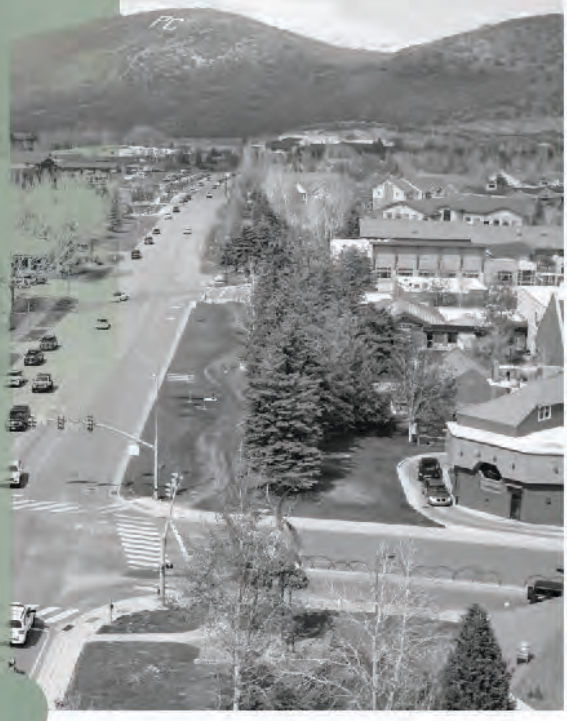
Re·create 248

LEVEL 2 SCREENING REPORT

November 2025



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Acronyms and Abbreviations

ADA	Americans with Disabilities Act
BRT	Bus Rapid Transit
CTTP	Census Transportation Planning Products
CIG	Capital Improvement Grant
EOL	End-of-Line
ESA	Endangered Species Act
ELB	Exclusive-Lane Buses
FTA	Federal Transit Administration
FTA STOPS	Federal Transit Administration Simplified Trips-on-Project Software
GIS	Geographic Information System
GTFS	General Transit Feed Specification
HVT	High Valley Transit
LPA	Locally Preferred Alternative
LRT	Light Rail Transit
LUST	Leaking Underground Storage Tank
NEPA	National Environmental Policy Act
OTTC	Old Town Transit Center
OCS	Overhead Catenary System
PCSD	Park City School District
PCMC	Park City Municipal Corporation
PCT	Park City Transit
Rail Trail	Historic Union Pacific Rail Trail
Re-create 248	Re-create 248 Transit Study
ROM	Rough Order of Magnitude
ROW	Right-of-Way
SWG	Stakeholder Working Group
TAC	Technical Advisory Committee
TSP	Transit Signal Priority
UDOT	Utah Department of Transportation
UST	Underground Storage Tank
UTA	Utah Transit Authority
VMT	Vehicle Miles Traveled

1 STUDY OVERVIEW

1.1 INTRODUCTION

Park City Municipal Corporation (PCMC), located in Summit County, Utah, in collaboration with the Utah Department of Transportation (UDOT), initiated the Re-create 248 Transit Study (Re-create 248). This multi-step alternative evaluation study is aimed at enhancing reliable high-capacity transit service along the SR-248 corridor, Bonanza Drive, and Deer Valley Drive that can be advanced to the next phase of project development: a Federal Transit Authority (FTA) National Environmental Policy Act (NEPA)-level environmental study and preliminary engineering.

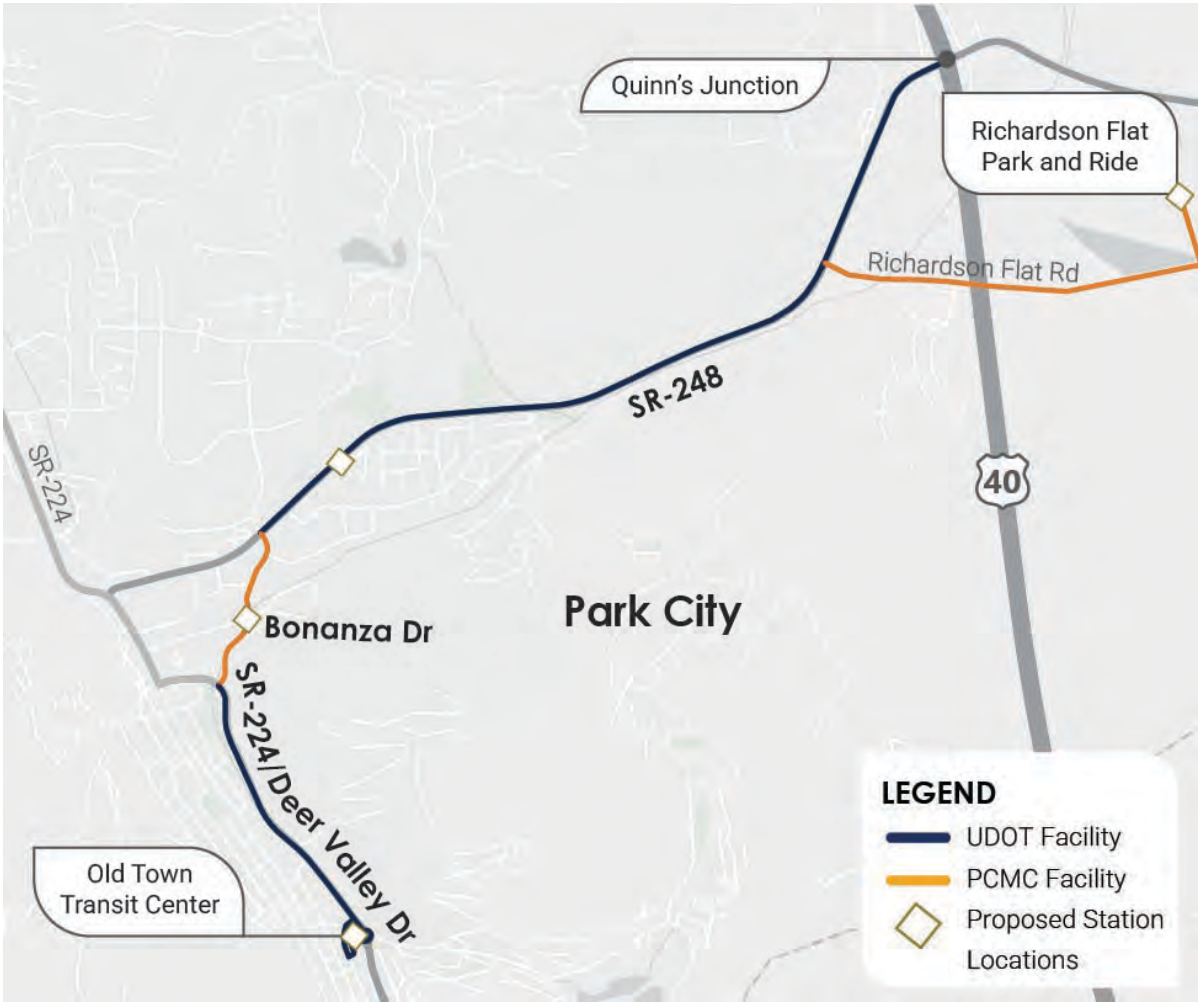


Figure 1. Re-create 248 Level 2 Screening Study Area

This study, using a Level 1 (initial) and Level 2 (detailed) screening process, identifies the recommended a locally preferred alternative (LPA) that includes a definition of areas to be served, transit mode/type of transit technology, and logical termini (project limits). Level 1 screening was completed in fall 2025.

1.2 STUDY AREA

The study area for Re-create 248 is between the Quinn's Junction area (near the SR-248 and US-40 interchange) and the Richardson Flat Park and Ride on the east, along SR-248, then south along Bonanza Drive and Deer Valley Drive to the Old Town Transit Center (OTTC) on the west (Figure 1). End-of-line (EOL) to the east was further defined since the prior Level 1 Screening through discussions with PCMC staff and leadership and Park City Transit (PCT). Richardson Flat Park and Ride will serve as the EOL on the east side of the study area for the purposes of this evaluation; the EOL on the west side will continue forward as the OTTC. Discussions are ongoing at the city leadership level for identifying additional satellite parking locations that will benefit this future transit service.

Additionally, station locations were evaluated using an assessment of current and future land uses, population and job densities, proximity to populations needing transit services, and local input from staff, PCT operations, and the Technical Advisory Committee (TAC), a committee convened to provide technical support and affirm decisions throughout this process. Appendix A includes the memorandum of the station location and EOL indicators analysis based on FTA guidance. An update to the environmental scan was also conducted based on refined preliminary design footprints and can be found in Appendix B.

2 REPORT PURPOSE

The purpose of this report is to summarize the detailed evaluation (Level 2 Screening) conducted for several alternatives for this transit study and make a recommendation on the LPA) The following sections include findings on:

- Description of the Level 2 Screening process
- Definition of the Level 2 Screening alternatives
- Evaluation of metrics and screening results
- Summary of stakeholder outreach
- Approach to the subsequent LPA refinement task

For findings on the previous evaluations (Purpose and Need Screening and Level 1 Screening) and a summary of outreach, please visit the study website.

3 LPA RECOMMENDATION

Park City Council reviewed the Level 2 evaluation criteria on December 11, 2025. Based on the detailed evaluation results of Level 2 Screening, the LPA was developed by the study team, and the draft results were presented to the Re-Create 248 Technical Advisory Committee (TAC) later that month. The final results were presented to Park City Council on January 8th and 20th 2026 to consider for adoption. On January 20th, Park City Council passed a resolution to adopt the LPA to advance into future phases of study.

LPA RECOMMENDATION: The alternative that performed the highest in the Level 2 Screening is **Exclusive Lane Bus (ELB)** service from the Richardson Flat P&R to the OTTC via SR-248, Bonanza Drive, and Deer Valley Drive/SR-224.

- The subsequent LPA refinement phase will refine the design footprint to optimize right-of-way (ROW), reduce potential impacts, and assess operational scenarios to maintain high levels of ridership and accommodate peak winter season travel demand.

4 LEVEL 2 SCREENING OVERVIEW

The Level 2 Screening evaluation was performed for two alternatives: ELB with both side running and center running alignment and Light Rail (LRT) with a center running alignment on the corridors shown in the study area map in Figure 1. The EOL assumptions used were Richardson Flat Park and Ride on the east side of the study area and the OTTC on the southwest side of the study area. The study area was evaluated in three corridor segments, to understand the differences and opportunities of each, allowing for the development of a preferred alternative that develops a comprehensive recommendation. The study area segments include Segment 1) SR-248 from Richardson Flat Park and Ride via Richardson Flat Road to Bonanza Drive, Segment 2) Bonanza Drive from SR-248 to Deer Valley Drive (SR-244), and Segment 3) Deer Valley Drive from Bonanza Drive to the OTTC. SR-248 and Deer Valley Drive are state-owned facilities, and Bonanza Drive is a local, PCMC-owned road.

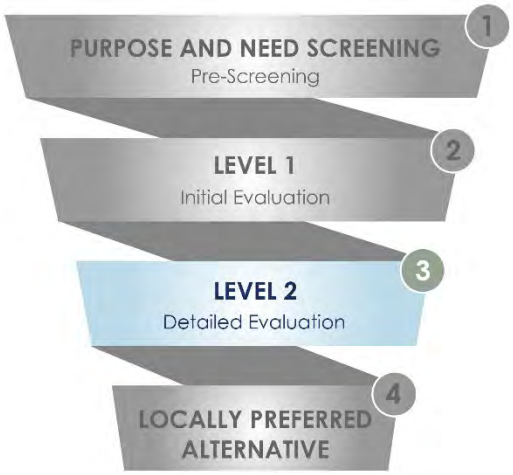


Figure 2. Level 2 Screening Step in the Overall Study Process

4.1 LEVEL 2 SCREENING EVALUATION

The purpose of Level 2 Screening was to conduct a quantitative analysis to compare alternatives, as compared to the qualitative analysis of Level 1 Screening, to garner a better

comparison between viable alternatives and assist in making an informed decision on the best performing option to recommend as the LPA. The Level 2 Screening analysis utilized a different approach than the Level 1 Screening; Level 2 focused on developing and defining detailed metrics that best align with FTA's Capital Investment Grant (CIG) criteria for the Small Starts program to determine potential eligibility and competitiveness for future federal funds and to develop a clearer picture of performance among alternatives.

4.1.1 Level 2 Alternatives Defined

Definitions and parameters were applied to the alternatives that advanced into Level 2 Screening to better analyze the factors of each alternative that were less nuanced in previous screening exercises. Table 1 includes a description of each alternative, taking industry and manufacturing standards and then pairing them with criteria defined through this study process that is unique to the corridor and community context to conduct the Level 2 Screening.

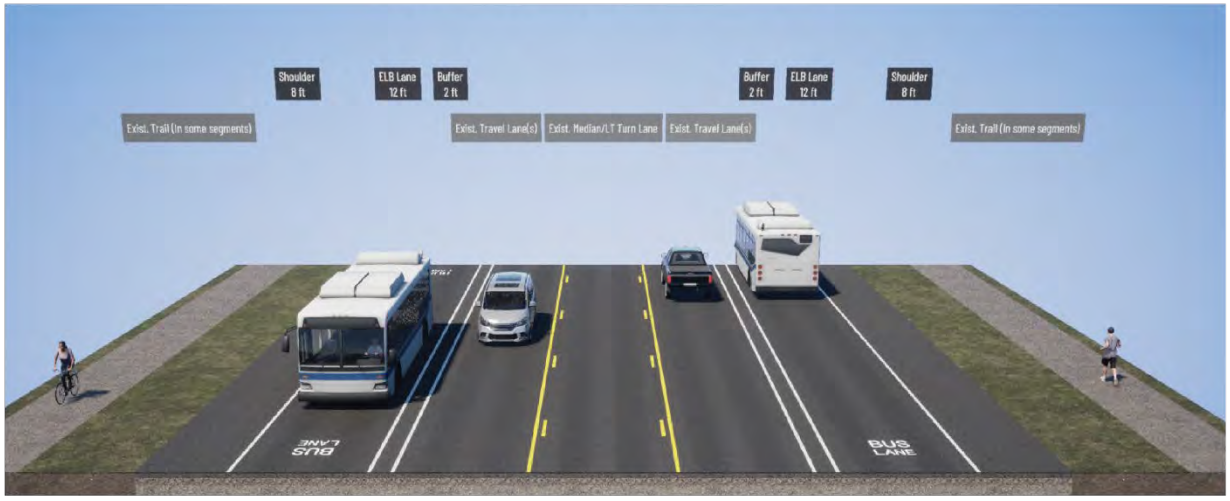
Table 1. Level 2 Generalized Mode Descriptions for Evaluation Process

GENERALIZED MODE DESCRIPTION	ELB SIDE RUNNING	ELB CENTER RUNNING	LRT CENTER RUNNING
Percentage of Fixed Guideway	100%, with some shared vehicle/bus turning bays	100% exclusive	100% exclusive, assume center running
Project Length	5 miles	5 miles	5 miles
Dedicated Guideway Transit Width	12 ft each side, plus 2 ft buffer, for total 28 ft	12 ft for each bus lane, plus a 2 ft buffer, for a total of 28 ft	28 ft
Vehicle Type and Power	Bus, electric	Bus, electric	Rail vehicle, electric overhead catenary system (OCS)
General Stop Spacing	½ - 1 mile	½ - 1 mile	½ - 1 mile
Capacity per Vehicle	60-80 riders per bus	60-80 riders per bus	120-180 riders per vehicle
Speed	25-65 mph	25-65 mph	35-75 mph
Capital Cost	$10-80M per mile	$10-80M per mile	$50-300M per mile
Operating Environment	Exclusive, at grade, can mix with traffic	Exclusive, at grade, can mix with traffic	Exclusive, at grade, separated from traffic
Implementation Timeframe *(Including Environmental Study, Design, and Construction)*	6-8 years	6-8 years	8-12 years, including maintenance facility needs

Planning-level cross sections for each alternative and each corridor segment are as follows (Figures 3, 4 and 5). Existing general-purpose lanes for traffic will be maintained on all corridors, and the transit mode footprint has been designed to be an additional treatment to the existing cross section. Side running ELB is shown for SR-248, Bonanza Drive, and Deer Valley Drive, and center running LRT is shown for the same corridors. Center running ELB is not shown below, however it would utilize the same cross section and alignment as center running LRT.

