



**FOUR CORNERS INTERSECTION IMPROVEMENTS**  
Founders Parkway / Fifth Street / Hwy 86 / Ridge Road

# Four Corners Intersection Improvements

Online Open House Meeting #2

July 27, 2021



## FOUR CORNERS INTERSECTION IMPROVEMENTS

Founders Parkway / Fifth Street / Hwy 86 / Ridge Road

# Welcome!

### ■ Agenda:

- Project and recommended improvements recap
- Design overview
  - Bicycle lanes
  - Safety Improvements
  - Business access
- Next steps
- Discussion/Q&A

### ■ Objectives:

- Present design progress and decisions
- Listen to questions and comments regarding the design progress

[www.CRgov.com/4Corners](http://www.CRgov.com/4Corners)



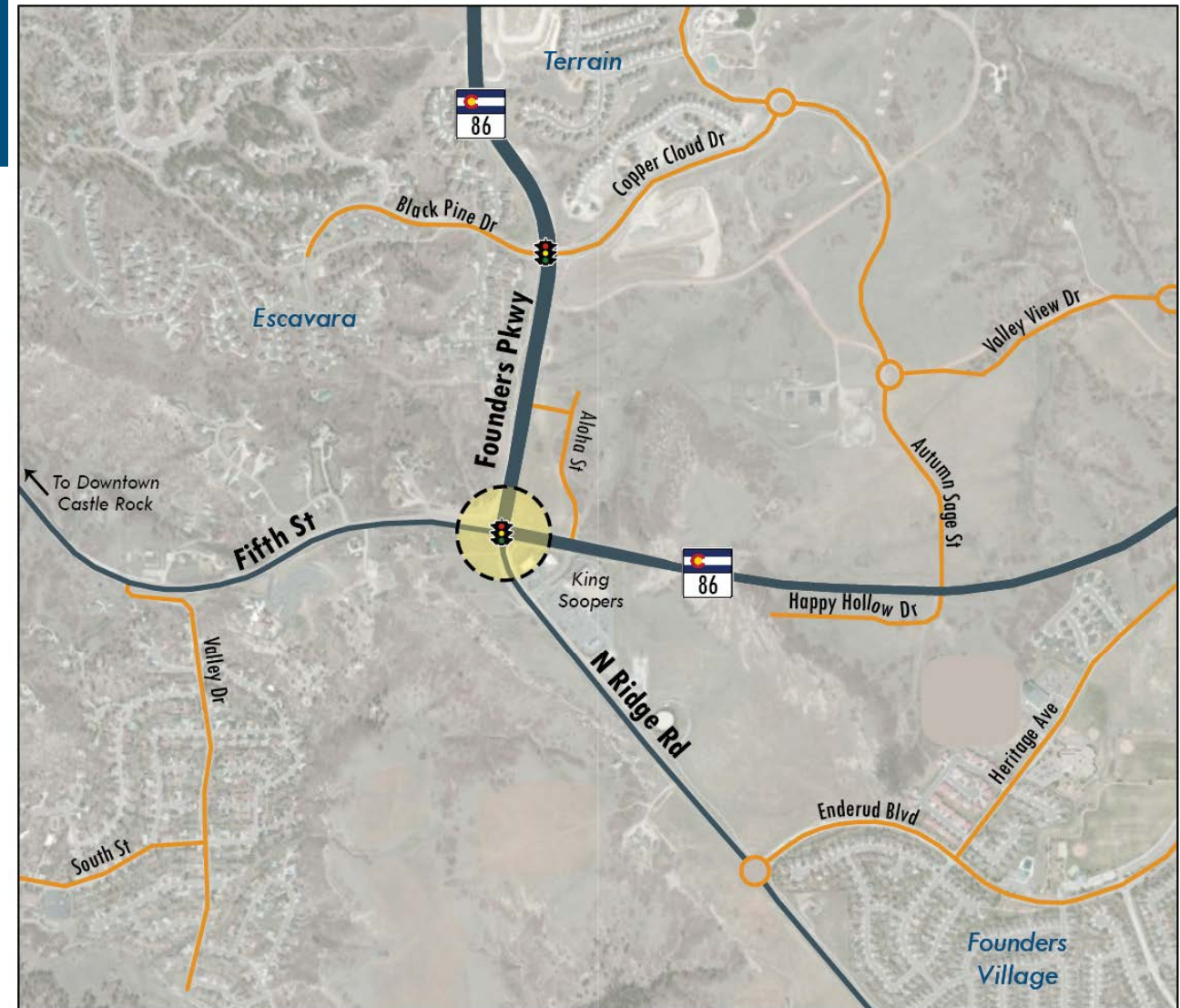
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# Project Recap

