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: **64550** | Service: **DTV** | Call Sign: **WQOW** | Channel: **25 (UHF)**

File Number: **0000027502**

FRN: **0030885057** | Date Submitted: **01/18/2021**

Applicant Information

Applicant Name, Type, and Contact Information

Applicant	Address	Phone	Email	Applicant Type
WXOW-WQOW LICENSE, LLC Doing Business As: WXOW-WQOW LICENSE, LLC	Brady Dreasler P.O. BOX 909 QUINCY, IL 62306 United States	+1 (217) 223-5100	bdreasler@quincyinc.com	Corporation

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
Tony zumMallen *President* *QCommunications, LLC*	Tony zumMallen 705B SE Melody LN #314 Lees Summit, MO 64063 United States	+1 (816) 729-1177	tony@qcom1.com

Broadcaster Information and Transition Plan

Question	Response
Will the station be sharing equipment with another broadcast television station or stations (e.g., a shared antenna, co-location on a tower, use of the same transmitter room, multiple transmitters feeding a combiner, etc.)? If yes, enter the facility ID's of the other stations and click 'prefill' to download those stations' licensing information.	No
Briefly describe transition plan	Transition from ch15 to ch25 will allow the use of the current antenna however the transmission line will require modifications.

Transmitters

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

Primary Transmitter

Existing Transmitter Information

Section	Question	Response
Existing Transmitter Description	Type of change	Purchase New
	Use	Primary (Main)
	Description of Use	N/A
	Ownership	Owned
	Owner	N/A
	Site	N/A
	Is this transmitter currently shared with another station?	No
	Is this transmitter currently in operating condition?	Yes
Existing Transmitter Manufacturer and Type	Manufacturer	
	Model	Diamond
	Year	2001
	Type	Solid State
	Solid State Cooling	Air Cooled
	Solid State Power Capacity	16 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	ULXTE-40
	Transmitter Type	Solid State
	Solid State Cooling	Liquid Cooled
	Solid State Power capacity	25.3 kW
	Justification for New Transmitter	Necessary to facilitate the channel reassignment. Existing Transmitter is not tunable per manufacturer.

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	300 kVA
	Rigid Conduit and Wiring	Yes
	Size	2 inches
	Length	300.0 feet
	Other Electrical Service	Yes

	Description	Run conduit and pull wires for new LED fixtures that needed to be replaced due to Repack
HVAC Service	Does the replacement transmitter require HVAC Service?	Yes
	Type	Cooling Only
	Size	25 tons
	Other Size	N/A
Transmitter Building Addition/Modification or Leasehold Improvement	Does the Transmitter Building require an addition, modification, other leashold improvement?	No
	Size	N/A
Channel 14 Costs	Is an RF Consulting Engineer needed?	N/A
	Is a channel 14 Mask Filer needed?	N/A
	Is additional field engineering time needed?	N/A
	Number of Days	N/A

Primary Transmitter

Other Transmitter Cost Not Listed

Name	Description
Transmitter-Disconnect	Disconnect transmitter and components from existing configuration and move within building to make way for new facilities.
Freight	Freight charges to ship equipment and parts
Plumbing installation for new transmitter	plumber required to install the new transmitter cooling systems

Electrical system modifications to accommodate the new transmitter	Electrician required to provide and install the equipment in preparation of the new transmitters electrical requirements.
Elect for HVAC	Electrical work to install HVAC
Sales Tax	Sales Tax on equipment per state law
ARC remote control	Install remote control system
Site Survey - TX	Site survey and report are required to be performed before the new transmitter and components installation plan can be finalized.
Transmitter Site Preperation	Site Preparation for Repack Interim and Main Transmitter installation Performing work that is not in the installation SOW on site to prepare for the GatesAir installation crew arrival to ensure there are no delays to the installation crews plans
Demo interior wall	Demolish interior wall to accommodate new 25 ton HVAC system required by new tx
Securirty - Site	This site requires security once the new transmission line and equipment arrive on site to be installed. Estimated length of 4-6 weeks.
Transmitter training	Transmitter training - offsite - 1 week in duration at mfg site.
Demo old HVAC tx ducts	Repack, removed old HVAC transmitter ducts and replace with blocks

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	Retune Existing
	Antenna Use	Primary (Main)
	Description of Use	N/A
	Ownership	Owned
	Owner	N/A
	Site	N/A
	Is the existing antenna shared with another station or stations?	No
	Is the existing antenna directional?	Yes
	Is antenna in operating condition?	Yes
	Is antenna located on or in close proximity to an antenna farm?	No
Existing Antenna Manufacturer and Type	Class	Full Power
	Mounting	Top Mount
	Antenna position in stack	Not in Stack
	Polarization	Horizontal
	Type	Broadband Panel
	Number of Stations Supported	1
	Number of Panels	32
	Design power capacity in use	50.0 %
	Lower Limit	470.00 MHz

Upper Limit	698.00 MHz
Other Antenna Type	N/A
ERP: (Effective Radiated Power)	200.0 kW
Manufacturer	Dielectric
Model	TUP-SP4-8-1
Year	2000

Primary Antenna

Adjustment to Existing Antenna

Section	Question	Response
Sweep Test of Existing Antenna	Do you need a sweep test of existing antenna?	Yes

Primary Antenna

Other Antenna Costs

Section	Question	Response
Combiner for Shared Antenna	Do you need a Combiner for a Shared Antenna?	No
	Type	
	Number of channels supported	N/A
	Frequencies of channels supported	N/A
	Frequency	

Primary Antenna

Other Antenna Cost Not Listed

Information not provided.

