



# THE TOWN OF DEWEY BEACH, DELAWARE

WIRELESS 5G CONSULTANT

APRIL 23, 2021

## CONTACT US

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## V-COMM'S OFFICE LOCATIONS

### **New Jersey**

2540 US Highway 130

Suite 101

Cranbury, NJ 08512

o. (609) 655-1200

f. (609) 409-1927

### **Pennsylvania**

736 Springdale Drive

Suite 300

Exton, PA 19341

o. (610) 684-1000

f. (484) 879-6963

### **South Jersey**

5 Chestnut Street

Somers Point, NJ 08244

o. (609) 655-1200



V-COMM, L.L.C.

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April 23, 2021

The Town of Dewey Beach, Delaware  
The Commissioners  
105 Rodney Ave.  
Dewey Beach, DE 19971

To the Commissioners,

V-COMM is pleased to submit this proposal to the Town of Dewey Beach, Delaware to provide consulting expertise on best practices for the placement of new 5G wireless facilities in the Right of Way of the Town of Dewey Beach.

V-COMM's expertise is key to the Town of Dewey Beach's need for comprehensive coverage throughout its coastal location. Our all-encompassing understanding of the telecommunications industry will allow us to determine and recommend the best options for the Town of Dewey Beach. V-COMM has been working with municipal clients located along the eastern seaboard for years and has extensive knowledge of the challenges of a coastline location and specific experience providing optimal solutions and options.

We believe in providing flexibility to accommodate our clients and therefore, we are willing to negotiate our costs and assumptions to best meet the needs of the Town of Dewey Beach, DE.

V-COMM's experience is outlined throughout this proposal, including the references of clients situated along the eastern seaboard. Currently, V-COMM operates and manages telecommunications towers for governmental agencies throughout the area. V-COMM has provided "Telecommunications Master Plans" for several of these clients, looking to optimize siting of telecommunications structures within towns that maximize coverage and service, while minimizing the proliferation of these structures. V-COMM has been the trusted consultant for over a decade for many governmental agencies. Detailed description of this experience is outlined in the "*V-COMM's Experience*" and "*References*" sections of this proposal.

V-COMM was founded in 1995 and has extensive experience in government, commercial and public safety systems, as well as a unique blend of experience in every sector of the wireless industry and transportation. Our range of expertise gives us the advantage over competing firms – we are able to use all of our previous experience to assist with any issues that may arise. V-COMM is a highly respected firm and a trusted consultant by over 70% of New Jersey's counties (our presence is strong in the Garden State due to the proximity to our headquarters). We are relied upon by various government and commercial agencies to design, deploy, manage, and consult for their wireless infrastructure, public safety systems, emergency communications and commercial carrier needs. Our expertise is also relied on by Transit Wireless, the company responsible for NYC Subway Wireless Service including MTA government services in 278 underground stations, serving 7 million customers daily. We have worked with Transit Wireless as their RF engineering firm since inception and currently assist them with consistent RF Engineering support for their underground Neutral Host DAS, over 8 years later. Our experience and capabilities are also relied upon by The Metropolitan Transportation Authority (MTA/the NYC Subways), New York Department of Transportation, Wells Fargo Center Complex (home of the Philadelphia 76ers and Philadelphia Flyers), Port Authority of New York and New Jersey, and the State of New Jersey. Our clientele ranges from government to education and



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healthcare to hospitality. Additionally, we have been qualified as expert witnesses on behalf of the US Department of Justice and the FCC on two high profile cases.

V-COMM specializes in every area of radio frequency and network engineering, we can perform every task and solve every problem you have, making us your one-stop-shop for all your networking needs. When it comes to your wireless network, we are the only firm you need to call to get it done right the first time.

As V-COMM's President and Founder, I will act as one of the key contacts and can answer any questions that may arise from our proposal. My partner and V-COMM's Co-Founder and Vice President, David Stern, will also act as a contact for this proposal.

