



**JOINT CITY COUNCIL AND PLANNING COMMISSION WORK SESSION
RICHFIELD MUNICIPAL CENTER, BARTHOLOMEW ROOM
SEPTEMBER 27, 2021
6:00 PM**

Call to order

Work Session Discussion Items

1. Electric vehicle charging standards: Staff will review current charging standards and options. Commissioners and Council Members will consider the number or percentage of chargers that could be required for new residential, commercial, and other developments.
2. Bicycle parking standards: Staff will review standards in Richfield and in neighboring cities. Commissioners and Council members will consider the number or percentage of bike racks that could be required for residential, commercial, and other developments.
3. Firearms sales regulations: Staff will also follow-up with policymakers on work related to uses involving firearms. Staff will briefly review feedback from the July 26 work session and discuss whether or not additional modifications to buffering distances are desired.

Adjournment

Auxiliary aids for individuals with disabilities are available upon request. Requests must be made at least 96 hours in advance to the City Clerk at 612-861-9738.



Electric Vehicle Charging Stations



Background on EV Chargers

- EV charging infrastructure: needed to reduce transportation emissions¹ which are 29% of U.S greenhouse gas emissions² (the largest share).
- Need 9,000 to 16,000 chargers to get EV vehicles to 10% of the market share in the Twin Cities Metro.
- Currently have only 500 charging units in Metro.¹
- Globally, EV sales jumped from 450,000 in 2015 to 2.1 million in 2019. EV sales will increase to 8.5 million by 2025 - battery prices decreasing, more models available³.

Background on EV Chargers

- 3 levels (types) of EV charger¹:

type	Cost	Charge Speed	Best for
Level 1	\$400 - \$1,000	120 volt 3-4 miles/hour	Residential, for those who drive under 40 miles/day
Level 2	\$2,000 to \$10,000	240 volt 18-28 miles/ hour	Workplaces, commercial, multi-family, parks, etc.
DC (fast)	\$40,000 to \$100,000	50-150 kW 80-90 miles in 30 minutes	Large commercial destinations, existing gas stations, fill in long-distance travel networks.

Ultra-fast charging stations (350kW) can charge vehicles with large batteries (100kWh+) to 80% in about 15 minutes. Vehicles that can accept that power level are only starting to enter the market.¹

Current stats in MN

- EVs made up about 1.9% of new car sales in MN in 2018².
- **Vision of 20% EVs by 2030** (published by MnDOT, MPCA, GPI)
- *Cities Charging Ahead* (2018):
 - Year-long program organized Great Plains Institute and Clean Energy Resource Teams (CERTs)
 - 28 MN cities, including Richfield, worked together, explored electric vehicle readiness
 - 12 cities have purchased, leased, or plan to purchase a total of 21 EVs
 - 11 cities installed/planned to install a total of 27 charging stations.
 - 13 cities either accomplished/are working towards implementing guidance on EV-ready development in the private sector

Neighboring Communities' Policies

- Minneapolis:

- *New lots/structures with <10 parking spaces are not required to install EV chargers.*

Use	Electric Vehicle Charging Stations	Electric Vehicle Ready Spaces
up to 3 residential units	None	Minimum of 1 L2 space if parking is provided. All remaining enclosed accessory parking spaces shall support L1 charging.
4 to 9 residential units	None	Minimum of 1 L2 space. All remaining enclosed spaces need L1.
10+ residential units	10% L2 charging. Installation not required when fewer than 10 parking spaces are provided.	Additional 20% L2 chargers.
non-residential uses with 20+ parking spaces	5% capable of L2 charging.	Additional 5% L2 chargers.