Interim Antenna

New Antenna Costs

Section	Question	Response
New Antenna Description	Use	Interim

	Description of Use	N/A
	Change Type	Purchase New
	Ownership	Owned
	Owner	N/A
	Is antenna shared?	No
	Is antenna directional?	Yes
	Will antenna be located on or in close proximity to an antenna farm?	No
New Antenna Manufacturer and Type	Class	Full Power
	Mounting	Side Mount
	Antenna position in stack	Not in Stack
	Polarization	Horizontal
	Type	Broadband Slot
	Number of Stations Supported	1
	Number of Panels/Bays	8
	Lower Limit	470.00 MHz
	Upper Limit	698.00 MHz
	Design power capacity in use	50.0 %
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power)	100.0 kW
	Manufacturer	
	Model	TFU-8WB
	Year	2017

	Justification for New Antenna	6-14-18-ZEROED all Interim facility EST pricing per call with Raphael Sznajder. The 399 tool will not DELETE the TX, ANT or LINE. Deleting returns an error message. WQOW will not be requiring an INTERIM due to an engineering work around.

Interim Antenna

Other Antenna Costs

Section	Question	Response
Elbow Complex	Do you require the separate purchase of the Elbow Complex?	Yes
	Broadband or Single Channel?	B
	Feed Line Size	4 1/16 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?	Yes
Sweep Test	Do you require the sweep testing of transmission line and antenna?	Yes

Interim Antenna

Other Antenna Cost Not Listed

Information not provided.

Transmission Line

Section	Question	Response
Transmission Line Related Expenses	Do you have transmission line related expenses?	Yes

Primary Transmission Line

Existing Transmission Line

Section	Question	Response
Existing Transmission Line Description	Type of change	Utilize Existing
	Use	Primary (Main)
	Description of Use	N/A
	Ownership	Owned
	Owner	N/A
	Site	N/A
	Is the existing transmission line shared with another station or stations?	No
	Is Transmission Line in operating condition?	Yes
Existing Transmission Line Manufacturer and Type	Manufacturer	Dielectric
	Type	Rigid
	Diameter	6 1/8 inches
	Other Diameter	N/A
	Segment Length	19 1/2 inches
	Other Segment Length	N/A
	Number of parallel runs	1
	Length	993 feet per run

Primary Transmission Line

Other Transmission Line Expenses Not Listed

Name	Description
Disconnect Interior RF	Disconnect interior transmission line and filters from existing configuration and move within the building to make way for new facilities.
Refurbish Transmission Line	Refurbish instead of replace. Per Resonant Results, Ltd, Field Report.

Primary Transmission Line

Add Transmission Line

Section	Question	Response
Existing Transmission Line Description	Type of change	Purchase New
	Use	Primary (Main)
	Description of Use	N/A
	Ownership	Owned
	Owner	N/A
	Site	N/A
	Is this transmission currently shared with any other stations?	No
	Is Transmission Line in operating condition?	Yes
Existing Transmission Line Manufacturer and Type	Manufacturer	
	Type	Rigid
	Diameter	6 1/8 inches
	Other Diameter	N/A
	Segment Length	19 1/2 inches
	Other Segment Length	N/A
	Number of parallel runs	1
	Length	993 feet per run

Primary Transmission Line

New Transmission Line

Section	Question	Response
New Transmission Line Costs	Use	Primary (Main)
	Description of Use	N/A
	Change Type	Purchase New
	Is this a request for upgraded equipment?	No
	Type	Rigid
	Diameter	6 1/8 inches
	Other Diameter	N/A
	Segment Length	19 1/2 inches
	Other Segment Length	N/A
	Number of parallel runs	1
	Length	993 feet per run
	Justification for New Transmission Line	See attached dated 3/16 /20 for justification for new line.

Primary Transmission Line

Other Transmission Line Expenses Not Listed

Information not provided.

Interim Transmission Line

New Transmission Line

Section	Question	Response
New Transmission Line Costs	Use	Interim
	Description of Use	N/A
	Change Type	Purchase New
	Type	Rigid
	Diameter	4 1/16 inches
	Segment Length	19 ½ '
	Other Segment Length	
	Number of parallel runs	1
	Length	975 feet per run
	Justification for New Transmission Line	6-14-18-ZEROED all Interim facility EST pricing per call with Raphael Sznajder. The 399 tool will not DELETE the TX, ANT or LINE. Deleting returns an error message. WQOW will not be requiring an INTERIM due to an engineering work around.

Interim Transmission Line

Other Transmission Line Expenses Not Listed

Information not provided.

