	Amount:	$12,631.72
	Component Description:	Please deny this invoice
	Amount:	N/A
	Component Description:	Primary antenna; UHF-High Power broadband side mount (200-1000KW)
	Amount:	$12,631.72

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	**$5,605.00**	**$9,837.43**		**$9,837.43**	
Flexible Air Transmission Line - dielectric, 3"	$5,605.00	$9,837.43	See dealer's quote.	$9,837.43	z
Sub-total	$5,605.00	$9,837.43	N/A	$9,837.43	N/A
Total for all systems	$1,905,081.71	$1,496,791.37	N/A	$1,212,649.50	N/A

Components

Actual Information Description	File Name

Flexible Air Transmission Line - dielectric, 3"	**Component Description:**	Provide One ASCO 300 Transfer Switch
	Amount:	$2,500.00
	Component Description:	WHSV-310-Primary Transmission Line - 3" Flexible Air Dielectric
	Amount:	$2,810.56
	Component Description:	New Primary Transmission Line
	Amount:	$1,414.65
	Component Description:	New Primary Transmission Line
	Amount:	$1,414.65
	Component Description:	New Primary Transmission Line
	Amount:	$1,697.57

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	**$0.00**	**$0.00**		**$0.00**	
Primary Tower	**$348,559.74**	**$344,359.74**		**$277,079.73**	
New tower	***$264,359.74***	$264,359.74	see Estimated Cost Justification WHSV-480-Construct New Tower v1	$264,359.73	N/A
Short Tower (less than 500')	$84,200.00	$80,000.00	N/A	$12,720.00	N/A
Sub-total	$348,559.74	$344,359.74	N/A	$277,079.73	N/A
Total for all systems	$1,905,081.71	$1,496,791.37	N/A	$1,212,649.50	N/A

Components

Actual Information Description	File Name
New tower	

Component Description:	Perform structural inspection in accordance with TIA 222G and document location of all tower appurtenances
Amount:	$1,475.00
Component Description:	Reimburse construction costs - Dominion Energy Virginia - Elliott's Knob
Amount:	$1,531.48
Component Description:	Underground conduit for shelter
Amount:	$16,970.00
Component Description:	Trx #300245; Line #1
Amount:	$61,132.66
Component Description:	Materials
Amount:	$45,063.00
Component Description:	Removal vegetation /Ant Mounts REPACK
Amount:	$12,900.00
Component Description:	Tower analysis
Amount:	$2,800.00
Component Description:	Shenandoah Tower construction
Amount:	$61,132.67

	Component Description:	Install new 400amp service for tower site, customer installing conduit.
	Amount:	$222.26
	Component Description:	1/3 Completion of FND
	Amount:	$61,132.66
Short Tower (less than 500')	**Component Description:**	Trx #300244; Line #1
	Amount:	$12,720.00

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	**$212,430.00**	**$235,575.00**		**$144,239.26**	
Additional Field Engineering Service, 10 Days	***$20,000.00***	$20,000.00	N/A	N/A	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
Environmental Assessment, if triggered by NEPA Section 106 review or for certain structures over 450 feet	$10,520.00	$10,000.00	N/A	$9,831.16	N/A
NEPA Section 106 environmental review, if needed	$6,310.00	$6,000.00	N/A	$1,174.00	N/A

Attorney Fees - Negotiation of lease and other matters for shared locations	$4,210.00	$4,000.00	N/A	$1,495.66	N/A
Attorney Fees - Prepare and File FCC Form 2100 (main), License to Cover Application	$2,365.00	$2,250.00	N/A	$589.50	N/A
Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	$5,260.00	$5,000.00	N/A	$4,061.00	N/A
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	$1,580.00	$1,500.00	N/A	$0.00	N/A
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	$3,155.00	$7,325.00	Quiet zone; Chesapeake RF Consultants, LLC Invoice #10267	$7,325.00	N/A
Perform engineering study for new channel assignment and antenna development	$7,360.00	$35,500.00	Quiet zone Chesapeake RF Consultants invoice	$31,687.50	z

Address transition timing and coordination issues w/ other stations and wireless	$2,630.00	$2,500.00	N/A	$0.00	N/A
Project management of the transition	$142,200.00	$135,000.00	N/A	$88,075.44	N/A
Prepare and or review reimbursement form	$2,630.00	$2,500.00	N/A	N/A	N/A
Sub-total	$212,430.00	$235,575.00	N/A	$144,239.26	N/A
Total for all systems	$1,905,081.71	$1,496,791.37	N/A	$1,212,649.50	N/A

