200867D

City of Gainesville, Florida

COMPANY:

Tilson Technology Management, Inc.
16 Middle St.
Portland, ME 04101
United States

CONTACT:

Adam Quinlan
Manager, Broadband Consulting

PREPARED 01/7/2021

TILSON
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roaWalter Banks, Chief Information Officer
GRUcom

Delivered via Portal

1/7/2021

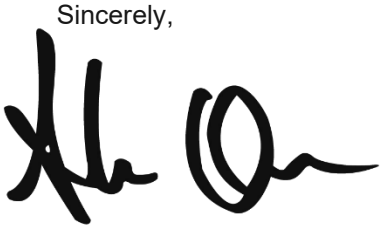
Dear Mr. Banks,

Thank you for considering Tilson's proposal to partner with you on the development and execution of a Broadband Action Plan that will help you the maximize the benefits of the network assets built and deployed over the years by the City of Gainesville and Gainesville Regional Utilities. As a consulting, engineering, design, and construction firm, Tilson has a long history of success partnering with state and local governments as well as the corporations they have formed to profitably serve the public interest.

Since 1996, Tilson has provided a full range of telecommunication services to public and private sector clients seeking to improve their information and communications infrastructure. We have the people, knowledge, experience, and technology necessary to provide our partners with solutions that meet, and often exceed, expectations. Tilson performs all its survey, design, permitting, and consulting work with its own employees in local offices around the country, drawing on the knowledge and insights of more than 500 telecommunications and technology professionals.

If you have any questions regarding our proposal, please contact me at my direct line (207) 229-4849 or by email at aquinlan@tilsontech.com. Thank you for your consideration and we look forward to continuing discussions.

Sincerely,



Adam Quinlan
Manager, Broadband Consulting

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ABOUT TILSON

Tilson Technology Management ("Tilson") is a multi-specialty telecommunications services firm with more than 15 years of experience designing, building, and maintaining telecommunications networks using both wireless and fiber technologies, in middle and last-mile applications. Our breadth of in-house resources allows us to lead projects from conception and planning through engineering, construction, and operations.

Tilson partners with our clients to help them define their needs, articulate their goals, set milestones, and launch networks that are scalable for growing user-bases and new technologies so that they become appreciating, long-lived assets. Many of our broadband planning clients later select Tilson to provide fiber design, engineering, and construction services. In that market, we provide turnkey solutions: everything from acquiring land rights and producing stamped, engineered drawings to full general contractor services. Tilson's public sector Broadband Consulting clients benefit from the experience of Tilson not only consulting but implementing telecommunications infrastructure projects for a wide range of service providers, utilities, and government entities.

We are recognized by customers and peers for our commitment to excellence in fiber network business and engineering consulting, design, and deployment. We work collaboratively on meaningful, impactful projects for great clients. Our team environment fosters intellectual curiosity, motivates employees, and cultivates talented people who work with purpose, mastery, and autonomy. We strive to listen to our clients, partner with them as a team, and accept their goals as our own. Our mission is to serve our customers by building, integrating, and maintaining the information technology and communications infrastructure that enables great organizations to innovate and deliver. Our consulting teams have broad-based experience with fiber, copper, coaxial, wireless, and hybrid networks and can assess the full range of network technology, network architecture design and construction, management, and financial performance.

Tilson was founded in 1996 and is incorporated as a C-Corp. in Maine (the firm is privately held and majority-owned by its CEO and Chairman Joshua Brodeur). We have since grown employ more than 550 professionals in 23 locations around the country, including Kirkland, Washington. Tilson is a privately held C Corporation, majority owned by our CEO, Joshua Broder. For ten consecutive years, we have been named on the Inc. 5000 list, one of the most prestigious rankings for the nation's fastest-growing private companies, a feat that less than half of one percent of companies have achieved, putting us in the company of Microsoft, Vizio, Intuit, and Oracle. Financial audits and other confidential company solvency-related documentation can be provided upon further request.

In conjunction with our affiliate, Tilson Infrastructure, we have capabilities and expertise commercializing fiber networks, including negotiation, brokerage, and crafting of lease agreements with carriers, ISPs and other dark and lit fiber broadband users nationwide.

Expertise in Project Management, Development and Public/Private Partnerships

- **Development of State and Local Support**

Having champions and allies in target communities and in the statehouse is critical, as these stakeholders will help clear a path to a successful broadband project. The global pandemic has heightened awareness of the Digital Divide and created opportunities – and pressures – on utilities to help provide solutions. Tilson has a great depth of experience defining the problem that a utility broadband project will address, and then convening local leaders and stakeholders, utility commissioners, state officials, and the community to advocate for and develop support for your project.

- **Assessment of Regulatory Environment**

Understanding regulatory advantages or hurdles you may face is another factor in a successful broadband project. Does your state or utility commission's regulatory paradigm support or hinder a utility broadband project? Will your pole attachment process allow for certainty around speed and cost for broadband deployment, or will the make-ready process require substantial investment in new poles and create expensive delays for completing attachments? Tilson can provide a comprehensive overview of the regulatory environment and suggest remedies to smooth any hurdles, including methods for engaging with champions and allies to address such challenges.

- **Potential Partnerships**

A broadband deployment ultimately seeks to provide retail broadband internet service to consumers. Many utilities would like to support broadband deployment, but do not want to be the entity providing that service to the end-user. Tilson has a track record of creating partnerships with Internet Service Providers (ISPs), as well as local government entities, to provide or assist with the retail broadband aspects of a project. These partnerships mean utilities do not have to go it alone, but rather can consider playing more of a supporting role in a broadband project by facilitating pole attachments and allowing access to excess utility fiber.

- **Leveraging Federal and State Subsidies**

Even before the pandemic, utilities were seeing increased availability of federal and state subsidies to support a utility broadband project. The largest of these is the Rural Digital Opportunity Fund ("RDOF), a $16.4 billion fund being auctioned off by the Federal Communications Commission. The pandemic has increased the availability of these types of subsidies at both the state and local level, a trend which is expected to continue as the country continues efforts to reduce the Digital Divide. Tilson can help

utilities leverage these funds to support broadband projects including participation in RDOF, as well as creating public-private partnerships to access funds available only to governmental entities.

- **Driving Private Capital Investment**

Large-scale utility broadband project will ultimately need access to capital. Tilson has successfully accessed private capital markets to support utility broadband projects. In addition, a utility broadband project that demonstrates a positive cost-benefit analysis for your ratepayers is much more likely to receive support from your utility commission We are also skilled at developing these cost-benefit analyses and helping utilities advocate for recovery before their regulators.

QUALIFICATIONS & PERFORMANCE

Seneca Nation

Project highlights: Preliminary Route Design for Universal Access Across Target Region; Business Model Planning and Financial Forecasting; Pole Data Collection and Field Surveying; Pole Applications and Make-Ready Management; Outside Plant Engineering and Low-Level Design; Construction Ready Plans, Bill-of-Materials, and Detailed Capital Expenditure Estimation; Permitting; Full Construction and Implementation of Designed Network

The Seneca Nation is a federally recognized tribal nation consisting of five territories over approximately 54,000 acres in Western New York. These territories are not contiguous, each parcel is unique in its economic, social, and environmental profile. The Cattaraugus territory encompasses approximately 22,000 acres (or 34.4 square miles) with a population of 2,655 enrolled tribal members and their families, 41 government facilities, and approximately 1200 residential and commercial structures.

Through its ReConnect Funding Program, the USDA awarded $4.3 million in high-speed broadband infrastructure aimed at creating or improving rural e-Connectivity for more than 1,000 rural households in the Seneca Nation's Cattaraugus Territory in western New York. The proposed network would provide access to all premises on the territory, provide speeds up to 2.4 Gbps downstream and 1.2 Gbps upstream per 32 subscribers, and be engineered for integration and expansion of future technological advances or subscriber growth. The Nation required a reliable firm to provide expert-level broadband consulting and holistic oversight of the project; conduct comprehensive utility pole surveys; design and engineer the last mile fiber-to-the-premise network to meet necessary specifications; undertake financial modeling and budget forecasting of the proposed network; identify required third-party approvals or permits; oversee the utility pole and conduit licensing process; prepare the construction-ready bid package; and provide assistance in reviewing proposals and ultimately identifying a construction contractor.

