

Federal Communications Commission

(REFERENCE COPY - Not for submission)

FCC Form 399: Reimbursement Request

Facility	30833	Service: DTV	Call	WWBT	Channel:
ID:			Sign:		
10 (High	י VHF)	File C	000024806		
		Number:			
FRN: 001	8223693	Date	03/16		
		Submitted:	/2021		

Applicant Name, Type, and Contact Information

Information

Applicant	Address	Phone	Email	Applicant Type
GRAY TELEVISION LICENSEE, LLC Doing Business As: WWBT	4370 PEACHTREE ROAD, NE ATLANTA, GA 30319 United States	+1 (804) 230-1212	allfcclms@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	
internation	The Preparer is same as the reimbursement contact.				

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.	No
Briefly describe transition plan	Install side mount interim antenna, conn to existing transmission line Install new t mount Channel 10 antenna and new tx I Install new main and backup transmitter

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

Auxiliary	Add Transmitter Information				
Transmitter	Section	Question	Response		
	Existing Transmitter Description	Type of change	Purchase New		
		Use	Auxiliary (Backup)		
		Description of Use	Emergency Backup		
		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	HTEL		
		Year	2010		
		Туре	Solid State		
		Solid State Cooling	Air Cooled		
		Solid State Power Capacity	1.1 kW		

Add Transmitter Information

Auxiliary	New Transmitter Costs				
Transmitter	Section	Question	Response		
	New Transmitter Use Change Type Is this a request for upgraded equipment Manufacturer Model Transmitter Type Solid State Cooling Solid State Power capacity Justification for New Transmitter	Use	Auxiliary (Backup)		
		Change Type	Purchase New		
		Is this a request for upgraded equipment?	Yes		
		Manufacturer			
		Model	VAXTE- 8R44		
		Transmitter Type	Solid State		
		Solid State Cooling	Air Cooled		
		Solid State Power capacity	6.4 kW		
		Justification for New Transmitter	Please see GatesAir quote Q- 73886		

Auxiliary Other Transmitter Costs

Transmitter	Section	Question	Response
	Electrical Service	Service Entrance (3 phases 800A 208V)	No
		Switchgear (industrial 800 amp)	Yes
		Transformer (480V)	Yes
		Power	150 kVA
		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

AuxiliaryOther Transmitter Cost Not ListedTransmitterInformation not provided.

Auxiliary	Add Transmitter Information				
Transmitter	Section	Question	Response		
	Existing Transmitter Description	Type of change	Purchase New		
		Use	Auxiliary (Backup)		
		Description of Use	Alternate Main		
		Ownership	Owned		
		Owner	N/A		
		Site	N/A		
		Is this transmitter currently shared with another station?	No		
		Is this transmitter currently in operating condition?	Yes		
	Existing Transmitter	Manufacturer			
	Manufacturer and Type	Model	TTS-30		
		Year	2005		
		Туре	Solid State		
		Solid State Cooling	Air Cooled		
		Solid State Power Capacity	2.6 kW		

Auxiliary	New Transmitter Costs		
Transmitter	Section	Question	Response
	New Transmitter	Use	Auxiliary (Backup)
		Change Type	Purchase New
		Is this a request for upgraded equipment?	No
		Manufacturer	
		Model	VAXTE- 6R44
		Transmitter Type	Solid State
		Solid State Cooling	Air Cooled
		Solid State Power capacity	4.8 kW
		Justification for New Transmitter	Existing transmitter can not be efficiently and effectively retuned. Station will buy 1 new transmitter to replace one main and one aux.

Auxiliary Other Transmitter Costs

Transmitter	Section	Question	Response
	Electrical Service	Service Entrance (3 phases 800A 208V)	No
		Switchgear (industrial 800 amp)	Yes
		Transformer (480V)	Yes
		Power	150 kVA

	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

Auxiliary Other Transmitter Cost Not Listed

Transmitter Information not provided.

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	TTS30	
		Year	2005	
		Туре	Solid State	
		Solid State Cooling	Air Cooled	
		Solid State Power Capacity	2.6 kW	

Existing Transmitter Information

Primary	New Transmitter Costs		
Transmitter	Section	Question	Response
	New Transmitter	Use	Primary (Main)
		Change Type	Purchase New
		Is this a request for upgraded equipment?	Yes
		Manufacturer	
		Model	VAXTE- 8R37
		Transmitter Type	Solid State
		Solid State Cooling	Air Cooled
		Solid State Power capacity	6.4 kW
		Justification for New Transmitter	Existing transmitter can not be efficiently and effectively retuned. Station will buy 1 new transmitter to replace one main and one aux.