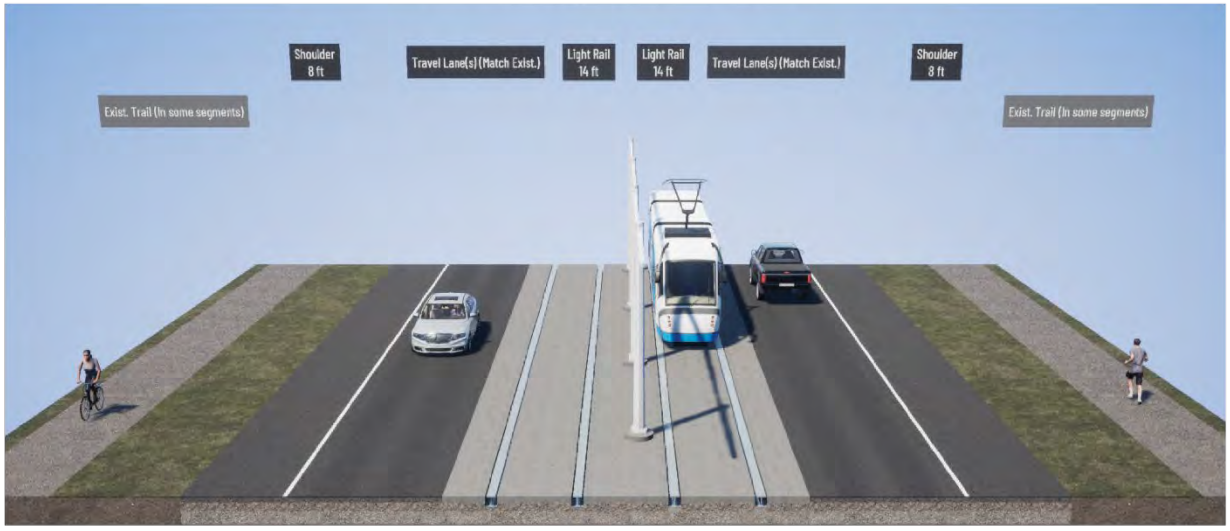
SR-248 Side Running ELB Alternative

Wyatt Earp Way to Bonanza Drive



SR-248 LRT Alternative

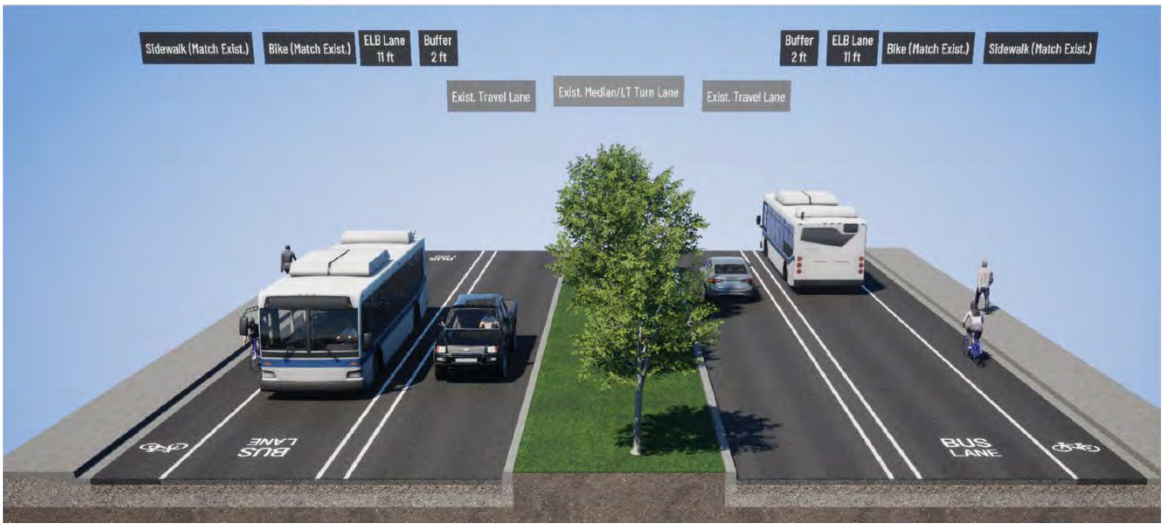
Wyatt Earp Way to Bonanza Drive



Typical section does not depict additional lanes at intersections or the short segments of 2 existing travel lanes in each direction near Bonanza Drive and Richardson Flat Road intersections.

Figure 3. SR-248 Alternatives Cross Sections (between Wyatt Earp Way and Bonanza Drive)

Bonanza Drive Side Running ELB Alternative



Bonanza Drive LRT Alternative

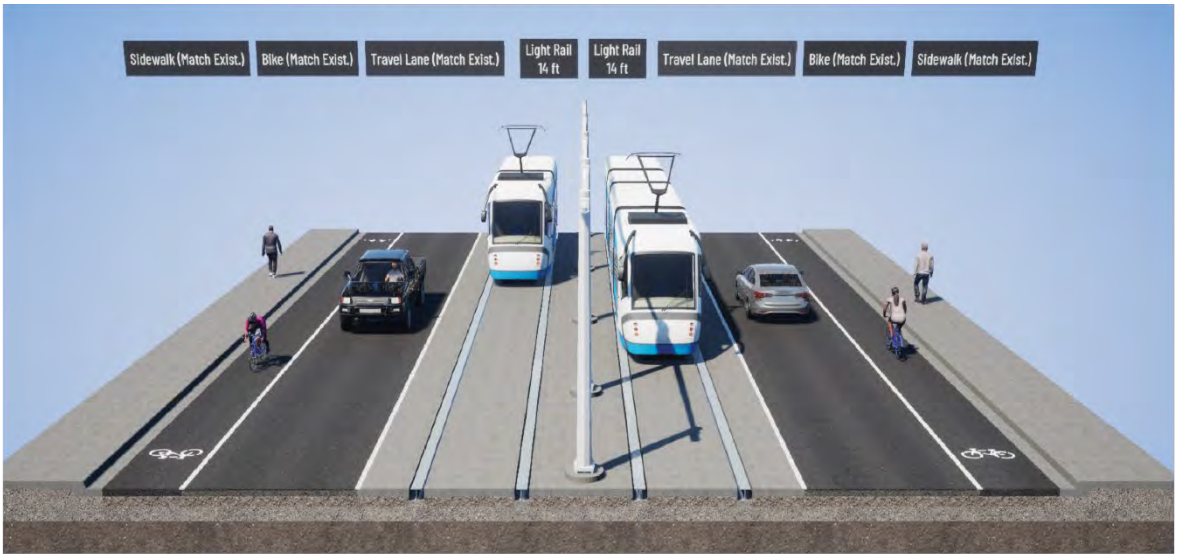
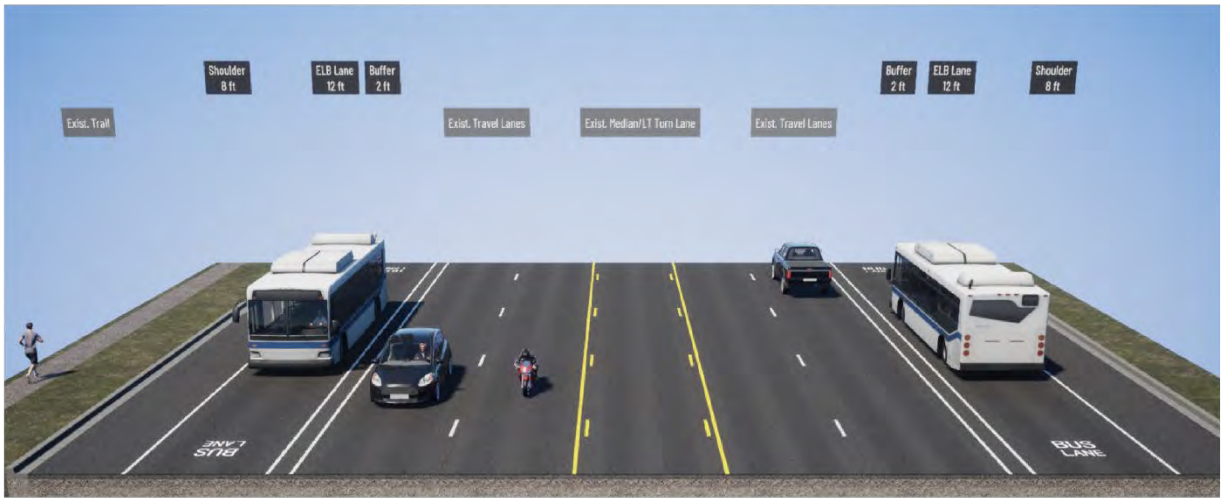


Figure 4. Bonanza Drive Alternatives Cross Sections

Deer Valley Drive Side Running ELB Alternative



Deer Valley Drive LRT Alternative

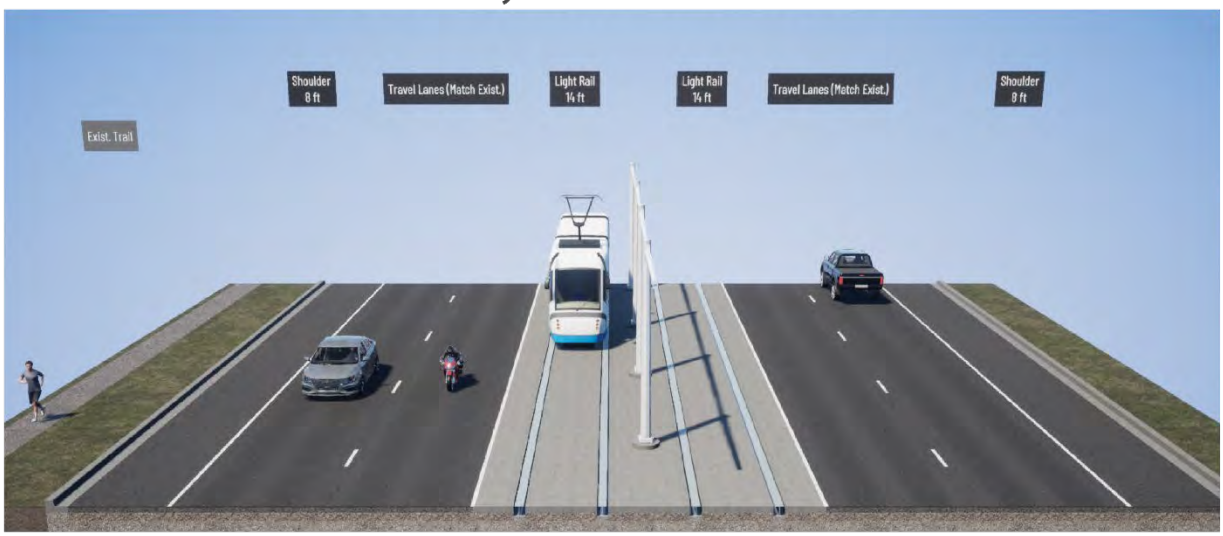


Figure 5. Deer Valley Drive Alternatives Cross Sections

4.1.2 Level 2 Screening Criteria

Table 2 includes a description of the criteria and evaluation metrics that were used to compare each alternative. This builds upon the Level 1 criteria with additional quantitative or detailed data findings to better differentiate performance of each alternative and/or implementation feasibility.

Additionally, as mentioned above in Section 4.1, these criteria respond to FTA's CIG ratings to determine potential future funding eligibility.

Table 2. Level 2 Evaluation Criteria

CRITERIA	DETAILED METRIC DESCRIPTION	SCORING METHODOLOGY
Transit Reliability	Percent alignment in exclusive guideway, ability to utilize queue jumps and Transit Signal Priority (TSP) signalization. Reported at the full corridor level.	Scoring: *Ratings assigned based on comparative performance between mode alternatives.* High performance (3) = Low number of intersections/locations needing signalization changes AND exclusive transit operations along entire segment Medium performance (2) = Moderate number of intersections/locations needing signalization changes OR exclusive transit operations along entire segment Low performance (1) = Large number of intersections/signalization changes needed AND limited exclusive transit operations
Transit Travel Time	Travel times for each alternative were calculated based on General Transit Feed Specification (GTFS) data from PCT, additional alignment characteristics including turning radii and roadway curvatures limiting speeds were the determining factors between mode alternatives. Reported at the full corridor level.	Scoring: *Ratings assigned based on comparative performance between mode alternatives, with the fastest travel time receiving the highest rating.* High performance (3) = Fastest travel time based on modal characteristics and intersection/shared turning bay characteristics Medium Performance (2) = Up to 25% increase in travel time based on modal characteristics and intersection/shared turning bay characteristics Low performance (1) = More than 25% travel time over fastest segment travel time based on modal characteristics and intersection/shared turning bay characteristics
Daily and Annual Projected Ridership See Appendix C for details.	Estimated from FTA Simplified Trips-on-Project Software (FTA STOPS) model for the years 2024 and 2045 using Census Transportation Planning Products (CTPP)[1]. *The model will be further calibrated with updated Origin and Destination survey data for the NEPA phase.* Reported at the station and corridor level.	Mode Scoring: *Ratings assigned based on comparative performance between mode alternatives.* Station Scoring: *Ratings assigned based on comparative performance between ALL station areas in the study area.* High performance (3) = ≥ 600 daily boardings Medium performance (2) = ≥ 150 and < 600 daily boardings Low performance (1) = 0-150 daily boardings

[1] Using synthetic CTPP data allows for analyzing magnitude of ridership between alternatives and is still a valuable exercise at this phase of study. The differences between alternatives may be similar once the STOPS model is calibrated with sufficient Origin and Destination survey data, however, the actual ridership numbers are likely to be different once the STOPS model is calibrated in the NEPA phase.

