

AMERICAN CITY COUNCIL
MAY 17, 2022
WORK SESSION AGENDA

Members Present:

Bradley J. Frost	Mayor
Staci Carroll	Council Member
Ryan Hunter	Council Member
Rob Shelton	Council Member
Clark Taylor	Council Member

Staff Present:

David Bunker	City Administrator
Camden Bird	Community Services Director
Stephanie Finau	Deputy Recorder
Cherylyn Egner	Legal Counsel
Cameron Paul	Police Chief
George Schade	IT Director
Scott Sensenbaugher	Public Works Director
Patrick O'Brian	Development Services Director
Cody Opperman	City Planner

Also present: John Woffinden, Rebecca Andrus, David Ryan (STRATA), and Tyler Rasmussen (STRATA)

Notice is hereby given that the American Fork City Council met in a work session on Tuesday, May 17, 2022, in the American Fork City Hall, located at 31 North Church Street, commencing at 4:00 p.m. The agenda shall be as follows:

Council Member Taylor opened the work session. Mayor Frost arrived a few minutes later and turned the time to Camden Bird to present the Review of the FY2023 Strategic Goals.

WORK SESSION

1. Review of the FY2023 Strategic Goals.

**Hunter arrived at 4:04 pm*

- Mr. Bird discussed growth planning for the year 2023. He explained how the City will develop and implement a plan to provide fiber to residents and businesses. He discussed fiber infrastructure and the process on how that will go in choosing a company.
 1. Determine public interest
 2. Intent to Negotiate
 3. Design the Project
 4. Funding
 5. Construction
- 200 South construction

1. Design Road
 2. Funding – moving forward on bonding
 3. Project Bid
 4. Begin construction to begin September 2022
- Facilities Master Plan – Develop facilities master plan that incorporates the city’s growth needs over the next 30 years
 1. Existing City Facilities
 2. Master Plan 30 Acre Property – engage in stakeholders, get input from community, residents, and staff.
 3. Property Acquisition Plan – Things we would want to do, tools are for acquiring property and getting in line when property comes available.

Mayor mentioned the 30 acres that 28 acres are for parks 2 acres carved out for a 3rd fire station that will be strategically placed by Lakeshore and will be a help to southern part of the town. Mr. Bird finished off the Master Plan with fire and a great space with the 28 acres and great location.

- Water Preservation (Water/Sewer Lines) – Look at ways to preserve and protect our irrigation water supply
 1. Develop PI Metering plan – look at rate structures, help educate residents
 2. Develop PI Rates – by spring 2023 hope to be working with a firm to help with fee analysis and recommendation.
 3. Water Recycle Program – General design concepts that are done by Horrocks then take that to the TSSD and DWR to get signed off and approved.

Council Member Carroll questioned what Horrocks has completed proof of concept meant. Mr. Bunker replied that it is to make sure we know we can complete the project fully before it is designed. Horrocks did a preliminary model of the system to make sure that if we did this project that is possible and that we can accomplish it and can use the water and put the water back into our system. It was not a full design, just a preliminary model.

Council Member Shelton had a question on the rate structure. He wanted the council to take into consideration looking at the new rate structures since he has had shareholders from the American Fork Irrigation company inquired about it also. Shareholders wanted to know how their water shares will be affected.

Mayor Frost stated a fun fact that in one month from April 15 to May 15, the residents conserved over 245 million gallons of water over the 10-year average. This is what the City has saved. He felt the residents and businesses were watering out of need not out of habit, and that the City is in a unique position to recycle water and it is something that the City can bring into their portfolio which sets the City up for perpetuities.

Mr. Bird continued with presentation:

- City Code - Rewrite city code to be more organized, streamlined, and accurate.
 1. Hire firm
 2. Update code – work with firm to organize code
 3. Adopt code

Council Member Shelton asked if it was the whole city code or just the development code section. Mr. Bird replied that it was the whole code.

Ms. Egner added that looking at the whole code we are looking to outsource the development code. It takes a lot of time, and we don't have time to do that. She stated that the rest of the code, she'll be looking to do that in-house to save costs.