Dominic Villecco  
President  
(609) 655-1200 ext. 322  
dominic.villecco@vcomm-eng.com

David Stern  
Vice President  
(609) 655-1200 ext. 323  
david.stern@vcomm-eng.com

Thank you for considering our proposal and we look forward to working with the Town of Dewey Beach on this critical project.

Regards,

A handwritten signature in black ink that reads 'Dominic C. Villecco'. The signature is written in a cursive style.

Dominic C. Villecco  
President  
V-COMM, L.L.C.



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## WHY CHOOSE V-COMM

V-COMM's executives have extensive wireless and telecommunications engineering, and operations experience as outlined herein, including consulting for towns with similar telecommunications needs. In past and current positions, V-COMM's executives have negotiated leases for and developed hundreds of tower and telecommunications sites. Further, designing both commercial and public safety systems to provide coverage in these towns, differentiates V-COMM from competing firms. V-COMM is currently engaged by various municipalities to support their 5G technology needs, which includes designing small cell master plans to increase 5G coverage from the carriers, creating or revising ordinances, negotiating leases with carriers, or addressing aesthetic concerns.

### **All work will be performed in-house for 5G Consultant services required by the Town of Dewey Beach.**

V-COMM is an RF Engineering and Consulting firm that has been designing cellular sites, public safety towers, small cells, oDAS and iDAS for carriers, government agencies, and commercial entities for over two decades. We are familiar with current tower locations, increasing capacity demands, existing coverage needs and desired coverage locations. We have supported many different carriers and are familiar with the internal affairs related to leases, capacity, reasonable market rates and contract requirements.

V-COMM has a reputation of providing exceptional support and expertise and have been serving many of our clients for over a decade. Our mission is to provide our clients with the support that best serves their needs. Our team of trusted professionals looks forward to the opportunity to support the Town of Dewey Beach's need for a 5G Consultant and any additional Wireless / Telecommunications needs required.



## WHAT WE DO

We support each client's specific needs with thorough research and carefully assessing the situation at-hand, then provide a completely customized solution, which we manage from start to finish. Our service offerings include a full range of turn-key network and radio frequency engineering support, including, but not limited to the following:

### Wireless Capabilities:

- Cell tower management and design
- Small cell master planning and design
- RF exposure testing and certification
- Interference discovery & mitigation
- Expert witness testimony
- BDA testing
- Our technology experience includes: 5G, 4G LTE, CDMA, TDMA, FDMA, OFDM, P25 Phase 1 & 2, microwave, point-to-point, mesh solutions, TDM, IP, VoIP, circuit switched, packet switched, SONET, ATM, frame relay & fiber optics

### Public Safety Radio Systems:

- P25 Phase II network design, consulting, specification and implementation
- In-building coverage testing, certification, design, installation
- FCC licensing
- Frequency planning
- NFPA/IFC testing, measurement, design and implementation of public safety in-building radio coverage
- Traffic and network capacity engineering, forecast & management
- System integration
- Technology evaluation
- Project management
- Regulatory advisory assistance
- Interference mitigation

### Telecommunications Engineering Services:

- In-building DAS design, testing and implementation of public safety and commercial wireless networks
- RF and network design, testing and optimization
- FCC and FAA licensing & regulations
- Network Project and Construction Management
- Regulatory advisory assistance
- Expert witness testimony
- Intermodulation/Interference Studies and Mitigation
- Coverage Testing, PIM Testing, and Antenna/Line Sweep Testing

Our staff and management teams are technology and safety certified with, but not limited to, the following organizations:

- **Transportation:** Amtrak, MTA, NYCT, PATCO, SIR, SEPTA and WMATA
- **Equipment and software:** Anritsu, iBwave Level 2 and 3, JMA Wireless and Keysight
- **General safety:** OSHA and SWAC



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## V-COMM'S EXPERIENCE

The following pages provide an extensive list of projects and descriptions of work **performed in-house** by various V-COMM team members. Our expertise is relied upon within the wireless industry and many governmental agencies. These projects are only a small part of what the V-COMM team can provide to the Town of Dewey Beach.