## Project Area & Funding

- Focused on intersection of:
  - Founders Parkway
  - Fifth Street
  - State Highway 86
  - Ridge Road
- \$1.2 M design
- \$5.3 M for construction



### Legend

-  Traffic Signal
-  Project Focus Intersection



0 0.25 Miles





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# Need for Improvements

- 10,000 people live within 1 mile of the intersection
  - Substantial planned residential and retail developments
- Additional multimodal connections
- Safety and mobility improvements
  - Reducing backups and delays



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# Project Objectives and Goals

- Improve traffic operations
- Enhance safety and mobility through the intersection
- Develop a cost-effective immediate solution
  - Accommodate future travel patterns and multimodal demand
- Connect seamlessly to future projects on Fifth Street and Ridge Road



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# Alternatives Evaluation

- Alternatives Considered
  - Improved Signalized Intersection
  - Two/Three-Lane Roundabout
  - Partial Continuous Flow Intersection (CFI)
  - Quadrant Road Intersection (Northeast)



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### Decision-making Factors

- **Traffic Operations and Safety** – future peak hour delay and queues, potential crash reduction, driver expectancy, freight movements
- **Multimodal Connections** – pedestrian/bike crossing conflicts and comfort & safety
- **Community and Environment** – property impacts, access modifications, potential environmental impacts
- **Constructability** – construction cost, maintenance, opportunity for future expansion, maintaining traffic during construction



# Evaluation Results

### ELIMINATED

#### Partial Continuous Flow Intersection (CFI)

- Poor operations for heavy WB right turning traffic
- Property impacts due to larger footprint
- High cost

### ELIMINATED

#### Quadrant Road Intersection (Northeast)

- Not enough capacity for heavy SB left turning traffic
- Difficult to navigate operational issues along Aloha Drive
- Property and business impacts
- High cost

### LESS FAVORABLE

#### Two/Three-Lane Roundabout

- Improved intersection operations
- Reduced turning conflicts, but safety concerns during off-peak hours
- Some difficulties for pedestrians and bicyclist to navigate
- Property and business impacts

### RECOMMENDED

#### Improved Signalized Intersection

- Improved intersection operations and safety with reduced delays and queues
- Easy to navigate for all travelers, including freight
- Comfortable for bicyclists and pedestrians
- Least impactful to adjacent properties

# Improved Signalized Intersection

- Added lanes at signal on each leg
- Free right turn movements
- Signal timing and phasing improvements (protected left turns)



## Legend



Traffic Signal



New or Widened Pavement



Raised Median/Island



New Sidewalk



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# Design Overview

## Design Progress

- Further operations evaluation/design
  - Pedestrian and bicycle accessibility
  - Signal timing and phasing
  - Access considerations
- Detailed design
  - Medians
  - Slopes and grading
  - Ability to widen existing pavement
  - Coordination with utilities
  - Minimization of impacts



# Bicycle Lanes

- Feature of the overall design
- Bicycle lanes added on 5<sup>th</sup> Street and Ridge Road
  - Bicycle lanes will connect with sidewalk to avoid the traffic lanes in the intersection
  - 5<sup>th</sup> Street- bicycle lane will continue to the west with the 5<sup>th</sup> Street project
  - Ridge Road project- bicycle lane will continue from sidewalk