CRITERIA	DETAILED METRIC DESCRIPTION	SCORING METHODOLOGY
Transportation System Access	Assessment of impact to corridor access including property and business access (like the Park City School District [PCSD)], travel lanes, shoulders, turning movements, and/or parking. The number of signalized intersections along the route as well as intersections that will likely require signalization or TSP due to the configuration of the mode will also be assessed. Reported at the full corridor level.	Scoring: *Ratings assigned based on comparative performance between mode alternatives*. High performance (3) = Limited impacts to access and traffic operations, limited turning restrictions Medium Performance (2) = Some impacts on traffic operations through restrictions on turning movements or removal of parking and/or other considerations Low performance (1) = Greater impacts on traffic operations through restrictions on turning movements or removal of parking and/or other considerations
Study Area Transit Trips See Appendix C for details.	Transit trip production *across the system* with the addition of this transit line as compared to No Build, calculated as a percent increase in ridership. Reported at the full corridor level.	Scoring: *Ratings assigned based on comparative performance between mode alternatives.* High performance (3) = >20% transit percentage increase Medium Performance (2) = 5% - 20% increase Low performance (1) = <5% increase
Station Area Accessibility	Due to consistent station locations across alternatives, a qualitative analysis assessing the ease and safety for pedestrians and bicyclists to access each station (considering factors such as completeness of sidewalk network, integration into other transit services/hubs) available bicycle facilities, Americans with Disabilities Act (ADA) access, and barriers to access was conducted. Reported at the station level.	Station Scoring: *Ratings assigned based on comparative performance between all station areas in the study area.* High performance (3) = > 80% station area with connected sidewalks, bikeways, and/or trails, along with minimal connectivity barriers Medium performance (2) = 60% - 80% station area connectivity, with some gaps and barriers (e.g., wide streets, freeway, railroad corridor, etc.) Low performance (1) = <60% station area connectivity/large areas of incomplete sidewalks/bikeways/trails
Conceptual Capital Costs[2] See Appendix D for details.	A quantitative analysis of the potential construction costs associated with each alternative using developed unit pricing. A rough order of magnitude (ROM) cost estimate was developed for each alternative, based on the representative alignment configuration and reported out as a cost per mile range. Costs include mode-specific infrastructure and roadway needs, signals, utility relocations, retaining wall replacement on Deer Valley Drive and contractor and construction contingencies. *Note this does not include ROW acquisition costs.* Reported at the full corridor level.	Scoring: *Ratings assigned based on comparative performance between mode alternatives. If quantitative difference between alternatives was less than 10%, ratings were assumed to be similar enough to warrant the same rating.* High performance (3) = Lowest cost alternative Medium performance (2) = Mid-range cost alternative Low performance (1) = Highest cost alternative

[2] Based on the high level of design at this phase of study, all costs are preliminary and expected to change as design progresses.

CRITERIA	DETAILED METRIC DESCRIPTION	SCORING METHODOLOGY
Operational Costs See Appendix D for details.	Estimated using national trends in operations for ELB and LRT. Reported at the full corridor level.	Scoring: *Ratings assigned based on comparative performance between mode alternatives. If quantitative difference between alternatives was less than 10%, ratings were assumed to be similar enough to warrant the same rating.* *Note: The cost of new vehicles and maintenance facility was not included as part of the estimates for ELB or LRT, as PCT would utilize existing vehicles and maintenance facility to operate ELB service initially, or, costs are already captured in other capital budgets. LRT maintenance costs were calculated and noted but excluded from the cost evaluation to ensure a fair comparison.* High performance (3) = Lowest cost alternative Medium performance (2) = Mid-range cost alternative Low performance (1) = Highest cost alternative
Construction Complexity	A qualitative analysis of the construction challenges and potential risks associated with an alternative. Each alternative was evaluated based on the type of construction required while also considering the existing conditions within a corridor. Reported at the full corridor level.	Scoring: *Ratings assigned based on comparative performance between mode alternatives.* High performance (3) = Limited intersection rebuilds, utility conflicts, and no unique construction challenges noted Medium performance (2) = Numerous intersection rebuilds and utility relocations are likely Low performance (1) = Numerous intersection rebuilds and utility relocations are likely, and reconstruction of major intersections and/or structures would be needed
Environmental Considerations See Appendix C for details.	Assessment of overall risk to project development based on proximity to key environmental resources such as water, wetlands, Endangered Species Act (ESA) species, Section 4(f), historic, and hazardous resources. Risk was assessed based on location of resource in proximity to project footprint and considers type of resource impacted and potential type of impact anticipated (long-term versus short-term impact). Reported at the full corridor level.	Scoring: *Ratings assigned based on comparative performance between mode alternatives.* High performance (3) = No environmental resources in proximity to project footprint, environmental risk is low Medium performance (2) = Some environmental resources are present in proximity to project footprint; environmental risk is moderate Low performance (1) = Many environmental resources are present in proximity to project footprint; environmental risk is high
Estimated Property Impacts See Appendix C for details.	Qualitative assessment of property impacts based on assumed project footprint using a Geographic Information System (GIS)-level exercise. Reported at the full corridor level.	Scoring: *Ratings assigned based on comparative performance between mode alternatives.* High performance (3) = No or very limited property impacts Medium performance (2) = Moderate property impacts Low performance (1) = Higher property impacts

CRITERIA	DETAILED METRIC DESCRIPTION	SCORING METHODOLOGY
Station Area and EOL Indicators Assessment	A land use analysis around the identified station locations was conducted, factoring in FTA CIG land use rating criteria. Reported at the station level.	*Considerations noted for informational purposes.*
Reduction in VMT See Appendix D for details.	This measure used the FTA STOPS model output to report potential vehicle miles traveled (VMT) savings assuming a 1.1-person vehicle capacity. Reported at the full corridor level.	Scoring: *Ratings assigned based on comparative performance between mode alternatives for current the year, in miles per day.* High performance (3) = > 500 miles Medium performance (2) = Between 500-1,500 Low performance (1) = <1,000 miles
Noise and Vibration Impacts See Appendix E for details.	A quantitative assessment measuring the sensitive noise receptors affected and areas of potential vibration concerns for each alternative. Reported at the full corridor level.	Scoring: *Ratings assigned based on comparative performance between mode alternatives.* High performance (3) = No or very limited impacts Medium performance (2) = Moderate noise impacts Low performance (1) = Higher noise impacts
Visual Impacts	Qualitative assessment of the alternative's potential impact on view sheds and whether or not the mode requires infrastructure that would impede the mountain views. Reported at the full corridor level.	Scoring: *Ratings assigned based on comparative performance between mode alternatives.* High performance (3) = No visual impacts, current view sheds remain uncompromised Medium performance (2) = Some visual impacts, current view sheds will be moderately compromised Low performance (1) = High visual impacts, current view sheds will be compromised
Feasible and Service-Proven	A qualitative assessment that determined if the alternative is feasible to implement prior to the 2034 Utah Winter Olympic Games, based on an evaluation of industry standards for manufacturing lead times, Buy America standards and compatibility, the ability for the alternative to be eligible and competitive for federal FTA funds, and the potential complexity of future study phases that could impact overall timeline. Reported at the full corridor level.	Scoring: *Ratings assigned based on comparative performance between mode alternatives.* High performance (3) = The alternative is feasible to implement by 2034 based on current known conditions and funding eligibility Medium performance (2) = The alternative may be feasible to implement by 2034, but some unknowns exist around funding availability and/or manufacturing lead times Low performance (1) = The alternative is unlikely to be implemented by 2034 due to funding eligibility and/or manufacturing lead times
Community Compatibility	This assessment evaluated the alternative's ability to interline or share the same guideway with existing transit service and whether or not it is compatible with adopted local and regional plans for the transportation network. It determines if steps are in place or could be in place near-term to accommodate the proposed mode in a way that meets the feasibility metric. Reported at the full corridor level.	Scoring: *Ratings assigned based on comparative performance between mode alternatives.* High performance (3) = Very compatible with current transit system AND future transit/transportation plans Medium performance (2) = Somewhat compatible with current transit system OR future transit/transportation plans Low performance (1) = Not very compatible with current transit system and future transit/transportation plans

CRITERIA	DETAILED METRIC DESCRIPTION	SCORING METHODOLOGY
Resiliency	This measure assessed, qualitatively, if the mode can be scaled over time. The alternatives are evaluated to determine level of ease for acquiring and adding new vehicles to the system to add capacity as demand increases. This measure considers cost and size of vehicles, station platform lengths, ROW preservation needs for station lengths, and vehicle storage facilities/tail track availability. Reported at the full corridor level.	Scoring: *Ratings assigned based on comparative performance between mode alternatives.* High performance (3) = The mode is highly scalable, and vehicles can be added over time to respond to future demand Medium performance (2) = The mode is somewhat scalable, and vehicles can be added over time but may reach a ceiling in ability to provide frequency of service or have adequate ROW for station sizing and vehicle queuing; it may require additional property for storage and maintenance Low performance (1) = The mode is not scalable and cannot accommodate future ridership demands
Public and Stakeholder Support	This measure quantified the level of support for the mode alternative based on the study's open house, public meeting, stakeholder, and public engagement efforts.	*Considerations noted for informational purposes.*

4.1.3 Screening Results

4.1.3.1 Summary

Table 3 provides a snapshot summary of the evaluation findings. Please see Table 4 for the detailed summary of data analysis and findings. **Because the analysis is comparative, the scores of high (3), medium (2), and low (1) performance are not indicators of peak performance or impacts for the alternative, but rather how well an alternative performs relative to the other options under consideration.**

Table 3. Summary of Level 2 Screening Evaluation Findings

EVALUATION CRITERIA	SUMMARY OF METRIC(S)	ELB SIDE RUNNING	SCORE	ELB CENTER RUNNING	SCORE	LRT CENTER RUNNING	SCORE
Transit Reliability	Percent alignment in exclusive guideway; ability to utilize TSP.	Medium	2	High	3	High	3
Transit Travel Time	Travel times from PCT and modal/ alignment characteristics.	High	3	High	3	Low	1
Daily and Annual Projected Ridership	FTA STOPS model projections.	Medium	2	Medium	2	High	3
Study Area Transit Trips	New transit trips across the system with the added service.	Medium	2	Medium	2	High	3
Station Area Accessibility	Qualitative analysis assessing ease and safety of access for transit users.	High	3	Medium	2	Low	1
Transportation System Access	Corridor access at driveways, PCSD, and other businesses/ destinations.	High	3	Low	1	Low	1
Conceptual Capital Costs	Quantitative assessment of costs, with ROM for each alternative, excludes ROW acquisition.	High	3	Medium	2	Low	1
Operational Costs	Operations and maintenance costs for the first year of operations.	High	3	High	3	Medium	2
Construction Complexity	Qualitative analysis of potential construction challenges and potential risks.	High	3	Medium	2	Low	1
Environmental Considerations	Assessment of project development risks based on proximity to key environmental considerations.	Medium	2	Medium	2	Medium	2
Estimated Property Impacts	Qualitative assessment of property impacts based on assumed footprint (GIS-level exercise).	Medium	2	Medium	2	Low	1
Station Area and EOL Indicators Assessment	Land use and population assessment based on FTA CIG criteria. *Informational only.*	Medium	-	Medium	-	Medium	-
Reduction in VMT	FTA STOPS model output on potential VMT savings.	Medium	2	Medium	2	High	3
Noise and Vibration Impacts	Measurement of sensitive noise receptors within the study area for each mode.	High	3	High	3	Low	1
Visual Impacts	Qualitative assessment of the alternative's potential impact on view sheds.	High	3	High	3	Low	1
Feasible and Service-Proven	Feasible to implement prior to 2034, eligibility and competitiveness for FTA funding.	High	3	High	3	Medium	2
Community Compatibility	Ability to interline or share guideway with existing transit services and compatibility with local plans.	High	3	High	3	Medium	2
Resiliency	Assessment of if and how the mode can be scalable over time to add capacity.	High	3	High	3	Medium	2
Public and Stakeholder Support	Support for the mode based on engagement findings. *Informational only.*	High	-	High	-	Medium	-
SCORING			45		41		30

4.1.3.2 Detailed Results

Table 4 provides detailed results of the Level 2 alternatives evaluation. **Because the analysis is comparative, the scores of high (3), medium (2), or low (1) performance are not indicators of peak performance or impacts, but rather how well an option performs relative to the other alternatives under consideration.**

Table 4. Detailed Level 2 Screening Evaluation Findings

EVALUATION CRITERIA	SUMMARY OF METRIC(S)	ELB SIDE RUNNING	SCORE	ELB CENTER RUNNING	SCORE	LRT CENTER RUNNING	SCORE
Transit Reliability	Percent alignment in exclusive guideway; ability to utilize TSP.	Medium – 90% lane exclusivity. Buses share outside lane with right turning vehicles at all driveway/business accesses, and at major intersections. Four existing signals; up to one additional signal may be needed for TSP into Richardson Flat Park and Ride. 100 ft before every driveway would be required as a shared turning lane with buses and vehicles, which slightly reduces lane exclusivity. Considerations for access management on Bonanza Drive can improve exclusivity.	2	High – 95% lane exclusivity. Four existing signals; up to three additional signals may be needed, two to aid in midblock station access for riders and one with TSP into Richardson Flat Park and Ride. Buses would be required to get out of the center running guideway to turn into the OTTC, reducing lane exclusivity slightly at this location.	3	High – 100% lane exclusivity. Four existing signals; three additional may be required, two to aid in midblock station access for riders and one for TSP into Richardson Flat Park and Ride.	3
Transit Travel Time	Travel times from PCT and modal/ alignment characteristics.	High – ELB mode is not impacted by existing grades or curvature. Travel times for side running ELB may see slight reductions as buses would share right turn lanes at key intersections and access points. Access management strategies, particularly for Bonanza Drive should be considered.	3	High – ELB mode is not impacted by existing grades or curvatures, and this alternative does not share turning lanes with general purpose traffic.	3	Low –Existing curvature of the roadway particularly on Bonanza Drive do not meet LRT minimum requirements; LRT would be required to travel +/- 10 miles per hour along Bonanza Drive due to roadway curvatures, creating operational inefficiencies compared to the other mode alternatives.	1

