

(REFERENCE COPY - Not for submission)

FCC Form 399: Reimbursement Request

Facility 25932 Service: DTV Call WHRO-TV Channel: 31 (UHF)

Sign:

0000027736

Number:

ID:

File

FRN: **0002062511** Date **08/03**

Submitted: /2020

Applicant Information

Applicant Name, Type, and Contact Information

Applicant	Address	Phone	Email	Applicant Type
HAMPTON ROADS EDUCATIONAL TELECOMMUNICATIONS ASSOC., INC. Doing Business As: HAMPTON ROADS EDUCATIONAL TELECOMMUNICATIONS ASSOC., INC.	Chris G. Gunnufsen 5200 HAMPTON BOULEVARD NORFOLK, VA 23508 United States	+1 (757) 889- 9394	chris. gunnufsen@whro. org	Not-for- Profit

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

The Preparer is same as the reimbursement contact.

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	The transition plan is being handled by the Owner of the Tower, American Tower Corporation. The tower is complicated due to the total number of broadcasters collocated on the tower. There will be a

Transmitters

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

Wide Band interim antenna side mounted

on the tower 987'

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 Millenium
	Year	2001
	Туре	Inductive Output Tube
	IOT Power Type	Two
	Power Capacity	60 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?	No
	Manufacturer	
	Model	HPTV PRLX- U36
	Transmitter Type	Solid State
	Solid State Cooling	Liquid Cooled
	Solid State Power capacity	58 kW
	Justification for New Transmitter	The Channels are to Far apart for Re- tuning. Channel 16 Pre and Channel 31 post Repacking. This has been verified with Hitachi Comark LLC. Manufacturer of the existing channel 16 antenna. The IOT Transmitters has been replaced by the Parallax SS

Primary Transmitter

Other Transmitter Costs

Section	Question	Response
Electrical Service	Service Entrance (3 phases 800A 208V)	No
	Switchgear (industrial 800 amp)	Yes
	Transformer (480V)	Yes
	Power	500 kVA
	Rigid Conduit and Wiring	Yes
	Size	4 inches
	Length	300.0 feet
	Other Electrical Service	Yes
	Description	Installation of Transmitter Electrical systems
HVAC Service	Does the replacement transmitter require HVAC Service?	Yes
	Туре	Cooling Only
	Size	15 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	4500.0 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

Other Transmitter Cost Not Listed

Primary
Transmitter Information not provided.

Antennas

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

Primary Antenna

Existing Antenna Information

Section	Question	Response
Existing Antenna Description	Type of change	Lease New
	Antenna Use	Primary (Main)
	Description of Use	N/A
	Ownership	Owned
	Owner	N/A
	Site	N/A
	Is the existing antenna shared with another station or stations?	No
	Is the existing antenna directional?	Yes
	Is antenna in operating condition?	Yes
	Is antenna located on or in close proximity to an antenna farm?	Yes
Existing Antenna	Class	Full Power
Manufacturer and Type	Mounting	Top Mount
	Antenna position in stack	Bottom
	Polarization	Horizontal
	Туре	Slotted Coaxial
	Number of Stations Supported	N/A
	Number of Panels	N/A
	Design power capacity in use	N/A
	Lower Limit	N/A
	Upper Limit	N/A
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power)	1000.0 kW
	Manufacturer	

	Model	TFU- 24GBH-R 08SP
	Year	2000

Primary Antenna

New Antenna Costs

Section	Question	Response
New Antenna Description	Use	Primary (Main)
	Description of Use	N/A
	Change Type	Lease New
	Is this a request for upgraded equipment?	Yes
	Ownership	Leased
	Owner	American Tower LLC
	Is antenna shared?	Yes
	Is antenna directional?	No
	Will antenna be located on or in close proximity to an antenna farm?	Yes
New Antenna	Class	Full Power
Manufacturer and Types	Mounting	Top Mount
	Antenna position in stack	Not in Stack
	Polarization	Elliptical
	Туре	Broadband Panel
	Number of Stations Supported	4
	Number of Panels/Bays	70
	Lower Limit	470.00 MHz
	Upper Limit	700.00 MHz
	Design power capacity in use	41.0 %
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power)	1950.0 kW
	Manufacturer	
		,

Model	PEP70E-05- 2-T
Year	2019
Justification for New Antenna	Combining Stations to reduce load and Total FCC Costs

Primary Antenna

Other Antenna Costs

Section	Question	Response
Combiner for Shared Antenna	Do you need a Combiner for a Shared Antenna?	Yes
	Туре	New
	Number of channels supported	4
	Frequencies of channels supported	RF channel
	Frequency	N/A
	Do you need a combiner output splitter /switcher for dual feed lines?	Yes
Elbow Complex	Do you require the separate purchase of the Elbow Complex?	Yes
	Broadband or Single Channel?	Broadband
	Feed Line Size	8 3/16 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

Enter a list of RF channel numbers.

RF Channel Number	
20	
16	
31	
33	

Primary Antenna

Other Antenna Cost Not Listed

Name	Description	
Combiner Installation	ATC Estimated Costs for line item 3-C-2	

Interim Antenna

New Antenna Costs

Section	Question	Response
New Antenna Description	Use	Interim
	Description of Use	N/A
	Change Type	Purchase New
	Ownership	Leased
	Owner	American Tower Corp
	Is antenna shared?	Yes
	Is antenna directional?	Yes
	Will antenna be located on or in close proximity to an antenna farm?	Yes
New Antenna	Class	Full Power
Manufacturer and Type	Mounting	Side Mount
	Antenna position in stack	Not in Stack
	Polarization	Elliptical
	Туре	Broadband Slot
	Number of Stations Supported	5
	Number of Panels/Bays	24
	Lower Limit	482.00 MHz
	Upper Limit	590.00 MHz
	Design power capacity in use	75.0 %
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power)	60.0 kW
	Manufacturer	
	Model	SBB-EP- 24C160

Year	2018
Justification for New Antenna	Complex antenna structure with multiple
	stations trying to remain on the air during the
	transition to new channels. See American
	Tower Plan.

Interim Antenna

Other Antenna Costs

Section	Question	Response
Combiner for Shared Antenna	Do you need a Combiner for a Shared Antenna?	Yes
	Туре	New
	Number of channels supported	5
	Frequencies of channels supported	RF channel
	Frequency	N/A
	Do you need a combiner output splitter /switcher for dual feed lines?	Yes
Elbow Complex	Do you require the separate purchase of the Elbow Complex?	Yes
	Broadband or Single Channel?	В
	Feed Line Size	7 3/16 inches
Side Mount Brackets	Do you require the separate purchase of side mount brackets for an antenna?	Yes

Pattern Scatter Analysis	Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna?	No
Sweep Test	Do you require the sweep testing of transmission line and antenna?	Yes

Enter a list of RF channel numbers.