Tilson provided first-in-class turnkey design and engineering services creating a construction-ready design capable of connecting the entirety of identified premises in the Cattaraugus Territory. Through value-added engineering, Tilson was able to creatively re-purpose existing commercial grade properties as hut locations, efficiently develop routes to leverage federal funding, and ultimately introduce savings of approximately $425,000 or roughly 8.5% of the estimated total project cost.

Tilson also provided expert broadband consulting services throughout the project to develop informative and actionable financial models and acted as a resource to ensure successful execution of the project from start to finish.

Tilson has also been selected to provide full construction, implementation, and testing of the designed network, bringing the client all the way from initial planning efforts to a fully operational high-speed broadband network.

Twisp Public Development Authority

Project Highlights: Existing infrastructure inventory; state broadband policy report; focus groups; broadband availability mapping; broadband gap analysis; broadband demand assessment.

Tilson has worked closely with the Methow Valley Broadband Action Team during 2020 fulfilling the requirements of their Community Economic Revitalization Board (CERB) planning grant. The Methow Valley Broadband Action Team (BAT) is a volunteer group focused on improving broadband access throughout the upper Methow Valley and is responsible for administering the CERB grant obtained by the PDA. BAT members include the Okanogan County Public Utility District, the Okanogan County Electric Cooperative, and the mayors of Twisp and Winthrop among others.

In addition to CERB planning grant requirements, Tilson mapped out a path forward for the Methow Valley that includes regular participation by various stakeholders in state and federal funding opportunities such as the state Public Works Board Broadband Construction grant, USEDA CARES Act funding, the US EDA Public Works and Economic Adjustment Assistance grant program, the next round of the USDA ReConnect and Community Connect programs and the FCC RDOF Phase 2, and complementing that with funding from special assessment districts such as local utility districts for Okanogan County PUD expansion and local improvement districts (or a port district) for broadband expansion within the electric Cooperative service area.

Okanogan Public Utility District

Project highlights: Regional High-level Design and Cost-Estimation; Funding Opportunity Identification and Strategy; Grant writing and Funding Application Subject Matter Expertise

Tilson has established a working relationship with the Okanogan Public Utility District (OKPUD) as a result of our mutual involvement with the Methow Valley Broadband Action Team and are currently working to develop high level designs and associated capital expenditure estimates for unserved and underserved regions within their district. These designs and cost estimates provide actionable intelligence to the OKPUD, providing support for strategic growth as well as foundational data for detailed engineering and construction efforts.

Tilson also acts as subject experts, advising and assisting the OKPUD in identifying and pursuing funding opportunities. As a Washington State PUD, the OKPUD's lack of retail-authority is a defining factor of the organization and one that informs our approach to funding opportunities. Tilson recently assisted the OKPUD draft and submit a strong application for grant funding through the Washington State Public Works Board's Broadband Construction Grant and Loan Program. In addition to the Public Works Board funding, we are actively identifying other grant-funding opportunities that may be available and appropriate for entities lacking retail authority. For example, the upcoming FCC RDOF auction is available only to entities able to offer retail services rendering Washington State PUDs ineligible, while upcoming funding opportunities through the USDA, such as the Community Connect Grant program (with the 2020 application window now open with a December deadline) and ReConnect Grant program (with Round 3 expected to open in January 2021), allow participants lacking retail authority.

City of Cambridge, Massachusetts

Project Highlights: Broadband Inventory Analysis, Community and Stakeholder Outreach, Service Gap Analysis, FTTP high-level design proposals and associated cost estimates

Tilson conducted a comprehensive inventory of existing broadband services in the City of Cambridge, MA and proposed three alternatives for FTTP encompassing different levels of capital commitment and connectivity. As part of this project, Tilson assisted the City's Broadband Task Force and City staff develop recommendations to the City Council.

First, Tilson developed and implemented a community engagement plan to seek input from residents and businesses from all areas of the City, which included facilitating two large-group public meetings. Next, Tilson identified the service gap to define desired broadband service levels and determine underserved areas, then quantify their level of service compared with other parts of the City. Third, Tilson worked with

the City and stakeholders to develop a range of alternatives for improving access. Finally, recognizing the community's desire for and the suitability to its needs of a fiber-based solution, Tilson proposed three discrete fiber network buildout plans suiting different capital commitment levels and service improvement goals. For each, Tilson provided a high-level network design and cost estimate. Tilson also advised the City on the tradeoffs and implications associated with different business and financing models for a municipal-scale network.

Southeast Colorado / Otero County

Project Highlights: Broadband Network Strategic Planning, Current Infrastructure and Availability Analysis, Community and Stakeholder Outreach, Broadband Coverage Gap Analysis, Operating Model Development

Tilson worked with a six-county region in southeastern Colorado to develop a strategic broadband plan that enabled the region to improve its infrastructure in a manner that leveraged existing national, state, and private resources. Tilson assisted the region with the following services:

- Defining broadband goals.
- Mapping current broadband infrastructure and service availability.
- Conducting community education and input workshops.
- Developing and administering a survey.
- Documenting national, state and private broadband efforts underway.
- Identifying broadband gaps.
- Developing design solutions for a sample of unserved areas.
- Providing an overview of operating model options.

The result of the project was a strategic plan document and series of community meetings with each county in the region to educate residents and receive input on desired solutions. Following the successful completion of this project, the region had a plan in place to build out connectivity subject to funds availability and the political desire to do so.

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Post Rd. Foundation

Project Highlights: Community Profiling; Market Assessment; Engineering Consulting; Mid-level Design and Cost Estimate; Business Model Planning

The Post Road Foundation is a non-profit platform that helps communities develop intelligent, broadband-connected infrastructure to drive digital inclusion, efficient resource management and economic growth. They help to bridge the gap between communities and institutional investors by reducing capacity barriers to the development and funding of sustainable infrastructure, particularly in places lacking 21st century communications.

The Foundation contracted Tilson to aide in the process of conducting pre-feasibility studies across pilot communities on the costs and benefits of deploying the fiber optic networks needed to support sustainable infrastructure.

Initially, Tilson undertook various community-based research efforts in preparation for the development of a business and financial model for Post Road Foundation Capital Partners including: constructing a comprehensive demographic profile of selected communities and an analyzing data against the backdrop of national surveys to forecast adoption rates; profiling existing broadband speed and availability and cataloging current consumer offerings to perform a demand-for-broadband assessment and provide a reasonable forecast of market response.

Tilson also provided an open-access market assessment based on the needs of the client. Tilson analyzed the requirements of potential ISPs delivering services over an open access network, both from an engineering perspective and from a business model perspective to help inform the client's investment. Tilson identified and conducted interviews with regional, national, and enterprise-focused ISPs to collect information about readiness and interest in participating in an open access project in the selected communities, factors that would make participation more or less attractive, and the desired role of the network operator vs. the ISP.

Finally, to aid in financial estimation and cost-prediction, Tilson developed for the client: a mid-level design consistent with developed engineering requirements via GIS shapefile; an associated bill of materials including assumed lit network cost components and shelters; and a comprehensive total project cost estimate broken down into strategic categories. With these deliverables, Tilson was able to utilize their sophisticated, multi-variable, proprietary financial model to analyze the performance of the proposed network under a variety of relevant scenarios. Such an analysis provided the client detailed information regarding predicted, capital cost, operating cost, cash-flow, and financial return of their proposed project.

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SanfordNet Broadband Network

Project Highlights: Community Broadband Consulting; Network Design and Engineering; Value Engineering; Construction Management; Interconnection of Municipal and Community Anchor Institutions

Tilson was hired by the City of Sanford, Maine, to assist with the implementation of a 10-gig, 45-mile, municipal high-speed fiber optic network. The municipally-owned network connects 87 community anchor institutions such as banks, medical institutions, industry and enterprise buildings to schools and municipal buildings. The network connects to the Maine Three Ring Binder network, that Tilson designed and built, in Wells.

Tilson initially provided consulting services to the City of Sanford in 2014, determining that a new, high speed broadband system designed with the purposes of growth and retention of existing businesses, and attracting new businesses, had the potential to inject $47-$192 million to the City's economy over the next decade.

In 2017 Tilson was hired by the City to provide network design and engineering services and construction management services to implement the network. Tilson reviewed the preliminary network route design with the network operator and recommend design changes, with value engineering in mind to avoid long delays in permitting or complex and costly make ready. Our experienced outside plant engineers performed field surveys of all utility poles along the route, using sophisticated, customizable applications for data collection, tethered GPS units, and photographs of each attachment location with optical references. Data from field surveys was imported into Tilson databases, allowing for fine engineering in 3GIS of the route and service drops with fiber counts, splice points and all BOMs. After finalization of the network design, Tilson's pole licensing team applied for all utility pole licenses and attended joint ride outs with the local utilities to ensure accurate and cost-effective make-ready. Tilson's real estate team consulted on environmental and regulatory issues and obtained all required jurisdictional permits.

