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: **19200** | Service: **DTV** | Call Sign: **WTNZ** | Channel: **15 (UHF)**

File Number: **0000025079**

FRN: **0028123164** | Date Submitted: **12/14/2020**

Applicant Information

Applicant Name, Type, and Contact Information

Applicant	Address	Phone	Email	Applicant Type
MARBLE CITY TV LLC Doing Business As: MARBLE CITY TV LLC	220 SALTERS CREEK ROAD HAMPTON, VA 23661 United States	+1 (757) 726-0136	DHANNA@LOCKWOODBROADCAST.COM	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*	4031 University Drive Ste 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	Move station to another close by ATC tower facility. Install new main and backup transmitter

Transmitters

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

Auxiliary Transmitter

Add Transmitter Information

Section	Question	Response
Existing Transmitter Description	Type of change	Retune Existing
	Use	Auxiliary (Backup)
	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 and Type	Manufacturer	Harris
	Model	UAX
	Year	2011

	Type	Solid State
	Solid State Cooling	Air Cooled
	Solid State Power capacity	1.1 kW

Auxiliary Transmitter

Retuning Transmitter Costs

Section	Question	Response
New IOT Tubes	Number of Tubes (including accessories) needed	N/A
New Mask Filter	Power	1.5 kW
	Other Power	N/A
New Exciter	Is a new exciter needed?	No

Auxiliary Transmitter

Other Transmitter Costs

Section	Question	Response
Electrical Service	Service Entrance (3 phases 800A 208V)	No
	Switchgear (industrial 800 amp)	No
	Transformer (480V)	Yes
	Power	150 kVA
	Rigid Conduit and Wiring	Yes
	Size	2 inches
	Length	50.0 feet
	Other Electrical Service	Yes
	Description	panel board distribution and breakers
HVAC Service	Does the replacement transmitter require HVAC Service?	Yes

	Type	Cooling Only
	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?	Yes
	Size	200.0
Channel 14 Costs	Is an RF Consulting Engineer needed?	N/A
	Is a channel 14 Mask Filer needed?	N/A
	Is additional field engineering time needed?	N/A
	Number of Days	N/A

Auxiliary Transmitter

Other Transmitter Cost Not Listed

Name	Description
Auxiliary Transmitter-Deinstall and Relocate	Auxiliary Transmitter-Deinstall and Relocate

Primary Transmitter

Existing Transmitter Information

Section	Question	Response
Existing Transmitter Description	Type of change	Purchase New
	Use	Primary (Main)
	Description of Use	N/A
	Ownership	Owned
	Owner	N/A
	Site	N/A
	Is this transmitter currently shared with another station?	No
	Is this transmitter currently in operating condition?	Yes
Existing Transmitter Manufacturer and Type	Manufacturer	
	Model	DCX
	Year	2005
	Type	Inductive Output Tube
	IOT Power Type	Single
	Power Capacity	20 kW

Primary Transmitter

New Transmitter Costs

Section	Question	Response
New Transmitter	Use	Primary (Main)
	Change Type	Purchase New
	Is this a request for upgraded equipment?	Yes
	Manufacturer	
	Model	ULXTE-50
	Transmitter Type	Solid State
	Solid State Cooling	Liquid Cooled
	Solid State Power capacity	31.7 kW
	Justification for New Transmitter	Existing transmitter cannot be retuned. Transmitter sizing is based on a forced relocation after it was found out that the existing broadband antenna would not transmit channel 15 at the proper output.

Primary Transmitter

Other Transmitter Costs

Section	Question	Response

Electrical Service	Service Entrance (3 phases 800A 208V)	Yes
	Switchgear (industrial 800 amp)	Yes
	Transformer (480V)	Yes
	Power	150 kVA
	Rigid Conduit and Wiring	Yes
	Size	4 inches
	Length	100.0 feet
	Other Electrical Service	Yes
	Description	Service panel and distribution for new greenfield ATC suite.
HVAC Service	Does the replacement transmitter require HVAC Service?	Yes
	Type	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?	Yes
	Size	800.0 square feet
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

Name	Description
removal of existing equipment	Station must abandon existing ATC suite and remove its equipment
Emergency Generator	250 kW diesel generator and ATS
Internal Transmission Line	Gases and other items needed for transmission line testing and soldering

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	Leased
	Owner	American Tower
	Site	N/A
	Is the existing antenna shared with another station or stations?	Yes
	Is the existing antenna directional?	No
	Is antenna in operating condition?	Yes
	Is antenna located on or in close proximity to an antenna farm?	No
Existing Antenna Manufacturer and Type	Class	Full Power
	Mounting	Top Mount
	Antenna position in stack	Bottom
	Polarization	Horizontal
	Type	Broadband Panel
	Number of Stations Supported	3
	Number of Panels	10
	Design power capacity in use	50.0 %
	Lower Limit	470.00 MHz
	Upper Limit	608.00 MHz
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power)	460.0 kW

Manufacturer	
Model	TUD-O5-16 /80H-2-B
Year	2003

Facility ID's and Call Signs of all stations with whom the antenna is shared.