RF Channel Number	
16	
20	
31	
32	
33	

Interim Antenna

Other Antenna Cost Not Listed

Name	Description
Interim Tower Rental	One time tower rental during repack line item 1-B-1

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

Primary Transmission Line

Existing Transmission Line

n Line Section	Question	Response
Existing Transmission Line Description	Type of change	Lease New
	Use	Primary (Main)
	Description of Use	N/A
	Ownership	Leased
	Owner	American Tower LLC
	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	19 1/2 inches
	Other Segment Length	N/A
	Number of parallel runs	1
	Length	1307 feet per run

Primary Transmission

New Transmission Line

Section	Question	Response
New Transmission Line Costs	Use	Primary (Main)
	Description of Use	N/A
	Change Type	Lease New
	Is this a request for upgraded equipment?	No
	Туре	Rigid
	Diameter	8 3/16 inches
	Other Diameter	N/A
	Segment Length	Broadband
	Other Segment Length	N/A
	Number of parallel runs	2
	Length	1350 feet per run
	Justification for New Transmission Line	Part of a shared Broadband antenna system

Other Transmission Line Expenses Not Listed

Transmission	n Line Name Description	
	Combiner system	Combiner system for shared Broadband antenna

New Transmission Line

Interim	
Transmission	1

n Line Section	Question	Response
New Transmission Line	Use	Interim
Costs	Description of Use	N/A
	Change Type	Purchase New
	Туре	Rigid
	Diameter	8 3/16 inches
	Segment Length	Broadband
	Other Segment Length	
	Number of parallel runs	1
	Length	1100 feet per run
	Justification for New Transmission Line	Single run Dielectric 8- 3/16" Digitline with 950 ft vertical plus 150 ft. run equals 1100 ft. total; Includes nitrogen generator plus 200' of vertical run to get to the combiner network in ATC owned building located in the compound total WHRO 1300

Interim Transmissio

Other Transmission Line Expenses Not Listed

on <mark>Line</mark>	Description
Transmission line interim	200 Ft of 6 1/8 " line to connect to the Wibeband Interim antenna located in the ATC building approx 200 ft away.
Elbows	3 Elbows are needed to connect a new sections of 6 1/8' line to the interim broadband antenna located in American Tower owned building.

Tower Equipment And Rigging Costs

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

Primary Tower

Existing Tower

Section	Question	Response
Existing Tower Description	Type of change	Modify Existing
Description	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?	Yes
	Is tower compliant with Rev G?	Yes
Existing Tower	Do you have a tower registration number?	Yes
Structure Registration	ASR Number	1057874
Coordinates (NAD83 (North American Datum of 1983))	Latitude (NAD83)	36° 48' 31.8" N-
	Longitude (NAD83)	076° 30' 11.3" W-
	Overall Structure Height	1258.84 feet
	Support Structure Height	1254.91 feet
	Ground Elevation Above Mean Sea Level (AMSL)	22.97 feet

Structure Type	GTOWER - Guyed Structure Used for Communication Purposes
Tower Owner	American Towers, LLC
Date Constructed	02/03/2006

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
25932	WHRO-TV	DTV
40759	WTVZ-TV	DTV
47401	WTKR	DTV
25933	WHRV	FM
25940	WHRO-FM	FM
9762	WGNT	DTV
67077	WPXV-TV	DTV
82574	WTPC-TV	DTV

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:	Minor Reinforcements needed

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

Name	Description
Tower Permit Drawing Package	Tower Permit Drawing Package
Tower Construction Project Management	Tower Construction Project Management

Outside Professional

Costs associated with American Tower Corporation This is a very complicated site and wil require Project manageme from all Broadcaste collocated on the towe Est is base on Previous conversion to digital in 2001 Outside RF consulting Engineering Services Perform engineering study for new channel assignment and antenna development Prepare engineering section of Form FCC Construction Permit Application Yes	Section	Question	Response
Explanation This is for the project manageme costs associated with American Tower Corporation This is a very complicate site and will require Project manageme from all Broadcaste collocated on the towe Est is base on Previous conversion to digital in 2001 Outside RF consulting Engineering Services Perform engineering study for new channel assignment and antenna development Prepare engineering section of Form FCC Construction Permit Application This is for the project manageme from the project manageme from all broadcaste collocated on the towe Est is base on Previous conversion to digital in 2001 Ves			Yes
the project manageme costs associated with American Tower Corporation This is a very complicate site and wil require Project manageme from all Broadcaste collocated on the towe Est is base on Previous conversion to digital in 2001 Outside RF consulting Engineering Services Perform engineering study for new channel assignment and antenna development Prepare engineering section of Form FCC Construction Permit Application Yes		Number of Hours	770
Engineering Services assignment and antenna development Prepare engineering section of Form FCC Construction Permit Application Yes		Explanation	the project management costs associated with American Tower Corporation. This is a very complicated site and will require Project management from all Broadcasters collocated on the tower. Est is based on Previous conversion to digital in
Construction Permit Application	=		Yes
			Yes
For Auxiliary Facility No		For Auxiliary Facility	No
For Main Facility Yes		For Main Facility	Yes
Prepare engineering section of Form FCC License to Cover Application Yes			Yes
For Auxiliary Facility No		For Auxiliary Facility	No
For Main Facility Yes		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	Yes
	Environmental Assessment	Yes
	ASR Modification	Yes
	FAA Consultation (including preparation of FAA Form 7460)	Yes
	Negotiation of Lease and other Matter for Shared Locations	Yes
	Prepare or Review FCC Form 399 for Reimbursement	Yes
	Address transition timing and coordination issues w/ other stations and wireless providers	Yes
RF Field Engineering Services	Comprehensive coverage verification via field study	Yes

RF exposure measurements	Yes
Additional Field Engineering Service	No
Number of Days	N/A
Justification	N/A

Outside Professional

Other Professional Services Expenses Not Listed

Services Costs	Description
Migratory Bird Assessment	Tower located in a migratory Bird Path
RF System Test	Testing of the combiner to ensure all one (1) frequencies are tuned for optimal patterns.
Site Coordination Meeting	Site coordination meetings with all broadcasters, contractors and vendors involved with the site deliveries and construction. This cost is for travel and logistics expenses accrued.
Ground and Building Drawing Package	Ground & Building A&E Permit Drawing Package