Neighboring Communities' Policies

- St Louis Park:

- *New lots/structures with <15 parking spaces are not required to install EV chargers.*
- *New or reconstructed motor fuel stations shall be required to install at least one L2 or DC charging station.*

New or expanded lots or structures with 15 to 49 spaces

Use	Electric Vehicle Charging Stations	ADA
<i>Multi family</i>	5% of spaces at L1	At least one ADA space
<i>Non-residential</i>	one L2 station	At least one ADA space

New or expanded lots or structures with 50 or more spaces

Use	Electric Vehicle Charging Stations	ADA
<i>Multi family</i>	10% of required parking at Level 1 1 space for guests at level 2	At least one ADA space
<i>Non-residential</i>	1% of required parking at Level 2. Min. two spaces with Level 2 charging (DC stations may be installed on a 1:1 ratio instead)	At least one ADA space

Neighboring Communities' Policies

- Bloomington:
 - *New, multi-family developments require L2 charger or higher, at 1 space/50 units*
 - *General EV charging standards (location, type, etc.) included in code*
 - *Regulations for installation at fuel stations/convenience facilities: setbacks, installation standards, etc.*



Best Practices - Recommendations

- **Minnesota B3 Building Guidelines⁴ (“green building” resource) recommendation:**
Install alternative-fuel refueling or plug-in electric vehicle charging station(s) for **3% of the total vehicle parking capacity of the site.**
- **Great Plains Institute’s Zoning Code best practices for cities to be “EV ready”¹:**
 1. Electric Vehicle Charging Station as Permitted Land Uses
 2. Electric Vehicle Make-Ready Standards (conduit installation)
 3. Electric Vehicle Supply Equipment Standards (standards or required design of charging equipment or charging station infrastructure)
 4. Electric Vehicle Parking Space Design and Location
 5. Required EV Parking Capacity & Minimum Parking Requirements
 6. EV-Designated Parking Use Standards and Protections
 7. Signage, Safety, and other standards
 8. Definitions of Terms

Best Practices - Recommendations

- **Zoning changes recommended:**
 - Chargers as 'Permitted Use' in all districts
 - Assign required percentages based on
 - Lot size and use, and/or
 - amount of parking provided/required
 - Mix of conduit ("EV ready") requirements and fully-installed station requirements
 - Design, setback, ADA requirements
 - L2 requirements as base, L1 and DC requirements in special circumstances

Sources

1. Great Plains Institute
<https://www.betterenergy.org/blog/reducing-transportation-emissions-through-better-zoning/>
2. Sources of Greenhouse Gas Emissions,
<https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions#transportation>
3. Electric Vehicles in Minnesota
<http://www.dot.state.mn.us/sustainability/docs/ev-finance-summary.pdf>
4. Accelerating Electric Vehicle Adoption: A Vision for Minnesota,
<http://www.dot.state.mn.us/sustainability/docs/mn-ev-vision.pdf>
5. Minnesota B3 Building Guidelines,
http://www.b3mn.org/guidelines2-2/s_12.html



Bike Parking Requirements



Current Richfield policies

- Required for auto parking lots with more than 20 parking spaces at **5%** of the number of required off-street parking spaces.
- Can be reduced by the Director if proof can be provided that such spaces will not be used.

(Zoning Code 544.17, Subd. 2)

Neighboring Communities' Policies

- **Edina**
 - If 20 or more spaces: bicycle parking at 5% of auto parking requirement (*This is the same as Richfield*)
- **St Louis Park**
 - Multi-Family: One bicycle parking space/dwelling unit, plus one bicycle parking space per ten automobile parking spaces.
 - Commercial, office and industrial uses: Bicycle parking spaces at 10% of auto parking spaces, not less than four bicycle parking spaces.
 - Schools: one bicycle parking space per ten students.
- **Eden Prairie**
 - Residential: one space/two dwelling units
 - Office: ten spaces, plus one space per 7,500 square feet of gross floor area.
 - Commercial and Public: ten spaces, plus one space per 3,500 square feet of floor area.
 - Light Industrial: ten spaces, plus one space per 10,000 square feet of floor area.
- **Roseville**
 - Bicycle parking spaces equal to 10% of the automobile parking space requirement, but not less than four bicycle parking spaces. No bicycle parking spaces are required for Low-density Residential.
 - Schools: 1 bicycle parking space per ten students