EVALUATION CRITERIA	SUMMARY OF METRIC(S)	ELB SIDE RUNNING	SCORE	ELB CENTER RUNNING	SCORE	LRT CENTER RUNNING	SCORE
Daily and Annual Projected Ridership	FTA STOPS model projections. Reported at the corridor and station levels.	Medium – Reported for 10-minute headways. 2024 Trips on Project: +1,650 2045 Trips on Project: +1,633 2024 Richardson Flat P&R: +469 2045 Richardson Flat P&R: +565 2024 Park City High School: +198 2045 Park City High School: +150 2024 Bonanza Drive: +319 2045 Bonanza Drive: +245 2024 OTTC: +665 2045 OTTC: +675	2	Medium – Reported for 10-minute headways. 2024 Trips on Project: +1,650 2045 Trips on Project: +1,633 2024 Richardson Flat P&R: +469 2045 Richardson Flat P&R: +565 2024 Park City High School: +198 2045 Park City High School: +150 2024 Bonanza Drive: +319 2045 Bonanza Drive: +245 2024 OTTC: +665 2045 OTTC: +675	2	High – Reported for 10-minute headways. 2024 Trips on Project: +3,350 2045 Trips on Project: +3,150 2024 Richardson Flat P&R: +918 2045 Richardson Flat P&R: +1,052 2024 Park City High School: +437 2045 Park City High School: +334 2024 Bonanza Drive: +701 2045 Bonanza Drive: +539 2024 OTTC: +1,304 2045 OTTC: +1,252	3
Study Area Transit Trips	New transit trips *across the system* with the added service.	Medium – reported for 10-minute headways. 2024: +1.4% increase in ridership 2045: 1.4% increase in ridership	2	Medium – reported for 10-minute headways. 2024: +1.4% increase in ridership 2045: 1.4% increase in ridership	2	High – reported for 10-minute headways. 2024: +7.8% increase in ridership 2045: +6.6% increase in ridership	3
Station Area Accessibility	Qualitative assessment of connectivity around station areas and first/last mile needs.	High - Offers the most direct access for first/last mile connections into the existing sidewalk, trail, and bicycle network for Park City School District Station and the Bonanza Drive Station. Seamless integration at Richardson Flat Park and Ride and the OTTC. Stations located on each side of the corridor reduce midblock crossing needs, added wait times for signals, and out of direction travel. Additionally, regular bus service can utilize the stations, providing a seamless experience for the user.	3	Medium - Offers fairly direct access for first/last mile connections into the existing sidewalk, trail, and bicycle network for Park City School District Station and the Bonanza Drive Station. Seamless integration at Richardson Flat Park and Ride and the OTTC. Stations located in the middle of the corridor require addition of signalized midblock crossings at Park City High School and on Bonanza Drive. It may be less feasible for regular bus service to utilize center-running stations due to the need to merge in and out of general purpose lanes.	2	Low -Offers fairly direct access for first/last mile connections into the existing sidewalk, trail, and bicycle network for Park City School District Station and the Bonanza Drive Station. A separate LRT station would need to be located on Deer Valley Drive, as LRT cannot serve the OTTC in its existing form. The station would be located on Deer Valley Drive north of Main Street, due to steep grades. Users would have to walk up hill +/- .25 to .5 mi to access OTTC or other Old Town destinations. LRT stations located in the middle of the corridor require addition of signalized midblock crossings at Park City High School and on Bonanza Drive. Regular bus service cannot utilize the LRT stations.	1

EVALUATION CRITERIA	SUMMARY OF METRIC(S)	ELB SIDE RUNNING	SCORE	ELB CENTER RUNNING	SCORE	LRT CENTER RUNNING	SCORE
Transportation System Access	Corridor access at driveways, PCSD, and other businesses/ destinations.	High – Has the lowest impact to vehicular access on and off the corridor as left turns in and out of accesses and at unsignalized intersections would still be allowed. However, right turns off the corridor would be made from the bus lane, which may have marginal impacts on transit performance.	3	Low – Has the highest impact to vehicular access on and off the corridor. Alternative assumes no left turns in or out of cross streets or drive accesses. Left turns could be made only at signalized intersections, requiring vehicles to turn right and make a U-turn at the nearest signalized intersection. Bonanza Drive has no signalized intersection for U-turns except at its extents; SR-248 has 1.32 miles between signals at Comstock Road and Richardson Flat Road.	1	Low – Has the highest impact to vehicular access on and off the corridor. Alternative assumes no left turns in or out of cross streets or drive accesses. Left turns could be made only at signalized intersections, requiring vehicles to turn right and make a U-turn at the nearest signalized intersection. Bonanza Drive has no signalized intersection for U-turns except at its extents; SR-248 has 1.32 miles between signals at Comstock Road and Richardson Flat Road.	1
Conceptual Capital Costs[3]	Quantitative assessment of costs, with ROM for each alternative, excludes ROW acquisition with an assumed construction year of 2030.	High – Has the lowest cost of each alternative. $176M - $328M total construction cost.	3	Medium – Has the mid-range cost of each alternative. $240M - $447M total construction cost.	2	Low – Has the highest cost per mile of each alternative. $292 - $545M total construction cost. (*Guideway costs only, LRT vehicles and a new Operations and Maintenance facility would require additional funds*).	1
Operational Costs[4]	Operations and maintenance costs. Excludes new facility and vehicle needs.	High – ELB has the lowest operating cost compared to LRT.	3	High – ELB has the lowest cost compared to LRT.	3	Medium – LRT is 1.5-2 times more expensive to operate than ELB.	2

[3] Conceptual capital costs were determined using a ROM unit cost and include a contingency range of -20% from the base cost assumption up to +40% form the base cost assumption.

[4] Operational costs were determined utilizing FTA's National Transit Database Annual Data Products National Transit Summaries and Trends 2018 and 2023 Editions, and American Public Transit Association (APTA's) Public Transportation Factbook. Costs for each alternative were general operations estimates and not tied to a specific operating year. Excludes new maintenance facility and vehicle needs.

EVALUATION CRITERIA	SUMMARY OF METRIC(S)	ELB SIDE RUNNING	SCORE	ELB CENTER RUNNING	SCORE	LRT CENTER RUNNING	SCORE
Construction Complexity	Qualitative analysis of potential construction challenges and potential risks.	High – Least complex alternative to construct compared to LRT and center running ELB. Station platforms fit within existing footprint and curvatures of the roadway.	3	Medium – Less complex than LRT, but slightly more complex than side-running ELB. Center running ELB requires additional width needs at intersections to accommodate turning bays and vehicle operations; center running ELB requires more infrastructure for access management along the corridor, e.g., infrastructure to facilitate right-in-right-out movements for turning vehicles and controlled U-turn locations. Station platforms fit within existing footprint and curvatures of the roadway.	2	Low – Most complex alternative due to need for specialized, permanent rail infrastructure which is more involved than dedicated bus lanes for ELB. Additional equipment including OCS poles presents vertical clearance issues under US-40 at Richardson Flat Road, requiring a new US-40 bridge structure and traction power sub-stations requiring high-voltage power. A new Operations and Maintenance facility would need to be constructed with a direct connection to the LRT alignment. Station Complexities: Deer Valley Drive would require regrading for a new station (a requirement of LRT near OTTC) due to the grade limitations of 2% standard grade for stations, resulting in potentially significant property impacts on both sides. Tail tracks are needed at each EOL (355 ft long); on Deer Valley Drive this would require the station to be located farther north and a great distance away from the OTTC. Station on Bonanza Drive would require 445 ft of tangent station platform length, and a realignment of the road would be required to accommodate it.	1

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EVALUATION CRITERIA	SUMMARY OF METRIC(S)	ELB SIDE RUNNING	SCORE	ELB CENTER RUNNING	SCORE	LRT CENTER RUNNING	SCORE
Environmental Considerations	Assessment of project development risks based on proximity to key environmental considerations. *Footprints and alignments will be further refined in the next phase with the goal of reducing impacts.*	Medium – This alternative may potentially impact 4.91 acres of farmlands of statewide importance, 2.54 acres of wetlands, and 6,731 linear ft of streams. The alternative would directly impact four hazardous sites (three leaking underground storage tank [LUST] and one underground storage tank [UST]) and is within a 1-mile buffer of one National Priorities List Superfund site. Although long-term impacts to these resources are anticipated, the proposed improvements represent minor additions to an existing roadway and would therefore result in minimal overall effects.	2	Medium – This alternative may potentially impact 6.03 acres of farmlands of statewide importance, 2.45 acres of wetlands, and 6,182 linear ft of streams. The alternative would directly impact four hazardous sites (three LUST and one UST) and is within a 1-mile buffer of one NPL Superfund site. Although long-term impacts to these resources are anticipated, the proposed improvements represent minor additions to an existing roadway and would therefore result in minimal overall effects.	2	Medium – This alternative may potentially impact 6.09 acres of farmlands of statewide importance, 2.61 acres of wetlands, and 6,302 linear ft of streams. The alternative would directly impact four hazardous sites (three LUST and one UST) and is within a 1-mile buffer of one National Priorities List Superfund site. Although long-term impacts to these resources are anticipated, the proposed improvements represent minor additions to an existing roadway and would therefore result in minimal overall effects.	2
Estimated Property Impacts	Qualitative assessment of property impacts based on assumed footprint (GIS-level exercise). *Footprints and alignments will be further refined in the next phase with the goal of reducing impacts.*	Medium – Seven properties fall within a 20 ft radius of the proposed design footprint (which also includes a 15 ft buffer outside of the alternative footprint) and may require commercial relocation; four of these directly overlap building footprints as defined today.	2	Medium – Seven properties fall within a 20 ft radius of the proposed design footprint (which also includes a 15 ft buffer outside of the alternative footprint); two of these directly overlap building footprints as defined today.	2	Low – This alignment may require more commercial relocations than the other alternatives. Eight properties fall within 20 ft of the proposed design footprint (which also includes a 15 ft buffer outside of the alternative footprint) and may require commercial relocation; three of these directly overlap building footprints as defined today.	1
Station Area and EOL Indicators Assessment	Land use and population assessment based on FTA CIG criteria. *Informational only.*	Medium – Richardson Flat Park and Ride Stations: Currently undeveloped but with substantial development potential. Bonanza Drive and Park City High Stations: Offer the highest concentrations of population and employment. OTTC: Unmatched commercial and taxable value per acre.	-	Medium – Richardson Flat Park and Ride Stations: Currently undeveloped but with substantial development potential. Bonanza Drive and Park City High Stations: Offer the highest concentrations of population and employment. OTTC: Unmatched commercial and taxable value per acre.	-	Medium – Richardson Flat Park and Ride Stations: Currently undeveloped but with substantial development potential. Bonanza Drive and Park City High Stations: Offer the highest concentrations of population and employment. OTTC: Unmatched commercial and taxable value per acre.	-
Reduction in VMT	FTA STOPS model output on potential VMT savings per day.	Medium – reported for 10-minute headways. VMT reduction 2024: -190 mi VMT reduction 2045: -800 mi	2	Medium – reported for 10-minute headways. VMT reduction 2024: -190 mi VMT reduction 2045: -800 mi	2	High – reported for 10-minute headways. VMT reduction 2024: -1,430 mi VMT reduction 2045: -2,790 mi	3

EVALUATION CRITERIA	SUMMARY OF METRIC(S)	ELB SIDE RUNNING	SCORE	ELB CENTER RUNNING	SCORE	LRT CENTER RUNNING	SCORE
Noise and Vibration Impacts	Measurement of sensitive noise receptors within the study area for each mode.	High – Noise sensitive receptors within screening distance: 66 Vibration sensitive receptors within screening distance: 0	3	High – Noise sensitive receptors within screening distance: 66 Vibration sensitive receptors within screening distance: 0	3	Low – Noise sensitive receptors within screening distance: 138 Vibration sensitive receptors within screening distance: 40	1
Visual Impacts	Qualitative assessment of the alternative's potential impact on view sheds.	High – No new or increased visual impacts. Station platforms would likely be expanded at the Park City School District station and the Bonanza Drive station.	3	High – No new or increased visual impacts. Station platforms would likely be expanded at the Park City School District station and the Bonanza Drive station.	3	Low – OCS poles would be located approx. every 100-200' along the entire length of the alignment plus visible wiring between the poles approximately 22' above track. Additionally signal houses and traction power substations would be required. Currently, the structure at US-40 and Richardson Flat road is too short to accommodate OCS and would need to be replaced/reconstructed.	1
Feasible and Service-Proven	Feasible to implement prior to 2034, eligibility and competitiveness for FTA funding.	High – The availability of vehicles is higher than rail cars, manufacturing times are faster, and a new maintenance facility is not needed immediately.	3	High – The availability of vehicles is higher than rail cars, manufacturing times are faster, and a new maintenance facility is not needed immediately.	3	Medium – There are generally longer lead times for vehicle manufacturing; a dedicated operations and maintenance facility would be required and would need to undergo a similar federal NEPA process prior to construction.	2
Community Compatibility	Ability to interline or share guideway with existing transit services and compatibility with local plans.	High – This alternative is most compatible with current bus system, the SR-224 Bus Rapid Transit (BRT) project, and the OTTC and is identified in several local and regional transportation and transit plans. High-capacity transit on this segment of SR-248 is identified on the Statewide Long Range Transportation Plan.	3	High – This alternative is most compatible with current bus system, the SR-224 BRT project, and the OTTC and is identified in several local and regional transportation and transit plans. High-capacity transit on this segment of SR-248 is identified on the Statewide Long Range Transportation Plan	3	Medium – There are currently no LRT services in operation with PCT, developing this service would require additional rail yard and maintenance facilities, and operators/maintainers. Connection considerations for directing people to/from the OTTC would be required, as LRT cannot use the current transit center. Considerations for separate alignment and access would be required for Richardson Flat Park and Ride connection. LRT is not identified in local or regional transit plans, but high-capacity transit is identified in the Statewide Long Range Transportation Plan on this segment of SR-248.	2

EVALUATION CRITERIA	SUMMARY OF METRIC(S)	ELB SIDE RUNNING	SCORE	ELB CENTER RUNNING	SCORE	LRT CENTER RUNNING	SCORE
Resiliency	Assessment of if and how the mode can be scalable over time to add capacity.	High – ELB service can expand service frequency and capacity with minimal infrastructure requirements by adding additional vehicles and reducing headways. Generally considered more scalable for special events due to existing availability of vehicles.	3	High – ELB service can expand service frequency and capacity with minimal infrastructure requirements by adding additional vehicles and reducing headways. Generally considered more scalable for special events due to existing availability of buses.	3	Medium – LRT offers less flexibility than ELB for adding vehicles, as stations must be designed larger in advance or ROW preserved to accommodate increasing station lengths for long trains. Adding vehicles does not necessarily increase frequency of service but can move more passengers with each trip. Alternatively reducing headways to meet demand instead of adding LRT vehicles to the train set could also be considered.	2
Public and Stakeholder Support	Support for the mode based on engagement findings. *Informational only.*	High – ELB service has the greatest public support; the public likes that this mode is most compatible with the current system; there is high interest in this alternative due to its ability for timely implementation and cost effectiveness; support for the flexibility of buses and ability to easily scale service.	-	High – ELB service has the greatest public support; the public likes that this mode is most compatible with the current system; there is high interest in this alternative due to its ability for timely implementation and cost effectiveness; support for the flexibility of buses and ability to easily scale service.	-	Medium – LRT has moderate public support; there are some concerns over system-to-system compatibility, cost, and impacts due to noise, vibration, property impacts at intersections, and noise and traffic delay during construction.	-
SCORING			45		41		30

5 SUMMARY OF LEVEL 2 ENGAGEMENT

5.1 TECHNICAL ADVISORY COMMITTEE MEETING

A TAC meeting was held on December 16, 2025, to review the Level 2 Screening findings, discuss methodology, and address questions.