Other Expenses

Section	Question	Response
AM Pattern Disturbance	Is an Impact Study needed?	No
	Is Remediation needed?	No
Facility Expenses	Name	N/A
	Other Distributed Transmission System Expenses Not listed	N/A
	Name	N/A
	Is Notification of a Medical Facility required as a result of DTV broadcasting?	Yes
Permit and Filing Costs	Local Zoning	Yes
	Non-zoning permits	Yes
	BLM or NFS Coordination	Yes
	FCC Construction Permit Minor Change	No
	FCC License to Cover Application	Yes
	FCC Special Temporary Authority Application	Yes
Other Miscellaneous Expenses	Does this relocation require paying Disposal Costs (for equipment and other waste, net of any salvage value)?	Yes
	Does this relocation require Equipment Delivery or Handling Charges not otherwise included in individual item costs?	Yes
	Does this relocation require Equipment Storage?	Yes
	Does this relocation require the Development and Airing of an Announcement regarding an upcoming channel change?	Yes
	Does this relocation require MVPD Notification of a Channel Change?	Yes

Other Expenses

Other Expenses Not Listed

Name	Description
Comark System Design and Site Survey	Cost associated with Hitachi Comark to do a site visit and design for the Transmitter installation
ATC One Time Tower Rental	ATC have 3 repack customers, one non repacked customer and one new customer on the Norfolk TT. The interim Main side mount antenna will allow the broadcasters to minimize their OTA disruption, maintain their coverage contour, complete in safe manner
Grading Road	The Gravel Road Will be destroyed during the repacking andwill require several Gradings during the process due to the complexity of the site and total number of broadcasters impacted
Public Hearing	Cost associated with Public hearings that might be required due to the repacking process and proximity of houses located around the tower
Site Security	Site Security Company during construction for theft prevention and vandalism
Special Insurance Rider	Special insurance rider will need to be purchased by WHRO for the Homes located within 1000' ft of the tower. WHRO owns all of the property surrounding the tower America Tower Leases only a small portion of the ground space, Anchor point Base and Buildin

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 HPTV PRLX- U36	\$3,685,700.00	\$3,535,075.00		\$0.00	
Transformer 3 phase /480v - 500 KVA	\$48,400.00	\$276,401.00	This is to replace the existing 3 wire 600 KVA Clean source UPS with a 4 wire 500KVA Clean Source UPS from Pillar Formerly Active Power	\$0.00	The Existing 3 wire 600 Kva UPS from Active power is not compatible with any solid state transmitter. The replacement is a 4 wire 500 kva UPS from Active power a division of Pillar power systems.
Switchgear - industrial 800 amp	\$38,200.00	\$36,300.00	N/A	\$0.00	N/A

4" Rigid Conduit and	\$30,300.00	\$28,800.00	After Digital conversion	\$0.00	N/A
Wiring (Cost per			in 2009 all conduits		
foot)			and switch		
,			gear was		
			removed		
			that		
			connected		
			to the		
			analog		
			transmitter.		
Other	\$52,000.00	\$52,000.00	Walls have	\$0.00	N/A
Building			to be		
Addition			removed to		
Size: 4500.0			install the		
			new		
			transmitter.		
			This		
			includes		
			removing a mezzanine		
			to mount		
			and install		
			the magic		
			Tee and		
			Mask filter.		
UHF -	\$1,788,000.00	\$1,992,120.00	Includes	\$0.00	N/A
Liquid			342,120		
Cooled			dollars for		
Solid State			the RFS 6		
Transmitter			pole filter		
52 - 61 kW			and		
			switches to		
			change from		
			the interim		
			antenna to		
			the main		
			antenna		

15 Ton	\$55,800.00	\$53,000.00	The new	N/A	N/A
system			transmitter,		
			CIF and		
			Magic Tee		
			will need to		
			be located		
			in a room		
			that does		
			not have AC		
			at this time.		
			A new AC		
			will be		
			needed to		
			keep the		
			CIF, magic		
			tee,		
			Combiner		
			and		
			temperature		
			from		
			Overheating		
			and drifting		
			in power.		

UHF - Liquid Cooled Solid State Transmitter 35 - 50 kW	\$1,473,000.00	\$896,454.00	***System Notice: Estimate adjusted and locked because line has been superseded. ***The options are needed to make the performance equal to the existing Transmitter and Filters. The additional filters are needed due to adjacent channel back feeding down the antenna and into the trasnmitter	\$0.00	The original quote was for a small transmitter then we currently have on Air. The quote Was changed to get as close to a 60 kw as possible to match the current headroom in the existing transmitter.
Other Electrical Service: Installation of Transmitter Electrical systems	\$200,000.00	\$200,000.00	N/A	\$0.00	N/A
Sub-total	\$3,685,700.00	\$3,535,075.00	N/A	\$0.00	N/A
Total for all systems	\$8,108,411.53	\$5,299,640.86	N/A	\$787,942.66	N/A

Components

Actual Information	
Description	File Name

Transformer 3 phase/480v - 500 KVA	Component Description: Amount:	Invoice to be resubmitted to LMS.
Switchgear - industrial 800	Information not provided.	
amp	,	
4" Rigid Conduit and Wiring (Cost per foot)	Information not provided.	
Other Building Addition Size: 4500.0	Information not provided.	
UHF - Liquid Cooled Solid State Transmitter 52 - 61 kW	Component Description:	Invoice to be resubmitted to LMS.
	Amount:	N/A
	Component Description:	Invoice to be resubmitted to LMS.
	Amount:	N/A

UHF - Liquid Cooled Solid State Transmitter 35 - 50 kW		0
	Component Description:	Category has
		been superseded,
		invoice to be
		resubmitted in
		appropriate
		category
	Amount:	N/A
	Component Description:	Category has
		been superseded.
		Invoice to be
		resubmitted in
		appropriate
		category.
	Amount:	N/A
Other Electrical Service:	Information not provided.	
Installation of Transmitter	·	
Electrical systems		

Cost Information

Antennas

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Interim Antenna SBB-EP- 24C160	\$374,530.00	\$236,766.33		\$130,449.99	
Elbow complex, broadband, at antenna input, per 7 3/16. feedline (if needed)	\$16,850.00	\$4,000.00	Please see WHRO American Towers Customer Project Cost Estimation	\$3,000.00	N/A
Interim Tower Rental	\$57,600.00	\$57,600.00	Interim antenna Tower rental during repack	\$43,200.00	N/A
Side mount brackets for high power antennas (if not included in antenna base cost)	\$23,150.00	\$8,500.00	Shared cost with Other Broadcasters being repacked See WHRO IM Norfolk Tall Tower 10152 Repack Cost Estimates	\$0.00	N/A