Neighboring Communities' Policies

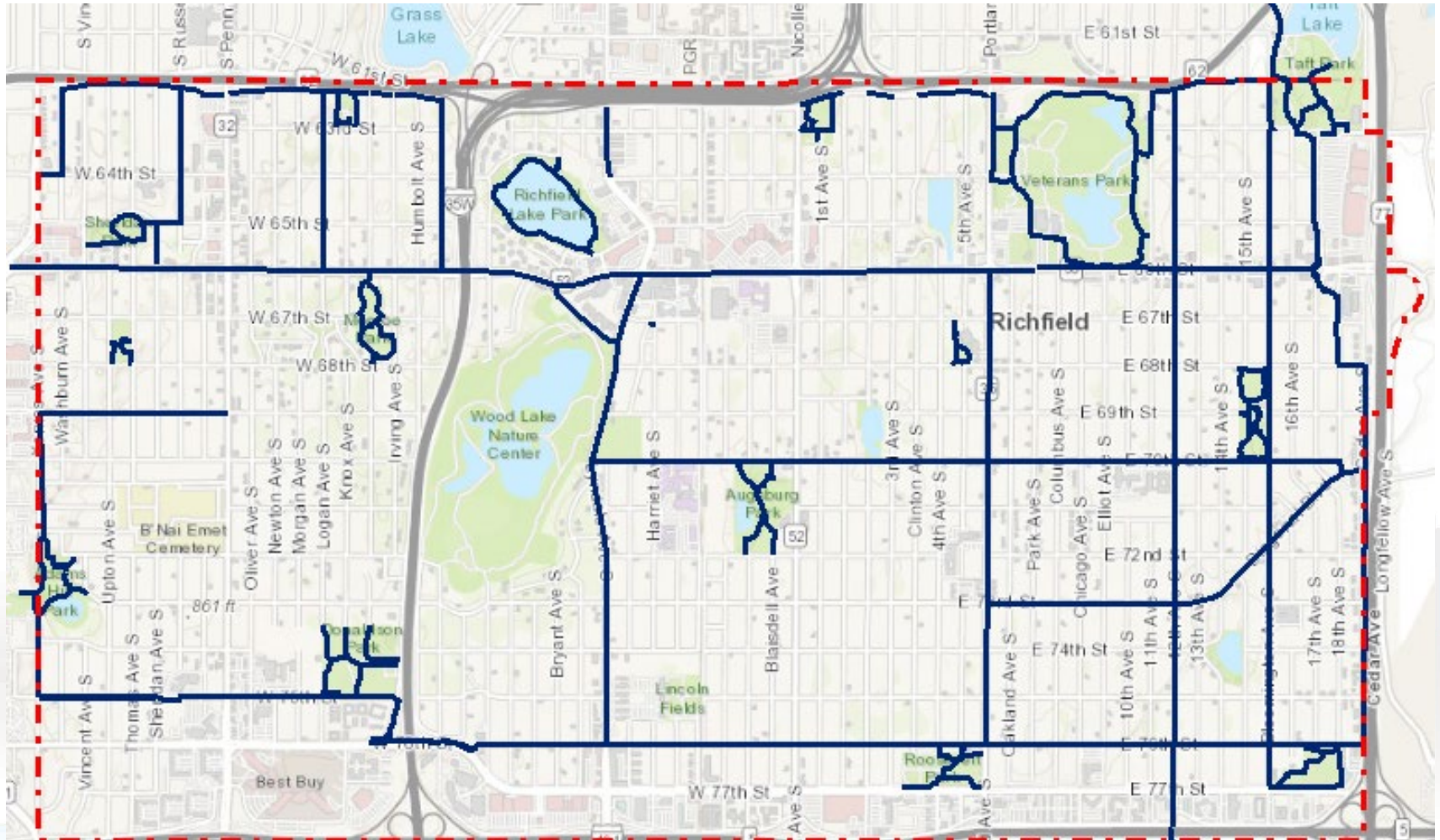
- **Minneapolis**

- Residential 4+ units: One bicycle parking space per dwelling unit, 90% of spaces are long-term (enclosed, secured, or supervised areas providing theft/vandalism/weather protection)
- Commercial, Institutional and Public uses with 1,000+ sq. ft.: the greater of 3 short-term spaces or specific ratios based on land use: Schools, 3 spaces per classroom ; grocery stores, community centers, theatres, etc, 1 space per 2,000 square feet gross floor area.
- bicycle parking spaces, shower facilities, and clothing storage areas required for all developments with 200,000+ square feet.

- **St. Paul**

- Residential: a minimum of one secure bicycle parking space for every fourteen units.
- Off-street parking areas: minimum of one secure bicycle parking space for every twenty motor vehicle parking spaces

Richfield Bike Trails



Best Practices - Recommendations

- Consider short-term parking vs. long term parking
 - Visibility and convenience in short-term parking - customers or visitors that need to park for up to a couple hours
 - Security and weather protection in long-term parking – residents, or employees who travel by bike
 - ex: Require an enclosed and covered “bike storage” area for larger commercial or industrial uses, large employment destinations, and multi-family residential
- Required bicycle parking for commercial, industrial, public, etc. at a percentage of car parking, and/or require a base minimum (*what Richfield currently has*)
 - ex: bike spaces at 10% of auto spaces, but no fewer than 3 bike spaces.
 - ex: 3 spaces, plus one space per 2,000 square feet of floor area.
 - ex: Schools: 1 space for every 10 students, or per classroom