Tower Equipment And Rigging Costs

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

Primary Tower

Existing Tower

Section	Question	Response
Existing Tower Description	Type of change	Move Equipment
	Tower Use	Primary (Main)
	Description of Use	N/A
	Ownership	Leased
	Is this tower consider Complex?	No
	Is this tower currently shared with any other stations?	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?	No
	Is tower compliant with Rev G?	Unknown
Existing Tower Structure Registration	Do you have a tower registration number?	No
	ASR Number	
Coordinates (NAD83 (North American Datum of 1983))	Latitude (NAD83)	44° 47' 59.0" N-
	Longitude (NAD83)	091° 27' 57.0" W-
	Overall Structure Height	961.00 feet
	Support Structure Height	888.00 feet
	Ground Elevation Above Mean Sea Level (AMSL)	888.00 feet

Structure Type	TOWER - Free Standing or Guyed Structure
Tower Owner	Gray Television Group, Inc.
Date Constructed	09/25/1956

Primary Tower

Tower Rigging Costs

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

Primary Tower

Other Tower Expenses Not Listed

Name	Description
STRUCTURAL ENGINEERING	TOWER ANALYSIS

Outside Professional Services Costs

Section	Question	Response
Outside Project Management Services	Do you require outside project management services?	Yes
	Number of Hours	614
	Explanation	Scope & significance of project (QMI has multiple stations repacked) require outside management services to augment existing internal personnel to assist turnkey management of and ensure timely and safe execution of channel relocation.
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	No
Number of Days	N/A
Justification	N/A

Outside Professional Services Costs

Other Professional Services Expenses Not Listed

Name	Description
Legal General Repack issues	See uploaded- QMI Repack Invoice Memo for Shared Legal Expenses (Matter 104411 00054) for Form 399
Quarterly reporting	Preparation and submittal of the FCC required quarterly report 387 by attorney.
Vendor Travel Expenses	Reimbursable Vendor Travel expenses for working in the field on behalf of the station for the Repack project - see quote for estimated expenses.

Other Expenses

Section	Question	Response
AM Pattern Disturbance	Is an Impact Study needed?	No
	Is Remediation needed?	No
Facility Expenses	Name	N/A
	Other Distributed Transmission System Expenses Not listed	N/A
	Name	N/A
	Is Notification of a Medical Facility required as a result of DTV broadcasting?	Yes
Permit and Filing Costs	Local Zoning	No
	Non-zoning permits	No
	BLM or NFS Coordination	No
	FCC Construction Permit Minor Change	Yes
	FCC License to Cover Application	Yes
	FCC Special Temporary Authority Application	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
Additional Insurance	Additional insurance to cover equipment in storage

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-40	**$2,002,046.33**	**$1,209,301.92**		**$1,039,009.36**	
Demo old HVAC tx ducts	***$9,440.00***	$9,440.00	Repack, removed old HVAC transmitter ducts and replace with blocks. Costs per actual invoice.	$9,440.00	N/A
Transmitter training	***$3,300.00***	$3,300.00	Transmitter training - offsite - 1 week in duration at mfg site.	N/A	N/A
Securirty - Site	***$17,500.00***	$17,500.00	This site requires security once the new transmission line and equipment arrive on site to be installed. Estimated length of 4-6 weeks.	N/A	N/A

Demo interior wall	***$9,950.00***	$9,950.00	Per actual costs on PO 20512. Demo interior walls to make way for HVAC unit required by new transmitter	$9,950.00	N/A
Transmitter Site Preperation	***$6,500.00***	$6,500.00	Site Preparation for RepackMain Transmitter installation Performing work that is not in the installation SOW on site to prepare for the GatesAir installation crew arrival to ensure there are no delays to the installation crews installation pl	$6,500.00	N/A
Site Survey - TX	***$20,000.00***	$20,000.00	Site survey and report are required to be performed before the new transmitter and components installation plan can be finalized.	$7,500.00	N/A

ARC remote control	***$9,971.67***	$9,971.67	Costs to install ARC system per actual invoices.	$0.00	N/A
Sales Tax	***$3,549.71***	$3,549.71	N/A	$3,549.71	N/A
Elect for HVAC	***$4,820.00***	$4,820.00	Electrical work to install HVAC - costs per actual invoices.	$4,820.00	N/A
Electrical system modifications to accommodate the new transmitter	***$50,400.00***	$50,400.00	Electrician required to provide and install the equipment in preparation of the new transmitters electrical requirements. per po20377 and vendor estimate.	$37,746.53	N/A
Plumbing installation for new transmitter	***$14,600.00***	$14,600.00	plumber required to install the new transmitter cooling systems per vendor estimate.	$14,515.10	N/A
Freight	***$9,359.05***	$9,359.05	N/A	$9,359.05	N/A
Transmitter-Disconnect	***$20,000.00***	$20,000.00	Disconnect transmitter and components from existing configuration and move within building to make way for new facilities.	$18,500.00	N/A