Combiner	\$126,000.00	\$50,000.00	Shared	\$0.00	25 percent
output			Costs See		payment
splitting			American		on
/switching			Tower		combiners
for dual			document:		
feed lines,			WHRO IM		
if applicable			Norfolk Tall		
			Tower 10152		
			Repack Cost		
			Estimates		
			plus		
			10,000.00 as		
			shared		
			installation		
			Costs line		
			item 3-C-2		
New	\$84,200.00	¢40 222 00	Shared	\$33,000.00	Combiner
combiner,	\$64,200.00	\$48,333.00	Costs with	φ33,000.00	25 %
cost per			other		payment
channel			Broadcasters		payment
			being		
(without antenna)			repacked		
			see		
			American		
			Tower		
			Project Costs		
			Estimate.		
			Microsoft Excel		
			Document		
			WHRO IM		
			Norfolk Tall		
			T 10150		
			Tower 10152		
			Tower 10152 Repack Cost Estimates		

Primary Antenna PEP70E-05- 2-T	\$1,339,213.33	\$421,883.33		\$217,112.49	
Sweep test of existing antenna	\$6,730.00	\$8,333.33	Shared expense with Other Broadcasters Being repacked See American Tower Document: WHRO IM Norfolk Tall Tower 10152 Repack Cost Estimates	\$6,249.99	25 percen payment for sweep tests
Power, Side Mount, basic slot antenna, 24 bay,, 60 - 65 kW input, directional,, elliptically or circularly polarized			number of 235,000 has been reduced to 60,000 due to the number of Broadcasters using the Broadband antenna. See American Tower Project Costs Est. Microsoft Excel Document: WHRO IM Norfolk Tall Tower 10152 Repack Cost Estimates		

Combiner output splitting /switching for dual feed lines, if applicable	\$126,000.00	\$126,000.00	N/A	\$0.00	N/A
Elbow complex, broadband, at antenna input, per 8 3/16. feedline (if needed)	\$18,950.00	\$12,000.00	N/A	\$9,000.00	N/A
Combiner Installation	\$13,333.33	\$13,333.33	Per station combiner installation costs	\$9,999.99	N/A
UHF - High Power Top Mount (200- 1000 kW), Four Station broadband panel antenna, elliptically or circularly polarized	\$1,090,000.00	\$198,150.00	This is the per cost per station with 4 station total using the BBA	\$148,612.50	N/A
New combiner, cost per channel (without antenna)	\$84,200.00	\$66,000.00	N/A	\$49,500.00	N/A
Sweep test of existing antenna	\$6,730.00	\$6,400.00	N/A	N/A	N/A
Sub-total	\$1,713,743.33	\$658,649.66	N/A	\$347,562.48	N/A
Total for all systems	\$8,108,411.53	\$5,299,640.86	N/A	\$787,942.66	N/A

Actual Information Description	File Name	
Elbow complex, broadband, at antenna input, per 7 3/16. feedline (if needed)	Component Description:	3. WHRO-TV-280- Interim Antenna - 7 3/16" Broadband Elbow Complex
	Amount:	\$2,000.00
	Component Description:	3. WHRO-TV-280- Interim Antenna - 7 3/16" Broadband Elbow Complex
	Amount:	\$1,000.00
Interim Tower Rental		
	Component Description:	23. WHRO-TV-280- Interim Antenna - Interim Tower Rental
	Amount:	\$28,800.00
	Component Description:	23. WHRO-TV-280- Interim Antenna - Interim Tower Rental
	Amount:	\$14,400.00
	Component Description:	Invoice to be resubmitted to LMS.
	Amount:	N/A
	Component Description:	Invoice to be resubmitted to LMS.
	Amount:	N/A

	Component Description: Amount:	Invoice to be resubmitted to LMS. N/A
	Amount:	New Combiner \$11,000.00
	Component Description:	21. WHRO-TV-280- Interim Antenna -
	Amount:	New Combiner \$22,000.00
	Component Description:	21. WHRO-TV-280- Interim Antenna -
	Amount:	N/A
New combiner, cost per channel (without antenna)	Component Description:	Invoice to be resubmitted to LMS.
Combiner output splitting /switching for dual feed lines, if applicable	Information not provided.	
Side mount brackets for high power antennas (if not included in antenna base cost)	Information not provided.	

UHF - High Power, Side Mount, basic slot antenna, 24 bay,, 60 - 65 kW input, directional,, elliptically or circularly polarized

Component Description: 20. WHRO-TV-280-

Interim Antenna -UHF High Power Side Mount,

Directional, E-POL

Amount: \$15,000.00

Component Description: Invoice to be

resubmitted to LMS.

Amount: N/A

Component Description: 20. WHRO-TV-280-

Interim Antenna-UHF High Power Side Mount,

Directional, E-POL

Amount: \$30,000.00

Component Description: Invoice to be

resubmitted to LMS.

Sweep test of existing		
antenna	Component Description:	22. WHRO-TV-280-
		Interim Antenna -
		Sweep Test
	Amount:	\$4,166.66
	Component Description:	22. WHRO-TV-280-
		Interim Antenna -
		Sweep Test
	Amount:	\$2,083.33
	Component Description:	Invoice to be
		resubmitted to LMS.
	Amount:	N/A
	Component Description:	Invoice to be
		resubmitted to LMS.
	Amount:	N/A
Combiner output splitting switching for dual feed ines, if applicable	Information not provided.	

Elbow complex, broadband, at antenna input, per 8 3/16. feedline (if needed)

Component Description: Invoice to be

resubmitted to LMS.

Amount: N

N/A

Component Description: 4. WHRO-TV-210-

Primary Antenna - 8 3/16" Broadband Elbow Complex

Amount: \$6,000.00

Component Description: 4. WHRO-TV-210-

Primary Antenna - 8
3/16" Broadband
Elbow Complex

Amount: \$3,000.00

Component Description: Invoice to be

resubmitted to LMS.

Combiner Installation		
	Component Description:	2. WHRO-TV-210-
		Primary Antenna -
		Combiner
		Installation
	Amount:	\$6,666.66
		4 -,
	Component Description:	2. WHRO-TV-210-
	Component Besonption.	Primary Antenna -
		Combiner
		Installation
	Amount:	\$3,333.33
	Allount	ψ0,000.00
	Component Description:	Invoice to be
		resubmitted to LMS.
	Amount:	N/A
	Component Description:	Invoice to be
		resubmitted to LMS.
	Amount:	N/A

UHF - High Power Top Mount (200-1000 kW), Four Station broadband panel antenna, elliptically or circularly polarized

Component Description: CAPITAL

CONTRIBUTION - NORFOLK TALL

TOWER

Amount: \$49,537.50

Component Description: CAPITAL

CONTRIBUTION - NORFOLK TALL

TOWER

Amount: \$99,075.00

Component Description: Invoice to be

resubmitted to LMS.

Amount: N/A

Component Description: Invoice to be

resubmitted to LMS.