Primary	Other Transmitter Costs			
Transmitter	Section	Question	Response	
	Electrical Service	Service Entrance (3 phases 800A 208V)	No	
		Switchgear (industrial 800 amp)	Yes	
		Transformer (480V)	Yes	
		Power	150 kVA	
			1	

	A	
	Rigid Conduit and Wiring	No
	Size	N/A
	Length	N/A
	Other Electrical Service	Yes
	Description	Remove and dispose of old wiring, conduit, disconnects, voltage regulator, bypass switch, and other electrical services.
HVAC Service	Does the replacement transmitter require HVAC Service?	Yes
	Туре	Heating and Cooling
	Size	10 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

Other Transmitter Cost Not Listed

Primary Other Transmitter Name

Description

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

Existing Antenna DescriptionType of changeAntenna UseAntenna UseDescription of UseOwnership	Response Purchase New Primary (Main) N/A Owned N/A N/A N/A
Description Antenna Use Description of Use Ownership	New Primary (Main) N/A Owned N/A N/A
Description of Use Ownership	(Main) N/A Owned N/A N/A
Ownership	Owned N/A N/A
	N/A N/A
Owner	N/A
Owner	
Site	No
Is the existing antenna shared with another station or stations?	UNU
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
	Full Power
Manufacturer and Type Mounting	Top Mount
Antenna position in stack	Not in Stack
Polarization	Horizontal
Туре	Other
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
	Traveling Wave
ERP: (Effective Radiated Power)	26.0 kW

Manufacturer	
Model	DIELECTRIC TW-12B12-R
Year	2005

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	
		Is antenna directional?	No	
		Will antenna be located on or in close proximity to an antenna farm?	No	
	New Antenna Manufacturer and Types	Class	Full Power	
		Mounting	Top Mount	
		Antenna position in stack	Not in Stack	
		Polarization	Elliptical	
		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)	26.0 kW	
		Manufacturer		

Model	THV-10A10 /VP-R 04
Year	2019
Justification for New Antenna	Existing antenna is not re- tunable Quote attached E- Pol premium is not reimbursable Estimated tax and shipping included in cost

inches

Other Antenna Costs Primary Antenna Section Question Response **Combiner for Shared** Do you need a Combiner for a Shared Antenna Antenna? Туре Number of channels supported N/A Frequencies of channels supported N/A N/A Frequency Do you need a combiner output splitter N/A /switcher for dual feed lines? **Elbow Complex** Do you require the separate purchase of Yes the Elbow Complex? Broadband or Single Channel? Single Channel Feed Line Size 3 1/8 inches

Side Mount Brackets	Do you require the separate purchase of side mount brackets for a high power antenna?	
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

Name	Description
Primary Antenna Mounting Adapter	Primary Antenna Mounting Adapter

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?	Yes	
		Will antenna be located on or in close proximity to an antenna farm?	No	
	New Antenna Manufacturer and Type	Class	Full Power	
		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)	26.0 kW	
		Manufacturer		
		Model	TLS-V4-BB	
		Year	2019	

Interim Other Antenna Costs

Antenna

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?	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

Interim Other Antenna Cost Not Listed

Antenna Information not provided.

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

ransmissio	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	Manufacturer	
	Line Manufacturer and Type	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	850 feet per run

Primary Existing Transmission Line

Primary	New Transmission Line		
Transmissio	n Line Section	Question	Response
	New Transmission Line Costs	Use	Primary (Main)
		Description of Use	N/A
		Change Type	Purchase New
		Is this a request for upgraded equipment?	No
		Туре	Rigid
		Diameter	4 1/16 inches
		Other Diameter	N/A
		Segment Length	19 1/2 inches
		Other Segment Length	N/A
		Number of parallel runs	1
		Length	820 feet per run
		Justification for New Transmission Line	Existing line is not specified for new channel Replacing 6" with 4 1 /16"

Other Transmission Line Expenses Not Listed Other Transmission I Transmission

Interim	New Transmission Line		
Transmissio	n Section	Question	Response
	New Transmission Line	Use	Interim
	Costs	Description of Use	N/A
		Change Type	Purchase New
		Туре	Flexible Air
		Diameter	1 5/8 inches
		Segment Length	N/A
		Other Segment Length	
		Number of parallel runs	1
		Length	20 feet per run
		Justification for New Transmission Line	20' of transmission line needed to connect existing transmission line to interim antenna

Interim Other Transmission Line Expenses Not Listed

Transmission home tion not provided.

