

City of Durham
CITY COUNCIL MINUTES
February 27, 2018

- A. OPEN REGULAR COUNCIL MEETING.** Mayor Schirado opened the Durham City Council meeting at 7:30 PM at Durham City Hall.
- B. ROLL CALL.** *Council Present:* Gery Schirado, Chris Hadfield, Keith Jehnke, and Chuck Van Meter
Council Absent: Leslie Gifford
Staff Present: City Administrator Linda Tate and Administrative Assistant Lynn Schroder
Public Present: Meridee Pabst, Wireless Policy Group; Aaron Gudeli, Modus; Noah Grodson, Verizon Wireless Real Estate; Neil Geisler, Modus; Eric Horesky, Planner at Modus; Rick Woidyla, Verizon Global Technology Group; Jay Gratchner, Verizon.
- C. JANUARY 23, 2017 COUNCIL MINUTES.** Councilor Van Meter moved to approve the minutes of the January 23, 2017 City Council meeting. Councilor Jehnke seconded the motion. The minutes were approved unanimously (4-0). **MO 022718-1**
- D.** Mayor Schirado read the **CALENDAR OF MEETINGS.**
Tuesday, **March 6, 2018**, Regular Meeting of the Planning Commission
Tuesday, **March 27, 2018**, Regular Meeting of the City Council at 7:30 pm, Durham City Hall
- E. PUBLIC FORUM.** None.
- F. PLANNING COMMISSION UPDATE.** None.
- G. PRESENTATION BY MODUS (VERIZON SMALL CELL WIRELESS).** Aaron Gudeli with Modus and representatives for Verizon Wireless introduced themselves. Gudeli explained that Modus consults with Verizon Wireless to handle site acquisition for small cell wireless facilities.

Gudeli introduced Verizon's small cell program and goals for placement. Verizon Wireless is seeking to install five small cell towers on existing streetlight poles in the residential zone in Durham to improve data download speeds and service.

Small cell towers are low-powered cellular radio access nodes that operate in the licensed and unlicensed spectrum that have a range of 10 meters to a few kilometers. They are "small" compared to a macro cell because they have a shorter range and partly because they typically handle fewer concurrent calls or sessions. Small cell towers differ from the larger towers in that they are designed to work in small environments. Small cells complement larger towers by filling in coverage gaps that exist due to topography, trees, buildings, and other obstructions. Small cell relay information to bigger towers. The tandem coverage improves speed and data downloads to homes.

The small cell towers will lay the infrastructure for Verizon Wireless to provide 5G technology to the area in the future. Because of terrain challenges, large areas of residential zoning, trees, and buildings, there are current gaps in Verizon's coverage that cannot be serviced by macro towers. Building a network of small cell towers in residential zones is necessary to increase comprehensive wireless capacity. Gudeli stated that without

increasing wireless infrastructure there will be an increase in buffering time and frequency of lost connections.

According to Verizon Wireless, 5G technology will open up a new set of products and mobile trends for customers. The benefits of 5G are high-speed data with connection speeds that are faster than 4G and significant improvements in responsiveness and video quality. Verizon Wireless believes that 5G will be the foundation for creating more internet-connected devices. Gudeli stated that there has been a 52% nationwide increase in internet-connected devices in houses. Gudeli stated that the average home currently has 13 internet-connected devices. Meridee Pabst of Wireless Policy Group stated that, nationwide, there is an increasing expectation that cell phones should work just as well as landline inside homes. Verizon Wireless plans to begin installing 5G technology in the next few years. 5G technology will complement 4G technology.

Gudeli provided a sample rendering of a small cell installation on a streetlight pole. The small cell would be co-locate on existing streetlight poles and would be designed to be compatible with the neighborhood. An equipment box would be installed on streetlight with cylindrical antennas mounted on the top. He stated that there is some ability to design the antennas to blend into the neighborhood. He stated that the existing streetlight poles would be replaced with new poles that look the same because the existing poles do not have the structure to hold the antennas.

Councilor Hadfield asked why the small cell antennas need to be located in residential zones and not in commercial zones. He asked why capacity could not be increased by increasing capacity in macro towers. Rick Woidyla of Verizon Global Technology Group replied the capacity in macro towers has been maximized and they cannot transmit micro signals or the higher frequency spectrum needed for 5G technology. Gudeli stated that their engineers determined the locations to best address the existing coverage gaps.

Councilor Jenke asked how the radio frequency (RF) emissions from small cells compare to macro towers. Meridee Pabst of Wireless Policy Group stated that small cell antennas are lower power than macro towers and emit only a small percentage of permitted RF exposure that is allowed by the FCC.