New combiner, cost per channel (without antenna)	Component Description:	1. WHRO-TV-210- Primary Antenna - New Combiner
	Amount:	\$33,000.00
	Component Description:	1. WHRO-TV-210- Primary Antenna -
		New Combiner
	Amount:	\$16,500.00
	Component Description:	Invoice to be
	Amount:	resubmitted to LMS. N/A
	Component Description:	Invoice to be
	Amount:	resubmitted to LMS. N/A
Sweep test of existing antenna	Information not provided.	

Cost Information

Transmission Line

Description Interim Transmission Line	Predetermined Cost Estimate \$503,230.70	Estimated Cost \$157,097.70	Estimated Cost Justification	Actual Cost \$67,436.50	Actual Cost Justification
Rigid Transmission Line - copper, 8 3 /16" broadband	\$438,900.00	\$92,767.00	The remaining costs are covered by other broadcasters collocated on the same tower that will be repacked Per American Tower Document WHRO IM Norfolk Tall Tower 10152 Repack Cost Estimates	\$66,000.00	N/A
Elbows	\$28,730.70	\$28,730.70	Elbows to connect the vertical run to the interim antenna 3 Total @ 1930.00 each per Dielectric Quote	\$1,436.50	Includes additional items not in the original quote

Transmission line interim	\$35,600.00	\$35,600.00	200 Ft of 6 1 /8" line to connect to the interim antenna per American Tower Document WHRO IM Norfolk Tall Tower 10152 Repack Cost Estimates	\$0.00	N/A
Primary Fransmission Line	\$1,121,300.00	\$264,671.00		\$165,503.25	
Rigid Transmission Line - copper, 8 3 /16" broadband	\$1,077,300.00	\$220,671.00	N/A	\$165,503.25	N/A
Combiner system	\$44,000.00	\$44,000.00	N/A	\$0.00	N/A
Sub-total	\$1,624,530.70	\$421,768.70	N/A	\$232,939.75	N/A
Total for all	\$8,108,411.53	\$5,299,640.86	N/A	\$787,942.66	N/A

Actual Information		
Description	File Name	

Rigid Transmission Line - copper, 8 3/16" broadband

Component Description: 24. WHRO-TV-380-

Interim

Transmission Line

- 8 3/16""

Broadband Rigid

Copper

Amount: \$22,000.00

Component Description: 24. WHRO-TV-380-

Interim

Transmission Line

- 8 3/16"

Broadband Rigid

Copper

Amount: \$44,000.00

Component Description: Invoice to be

resubmitted to

LMS.

Amount: N/A

Component Description: Invoice to be

resubmitted to

LMS.

Amount: N/A

Component Description: Invoice to be

resubmitted to

LMS.

Elbows		
	Component Description:	Invoice to be resubmitted to
	Amount:	LMS. N/A
	Component Description:	Invoice to be resubmitted to LMS.
	Amount:	N/A
	Component Description:	Invoice to be resubmitted to
		LMS.
	Amount:	N/A
	Component Description:	item 1 R0004542501 field Flange 5 at 287 30
	Component Description: Amount:	
Transmission line interim		R0004542501 field Flange 5 at 287.30
Transmission line interim		R0004542501 field Flange 5 at 287.30 \$1,436.50 Invoice to be resubmitted to
Transmission line interim	Amount:	R0004542501 field Flange 5 at 287.30 \$1,436.50
Transmission line interim	Amount: Component Description:	R0004542501 field Flange 5 at 287.30 \$1,436.50 Invoice to be resubmitted to LMS. N/A Invoice to be resubmitted to
Transmission line interim	Amount: Component Description: Amount:	R0004542501 field Flange 5 at 287.30 \$1,436.50 Invoice to be resubmitted to LMS. N/A

Rigid Transmission Line -		
copper, 8 3/16" broadband	Component Description:	5. WHRO-TV-310-
		Primary
		Transmission Line
		- 8 3/16"
		Broadband Rigid
		Copper
	Amount:	\$55,167.75
	Component Description:	5. WHRO-TV-310-
		Primary
		Transmission Line
		- 8 3/16"
		Broadband Rigid
		Copper
	Amount:	\$110,335.50
	Component Description:	Invoice to be
		resubmitted to
		LMS.
	Amount:	N/A
	Component Description:	Invoice to be
	, , , , , , , , , , , , , , , , , , ,	resubmitted to
		LMS.
	Amount:	N/A
Combiner system	Information not provided.	

Cost Information

Tower Equipment and Rigging Costs

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Primary Tower GTOWER	\$610,887.50	\$281,887.50		\$175,878.24	
Structural engineering tower load study for a documented tower with candelabra	\$20,000.00	\$20,000.00	Part of the total tower rebuild with 4 other broadcasters American Tower Document WHRO IM Norfolk Tall Tower 10152 Repack Cost Estimates	\$8,212.50	this included structural and tower mapping for structural
Tower Construction Project Management	\$7,187.50	\$7,187.50	Please see American Towers Customer Project Cost Estimation	\$5,390.62	N/A
Minor tower reinforcement /modifications	\$158,000.00	\$50,000.00	Shared cost with Other Broadcasters that are being repacked per ATC document WHRO IM Norfolk Tall Tower 10152 Repack Cost Estimates	\$37,500.00	N/A

Drawing Package			Towers Customer		
			Project Cost Estimation		
Complex Tower (includes, for	\$421,000.00	\$200,000.00	Shared cost of the broadcasters	\$121,250.12	N/A
example,			that are		
those with			going to be		
candelabras			repacked per		
and/or			American		
stacked			Tower		
antennas)			Document		
			WHRO IM		
			Norfolk Tall		
			Tower 10152		
			Repack Cost		
			Estimates		
Sub-total	\$610,887.50	\$281,887.50	N/A	\$175,878.24	N/A
Total for all systems	\$8,108,411.53	\$5,299,640.86	N/A	\$787,942.66	N/A

Actual Information	
Description	File Name

Structural engineering tower load study for a documented tower with candelabra

Component Description: 6. WHRO-TV-410-

Existing Primary
Tower - Tower
Load Study for
Documented
Tower with
Candelabra

Amount: \$5,475.00

Component Description: 6. WHRO-TV-410-

Existing Primary
Tower - Tower
Load Study for
Documented
Tower with
Candelabra

Amount: \$2,737.50

Component Description: Invoice to be

resubmitted to

LMS.

Amount: N/A

Component Description: Invoice to be

resubmitted to

LMS.

