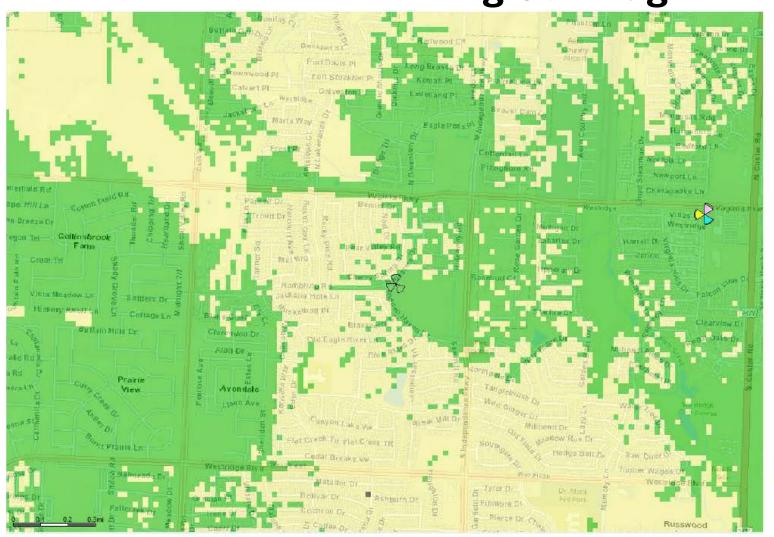
## City of McKinney City Council Meeting July 6, 2021