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

marv	Existing	Tower
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Primary	Existing Tower			
Tower	Section	Question	Response	
	Existing Tower Description	Type of change	Modify Existing	
		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	Do you have a tower registration number?	Yes	
	Registration Coordinates (NAD83 (North American Datum of 1983))	ASR Number	1015246	
		Latitude (NAD83)	37° 30' 23.0" N-	
		Longitude (NAD83)	077° 30' 11.0" W-	
		Overall Structure Height	791.99 feet	
		Support Structure Height	716.85 feet	
		Ground Elevation Above Mean Sea Level (AMSL)	210.96 feet	

Structure Type	TOWER - Free Standing or Guyed Structure
Tower Owner	WWBT, Inc.
Date Constructed	04/01/1956

Primary Tower Section Question

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:	Minor Reinforcements needed

Primary Tower Rigging Costs

Tower

Section	Question	Response
Tower Rigging Costs	Complex Tower	N/A
Helicopter Services Required	Are helicopter services required?	Yes

Primary Other Tower Expenses Not Listed

Tower Information not provided.

Outside	Section	Question	Response
Professional	Services Costs Outside Project Management Services	Do you require outside project management services?	Yes
		Number of Hours	895
		Explanation	Pattern analysis Antenna Spec Transmitter Spec Building drawings Installation Supervision Accounting Internal Legal 399 Preparation
	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)	No
	Negotiation of Lease and other Matter for Shared Locations	No
	Prepare or Review FCC Form 399 for Reimbursement	No
	Address transition timing and coordination issues w/ other stations and wireless providers	No
RF Field Engineering Services	Comprehensive coverage verification via field study	Yes
	RF exposure measurements	No
	Additional Field Engineering Service	Yes
	Number of Days	2
	Justification	Transmission line routing and planning

Other Professional Services Expenses Not Listed Professional Services roostsided.

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	No
		BLM or NFS Coordination	No
		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?	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

Expenses Information not provided.

Transmitters

Cost Information

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

Description Primary Transmitter VAXTE-8R37	Predetermined Cost Estimate \$439,449.27	Estimated Cost \$328,093.42	Estimated Cost Justification	Actual Cost \$88,614.91	Actual Cost Justificatior
Internal Transmission Line Installation	\$2,250.00	\$2,250.00	Please see WWBT Primary Transmitter - Other Expenses - Internal Transmission Line Installation Budget Revision Justification Letter	\$2,250.00	N/A
10 Ton system	\$60,500.00	\$80,194.50	see Estimated Cost Justification WWBT-110- 1st Primary Transmitter - HVAC v0	\$39,970.50	N/A

Other Electrical Service: Remove and dispose of old wiring, conduit, disconnects, voltage regulator, bypass switch, and other electrical services.	\$6,895.00	\$6,895.00	Please see Hill Electrical, Inc. quote dated April 1, 2019	\$5,395.00	N/A
Transformer 3 phase /480v - 150 KVA	\$25,550.00	\$24,300.00	N/A	N/A	N/A
High VHF - Air Cooled Solid State Transmitter 6.4 kW	\$137,154.51	\$137,154.51	Please see attached GatesAir Quotes Q- 81028 and GA-00021668 and Change Order Q- 86287, plus actual shipping on invoice US0334829 (\$178,153.92), less the amount already reimbursed on two locked and superseded categories (\$40,999.41)	\$0.00	N/A
Switchgear - industrial 800 amp	\$38,200.00	\$36,300.00	N/A	N/A	N/A