Once the network was ready for construction, Tilson drafted an RFP to solicit bids from qualified contractors. The RFP packaged included construction plans, BOMs, Scope of Work and Close-Out requirements including the network test and acceptance plan. The network construction is currently in process and is scheduled to be completed by the end of 2018. Tilson is providing construction management for the City of Sanford which includes construction oversight and regular reporting to the City. Once construction is complete, Tilson will review the network construction and all test and acceptance documentation to ensure that the network is built to plan, and fully operational.

PROJECT APPROACH

Document Review and Analysis

Tilson will undertake a deep dive analysis of the CCG report to determine the logistic and economic feasibility of each of their recommendations, to explain trade-offs to all identified stakeholders and to develop a priority-based plan for implementation that will result in universal broadband access for all citizens and businesses within Gainesville and extending to GRUcom's larger service area.

Our review of the CCG report may confirm their analysis or suggest other ways of assessing the potential of the existing network and how to expand it in a scalable, timely and cost-effective way. We will also assess GRUcom's operations, model, and projections and will offer insights for improvement, where necessary.

Our analysis will include a review of peer communities in Florida as well as lessons learned working elsewhere in the continental United States.

Fiber and Wireless Infrastructure Analysis

Alongside its documentary review, Tilson will analyze existing fiber and wireless infrastructure to identify gaps in coverage and to suggest remediation plans that will include both private sector and municipally-owned assets.

We will create a plan for a city owned Internet Service Provider that will provide affordable network access to homes and businesses while achieving financial viability for the enterprise. Based on experience, we believe that this ISP will offer services over a network utilized both broadband and wireless connections.

The broadband business plan, encompassing the publicly-owned ISP, will be customized to achieve the City of Gainesville's objectives including:

- Support for small and locally-owned businesses and start-ups
- Poverty reduction through access to commerce, education, and public services
- Will help to decouple Gainesville's economy from national trends by helping businesses reach customers and clients seamlessly
- Will establish Gainesville as a regional start-up hub
- Will support the development of a Women and Minority-Owned Business Enterprise program

Financial Models, Business Plan Development and Financing Roadmap

Tilson will identify opportunities for grants and investments from public and private sources. Tilson

may potentially partner with the City of Gainesville to finance parts of the network through our affiliate, Tilson Infrastructure. Tilson Infrastructure is a registered CLEC in all 50 states and able to enter into agreements with public sector clients where we share revenue and ownership of all or part of the network.

Tilson will create up to three business model scenarios based on these structures:

- Public Private Partnership
- Publicly Subsidized, Privately Owned and Operated Network
- Publicly Funded, Owned and Operated Network
- Privately Funded and Owned Network
- Networked Developed and Operated in Partnership with the University of Florida

In all scenarios we will forecast revenue, user growth and the ability to scale the network beyond the Gainesville city limits to reach the entirely of GRUcom's service area.

From these financial models, we will develop appropriate business plans so that stakeholders can assess how each model would function if implemented.

We will also associate, with each financial model, mechanisms for financing, including bond offerings, forecasted revenue from operations, potential lease agreements and other incentives.

Taking a holistic approach to financial and business modeling will offer all stakeholders maximum flexibility in choosing a path, or combination of paths, to pursue.

Digital Inclusion Plan

Tilson takes both a research-driven and practical approach to digital inclusion. Based on our experiences throughout the country we can identify common and likely hurdles to reaching unserved or underserved segments of the community, including financial issues and support for technology education.

Additionally, Tilson will design a model for community outreach that utilizes direct communications to keep citizens aware of our broadband project, to give them a voice in shaping its outcome and to build excitement and enthusiasm for its eventual launch.

Network Design, Operations and Maintenance

Tilson will pursue a high-level network design, supported by its business and financial modeling. We will additionally create an operations and maintenance action plan, including the remote-management and monitoring capabilities of Tilson's cloud-based Network Operations Center. This plan will include

recommendations for staffing, stocking spare inventory and sourcing equipment. Tilson has extensive experience operating and maintaining publicly and privately owned networks nationwide.

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PROJECT PLAN

Tilson will complete all work on the Broadband Business Plan within six months of the project's inception. The below work breakdown structure lists general timelines for the main phases of the project. There will likely be some phases that can overlap and run in parallel. A full project schedule to track project progress throughout the engagement will be developed with input from stakeholders as part of the kickoff meeting.

Document Review and Analysis	**2 Weeks**
Review CCG Report	
Develop recommendations and Draft Analysis	
Priority-based plan for implementation	
Review of peer communities	
Fiber and Wireless Infrastructure Analysis	**3 Weeks**
Data collection efforts	
Mapping and inventory based on data collection	
Identification of coverage gaps	
Financial Models, Business Plan Development, and Financing Roadmap	**6 Weeks**
Identification of various funding sources and high level funding strategy	
Develop up to three business model scenarios based on Document Review and Infrastructure Analysis phases	
Development of comprehensive business plan based on strongest business model scenario	
Digital Inclusion Plan	**2 weeks**
Identify hurdles and risks associated with proposed network	
Design community outreach model	
Network Design	**8 weeks**
Network technology selection and recommendation based on project goals	
Ingest existing infrastructure geo-spatial data and determine key locations including central office and network hubs	
Identify and map all premises to be served by proposed network	
Generate and verify preliminary design routes	
Develop associated bill of materials to estimate capex expenditures more accurately	

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PROPOSED TEAM

Project Manager	Ryan McNally
Principal Consultant	Frederic Feit
Senior Consulting Engineer	John Costa
Wireless Engineering Consultant	Jim Harding

Key Personnel

Our team is comprised of experienced and knowledgeable consultants and engineers. Being a full-service telecommunications firm, our consulting team has the distinct advantage of drawing versatile resources from across the company to suit the needs of any engagement. Consequently, we will likely not utilize subconsultants and can provide a full in-house consulting solution for the Jefferson County Public Utility District. A summary of the key personnel follows:

RYAN MCNALLY

Ryan is a dedicated telecommunications project manager for Tilson's consulting team, providing technical and supervisory support to public and private entities for audit work, engineering and design, feasibility studies, and other broadband initiatives. He is an effective communicator and team leader with a strong track record of success across a diverse array of complex broadband consulting engagements. His organizational skills and ability to collaborate with multiple teams on a range of intersecting projects have allowed his projects to continually meet deadlines and exceed client expectations. Ryan has a robust background in software quality assurance front-end development with experience designing, developing, and implementing test plans, cases, and processes to identify any software issues during full development lifecycles.

FREDERIC FEIT

Frederic is highly experienced in the field of middle-mile and last-mile network analysis and planning for ISPs, telecommunications companies, municipalities, utilities, developers, and tribal lands. Fred has extensive experience with regulatory compliance including the FCC, the USF, and participation in federal and state level broadband funding opportunities. He has represented various ISPs in the Connect America Fund Price Cap Auction process. This process included business plan development; competitive analyses; network engineering and optimization; cost analyses and recovery; regulatory review; and negotiation. He has a strong track-record assisting communities and stakeholders perform actionable infrastructure planning tasks through feasibility studies, network analyses, funding opportunity guidance, and strategic partnership negotiation.

JOHN COSTA

John acts as Tilson's Senior Engineering Consultant and is an accomplished, multi-disciplined telecommunications engineer with over 29 years of experience. John has extensive experience building ground up UAT function and process solutions and has successfully led numerous strategic quality initiatives. With his strong telecommunications engineering and broadband architecture background, John brings a depth of experience in reliable and efficient broadband network design.

JIM HARDING

Jim has served in the IT industry for 20 years with a broad range of experience. He started his IT career on an IT Help Desk for a Fortune 500 company, working up to desktop support, eventually landing in network administration on a number of various Windows, Cisco and Linux platforms. He has performed numerous wireless and wired network analyses and has designed and implemented solutions for private companies, school districts, colleges, libraries and public utilities. Jim has been heavily involved with spatial analysis, RF tuning and engineering network solutions for a 7000+ node smart meter network, and managed a DoD network surveying and accreditation project for a Navy base in New England. Most recently, Jim has been leading a team of network technicians and engineers at several locations around the country for various RF, fiber, and smart grid networking systems.