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### Master Plan Development / Cell Carrier Leasing and Coordination Experience

#### **Avalon Borough, New Jersey**

*Proudly supporting for over 15 years and counting*

- Cell Carrier Leasing and Coordination on municipal owned infrastructure
- Telecommunications Master Plan Development

#### **Stone Harbor, New Jersey**

- Cell Carrier Leasing and Coordination on municipal owned infrastructure
- Telecommunications Master Plan Development

#### **Cherry Hill Township, New Jersey**

*Proudly supporting for over 10 years and counting*

- Cell Carrier Leasing/Coordination on municipal owned infrastructure

#### **Margate, New Jersey**

*Proudly supporting for over 5 years and counting*

- Cell Carrier Leasing/Coordination on municipal owned infrastructure

#### **Palmyra, New Jersey**

*Proudly supporting for over 5 years and counting*

- Cell Carrier Leasing/Coordination on municipal owned infrastructure

#### **Burlington County, New Jersey**

*Proudly supporting for over 8 years and counting*

- Cell Carrier Leasing/Coordination on County owned structures

#### **West Chester University, West Chester, PA**

- Coordinated wireless carrier relocations which included lease renegotiation, system engineering, new location engineering and carrier coordination.

#### **Town of Kill Devil Hills, North Carolina**

*Proudly supporting for over 15 years and counting*

- Cell Carrier Leasing and Coordination on municipal owned infrastructure
- Telecommunications Master Plan Development



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## 5G Experience

### **Avalon Borough, New Jersey**

*Proudly supporting for over 15 years and counting*

- Designing a Small Cell Deployment Plan (100+ Nodes Borough-wide) to support enhanced 4G and 5G services for the wireless carriers – increasing coverage and adhering to the Borough’s aesthetic requirements.

### **Borough of Woodbine, New Jersey**

*Proudly supporting for over 20 years and counting*

- Supporting Cell Carrier requests for 5G upgrades on municipal owned infrastructure

### **Cherry Hill Township, New Jersey**

*Proudly supporting for over 10 years and counting*

- Currently developing Small Cell Master Plan to support 5G interest from cell carriers
- Supporting Cell Carrier requests for 5G upgrades on municipal owned infrastructure

### **Stone Harbor, New Jersey**

- Currently developing Small Cell Master Plan to support 5G interest from cell carriers

### **Passaic County, New Jersey**

- 5G Study for Economic Development

### **PSE&G**

- PSE&G Approved firm for MPE/RF Exposure/RF Safety Reports on over 450 PSE&G structures on 4G/5G deployments

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## Municipal / Governmental Experience

### **New York City Transit (NYCT)**

- Department of Busses New 700/800 MHz TETRA Radio System
- Department of Subways New 800 MHz Above Ground Radio System

### **New York Police Department (NYPD) / Metropolitan Transit Authority (MTA)**

- NYPD UHF Subway Radio Distributed Antenna System (DAS)
  - Full RF System Design, Frequency Acquisition Services, Site Acquisition, Evaluation and Surveys

### **State of New Jersey**

*Proudly supporting for over 10 years and counting*

- 700/800 MHz PSIC P25 Phase 2 System
- LTE Broadband Network
- Comprehensive Public Safety Tower Planning



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## **Burlington County, New Jersey**

*Proudly supporting for over 8 years and counting*

- P25 Phase 2 System Design and Deployment:
  - Site acquisition, RFP Development, System procurement, Implementation Oversight, and Integration, through the completion of System Implementation

## **Camden County, New Jersey**

*Proudly supporting for over 12 years and counting*

- NJ's First 700 MHz P25 – Phase 2 System Design and Deployment:
  - Site acquisition, RFP Development, System procurement, Implementation Oversight, and Integration, through the completion of System Implementation
- Tower Management Support
- Highway Construction Interchange Project – Repeater Design