Zoning – Firearms-Related Uses

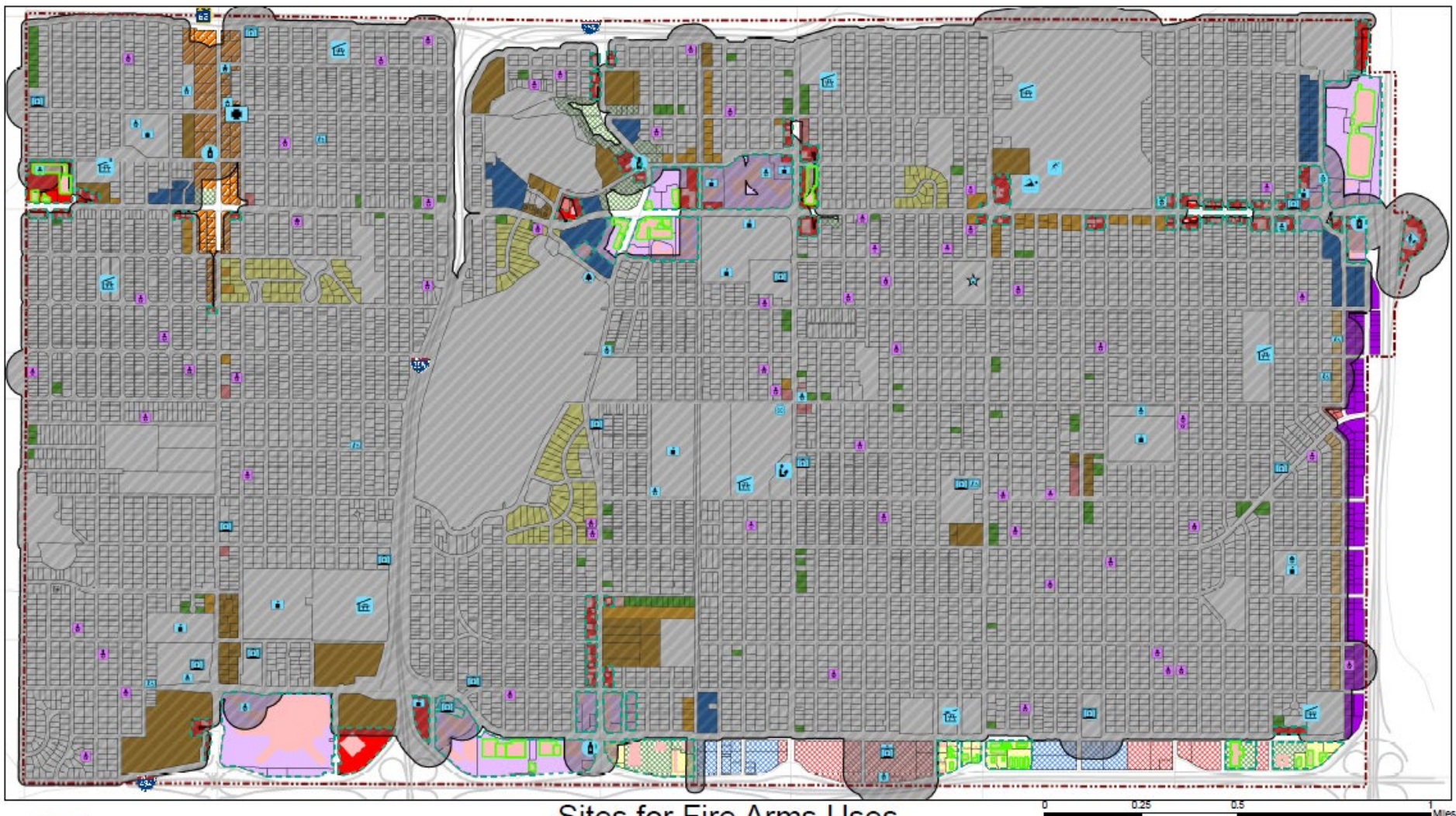


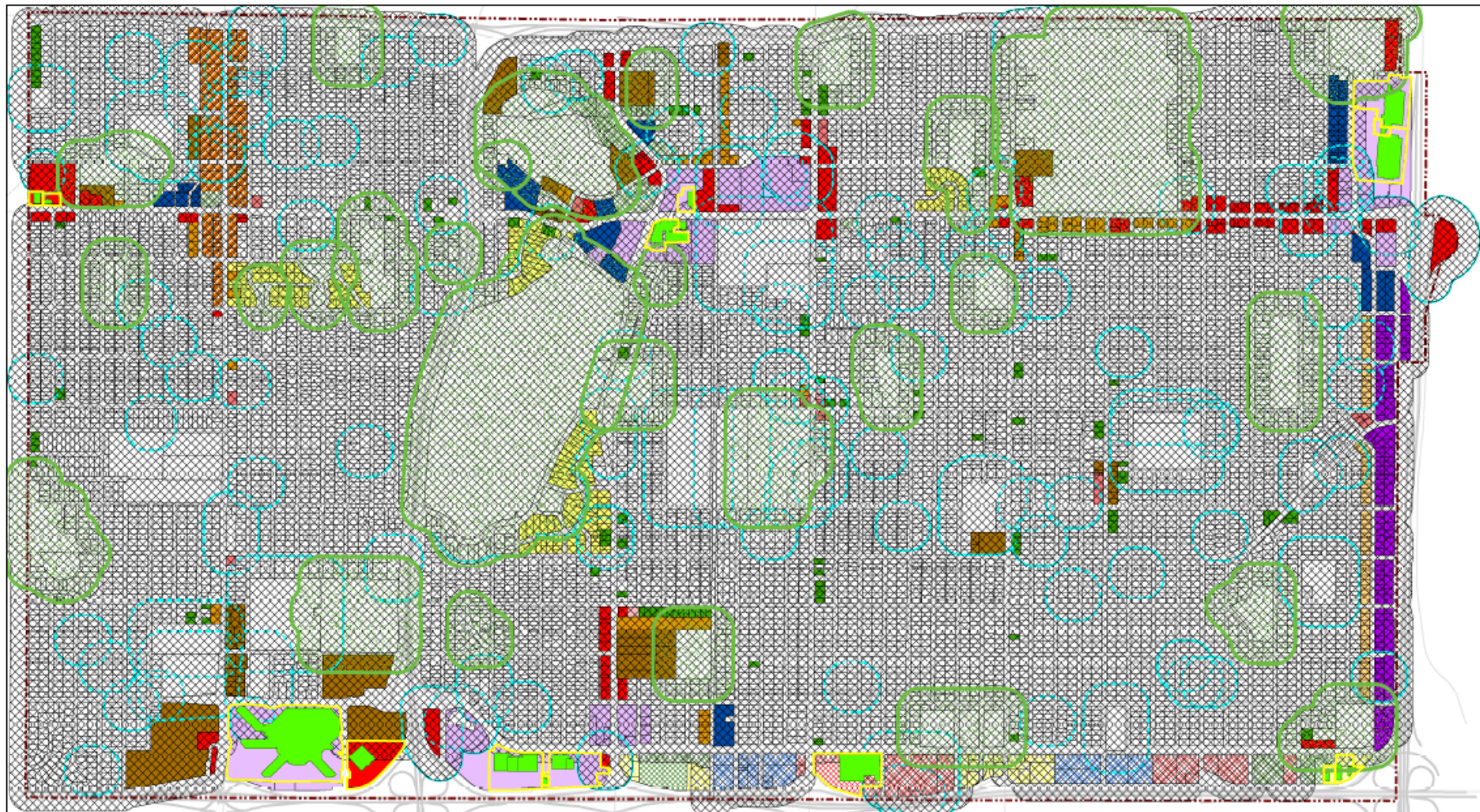
Richfield's Current Regulations

- Conditionally permitted in C-2 & MU-R.
- 100 ft from residentially zoned property.
- 300 ft from schools, churches, daycares, public libraries, or gov't buildings.
- 1,000 ft from other gun or ammunition business.
- Hours of operation 8 a.m.- 9 p.m.
- Soundproofing, transport, storage, outside security plan, alarm system, firing ranges.

July 26 Feedback

- Should continue to require CUP in all instances.
- Add MU-C to allowable locations.
- Increase residential buffer to 250 ft – apply to both used and zoned.