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PRICING PROPOSAL

Tilson proposes a time and materials engagement at a flat blended hourly-rate of $195 with a not-to-exceed cap of $60,000. Tilson does not anticipate any travel or expenses to be associated with this project. Please find our approximations for each scope-of-work item below, informing our price proposal.

Role	Estimated Hours	Estimated Cost
Document Review and Analysis	40	$7,800
Fiber and Wireless Infrastructure Analysis	50	$9,750
Financial Models, Business Plan Development, and Financing Roadmap	60	$11,700
Digital Inclusion Plan	30	$5,850
Network Design & Operations, and Maintenance Action Plan	80	$15,600
Project Management	52	$10,140
	312	**$60,840**

PART 7 – PRICE PROPOSAL PAGE

Proposers are required to submit three (3) components in the pricing proposal:

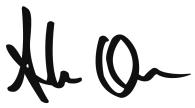
1) Lump Sum price for the entire project – all-inclusive of travel, administrative costs and other expenses. **NOTE:** Travel for the city will only be approved for coach class airline travel, administrative costs must be billed at-cost – no mark-up.
2) Provide a breakdown of the lump sum by task
3) Detail hourly rate of each of the positions within Proposer's company that will be participating in the development of the Downtown Gainesville Strategic Master Plan.

Role	Estimated Hours	Estimated Cost
Document Review and Analysis	40	$7,800
Fiber and Wireless Infrastructure Analysis	50	$9,750
Financial Models, Business Plan Development, and Financing Roadmap	60	$11,700
Digital Inclusion Plan	30	$5,850
Network Design & Operations, and Maintenance Action Plan	80	$15,600
Project Management	52	$10,140
	312	$60,840

Tilson proposes a time and materials engagement at a flat blended hourly-rate of $195 with a not-to-exceed cap of $60,000.

Submitted by:

Adam Quinlan
Name (printed)


Signature

January 8th, 2021
Date

Broadband Consulting Manager
Title

Respondent's Company Name: Tilson Technology Management, Inc.

Contact Name: Adam Quinlan

Contact Email: aquinlan@tilsontech.com

Contact Phone: (207) 229-4849

Failure to provide costs as requested in this RFP, may deem your proposal non-responsive.

This page must be completed and uploaded to DemandStar.com with your Submittal.

Exhibit A - DRUG-FREE WORKPLACE FORM

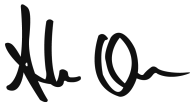
The undersigned bidder in accordance with Florida Statute 287.087 hereby certifies that

Tilson Technology Management, Inc. does:

(Name of Bidder)

1. Publish a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the workplace and specifying the actions that will be taken against employees for violations of such prohibition.
2. Inform employees about the dangers of drug abuse in the workplace, the business's policy of maintaining a drug-free workplace, any available drug counseling, rehabilitation, and employee assistance programs, and the penalties that may be imposed upon employees for the drug abuse violations.
3. Give each employee engaged in providing the commodities or contractual services that are under bid a copy of the statement specified in subsection (1).
4. In the statement specified in subsection (1), notify the employees that, as a condition of working on the commodities or contractual services that are under bid, the employee will abide by the terms of the statement and will notify the employer of any conviction of, or plea of guilty or nolo contendere to, any violation of Chapter 893 or of any controlled substance law of the United States or any state, for a violation occurring in the workplace no later than five (5) days after such conviction.
5. Impose a sanction on, or require the satisfactory participation in a drug abuse assistance or rehabilitation program if such is available in the employee's community, by any employee who is so convicted.
6. Make a good faith effort to continue to maintain a drug-free workplace through implementation of this section.

As the person authorized to sign the statement, I certify that this bidder complies fully with the above requirements.



Bidder's Signature

January 8th, 2021

Date

In the event of a tie bid, bidders with a Drug Free Workplace Program will be given preference. To be considered for the preference, this document must be completed and uploaded to DemandStar.com with your Submittal.

BID COVER PAGE

City of Gainesville
Procurement Division
200 E University Avenue, Rm 339
Gainesville, FL 32601
(352) 334-5021(main)
Posted: November 9, 2020

REQUEST FOR PROPOSAL (RFP): ITDX-210005-GD:Broadband Business Plan Strategy

DUE DATE FOR SUBMITTING PROPOSAL ON DEMANDSTAR.COM: January 8, 2021, 3:00pm

PRE-PROPOSAL MEETING: ☒ Non-Mandatory ☐ Mandatory ☐ N/A ☐ Includes Site Visit
PRE-PROPOSAL MEETING DATE/TIME: November 18, 2020, 2:00pm
PRE-PROPOSAL MEETING LOCATION: Reference Exhibit F for ZOOM access information.

BIDDER QUESTIONS DUE DATE: December 2, 2020, 3:00pm

SUMMARY OF SCOPE OF WORK:
The City of Gainesville, Florida is seeking a business partner to create an investor grade Business Plan Strategy for the City to function as a broadband utility.

For questions relating to this solicitation, contact:
Gayle Dykeman, Procurement Specialist 3, (352) 393-8789; dykemangb@cityofgainesville.org

Bidder is not in arrears to City upon any debt, fee, tax or contract: ☒ Bidder is NOT in arrears ☐ Bidder IS in arrears
Bidder is not a defaulter, as surety or otherwise, upon any obligation to City:
☒ Bidder is NOT in default ☐ Bidder IS in default

Bidders who receive this bid from sources other than City of Gainesville Procurement Division or DemandStar.com MUST contact the Procurement Division prior to the due date to ensure any addenda are received in order to submit a responsible and responsive offer. Uploading an incomplete document may deem the offer non-responsive, causing rejection.

ADDENDA ACKNOWLEDGMENT: Prior to submitting my offer, I have verified that all addenda issued to date are considered as part of my offer: Addenda received (list all) # 1

Legal Name of Bidder: Tilson Technology Management, Inc.

DBA: Tilson

Authorized Representative Name/Title: Adam Quinlan, Broadband Consulting Manager

E-mail Address: aquinlan@tilsontech.com FEIN: 01-0509537

Street Address: 16 Middle Street, 4th Floor, Portland, Maine 04101

Mailing Address (if different): _____

Telephone: (207) 591-6427 Fax: (_____) _____

By signing this form, I acknowledge I have read and understand, and my business complies with all General Conditions and requirements set forth herein; and,

☒ Proposal is in full compliance with the Specifications.
☐ Proposal is in full compliance with the Specifications except as specifically stated and attached hereto.

SIGNATURE OF AUTHORIZED REPRESENTATIVE: _____

SIGNER'S PRINTED NAME: Adam Quinlan **DATE:** 1/8/2021

This page must be completed and uploaded to DemandStar.com with your Submittal.

Addendum Publish Date: November 20, 2020

Broadband Business Plan Strategy
RFP #: ITDX-210005-gd
ADDENDUM NO. 1

Bid Due Date: January 8, 2021, 3:00pm (Local Time)

NOTE: The original Specifications remain in full force and effect except as revised by the following changes which shall take precedence over anything to the contrary.

1. Any questions regarding this solicitation shall be submitted in writing to the City of Gainesville (CoG) Procurement Division by 3:00pm, (local time), December 2, 2020, 3:00pm local time. Submit questions to: dykemangb@cityofgainesville.org
2. Please find attached:
    a. Attachment 1 to Addendum 1 – edited language to the RFP on Page 10 – updated language is highlighted
    b. A copy of the Cone of Silence period information (Financial Procedures Manual Section 41-424 Prohibition of lobbying in procurement matters) that was discussed.
    c. A copy of the Pre-Bid Discussion/Information Checklist
3. Following is a review of the Pre-Bid Meeting that was held via Zoom Conference on November 18, 2020, 2:00pm:
    a. City of Gainesville Staff represented by Gayle Dykeman, City of Gainesville Procurement Specialist III and David Duda, Project Manager.
    b. Gayle Dykeman started the meeting by reviewing important Procurement areas of the solicitation, including the solicitation schedule and submittal due date. All communication must go through Gayle Dykeman throughout the duration of the solicitation. All submittals must be entered in DemandStar.com by the due date and time – DemandStar is programmed to reject any bids that are entered after that time. DemandStar is a free tool for vendors to submit bids. DemandStar will automatically close the solicitation at the specified date and time, and the City will not accept any late proposals, regardless of the format presented. Spoke at length about the rules guiding the Cone of Silence.
    c. David Duda gave a brief overview of the intent of the solicitation. The solicitation is intended to explore new possibilities on how the City can leverage its current infrastructure to meet the needs of the community. Particularly in light of the COVID-19 pandemic that has created an increased demand for broadband. A study was completed a few years ago.
4. Following are questions and answers that were discussed in the meeting:
    a. Question:
    Will you allow the chosen consultant to rework the surveys that were conducted pre-COVID?