## **Cape May County, New Jersey**

*Proudly supporting for over 10 years and counting*

- 700 MHz P25 Phase 2 System Design and Implementation
- VHF System Expansion
- PSAP Recommendations

## **Cumberland County, New Jersey**

*Proudly supporting for over 10 years and counting*

- 700 MHz System/Tower Design/Construction Management
- 700 MHz Project Management Services
- VHF System Expansion

## **Newark, New Jersey**

*Proudly supporting for over 3 years and counting*

- Public Safety 700 MHz Radio Network Expansion and Upgrade

## **Parsippany-Troy Hills, New Jersey**

*Proudly supporting for over 3 years and counting*

- 700 MHz P25 Phase 2 System Design and Implementation
- PSAP Recommendations

## **Cherry Hill Township, New Jersey**

*Proudly supporting for over 10 years and counting*

- P25 Phase 2 System Assessment, Recommendations, System Design and Implementation

## **Philadelphia, Pennsylvania**

- 700/800 MHz P25 Phase 2 System
- Philadelphia International Airport 800 MHz radio system dispatch console upgrade
- Wireless broadband Assessment for Police, Fire & PWD

## **Ocean County, New Jersey**

- 700 MHz System Design



## FCC Licensing Experience

V-COMM has extensive FCC Licensing Services experience is members of our staff currently hold positions on the Regional Planning Committee's Board for Region 8 and 28. Additionally, V-COMM is intimately involved in adjacent Regions 19, 20 and 30 on various projects.

V-COMM has provided licensing services to:

- **State of New Jersey (NJICS)**
- **Port Authority of New York and New Jersey**
- **New York City Transit (NYCT)**
- **New Jersey Transit (NJT)**
- **Washington Metropolitan Area Transit Authority (WMATA)**
- **City of Philadelphia, PA**
- **Various New Jersey Counties and Municipalities:**
  - Avalon Borough
  - Bergen County
  - Burlington County
  - Camden County
  - Cape May County
  - Cherry Hill Township
  - Cumberland County
  - Edison Township
  - Essex County
  - Hudson County
  - Hunterdon County
  - Jackson Township
  - Madison Borough
  - Newark
  - Parsippany-Troy Hills Township
  - Somerset County
  - Toms River Township
  - Union County
- **Various New York Counties:**
  - Albany County (800 MHz)
  - Allegany County (UHF / VHF)
  - Broome County (UHF)
  - Cattaraugus County (VHF)
  - Chautauqua County (VHF)
  - Chemung County (VHF)
  - Clinton County (800 MHz)
  - Essex County (VHF)
  - Montgomery County (VHF)
  - Nassau County (UHF / 700 MHz / 800 MHz)
  - Niagara County (UHF)
  - Orange County, NY (700 MHz / 800 MHz)
  - Saratoga County (700 MHz / 800 MHz)
  - Schenectady County (800 MHz)
  - Seneca County (UHF / VHF / 800 MHz)
  - Suffolk County (UHF / 700 MHz / 800MHz)

- Ulster County (VHF)
  - Westchester County (UHF T-Band)
  - **Lycoming County, PA**
  - **Pike County, PA**
  - **Biddeford, ME**
  - **State of Connecticut Dept. of Emergency Services and Public Protection (DESPP)**
  - **Avon, CT**
  - **Bristol, CT**
  - **Bridgeport, CT**
  - **Cheshire, CT**
  - **Greenwich, CT**
  - **Windsor, CT**
  - **Berkshire County, MA**
  - **Dukes County, MA**
  - **Holden, MA**
  - **West Springfield, MA**
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## DAS Experience