Facility ID	Call Sign
52628	WPXK-TV
71082	WATE-TV

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?	No
	Will antenna be located on or in close proximity to an antenna farm?	Yes
New Antenna Manufacturer and Types	Class	Full Power
	Mounting	Top Mount
	Antenna position in stack	Not in Stack
	Polarization	Elliptical
	Type	Slotted Coaxial
	Number of Stations Supported	N/A
	Number of Panels/Bays	N/A
	Lower Limit	N/A
	Upper Limit	N/A
	Design power capacity in use	N/A
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power)	350.0 kW
	Manufacturer	

Model	TFU-24GTH /VP-R 04
Year	2019
Justification for New Antenna	Existing leased antenna will not meet spec for channel 15. Sweep data attached. Station must relocate and purchase a new single frequency antenna.

Primary Antenna

Other Antenna Costs

Section	Question	Response
Combiner for Shared Antenna	Do you need a Combiner for a Shared Antenna?	
	Type	
	Number of channels supported	N/A
	Frequencies of channels supported	N/A
	Frequency	N/A
	Do you need a combiner output splitter /switcher for dual feed lines?	N/A
Elbow Complex	Do you require the separate purchase of the Elbow Complex?	Yes
	Broadband or Single Channel?	Single Channel
	Feed Line Size	6 1/8 inches inches

Side Mount Brackets	Do you require the separate purchase of side mount brackets for a high power antenna?	
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
Antenna Pedestal	Required 4' pedestal for arbor arm installation

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	Leased
	Owner	American Tower
	Site	N/A
	Is the existing transmission line shared with another station or stations?	Yes
	Is Transmission Line in operating condition?	Yes
Existing Transmission Line Manufacturer and Type	Manufacturer	
	Type	Rigid
	Diameter	8 3/16 inches
	Other Diameter	N/A
	Segment Length	Broadband
	Other Segment Length	N/A
	Number of parallel runs	2
	Length	1600 feet per run

Facility ID's and Call Signs of all stations with whom the transmission line is shared.

Facility ID	Call Sign
71082	WATE-TV
52628	WPXK-TV

Primary Transmission Line

New Transmission Line

Section	Question	Response
New Transmission Line Costs	Use	Primary (Main)
	Description of Use	N/A
	Change Type	Purchase New
	Is this a request for upgraded equipment?	No
	Type	Rigid
	Diameter	6 1/8 inches
	Other Diameter	N/A
	Segment Length	20 inches
	Other Segment Length	N/A
	Number of parallel runs	1
	Length	1500 feet per run
	Justification for New Transmission Line	Station is changing sites and is not able to lease.

Primary Transmission Line

Other Transmission Line Expenses Not Listed

Name	Description
Nitrogen Regulator	Nitrogen Regulator required due to repack

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

Add 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?	Candelabra
	Is this tower currently shared with any other stations?	No
	One or more FM, AM or TV radio broadcaster(s)	N/A
	Others Types of Users	N/A
	Is tower documented for structural analysis?	Yes
	Is tower compliant with Rev G?	Yes
Existing Tower Structure Registration	Do you have a tower registration number?	Yes
	ASR Number	1222895
Coordinates (NAD83 (North American Datum of 1983))	Latitude (NAD83)	35° 59' 44.4" N-
	Longitude (NAD83)	083° 57' 23.1" W-
	Overall Structure Height	1534.10 feet
	Support Structure Height	1399.92 feet
	Ground Elevation Above Mean Sea Level (AMSL)	1314.94 feet

Structure Type	GTOWER - Guyed Structure Used for Communication Purposes
Tower Owner	American Towers LLC
Date Constructed	04/03/2003

Primary Tower

Tower Modification Costs

Section	Question	Response
Engineering Study	Please what type of engineering study is required, if any:	Study needed for tower with candelabra
Tower Reinforcements	Please select whether tower reinforcements are needed:	No reinforcements needed

Primary Tower

Tower Rigging Costs

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

Primary Tower

Other Tower Expenses Not Listed

Name	Description
Tower Permit Drawing Package	Tower Permit Drawing Package
Tower Mapping	Mapping the tower to identify potential maintenance and structural concerns.
ATC Capital Contribution	Capital contribution fee