Mayor Frost asked if the council had any more questions and moved on to the next item in the agenda.

2. Review of the submittals for fiber proposals.

Mr. Bunker stated that based on the Council direction, an Intent To Negotiate document requesting firms to submit information to the City. Some of the things that were asked for:

- Details about the firm,
- Statement of qualifications
- Previous projects they've done
- References of projects completed
- Financial position and abilities
- Business plan, what a Performa might look like doing a project city wide
- Discuss project funding, discuss any obstacles the City might face
- Detail ways in which we can be innovative and best help our residents.
- Responding to questions to a government owned and ran network
- Firms amiable to working with the City and the City own the network

He stated that the city received a proposal from STRATA Network (which was included in the drobox for the Council to review). STRATA gave a high-level projection of what the network would consist of. They went through each of the criteria within the "intent to negotiate". They are proposing Hybrid active ethernet and passive optical network (G1). In the proposal was discussed two options:

1. Utility Model
OR
2. Subscription Model (take rate to achieve the financial success to cover that service).

They are proposing open access system. Any ISP that is qualified can come onto the network. They proposed a revenue sharing program after the debt obligation is satisfied. They did lay out a 5–10-year operation maintenance agreement, proposing that the City would own the network but that STRATA would be the operations and maintenance group for that. They would operate the Network Operation Center (NOC) and provide the City with the service through that program as well as the ISPs. This will be a Public/Private partnership where the City and STRATA both take on risks. A design period of 6-12 months, and a construction timeline of 3 years. They have identified 13,000 unique addresses (single or multifamily business or private connections) to the system. Of the 13,000 connections several of them may have service already. That is not

suggesting that there are 13,000 un-serviced connections. In the project obstacles, STRATA has identified several areas where timing is of the essence. That would be the supply chain, having a company unable to perform according to contract, or if we select an incorrect model. If it is a *Subscription Model* and there is insufficient subscriptions, that is a risk. Mr. Bunker added that in the avenues of innovation they've discussed water management, public safety, traffic control and doing a smart city initiative. The next step would be if the City Council would like to move forward, then we would start the negotiation steps along with some open house discussions with the community so that we understand what residents are looking for and what their desires are. Based on survey by MDI, residents are open and excited for something to happen.

Council Member Shelton had a question about the *Utility Model*, he was wondering if the Council was still entertaining it as a viable option. Mr. Bunker stated it was discussed as an option, but STRATA didn't know that the Council had discussed it. Council Member Shelton just want to make sure they were open with the public at what they were looking at. His opinion would not be for the *Utility Model*

Council Member Carroll felt like the *Utility Model* would be best because it could be justified as a utility but does feel that the residents are not supportive of it, so for that reason she would not be supportive of it.

Council Member Taylor stated he was not in favor of the *Utility Model*. He felt that the *Subscription Model* was the way to go even though the *Utility Model* makes sense as to some degree, to which Council Member Hunter agreed.

Mayor Frost agreed with what Council Member Taylor said. He mentioned in he was in a new build area of town and that area didn't have the internet speed they needed (with a lot of people working from home). He also added that the area around Art Dye, you cannot work from home. Mayor Frost felt the *Subscription* rate is a risk, but the City is prepared for that. Mayor Frost asked the STRATA representatives to discuss Smart City and what it entails.

Dave Ryan (STRATA Chief operation officers) explained the Smart City Initiative. It means to have public Wi-Fi access throughout the city, doing smart metering for the water that we talked about for irrigation project, the City may want to consider *Smart Metering* as part of that process. There are a lot of things in the future that we may not understand or anticipate. For example, we primarily view Fiber Optic Network as an internet solution for residential and business locations, but we believe the internet and smart devices are going to be credible things for the City to manage. Smart driving cars and being able to do traffic management. He gave an example where the state of UDOT is investigating an optical sensing technology that allows them to use fiber optic infrastructure to sense traffic, speeds, and weight of vehicles. He added that STRATA would like to engage with the Council and administrative staff to discuss what the specific needs interest them and what should be evaluated as part of the *Smart City Initiative* for the City.