25 Ton system	$91,500.00	$87,000.00	N/A	$34,780.00	N/A
Other Electrical Service: Run conduit and pull wires for new LED fixtures that needed to be replaced due to Repack	***$2,955.90***	$2,955.90	Conduit and pull wires for new LED fixtures due to Repack issues.	$2,955.90	N/A
2" Rigid Conduit and Wiring (Cost per foot)	$7,800.00	$7,500.00	N/A	N/A	N/A
Transformer 3 phase/480v - 300 KVA	$36,800.00	$35,000.00	N/A	$0.00	N/A
Switchgear - industrial 800 amp	$38,200.00	$51,178.41	Actual costs per invoices	$51,178.41	N/A
Service entrance 3 phase/800 amp/208 volt	$14,400.00	$13,700.00	N/A	$8,546.24	N/A
UHF - Liquid Cooled Solid State Transmitter 21 - 31 kW	$947,000.00	$294,442.90	Changed power on transmitter, which created this new line. This is the amount remaining on the PO per actual invoices.	$281,534.14	N/A

UHF - Liquid Cooled Solid State Transmitter 14.2 - 20 kW	$684,000.00	$538,134.28	***System Notice: Estimate adjusted and locked because line has been superseded. ***Actual costs per vendor invoices.	$538,134.28	Actual costs per invoices from GatesAir.
Sub-total	$2,002,046.33	$1,209,301.92	N/A	$1,039,009.36	N/A
Total for all systems	$4,001,626.00	$2,329,165.70	N/A	$1,604,533.12	N/A

Components

Actual Information Description	File Name	
Demo old HVAC tx ducts	**Component Description:** **Amount:**	Costs necessary to remove old HVAC ductwork for repack. Royal - INV 12540 - PO 20538 $9,440.00
Transmitter training	Information not provided.	
Securirty - Site	Information not provided.	
Demo interior wall	**Component Description:** **Amount:**	Demolishing interior walls to make way for HVAC - QComm - INV QC19-002 $9,950.00

Transmitter Site Preperation	**Component Description:**	WQOW- MAIN SITE PREP - INV QC18-056
	Amount:	$6,500.00
Site Survey - TX	**Component Description:**	WQOW-SITE SURVEY-INV-QC18-029
	Amount:	$7,500.00
ARC remote control	**Component Description:**	Revised with cover letter - remote control system. Burk Tech - INV 00068910 - PO 20373
	Amount:	$9,971.67
	Component Description:	Invoice includes $213.67 for shipping and handling not included on original quote. INV 00068910 - PO 20373
	Amount:	$9,971.67

Sales Tax	**Component Description:** **Amount:**	Final Gates Air INV US0319031 $3,549.71
	Component Description: **Amount:**	6-5-20 Zeroed out. Resubmitted under new component line. sales tax for tx equipment. US0319031, PO 19967; change ordr Q-79019, PO 20435 N/A
Elect for HVAC	**Component Description:** **Amount:**	WQOW - NEI - elect for HVAC - INV 132274 - PO 20729 $4,820.00
Electrical system modifications to accommodate the new transmitter	**Component Description:** **Amount:**	WQOW- P AND T INV 16136 - ELECTRIC WORK FOR NEW TX- LABOR AND MATERIAL $35,723.93
	Component Description: **Amount:**	WQOW- P AND T - INV 16296 - ELECTRIC INSTALL PROGRESS MATERIAL $2,022.60

Plumbing installation for new transmitter	**Component Description:**	WQOW - BERNIE - PLUMBING INV 857757
	Amount:	$14,515.10
Freight	**Component Description:**	Final Gates Air INV US0319031
	Amount:	$9,359.05
	Component Description:	6-5-20 Zeroed out. Submitted under new line. Freight for shipment of equipment and parts. See cover letter for explanation of charges. US0319031; PO 19967; change order Q-79019 - PO 20435
	Amount:	N/A
Transmitter-Disconnect	**Component Description:**	WQOW- QCOMM-DECOMM INV QC19-010
	Amount:	$18,500.00
25 Ton system	**Component Description:**	Kurth - Installation of (3) Carrier AC units - INV 100951 - PO 20728
	Amount:	$34,780.00

Other Electrical Service: Run conduit and pull wires for new LED fixtures that needed to be replaced due to Repack	**Component Description:** **Amount:**	conduit and pull wires for new LED fixtures - NEI INV 130212 $2,955.90
2" Rigid Conduit and Wiring (Cost per foot)	Information not provided.	
Transformer 3 phase/480v - 300 KVA	Information not provided.	
Switchgear - industrial 800 amp	**Component Description:** **Amount:** **Component Description:** **Amount:** **Component Description:** **Amount:**	Gates WQOW - quote Q-59383 - RF Access - C inv $17,059.47 WQOW - MAIN TX INV-TE10004378-2 quote Q-59383 - RF Access - C inv $17,059.47 GatesAir 3rd Invoice, TE10004378-3; LINE C ONLY, PO 19967 $17,059.47

Service entrance 3 phase /800 amp/208 volt	**Component Description:**	WQOW - MAIN TX INV-TE10004378-2 Q-59383 LINE D Electric- 5-29 - correct amount.
	Amount:	$2,848.75
	Component Description:	GatesAir 3rd Invoice TE10004378-3; LINE D only.
	Amount:	$2,848.74
	Component Description:	Gates WQOW - TX quote Q-59383 Electric - D Electric
	Amount:	$2,848.75