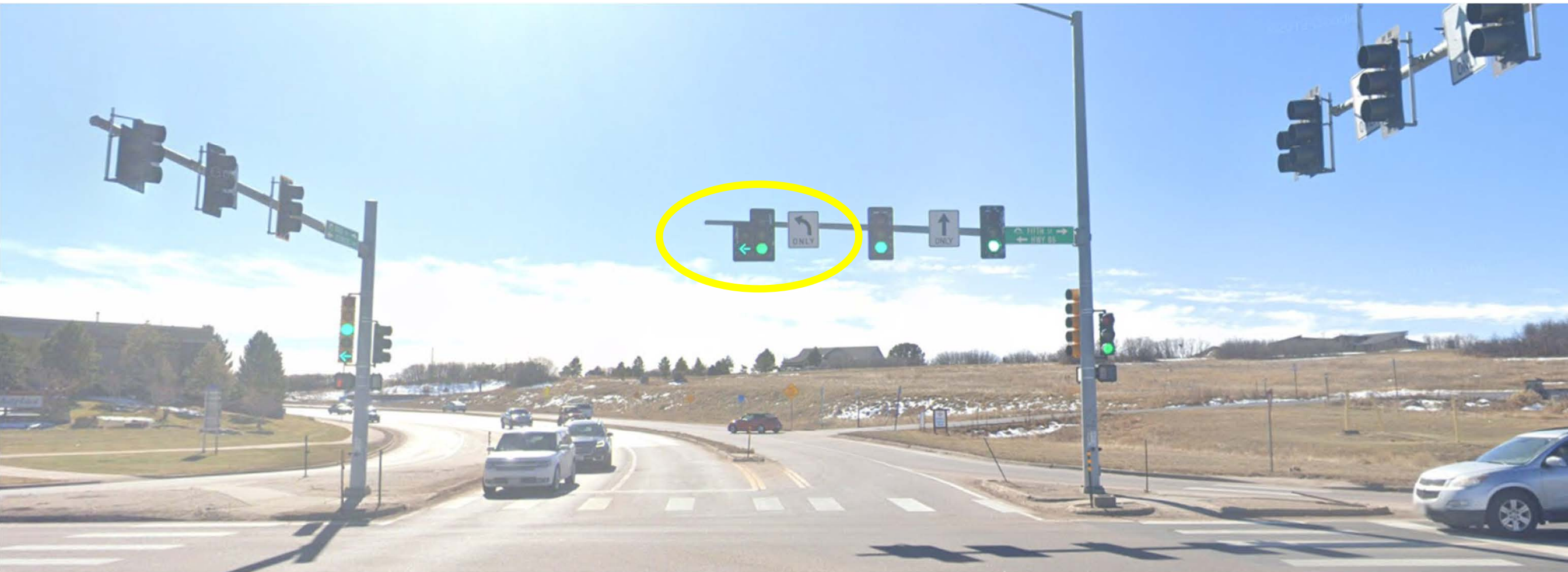




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## Safety Improvements



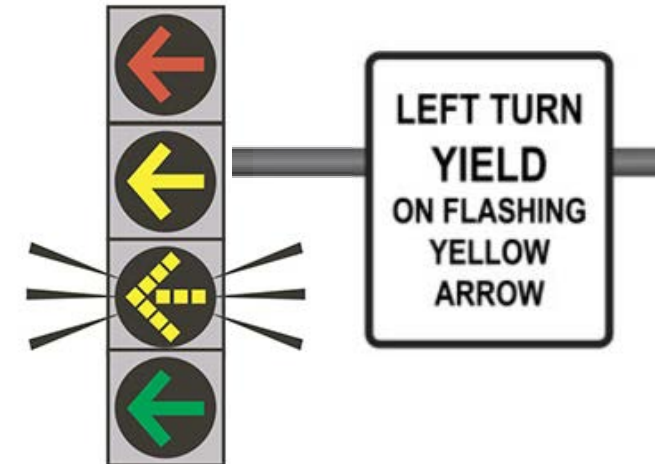
# Safety Improvements

- Intersection will now have green turn arrows at Founders and N Ridge Road rather than permissive left
- Added capacity (through traffic lanes) will reduce backups and therefore, rear-end crashes
- Added turn lanes will reduce conflicts