High VHF - Air Cooled Solid State Transmitter 1.1 . 4.4 kW	\$152,500.00	\$24,599.65	***System Notice: Estimate adjusted and locked because line has been superseded. ***Quote attached Headroom analysis attached	\$24,599.65	N/A
High VHF - Air Cooled Solid State Transmitter 4.8 kW	\$16,399.76	\$16,399.76	***System Notice: Estimate adjusted and locked because line has been superseded. ***Per Gatesair quote GA- 00021476	\$16,399.76	N/A
Auxiliary Transmitter VAXTE-8R44	\$253,342.62	\$113,088.23		\$85,505.95	
Switchgear - industrial 800 amp	\$38,200.00	\$7,000.00	N/A	N/A	N/A

High VHF - Air Cooled Solid State Transmitter 6.4 kW	\$37,092.62	\$37,092.62	Please see attached GatesAir Quotes GA- 00021684 and Q-73886 and Change Order Q-75542 (\$96,088.23), less the amount already reimbursed on locked and superseded category (\$58,995.61).	\$26,510.34	N/A
Transformer 3 phase /480v - 150 KVA	\$25,550.00	\$10,000.00	N/A	N/A	N/A
High VHF - Air Cooled Solid State Transmitter 1.1 . 4.4 kW	\$152,500.00	\$58,995.61	***System Notice: Estimate adjusted and locked because line has been superseded. ***Quote attached	\$58,995.61	N/A
Auxiliary Transmitter VAXTE-6R44	\$63,750.00	\$0.00		\$0.00	
Transformer 3 phase /480v - 150 KVA	\$25,550.00	\$0.00	Not required	N/A	N/A
High VHF - Air Cooled Solid State Transmitter 4.8 kW	\$0.00	\$0.00	Station is installing one main to replace existing main and 1 aux	N/A	N/A

Switchgear - industrial 800 amp	\$38,200.00	\$0.00	Not required	N/A	N/A
Sub-total	\$756,541.89	\$441,181.65	N/A	\$174,120.86	N/A
Total for all systems	\$2,131,656.03	\$1,913,940.61	N/A	\$1,402,211.36	N/A

Components

Actual Information Description	File Name	
Internal Transmission Line Installation	Component Description: Amount:	WWBT-110-1st Primary Transmitter - Internal Transmission Line \$2,250.00
10 Ton system	Component Description: Amount:	Credit Memo (\$39,970.50)
	Component Description: Amount:	Base Contract Amount Install (2) Carrier 10 TON \$51,962.00
	Component Description: Amount:	Invoice Non Reimburseable N/A
	Component Description:	INSTALL (2) CARRIER 10 TON PACKAGE A/C UNITS
	Amount:	\$27,979.00

Remove and dispose of old wiring, conduit, disconnects, voltage regulator, bypass switch,	Component Description:	WWBT-110-1st Primary Transmitter - Oth
and other electrical services.	Amount:	Electrical \$5,395.00
Transformer 3 phase/480v - 150 KVA	Information not provided.	
High VHF - Air Cooled Solid State Transmitter 6.4 kW	Component Description: Amount:	A. Transmitter \$81,622.17
	Component Description: Amount:	VAXTE-6R37 \$17,358.67
	Component Description: Amount:	VAXTE-6R37 \$29,611.30
Switchgear - industrial 800 amp	Information not provided.	
High VHF - Air Cooled Solid State Transmitter 1.1 . 4.4 kW	Component Description: Amount:	VAXTE-6 \$24,599.65
High VHF - Air Cooled Solid State Transmitter 4.8 kW	Component Description: Amount:	VAXTE-6 \$16,399.76
Switchgear - industrial 800 amp	Information not provided.	

High VHF - Air Cooled Solid State Transmitter 6.4 kW	Component Description: Amount:	VAXTE-2 \$13,019.23
	Component Description: Amount:	VAXTE-2 \$13,491.11
Transformer 3 phase/480v - 150 KVA	Information not provided.	
High VHF - Air Cooled Solid State Transmitter 1.1 . 4.4 kW	Component Description: Amount:	VAXTE-2 Transmitter \$11,427.91
	Component Description: Amount:	A. Transmitte \$39,949.09
	Component Description:	VAXTE-2 per quote GA- 00021476
	Amount:	\$7,618.61
Transformer 3 phase/480v - 150 KVA	Information not provided.	
High VHF - Air Cooled Solid State Transmitter 4.8 kW	Information not provided.	
Switchgear - industrial 800 amp	Information not provided.	

