

AGENDA ITEM SUMMARY

Subject: Public Housing Safety and Security Connectivity Project

Background Summary:

The following is an overview of the connectivity portion of CCHRA safety and security project at the three public housing sites (North Cedar Terrace, South Cedar Terrace, and Morningside). The focus of this project is installing and maintaining a robust video surveillance system that provides good coverage and clarity of all vital areas throughout the three properties accessible at the main office. The project will also allow CCHRA to provide Wi-fi services to tenants. Fiber connections at each site and back to the main office will be provided by Omnitel contingent on being granted Wisconsin Street Right of Way access by the City and high school easement approval.

Three alternatives for external connectivity to the sites have been considered:

1. CCHRA currently pays for a connection through Mediacom with a VPN tunnel setup between the site and SCT Main Office to retrieve the camera feeds. This is currently being done with the Morningside cameras. This has proven to be very ineffective, the connection is unstable at best, and it does not allow us to provide wi-fi services.
2. The second option considered was a gigabit wireless mesh between the sites, providing connectivity back to the main site without the overhead needed using the VPN option. This option is contingent on securing an access point on a business high enough to provide an unobstructed view between sites. This has been tried in the past and was not found to be effective or reliable. A site that meets the needed criteria has also proven difficult to find.
3. The third option considered is a mix of fiber connections between sites with tenant wireless onsite. Omnitel can provide 1 Gbps ethernet/fiber connections between all three sites through the vaults located near each of the three properties. This option provides the most secure and reliable connection. Camera feeds will transmit to the CCHRA office via fiber and allow wireless access points to be strategically placed throughout the properties at all sites creating a full mesh wireless system for tenants. The system will utilize enterprise network grade equipment capable of throttling client connections on a per device level.