Founders and  
N Ridge Road

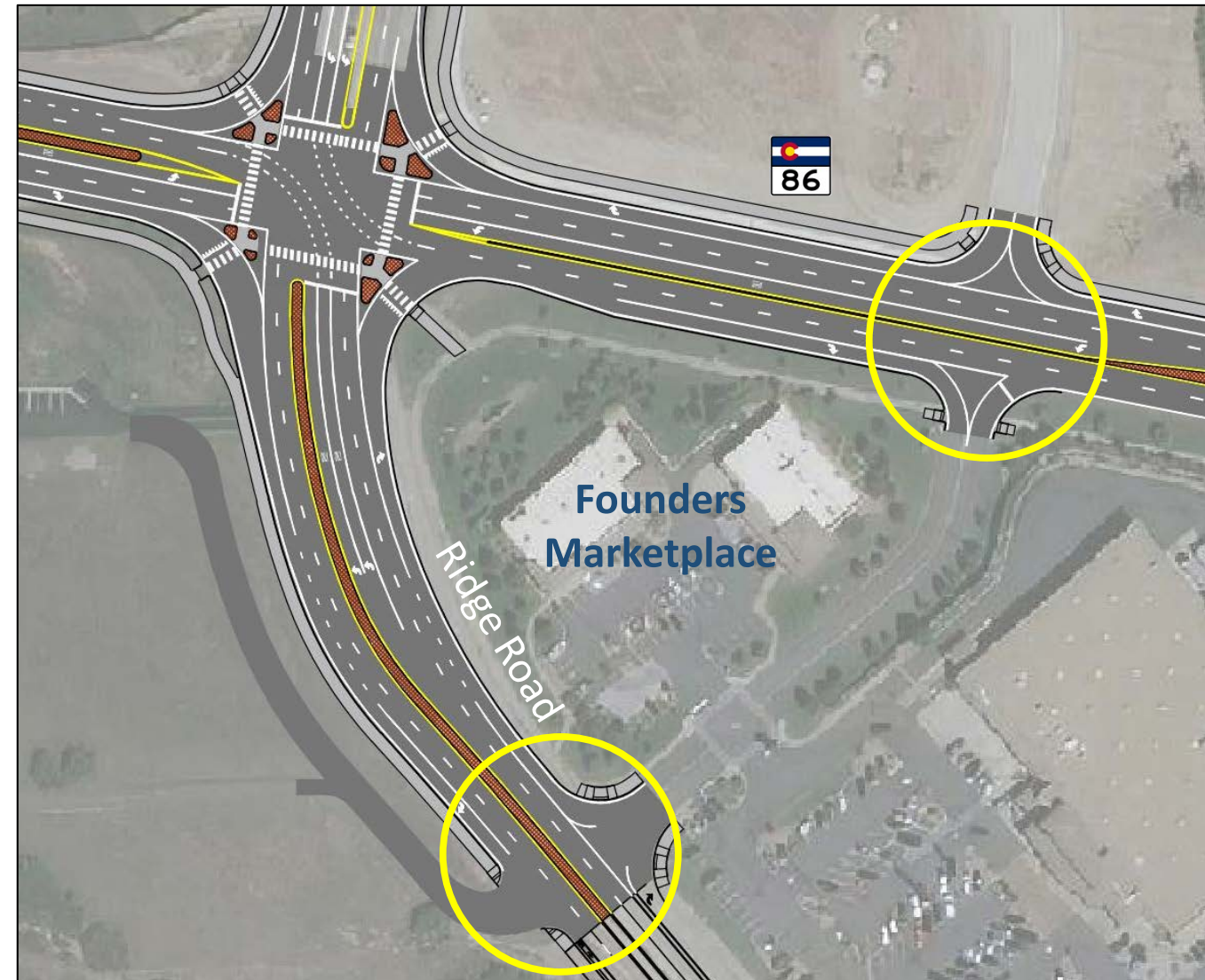


5<sup>th</sup> Street and  
CO 86



## Business Access

- Founders Marketplace Access
  - CO 86 Access
  - Ridge Road Access
    - Evaluated roundabout
    - Cost-prohibitive with current construction budget, but feasible; potential future improvement
    - Outside scope of project