- Add Parks to list of “protected” uses.





Legend

- Revised Buffer (250 ft from Residential Zoning or Use AND 300 ft from certain uses & 1,000 ft from existing FA uses)
- Buildings where a portion of floor area would be eligible
- 300 ft buffer from Parks

NOTE: Sites identified as eligible may be arranged such that only portions of the building may have fire arms tenants, or they were deemed to have sufficient area for a building addition or where a building could be elsewhere constructed.

Sites for Fire Arms Uses

Zoning Districts

- R Single-Family
- R-1 Low-Density Single-Family
- MR-1 Two-Family
- PMR Planned Multi-Family
- MR-2 Multi-Family
- MR-2/CAC Multi-Fam + Cedar Overlay
- MR-3 High-Density Multi-Family
- SO Service Office
- C-1 Community Commercial

- C-2 General Commercial
- PO-2 Planned General Commercial
- PMU Planned Mixed Use
- MU-C Mixed Use-Community
- MU-C/CAC Mixed Use + Cedar Overlay

- MU-C/CAC Mixed Use + Penn Overlay
- MU-N Mixed Use-Neighborhood
- MU-R Mixed Use-Regional
- I Industrial

0 0.25 0.5 1 Miles



Discussion

Questions

- Does this capture our previous discussion accurately?
- Are there additional items to consider?

Tentative Timeline

- October 25 – Public Hearing PC
- November 9 & December 14 – 1st & 2nd Reading CC
- May 11, 2022 – Moratorium Expires