Tower Construction Project		
Management	Component Description:	11. WHRO-TV-410-
		Existing Primary
		Tower-Tower Construction
		Project
		Management
	Amount:	\$3,593.75
	Amount.	ψ0,000.70
	Component Description:	11. WHRO-TV-410-
		Existing Primary
		Tower - Tower
		Construction
		Project
		Management
	Amount:	\$1,796.87
Minor tower reinforcement /modifications		
modifications	Component Description:	7. WHRO-TV-410-
		Existing Primary
		Tower - Minor
		Reinforcement
		/Modifications
	Amount:	\$25,000.00
	Component Description:	7. WHRO-TV-410-
		Existing Primary
		Tower - Minor
		Reinforcement
		/Modifications
	Amount:	\$12,500.00
	Component Description:	Invoice to be
		resubmitted to
		LMS.
	Amount:	N/A
	Component Description:	Invoice to be
	Component Description:	resubmitted to
		LMS.
		Livio.
	Amount:	N/A

Tower Permit Drawing		
Package	Component Description:	9. WHRO-TV-410- Existing Primary
		Tower - Tower
		Permit Drawing
		Package
	Amount:	\$2,350.00
	Component Description:	9. WHRO-TV-410-
		Existing Primary
		Tower - Tower
		Permit Drawing
		Package
	Amount:	\$1,175.00
Complex Tower (includes,		
for example, those with candelabras and/or stacked	Component Description:	8. WHRO-TV-410-
antennas)		Existing Primary
antennas)		Tower - Tower
		Rigging, Complex Tower
	Amount:	\$40,416.70
	Component Description:	8. WHRO-TV-410-
	Component Description.	Existing Primary
		Tower - Tower
		Rigging, Complex
		Tower
	Amount:	\$80,833.42
	Component Description:	Invoice to be
		resubmitted to
		LMS.
	Amount:	N/A
	Component Description:	Invoice to be
	Component Description.	resubmitted to
		LMS.
		LIVIO.

Cost Information

Outside Professional Services

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Outside Professional Services	\$300,620.00	\$229,895.00		\$25,957.84	
Site Coordination Meeting	\$1,250.00	\$1,250.00	Complex tower rebuild multiple Broadcaster involvement ATC Doc WHRO IM Norfolk Tall Tower 10152 Repack Cost Estimates	\$1,875.00	Complex tower with many broadcasters to coordinate. WTKR, WGNT, WTVZ-TV, WHRO-TV
Project management of the transition	\$121,660.00	\$85,895.00	Shared Expense via American Tower Doc WHRO IM Norfolk Tall Tower 10152 Repack Cost Estimates. Also see Widelity Strategic Support Quote.	\$10,745.35	N/A

RF System Test	\$5,000.00	\$5,000.00	Perform	\$3,750.00	N/A
ra Gyotom root	φο,σσσ.σσ	ψο,σσσ.σσ	systems	φο, ι σσ.σσ	14// (
			checks on		
			Combiner		
			network due		
			to the		
			volume of		
			broadcaster		
			using the		
			antenna		
			ATC Doc		
			WHRO IM		
			Norfolk Tall		
			Tower 10152		
			Repack Cost		
			Estimates		
Migratory Bird	\$500.00	\$500.00	estimated	\$437.49	N/A
Assessment			costs for		
			being in a		
			bird		
			migration		
			mitigation		
			ATC		
			DocWHRO		
			IM Norfolk		
			Tall Tower		
			10152		
			Repack Cost		
			Estimates		
Ground and	\$11,000.00	\$11,000.00	Cost to	\$3,525.00	All of these
Building			Generate the		were unde
Drawing			Construction		Non Zoning
Package			Drawing		Permit which
			package for		have beer
			4 Broadcast		Zeroed ou
			stations.		but I can't
			Cover the		remove
			interim and		them.
			Main		
			antenna		
			packages		
	0 04.050.00	¢c 500 00	Shared	N/A	N/A
RF Exposure	\$21,050.00	\$6,500.00	Shareu	IN/A	IN/A

Environmental Assessment, if triggered by NEPA Section 106 review or for certain structures over 450 feet	\$10,520.00	\$3,500.00	Per ATC Doc WHRO IM Norfolk Tall Tower 10152 Repack Cost Estimates	N/A	N/A
NEPA Section 106 environmental review, if needed	\$6,310.00	\$2,000.00	Per ATC Doc WHRO IM Norfolk Tall Tower 10152 Repack Cost Estimates	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 - Negotiation of lease and other matters for shared locations	\$4,210.00	\$4,000.00	N/A	N/A	N/A
Attorney Fees - Prepare and File FCC Form 2100 (main), License to Cover Application	\$2,365.00	\$2,250.00	N/A	N/A	N/A
Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	\$5,260.00	\$5,000.00	N/A	N/A	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
Address transition timing and coordination issues w/ other stations and wireless	\$2,630.00	\$2,500.00	N/A	\$1,875.00	N/A
Perform engineering study for new channel assignment and antenna development	\$7,360.00	\$7,000.00	N/A	\$3,750.00	N/A
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	\$3,155.00	\$3,000.00	N/A	N/A	N/A
Prepare and or review reimbursement form	\$2,630.00	\$2,500.00	N/A	N/A	N/A
ASR modification (prepare FCC Form 854)	\$2,105.00	\$800.00	Shared cost of the Broadcasters being repacked	N/A	N/A

FAA consultant, including cost of preparing FAA Form 7460 (Notice of Proposed Construction), if needed for height increase	\$2,105.00	\$700.00	To reimburse American Tower if needed	N/A	N/A
Comprehensive coverage verification via field study, if needed	\$84,200.00	\$80,000.00	N/A	N/A	N/A
Sub-total	\$300,620.00	\$229,895.00	N/A	\$25,957.84	N/A
Total for all systems	\$8,108,411.53	\$5,299,640.86	N/A	\$787,942.66	N/A

Actual Information	
Description	File Name

Site Coordination Meeting		
	Component Description:	15. WHRO-TV-
		590-Site
		Coordination
		Meeting
	Amount:	\$625.00
	Component Description:	15. WHRO-TV-
	Compensition Decompaism	590-Site
		Coordination
		Meeting
	Amount:	\$1,250.00
	Component Description:	Invoice to be
		resubmitted to
		LMS.
	Amount:	N/A
	Component Description:	Invoice to be
	2000, 3000	resubmitted to
		LMS.
	Amount:	N/A

Project management of the transition **Component Description:** 12. WHRO-TV-510-Project Management \$2,370.00 Amount: **Component Description:** 12. WHRO-TV-510-Project Management Amount: \$4,740.00 **Component Description:** Invoice to be resubmitted to LMS. Amount: N/A **Component Description: Project** Management Amount: \$3,635.35 **Component Description:** Invoice to be resubmitted to LMS. Amount: N/A **Component Description:** Invoice to be resubmitted to LMS.

Amount: N/A

Component Description: Invoice to be

resubmitted to

LMS.