Primary Tower

Add Tower

Section	Question	Response
Existing Tower Description	Type of change	Move Equipment
	Tower Use	Primary (Main)
	Description of Use	N/A
	Ownership	Leased
	Is this tower consider Complex?	Candelabra
	Is this tower currently shared with any other stations?	Yes
	One or more FM, AM or TV radio broadcaster(s)	Yes
	Others Types of Users	No
	Is tower documented for structural analysis?	No
	Is tower compliant with Rev G?	Unknown
Existing Tower Structure Registration	Do you have a tower registration number?	Yes
	ASR Number	1052156
Coordinates (NAD83 (North American Datum of 1983))	Latitude (NAD83)	36° 00' 12.8" N-
	Longitude (NAD83)	083° 56' 34.0" W-
	Overall Structure Height	1456.02 feet
	Support Structure Height	1332.99 feet
	Ground Elevation Above Mean Sea Level (AMSL)	1393.03 feet
	Structure Type	GTOWER - Guyed Structure Used for Communication Purposes
	Tower Owner	SpectraSite Communications, LLC. through American Towers, LLC.

	Date Constructed	01/01/1955

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
35908	WVLT-TV	DTV
18267	WKOP-TV	DTV
69161	WUOT	FM

Primary Tower

Tower Rigging Costs

Section	Question	Response
Tower Rigging Costs	Complex Tower	Candelabra
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	800
	Explanation	Pattern analysis Antenna Spec Transmitter Spec Building drawings Installation Supervision Accounting Internal Legal 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	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	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	Yes
	RF exposure measurements	No
	Additional Field Engineering Service	Yes
	Number of Days	1
	Justification	system sweep

Outside Professional Services Costs

Other Professional Services Expenses Not Listed

Information 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	No
	FCC Construction Permit Minor Change	Yes
	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

Other Expenses Not Listed

Name	Description
Microwave STL	Microwave STL required due to forced move to a different tower WTNZs existing ATC tower will install a communal antenna that will not support the WTNZs repack channel
ATC Expenses	Defined American Tower charges attached
Site Security	Site Security

Cost Information

Transmitters

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Primary Transmitter ULXTE-50	**$1,329,849.54**	**$1,301,196.34**		**$907,311.57**	
Internal Transmission Line	***$155.03***	$155.03	Please see WTNZ Primary Transmitter - Internal Transmission Line Revision Justification Cover Letter	$155.03	N/A
Emergency Generator	***$66,552.25***	$66,552.25	see Estimated Cost Justification WTNZ-110-1st Primary Transmitter - Generator v0	$66,552.23	N/A
Other -- Building Addition Size: 800.0	***$45,000.00***	$45,000.00	N/A	$9,340.14	N/A
10 Ton system	$38,900.00	$32,000.00	See attached Funderburk Electrical Services Budget Proposal dated 5/8/19 (50% of total cost of 2 HVAC units)	$22,942.50	N/A

Other Electrical Service: Service panel and distribution for new greenfield ATC suite.	***$75,000.00***	$75,000.00	New greenfield site shell requiring all new electrical distribution	$71,663.84	N/A
4" Rigid Conduit and Wiring (Cost per foot)	$10,100.00	$9,000.00	new site with no existing electrical infrastructure	N/A	N/A
Transformer 3 phase /480v - 150 KVA	$25,550.00	$7,496.80	GatesAir Quote Q-76710	N/A	N/A
Service entrance 3 phase/800 amp/208 volt	$14,400.00	$13,700.00	N/A	N/A	N/A
UHF - Liquid Cooled Solid State Transmitter 31.7 kW	***$980,992.26***	$980,992.26	Estimated Cost Justification WTNZ-110-1st Primary Transmitter - UHF Liquid Cooled Solid State v2	$736,657.83	N/A
Switchgear - industrial 800 amp	$38,200.00	$36,300.00	N/A	N/A	N/A
removal of existing equipment	***$35,000.00***	$35,000.00	N/A	$0.00	N/A
Auxiliary Transmitter UAX	**$228,547.45**	**$121,601.05**		**$81,125.21**	

Auxiliary Transmitter-Deinstall and Relocate	***$4,567.45***	$4,567.45	Please see WTNZ Auxiliary Transmitter-Deinstall and Relocate Budget Revision Justification Letter	$4,567.45	N/A
Other -- Building Addition Size: 200.0	***$15,000.00***	$15,000.00	floor and wall paint. New concrete shell site	N/A	N/A
Transformer 3 phase /480v - 150 KVA	$25,550.00	$23,000.00	new greenfield site with no existing electrical infrastructure	N/A	N/A
2" Rigid Conduit and Wiring (Cost per foot)	$1,300.00	$1,200.00	new greenfield site with no existing electrical infrastructure	N/A	N/A
Other Electrical Service: panel board distribution and breakers	***$35,000.00***	$35,000.00	New greenfield site with no existing electrical infrastructure	$33,724.16	N/A
10 Ton system	$38,900.00	$22,942.50	See attached Funderburk Electrical Services Budget Proposal dated 5/8/19 (50% of total cost of 2 HVAC units)	$22,942.50	N/A
1.5 kW mask filter	$3,030.00	$0.00	included in tx quote	N/A	N/A