### **Wells Fargo Center / Comcast Spectacor**

*Proudly supporting for 2 years and counting*

- DAS (Distributed Antenna System) Relocation Design and Installation Management

### **Comcast Tower, Philadelphia, Pennsylvania**

- T-Mobile DAS Network Expansion Support

### **South Jersey Industries (SJI)**

- Neutral Host DAS
  - RF design, construction, implementation, optimization, acceptance testing and carrier coordination for new HQ DAS in New Jersey

### **Kalahari Resort, Mt. Pocono, Pennsylvania**

- Public Safety DAS, VHF and UHF Bands
  - RF design, construction, implementation, optimization and certification testing of an in-building public safety radio Distributed Antenna System (DAS)

### **Ocean County, New Jersey**

- Justice Complex DAS

### **Philadelphia, Pennsylvania**

- In-building public safety for the Democratic National Convention at Wells Fargo Center



## Interference Experience

### **AMTRAK**

*Proudly supporting for over 15 years and counting*

- Surveys for link budget analysis, train car penetration, interference and noise floor levels of the Commercial Mobile Radio Service (CMRS) for Northeast Corridor

### **New York City Transit (NYCT)**

- Interference Analysis to support the implementation of the NYCT's Department of Busses new 700/800 MHz TETRA Radio System
- Interference analysis of Canarsie Subway Line and tunnels for cellular and public safety systems

### **State of New Jersey**

*Proudly supporting for over 10 years and counting*

- Interference Analysis to support the development of the State's 700 MHz Frequency Plan

### **NJ Transit Rail Lines**

- Interference Analysis to support NJT's Positive Train Control (PTC) System

### **Port Authority of New York and New Jersey**

- **Port Authority Trans-Hudson (PATH)** – Interference Mitigation, RF Engineering and Design of DAS of 14 stations between NY and NJ
- **World Trade Center** – Intermodulation analysis and interference mitigation plan for Cellular and public safety DAS networks

### **Jefferson Health, Philadelphia, Pennsylvania**

- Interference Hunting and Mitigation from Phillips' Patient Monitors to adjacent AT&T macro site

### **NBC Studios, Rockefeller Plaza, New York**

- RF inter-modulation and isolation studies for over 500 bands of operation and wireless systems used in the building

### **Cherry Hill Township, New Jersey**

*Proudly supporting for over 10 years and counting*

- Tower Interference Mitigation

### **Nabisco Bakery, Fair Lawn, New Jersey**

- Interference Hunting and Mitigation
  - Determined the source of interference from the Nabisco/Kraft Foods bakery in Fair to the incoming aviation traffic for Newark International Airport
  - Worked with microwave oven manufacturer to modify the ovens and screen the bakery floor to stay within the FCC ISM guidelines

### **Camden County, New Jersey**

*Proudly supporting for over 12 years and counting*

- Intermodulation Studies



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## Transit Experience

### **AMTRAK**

*Proudly supporting for over 15 years and counting*

- Testing and Design of Commercial Mobile Radio Service (CMRS) for Northeast Corridor
- Design and installation oversight of cellular repeaters aboard AMTRAK's Acela trainsets

### **NYC Subways**

*Proudly supporting for over 10 years and counting*

- Wireless DAS for 277 Underground Stations
  - System design services included equipment requirements and specifications, overall system link budget designs for many frequency bands and operating systems, including commercial, public safety and unlicensed frequency bands, measurements and verification, technology and spectrum evaluation, system integration services, vendor coordination, fixed network designs, enhanced 911 coordination and support and other engineering support services.