Components

Actual Information Description	File Name
Additional Field Engineering Service, 10 Days	Information not provided.
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.
Environmental Assessment, if triggered by NEPA Section 106 review or for certain structures over 450 feet	**Component Description:** Elliot Knob Biological Assesment **Amount:** $9,831.16

NEPA Section 106 environmental review, if needed	**Component Description:**	Research and analyze applicability of Forest Service letter to need for environmental review.
	Amount:	$345.00
	Component Description:	NEPA Section 106 Environmental Review
	Amount:	$829.00
Attorney Fees - Negotiation of lease and other matters for shared locations	**Component Description:**	Legal services
	Amount:	$123.00
	Component Description:	Prepare pro hac vice motion
	Amount:	$291.37
	Component Description:	Professional Services Rendered through December 31, 2018
	Amount:	$384.29
	Component Description:	Total professional services, total Disbursements
	Amount:	$697.00

Attorney Fees -Prepare and File FCC Form 2100 (main), License to Cover Application	**Component Description:** **Amount:**	Professional services: Complete and file WHSV Repack construction permit application. Call re: WHSV quiet zone concerns; email with FCC staff re: same $589.50
Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	**Component Description:** **Amount:** **Component Description:** **Amount:** **Component Description:** **Amount:**	FCC Filing fees for modified CP and construction waiver request $1,048.00 Attorney Fees Prepare and File Construction Permit Application $524.00 Prepare and File Construction Permit Application (Main) $851.50 Prepare and File Construction Permit Application (Main) $1,637.50
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:**	RF Eng - Construction Permit Application (Main)
	Amount:	$3,000.00
	Component Description:	RF Eng - Construction Permit Application (Main)
	Amount:	$275.00
	Component Description:	Consulting Engineer
	Amount:	$4,050.00
Perform engineering study for new channel assignment and antenna development	**Component Description:**	Re: prospective digital replacement translators ar 4 sites, continued review of antenna vendor responses and discussions.
	Amount:	$375.00
	Component Description:	Engineering Study for New Channel Assignment
	Amount:	$437.50
	Component Description:	Engineering Study for New Channel Assignment
	Amount:	$1,125.00

Component Description:	Engineering Study for New Channel Assignment
Amount:	$1,287.50
Component Description:	Engineering Study for New Channel Assignment
Amount:	$325.00
Component Description:	Engineering Study for New Channel Assignment
Amount:	$375.00
Component Description:	Engineering Study for New Channel Assignment
Amount:	$1,812.50
Component Description:	Consulting Engineer - J. Davis. Participate in telephone conference call regarding buildout of WHSV-TV repack facility
Amount:	$125.00
Component Description:	Engineering Study for New Channel Assignment
Amount:	$2,462.50

Component Description:	Provide NRAO Quiet Zone interference office with tech specs; discuss with FCC staff the coverage extension into loss area that will be created
Amount:	$2,775.00
Component Description:	Engineering Study for New Channel Assignment
Amount:	$3,475.00
Component Description:	Engineering Study for New Channel Assignment
Amount:	$4,687.50
Component Description:	Engineering Study for New Channel Assignment
Amount:	$250.00
Component Description:	Provide coverage contour map of WHSV-TV's repack facility and planned translators.
Amount:	$587.50

Component Description:	Prepare site location map; provide NRAO Quiet Zone interference office w/ specs of substitute directional antenna.
Amount:	$2,125.00
Component Description:	Engineering Study for New Channel Assignment
Amount:	$1,075.00
Component Description:	Develop final technical parameters for prospective displacement facilities - re: 4 digital replacement translators
Amount:	$5,662.50
Component Description:	Consulting Engineer - J. Davis - Hourly
Amount:	$1,050.00
Component Description:	Frequency study
Amount:	$1,425.00
Component Description:	Consulting Engineer - J. Davis - Hourly (@ $250 /hr)
Amount:	$250.00

Address transition timing and coordination issues w/ other stations and wireless	Information not provided.
Project management of the transition	**Component Description:** Project Management **Amount:** $5,090.60 **Component Description:** Project Management **Amount:** $4,977.10 **Component Description:** Reference WHSV-510-Project Management Widelity, Inc. GRY-WHSV-TV-010 **Amount:** $1,822.50 **Component Description:** Project Management **Amount:** $1,668.10 **Component Description:** Project Management **Amount:** $1,723.55 **Component Description:** Project Management **Amount:** $951.45 **Component Description:** Project Management **Amount:** $3,545.70 **Component Description:** Project Management **Amount:** $2,962.20