UHF and VHF - minor banding issues	$105,200.00	$19,891.10	see Estimated Cost Justification WTNZ-150-1st Auxiliary Transmitter - Retune Existing Transmitter, Minor Banding Issues v0	$19,891.10	Est not exceeded.
Sub-total	$1,558,396.99	$1,422,797.39	N/A	$988,436.78	N/A
Total for all systems	$3,640,047.69	$3,141,251.63	N/A	$2,047,397.25	N/A

Components

Actual Information Description	File Name
Internal Transmission Line	**Component Description:** Cylinder rental **Amount:** $155.03
Emergency Generator	**Component Description:** EQUIPMENT SALE **Amount:** $66,552.23

Other -- Building Addition Size: 800.0	**Component Description:** **Amount:**	WTNZ-110-1st Primary Transmitter - Building Addition, 800 sq. ft. $1,250.00
	Component Description: **Amount:**	Equipment Rental for Interior Paint and Seal $693.36
	Component Description: **Amount:**	Sealed, waterproofed, and coated 42x21x26 interior walls $6,306.64
	Component Description: **Amount:**	Copper Strap $454.00
	Component Description: **Amount:**	Transmitter $636.14
10 Ton system	**Component Description:** **Amount:**	WTNZ-110-1st Primary Transmitter - 10 Ton System $22,942.50
Other Electrical Service: Service panel and distribution for new greenfield ATC suite.	**Component Description:** **Amount:**	Work Order #: S015860 $71,663.84
4" Rigid Conduit and Wiring (Cost per foot)	Information not provided.	

Transformer 3 phase/480v - 150 KVA	Information not provided.
Service entrance 3 phase /800 amp/208 volt	Information not provided.
UHF - Liquid Cooled Solid State Transmitter 31.7 kW	**Component Description:** Transmitter **Amount:** $76,822.07 **Component Description:** WTNZ- 110-1st Primary Transmitter - UHF Liquid Cooled Solid State, 21-31 kW **Amount:** $8,881.81 **Component Description:** ULXTE-50, 75% payment of comparable equipment **Amount:** $494,459.87 **Component Description:** Enhanced Feature- License- 1 switch **Amount:** $5,080.08 **Component Description:** A. Transmitter **Amount:** $244,344.43 **Component Description:** Invoice moved to correct budget category. **Amount:** N/A **Component Description:** ULXTE-50 **Amount:** $90,739.11

	Component Description: Invoice moved to correct budget category per NMI message **Amount:** N/A **Component Description:** 7401278000 Parallel Surge Suppressor **Amount:** $1,699.97 **Component Description:** SMP chassis (dual PS), ATSC Receive Configuration **Amount:** $4,695.00 **Component Description:** Precision 3430 Small Form Factor **Amount:** $1,356.47 **Component Description:** CABLE **Amount:** $59.19 **Component Description:** ULXTE-50 **Amount:** $60,528.74 **Component Description:** PLNM 100022 **Amount:** $86.96
Switchgear - industrial 800 amp	Information not provided.
removal of existing equipment	Information not provided.

Auxiliary Transmitter-Deinstall and Relocate	**Component Description:** **Amount:**	Travel $4,567.45
Other -- Building Addition Size: 200.0	Information not provided.	
Transformer 3 phase/480v - 150 KVA	Information not provided.	
2" Rigid Conduit and Wiring (Cost per foot)	Information not provided.	
Other Electrical Service: panel board distribution and breakers	**Component Description:** **Amount:**	WTNZ-150-1st Auxiliary Transmitter - Other Electrical Service $33,724.16
10 Ton system	**Component Description:** **Amount:**	WTNZ-150-1st Auxiliary Transmitter - 10 Ton System $22,942.50
1.5 kW mask filter	Information not provided.	