UHF - Liquid Cooled Solid State Transmitter 21 - 31 kW	**Component Description:**	Final Gates Air INV US0319031 - PO 19967 - Q-79019 - PO 20435
	Amount:	$77,007.15
	Component Description:	3rd invoice for transmitter. TE10004378-3, PO 19967
	Amount:	$204,526.99
	Component Description:	6-5-20 Zeroed out. Resubmitted under new component line. WQOW - final tx invoice US0319031 - PO 19967; includes. CO Q-79019; PO 20435. See cover letter
	Amount:	N/A

UHF - Liquid Cooled Solid State Transmitter 14.2 - 20 kW	**Component Description:**	DEP ON MAIN TX WQOW - A B and E - see Q59383
	Amount:	$269,067.14
	Component Description:	Gates Air third invoice: TE10004378-3; Lines A, B only on PO 19967. 2-27-20 zeroed out this request and put on new line.
	Amount:	N/A
	Component Description:	Final Invoice GatesAir; US0319031; Lines A, B, and E balances PLUS actual Sales tax and freight charges to ship equipment. PO 19967. 2-25-20 Zeroed out request and resubmitted under new line.
	Amount:	N/A
	Component Description:	WQOW- MAIN TX -INV TE10004378-2 LINES A B and E - see Q59383
	Amount:	$269,067.14

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 TFU-8WB	**$135,490.00**	**$8,767.50**		**$8,767.50**	
Pattern scatter analysis for side mount high/med power antennas (if not included in antenna base cost)	$5,260.00	$0.00	N/A	N/A	N/A
UHF - Lower Power Side Mount, One station antenna - medium power (50-200 kW), horizontally polarized	$89,400.00	$0.00	N/A	N/A	N/A
Sweep test of existing antenna	$6,730.00	$1,050.00	Test antenna. Costs per actual invoice from Resonant.	$1,050.00	N/A

Side mount brackets for high power antennas (if not included in antenna base cost)	$23,150.00	$0.00	N/A	N/A	N/A
Elbow complex, broadband, at antenna input, per 4 1/16. feedline (if needed)	$10,950.00	$7,717.50	N/A	$7,717.50	Per Actual costs: Invoice 242022, PO 20314
Primary Antenna TUP-SP4-8-1	**$6,730.00**	**$6,400.00**		**$4,500.00**	
Sweep test of existing antenna	$6,730.00	$6,400.00	N/A	$4,500.00	N/A
Sub-total	$142,220.00	$15,167.50	N/A	$13,267.50	N/A
Total for all systems	$4,001,626.00	$2,329,165.70	N/A	$1,604,533.12	N/A

Components

Actual Information Description	File Name
Pattern scatter analysis for side mount high/med power antennas (if not included in antenna base cost)	Information not provided.
UHF - Lower Power Side Mount, One station antenna - medium power (50-200 kW), horizontally polarized	Information not provided.

Sweep test of existing antenna	**Component Description:** **Amount:**	Test antenna system for frequency and time domain response. INV RR3171 - PO 19749 $1,050.00
Side mount brackets for high power antennas (if not included in antenna base cost)	Information not provided.	
Elbow complex, broadband, at antenna input, per 4 1/16. feedline (if needed)	**Component Description:** **Amount:**	Dielectric - Elbow - INV 242022 - PO 20314 $7,717.50
Sweep test of existing antenna	**Component Description:** **Amount:**	Actual vendor name: Jeremy Ruck & Associates, Inc. Repack Sweep - INV 1801241 $4,500.00

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
Interim Transmission Line	**$138,450.00**	**$0.00**		**$0.00**	
Rigid Transmission Line - copper, 4 1 /16"	$138,450.00	$0.00	N/A	$0.00	N/A
Primary Transmission Line	**$12,500.00**	**$12,500.00**		**$12,500.00**	
Disconnect Interior RF	***$12,500.00***	$12,500.00	***System Notice: Estimate adjusted and locked because line has been superseded. ***Disconnect interior RF transmission line and filters from existing configuration and move within the building to make way for new facilities.	$12,500.00	N/A
Primary Transmission Line	**$200,586.00**	**$385,225.00**		**$9,243.02**	

Rigid Transmission Line - copper, 6 1/8"	$200,586.00	$385,225.00	Per actual invoices from PCI. See cover sheet for more explanations.	$9,243.02	N/A
Sub-total	$351,536.00	$397,725.00	N/A	$21,743.02	N/A
Total for all systems	$4,001,626.00	$2,329,165.70	N/A	$1,604,533.12	N/A

Components

Actual Information Description	File Name	
Rigid Transmission Line - copper, 4 1/16"	Information not provided.	
Disconnect Interior RF	**Component Description:** **Amount:**	WQOW-QCOMM-DECOMM INV QC19-010 $12,500.00
Rigid Transmission Line - copper, 6 1/8"	**Component Description:** **Amount:** **Component Description:** **Amount:**	Cut pieces of transmission line - Dielectric - INV 225006 $6,366.50 See LAST page of attachment for further information. WQOW - PCI - new line - INV 7267 - PO 20088 (1st invoice) $154,102.00