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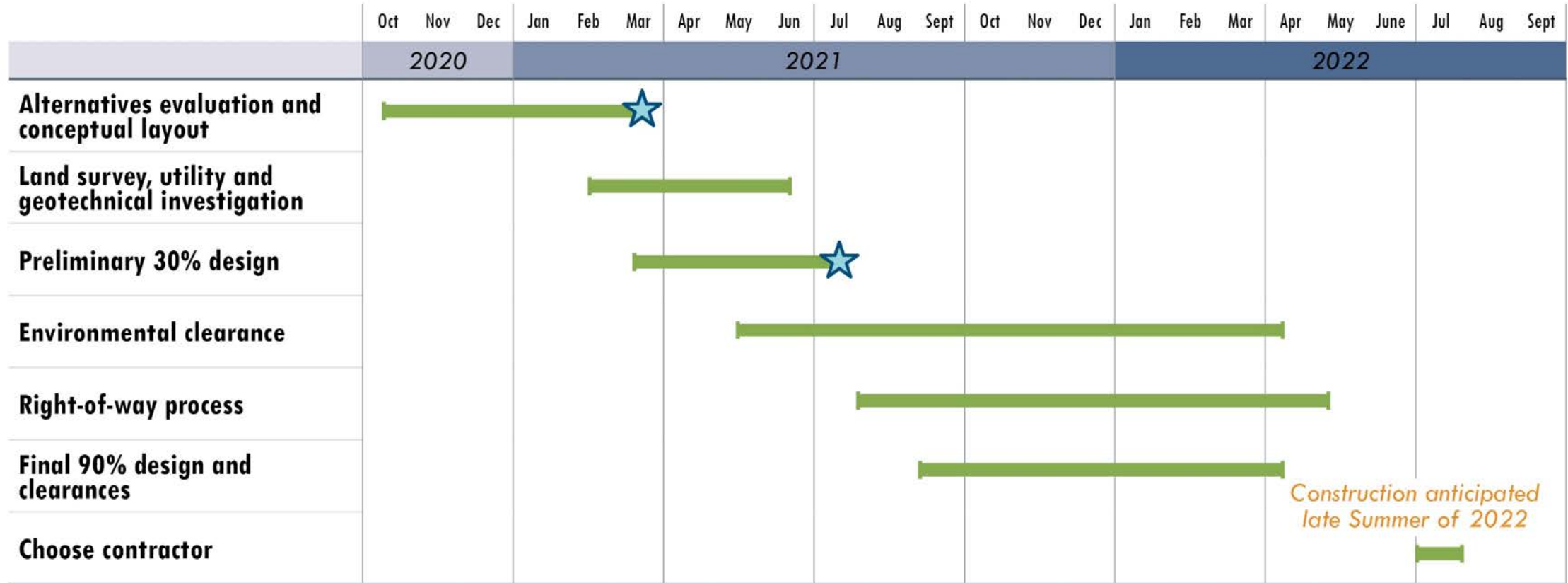
# Next Steps



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## Schedule



Construction anticipated late Summer of 2022

Last Updated 7/26/21

★ Public Open House Meeting



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# Stay Engaged

- View project updates, join the mailing list, and submit comments
  - Project web page: [www.CRgov.com/4Corners](http://www.CRgov.com/4Corners)
  - Call or email:
    - Brian Kelley, PE, Town of Castle Rock Engineering Division Manager  
bkelley@crgov.com  
303-681-8078
    - Leah Langerman, Consultant Community Engagement Specialist  
leah.langerman@deainc.com  
720-225-4651



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# Discussion/Q&A



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Thank you!