RF System Test		
	Component Description:	17. WHRO-TV-
		580-Field
		Engineering
		Service - RF
		System Test
	Amount:	\$2,500.00
	Component Description:	Invoice to be resubmitted to
		LMS.
	Amount:	N/A
	Amount.	N/A
	Component Description:	Invoice to be
		resubmitted to
		LMS.
	Amount:	N/A
	Component Description:	17. WHRO-TV-
	•	580-Field
		Engineering
		Service - RF
		System Test
	Amount:	\$1,250.00

Migratory Bird Assessment		
	Component Description:	16. WHRO-TV-
		590-Migratory Bird
		Assessment
	Amount:	\$145.83
	Component Description:	Invoice to be
	,	resubmitted to
		LMS.
	Amount:	N/A
	Component Description:	16. WHRO-TV-
		590-Migratory Bird
		Assessment
	Amount:	\$291.66
	Component Description:	Invoice to be
		resubmitted to
		LMS.
	Amount:	N/A

Ground and Building Drawing Package	Component Description:	Invoice to be
		resubmitted to
	Amount:	LMS. N/A
	Amount:	N/A
	Component Description:	10. WHRO-TV-
		590-Ground and Building Drawing
	Amount:	Package \$2,350.00
	Amount.	Ψ2,330.00
	Component Description:	10. WHRO-TV-
		590-Ground and Building Drawing
		Package
	Amount:	\$1,175.00
	Component Description:	Invoice to be
		resubmitted to
	A	LMS.
	Amount:	N/A
	Component Description:	Invoice to be
		resubmitted to
	Amount:	LMS. N/A
		land to the
	Component Description:	Invoice to be resubmitted to LMS.
	Amount:	LMS. N/A
RF Exposure Measurements	Information not provided.	
Environmental Assessment, if triggered by NEPA	Information not provided.	
Section 106 review or for certain structures over 450 feet		

NEPA Section 106 environmental review, if needed	Information not provided.
Attorney Fees - Prepare and File request for Special Temporary Authorization	Information not provided.
Attorney Fees - Negotiation of lease and other matters for shared locations	Information not provided.
Attorney Fees -Prepare and File FCC Form 2100 (main), License to Cover Application	Information not provided.
Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	Information not provided.
Prepare request for Special Temporary Authorization	Information not provided.
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	Information not provided.

Address transition timing and coordination issues w/ other stations and wireless

Component Description: Invoice to be

resubmitted to

LMS.

Amount: N/A

Component Description: 13. WHRO-TV-

590-Transition
Timing and
Coordination

Issues

Amount: \$1,250.00

Component Description: 13. WHRO-TV-

590-Transition Timing and Coordination

Issues

Amount: \$625.00

Component Description: Invoice to be

resubmitted to

LMS.

Perform engineering study for new channel assignment	Component Description:	Invoice to be
and antenna development		resubmitted to
		LMS.
	Amount:	N/A
	Component Description:	Invoice to be resubmitted to LMS.
	Amount:	N/A
	Component Description:	14. WHRO-TV- 530-RF Eng - Engineering Study for New Channel Assignment
	Amount:	\$2,500.00
	Component Description:	14. WHRO-TV- 530-RF Eng - Engineering Study for New Channel
	Amount:	Assignment \$1,250.00
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	Information not provided.	
Prepare and or review reimbursement form	Information not provided.	
ASR modification (prepare FCC Form 854)	Information not provided.	
FAA consultant, including cost of preparing FAA Form 7460 (Notice of Proposed Construction), if needed for height increase	Information not provided.	
Comprehensive coverage verification via field study, if needed	Information not provided.	

Cost Information

Other Expenses

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Other Expenses	\$172,930.00	\$172,365.00		\$5,604.35	
Non-zoning permits	\$5,000.00	\$5,000.00	N/A	\$562.50	Includes multiple broadcasters coordination
Equipment Delivery and Handling Charges	\$12,500.00	\$12,500.00	N/A	\$5,041.85	N/A
Comark System Design and Site Survey	\$15,300.00	\$15,300.00	This is to visit the tower site location and design the transmitter installation locations and RF plumbing of the system.	\$0.00	See P3921E WHRO Site design and Survey quote.

Special Insurance	\$2,500.00	\$2,500.00	Special insurance	N/A	N/A
Rider			Rider to		
			cover the		
			costs of the		
			homes that		
			are within		
			2000 ft of		
			the tower.		
			ATC owes		
			the tower		
			WHRO		
			Owns all		
			the Land.		
			ATC Lease		
			the Base,		
			Anchors		
			and		
			Building		
			land from		
			WHRO		
Site Security	\$16,200.00	\$16,200.00	Very	N/A	N/A
			complicated		
			site		
			installation.		
			lots o		
			expensive		
			materials		
			lying		
			around very		
			easy to		
			steal. The		
			compound		
			is gated but		
			access		
			under ditch		
			area is		
			possible		
Public Hearing	\$500.00	\$500.00	Costs	N/A	N/A
			associated		
			with Public		
			hearing		
			materials		
			sent to		
			surrounding		
			homes,		
			newspapers		
			ETC.		

Grading Road	\$4,500.00	\$4,500.00	Regrading drive access to the site for at least 1 year	N/A	N/A
ATC One Time Tower Rental	\$57,600.00	\$57,600.00	Rental Fee associated with repacking for the Interim antenna	N/A	N/A
MVPD Notification of Channel Change	\$500.00	\$500.00	N/A	N/A	N/A
Develop and air announcement of upcoming channel change	\$15,000.00	\$15,000.00	N/A	N/A	N/A
Equipment Storage	\$24,000.00	\$24,000.00	N/A	N/A	N/A
Disposal Costs (for equipment and other waste, net of any salvage value)	\$3,500.00	\$3,500.00	N/A	N/A	N/A
BLM or NFS Coordination	\$2,000.00	\$2,000.00	N/A	N/A	N/A
Local Zoning	\$1,750.00	\$1,750.00	N/A	\$0.00	N/A
FCC Filing Fees - Special Temporary Authorization request	\$195.00	\$190.00	N/A	N/A	N/A

FCC Filing Fees - Form 2100 license to cover application	\$335.00	\$325.00	N/A	N/A	N/A
DTV Medical Facility Notification	\$11,550.00	\$11,000.00	N/A	N/A	N/A
Sub-total	\$172,930.00	\$172,365.00	N/A	\$5,604.35	N/A
Total for all systems	\$8,108,411.53	\$5,299,640.86	N/A	\$787,942.66	N/A