Component Description:	See LAST page of attachment for further explanation. WQOW - PCI - new line - INV 7381 - PO 20088 (2nd INvoice)
Amount:	$183,168.00
Component Description:	Freight for items on PO 20358 - Dielectric - INV 284007
Amount:	$67.18
Component Description:	See cover sheet. Dielectric - INV 270004
Amount:	$1,831.34
Component Description:	TX line - Dielectric INV 284008
Amount:	$2,552.00
Component Description:	freight for PO 20314 - Dielectric INV 242064
Amount:	$4,792.50

Cost Information

Tower Equipment and Rigging Costs

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Primary Tower TOWER	**$222,500.00**	**$418,134.61**		**$411,884.61**	
Tall Tower (greater than 500')	$210,500.00	$406,134.61	Actual costs per vendor invoices.	$406,134.61	N/A
STRUCTURAL ENGINEERING	***$12,000.00***	$12,000.00	Structural engineering to determine if tower will hold interim antenna and new config at current requirements	$5,750.00	N/A
Sub-total	$222,500.00	$418,134.61	N/A	$411,884.61	N/A
Total for all systems	$4,001,626.00	$2,329,165.70	N/A	$1,604,533.12	N/A

Components

Actual Information Description	File Name

Tall Tower (greater than 500')	**Component Description:**	Revised PCI INV 7399 with explanation
	Amount:	$68,864.61
	Component Description:	PCI - Tower work - INV 7381 - 2nd invoice - see cover sheet for additional info
	Amount:	$183,168.00
	Component Description:	PCI - Tower Work - INV 7399 - 3rd invoice - see cover sheet for explanation. See attached daily reports.
	Amount:	$68,864.61
	Component Description:	PCI - Tower work - INV 7267 - 1st invoice - see cover letter.
	Amount:	$154,102.00
STRUCTURAL ENGINEERING	**Component Description:**	WQOW-TOWER TECH-INV-17-116
	Amount:	$5,750.00

Cost Information

Outside Professional Services

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

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cos Justificati
Outside Professional Services	**$238,810.00**	**$228,323.00**		**$108,901.75**	
Vendor Travel Expenses	***$13,408.00***	$13,408.00	Reimbursable Vendor Travel expenses for working in the field on behalf of the station for the Repack project - see quote for estimated expenses. QC-17003	$10,327.18	N/A
Quarterly reporting	***$5,000.00***	$5,000.00	Preparation and submittal of the FCC required quarterly report 387 by PM and attorney.	N/A	N/A
Legal General Repack issues	***$10,000.00***	$10,000.00	see exhibit memo - QMI Repack Invoice Memo for Shared Legal Expenses (Matter 104411 00054) for Form 399	$7,828.57	N/A

Comprehensive coverage verification via field study, if needed	$84,200.00	$80,000.00	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	$4,506.00	N/A
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	$1,580.00	$1,500.00	N/A	$525.00	N/A
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	$3,155.00	$3,000.00	N/A	$1,970.00	N/A

Perform engineering study for new channel assignment and antenna development	$7,360.00	$7,000.00	N/A	$4,425.00	N/A
Address transition timing and coordination issues w/ other stations and wireless	$2,630.00	$2,565.00	Actual total of two invoices from Lohnes & Culver regarding coordination issues.	$840.00	N/A
Prepare and or review reimbursement form	$2,630.00	$2,500.00	N/A	N/A	N/A
Project management of the transition	$97,012.00	$92,100.00	N/A	$78,480.00	N/A
Sub-total	$238,810.00	$228,323.00	N/A	$108,901.75	N/A
Total for all systems	$4,001,626.00	$2,329,165.70	N/A	$1,604,533.12	N/A

Components

Actual Information Description	File Name

Vendor Travel Expenses	**Component Description:**	WQOW-PM TRAVEL - INV 1THRU3-18 - INV QC18-048 LINES 1010,1014 AND 1015
	Amount:	$1,110.11
	Component Description:	WQOW- PM -AUG-NOV18 - INV QC19-018 - PM TRAVEL TIME
	Amount:	$8,400.00
	Component Description:	WQOW-PM-TRAVEL EXP - INV QC17-143 - ITEMS 1010-1015
	Amount:	$817.07
Quarterly reporting	Information not provided.	
Legal General Repack issues	**Component Description:**	1-24-20 WQOW General Repack Legal Services for period ending May 2017. INV 3940170 (revised with cover sheet)
	Amount:	$190.85
	Component Description:	Brooks Repack legal services for period ending Sept '18; INV 3958278
	Amount:	$2,013.00

Component Description:	WQOW - Brooks-Gen Legal period ending Dec 2017 - INV 3947925. 440.29 is WQOW portion of total invoice
Amount:	$40.29
Component Description:	Brooks Repack Legal Services for period ending Dec '17; INV 3947922
Amount:	$188.00
Component Description:	WQOW - Brooks - Gen Legal February 2018 - INV 3950148. $28.29 is WQOW portion of total invoice
Amount:	$28.29
Component Description:	WQOW - Brooks - Gen Legal April 2018 - INV 3952584. $28.29 is WQOW portion of invoice total
Amount:	$28.29
Component Description:	WQOW - Brooks - General Legal March 2018 - INV 3951201. $28.29 is WQOW portion of total invoice
Amount:	$28.29

