### **RESOLUTION NO. R-2021-104**

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF BASTROP, TEXAS, AUTHORIZING THE CITY MANAGER TO ENTER INTO AN AGREEMENT WITH SCHNEIDER ENGINEERING LLC. FOR A BROADBAND FEASIBILITY STUDY, FOR FORTY-SEVEN THOUSAND DOLLARS AND ZERO CENTS (\$47,000.00) AS SHOWN IN EXHIBIT A, INCLUDING A SEVERABILITY CLAUSE; AND ESTABLISHING AN EFFECTIVE DATE.

WHEREAS, the City of Bastrop City Council understands the importance of broadband reliability provided by performing infrastructure improvements; and

WHEREAS, the City of Bastrop City Council understands providing an enhanced quality of life services from City Infrastructure should be cost effective; and

WHEREAS, the City of Bastrop understands the importance of focusing on infrastructure improvements in the area of Broadband is important to prevent a lack of reliable, faster broadband service poses a fundamental threat to the stability of the entire economy of the community. The City believes that its broadband needs are presently being underserved; and

WHEREAS, Schneider Engineering is a subject matter expert in the area of planning and designing infrastructure related to electricity and broadband.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF BASTROP, TEXAS:

<u>Section 1.</u> That the City Manager is hereby authorized to enter into an agreement with Schneider Engineering LLC. For a Broadband Feasibility Study, for Forty-seven thousand dollars and zero cents (\$47,000.00) as shown in Exhibit A.

<u>Section 2</u>. The City Council of the City of Bastrop, Texas has found Schneider Engineering LLC., to be a subject matter expert in the field of engineering and broadband feasibility.

**Section 3**. This resolution shall take effect immediately from and after its passage, and it is duly resolved.

 $\,$  DULY RESOLVED AND ADOPTED by the City Council of the City of Bastrop this 26  $^{th}$  day of October, 2021.

APPROVED:

Connie B. Schroeder, Mayo

ATTEST:

Ann Franklin, City Secretary

APPROVED AS TO FORM:

Alan Bojorquez, City Attorney



## Schneider Engineering, LLC

191 Menger Springs Parkway - Boerne, TX 78006 830.249.3887 // www.se-texas.com Offices: Boerne, TX and College Station, TX







October 14, 2021

Mr. Paul Hofmann, City Manager City of Bastrop 1408 Chestnut Street Bastrop, Texas 78602

# **RE: Proposal for Broadband Deployment Feasibility Study**

### Dear Paul:

Schneider Engineering, LLC (SE) is pleased to present this proposal to prepare a Broadband Deployment Feasibility Study for the City of Bastrop. Our understanding of project and description of our Scope of Services to complete the study follows:

#### The Need

The City of Bastrop (the City) believes that reliable, economical, FTTP/FTTH (Fiber to the Premises/Fiber to the Home) service is a fundamental 21<sup>st</sup> century utility that will enhance the quality of life for Bastrop's citizens and local businesses. Lack of reliable, faster broadband service poses a fundamental threat to the stability of the entire economy of the community. The City believes that its broadband needs are presently being underserved.

### The Solution

The City feels an obligation to explore the possibility of deploying a FTTP/FTTH network as an economic development tool and fundamental service for its citizens and businesses to grow and prosper. With the potential opportunity to leverage the existing electric utility infrastructure as the enabling backbone, the City believes that it may be well positioned to be the infrastructure provider and access provider as a service to the community.

### The Study

SE is prepared and qualified to provide this evaluation for the City. The deliverable will be a formal report to the City to provide strategic insight into broadband deployment that will include the methodology used, and scenarios with high level cost estimates for infrastructure and revenue expectations, an evaluation of expense development for operations, and conceptual phased deployment maps based on input and discussions for initial deployment. The study should provide sufficient strategic analysis to equip the City to make decisions on the path forward.

We envision the study deliverable to provide strategic and tactical guidance toward making the decision to deploy broadband services by presenting system feasibility within the following areas:

# Market and Regulatory Analysis

The study will research the region's available broadband service providers, projected saturation rate, and costs to develop the top line revenue model of the FTTP/FTTH network. Bandwidth trends for upload and download will be identified to position the constituents of the City, both citizens and businesses, for economic competitiveness in the increasingly demanding data driven economy.