    Answer:
    Yes, there would have to be some understanding in considering COVID impact on schools and work from home demand that was not considered in the initial study

b. Question:

Have you conducted any discussions with seniors and other user groups?

Answer: No.

ACKNOWLEDGMENT: Each Proposer shall acknowledge receipt of this Addendum No. 1 by his or her signature below, **and a copy of this Addendum to be returned with proposal.**

CERTIFICATION BY PROPOSER

The undersigned acknowledges receipt of this Addendum No. 1 and the Proposal submitted is in accordance with information, instructions, and stipulations set forth herein.

PROPOSER COMPANY NAME: Tilson Technology Management, Inc.

SIGNATURE: _____

LEGIBLY PRINT NAME: Adam Quinlan

DATE: January 8th, 2021

C. City to function as an Internet Service Provider (ISP) to both business and residential customers within the City limits and possibly into the GRUCom service area. The City will provide affordable broadband high- speed fiber or innovative wireless infrastructure to support businesses and residents with a minimum symmetrical speed of 50 megabits per second, but with a capability of up to 1 gigabit per second.

D. This project will result in the production of a Business Plan containing strategies and solutions, preliminary engineering and construction cost estimates, organizational and operational recommendations for future network implementation projects, and funding strategies for potential projects.

Expected Outcomes and High Level Deliverables

City of Gainesville leadership is committed to a resilient local economy for the City. To that end, the City has the following objectives:

A. Increase the number of successful sustainable, small and locally owned businesses
B. Reduce the poverty level in the Gainesville community, through the development of a community broadband
C. Have the technology infrastructure/community broadband that is fast, reliable and affordable to support businesses and home offices.
D. Have a diverse local economy (industrial and business) insulated from economic trends.
E. Attract new businesses to Gainesville consistent with vision and "targeted" businesses.
F. Develop a successful MWBE (Minority and Women Owned Business Enterprise) program.

2.3.1 TASK ONE: DOCUMENT REVIEW

The consultant is expected to thoroughly review existing documentation and the previous study and supporting documents [Appendixes A Report, B Survey Results, and C Survey Area] and provide an analysis of the following.

A. Validation of data used and assumptions of the previous study. Use any readily available data to update the assertions of that study. Specific attention should be paid to:
B. What are the capabilities, capacities, and resiliencies of the existing digital infrastructure?
C. What are the gaps in knowledge of existing digital infrastructure that prevent efficient or effective decision-making?
D. How well is the service provider broadband market performing on a granular geographic basis? What are the areas of improvement in affordability, reliability, and speeds necessary to support residents and businesses and where are these improvement areas located?
E. What are the gaps in the City and service provider digital infrastructure that would prevent scaling existing or future initiatives?
F. Review the existing GRUCom business model and assets and provide observations relevant to the desired outcomes.
G. Building upon the work of the previous study, provide additional insights from other jurisdictions, particularly in Florida, that will inform our next steps.

41-424 Prohibition of lobbying in procurement matters

Except as expressly set forth in Resolution 170116, Section 9, during the Cone of Silence as defined herein no person may lobby, on behalf of a competing party in a particular procurement process, City Officials or employees, except the Procurement Division or the procurement designated staff contact person. Violation of this provision shall result in disqualification of the party on whose behalf the lobbying occurred.

Cone of Silence period means the period between the issue date which allows for immediate submittals to the City of Gainesville Procurement Division in response to an invitation to bid, or a request for proposal, or qualifications, or information, or an invitation to negotiate, as applicable, and the time that City Officials or the Procurement Division, or City Department awards the contract.

Lobbying means when a person seeks to influence or attempt to influence City Officials or employees with respect to a decision of the City, except as authorized by procurement procedures.

PRE-BID DISCUSSION/INFORMATION CHECKLIST

BID NAME: Broadband Business Plan Strategy

BID NUMBER: ITDX-210005-GD PRE-BID DATE: 11/18/20

_____ Introductions

_____ Sign-in – via Zoom

_____ Questions/Answers and topics of discussion addressed at the pre-bid will be available through DemandStar via Addendum 1

- You can link to Demandstar through the City's website or direct.

_____ Any questions must be in writing

- Email to dykemangb@cityofgainesville.org
- Questions Deadline: December 2, 2020

_____ All communication, contact and/or correspondence must be with Gayle Dykeman, dykemangb@cityofgainesville.org or Purchasing Division staff.

- Bidders who have contact with anyone other than Gayle Dykeman or Purchasing Division staff (City Manager, Staff, City elected officials, etc.) will be disqualified.
- ATTACHED IS THE DEFINITION OF THE CONE OF SILENCE

_____ Bid Due Date: January 8, 2021 at 3:00PM local time

_____ Location to receive bids: DemandStar

_____ Bonds - ☐ YES ☒ NO

- If no, bring attention to State Statute of $200,000

_____ Living wage – Policy on page 24, 8.3; Form is in Section 10, Page 38

- Discuss all forms within bid document

_____ Local Preference – Policy on page 23, Part 8, 8.1, Response on page 36

_____ Addenda – Declare on the Bid Cover Page all Addenda received

- Sign sheet included with each addendum and submit with bid

_____ Bid form must be signed

_____ ~~Minimum Requirements (MUST or SHALL)- Be aware of or could be deemed non-responsive and not considered for award.~~ *Not applicable to this solicitation*

_____ Bid Information Form- If not bidding, please complete the form and let us know why you are not bidding.

ADDITIONAL INFORMATION TO DISCUSS

_____

_____

Exhibit B - BIDDER VERIFICATION FORM

LOCAL PREFERENCE (Check one)

Local Preference requested: YES (NO)

A copy of the following documents must be included in your submission if you are requesting Local Preference:

- Business Tax Receipt
- Zoning Compliance Permit

QUALIFIED SMALL BUSINESS AND/OR SERVICE DISABLED VETERAN BUSINESS STATUS (Check one)

Is your business qualified, in accordance with the City of Gainesville's Small Business Procurement Program, as a local Small Business? YES (NO)

Is your business qualified, in accordance with the City of Gainesville's Small Business Procurement Program, as a local Service-Disabled Veteran Business? YES (NO)

LIVING WAGE COMPLIANCE

See Living Wage Decision Tree:

(Check one)

☒ Living Wage Ordinance does not apply (check all that apply)

- ☐ Not a covered service
- ☐ Contract does not exceed $100,000
- ☐ Not a for-profit individual, business entity, corporation, partnership, limited liability company, joint venture, or similar business, who or which employees 50 or more persons, but not including employees of any subsidiaries, affiliates or parent businesses.
- ☐ Located within the City of Gainesville enterprise zone.

☐ Living Wage Ordinance applies and the completed Certification of Compliance with Living Wage is included with this bid.

NOTE: If Contractor has stated Living Wage Ordinance does not apply and it is later determined Living Wage Ordinance does apply, Contractor will be required to comply with the provision of the City of Gainesville's living wage requirements, as applicable, without any adjustment to the bid price.

REGISTERED TO DO BUSINESS IN THE STATE OF FLORIDA

Is Bidder registered with Florida Department of State's, Division of Corporations, to do business in the State of Florida?

YES NO (refer to Part 1, 1.6, last paragraph)

If the answer is "YES", provide a copy of SunBiz registration or SunBiz Document Number (# F13000000826)

If the answer is "NO", please state reason why: _____

Tilson Technology Management, Inc.

Bidder's Name

Adam Quinlan, Broadband Consulting Manager

Printed Name/Title of Authorized Representative

Signature of Authorized Representative 1/8/2021 Date

This page must be completed and uploaded to DemandStar.com with your Submittal.

Exhibit E - REFERENCE FORM

Name of Bidder: Tilson Technology Management, Inc.

Provide information for three references of similar scope performed within the past three years. You may include photos or other pertinent information.