A summary of the meeting discussion is as follows:

- An overview of the study and corridor goals were presented.
- A reminder on previous screening results, including the Purpose and Need Screening and the Level 1 Screening, were shared.
- The Level 2 Screening criteria and metrics were shared with the TAC, and the scoring findings for each alternative were presented.
- Some discussion occurred inquiring about FTA CIG considerations, and travel time for LRT on Bonanza Drives (reduced due to curvature of the roadway).
- A discussion about ensuring this future project moves from Phase 2 of the UDOT Long Range Transportation Plan to Phase 1, to allow for more near-term funding opportunities was discussed.
- A desire to understand a funding plan from PCMC was discussed.

Overall, no feedback or concerns were expressed about what was presented or about the scoring of the three alternatives – the TAC indicated support for side running ELB to advance as the LPA per the evaluation findings.

5.2 ADDITIONAL ENGAGEMENT

Park City engaged business and property owners along the corridor to share the evaluation approach, potential impacts, and commit to continuing the conversation as design advances. The study hotline and email address remained open for the duration of this study, and a summary of public engagement can be found on the study website.

6 NEXT STEPS FOR LPA REFINEMENT

The remaining task in the Re-create 248 Study will be to refine the LPA; this will allow for a greater detail of design to inform cost, impacts, and coordination needs with UDOT, FTA Region 8, and other agencies and stakeholders. A preliminary assessment of FTA CIG ratings will be conducted to determine additional analysis and planning that may need to be further refined in the NEPA phase of study. Additionally, intersection-level operational assessments will be conducted using Vissim.

The Re-create 248 Study is slated to be completed in early 2026, the future project will then be entered into Project Development with FTA, and the NEPA study will commence.

APPENDIX A: STATION AREA AND END-OF-LINE INDICATORS MEMORANDUM

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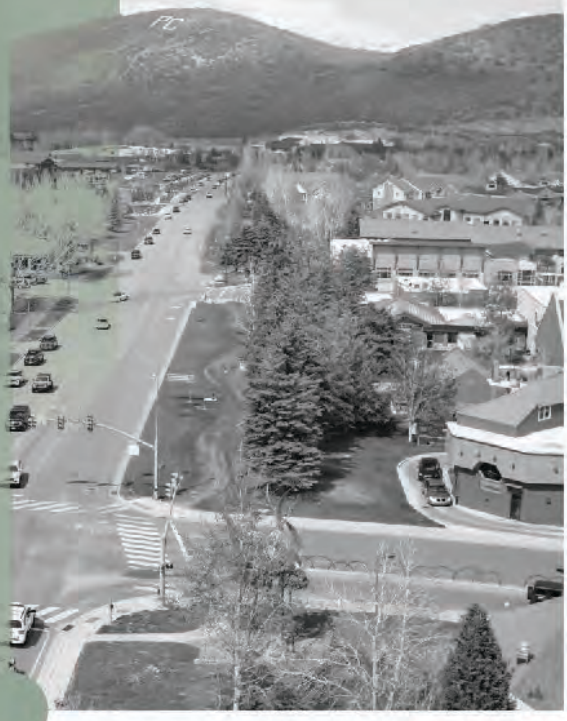
STATION AREA AND END-OF-LINE INDICATORS MEMORANDUM

November 2025



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Acronyms and Abbreviations

ACS	American Community Survey
AMI	Area median income
Bonanza Drive	Station area at Bonanza Drive and Prospector Avenue
ELB	Exclusive-Lane Buses
FTA	Federal Transit Administration
Gordo	Station area at SR-248 and Richardson Flat Road
HTRZ	Housing and Transit Reinvestment Zone Act
HUD	U.S. Department of Housing and Urban Development
LBAR	Legally binding affordability restricted
OTTC	Station area at Old Town Transit Center
Park City High School	Station area at SR-248 and Park City High School
PCHS	Park City High School
PCMC	Park City Municipal Corporation
Richardson Flat	Station area at Richardson Flat Park and Ride
The Study	Re-create 248 Transit Study
TAZ	Traffic Analysis Zone
WFRC	Wasatch Front Regional Council
ZPFI	Zions Public Finance, Inc.

1 KEY FTA LAND USE PROJECT MEASURES

In this report Zions Public Finance, Inc. (ZPFI) provides additional insights and analysis regarding Park City Municipal Corporation's (PCMC's) Re-create 248 Transit Study (the study) and examines potential station areas within the SR-248 corridor for Exclusive-Lane Bus (ELB) alternatives, and the Light Rail (LRT) alternative. Station locations are assumed to be consistent across alternatives based on industry best practices and corridor land uses. Where able, ZPFI has aligned the analysis to the Federal Transit Administration's (FTA) land use project measures, as described in its "Capital Investment Grants Proposed Policy Guidance"[1] report (FTA 18). In certain cases, where this data is not readily available, ZPFI has provided a qualitative narrative.

1.1 POTENTIAL STATION AREAS

As part of the project, Horrocks identified four potential station areas, inclusive of end-of-line facilities. These four areas are identified in the exhibit below and constitute the following:

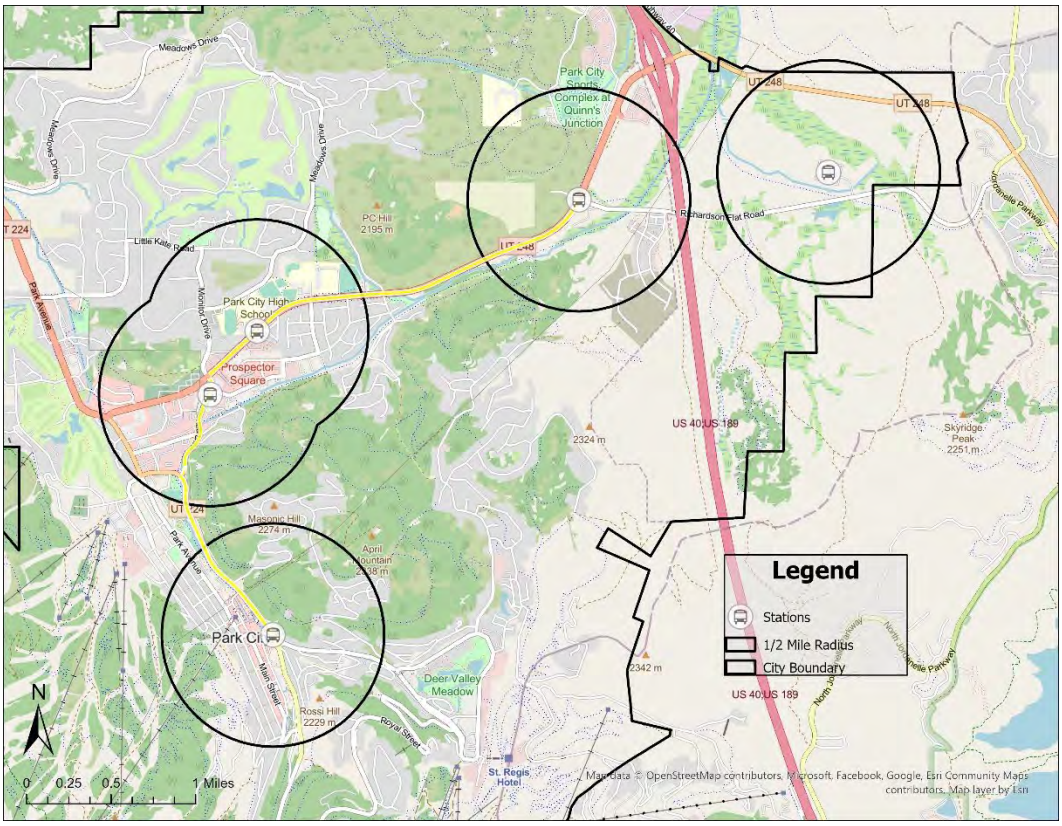
- A station or potential end-of-line facility at the Richardson Flat Park and Ride (Richardson Flat)
- A station or potential end-of-line facility at the intersection of SR-248 and Richardson Flat Road area adjacent to a city-owned parcel informally called the 'Gordo site' (Gordo)
- A station at SR-248 and Park City High School (Park City High School)
- A station at Bonanza Drive and approximately Prospector Avenue (Bonanza Drive)
- An end-of-line facility at the City's Old Town Transit Center on Swede Alley (OTTC)

The station areas for this study are examined in ½ mile radii, consistent with FTA requirements. Additionally, for the purposes of this analysis, ZPFI combined the radii associated with the Park City High School station and Bonanza station given that they overlap. By combining these areas, ZPFI prevents double counting of characteristics in overlapping zones such as population

[1] U.S. Department of Transportation, Federal Transit Administration. Capital Investment Grants Proposed Policy Guidance, Federal Transit Administration, 2025, https://www.transit.dot.gov/sites/fta.dot.gov/files/2025-08/Proposed-CIG-Policy-Guidance-August-2025.pdf.

or total acreage. ZPFI also notes that portions of the potential Richardson Flat station area lie outside of the Park City Municipal boundary.

Figure 1. Re-create 248 Transit Study Area Potential Station Locations



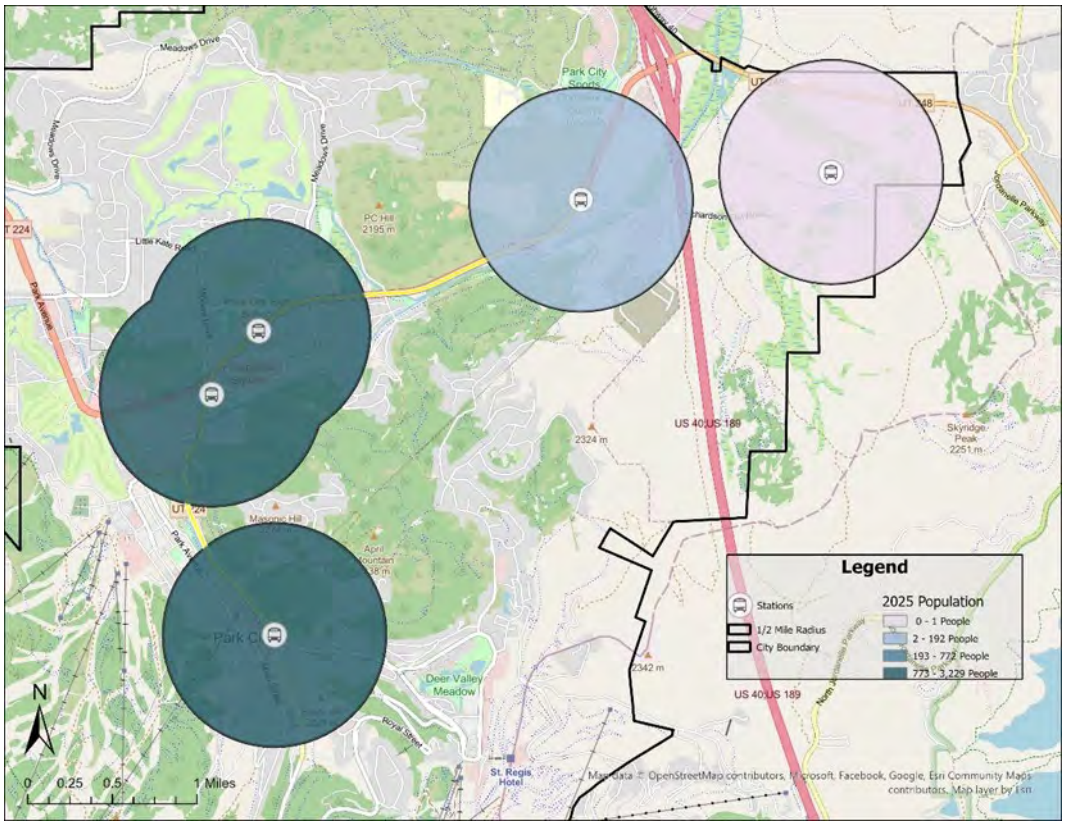
Source: Horrocks, ZPFI.

1.2 AVERAGE EXISTING POPULATION DENSITY ACROSS ALL STATION AREAS

Most of Park City's large employment centers are located proximate to SR-224 or SR-248. Transit improvements along SR-248 will substantially increase access to employment, due to the connection to SR-248 as well as to major employment centers near Bonanza Drive.

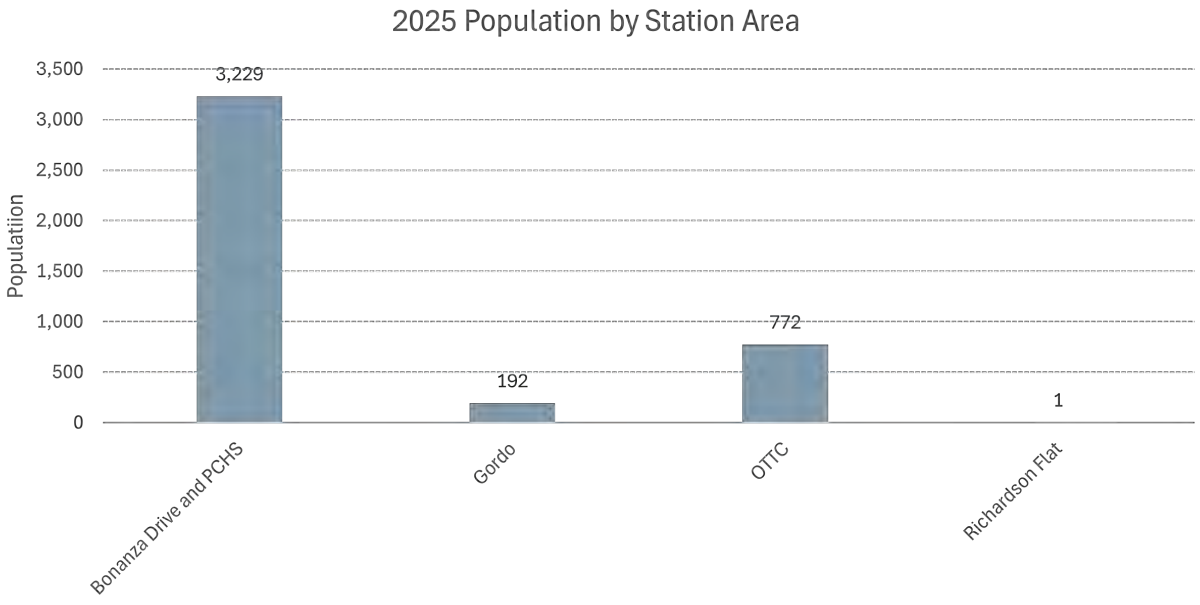
Consistent with the exhibit below, existing population is relatively sparse in the Gordo area at 192 people given the minimal residential development in the area. Population is essentially not present in the Richardson Flat area. Total population in the Bonanza Drive, Park City High School, and Gordo areas is greater at 3,229 people, due to existing homes and its larger land area. Total population in the OTTC area is 772 people.