Hemphill Towers: 551 South Bluestem

## Verizon Wireless existing coverage



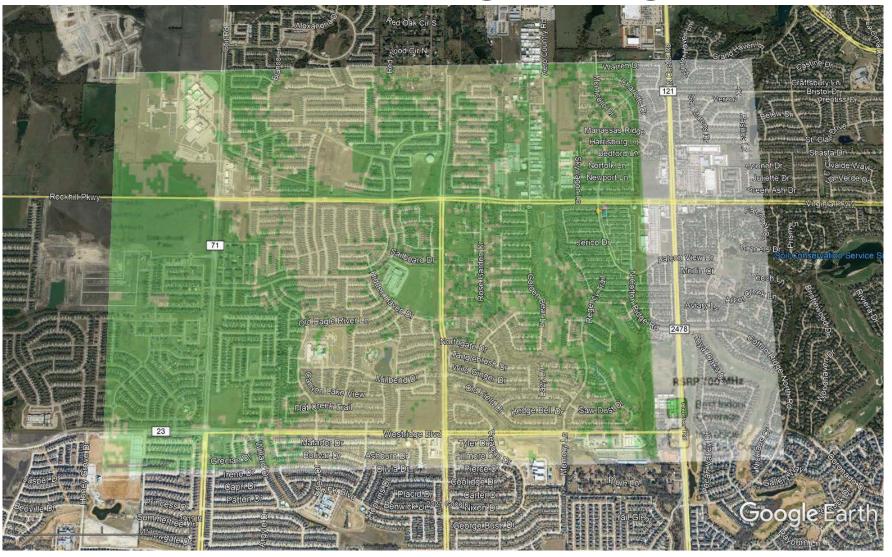
#### RSRP 700 MHz

- Best Indoor Coverage
- In-Vehicle/ Outdoor Coverage

## Verizon Wireless with proposed 80' tower



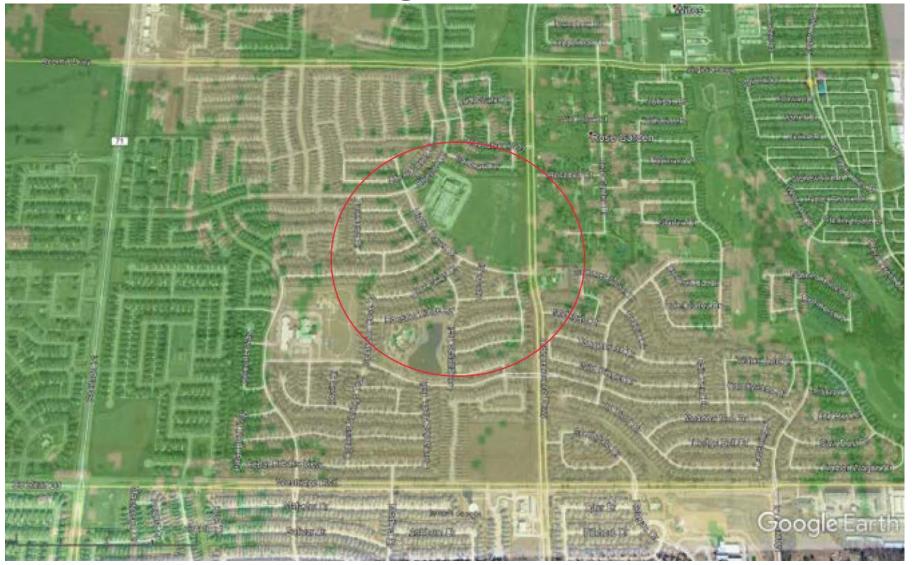
## Verizon Wireless existing coverage



## Verizon Wireless existing coverage



Verizon Wireless target area for tower



## Three possible locations



#### **Option 1: Fire Station**

- This site was considered, and Hemphill made a proposal to the City
- City policy prohibits leases on city property used for public safety purposes
- Size of property makes distance setbacks unworkable (tract is approximately 320' x 400') so an 80' tower would have to be sited almost dead center of the property to meet a 2:1 setback requirement.

#### **Option 2: Amenity Center**

- Hemphill has not approached this candidate
- The pond makes the site very problematic from a tower siting standpoint
- Approximate location of a tower would have to be outside of the running track to avoid flooding issues (fails 2x1 setback requirement)
- Most of the balance of the tract is already utilized

### **Option 3: Furr Elementary School**

- Lease negotiated with a willing landlord
- Provides best possible coverage with least impact on neighborhood
- Only remaining option that addresses coverage need
- Eastern end of property is within flood plain and is therefore unusable
- -Middle section is owned by a residential developer

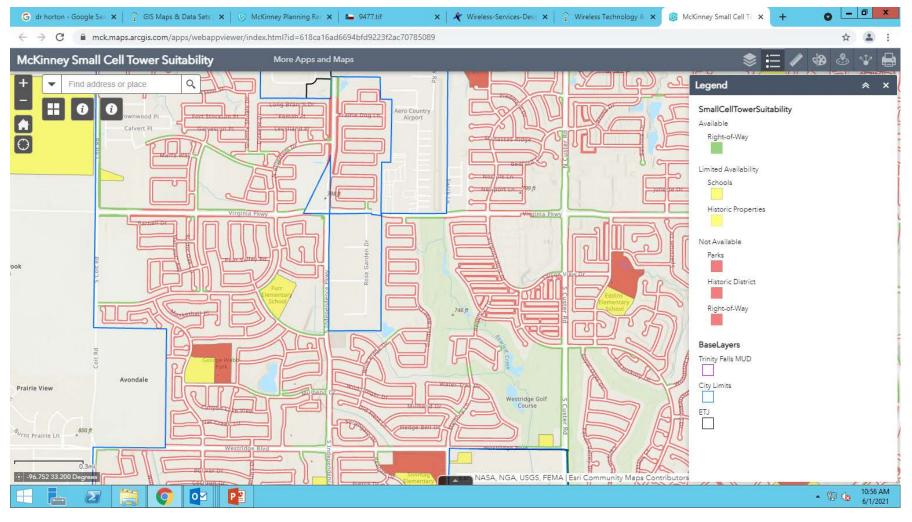
#### Other considerations

- AT&T has similar needs in the area, but this site is not in their budget until it has been approved by McKinney City Council
- Proposed Hemphill tower uses slimmest pole design available
- According to ISD, tower has been sited to provide least amount of disruption to school
- Tower design meets or exceeds City requirements (wall height, tower height, and property line setback)
  - Aesthetics will match school gymnasium

#### Other considerations

- Fall risk: At City-required wind load capacity (106 mph, EF-1 tornado), tower would be stressed to 58% of its load capacity; also, the tower is designed to buckle at 40'
- Intended to address coverage and capacity deficiencies in area (Top 5 site for VZW in the North Texas market)
- Provides safe and secure 911 service to neighborhood and school
  - Necessary infrastructure for growing city
- Increase in "work from home" demands better coverage and higher capacity