Tyler Rasmussen (STRATA) mentioned that as part of the proposal, we've included a set of hours from subsidiaries spectra solutions that will come in and work with the city and identify the priorities on *Smart City Initiatives* and identify the areas to maximize and deploy fiber the right way.

Council Member Carroll asked to know the actual network that STRATA is planning to build in the city. She wanted more explanation of what the Hybrid Model is.

Mr. Ryan explained the Hybrid Model allows us to have an XGS-PON and that PON is 10-GIG capable, it is the primary distribution model for residents and businesses. He went on to explain that there is additional fiber that is distributed throughout the city, that allows us to move a customer from a G-PON splitter to a direct active ethernet fiber. The way we design the networks, there is a centralized splitter location, sometimes splitters can be staggered and distributed throughout the network and that's what we try to avoid that and have these the centralized locations (multiple locations) where these splitters are centralized. And from these centralized locations go out to each home there is a dedicated fiber for every residential and business location. So, the centralized location has extra feeder fibers that come to it and then individual fiber that goes out to every location and then if that location needs an active ethernet connection you just move a jumper over to a dedicated fiber that comes back to the shelter that provides the service.

Council Member Carroll rephrased Mr. Ryan's explanation to make sure she understood what he was stating. Mr. Rasmussen restated what Mr. Ryan previously said. He added that the network on Day 1 would be multi-Gig capable. The City could offer a residential plan for 2-Gig and then swap out the LNT (the actual electronics at the home) for a slightly more expensive LNT you can deliver 10-Gig on the SGS network (significant bandwidth). As part of the model to, we strongly recommend the City to take their dollars from their revenues from each subscriber each month and set that aside in an account and build that up for network refresh. In 5 to 8 years, there will likely be another technology that we will likely deploy and it maybe something beyond 10-Gig.

Council Member Shelton asked if the hubs with individual lines that connect to a home will be ethernet or fiber depending on what the resident requests. Mr. Ryan stated that it was all fiber. The term active ethernet is a network terminology that defines fiber that is dedicated from one location to another. But it is all 100% fiber. Council Member Shelton asked what happens if a resident doesn't want fiber as it is being deployed. Mr. Ryan replied that in both models that were provided, it is 100% fiber to the curb network build and then in the *Utility Model* it includes the cost of taking that drop from the curb and to every home and across their yard. The *Subscription Model* it includes the cost to the necessary "take rate". That's why you see the \$7 to \$8 million dollar difference in cost between the two models. There is a difference in the network cost to build to the side of every home. But to the front of the home at the curb will be a fiber network that is ready and capable serving every location. It will be scaled and designed to accommodate up to a 100% take rate. Shelton asked how do we manage to incentivize

customers to hook onto the network now? Mr. Ryan added that it will be less expensive for the City to pay for a service drop from the curb to the site of the home at the time of construction so you don't have to remobilize, and construction cost will go up. It is cheaper up front and find a way to somehow incentivize residents. It is something we would discuss in a partnership of what is the best way is to do that. If the City wants to charge residents the full price cost of adding a service drop if they do not do it at the time of construction and maybe it is less expensive at the time of construction or free. Or maybe meet halfway later, we have to define what is that sweet spot to incentivize customers to participate while the construction crews are there.

Council Member Hunter stated that the City pays for it and the residents get to pay for their market rate when they decide to connect. Mr. Ryan added that part of the incentives will be to take up front, but there will be new people that move into a home that will have fiber past 6 months ago and didn't have the opportunity to connect or maybe they missed the flier and didn't understand what it entailed and now they understand it better, we would have to figure out the right balance and accommodate future connections.