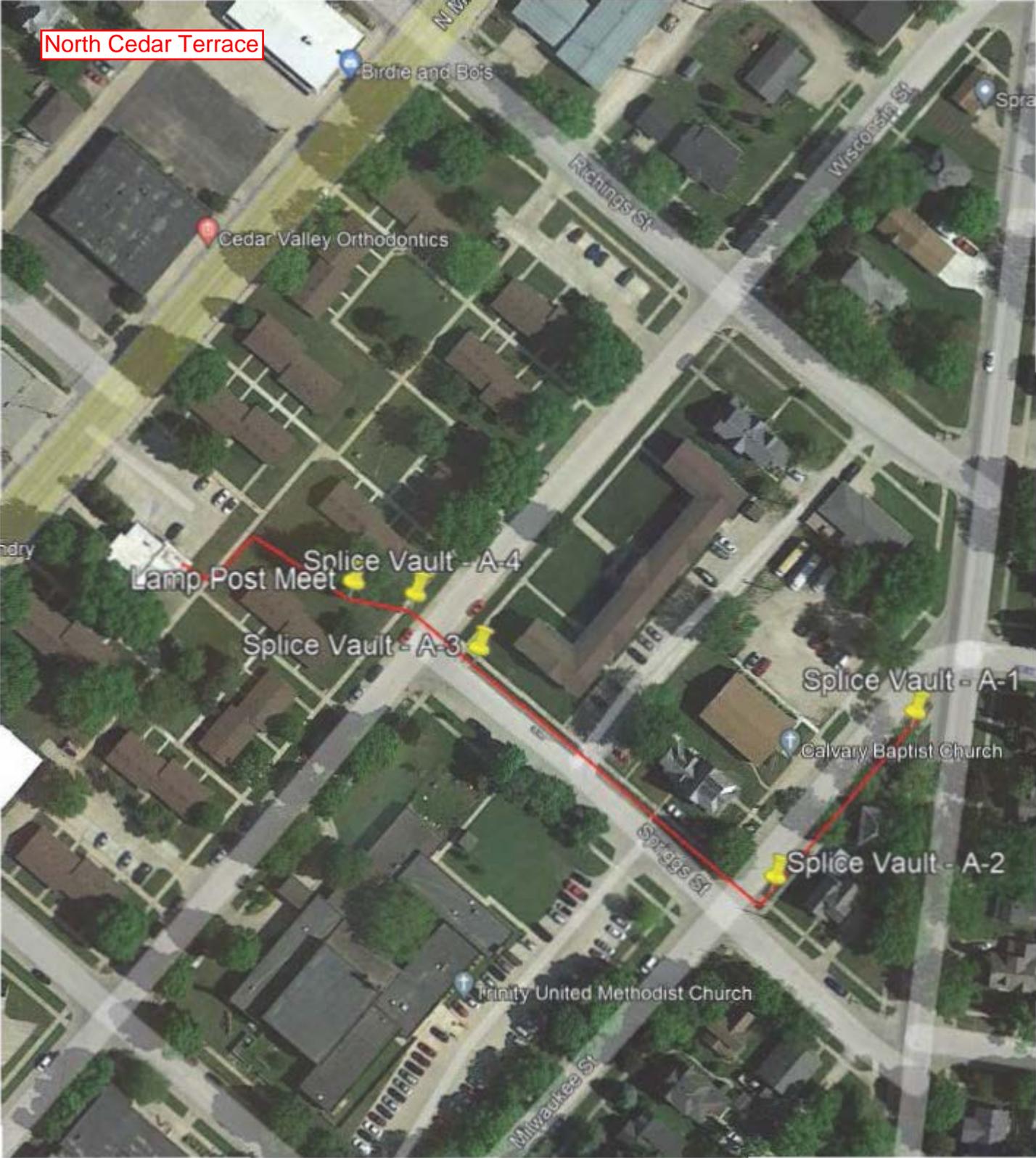
OMNITEL SITE CONNECTION PROPOSAL

- **North Cedar Terrace** (1 Gbps ethernet transit to South Cedar Terrace main office) Omnitel will build and meet CCHRA inner-duct on the East side of the sidewalk beyond the lamp post. Fiber will transit CCHRA duct from this point into the garage where our router will be placed .
- **Morningside** (1 Gbps ethernet transit to South Cedar Terrace main office). Omnitel will build across the street and express through a 2" duct owned by the Charles City Highschool to a vault on the East side of the parking lot. They will then bore south to the garage and place out router inside.
- **South Cedar Terrace** (1 Gbps Symmetrical dedicated internet connection, 1 Static IP address included) Fiber will be bored under the parking lot from the west and enter the office building where router will be placed.

Costs & Funding

The cost for infrastructure/construction (inclusive of all sites) is a onetime fee of \$20,000. This portion of the project will be paid for with the HUD Safety and Security grant specified for these type of capital projects. The onsite boring at NCT is integrated into the electrical project slated to begin this spring. The ongoing service cost on a 36 month term is \$1,100 per month for the ethernet circuits, unmetered internet access and static IP. The monthly costs will be paid for out of operating funds. We currently paid \$363 per month for the Mediacom Connection at Morningside that is not used due to its instability.

North Cedar Terrace



Lamp Post Meet

Splice Vault - A-4

Splice Vault - A-3

Splice Vault - A-1

Calvary Baptist Church

Splice Vault - A-2

Trinity United Methodist Church

Birdie and Bo's

Richings St

Wisconsin St

Spriggs St

Milwaukee St

Cedar Valley Orthodontics

Spr...