Figure 2. Re-create 248 Transit Study Area Total Population by Station Area



Source: WFRC Traffic Analysis Zones, ZPFI.

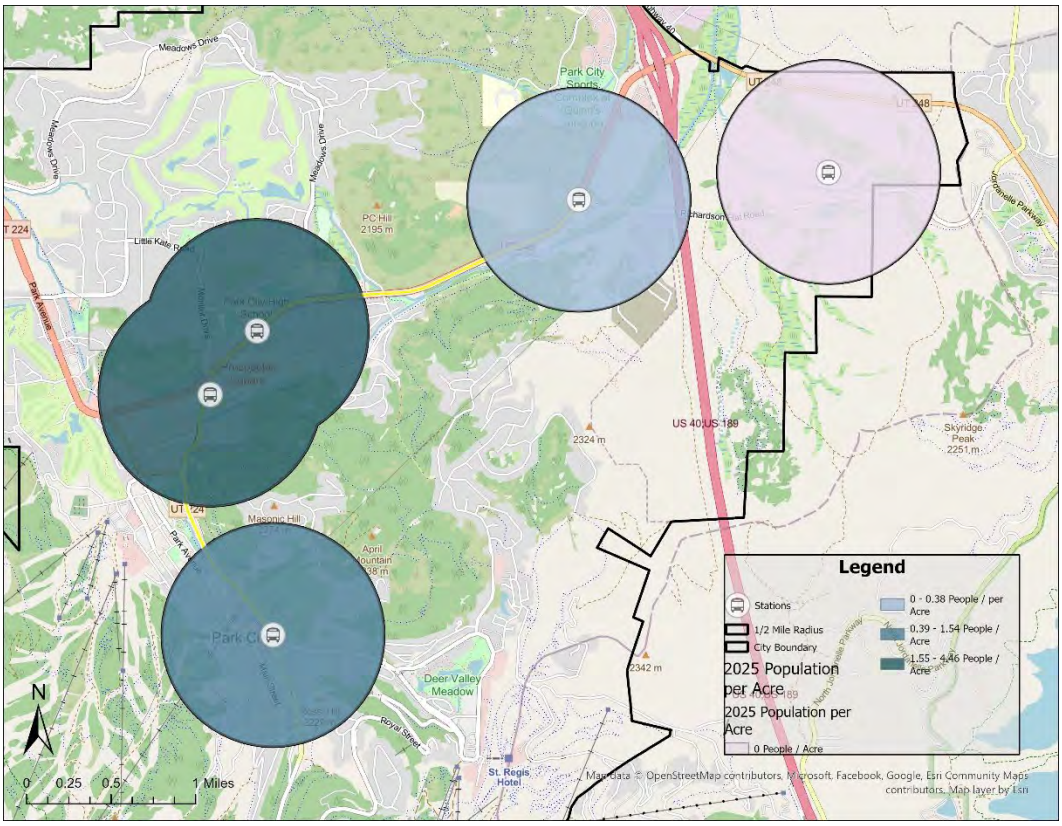
Figure 3. Total Population by Station Area



Source: WFRC Traffic Analysis Zones, ZPFI.

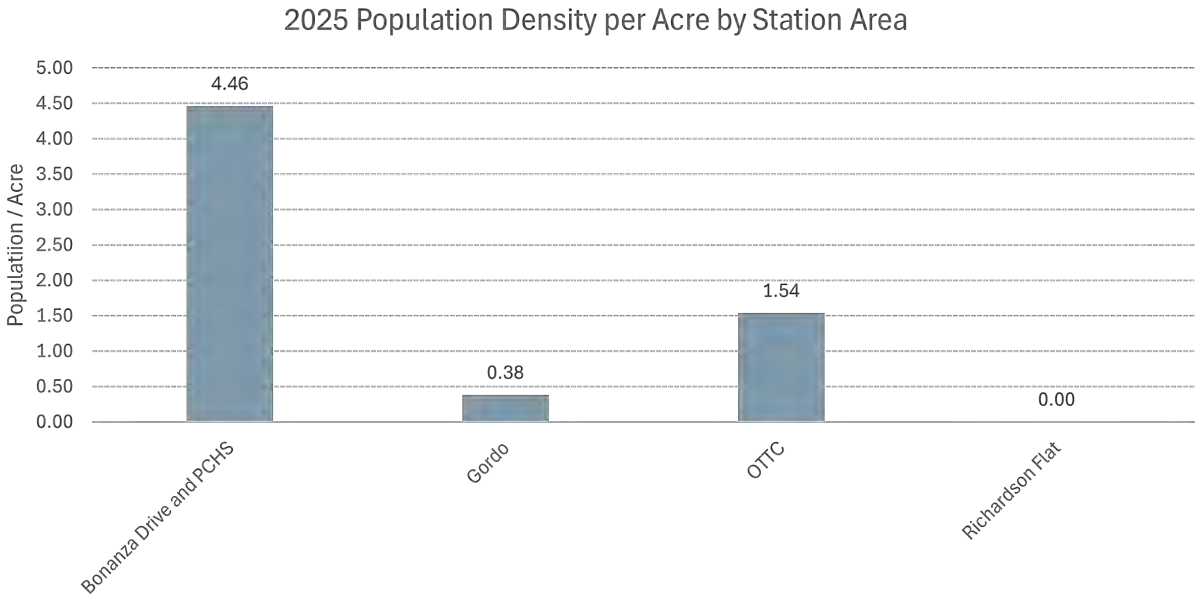
However, population density is better understood by normalizing these population figures by land area to examine a measure of people per acre. When viewed through this lens, the Bonanza Drive and Park City High School area still has the greatest population density, followed by the OTTC and then the Gordo area. Population density at the Richardson Flat area is again zero.

Figure 4. 2025 Population Density per Acre by Station Area



Source: WFRC Traffic Analysis Zones, ZPFI.

Figure 5. SR-248 ELB 2025 Population Density per Acre by Station Area



Source: WFRC Traffic Analysis Zones, ZPFI.

Jobs served by the project are a critical component to project success and adoption. Furthermore, it is likely that the benefit to jobs will extend beyond the immediate number of jobs within each station area as winter visitation creates much more dynamic demand for jobs throughout the corridor.

However, in studying data and projections from the statewide Wasatch Front Regional Council Traffic Analysis Zones (WFRC TAZ) dataset by census tract we can gain insights into the long-term job market and employment characteristics within each station area.

Table 1. Re-create 248 Jobs by Station Area, 2025-2045

STATION AREA	2025 JOBS	2045 PROJECTED JOBS	PROJECTED 20-YEAR JOB GROWTH	ANNUALIZED JOB GROWTH OVER 20-YEAR PERIOD
Bonanza Drive and Park City High School	11,879	14,010	2,131	0.9%
Gordo	1,008	1,301	293	1.5%
OTTC	6,950	7,614	664	0.5%
Richardson Flat	0	2	2	27.9%
Total	19,836	22,924	3,088	0.8%

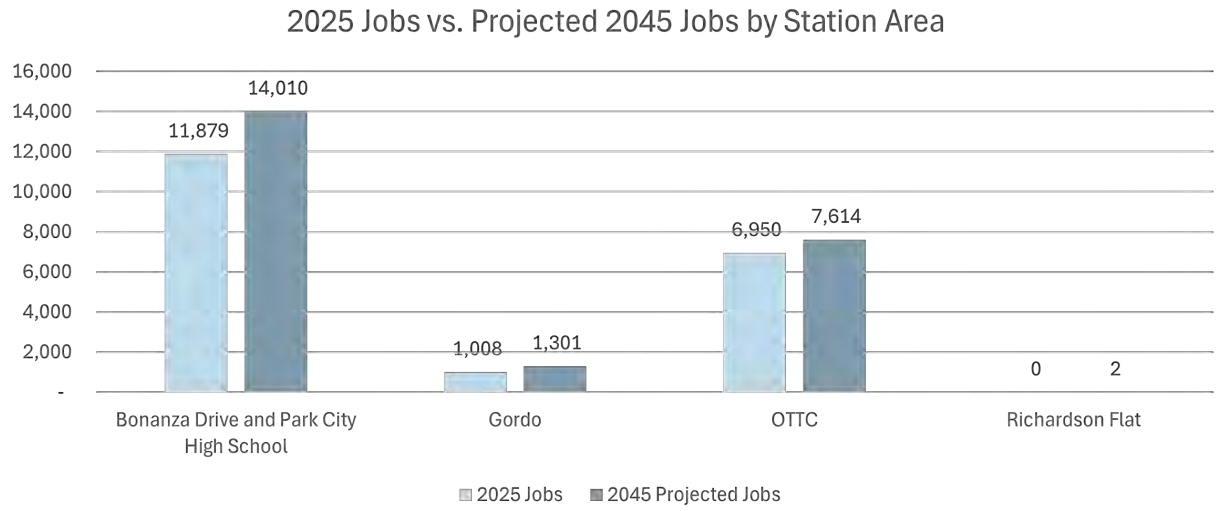
Table 2. Re-create 248 Job Density by Station Area, 2025-2045

STATION AREA	2025 JOBS	2045 PROJECTED JOBS	PROJECTED 20-YEAR JOB GROWTH	ANNUALIZED JOB GROWTH OVER 20-YEAR PERIOD
Bonanza Drive and Park City High School	16.4	19.4	1.2	0.9%
Gordo	2.0	2.6	1.3	1.5%
OTTC	13.8	15.2	1.1	0.5%
Richardson Flat	0.0	0.0	0.0	27.9%

Source: WFRC Traffic Analysis Zones, ZPFI.

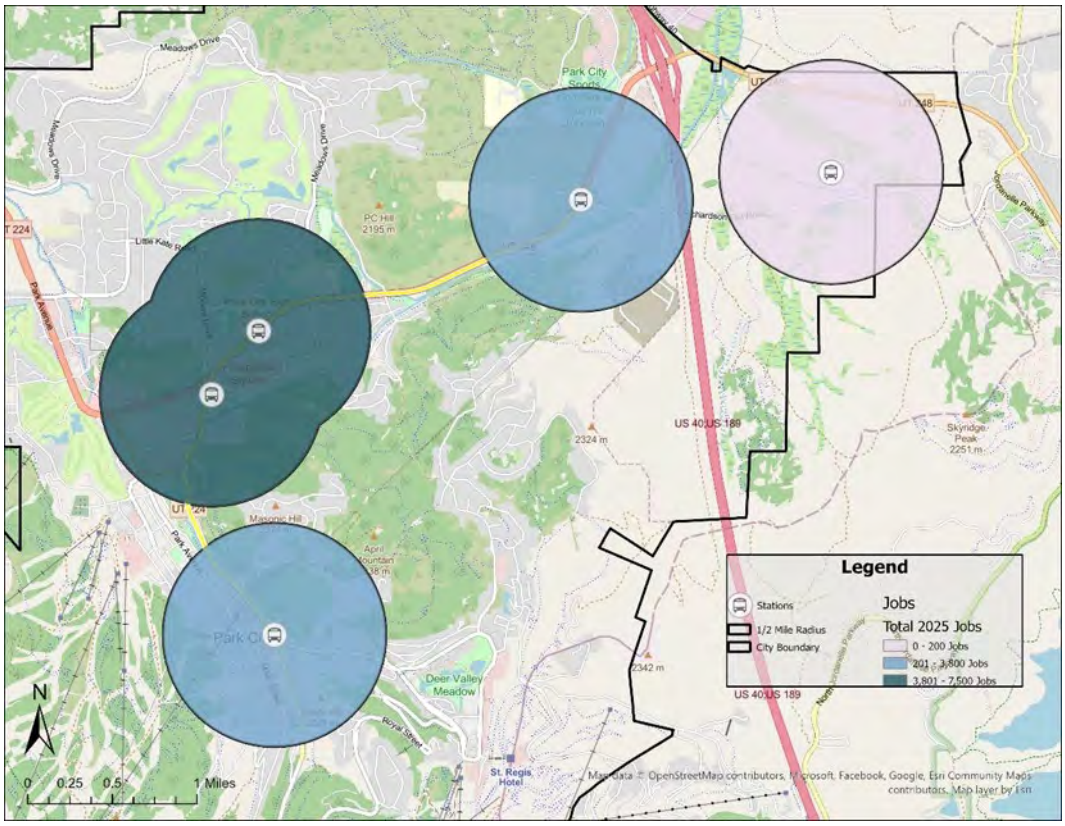
Additional visualizations of the information above illustrate the significance and relative efficiency of the Bonanza Drive and Park City High School station area along with the OTTC area. The Gordo and Richardson Flat areas stand out for their scarcity of jobs when compared to the other station areas.

Figure 6. Jobs by Station Area, 2025-2045



Source: WFRC Traffic Analysis Zones, ZPFI.

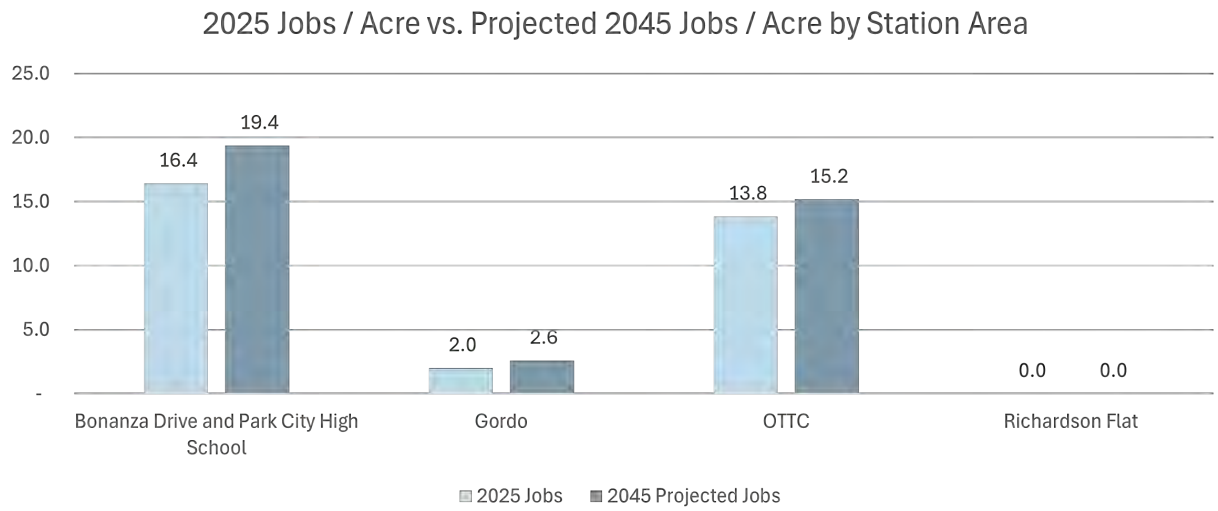
Figure 7. Jobs by Station Area, 2025



Source: WFRC Traffic Analysis Zones, ZPFI.