Antennas

Cost Information

Description Interim	Predetermined Cost Estimate \$72,051.00	Estimated Cost \$71,721.00	Estimated Cost Justification	Actual Cost \$43,930.00	Actual Cost Justification
Antenna TLS-V4-BB					
High VHF - High Power Side Mount One Station horizontally polarized	\$65,321.00	\$65,321.00	Please see Dielectric Order Confirmation 183001	\$37,530.00	N/A
Sweep test of existing antenna	\$6,730.00	\$6,400.00	Please see Dielectric Order Confirmation 183001	\$6,400.00	N/A
Primary Antenna THV-10A10 /VP-R 04	\$311,842.00	\$310,497.00		\$273,340.00	
Sweep test of existing antenna	\$6,730.00	\$6,400.00	Please see Dielectric Order Confirmation 82001	\$6,400.00	N/A
Primary Antenna Mounting Adapter	\$20,175.00	\$20,175.00	Please see Dielectric Order Confirmation 82001	\$20,175.00	N/A

Elbow complex, single channel, at antenna input, per 3 1/8. feedline (if needed)	\$7,600.00	\$6,585.00	Please see Dielectric Order Confirmation 82001	\$6,585.00	N/A
High VHF - High Power Top Mount One Station elliptically or circularly polarized	\$277,337.00	\$277,337.00	Quote attached Estimated tax and shipping included in cost V-Pol premium not included in cost	\$240,180.00	N/A
Sub-total	\$383,893.00	\$382,218.00	N/A	\$317,270.00	N/A
Total for all systems	\$2,131,656.03	\$1,913,940.61	N/A	\$1,402,211.36	N/A

Actual Information	
Description	File Name

High VHF - High Power Side Mount One Station horizontally polarized	Component Description:	FOR PURCHASE OF INTERIM
	Amount:	ANTENNAS \$5,629.50
	Component Description:	ANTENNA FOR PURCHASE OF INTERIM
	Amount:	\$7,303.16
	Component Description:	PURCHASE OF INTERIM ANTENNAS AND /OR REPLACEMENT OF EXISTING
	Amount:	\$18,765.00
	Component Description: Amount:	Interim antenna \$5,832.34
Sweep test of existing antenna	Component Description:	WWBT-280-Interim Antenna - Sweep
	Amount:	Test \$2,240.00
	Component Description:	WWBT-280-Interim Antenna - Sweep Test
	Amount:	\$960.00
	Component Description:	WWBT-280-Interim Antenna - Sweep Test
	Amount:	\$3,200.00

Sweep test of existing		
antenna	Component Description:	WWBT-210-Primary
	Component Description.	Antenna - Sweep
		Test
	Amount:	\$3,200.00
		\$0,200100
	Component Description:	OTHER WWBT -
		INCLUDES ONE
		FIELD ENGINEER
	Amount:	\$960.00
	Component Description:	Sweep Test
	Amount:	\$640.00
	Component Description:	Invoice moved to
	•••••••••••••••••••••••••••••	correct budget
		category
	Amount:	N/A
	Component Description:	WWBT-210-Primary
		Antenna - Sweep
		Test
	Amount:	\$1,600.00
Primary Antenna Mounting		
Adapter	Component Description:	WWBT-210-Primary
		Antenna - Mounting
		Adapter
	Amount:	\$10,087.50
	Component Description:	WWBT-210-Primary
		Antenna - Mounting
		Adapter
	Amount:	\$10,087.50

Elbow complex, single channel, at antenna input, per 3 1/8. feedline (if needed)	Component Description:	WWBT-210-Primary Antenna - Elbow
	Amount:	Complex \$1,646.25
	Component Description:	WWBT-210-Primary Antenna - Elbow Complex
	Amount:	\$1,646.25
	Component Description:	WWBT-210-Primary Antenna - Elbow Complex
	Amount:	\$3,292.50
High VHF - High Power Top Mount One Station elliptically or circularly	Component Description: Amount:	Antenna \$34,642.77
polarized	Component Description:	
	Amount:	Primary antenna \$25,402.23
	Component Description:	HIGH-VHF One station antenna
	Amount:	\$60,045.00
	Component Description:	HIGH-VHF 10A10 /VP-R 04 CH10 WWBT ONE STATION, TOP
	Amount:	MOUNT \$120,090.00