Morningside Apts

Charles City High School

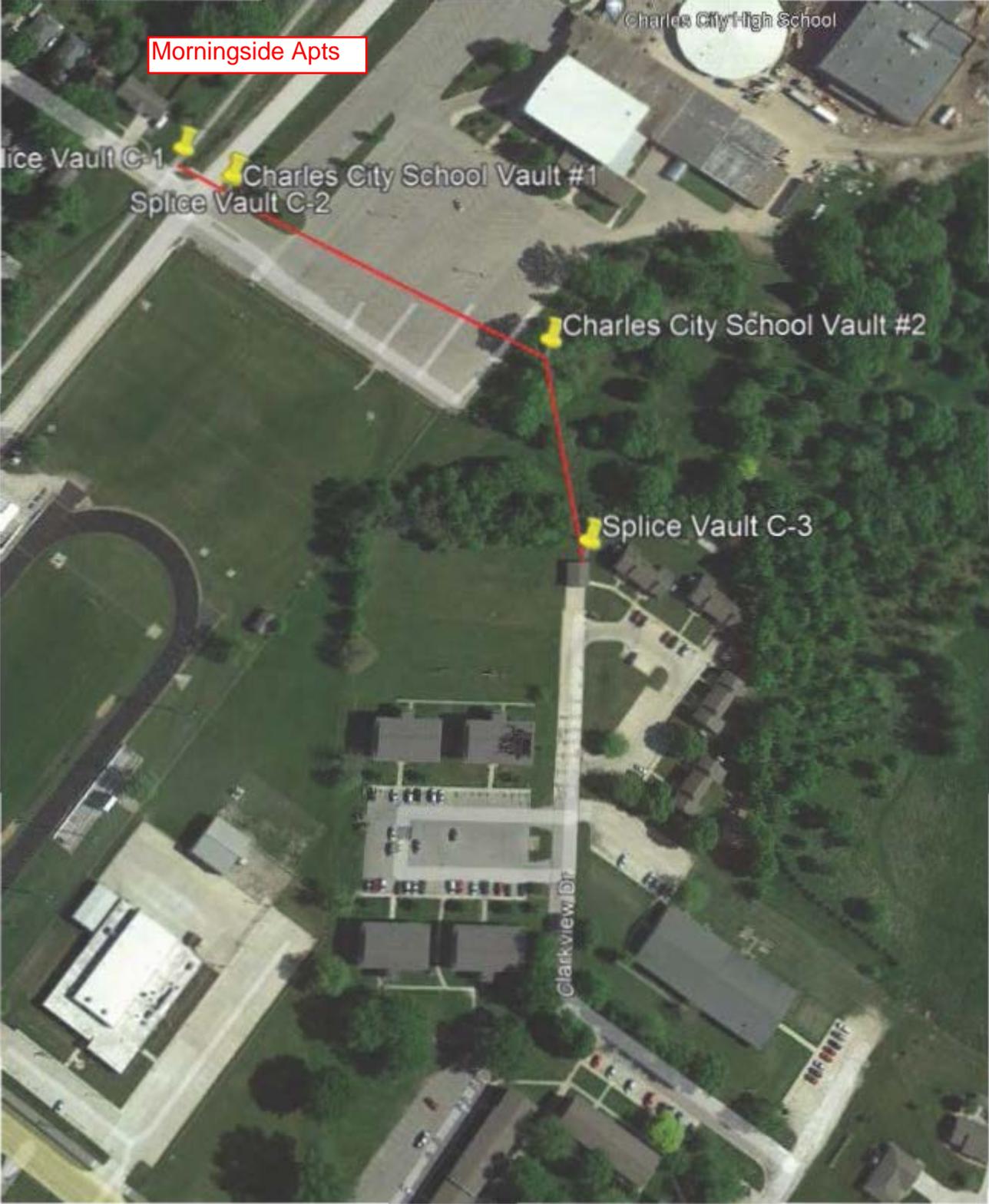
Splice Vault C-1

Charles City School Vault #1
Splice Vault C-2

Charles City School Vault #2

Splice Vault C-3

Clarkview Dr



South Cedar Terrace

Splice Vault B-1

Cedar River

Charles City Whitewater

Kwik Star #468

ATM

Cedar Terrace St

Gilbert St

Kniesel Cir

200th Ave

Floyd County Museum

Gilbert St