UHF and VHF - minor banding issues	**Component Description:** **Amount:**	Channel Change UAX-1000AT $17,105.72
	Component Description: **Amount:**	Channel Change & Proof $1,671.23
	Component Description: **Amount:**	Channel Change UAX-1000AT per quote GA-00021682 $1,114.15

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 TFU-24GTH /VP-R 04	**$353,273.20**	**$278,581.20**		**$225,282.57**	
Elbow complex, single channel, at antenna input, per 6 1/8. feedline (if needed)	$12,300.00	$10,298.00	included in antenna cost, quote attached	$9,481.38	N/A
Antenna Pedestal	***$44,743.20***	$44,743.20	See Estimated Cost Justification WTNZ-210-Primary Antenna - Antenna Pedestal v0	$44,743.20	N/A
UHF - High Power Top Mount (200-1000 kW), One station antenna , elliptically or circularly polarized	$289,500.00	$217,140.00	Quote Attached (800134CMZ-2) Station is responsible for $27,600 in v-pol related expense.	$164,657.99	N/A

Sweep test of existing antenna	$6,730.00	$6,400.00	N/A	$6,400.00	N/A
Sub-total	$353,273.20	$278,581.20	N/A	$225,282.57	N/A
Total for all systems	$3,640,047.69	$3,141,251.63	N/A	$2,047,397.25	N/A

Components

Actual Information Description	File Name	
Elbow complex, single channel, at antenna input, per 6 1/8. feedline (if needed)	**Component Description:** **Amount:**	WTNZ-210-Primary Antenna - Elbow Complex, 6 1/8" $4,634.10
	Component Description: **Amount:**	WTNZ-210-Primary Antenna - Elbow Complex, 6 1/8 $213.18
	Component Description: **Amount:**	WTNZ-210-Primary Antenna - Elbow Complex, 6 1/8" $4,634.10

Antenna Pedestal	**Component Description:**	WTNZ-210-Primary Antenna - Antenna Pedestal
	Amount:	$1,375.00
	Component Description:	50% DEPOSIT DUE WITH ORDER
	Amount:	$19,450.00
	Component Description:	Tower Pedestal
	Amount:	$23,918.20
UHF - High Power Top Mount (200-1000 kW), One station antenna , elliptically or circularly polarized	**Component Description:**	Freight, shipping and handling
	Amount:	$3,339.75
	Component Description:	Antenna UHF high power top mount
	Amount:	$80,659.12
	Component Description:	Antenna UHF high power top mount
	Amount:	$80,659.12

Sweep test of existing antenna	**Component Description:** **Amount:**	WTNZ-210-Primary Antenna - Sweep Test $2,880.00
	Component Description: **Amount:**	Other $640.00
	Component Description: **Amount:**	WTNZ-210-Primary Antenna - Sweep Test $2,880.00

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	**$304,828.14**	**$234,998.83**		**$234,843.80**	
Nitrogen Regulator	***$1,828.14***	$1,828.14	Please see WTNZ Greenville Media quote 6143 lines 15 - 19, plus actual taxes and freight on invoice 6143-3	$1,828.14	N/A
Rigid Transmission Line - copper, 6 1/8"	$303,000.00	$233,170.69	see Estimated Cost Justification WTNZ-310-Primary Transmission Line - Rigid Copper, v3	$233,015.66	invoices
Sub-total	$304,828.14	$234,998.83	N/A	$234,843.80	N/A
Total for all systems	$3,640,047.69	$3,141,251.63	N/A	$2,047,397.25	N/A

Components

Actual Information Description	File Name	
Nitrogen Regulator	**Component Description:** **Amount:**	Nitrogen Regulator $1,828.14
Rigid Transmission Line -		

copper, 6 1/8"

Component Description:	WTNZ-310-Primary Transmission Line - Rigid Copper, 6 1/8"
Amount:	$97,906.72
Component Description:	WTNZ-310-Primary Transmission Line - Rigid Copper, 6 1/8
Amount:	$3,552.93
Component Description:	T/L 6-75 EIA length 15' to 20' fixed FLG
Amount:	$3,133.40
Component Description:	Rigid transmission line-copper
Amount:	$21,757.06
Component Description:	RFREIGHT OTHER
Amount:	$3,376.59
Component Description:	Stainless 3/8" angle adapters
Amount:	$1,602.75
Component Description:	SADDLE KIT 6 T/L 5/8 X 7 LG
Amount:	$876.40

Component Description:	WTNZ-310-Primary Transmission Line - Rigid Copper, 6 1/8"
Amount:	$97,906.72
Component Description:	FREIGHT, SHIPPING, AND HANDLING LINE 31 & LINE 32 FEDEX FIRST OVERNIGHT
Amount:	$2,884.23
Component Description:	COLORED VINYL TAPE
Amount:	$18.86

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	Actua Justif
Primary Tower GTOWER	**$421,000.00**	**$409,500.00**		**$0.00**	
Complex Tower (includes, for example, those with candelabras and/or stacked antennas)	$421,000.00	$409,500.00	Remove Equipment From Old Tower	$0.00	N
Primary Tower GTOWER	**$527,700.00**	**$315,968.75**		**$311,125.00**	
Tower Mapping	***$20,600.00***	$20,600.00	Please see Raycom Purchase Order Corp_WTNZ_ATC_01 and ATC Tower Invoice 460208332	$20,600.00	N
Tower Permit Drawing Package	***$4,700.00***	$4,700.00	Please see WTNZ Customer Project Cost Estimation 282655 Knoxville TN 1	N/A	N
Complex Tower (includes, for example, those with candelabras and/or stacked antennas)	$421,000.00	$210,268.75	see Estimated Cost Justification WTNZ-410-New Primary Tower - Complex Tower v0	$210,125.00	N