### **New Jersey Transit (NJT)**

- Design, frequency analysis, interference analysis and regulatory tasks to assist NJ Transit in deployment of their Positive Train Control (PTC) System.
- Cellular coverage testing on all NJT Right of Ways (ROW)

### **Port Authority Trans-Hudson (PATH)**

- Interference Mitigation, RF Engineering and Design of DAS of 14 stations between NY and NJ

### **Washington Metropolitan Area Transit Authority (WMATA)**

- Public Safety P-25 Radio System
  - FCC Licensing
  - Project Management

### **Southeastern Pennsylvania Transit Authority (SEPTA)**

- Wireless DAS Network Design/Build
  - Design, Procurement, Installation, Commissioning and Documentation for 700, 850 and 1900 MHz bands
- Intermodulation Analysis

### **Delaware River Port Authority (DRPA)**

- 800 MHz DAS Network for PATCO Subway – Public Safety System
  - Design / Build, Specifications, ATP testing
  - Final Design included 99% coverage with a DAQ of 4.5
- Design /Build DAS Network for Cellular Service in Subway

### **Massachusetts Bay Transportation Authority (MBTA)**

- Baseline and throughput testing for all commercial carriers along Commuter Rail ROWs

### **MTA/LIRR – Eastside Access**

- Baseline and throughput testing for cellular coverage



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### **Penn Station, New York**

- Cellular DAS Testing and troubleshooting (station passenger areas)
- CW Testing trackside for transition system between tunnel and station platforms

### **Lincoln Tunnel**

- Intermodulation analysis
- EME Testing for Radiating Cable System in Tunnel

### **Holland Tunnel**

- Intermodulation analysis
- EME Testing for Radiating Cable System in Tunnel

### **Newark Airport**

- DAS Network design, testing and troubleshooting
- Airtrain oDAS design and testing



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## REFERENCES

V-COMM has provided similar services to those that the Township of Dewey Beach is requesting for several other municipalities and counties on the east coast. These references have been listed below. V-COMM is proud of its accomplishments in supporting local government agencies.

**CLIENT:** **Borough of Avalon, New Jersey**  
**DATES:** **2007 – Present**  
**CONTACT:** Scott Wahl, Business Administrator, Department of Administration  
Swahl@avalonboro.org  
(609) 967-8200

*V-COMM has assisted in developing and management of cell tower leases on the Borough's two water tanks since 2007. V-COMM has also developed leasing requirements to allow cell carriers leasing opportunities on the municipally owned radio tower located at the Police Department/Borough Hall*

**CLIENT:** **Borough of Woodbine Municipal Utilities Authority, New Jersey**  
**DATES:** **1999 – Present**  
**CONTACT:** William Pikolycky, Mayor  
mayor@boroughofwoodbine.net  
(609) 861-5301

*V-COMM has assisted the Woodbine MUA with managing carriers on their water tanks for over 20 years.*

**CLIENT:** **Burlington County, New Jersey**  
**DATES:** **2012 – Present**  
**CONTACT:** Carolyn Havlick, Chief Financial Officer  
chavlick@co.burlington.nj.us  
(609) 265-5018

*V-COMM assisted in negotiating the cell carrier lease agreements on several County owned towers and buildings.*

**CLIENT:** **The Township of Cherry Hill, New Jersey**  
**DATES:** **2012 – Present**  
**CONTACT:** Steve Musilli, Director of Engineering and Public Works  
SMusilli@chtownship.com  
(856) 424-3203

*V-COMM assisted in negotiating cell leases on the Township's two radio towers.*



## SERVICES TO BE PERFORMED

V-COMM will provide the following:

### 1. Initial 5G Plan for Town of Dewey Beach:

V-COMM will provide 5G Consulting services for the placement of small cell nodes throughout the Town of Dewey Beach for the future use of these locations for wireless carriers. Project objectives in completing this project as follows:

- Develop preliminary plan to estimate required coverage locations
- Perform field survey to validate assumptions
- Identify & verify pole locations and configurations/options
- Identify decorative pole options to be considered by Town (e.g., Light poles, Traffic Lights, etc.)
- Identify potential areas of concern
- Review Node Candidates per location
- Identify sample ordinances and Master License Agreements from other towns to be used as a starting point for Dewey Beach to enact its own ordinance.