Component Description:	Gen Legal June 2020 - Brooks - INV 3984325
Amount:	$79.50
Component Description:	WQOW portion of general legal invoice for Sept 2017 - INV 3944708
Amount:	$78.06
Component Description:	General Legal-NOV17-WQOW-inv
Amount:	$221.57
Component Description:	WQOW - Brooks - Gen Legal period ending January, 2018 - INV 3949059. $35.36 is WQOW portion of total invoice
Amount:	$35.36
Component Description:	General Legal-OCT17-WQOW-inv
Amount:	$322.28
Component Description:	General Legal - SEPT-WQOW-inv
Amount:	$80.57
Component Description:	WQOW-BROOKS AUG18 INV 3957121
Amount:	$148.50

Component Description:	WQOW-BROOKS LEGAL INV 3952581-APRIL18
Amount:	$297.00
Component Description:	WQOW - BROOKS - LEGAL OCT 19 - INV 3959630
Amount:	$363.00
Component Description:	WQOW-BROOKS-MAR18 INV-3951198
Amount:	$445.50
Component Description:	WQOW - Brooks - Gen Legal July '17 - INV 3942230 (revised)
Amount:	$275.00
Component Description:	General Legal-JUNE17 - WQOW inv
Amount:	$266.44
Component Description:	Brooks Repack Legal Services for period ending Dec '18; INV 3961875
Amount:	$33.00
Component Description:	WQOW Brooks Gen Legal June '17 INV 3941325
Amount:	$266.44

Component Description:	General Legal - AUG17-WQOW-inv
Amount:	$117.85
Component Description:	General Legal- JULY17-WQOW-inv
Amount:	$275.00
Component Description:	Brooks Repack Legal Services for period ending July '19; INV 3970201
Amount:	$52.00
Component Description:	WQOW - Brooks - Gen Legal Jan 2020 - INV 3977755
Amount:	$52.00
Component Description:	WQOW-BROOKS-JUNE18- INV 3954664
Amount:	$1,287.00
Component Description:	WQOW-BROOKS - JULY18 INV 3955734
Amount:	$495.00
Component Description:	General Legal- MAY17-WQOW
Amount:	$190.85
Component Description:	WQOW-BROOKS-MAY18-INV 3953761
Amount:	$445.50

	Component Description: **Amount:**	WQOW-BROOKS-LEGAL JAN-18-INV 3949056 $297.00
Comprehensive coverage verification via field study, if needed	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	**Component Description:**	LEGAL-MAY17-WQOW
	Amount:	$453.00
	Component Description:	Legal-WQOW-NOV17-inv
	Amount:	$94.00
	Component Description:	Legal-WQOW-OCT17-inv
	Amount:	$329.00
	Component Description:	LEGAL APRIL17 - WQOW
	Amount:	$517.00
	Component Description:	LEGAL JUNE17-WQOW
	Amount:	$359.00
	Component Description:	LEGAL - JULY17 WQOW
	Amount:	$1,861.00
	Component Description:	LEGAL-WQOW-SEPT17
	Amount:	$423.00
	Component Description:	LEGAL AUGUST17 - WQOW
	Amount:	$470.00

Prepare engineering section of FCC Form 2100 (main), License to Cover Application	**Component Description:**	Prepare engineering section of Form 2100 - Lohnes - INV 2001809-0275-08-2 . NOTE: Vendor name is Lohnes & Culver; "and" was substituted for special character "&".
	Amount:	$525.00
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	**Component Description:**	WQOW - Lohnes - Form 2100 - INV 201809-0275-08-2. NOTE: Vendor name is Lohnes & Culver; however, since the tool does not allow special characters, "and" was substituted for "&".
	Amount:	$525.00
	Component Description:	CP APPLICATION-WQOW - LOHNES ENGR
	Amount:	$1,970.00

Perform engineering study for new channel assignment and antenna development	**Component Description:**	WQOW - Lohnes - eng services - tx power justification - INV 201905-0275-08-2-1. NOTE: vendor name is Lohnes & Culver. Since the tool does not allow for special characters, "and" was substituted for "&".
	Amount:	$300.00
	Component Description:	Construction phase assignment waiver - engineering studies. Lohnes INV 201806-0275-08-2
	Amount:	$1,725.00
	Component Description:	NEW CHANNEL ASSIGN ENGR-LOHNES INV-WQOW
	Amount:	$2,400.00

Address transition timing and coordination issues w/ other stations and wireless	**Component Description:**	WQOW - Lohnes - Interference study - INV 201905-0275-08-2-2. NOTE: Vendor name is Lohnes & Culver; since the tool does not allow for special characters, "and" was substituted for "&".
	Amount:	$840.00
	Component Description:	WQOW - Lohnes - engineering studies - INV 201806-0275-08-2. Note: Vendor name is Lohnes & Culver, but since the tool does not allow special characters, "and" was substituted for "&".
	Amount:	$1,725.00
Prepare and or review reimbursement form	Information not provided.	