ATC Capital Contribution	***$5,000.00***	$5,000.00	See attached Please see Raycom Purchase Order Corp_WTNZ_ATC_02 and WTNZ American Tower Invoice 460211214	$5,000.00	N
Tower Helicopter Lift	***$56,400.00***	$56,400.00	Tower King II, Inc Proposal C-19-014	$56,400.00	N
Structural engineering tower load study for a documented tower with candelabra	$20,000.00	$19,000.00	Please see Raycom Purchase Order Corp_WTNZ_ATC_01 and ATC Tower Invoice 460208330	$19,000.00	N
Sub-total	$948,700.00	$725,468.75	N/A	$311,125.00	N
Total for all systems	$3,640,047.69	$3,141,251.63	N/A	$2,047,397.25	N

Components

Actual Information Description	**File Name**
Complex Tower (includes, for example, those with candelabras and/or stacked antennas)	Information not provided.
Tower Mapping	**Component Description:** Broadcast Tower Mapping **Amount:** $20,600.00
Tower Permit Drawing Package	Information not provided.

Complex Tower (includes, for example, those with candelabras and/or stacked antennas)	**Component Description:** **Amount:**	WTNZ-410-New Primary Tower - Complex Tower $78,420.00
	Component Description: **Amount:**	WTNZ-410-New Primary Tower - Complex Tower $126,505.00
	Component Description: **Amount:**	Repack work $2,200.00
	Component Description: **Amount:**	Use of Gap Road property for staging area $3,000.00
ATC Capital Contribution	**Component Description:** **Amount:**	CAPITAL CONTRIBUTION $5,000.00
Tower Helicopter Lift	**Component Description:** **Amount:**	TOWER SERVICE $34,820.00
	Component Description: **Amount:**	Down Payment for WTNZ Repack Antenna Project $21,580.00
Structural engineering tower load study for a documented tower with candelabra	**Component Description:** **Amount:**	Broadcast Structural $19,000.00

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	**$244,790.00**	**$257,266.10**		**$128,499.07**	
Comprehensive coverage verification via field study, if needed	$84,200.00	$80,000.00	N/A	$9,560.78	N/A
Attorney Fees - Negotiation of lease and other matters for shared locations	$4,210.00	$4,216.10	Estimated Cost Justification WTNZ-550-Attorney - Negotiate Lease and Other Matters v0	$4,216.10	N/A
Attorney Fees - Prepare and File FCC Form 2100 (main), License to Cover Application	$2,365.00	$2,250.00	N/A	$765.50	N/A
Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	$5,260.00	$5,000.00	N/A	N/A	N/A

Prepare 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	$3,625.00	Per invoices submitted	$3,625.00	N/A
Perform engineering study for new channel assignment and antenna development	$7,360.00	$7,000.00	N/A	$5,568.98	N/A
Address transition timing and coordination issues w/ other stations and wireless	$2,630.00	$2,000.00	market phase coordination	N/A	N/A
Prepare and or review reimbursement form	$2,630.00	$2,000.00	N/A	$74.20	N/A
Project management of the transition	$126,400.00	$144,675.00	Widelity Strategic Support Quote	$103,935.75	N/A
Additional Field Engineering Service, 1 Days	***$5,000.00***	$5,000.00	N/A	$752.76	N/A
Sub-total	$244,790.00	$257,266.10	N/A	$128,499.07	N/A
Total for all systems	$3,640,047.69	$3,141,251.63	N/A	$2,047,397.25	N/A

Components

Actual Information Description	File Name	
Comprehensive coverage verification via field study, if needed	**Component Description:**	WTNZ-580-Field Engineering Service - Comprehensive Coverage Verification
	Amount:	$9,560.78

Attorney Fees - Negotiation of lease and other matters for shared locations	**Component Description:** **Amount:**	RE: WTNZ Repack Legal Services (19200) $441.80
	Component Description: **Amount:**	RE: WTNZ Repack Legal Services (19200) $392.00
	Component Description: **Amount:**	Legal Services $903.70
	Component Description: **Amount:**	RE: WTNZ Repack Legal Services (19200) $2,084.00
	Component Description: **Amount:**	RE: WTNZ Repack Legal Services (19200) $49.00
	Component Description: **Amount:**	RE: WTNZ Repack Legal Services (19200) $345.60
Attorney Fees -Prepare and File FCC Form 2100 (main), License to Cover Application	**Component Description:** **Amount:**	WTNZ-550-Attorney - License to Cover Application (Main) $765.50
Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	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:** **Amount:**	Preparation of the engineering portion of FCC Form 2100 $1,625.00
	Component Description: **Amount:**	Preparation of the engineering portion of FCC Form 2100 $2,000.00