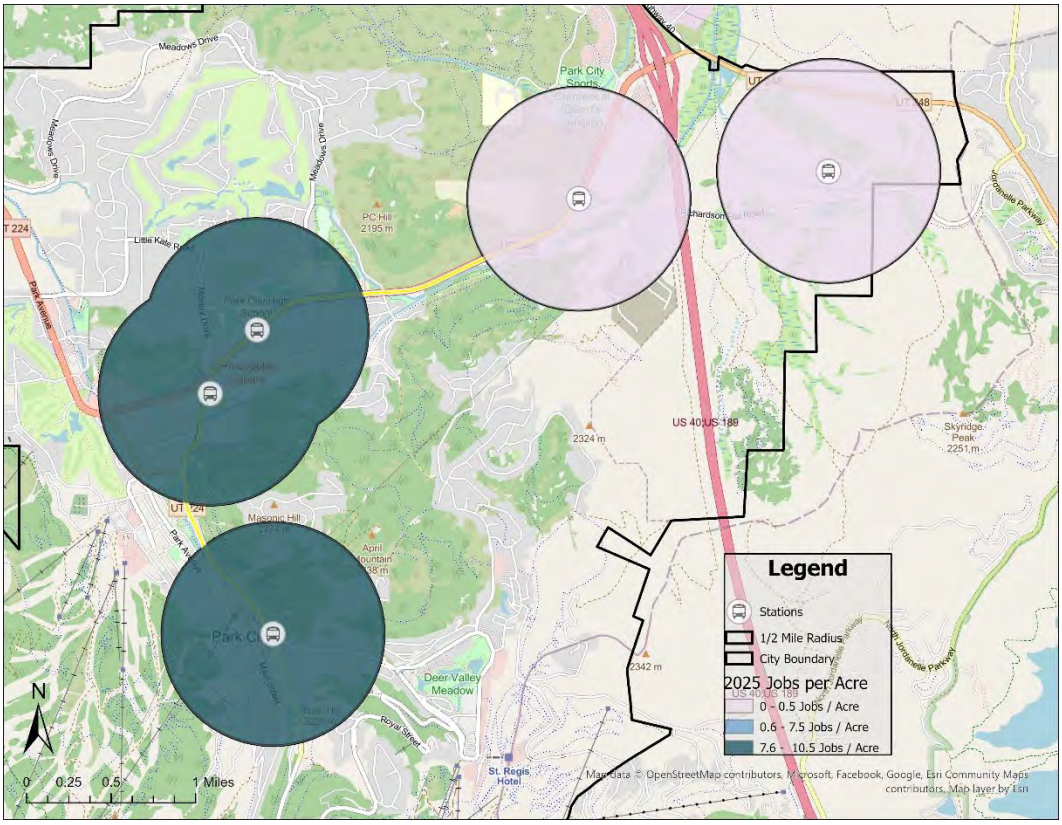
Normalizing job density per acre provides a more accurate measure of the relative efficiency of each site in serving workers.

Figure 8. Jobs per Acre by Station Area, 2025-2045



Source: WFRC Traffic Analysis Zones, ZPFI.

Figure 9. Jobs per Acre by Station Area



Source: WFRC Traffic Analysis Zones, ZPFI.

From the analysis above, we see that job density far outstrips long-term population density in the different station areas. It is reasonable to conclude that the Re-create 248 project could serve as a critical resource for workers in these regions and this would correspondingly lessen the amount of single-occupancy vehicle traffic on this corridor due to jobs in the region.

1.3 HOUSING CHARACTERISTICS

FTA defines legally binding affordability restricted (LBAR) housing as, “For purposes of the affordable housing measure, a legally binding affordability restriction is a lien, deed of trust or other legal instrument attached to a property and/or housing structure that restricts the cost of housing units to be affordable to households at specified income levels for a defined period of time and requires that households at these income levels occupy these units”[2] (FTA 19). Deed restricted housing units that are occupied by renters that have household incomes at or below

[2] U.S. Department of Transportation, Federal Transit Administration. Capital Investment Grants Proposed Policy Guidance, Federal Transit Administration, 2025, https://www.transit.dot.gov/sites/fta.dot.gov/files/2025-08/Proposed-CIG-Policy-Guidance-August-2025.pdf.

60 percent of the area median income (AMI) as defined by the U.S. Department of Housing and Urban Development (HUD). This study criteria considers the ratio of the number of these LBAR units within ½ mile of a station area to the proportion of LBAR units within the counties.

A presentation by Summit County in 2024 indicates that the County has 1,095 deed restricted housing units[3] (Summit County, 2). However, ZPFI does not currently have access to geographically mapped data regarding deed-restricted housing in Park City. Therefore, this ratio cannot be directly computed at this time. However, ZPFI has presented additional housing characteristics regarding the station areas below.

FTA cites that it, "is seeking LBAR housing units to renters with household incomes at or below 60 percent of the area median income (AMI) and/or owners with household incomes at or below AMI that are within a ½-mile radius of stations and in the counties through which the project travels" (FTA 19).

First, ZPFI notes that, according to the U.S. Census American Community Survey (ACS) the Bonanza Drive and Park City High School station area has the greatest number of housing units given it is composed of a larger land area than the end-of-line stations. However, when normalizing by units per acre, each area is roughly similar. Further, we note that this data is based on U.S. Census tracts, which are larger than each station area. Therefore, the Richardson Flat site will show as having units present, even though no actual housing units exist on the site.

Next, we note that a significant number of housing units are held as vacant housing units for seasonal, recreational, or occasional use.

Table 3. Housing Characteristics by Station Area

STATION AREA	TOTAL HOUSING UNITS	OWNER OCCUPIED HOUSING UNITS	RENTER OCCUPIED HOUSING UNITS	VACANT HOUSING UNITS FOR SEASONAL, RECREATIONAL, OR OCCASIONAL USE	OTHER VACANT HOUSING UNITS	% OF HOUSING UNITS FOR SEASONAL, RECREATIONAL, OR OCCASIONAL USE	TOTAL HOUSING UNITS PER ACRE	HOUSING UNITS FOR SEASONAL, RECREATIONAL, OR OCCASIONAL USE PER ACRE
Bonanza Drive	392	118	43	182	49	46%	0.54	0.25
Gordo	280	83	30	132	35	47%	0.56	0.26
OTTC	298	68	25	159	46	53%	0.59	0.32

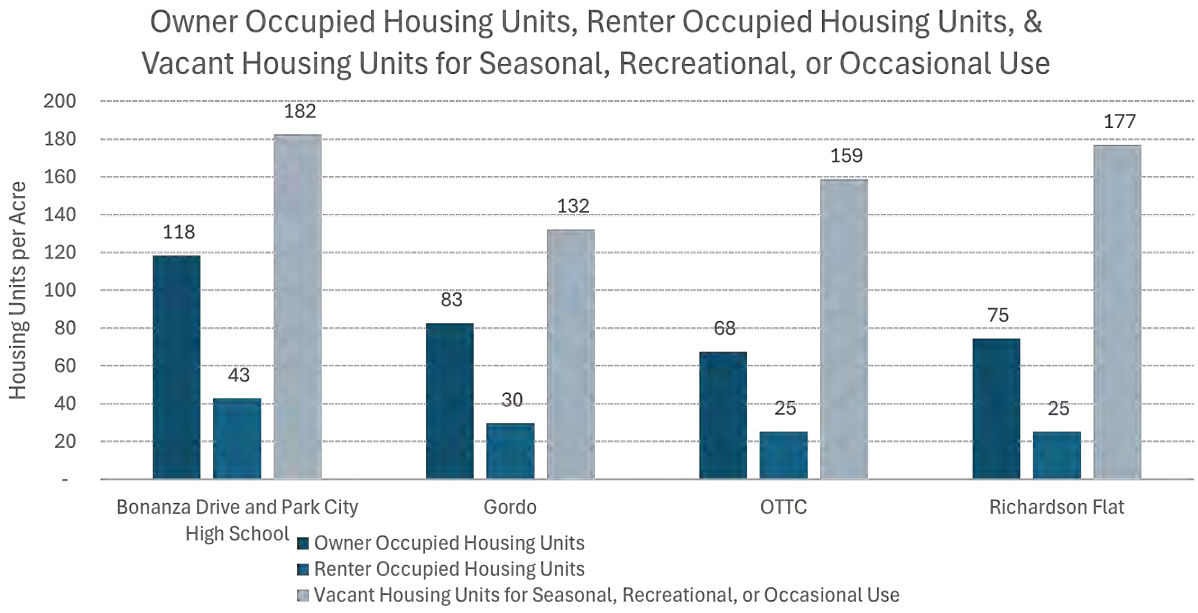
[3] Summit County. Housing Profiles, Jeffrey B. Jones, 2024, https://summitcounty.granicus.com/MetaViewer.php?view_id=&clip_id=674&meta_id=44685#:~:text=Summit%20County:%20=%201%2C095%20Deed%20Restricted,Entitled%20and/or%20Under%20Construction.

STATION AREA	TOTAL HOUSING UNITS	OWNER OCCUPIED HOUSING UNITS	RENTER OCCUPIED HOUSING UNITS	VACANT HOUSING UNITS FOR SEASONAL, RECREATIONAL, OR OCCASIONAL USE	OTHER VACANT HOUSING UNITS	% OF HOUSING UNITS FOR SEASONAL, RECREATIONAL, OR OCCASIONAL USE	TOTAL HOUSING UNITS PER ACRE	HOUSING UNITS FOR SEASONAL, RECREATIONAL, OR OCCASIONAL USE PER ACRE
Richard-son Flat	324	75	25	177	47	55%	0.65	0.35
Total	1,294	343	123	651	177	50%	0.15	0.29

Source: U.S. Census ACS 2023, ZPFI.

Housing units held as vacant housing units for seasonal, recreational, or occasional use are commonly referred to as nightly rentals or non-primary homes. The exhibit below highlights the striking difference and fact that these non-primary homes constitute the majority of the market in every station area. ZPFI notes that while the Richardson Flat area has minimal to no housing, some housing is provided in the Hideout area. As this analysis occurs at the Census tract area, higher precision about this area in the Park City Municipal boundary only is limited in the data and its lack of actual physical housing, within Park City boundaries, is reiterated here.

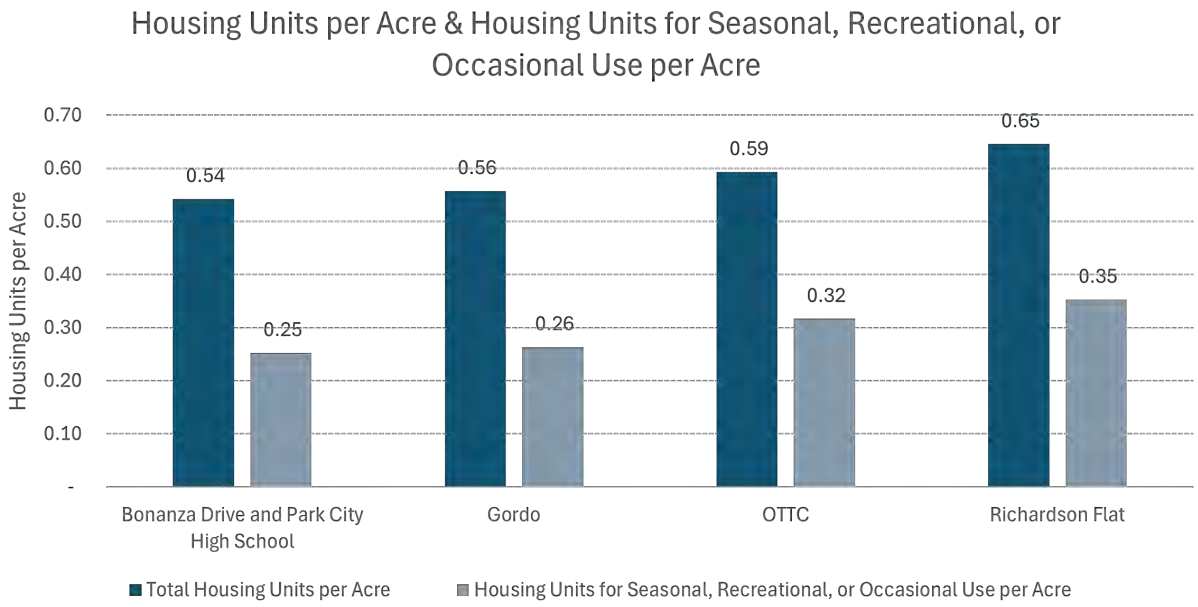
Figure 10. Owner Occupied Housing Units, Renter Occupied Housing Units, & Vacant Housing Units for Seasonal, Recreational, or Occasional Use



Source: U.S. Census ACS 2023, ZPFI.

Across the station areas, the Bonanza Drive and Park City High School station areas provide the greatest number of owner-occupied units per acre, while the OTTC end-of-line area contains the greatest number of units for seasonal, recreational, or occasional use.