# Other considerations: McKinney Small Cell Suitability Map



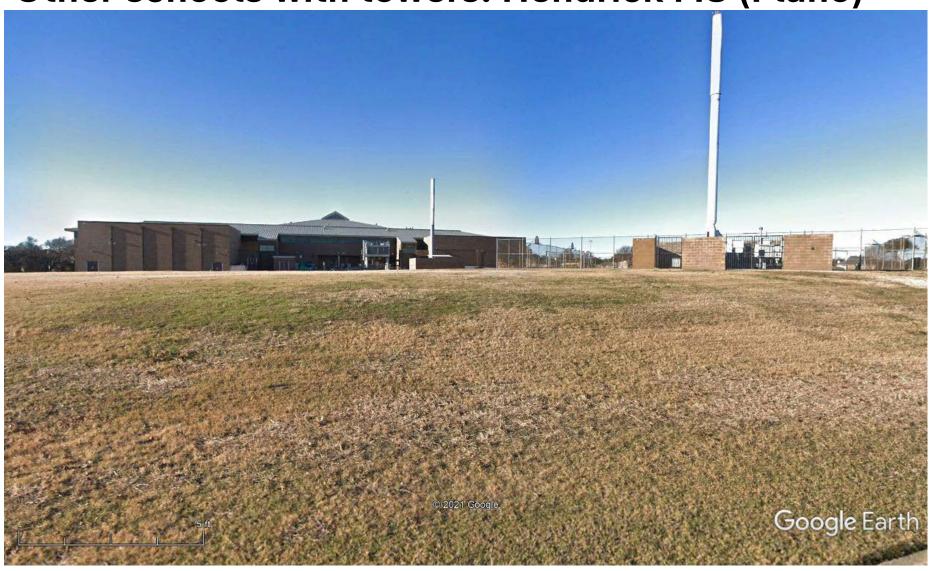
#### Other schools with towers

- Two proposed towers on Prosper ISD property
  - Cobb MS (Frisco ISD)
- Hendrick MS (Plano ISD) two towers on property
- Kerr ES, Vaughan ES, and Kerr MS (Allen ISD)

## Other schools with towers: Hendrick MS (Plano)



## Other schools with towers: Hendrick MS (Plano)



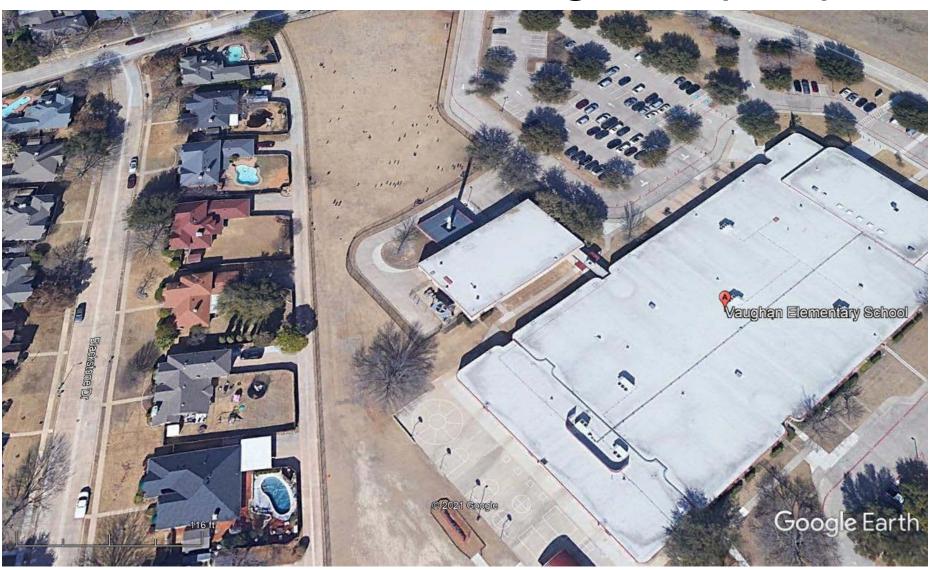
## Other schools with towers: Kerr ES (Allen)



## Other schools with towers: Kerr ES (Allen)



## Other schools with towers: Vaughan ES (Allen)



## Other schools with towers: Vaughan ES (Allen)