Perform engineering study for new channel assignment and antenna development	**Component Description:** **Amount:**	WTNZ-530-RF Eng - Engineering Study for New Channel Assignment $1,568.98
	Component Description: **Amount:**	Repack engineering $220.83
	Component Description: **Amount:**	Repack Engineering $1,187.50
	Component Description: **Amount:**	Engineering study work for new channel assignment and antenna development. $125.00
	Component Description: **Amount:**	WTNZ-530-RF Eng - Engineering Study for New Channel Assignment $216.67
	Component Description: **Amount:**	WTNZ-530-RF Eng - Engineering Study for New Channel Assignment $2,250.00
Address transition timing and coordination issues w/ other stations and wireless	Information not provided.	

Prepare and or review reimbursement form	**Component Description:** **Amount:**	WTNZ Repack legal Services $25.20
	Component Description: **Amount:**	RE: WTNZ Repack Legal Services (19200) $49.00
Project management of the transition	**Component Description:** **Amount:**	Project Management $3,143.20
	Component Description: **Amount:**	Project Management $2,362.50
	Component Description: **Amount:**	Project Management $2,597.50
	Component Description: **Amount:**	Project Management $4,346.35
	Component Description: **Amount:**	Project Management $169.40
	Component Description: **Amount:**	Project Management $968.87

Component Description: Project Management
Amount: $4,761.25

Component Description: Project Management
Amount: $4,220.35

Component Description: Travel Expenses
Amount: $893.20

Component Description: Project management
Amount: $6,194.05

Component Description: Project Management
Amount: $3,366.65

Component Description: Project Management
Amount: $2,855.15

Component Description: WTNZ-510-Project Management
Amount: $385.00

Component Description: Project Management
Amount: $4,848.75

Component Description: Project Management
Amount: $4,061.70

Component Description:	Project Management
Amount:	$2,175.00
Component Description:	Project Management
Amount:	$6,636.05
Component Description:	Project Management
Amount:	$3,757.85
Component Description:	Project management
Amount:	$2,324.00
Component Description:	Project Management
Amount:	$3,098.10
Component Description:	Project Management
Amount:	$105.00
Component Description:	Project Management
Amount:	$3,227.55
Component Description:	Project Management
Amount:	$4,945.00
Component Description:	Project Management
Amount:	$3,447.50

	Component Description: **Amount:**	Project Management $4,755.60
	Component Description: **Amount:**	Widelity information request $43.63
	Component Description: **Amount:**	Project Management $2,084.95
	Component Description: **Amount:**	Project Management $7,524.15
	Component Description: **Amount:**	Project Management $4,771.30
	Component Description: **Amount:**	Project Management $2,999.90
	Component Description: **Amount:**	Project Management $6,866.25
Additional Field Engineering Service, 1 Days	**Component Description:** **Amount:**	WTNZ-580-Field Engineering Service - Additional Field Engineering, 1 Day $752.76

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 Cos Justificati
Other Expenses	**$230,059.36**	**$222,139.36**		**$159,210.03**	
Site Security	***$9,450.00***	$9,450.00	Invoices Christopher Bell 001, Christopher Jones 002, Daniel Paidousis 002, David Gerlach 002, 003, Hayden Cochran 001, James Lockmiller 002, 003, Michael Geddings 001, 002, Alan Meisheid 001, 002, Jonathan Gomez 001, Shawn Austin 001	$9,450.00	N/A
Disposal Costs (for equipment and other waste, net of any salvage value)	***$25,000.00***	$25,000.00	N/A	$11,012.48	N/A
Non-zoning permits	***$8,500.00***	$8,500.00	see Estimated Cost Justification WTNZ-610-Non-Zoning Permits v0	$8,500.00	N/A

Local Zoning	***$1,000.00***	$1,000.00	Please see WTNZ Customer Project Cost Estimation 282655 Knoxville TN 1	N/A	N/A
ATC Expenses	***$19,630.00***	$19,630.00	ATC document attached	N/A	N/A
Microwave STL	***$119,671.69***	$119,671.69	See Estimated Cost Justification WTNZ-610-Microwave STL v1	$118,974.88	N/A
MVPD Notification of Channel Change	***$5,000.00***	$5,000.00	N/A	N/A	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	***$20,000.00***	$20,000.00	Dielectric letter attached	$1,560.00	N/A
Equipment Delivery and Handling Charges	***$5,962.67***	$5,962.67	Estimated Cost Justification WTNZ-610-Equipment Delivery and Handling v1	$5,962.67	Please se submitted invoices.
FCC Filing Fees - Form 2100 license to cover application	$335.00	$325.00	N/A	N/A	N/A
DTV Medical Facility Notification	$11,550.00	$3,750.00	Group quote attached	$3,750.00	N/A