We will also explore funding opportunities through grants, and public-private partnerships to provide best strength to the balance sheet for the deployment of this infrastructure.

The study will also assess the regulatory issues that may arise for deployment of broadband outside of the Bastrop service territory.

## Infrastructure Feasibility

The study will identify a budget for infrastructure deployment of the FTTP/FTTH network considering the city's existing electric utility infrastructure within the city limits and the identified ETJ outside the city limits

To accomplish this, we envision the following steps:

- Assess capacity of existing infrastructure
  - Review existing system mapping and customer service areas including existing density.
     The City will provide details of existing zoning for undeveloped property, location of existing overhead and underground service facilities, and ETJ areas.
  - Conduct staff interviews
  - Prepare a conceptual estimate of cost to attach to the electric utility system to accommodate FTTP/FTTH
  - Between two and three scenarios with sensitivity analysis will be provided for each differing scenario
- Estimate the cost of the FTTP/FTTH network:
  - Dark Fiber Middle Mile and Last Mile Deployment
  - Electronics and Customer Premises Equipment (CPE)
  - Connectivity to the Greater Internet.

### **Operational Feasibility**

Operational costs for deployment of the infrastructure could range from an infrastructure only maintenance model (middle and/or last mile fiber) to a full retail service provider (RSP) model in which the City is providing full technical support and CPE for its customer base. Office and maintenance staffing solutions will be evaluated. Based on the City's desire to provide exceptional service with the FTTP/FTTH network, we will address both infrastructure and full RSP options for consideration as well as a public/private partnership option in which the City contracts the customer service.

# Deployment Plan

A positive market, infrastructure, and operational assessment are highly dependent on the strategic sensitivities of market saturation, projected market penetration, and a tactical deployment plan. Through conversations with City Staff, we will identify a staged deployment plan, and assign financial sensitivities to each stage of the plan to make the deployment successful.

# **Schedule**

Project Kickoff
Draft Infrastructure/Operations Cost Model
Draft Phased Deployment Map with Scenarios
Final Feasibility Study

November 1, 2021 January 31, 2022 February 28, 2022 March 31, 2022

We are pleased to provide this feasibility study on a time and expense basis for an estimated fee of \$47,000 including reimbursable expenses such as hotels, meals, and mileage. We do not envision adding subconsultants. If the need arises, we will seek full approval of the City prior to engaging a subconsultant. We appreciate the opportunity to propose on this exciting project and we look forward to discussing the next steps. We have included a signature blank below to signify acceptance of the proposal.

Please let us know if you have any questions or require anything further.

Respectfully Submitted,

Lance Pettigrew, P.E

CEO

Accepted By:

Paul Hofmann, City Manager

\_\_\_\_\_

Date

The Owner shall pay the Engineer for services performed under this Agreement as follows:

Position	HOURLY RATE
President	\$250.00
Principal	\$230.00
Engineer VIII / Senior Consultant V	\$200.00
Engineer VII / Senior Consultant IV	\$185.00
Engineer VI / Senior Consultant III	\$170.00
Engineer V	\$155.00
Engineer IV	\$140.00
Engineer III	\$125.00
Engineer II	\$110.00
Engineer I	\$100.00
Project Manager V	\$180.00
Project Manager IV	\$165.00
Project Manager III / Senior Consultant II	\$155.00
Project Manager II / Senior Consultant I	\$140.00
Project Manager I	\$125.00
Project Analyst IV	\$120.00
Project Analyst III	\$105.00
Project Analyst II	\$90.00
Project Analyst I	\$75.00
Technician VI	\$135.00
Technician V	\$125.00
Fechnician IV / Designer III	\$110.00
Fechnician III / Designer II	\$95.00
Fechnician II / Designer I	\$85.00
echnician I	\$75.00
Technician Assistant	\$60.00
Administrative Staff	\$65.00
Administrative Assistant	\$55.00
Clerical	\$50.00

# PERSONNEL OVERTIME CHARGES

Hourly personnel overtime work will be invoiced at the base billing rate plus a multiplier of 1.5 times the employee hourly rate.

### REIMBURSABLE EXPENSES

- Mileage Reimbursement: \$0.62/mile for cars, \$0.80/mile for trucks, \$0.90/mile for fully equipped off-road survey trucks
- The following will be billed at cost plus 12%:
  - o Copying costs
  - Transportation, subsistence and lodging
  - o Approved sub-contract services