Component Description: Project Management
Amount: $4,749.40

Component Description: Project Management
Amount: $1,856.30

Component Description: Project Management
Amount: $5,042.95

Component Description: Professional Services
Amount: $236.44

Component Description: Project Management
Amount: $802.25

Component Description: Project Management
Amount: $1,500.00

Component Description: Project Management
Amount: $733.30

Component Description: Cost Reconciliation
Amount: $8,285.45

Component Description: Project Management
Amount: $1,328.55

Component Description: Project Management
Amount: $28.20

Component Description: Project Management
Amount: $2,231.90

Component Description: Project Management
Amount: $4,093.05

Component Description: Project Management
Amount: $4,100.40

Component Description: Project Management
Amount: $6,234.80

Component Description: Project Management
Amount: $3,395.10

Component Description: Project Management
Amount: $1,861.40

Component Description: Project Management
Amount: $1,795.60

Component Description: Project Management
Amount: $7,014.40

	Component Description: Project Management **Amount:** $2,367.65 **Component Description:** Project Management **Amount:** $2,022.90 **Component Description:** Project Management **Amount:** $1,916.50 **Component Description:** Project Management **Amount:** $3,737.70
Prepare and or review reimbursement form	Information not provided.

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	**$212,785.00**	**$204,840.00**		**$128,013.81**	
Microwave Equipment	***$120,200.00***	$120,200.00	STL link.	$101,724.91	N/A
MVPD Notification of Channel Change	***$2,000.00***	$2,000.00	N/A	$2,000.00	N/A
Develop and air announcement of upcoming channel change	***$5,000.00***	$5,000.00	N/A	N/A	N/A
Equipment Delivery and Handling Charges	***$20,000.00***	$20,000.00	N/A	$8,276.40	N/A
Disposal Costs (for equipment and other waste, net of any salvage value)	***$15,375.00***	$15,375.00	N/A	$8,975.00	N/A
BLM or NFS Coordination	***$30,000.00***	$30,000.00	NFS coordination.	N/A	N/A
Non-zoning permits	***$6,325.00***	$6,325.00	N/A	$6,325.00	N/A

FCC Filing Fees - Form 2100 license to cover application	$335.00	$712.50	Chesapeake RF Consultants Invoice #4869 and Wiley Rein, LLP, Invoice #1479797	$712.50	N/A
DTV Medical Facility Notification	$11,550.00	$3,227.50	N/A	N/A	N/A
Local Zoning	***$2,000.00***	$2,000.00	N/A	N/A	N/A
Sub-total	$212,785.00	$204,840.00	N/A	$128,013.81	N/A
Total for all systems	$1,905,081.71	$1,496,791.37	N/A	$1,212,649.50	N/A

Components

Actual Information Description	**File Name**	
Microwave Equipment	**Component Description:**	SW-16pt Netgear GIG SMRT GS716
	Amount:	$193.00
	Component Description:	Antenna Mounts and Waveguide
	Amount:	$38,617.88
	Component Description:	Microwave system on-site installation
	Amount:	$62,914.03

MVPD Notification of Channel Change	**Component Description:** **Amount:**	Prepare MVPD notification letters (Repack) $2,000.00
Develop and air announcement of upcoming channel change	Information not provided.	
Equipment Delivery and Handling Charges	**Component Description:** **Amount:**	Equipment Delivery and Handling Charges $8,276.40
Disposal Costs (for equipment and other waste, net of any salvage value)	**Component Description:** **Amount:**	Disposal Costs $8,975.00
BLM or NFS Coordination	Information not provided.	
Non-zoning permits	**Component Description:** **Amount:**	Permit drawings $6,325.00

FCC Filing Fees - Form 2100 license to cover application	**Component Description:** **Amount:**	Regarding repack Ch-20 buildout at Elliott Knob, preparation and review of engineering portions of FCC application for license to cover. $187.50
	Component Description: **Amount:**	Filing Fees- license to cover $190.00
	Component Description: **Amount:**	WHSV-610-FCC Filing Fee - License to Cover $335.00
DTV Medical Facility Notification	Information not provided.	
Local Zoning	Information not provided.	

Cost Information

Grand Total

	Predetermined Cost Estimate	Estimated Cost	Actual Cost
Total for all systems	$1,905,081.71	$1,496,791.37	$1,212,649.50

Reimbursement Status

Question	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.	
	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 above-named applicant for the Authorization(s) specified above.	**Robert Folliard , III .** *Assistant Secretary* 08/26/2019

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).	
	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.

	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 above-named applicant for the Authorization(s) specified above.	**Robert Folliard , III .** *Assistant Secretary* 08/26/2019

Attachments