FCC Filing Fees - Form 2100 minor change CP application	$1,110.00	$1,000.00	N/A	N/A	N/A
Sub-total	$230,059.36	$222,139.36	N/A	$159,210.03	N/A
Total for all systems	$3,640,047.69	$3,141,251.63	N/A	$2,047,397.25	N/A

Components

Actual Information Description	File Name	
Site Security	**Component Description:** **Amount:**	WTNZ Antenna Upgrade Job #691 $240.00
	Component Description: **Amount:**	Repack Security $420.00
	Component Description: **Amount:**	Repack Security $210.00
	Component Description: **Amount:**	Repack Security $210.00
	Component Description: **Amount:**	Repack Security - GL#110128 $450.00
	Component Description: **Amount:**	Repack Security $240.00
	Component Description: **Amount:**	Repack Security $240.00

Component Description: Repack Security - GL#110128
Amount: $660.00

Component Description: WTNZ Antenna Upgrade Job #691
Amount: $240.00

Component Description: Repack Security - GL#110128
Amount: $420.00

Component Description: Repack Security - GL#110128
Amount: $240.00

Component Description: Repack Security
Amount: $510.00

Component Description: Repack Security
Amount: $1,260.00

Component Description: WTNZ Antenna Upgrade Job #691
Amount: $480.00

Component Description: WTNZ Antenna Upgrade Job #691
Amount: $450.00

Component Description: WTNZ Antenna Upgrade Job #691
Amount: $420.00

Component Description:	Repack Security - GL#110128
Amount:	$240.00
Component Description:	Repack Security
Amount:	$210.00
Component Description:	Repack Security - GL#110128
Amount:	$660.00
Component Description:	Repack Security
Amount:	$270.00
Component Description:	WTNZ Antenna Upgrade Job #691
Amount:	$420.00
Component Description:	WTNZ Antenna Upgrade Job #691
Amount:	$480.00
Component Description:	WTNZ Antenna Upgrade Job #691
Amount:	$210.00
Component Description:	Repack Security
Amount:	$270.00

Disposal Costs (for equipment and other waste, net of any salvage value)	**Component Description:** **Amount:**	Fee, Fuel Surcharge $1,412.48
	Component Description: **Amount:**	Service Call $9,150.00
	Component Description: **Amount:**	delivery of roll-off container, release of roll-off container $450.00
Non-zoning permits	**Component Description:** **Amount:**	WTNZ-610-Non-Zoning Permits $8,500.00
Local Zoning	Information not provided.	
ATC Expenses	Information not provided.	

Microwave STL	**Component Description:** Antenna HP DP **Amount:** $40,106.40 **Component Description:** FREIGHT CHARGES **Amount:** $2,363.78 **Component Description:** Ubiquiti-Powerbeam 5 GHZ, 400MM- US **Amount:** $13,424.53 **Component Description:** MRK Series 19" Gangable Enclosure **Amount:** $2,953.48 **Component Description:** IPLink 6GHz Duplex T/R HS, High RF **Amount:** $60,126.69
MVPD Notification of Channel Change	Information not provided.
Develop and air announcement of upcoming channel change	Information not provided.
Equipment Storage	**Component Description:** WTNZ-610-Equipment Storage **Amount:** $1,560.00

Equipment Delivery and Handling Charges	**Component Description:** **Amount:**	EQUIPMENT RENTAL $787.48
	Component Description: **Amount:**	Stowers Rental TL642D $787.48
	Component Description: **Amount:**	EQUIPMENT RENTAL $405.21
	Component Description: **Amount:**	Freight and Shipping $3,982.50
FCC Filing Fees - Form 2100 license to cover application	Information not provided.	
DTV Medical Facility Notification	**Component Description:** **Amount:**	Medical Notification Mailing Complete per FCC Repack $3,750.00
FCC Filing Fees - Form 2100 minor change CP application	Information not provided.	

Cost Information

Grand Total

	Predetermined Cost Estimate	Estimated Cost	Actual Cost
Total for all systems	$3,640,047.69	$3,141,251.63	$2,047,397.25

Reimbursement Status

Question	Response
The facility has ceased operating on its pre-auction channel.	Yes
Construction of final facilities or all necessary modifications are complete.	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.	**Bob Pectelidis** *Director of Corporate Engineering* 12/14/2020

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.	**Bob Pectelidis** *Director of Corporate Engineering* 12/14/2020

Attachments