#1 Year(s) services provided (For Example: 1/2018 to 12/2019): 12/2019 - Present

Company Name: Seneca Energy, Seneca Nation

Address: 219 Thomas Indian School Drive

City, State Zip: Irving, New York 14081

Contact Name: Anthony Giacobbe, Director of Power and Gas

Phone Number: (716) 534-7950 Fax Number:

Email Address (if available): anthony.giacobbe@sni.org

#2 Year(s) services provided (For Example:. 1/2018 to 12/2019): 1/16/2020 - 12/31/2020

Company Name: Methow Valley Broadband Action Team

Address: 502 S. Glover Street

City, State Zip: Twisp, WA 98856

Contact Name: Don Linnertz, Director

Phone Number: (509) 997-3300 Fax Number:

Email Address (if available): dlinnertz@twispworks.org

#3 Year(s) services provided (For Example: 1/2018 to 12/2019): 2014-2018

Company Name: City of Sanford

Address: 919 Main Street

City, State Zip: Sandford, Maine 04073

Contact Name: Steven R. Buck, City Manager

Phone Number: (207) 324-9172 Fax Number:

Email Address (if available): srbuck@sanfordmaine.org

This page must be completed and uploaded to DemandStar.com with your Submittal.

Form **W-9**
(Rev. October 2018)
Department of the Treasury
Internal Revenue Service

Request for Taxpayer Identification Number and Certification

► **Go to *www.irs.gov/FormW9* for instructions and the latest information.**

Give Form to the requester. Do not send to the IRS.

Print or type. See **Specific Instructions** on page 3.

1 Name (as shown on your income tax return). Name is required on this line; do not leave this line blank.

Tilson Technology Management, Inc

2 Business name/disregarded entity name, if different from above

3 Check appropriate box for federal tax classification of the person whose name is entered on line 1. Check only **one** of the following seven boxes.

☐ Individual/sole proprietor or single-member LLC ☑ C Corporation ☐ S Corporation ☐ Partnership ☐ Trust/estate

☐ Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=Partnership) ► _____

Note: Check the appropriate box in the line above for the tax classification of the single-member owner. Do not check LLC if the LLC is classified as a single-member LLC that is disregarded from the owner unless the owner of the LLC is another LLC that is **not** disregarded from the owner for U.S. federal tax purposes. Otherwise, a single-member LLC that is disregarded from the owner should check the appropriate box for the tax classification of its owner.

☐ Other (see instructions) ►

4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3):

Exempt payee code (if any) 5

Exemption from FATCA reporting code (if any) _____

(Applies to accounts maintained outside the U.S.)

5 Address (number, street, and apt. or suite no.) See instructions.

16 Middle Street, 4th Floor

Requester's name and address (optional)

6 City, state, and ZIP code

Portland, ME 04101

7 List account number(s) here (optional)

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the instructions for Part I, later. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN,* later.

Note: If the account is in more than one name, see the instructions for line 1. Also see *What Name and Number To Give the Requester* for guidelines on whose number to enter.

Social security number

			–		–				

or

Employer identification number

0	1	–	0	5	0	9	5	3	7

Part II Certification

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
3. I am a U.S. citizen or other U.S. person (defined below); and
4. The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions for Part II, later.

Sign Here **Signature of U.S. person** ► Shaun McCarthy **Date** ► 06-24-2020

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Future developments. For the latest information about developments related to Form W-9 and its instructions, such as legislation enacted after they were published, go to *www.irs.gov/FormW9.*

Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following.

- Form 1099-INT (interest earned or paid)
- Form 1099-DIV (dividends, including those from stocks or mutual funds)
- Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)
- Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)
- Form 1099-S (proceeds from real estate transactions)
- Form 1099-K (merchant card and third party network transactions)
- Form 1098 (home mortgage interest), 1098-E (student loan interest), 1098-T (tuition)
- Form 1099-C (canceled debt)
- Form 1099-A (acquisition or abandonment of secured property)

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.

If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See What is backup withholding, *later.*

Division of Corporations

Detail by Entity Name

Foreign Profit Corporation
TILSON TECHNOLOGY MANAGEMENT, INC.

Filing Information

Document Number	F13000000826
FEI/EIN Number	01-0509537
Date Filed	02/21/2013
State	ME
Status	ACTIVE

Principal Address

16 MIDDLE ST
4TH FLOOR
PORTLAND, ME 04101

Changed: 06/28/2018

Mailing Address

16 MIDDLE ST
4TH FLOOR
PORTLAND, ME 04101

Changed: 06/28/2018

Registered Agent Name & Address

CORPORATION SERVICE COMPANY
1201 HAYS STREET
TALLAHASSEE, FL 32301-2525

Officer/Director Detail

Name & Address

Title CEO, DIRECTOR

BRODER, JOSHUA

Ron DeSantis, Governor

FBPE
FLORIDA BOARD OF PROFESSIONAL ENGINEERS

STATE OF FLORIDA

BOARD OF PROFESSIONAL ENGINEERS

THE ENGINEERING BUSINESS HEREIN IS AUTHORIZED UNDER THE PROVISIONS OF CHAPTER 471, FLORIDA STATUTES

TILSON TECHNOLOGY MANAGEMENT, INC.

16 MIDDLE ST.
4TH FLOOR
PORTLAND ME 04101

LICENSE NUMBER: CA31747

EXPIRATION DATE: FEBRUARY 28, 2021

Always verify licenses online at MyFloridaLicense.com

Do not alter this document in any form.

This is your license. It is unlawful for anyone other than the licensee to use this document.

Tilson Technology Management, Inc. has not been involved as a defendant in, or the subject of any investigation or criminal actions in the past six years.

- A former employee filed an Equal Employment Opportunity Commission complaint against Tilson in 2017 alleging gender-based discrimination and retaliation. The EEOC took no action on this complaint, and it was dismissed.
- Tilson is currently a co-defendant in a suit in Utah state court brought by a landowner for damages caused when a Tilson subcontractor struck an unmarked water line. To the extent there is liability, it will be borne by the subcontractor who performed the underground excavation work, and not Tilson. Tilson is vigorously contesting its liability in this claim.
- Tilson is currently a defendant in a suit in Utah state court by a former subcontractor, alleging non-payment of invoices. Tilson asserts that these payments are no longer due as a result of set-offs for costs incurred when the subcontractor breached its agreement with Tilson, warranty claims, counterclaims, and subsequent payments to sub-subcontractors and other creditors. Tilson will vigorously contest this claim. Mile High Contracting, Inc v. Tilson Technology Management, Inc, Third Judicial District Court of Utah, Salt Lake County, Salt Lake Department, Case no. 200900031
- A Tilson subcontractor sued Tilson in New Jersey in March 2018 to pre-emptively block enforcement of a claim of breach of contract. That suit was dismissed with prejudice in April 2018. Tech Nel Electric, Inc. v. Tilson Technology Management, Inc., New Jersey Superior Court Passaic County – Law Division, Docket No.: PAS-L-936-18.
    - Tilson's underlying claim in Federal District court was resolved by settlement. Tilson Technology Management, Inc. v. Tech Nel Electric, Inc. US District Court, District of Maine, Civil No. 2:18-cv-00127-DBH.
- Tilson is co-defendant in a suit in Utah state court seeking damages related to a January 2019 strike of a fire suppression line by a subcontractor conducting directional boring in Salt Lake City. CB Center, LLC v. MCI Metro Access Transmission Services Corp., Third Judicial District Court, Salt Lake County, Utah, Civil No. 190907840.

TILSON
Ryan McNally | Project Manager
rmcnally@tilsontech.com
207.835.4546

PROFESSIONAL SUMMARY

Software quality assurance analyst with experience testing full development lifecycles, including designing, developing, and implementing test plans, cases, and processes to identify any software issues. Demonstrated communication and organizational skills necessary to collaborate with multiple teams on a range of intersecting projects.

WORK EXPERIENCE

Software Quality Assurance Specialist
2017-Present, Tilson Technology Management, Portland, Maine

- Lead quality assurance tester on a software development team that produces software solutions to clients with various needs and conditions.
- Implement a testing process that ensures compliance with QA standards and project specifications that increases visibility for both client and developer.
- Create and execute software test plans and test cases tailored to each product, system, or platform to identify any problems, their causes, and provide recommended fixes.
- Experience with various testing techniques including black-box testing, acceptance testing, functional testing, performance testing, alpha-testing, and regression testing.
- Maintain documentation throughout development lifecycle to track issues, log relevant information, and archive status of previous builds.