Council Member Shelton asked if micro-trenching is an option and how successful that has been in Utah with their company. Mr. Ryan replied that their spec is a 16" depth and the goal during engineering is to have a minimum cover of 12" to the top of the top product. If there are 5 to 6 conduits in that micro-trench, we will need to accommodate a 12" cover. What that does is it allows the city to rototill up the road, repave the road without having to worry about relocating that infrastructure. There is a lot of micro-trenching projects where that spec is shallower than that. He added that it does add a little bit of cost because once you get into the road base you get into cobble rock on the benches and the cobble rock is more costly to cut through. That spec is more expensive, and it is something we can talk through if the City wanted to adjust that spec. STRATAs recommendation is to give the City 12" of cover on the roads.

Council Member Shelton asked how long STRATA has been micro-trenching? Mr. Ryan replied it was about 3 years. He mentioned that they were late adopters because there's been challenges with that. A lot of that is based on two factors: the depth and restoration process of being able to have your roads restored. There is a lot of different ways that it has been done. He mentioned they previously used a product that is a tar-base crack seal and no longer use it because of change in temperatures. The spec requires the product be installed into the bottom of the 16" trench and the rest of it is filled with a flowable fill and then the top will be sealed with a mastic and asphalt base with an aggregated mastic that goes over the top.

Council Member Shelton wanted to know how micro-trenching was going to affect roads and residents. Mr. Ryan replied that the benefit of micro-trenching is the impact to the community compared to open trenching in a road. It is a narrow trench about a 1½" wide up to 2" depending on how many conduits have to go into it and might have to keep it wider in order to have 12" of cover. Once that saw goes through you can drive over the top of it. From the impact to drivability, it's minimal. He also stated that they have micro-trenching experiences and capabilities. They are happy to build a network according to what the City would like. He

mentioned different construction techniques on how to install fiber in the roads and added that if the City had other options for them to investigate, they could have that conversation

Mr. Ryan said that STATA could provide a compared analysis that shows traditional construction methods that exclude micro-trenching and compare that to the \$33 million micro-trenching estimate.

Mr. Bunker stated that the general direction drilling would be more expensive than micro-trenching. Mr. Ryan affirmed that typically it is, there are exceptions. Direction drilling could be as much as \$20 to \$30 a foot compared to micro-trenching that is \$13 to \$16 a foot. Mr. Bunker added there is flexibility in how this is designed. Some areas may need directional boring and some areas we can do micro-trenching. Right now, we do not have any aerial capabilities and he did not see that in the STRATA proposal.

Mr. Ryan replied that they didn't put it in proposal since the City does not own any aerial infrastructure (at least not in bulk), but if the City would like them to, they could talk to Rocky Mountain Power and look at what an attachment agreement as an exception. Especially in the downtown area and sidewalk. Mr. Bunker stated that would be another option and it gets into the weeds of the design, but there is flexibility in the way we approach the system.

Mr. Ryan stated that STRATA proposal is to work with the city and determine how they would like it designed and constructed. And then they'll help the City solicit and get the best price to get that work done. Some may be STRATA performing that work or bringing in a 3rd party contractor that can do it for cheaper. The goal is to build the network at the best price the City can, at the spec that they want it at.

Mayor Frost added that philosophically STRATA has been involved with Lehi and asked Mr. Ryan what is his version on why cities are going out and aggressively getting fiber. Some people will say that this is not for government to be involved, but that trend has been changing.

Mr. Ryan felt that the partnerships with cities and telecoms did not exist. He felt like there wasn't a company that can service the City in a ubiquitous city-wide way. He felt like that is a problem for the city because a solution should be offered to all residents and businesses of the city and recognized that was one of the challenges. Another challenge is that the city might not have the expertise to be able to provide an offer like this. He felt that American Fork has more expertise due to a great IT staff and that the city has been involved in fiber networks for many years. He mentioned that STRATA has decades of experience on how to build, maintain and operate these networks. They can support the city and provide repairs and maintenance when needed in a timely way. He added that cities are getting involved in fiber because they don't feel that they have a partner that is engaged in aligned with their objective of service to every location of the city.