### 2. On-going Service Requirements on an annual basis:

V-COMM will provide continued support and consulting for the Town of Dewey Beach on an annual basis to:

- Assist with the development of a Small Cell Ordinance and Master License Agreement for adoption by the Town of Dewey Beach
- Follow up activities and assistance related to Town wireless initiatives, wireless carrier requests, and small cell development plan.
- Review wireless carrier upgrade/expansion requests;
  - To determine application to the existing agreements.
  - To determine if the application has all necessary documentation (i.e. structural analyses, interference analyses, construction drawings, RF Safety reports, etc.).
- Work with Town legal department to develop any Agreement Amendments needed to properly document any proposed changes, upgrades or expansions.
- Develop recommendations for Dewey Beach in approving or denying the carrier requests, or requirements for modifications, if possible.
- Coordinate with carriers to implement modifications and confirm final modifications match the final construction drawings.
- Follow up on any final documentation to ensure Town of Dewey Beach has accurate and current information for its site files.
- Assist Town personnel on Small Cell Master License Agreements with carriers.
- Assist Town personnel with research on small cell light pole and other infrastructure options, to use in expanding/developing Town requirements for these types of installations.



## TOWN OF DEWEY BEACH RESPONSIBILITIES

### Dewey Beach shall provide the following:

1. Provide copies of all existing Master License Agreements and any other available information on existing cell leases or existing utility pole installations.
2. Provide legal assistance with all lease and license documentation and amendments.
3. Provide access to current cell lease facilities and Town rights of way as needed to coordinate with wireless carriers for engineering site walks, and inspections.
4. Provide information (preferably in GIS format) regarding the Town owned Right of Way and any other govern controlled Right of Way (e.g. County or State) within the Town of Dewey Beach.
5. Provide copies of existing State, County or Town legislation regarding small cells in the Right of Way.

## COST PROPOSAL

Telecommunications Engineering Services performed under this proposed agreement will be performed on a time and materials basis for services provided by members of our professional staff.

### Initial 5G Plan Cost Proposal

Task	Estimated Hours	Blended Hourly Rate	Extended
Initial 5G Plan	100	\$ 175	\$ 17,500
Estimated Travel Expenses (mileage, meals, lodging)			\$ 750
<b>Estimated Cost</b>	<b>100</b>		<b>\$ 18,250</b>

### On-going Service Requirements Cost Proposal

On-Going Service Requirements outlined above will be performed on a Time and Materials basis at the hourly rates outlined below. An annual budget will be negotiated with the Town of Dewey Beach and V-COMM will not exceed this budget without prior approval. Only actual time and expenses incurred will be invoiced.

Position	Hourly Rate
RF Engineer	\$ 150
Senior Engineer	\$ 175
Project Manager	\$ 175
Director	\$ 195
Principal	\$ 250