Components

Actual Information	
Description	File Name

Non-zoning permits		
	Component Description:	18. WHRO-TV- 610-Non-Zoning
		Permits
	Amount:	\$375.00
	Component Description:	18. WHRO-TV- 610-Non-Zoning
	Amount:	Permits \$187.50
	Amount.	\$107.50
		0.04.0
	Component Description:	3-D-1 Ground and building permit
		package MS1 at 25% of total
	Amount:	N/A
	Component Description:	3-D-1 Tower
		Permits drawing package
	Amount:	N/A
	Component Description:	ATC MS2 item 3- D-1 Tower Permit
		additional 50% payment 25%
	Amount:	remaining N/A
	Amount.	IVA
	Component Description:	ATC MS2 3-D-1
	Component Description.	Ground and
		building Permit additional 50%
		payment 25% remaining
	Amount:	N/A

Equipment Delivery and		
landling Charges	Component Description:	Dielectric Freight
		Charges for
		invoice 637004. Cover letter for
		Dielectric
		Shipping is
		located in the
		Attachments
	Amount:	\$41.86
	Component Description:	Invoice to be
		resubmitted to
		LMS.
	Amount:	N/A
		40 144122 77
	Component Description:	19. WHRO-TV-
		610-Equipment
		Delivery and Handling
	Amount:	\$3,333.33
		+-,000.00
	Component Description:	19. WHRO-TV-
		610-Equipment
		Delivery and
		Handling
	Amount:	\$1,666.66
	Component Description	ATC MS1 1-A-4
	Component Description:	at 25% of total
	Amount:	N/A
Comark System Design and Site Survey		
one ourrey	Component Description:	Invoice to be
		resubmitted to
		LMS.
	Amount:	N/A
Special Insurance Rider	Information not provided.	

Public Hearing	Information not provided.	
Grading Road	Information not provided.	
ATC One Time Tower Rental	Information not provided.	
MVPD Notification of Channel Change	Information not provided.	
Develop and air announcement of upcoming channel change	Information not provided.	
Equipment Storage	Information not provided.	
Disposal Costs (for equipment and other waste, net of any salvage value)	Information not provided.	
BLM or NFS Coordination	Information not provided.	
Local Zoning		
	Component Description:	Invoice to be resubmitted to LMS.
	Amount:	N/A
	Component Description:	ATC MS2 item 1-A-3 permit costs Additional 50% payment 25% remaining
	Amount:	N/A
	Allount	
Temporary Authorization	Information not provided.	
FCC Filing Fees - Special Temporary Authorization request FCC Filing Fees - Form 2100 license to cover application		

Cost Information

Grand Total

	Predetermined Cost Estimate	Estimated Cost	Actual Cost
Total for all systems	\$8,108,411.53	\$5,299,640.86	\$787,942.66

Reimbursem	envestiarus	Response
	The facility has ceased operating on its pre- auction channel.	Yes
	Construction of final facilities or all necessary modifications are complete.	Yes
	All receipts for reimbursement have been submitted no further costs are expected to be incurred. Note this will lock the Form 399 from further editing and begin close-out procedures with the Fund Administrator.	No

Section Question Response

Submission of Estimated Expenses Statements

WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND /OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a) (1), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503), AND ANY FALSE STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT.

- 1. The Authorized
 Person signing
 below certifies that he
 /she is authorized to
 submit this TV
 Broadcaster
 Relocation Fund
 Reimbursement
 Form on behalf of
 the above-named
 entity.
- 2. The above-named entity acknowledges that all certifications and attached documentation are considered material representations.
- 3. The above-named entity acknowledges the submission of the information herein creates no obligation on the part of the government to pay any amount.

- 4. The above-named entity certifies that the equipment and services paid for with money from the TV Broadcaster Relocation Fund are necessary to change channels (broadcasters) or to continue to carry the signal of a broadcaster that changes channels (MVPD).
- 5. The above-named entity certifies that all payments from the TV Broadcaster Relocation Fund (Fund) received by the entity listed on this form will be used only for expenses that are eligible for reimbursement from the Fund.
- 6. The above-named entity certifies that it will maintain and provide to the Commission detailed records, including receipts, of all costs eligible for reimbursement actually incurred.
- 7. The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission.

8. The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a pre-requisite for obtaining the payments herein requested.

I declare, under penalty of perjury, that I am an authorized representative of the abovenamed applicant for the Authorization(s) specified above. Chris Gunnar Gunnufsen Vice President Technology

08/03/2020

Section Question Response

Submission of Actual Cost Documentation Statements

WILLFUL FALSE, FRAUDULENT, OR FICTITIOUS STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND /OR IMPRISIONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a) (1), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503), AND ANY FALSE AND/OR FRAUDULENT STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT (U.S. CODE, TITLE 31, SECTIONS 3729-3733).

- 1. The Authorized
 Person signing
 below certifies and
 represents that he
 /she is authorized to
 submit this TV
 Broadcaster
 Relocation Fund
 Reimbursement
 Form on behalf of
 the above-named
 entity.
- The above-named entity certifies that the statements in this form and attached documentation are true, complete, and correct.
- The above-named entity acknowledges that all certifications and attached documentation are considered material representations.

- 4. The above-named entity acknowledges the submission of the information herein creates no obligation on the part of the government to pay any amount.
- 5. The above-named entity certifies that the equipment and services paid for with money from the TV Broadcaster Relocation Fund are necessary to change channels (full power and Class A stations) and/or otherwise modify a television station's facility as a result of the spectrum repack (LPTV/TV Translator stations); or to minimize service disruption resulting from a repacked television station (FM stations); or to continue to carry the signal of a broadcaster that changes channels (MVPD).
- 6. The above-named entity certifies that all payments from the TV Broadcaster Relocation Fund (Fund) received by the entity listed on this form will be used only for expenses that are eligible for reimbursement from the Fund.
- 7. The above-named entity certifies that the cost information /documents submitted reflect costs actually incurred.

- 8. The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission.
- 9. The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a prerequisite for obtaining the payments herein requested.

I declare, under penalty of perjury, that I am an authorized representative of the abovenamed applicant for the Authorization(s) specified above. Chris Gunnar Gunnufsen Vice President Technology

08/03/2020

Section Question Response

Submission of Final Allocation or Accounting Information 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 and represents that he /she is authorized to submit this TV Broadcaster Relocation Fund Reimbursement Form on behalf of the above-named entity. The abovenamed entity acknowledges that all certifications and attached documentation are considered material representations.
- 2. The above-named entity acknowledges the submission of the information herein creates no obligation on the part of the government to pay any amount.

- 3. The above-named entity certifies that all costs identified as "actual costs" herein accurately represent the costs actually paid by the above-named entity, including any discounts, refunds, or rebates.
- 4. 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.
- 5. The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission.
- 6. The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a pre-requisite for obtaining the payments herein requested.

I declare, under penalty of perjury, that I am an authorized representative of the abovenamed applicant for the Authorization(s) specified above. Chris Gunnar Gunnufsen Vice President Technology

08/03/2020

Attachments