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	\$660.00	\$4,723.53		\$4,723.53	
Flexible Air Transmission Line - dielectric, 1 5 /8"	\$660.00	\$4,723.53	Please see Dielectric Order Confirmation 183001	\$4,723.53	N/A
Primary Transmission Line	\$116,440.00	\$92,073.22		\$92,073.22	
Rigid Transmission Line - copper, 4 1 /16"	\$116,440.00	\$92,073.22	See Estimated Cost Justification WWBT-310- Primary Transmission Line - Rigid, Copper V1	\$92,073.22	N/A
Sub-total	\$117,100.00	\$96,796.75	N/A	\$96,796.75	N/A
Total for all systems	\$2,131,656.03	\$1,913,940.61	N/A	\$1,402,211.36	N/A

Actual Information	
Description	File Name

Flexible Air Transmission Line - dielectric, 1 5/8"	Component Description: Amount:	WWBT-380-Interim Transmission Line - Flexible Air, 1 5/8" \$132.30
	Component Description: Amount:	WWBT-380-Interim Transmission Line - Flexible Air, 1 5/8" \$4,402.23
	Component Description: Amount:	WWBT-380-Interim Transmission Line - Flexible Air, 1 5/8" \$189.00
Rigid Transmission Line - copper, 4 1/16"	Component Description:	WWBT-310- Primary Transmission Line - Rigid, Copper, 4 1
	Amount:	/16" \$21,375.56
	Component Description:	WWBT-310- Primary Transmission Line - Rigid, Copper, 4 1 /16"
	Amount:	\$42,751.12
	Component Description:	WWBT-310- Primary Transmission Line - Rigid, Copper, 4 1 /16"
	Amount:	\$13,190.31

Component Description: Amount:	REDUCER 4-50 EIA X 3-50 EIA STD "QS" \$992.00
Component Description: Amount:	Reducer 4-50 \$4,549.73
Component Description: Amount:	Primary Transmission Line Components \$8,464.50
Component Description:	MODIFY SECTION OF 6 1/8 UNIVERSAL EA
Amount:	OUTER CONDUCTOR BY ADDING 6 1/8 EIA FLANGE \$750.00
	Amount: Component Description: Amount: Component Description: Component Description:

Tower Equipment and Rigging Costs

Cost Information

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Primary Tower TOWER	\$524,850.00	\$654,908.07		\$606,961.82	
Minor tower reinforcement /modifications	\$158,000.00	\$150,000.00	N/A	\$102,150.00	N/A
Tall Tower (greater than 500')	\$210,500.00	\$344,633.07	see Estimated Cost Justification WWBT-410- Existing Primary Tower - Tower Rigging, Tall Tower V2	\$344,536.82	N/A
Structural engineering tower load study for well documented tower	\$12,600.00	\$16,525.00	See WWBT-410- Existing Primary Tower - Tower Load Study Estimated Cost Justification v0	\$16,525.00	N/A
Tower Helicopter Lift	\$143,750.00	\$143,750.00	Please see WWBT Tower King Proposal C19_008	\$143,750.00	N/A
Sub-total	\$524,850.00	\$654,908.07	N/A	\$606,961.82	N/A

Total for all	\$2,131,656.03	\$1,913,940.61	N/A	\$1,402,211.36	N/A
systems					

Actual Information Description

File Name

Minor tower reinforcement /modifications	Component Description:	A) 50 % Upon Acceptance of
	Amount:	Order \$22,462.50
	Component Description:	Re: 20-0087 722 ft 8.25 ft-face Guyed material for Tower
	Amount:	Modification \$13,850.00
	Component Description:	Provide, Construction Drawings, Material Fabrication
	Amount:	\$13,850.00
	Component Description: Amount:	"Re:19-0145 WWBT's 722 ft. Guyed Tower (Engineering Support During Construction) Richmond, VA" \$7,487.50
	Component Description: Amount:	TOWER SERVICE \$39,000.00
	Component Description: Amount:	In-depth Physical Inspection \$5,500.00