Councilor Van Meter asked if the small cell antennas are always placed on existing poles or if new poles specially designed for these antennas are erected. Meridee Pabst stated that feedback they have received is that communities prefer to co-locate the small cell antennas on existing poles to better blend into surrounding area. Gudeli stated that existing streetlight poles would be replaced with new poles that look the same because the existing poles do not have the structure to hold the antennas.

Mayor Schirado asked what methodology was used to determine the number and location of small cell nodes that are needed in Durham to eliminate coverage gaps. He asked why Verizon Wireless did not want to locate any small cell nodes on the east side of Durham along Upper Boones Ferry Road. He also asked how tall the small cell antennas would be. Gudeli stated that the Verizon Wireless engineer did an analysis of existing coverage to determine coverage gaps. However, the specific design for Durham has not been finalized. He stated that he would have to check with Verizon Wireless engineers to find out why there were not any small cells proposed for the east side of Durham and to see if some nodes could be moved to Upper Boones Ferry Road. He stated that small cell antennas are generally 30 to 35 feet tall but the final height depends on site-specific factors.

Councilor Hadfield asked if there would be any undergrounding that would be required. Gudeli stated that the small cell nodes would need to connect to the fiber network so trenching may be required. Rick Woidyla stated that initially Verizon Wireless would likely use the existing Frontier FIOS fiber optic network.

Mayor Schirado asked if Verizon Wireless has installed small cell facilities anywhere in Washington County. Gudeli stated that they have installed a pilot project in Hillsboro and the have projects in permitting with Washington County. They have installed small cell antennas at Lewis & Clark College. Gudeli offered to send pictures of small cells at Lewis & Clark or arrange a tour if the City Council would prefer an onsite visit.

Councilor Van Meter asked if Verizon Wireless could co-locate small cell antennas with other providers. Gudeli stated that co-locating small cell antennas on the same pole would not work. Co-locating would require additional height on the pole.

Mayor Schirado stated the next step is for the City is to develop the structure for permitting small cell antennas. Councilor Jehnke requested that Verizon Wireless provide pictures of the small cell antennas at Lewis & Clark and model ordinances for Durham's consideration.

H. DISCUSSION OF LOCATION AND CEREMONY FOR PEACE POLE PLACEMENT. Tate surveyed Councilors about the specific location for placement of the Peace Pole and dedication ceremony. The consensus of the Council was to have a ceremony dedicating the Peace Pole on a Saturday morning sometime in June and to locate the pole near the bench in Heron Grove Park.

I. ADMINISTRATOR'S REPORT. Tate informed the Council about two street light poles on Upper Boones Ferry Road that were broken in two separate accidents in February. The poles will be replaced March 14.

J. FINANCIAL REPORTS. Councilor Van Meter moved to approve the financial reports for January 2018, payroll checks 532-533, vendor checks 16151 to 16169, and electronic fund transfers totaling \$5,296.60. Councilor Hadfield seconded and the motion passed (4-0).

MO 022718-2

K. COUNCIL COMMENTS. Mayor Schirado revisited the presentation about the Family Justice Center of Washington County by Lee Dobrowolski, Hillsboro Police Chief at the August 2017 City Council meeting. The FJCWC is a collaborative effort by Washington County governments, law enforcement, and nonprofit partners to provide comprehensive services for survivors of domestic violence in one location in Washington County. The FJCWC is a one-stop center where survivors can receive all services that they may need including shelter, protective orders, legal assistance, housing assistance, and counseling. Schirado noted that the Tualatin Police respond to approximately 65 domestic related calls in 2017 in Durham. The FJCWC will be opened on April 12, 2018. Mayor Schirado recalled that is was the goal of the FJCWC Steering Committee to obtain support from all Washington County cities. He requested that the Council consider a small financial contribution to the FJCWC to demonstrate the City's support of the center at the next regular meeting.

Mayor Schirado announced that Councilors' annual performance evaluation of the City Administrator is due to him by March 17, 2018. The Council will hold an Executive Session

at the March 27, 2018 City Council meeting to discuss the City Administrator's annual performance review.

Councilor Hadfield asked about the schedule for paying off the City's bond. Tate stated the City will pay off the bond in 2019.

Hadfield noted that a portion of Upper Boones Ferry Road in front of the vacant lot in the south of Durham seems to be deteriorating. Tate stated that she already reported damage to ODOT last spring shortly after it appeared. ODOT replied that the damage was normal wear and tear of the road. Mayor Schirado asked that the City submit a letter to ODOT requesting them to investigate the damage further.

Hadfield requested that the ivy in Kingsgate Woods be cut back. Tate stated that she will hire someone to spray herbicide once the rain stops.

L. ADJOURN. Councilor Van Meter moved to adjourn the regular Council meeting. Councilor Hadfield. Mayor Schirado adjourned the regular meeting at 9:30 pm.

Approved:

GERY SCHIRADO, MAYOR

Attest:

LINDA TATE, CITY ADMINISTRATOR/RECORDER