Information Technology Apprentice
2016 -2017, Spurwink Services, Portland, ME

- Performed troubleshooting, repair, and maintenance of computer systems, hardware, peripherals, and telephony.
- Provided support for e-mail, network, connectivity, peripheral equipment, and system maintenance.
- Analyzed system requirements to find and resolve various technical issues.
- Participated in large-scale upgrades and installations using Windows Deployment Servers, Virtual Machines, and Group Policy.
- Set-up various computers for deployment by installing specific hardware and software depending on the needs of the end-user.
- Updated, installed, and modified computer images as network, business, and organizational requirements change.
- Set-up computer workstations and conference rooms with desired equipment and other specificities.

EDUCATION

- Current, University of Southern Maine
    - Computer Science coursework in Java, algorithms in programming, computer systems, HTML, and CSS.

TILSON
Frederic Feit | Broadband Consultant
ffeit@tilsontech.com
917.463.8611

PROFESSIONAL SUMMARY

Highly experienced in the field of middle-mile and last-mile network analysis and planning for ISPs, telecommunications companies, municipalities, utilities, developers, and tribal lands. Fred has extensive experience with regulatory compliance including the FCC, the USF, and participation in federal and state level broadband funding opportunities. He has represented various ISPs in the Connect America Fund Price Cap Auction process. This process included business plan development; competitive analyses; network engineering and optimization; cost analyses and recovery; regulatory review; and negotiation. He has a strong track-record assisting communities and stakeholders perform actionable infrastructure planning tasks through feasibility studies, network analyses, funding opportunity guidance, and strategic partnership negotiation.

WORK EXPERIENCE

Tilson - Broadband Consultant / Project Manager
Dec. 2019 - Present, Clay, New York

- Manage all levels of Broadband Consulting projects within the practice with a specialty of working with municipalities and government entities
- Wide range of broadband consulting activities including: advising clients on fiber network designs and costs; performing financial analyses and modeling of transactions and financial scenarios; aiding in development of high-level designs and cost estimate factors; researching and drafting client deliverables such as feasibility studies and network assessments; evaluating bids and engaging in vendor negotiations/selection on behalf of clients

Precipio Industries – Project Manager
Nov. 2015 - Dec. 2019, New York, NY

- Representing ISP clients in the Connect America Fund Price Cap Auction and subsequent deployment and compliance.
    - Business plan development; modeling; planning (business, market, regulatory, network, technology, and operations);
    - Competitive benchmarking; market segmentation.
    - Network engineering and optimization; line cost analyses and recovery; technology migration and absorption.
    - Product development and management; business development; process and quality management; negotiation; regulatory; project management; asset valuation and acquisition; competitor, customer, and company analyses.

- Performed a broadband analysis and feasibility study for the city of Northampton, Massachusetts and made recommendations so they could more fully leverage their existing municipal fiber network.

Axia NGNetworks USA – Business Development Manager
June 2011 - Nov. 2015, Boston, MA

- Wholesale business development for the Operator of the MassBroadband 123 Middle Mile network.
- Involved with this BTOP round 2 network since its design, pre-construction stage.
- Onboarded retail service providers prior to network readiness and introduced the network to community anchor institutions.
- Sold managed lit services, dark fiber and colocation on the MB123 open access, carrier neutral middle mile fiber network.
- Worked with retail service providers to build fiber extensions to additional end users.
- Worked directly with government users EOPSS and MassIT (Formally ITD).
- Presented the Axia FTTP public private partnership solution to municipalities throughout western Massachusetts.

Steeplechase Networks – Business Development
2008 - 2010, Pittsfield, MA

- Presented the Steeplechase platform of localized content and application servers to the owners of last mile broadband networks.
- Targeted areas with above average transport and Internet transit costs as localized servers decrease latency and backhaul requirements.

Proximity Industries – Project Manager
2006 - 2007, Incline Village, NV

- Performed hardware and SaaS evaluation and selection for this managed services provider for the owners of FTTP networks.
- Presented the managed services model to FTTP network owners including real estate developers, municipalities and utilities.

Speculative Homebuilder – Builder
2002 - 2006, Boulder, CO

- Designed, built and sold custom, high-end homes in and around Boulder, Colorado.
- Land acquisition, design, permitting, site preparation, construction management, hands-on construction, marketing and sales.

TESS Communications, Inc. – Project Manager
1999 - 2001, Denver, CO

- Responsible for deployment of broadband Last Mile systems for this facilities-based CLEC and triple play provider.
- Negotiated with developers of master-planned communities to install broadband last mile systems in open trenches.
- Worked directly with Optical Solutions' PON product and World Wide Packets' Active Ethernet product.
- Managed installation and commissioning of statewide DSLAM Network throughout Arizona.

EDUCATION

- **Master of Science, Telecommunications**, University of Colorado at Boulder Graduate School of Engineering and Applied Science, 1999
- **Bachelor of Science, Journalism and Mass Communications**, University of Colorado at Boulder School of Journalism and Mass Communication, 1990

TILSON
John Costa | Senior Consulting Engineer
jcosta@tilsontech.com
207.239.1605

PROFESSIONAL SUMMARY

Accomplished, multi-disciplined, telecommunications professional with 29 years of experience. Progressive career and excellent track record in multiple engineering systems roles. Hands-on experience building ground up UAT function and process. Successfully led strategic quality initiatives in training, documentation, and testing. Experience leading and driving cross-functional teams to produce key business results. Demonstrated success in streamlining organizational operations to increase efficiency and improve quality. Extensive project management success handling critical business objectives. Proven ability to build and develop high performing teams. Strong foundational knowledge in Telecommunications evolution including a Next Generation IP/MPLS Architecture. Polished business acumen and ability to interact at all levels of leadership.

WORK EXPERIENCE

Tilson Technology, Portland ME
Senior OSP Engineer; Senior Engineering Consultant
February 2015 - Present

- Provide detailed engineering for large scale OSP engineering projects
- Technology selection GPON – Active Ethernet – GPON w/Active E overlay
- Access equipment vendor selection and POP design integration with OSP
- FDH GPON serving area design w/fiber counts and fill boxes
- Detailed BOM drafting with cost estimation
- Construction BID management to select a contractor

Maine Fiber Company, Portland ME
Network Engineering Manager; Construction/Project Manager/OSP Engineering
January 2013 – February 2015

- Construction Management for the construction of 7 new ReGeneration Fiber Huts. Establishing timelines and detailed project plans to meet the overall objectives. Responsible for managing vendor construction crews to deliver a quality-built product on time. Scheduling of all construction activities to produce a finished product in Microsoft Project. Worked with ReGeneration Hut Manufacturer to ensure quality standards and all defined requirements were met.
- Responsible for Pole mount Regen hut designs and acquiring all necessary Utility location permits as well as implementation of sites. Evaluating and selecting new cabinets.
- OSP Engineering and construction management of Fiber Laterals
- Responsible for vendor review and selection of maintenance and repair vendors for generators, HVAC, and DC Power Plant Systems.
- Responsible for evaluating NOC service providers and selecting the best fit for MFC. Implementing NOC service including OSS system for alarm monitoring.
- Worked with Vendors for a 100Gig test of the fiber network, project planning and testing to

demonstrate the vendor and network equipment.
- Responsible for make ready ride outs to determine the best route and overall cost and design for Fiber Routes. Inspection of Communication infrastructure to ensure quality and compliance for safety and standards.

FairPoint Communications, Portland ME
Senior Manager, Alternate Access
July 2011 – November 2012

- Established network designs for opportunities in ITC foot print for both copper bounded and Ethernet solutions. Coordinate the pre-sales process with account managers and sales engineers to deliver a seamless solution to our customers. Work closely with the Offer Management team to ensure a quality ITC engineered solution, including cost estimates for the pre-sales opportunity. Worked closely with Client services to launch the ITC orders (CLR/DLR's) to define the proper network elements to deliver Ethernet services. Coordinate new Ethernet (10Gig and 1Gig) meet points to upgrade to an Ethernet handoff for 5M, 10M, 20M services. Established a new OOF Vendor to transport multiple 10Gig waves to OOF MTSO's for the wireless back haul opportunity. Positioning FairPoint to win a bid for 350+ towers.
- Managed the overall AAQR (Alternate Access Quote Request) process to deliver service to FairPoint customers in ITC territories and OOF.