Project management of the transition	**Component Description:**	WQOW-PM- SEPT-DEC-17- INV QC18-019
	Amount:	$12,270.00
	Component Description:	WQOW- PM -AUG-NOV18 - INV QC19-018 - PM TIME
	Amount:	$22,537.50
	Component Description:	WQOW - QCOMM PM 4THRU7-18 INV QC18-069
	Amount:	$18,660.00
	Component Description:	WQOW-PM-1THRU3 18 - INV QC18-048
	Amount:	$9,562.50
	Component Description:	WQOW-PM-INV-QC17-143 - ITEM 4004
	Amount:	$15,450.00

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 Co Justificat
Other Expenses	**$61,113.67**	**$60,513.67**		**$9,726.88**	
Additional Insurance	***$118.67***	$118.67	Additional Insurance costs to cover equipment in storage - Winters Ins	$118.67	N/A
MVPD Notification of Channel Change	***$5,000.00***	$5,000.00	Required FCC notification.	N/A	N/A
Develop and air announcement of upcoming channel change	***$15,000.00***	$15,000.00	Required FCC announcements and good will public relations must we upheld. The production airing and disseminating of these announcements are fundamental to our operations.	N/A	N/A

Equipment Storage	***$10,000.00***	$10,000.00	Expecting multiple staggered equipment deliveries from different vendors and need to store and stage new equipment prior to installation date. Anticipate from 6-24 months of storage time.	$1,800.00	N/A
Equipment Delivery and Handling Charges	***$8,000.00***	$8,000.00	Transport, forklift rental and handling fees from staging area to transmitter site.	$2,900.00	N/A
Disposal Costs (for equipment and other waste, net of any salvage value)	***$10,000.00***	$10,000.00	Rent 40 yard dumpster with multiple pickups. Estimated 6-months on site. Potential hazardous waste management issues.	$1,958.21	N/A
FCC Filing Fees - Form 2100 license to cover application	$335.00	$325.00	N/A	N/A	N/A
FCC Filing Fees - Form 2100 minor change CP application	$1,110.00	$1,070.00	N/A	N/A	N/A
DTV Medical Facility Notification	$11,550.00	$11,000.00	N/A	$2,950.00	N/A

Sub-total	$61,113.67	$60,513.67	N/A	$9,726.88	N/A
Total for all systems	$4,001,626.00	$2,329,165.70	N/A	$1,604,533.12	N/A

Components

Actual Information Description	File Name
Additional Insurance	**Component Description:** Additional insurance - equipment in storage - Winters INV 99459 **Amount:** $118.67
MVPD Notification of Channel Change	Information not provided.
Develop and air announcement of upcoming channel change	Information not provided.
Equipment Storage	**Component Description:** WQOW rent only - Casey's GArage - INV 1002 **Amount:** $1,800.00

Equipment Delivery and Handling Charges	**Component Description:**	Equipment delivery - Casey's - INV 1015
	Amount:	$650.00
	Component Description:	move tx line from WXOW to WQOW - Classic Cargo - INV 32332A
	Amount:	$1,000.00
	Component Description:	Equipment delivery from storage to site - Casey's Garage - INV 1016
	Amount:	$1,000.00
	Component Description:	Equipment delivery - Casey's Garage - INV 1015
	Amount:	$650.00
	Component Description:	Monitor delivery from storage facility to site - Casey's Garage - INV 1019
	Amount:	$250.00

Disposal Costs (for equipment and other waste, net of any salvage value)	**Component Description:** **Amount:**	Cleanup and disposal of debris around dumpster area. Supreme - INV 3127 $70.00
	Component Description: **Amount:**	Roll off dumpster to collect debris from installation activities. INV 1603 $152.98
	Component Description: **Amount:**	dumpster rental for December 18, 2018. Advanced INV M40002312417 $731.00
	Component Description: **Amount:**	Roll off dumpster for June 2019 to collect debris from installation activities. $693.00
	Component Description: **Amount:**	Roll off dumpster to collect debris from installation activities. INV 1574 $311.23
FCC Filing Fees - Form 2100 license to cover application	Information not provided.	
FCC Filing Fees - Form 2100 minor change CP application	Information not provided.	

DTV Medical Facility Notification	**Component Description:**	WQOW-RF NOTE-MEDICAL - INV 1059
	Amount:	$2,950.00

Cost Information

Grand Total

	Predetermined Cost Estimate	Estimated Cost	Actual Cost
Total for all systems	$4,001,626.00	$2,329,165.70	$1,604,533.12

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.	**BRADY DREASLER** *CORPORATE DIRECTOR OF ENGINEERING* 01/18/2021

Certification

Section	Question	Response
Submission of Actual Cost Documentation Statements	WILLFUL FALSE, FRAUDULENT, OR FICTITIOUS STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND /OR IMPRISIONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a)(1), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503), AND ANY FALSE AND/OR FRAUDULENT STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT (U.S. CODE, TITLE 31, SECTIONS 3729-3733).	
	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.	**BRADY DREASLER** *CORPORATE DIRECTOR OF ENGINEERING* 01/18/2021

Attachments