Mr. Rasmussen emphasized what Mr. Ryan previously stated and referred to what Mayor Frost described an environment where internet alone is critical to day-to-day lives. He felt that cities recognize that in most scenarios, most providers need to take more control of their destiny with critical infrastructure. There are many trends indicating that it is becoming the norm. They are seeing more state and federal programs that are recognizing and showing preferences to local providers, private/public partnerships, municipalities, and cooperatives primarily because they are interested in the local needs of the community they are serving. He added that internet is the key today, but the city can see it as much more than just internet service.

Mayor Frost agreed with STRATA and asked if fiber will go obsolete or will it change or will fiber always be the constant and wanted their opinion. Mr. Ryan stated that anything he had to say would be a prediction, and they don't see fiber networks going away - they are going to be critical. He gave an example of a wireless 4G or 5G system, 5G is in a new wave of technology that provides fiber-like speeds, it requires fiber to be injected into that network on nearly every street corner. Whoever has a fiber network will be providing service to the customer directly or those who facilitate those connections.

Mayor Frost felt that Council has been educated on the fiber network and thanked them for refining what fiber internet is. Council Member Hunter added that what he heard from STRATA, is that fiber infrastructure is the backbone of 5G being successful. He felt if it increased it would just continue to be faster. Mr. Ryan replied that fiber networks will always continue to expand in their capabilities and capacities.

Council Member Shelton wanted to know the timeline of when negotiations will take place and what is the next step for the city. Mayor Frost replied that it is something that the Council needs to determine today. He added they need to come up with the next steps and give direction to staff. Mr. Bunker stated that the "intent to negotiate" initially, the intention was to take the top proposals and enter into some type of negotiation and start working on what that would look like and drill down the details and it would be something that would come back to the Council for approval and then formalize a contract based on that. He added that if the Council wanted to move in that direction that would be the next step.

-- Council Member Hunter added that he would love to see that happen sooner than later would be his recommendation.

-- Council Member Taylor agreed with Council Member Hunter. He found public/private partnership appealing and it makes sense. Everyone is involved and the City puts out the best product for residents and businesses and is in favor of going forward prudently and getting started.

-- Council Member Carroll stated that she would like a little more information about the feasibility of getting to that "take rate." The city does have some uniqueness of how things are happening and felt like its fractured on who has services in what. That has been her hang up about *Subscription Model*, is getting to that "take rate." She just wanted to make sure that

the City is not putting itself in peril. Mr. Bunker replied that some of the information came through on the MDI study and that is something that can be refined further.

-- Council Member Shelton had a couple concerns. He recalled a substantial number of roads that do need a full depth reclamation on it and wasn't sure if that hits the micro-trenching. He felt that if the roads need to be redone anyway, that full trenching is more expensive but will give us a better product in the long run. He mentioned the two different types of models and liked the revenue share idea but wondered what it would look like from a contract standpoint.

Mr. Tyler replied that is something they can look at. The revenue share would be after the City meets all their debt obligations. He stated that what is proposed is that the City would meet all their bond payments, the operators fee, and refresh fees, and after those costs then excess revenue will be split. Council Member Shelton questioned why there would be a revenue share split if STRATA is not sharing on the risk of the debt. Mr. Tyler replied that the way they review the shared split, that STRATA would have to build an operational presence in American Fork to support the city network and if they don't achieve the *Subscription Rate* as anticipated, then STRATA is locked into a 5–10-year agreement at a lower take rate and they start losing money. The risks are applied in different scenarios but are mutually yoked to drive *Subscription Rates* as high as they can because if they don't meet those numbers, STRATA will suffer over the term of the agreement as well.

Council Member Carroll stated that in the proposal she does like the idea of some of the incentives that are built in. She also added that as part of negotiations is cost, but if the way STRATA describe micro-trenching vs. full trenching it might be a consideration for her to make sure it is not a burden for residents during buildouts and does not want it to be an inconvenience on the residents.

Council Member Hunter thanked STRATA for their work and that their reputation precedes them and felt that the City is blessed to have received a proposal from someone who is as qualified as they are. Mayor Frost thanked them for their time and adjourned the work session.

3. Adjourn.

Meeting adjourned at 5:02 pm



Stephanie Finau
Deputy Recorder