500')	Component Description: Amount:	TOWER SERVICE \$235,408.84
	Component Description:	WWBT-410- Existing Primary Tower - Tower
	Amount:	Rigging, Tall Towe \$2,286.82
	Component Description: Amount:	Tower Service \$67,841.16
	Component Description:	WWBT-410- Existing Primary Tower - Tower
	Amount:	Rigging, Tall Towe \$39,000.00
Structural engineering tower load study for well documented tower	Component Description:	WWBT-410- Existing Primary
	Amount:	Tower - Tower Load Study \$625.00
	Component Description:	Tower Structural Analysis
	Amount:	\$8,500.00
	Component Description:	Tower Structural Analysis on
	Amount:	WWBT tower \$7,400.00

Tower Helicopter Lift		
	Component Description:	WWBT-410-
		Existing Primary
		Tower - Helicopter
		Lift
	Amount:	\$111,591.16
	Component Description:	WWBT-410-
	Component Description:	
		Existing Primary Tower - Helicopter
		Lift
	Amount:	\$32,158.84
		· ,

Outside Professional Services

Cost Information

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Outside Professional Services	\$252,225.88	\$249,590.88		\$138,962.92	
Comprehensive coverage verification via field study, if needed	\$84,200.00	\$80,000.00	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	\$332.00	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

Actual Information	
Description	File Name

Comprehensive coverage verification via field study, if needed	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	Component Description: Amount:	For Professional Services Rendered \$332.00
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:	FCC Form 2100 Construction Permit Applicatior \$2,750.00

Perform engineering study for new channel assignment		
and antenna development	Component Description:	Engineering study work for new
		channel assignment and antenna
		development.
	Amount:	\$500.00
	Component Description:	WWBT-530-RF
		Eng - Engineering Study for New Channel
		Assignment
	Amount:	\$2,400.00
	Component Description:	Engineering study work for new
		channel
		assignment and antenna
		development.
	Amount:	\$125.00
	Component Description:	Consulting
	Amount:	Engineer \$150.00
Project management of the transition	Component Description:	Project
	A	Management
	Amount:	\$14,307.40
	Component Description:	Project
	Amount:	Management \$6,979.30
	Component Description:	Project
	Amount:	management \$2,492.75

Component Description: Amount:	Project Management \$4,003.70
Component Description: Amount:	Project Management \$3,298.25
Component Description: Amount:	Travel \$84.70
Component Description: Amount:	Project Management \$8,961.60
Component Description: Amount:	Project management \$5,616.00
Component Description: Amount:	Project Management \$38.50
Component Description: Amount:	Project Management \$192.49
Component Description: Amount:	Project Management \$43.63
Component Description: Amount:	Project Management \$6,484.20

Component Description: Amount:	Project Management \$3,962.65
Component Description: Amount:	Repack Engineering \$1,339.50
Component Description: Amount:	Project Management \$2,835.90
Component Description: Amount:	Project Management \$2,045.45
Component Description: Amount:	Project Management \$3,422.50
Component Description: Amount:	Project Management \$3,449.95
Component Description: Amount:	Project Management \$2,247.20
Component Description: Amount:	Project management \$6,908.85
Component Description: Amount:	Project Management \$7,493.80

Component Description: Amount:	Project Management \$297.74
Component Description: Amount:	Project management \$8,568.15
Component Description: Amount:	Project Management \$4,604.55
Component Description: Amount:	Project Management \$141.16
Component Description: Amount:	Project Management \$2,675.65
Component Description: Amount:	Project Management \$500.50
Component Description: Amount:	Project Management \$3,401.30
Component Description: Amount:	Project Management \$2,727.15
Component Description: Amount:	Project Management \$205.32

Component Description: Amount:	Project Management \$2,264.95
Component Description: Amount:	Project Management \$3,103.15
Component Description: Amount:	Project Management \$28.23
Component Description: Amount:	Project Management \$770.00
Component Description: Amount:	Project Management \$2,071.95
Component Description: Amount:	Project Management \$3,015.35
Component Description: Amount:	Project Management \$2,615.15
Component Description: Amount:	Project Management \$177.10
Component Description: Amount:	Project Management \$2,785.75

	Component Description: Amount:	Project Management \$112.92
	Component Description: Amount:	Project Management \$2,909.80
	Component Description: Amount:	Project Management \$2,355.85
Additional Field Engineering Service, 2 Days	Component Description: Amount:	Site tx line routing and planning \$1,165.88
Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	Information not provided.	