## COST ASSUMPTIONS AND EXCLUSIONS

1. Telecommunications engineering services will be performed on a Time and Materials basis. Only actual time and expenses incurred will be invoiced. If additional time is needed, V-COMM will notify the Town of Dewey Beach and mutually agree on any associated additional costs, prior to expending any such costs. Such approval shall not be unreasonably withheld, delayed or denied jeopardizing the project.
2. Pricing does not include travel and related expenses, which will be passed through at cost provided these expenses are reimbursed upon receipt.
3. Access will be provided to V-COMM to analyze the existing tower and leasehold locations.
4. Dewey Beach will provide copies of all existing leases, Master License Agreements and site plans associated with the current wireless carriers and other antennas on the structure.
5. The price reflected in this proposal response does not include any additional cost associated with the delay of this project as a result of vendor delays, union disputes, COVID-19 or Homeland Security issues.
6. This proposal assumes that the Town of Dewey Beach will not unreasonably withhold approval of recommended changes, modifications, or additional infrastructure to facilitate the overall project objectives as defined in the proposal.
7. This proposal assumes that the project schedule will track on a two (2) month time frame, prior to the peak seasonal summer months. Should the schedule vary beyond two months, or cross over into the summer peak season, additional costs may be incurred (anticipated additional costs are primarily lodging and travel costs associated with seasonal peak rates).
8. V-COMM is not providing any hardware, software or installation services as part of this proposal.
9. The price reflected in this proposal does not include any building materials, construction cost, construction or electronic equipment, product, or vendor costs associated with the plans or recommendations provided by V-COMM.
10. V-COMM management will perform coordination of personnel. These personnel will be located in either V-COMM's Cranbury, NJ, Somers Point, NJ or Exton, PA offices throughout the duration of the project with travel as required for the various tasks.
11. This quote is specific to the consulting tasks outlined within this Scope of Work (SOW). Additional projects (e.g. project management and implementation of additional networks, other RF engineering needs, etc.) will be quoted separately as individual projects.
12. Should the Town of Dewey Beach direct a change in the Work, the change shall be incorporated into the agreement by a written Change Order approved in advance of such work in writing by the Town of Dewey Beach and V-COMM, stating their agreement upon the change or changes in the work and the necessary adjustments.



2540 U.S. Highway 130, Suite 101, Cranbury, NJ 08512  
P: (609) 655-1200 · F: (609) 409-1927

736 Springdale Drive, Suite 300, Exton, PA 19341  
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## CONFLICTS OF INTEREST

V-COMM is a professionally competent firm with proud vendor independent status. This neutral status allows for V-COMM to provide unbiased results in the best interests of the Town of Dewey Beach. As such, V-COMM does not and will not receive any monetary incentive from such vendors (or carriers) for recommendations made.

V-COMM has been in the Telecommunications industry for over 25 years. As such, V-COMM has had many relationships with various Telecommunications companies over the years. At this point in time, there are no known conflicts of interest. Further, V-COMM does not perform any real estate or lease negotiations for any wireless carriers and does not perform any services for any potentially conflicting parties in the Town of Dewey Beach, or any other jurisdictions where it provides these services, in any of the reference projects listed above. This methodology has enabled V-COMM to successfully perform these same services for many other governmental agencies over the past 20 years.

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## PROFESSIONAL PRACTICE

In addition to V-COMM's vendor neutrality, the Town of Dewey Beach is to be aware that V-COMM is not currently, nor ever in the past, in violation of any regulatory rules and regulations that would impact the firm's operations and service to its clients. Therefore, there is nothing that would prevent V-COMM from performing the requested service to the Town of Dewey Beach as outlined in the proposal.

Neither V-COMM nor any individuals assigned to this engagement are disbarred, suspended, or otherwise prohibited from professional practice by any federal, state, or local agency.



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## INVOICING AND PAYMENT

Engineering services will be invoiced on a monthly basis or as negotiated with the Town of Dewey Beach. Payments shall be due upon receipt of invoice. Any invoices which are paid after thirty (30) days of invoice date will incur a late payment charge of 1 ½ % per month.

All invoices should be mailed to the following address to the attention of the representative named below:

The Town of Dewey Beach, Delaware

\_\_\_\_\_

ATTN: \_\_\_\_\_

All payments are to be mailed to the following address below:

V-COMM L.L.C.  
5 Chestnut Street  
Somers Point, NJ 08244  
ATTN: Accounts Payable

## STARTING DATE

The V-COMM team is ready to begin this project for the Town of Dewey Beach, Delaware upon execution of an agreement and receipt of a Purchase Order authorizing V-COMM to commence services, along with receipt of all necessary information. This offer and pricing are good for 60 days.

Agreed to this **23<sup>rd</sup>** day of **April, 2021**.

Agreed by:  
**Town of Dewey Beach, Delaware**

Accepted by:  
**V-COMM, L.L.C.**

Dominic VILLECCO  
President

\_\_\_\_\_  
Authorized Signature

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Title of Signatory