Senior Manager OSP Planning
June 2010 – July 2011

- Overall responsibility for OSP Planning Design work to accomplish a quality product.
- Review and approve planning packages for DSL growth and major fiber projects. Fiber projects to include feeder facilities to new and existing remotes and pole mount RT's to deliver (NGN) next generation DSL service. NGN equipment such as OCCAM 6214, Atran TA5000 and 1148 Pole mount DSLAM. This was a major broadband initiative of FairPoint to deliver increased broadband speeds to our customers, I.E. 3M, 5M, 7M, 15M services.
- Managed a team consisting of 2 Mangers and 35+ planners to meet specific PUC mandates. As well as day to day planning responsibilities. Managed the overall output of department's workload to increase DSL coverage to 85% in an aggressive timeline.
- Overall responsibility for OSP Planning to design fiber routes to support the wireless back haul projects. Work Order estimates to plan fiber routes for several hundred wireless carrier towers.

Manager, OSS Next Generation Network & GPON Technologies
2005 - 2010

- Lead all FairPoint's OSS initiatives for the Next Generation Network Architecture.
- Provide on-going systems review and direction to support FairPoint business/market requirements for new products and services.
- Created and formalized User Acceptance Testing for FairPoint by creating internal user groups and alliances with Capgemeni and senior leadership recognizing quality as a non-negotiable priority. Manage the UAT model for all products and services to roll across the NGN.
- Built and directed a supplemental training organization to conduct NGN field and systems training for approximately 1000+ ee's.

- Manage a streamlined documentation reporting effort to ensure NGN documentation requirements are owned and satisfied.
- Negotiate all vendor engagements and contracts for Cisco and Occam.
- Identify ways to maximize contributions from external contract teams by streamlining roles and responsibilities across multiple disciplines (training, documentation, and User Acceptance testing.)
- Actively participate in Senior Leadership briefings and strategy sessions.
- FTTP - GPON, capital planning to upgrade current network from BPON to GPON technology. Involved with Video trial for prove of concept using new GPON technology. 100 video customers were installed and operational show casing NGN Technology.

Manager, OSS Plant Support
2004 - 2005

- Drove the full implementation of the ICMS Plant Conversion for FPNE including training and user support to meet timelines and budgets.
- Served as the primary liaison between FairPoint and Capgemini during the systems development cycle for Logica, GESW, Integraph, Pole Record Systems.
- Led the Help Desk/User Support teams and provided the following support services: trouble triage, development of SME's to handle advanced plant functions, resource scheduling and process improvement
- Utilized overall system integration knowledge and made recommendations for system enhancements; managed the enhancement and upgrade process; and coordinated UAT activities.
- Responsible for all additional systems and plant training delivery.

Network Manager, Infrastructure Solutions
2000 - 2004

- Managed all aspects of business operations for Plant Assignment/Dispatch/Repair for the combined Northland UI Company.
- Maintained and developed records to support 41 exchanges serving 50,000 access lines.
- Owned responsibility of GLA/CAD system performance.
- Oversaw OSP Network Planning facilities.

OSP and Facilities Engineering
1992 – 2000

During this 8 year span, my job roles graduated from OSP Engineer, Facilities Engineer and Facilities Planning Engineer. A summary of my responsibilities and accomplishments include but are not limited to:

- Manage all aspects of the facilities planning group.
- Provision special circuit orders (iSND, 56K, 4WDATA and T1's)
- Design new T1 facilities using existing OC3/OC12 Sonet Fiber rings.
- Plan and design construction of OSP jobs to maximize quality and economical requirements.

Contel of Maine, Damariscotta ME
January 1988 – December 1992

During my 4-year tenure at Contel of Maine, I held various positions progressing from Engineer Assistant, Line Assignor, RDS Assistant/CAD Operator, and OSP Associate Engineer.

Tesinc (Contractor), Damariscotta ME
January 1984 – December 1988

During my 4-year tenure at Tesinc I drafted engineering staking sheets for aerial and buried cable, to RUS engineering standards. Supported 5-7 engineers with drafting and field work for both routines and specific projects.

EDUCATION

- **New Hampshire College – Brunswick, ME**
  Associates of Business Administration
  May 1993

CERTIFICATIONS & COMPLETED TRAINING

- Completed CISCO Active Network Abstraction course (ANA) February 5, 2010
- Completed Metasolve and GESW OSS training FairPoint Communications.
- Certification DSL Installation/Configuration, Pair Gain Technologies ~ 2000
- Certification Pillars of Modern Telephony – Sonet, ISDN, SS7, ATM ~ 1998
- Contel – Routine Outside Plant Engineering School ~ 1990
- Continuing education through Self Study and or education
- SMCC – AutoCAD training course, 1995

TILSON
James Harding | Senior Consultant
jharding@tilsontech.com

PROFESSIONAL SUMMARY

Jim has served in the IT industry for 20 years with a broad range of experience. He started his IT career on an IT Help Desk for a Fortune 500 company, working up to desktop support, eventually landing in network administration on a number of various Windows, Cisco and Linux platforms. He has performed network analysis, review, and has designed and implemented solutions for private companies, school districts, colleges, libraries and public utilities. Jim has been heavily involved with spatial analysis, RF tuning and engineering network solutions for a 7000+ node smart meter network, and managed a DoD network surveying and accreditation project for a Navy base in New England. Most recently, Jim has been leading a team of network technicians and engineers at several locations around the country for various RF, fiber, and smart grid networking systems.

WORK EXPERIENCE

Tilson Technology Management
Senior Consultant: 01/12 - Present

- Imbedded consulting Project Manager and Team Manager over a $2MM annual budget and a team of 6-9 technicians across several regions for network, RF, and SCADA engineering projects for a global utility company.
- PM for a DoD network survey and accreditation project, directing efforts of team members, identifying network deficiencies and recommending solutions to DoD staff and contractors.
- Microwave backhaul design and implementation, Cisco routing and troubleshooting for a private off-shore customer (IT as a Service).
- RF and Network Design, project management, and implementation for WISPs
- Cost estimates and proposal writing for national-level AMI deployments, regional and national Wireless ISP, and other projects.

UniTel Inc.
Network Administrator: 03/07 – 01/12

- System administrator for a rural incumbent local exchange carrier (ILEC) managing/maintaining all facets of the LAN/WAN.
- Managed and maintained all desktop, server, switching, routing, security and peripheral IT needs in a diverse systems environment.
- Wireless ISP backhaul management/maintenance, configuration and administration
- Managed all aspects of IP infrastructure – DHCP, DNS, ARIN requests, etc.
- Consulted business customers in engineering various connectivity solutions, public IP space needs and management, bandwidth needs and monitoring.

- Strategic and tactical planning for growth and new technology
- Budgetary planning and forecasting.
- Regular tech article writer for the UniTel Quarterly customer newsletter.

T-Mobile
System Administrator: 2005 - 2007

- Business system administration, on-site contact for Tier I and II troubleshooting for local application issues, desktop and server hardware issues, and user account issues.
- T-Mobile center launch team member for two new, ground-up call center builds and later conversion to Voice over IP.
- Corporate Desktop Standards Committee member - researched, developed and implemented solutions to the enterprise.
- Maintained PBX using DSA, Avaya Modular Messaging system administration, desk phone moves and general telecom support.
- Built, configured, and maintained desktop and laptop computers and associated peripherals.

MBNA
Tier II LAN Administrator: 1997 - 2005

- System administrator for NT4.0, Windows 2000 server, Exchange, Backup Server, Novell, Symantec Ghost.
- Participated in enterprise application deployments to 600 end users and LAN design, procurement, and deployment for new facilities.
- Managed as well as provided desktop support for over 600 Windows NT and Windows 2000 clients.
- Team leader for IT employees at remote office
- Regional lead on data audits and compliance.
- Tested, integrated, and developed methods for implementing new applications, hardware and environments.
- Administered bi-annual performance appraisals for junior team members.

CERTICIATIONS & TRAINING

- Annual NERC/CIP
- 2016 EDX SignalPro RF modeling software
- 2016 CIBET Basic RF track
- 2015 iBwave Level I certification
- 2015 Digi Transport technical training
- 2015 JMA RF cable connectors certification
- 2014 OSHA 10
- 2011 Windows Server 2008 R2 MCITP Skillsoft classes
- 2008 Cisco CCNA CBT self-studies.
- 2005 Avaya/Definity Site Administrator CBD

- Microsoft Server 2003 Core concepts, MCP
- Microsoft NT 4.0 Server core concepts, Exchange 5.5 Design and Implementation

VOLUNTEERING

- Board of Directors, Coastal Christian School of Waldoboro, Maine 2017-2018
- Building Committee Planning Member, First Baptist Church of Waldoboro
- Audio System Team Leader and Worship Team member, First Baptist Church of Waldoboro