Other Expenses

Cost Information

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cos Justificatio
Other Expenses	\$97,045.26	\$89,245.26		\$68,099.01	
Disposal Costs (for equipment and other waste, net of any salvage value)	\$2,263.33	\$2,263.33	Please see Estimated Cost Justification WWBT-610- Disposal v1	\$2,263.33	N/A
MVPD Notification of Channel Change	\$2,065.70	\$2,065.70	see Estimated Cost Justification WWBT-610- MVPD Notification v0	\$2,065.70	N/A
Develop and air announcement of upcoming channel change	\$2,850.00	\$2,850.00	estimate for on air rescan announcement production Quote attached	N/A	N/A
Equipment Storage	\$30,500.00	\$30,500.00	Estimate for Dielectric on site antenna storage Dielectric letter attached	\$12,300.00	N/A
Equipment Delivery and Handling Charges	\$47,481.23	\$47,481.23	see Estimated Cost Justification WWBT-610- Equipment Delivery and Handling v6	\$47,384.98	N/A

FCC Filing Fees - Form 2100 license to cover application	\$335.00	\$335.00	Please see WWBT Filing Fees- License to Cover Budget Justification Cover Letter	\$335.00	N/A
DTV Medical Facility Notification	\$11,550.00	\$3,750.00	Group quote attached	\$3,750.00	N/A
Sub-total	\$97,045.26	\$89,245.26	N/A	\$68,099.01	N/A
Total for all systems	\$2,131,656.03	\$1,913,940.61	N/A	\$1,402,211.36	N/A

Actual Information Description	File Name	
Disposal Costs (for equipment and other waste, net of any salvage value)	Component Description: Amount:	Removed and disposed of old wiring, conduit, disconnects, voltage regulator, and bypass switch. \$1,500.00
	Component Description: Amount:	Delivery 20 CYD \$100.00
	Component Description: Amount:	Final 20 CYD \$325.00
	Component Description: Amount:	Rent CY20 \$338.33

MVPD Notification of Channel Change	Component Description: Amount:	Total Professional Services \$2,065.70
Develop and air announcement of upcoming channel change	Information not provided.	
Equipment Storage		
	Component Description:	WWBT-610- Equipment Storag
	Amount:	\$2,870.00
	Component Description:	WWBT-610-
		Equipment Storag
	Amount:	\$9,430.00
Equipment Delivery and		
Handling Charges	Component Description:	FREIGHT AND
	A	SHIPPING
	Amount:	\$9,812.07
	Component Description:	Shooting Boom
		Forklift
	Amount:	\$4,679.14
	Component Description:	IOK 42'-48'
		SHOOTING BOOM
	Amount:	FORKLIFT \$4,906.11
		ф 1,000.11
	Component Description:	FREIGHT AND
	Amount:	SHIPPING \$934.89
		φυσ τ. υυ
	Component Description:	FREIGHT AND
	Amount:	SHIPPING \$921.98

Component Description: Amount:	WWBT-610- Equipment Delivery and Handling \$2,286.83
Component Description: Amount:	10k 55' Shooting Boom Forklift \$6,636.78
Component Description: Amount:	10K 55' SHOOTING BOOM FORKLIFT \$5,858.19
Component Description: Amount:	CHESTERFIELD SHORT TERM RENTAL TAX \$1,876.03
Component Description: Amount:	Freight and Shipping \$2,043.18
Component Description: Amount:	WWBT-610- Equipment Delivery and Handling \$921.36
Component Description: Amount:	8K-9K 42' Shooting Boom Forklift \$1,105.43
Component Description: Amount:	12K 55' SHOOTING BOOM FORKLIFT \$2,950.64
Component Description: Amount:	6k-7k 42' Shooting Boom Forklift \$1,857.58

	Component Description: Amount:	Freight and shipping \$594.77
FCC Filing Fees - Form 2100 license to cover application	Component Description: Amount:	WWBT-610-FCC Filing Fees - License to Cover \$335.00
DTV Medical Facility Notification	Component Description: Amount:	Medical Notification \$3,750.00

Cost Information	Grand Total			
		Predetermined Cost Estimate	Estimated Cost	Actual Cost
	Total for all systems	\$2,131,656.03	\$1,913,940.61	\$1,402,211.36

Reimbursem	entestatus	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.	
		 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).
- 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 J. Folliard , III Assistant Secretary 03/16/2021

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).	
		 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 03/16/2021

Attachments

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