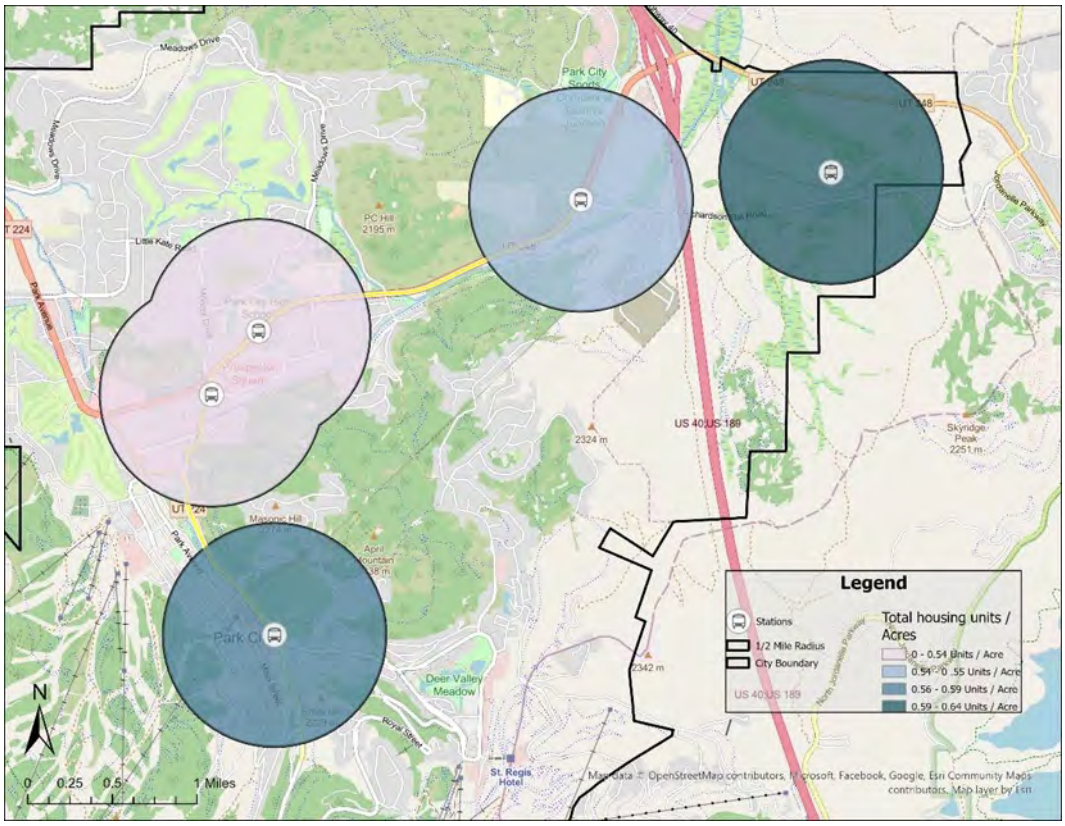
Figure 11. Housing Units per Acre & Housing Units for Seasonal, Recreational, or Occasional Use per Acre



Source: U.S. Census ACS 2023, ZPFI.

Lastly, an additional visualization of total housing units per acre highlights that the residential land use form provides a very similar level of density across station areas.

Figure 12. Total Housing Units per Acre by Station Area



Source: U.S. Census ACS 2023, ZPFI.

1.4 COMMUNITY RISK

While the above metrics provide illuminating characteristics about potential station areas, FTA also requires analysis of potential community risks as outlined below. These risk metrics for every station area are currently not within the scope of this study but are important to note. However, ZPFI notes that station areas fall within Census Tract 9644.02 and 9643.08. In Census Tract 9644.02 only 12 percent of the population has 3+ components of social vulnerability, about 522 individuals, according to the U.S. Census Community Resilience Estimates Viewer[4]. In Census Tract 9643.08 24 percent of the population has 3+ components of social vulnerability, about 799 individuals.

[4] U.S. Census Bureau, Community Resilience Estimates Viewer, https://mtgis-portal.geo.census.gov/arcgis/apps/experiencebuilder/experience/?id=54292fa3918e425a8717259f930274fb#data_s=id%3AdataSource_6-1946fd5161f-layer-6-30%3A27329.

Table 4. FTA Potential Community Risk Factors

RISK FACTOR #	RISK FACTOR	HOUSEHOLD OR INDIVIDUAL
1	Income-to-Poverty Ratio (IPR) < 130 percent Household	Household
2	Single or zero caregiver household – only one or no individuals living in the household who are 18-64 Household	Household
3	Unit-level crowding defined as > 0.75 persons per room Household	Household
4	Communication barrier defined as either: (a) Limited English-speaking households; or (b) No one in the household over the age of 16 with a high school diploma	Household
5	No one in the household is employed full-time, year-round (flag is not applied if all residents of the household are aged 65 years or older)	Household
6	Disability posing constraint to significant life activity (persons who report having any one of the six disability types: hearing difficulty, vision difficulty, cognitive difficulty, ambulatory difficulty, self-care difficulty, or independent living difficulty)	Individual
7	No health insurance coverage Individual	Individual
8	Being aged 65 years or older Individual	Individual
9	Households without a vehicle Household	Individual
10	Households without broadband internet access Household	Individual

Source: U.S. Department of Transportation, Federal Transit Administration.

1.5 ESSENTIAL SERVICES WITHIN ONE MILE OF STATIONS

FTA encourages transit services in locations with access to key essential services such as healthcare and education institutions. These may include hospitals, Veterans Administration centers, colleges/universities, supplemental colleges, and public schools within a one-mile radius of stations. By these criteria both the Gordo facility and the Bonanza Drive and Park City High School station area are excellent candidate sites. There is a hospital in the region of the Gordo facility, and Park City High School and McPolin Elementary school are both in the region of the Bonanza Drive and Park City High School station areas.

1.6 ADDITIONAL INDICATORS

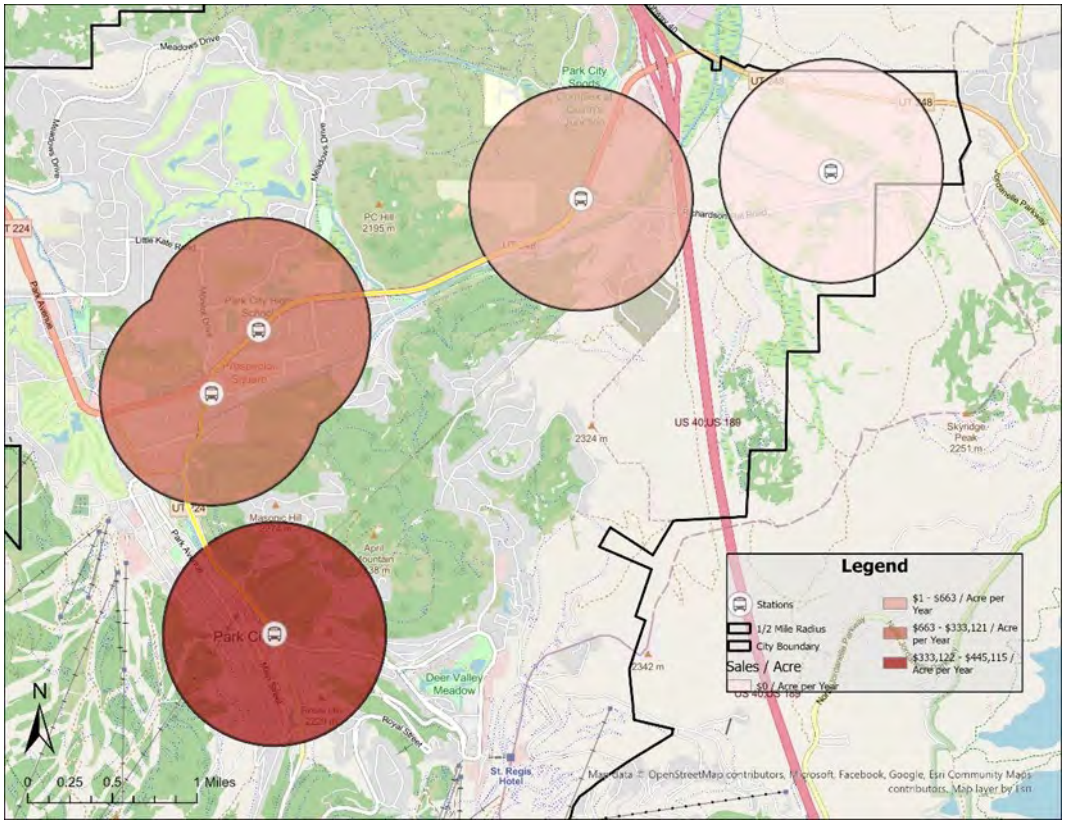
In addition to the FTA-preferred indicators highlighted above, ZPFI provides additional metric insights into the potential station areas that highlight their suitability for the Re-create 248 project.

1.7 TAXABLE SALE PER ACRE

As noted in ZPFI's previous report, high-performing retail centers drive real estate demand and produce municipal revenue. Ideal redevelopment strategies will support existing businesses and expand retail agglomerations.

ZPFI studied calendar year 2023's annual taxable sales per acre which verifies the sales strength of the Old Town and Historic Main Street commercial core relative to the Bonanza Drive and Park City High School station area and the Gordo and Richardson Flat area. This is not surprising given Main Street's much higher density land uses, its prominence as a must-visit location for visitors, and its concentration of restaurants, bars, and retail locations. The Gordo and Richardson Flat area has minimal taxable sales due to its sparse and partially residential land uses.

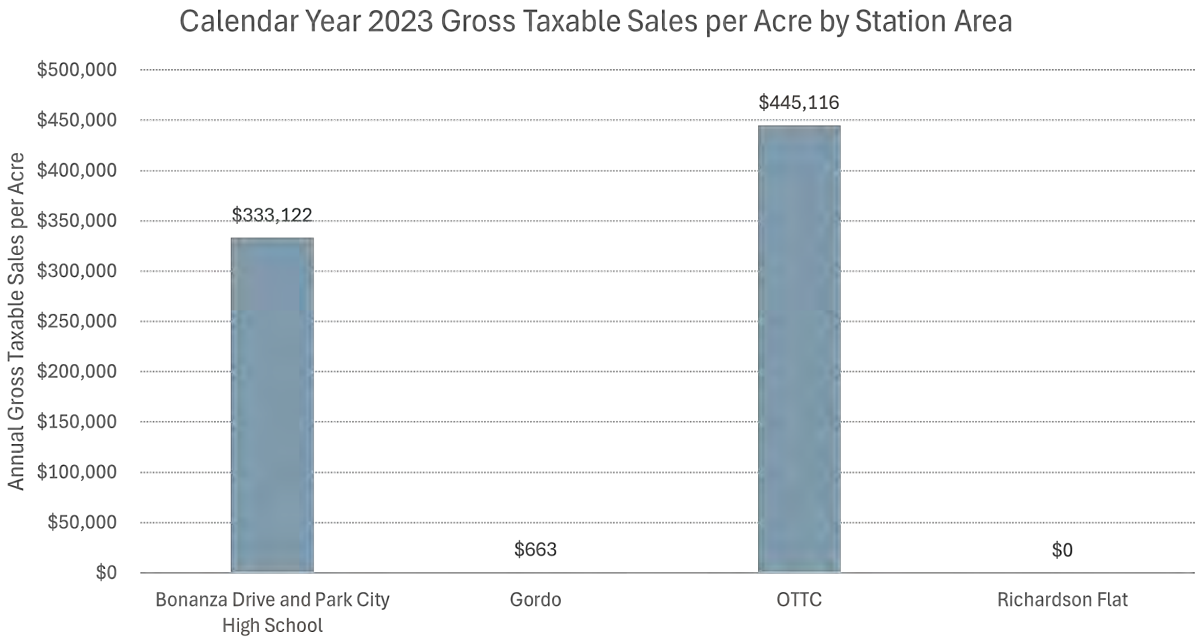
Figure 13. CY 2023 Taxable Sales per Acre by Station Area



Source: PCMC, ZPFI.

Calendar year 2023 taxable sales per acres stood at $445,116 per acre in the OTTC area while the Bonanza Drive and Park City High School station area performed at approximately $333,122 in sales per acre. Since 2023, the City has been traveling at similar trend levels with sales growth slowing.

Figure 14. CY 2023 Taxable Sales per Acre by Station Area



Source: PCMC, ZPFI.

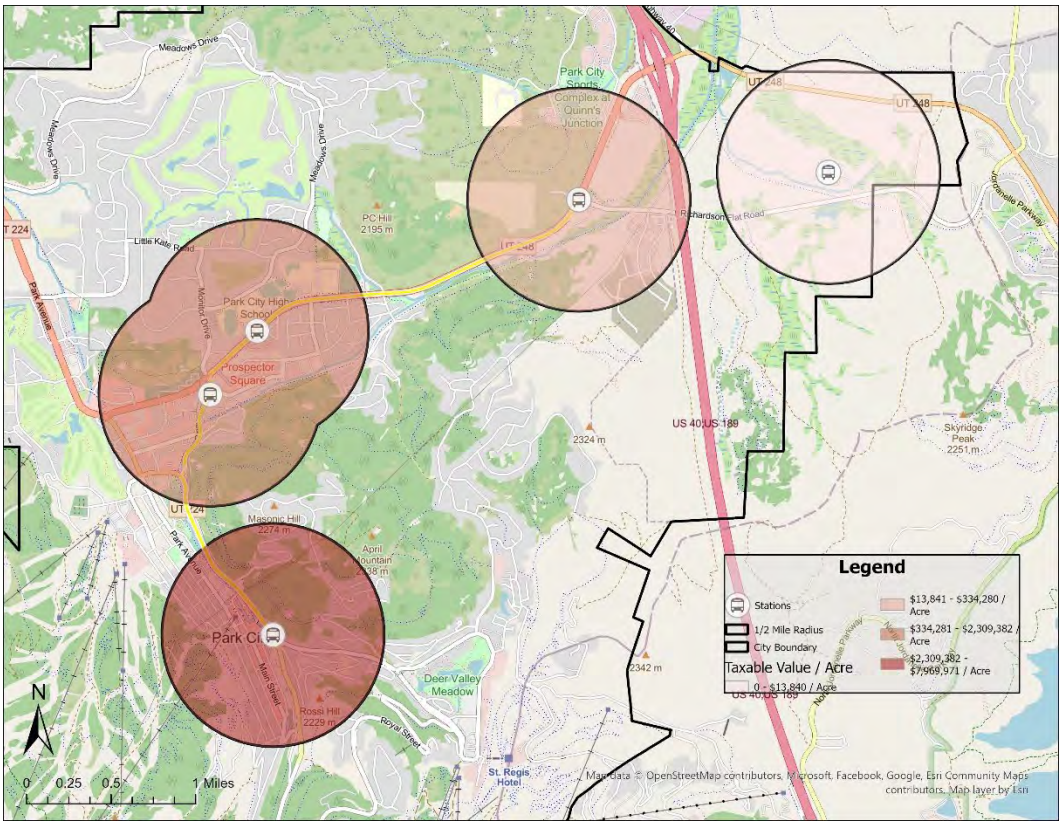
1.8 TAXABLE VALUE PER ACRE

High market values reflect past investment and current high demand for real estate. Like low relative improvement values, low market values suggest areas with opportunity for redevelopment. When high and low market values are intermingled, the area shows both demand and opportunity for redevelopment.

Taxable value per acre is highly correlated with economic and sales activity in a region, so it is no surprise that the OTTC area also has significantly higher taxable value per acre than the other station areas. Further, taxable values frequently lag traded market values. Thus, this analysis is not reflective of potential sales prices of assets.

Nevertheless, with its relatively low taxable value per acre, the Gordo and Richardson Flat area presents a clear investment opportunity with the greatest potential upside in terms of new investment. The project will likely need to consider how an end-of-line facility in the Gordo and Richardson Flat region is supported and integrated into this land area.

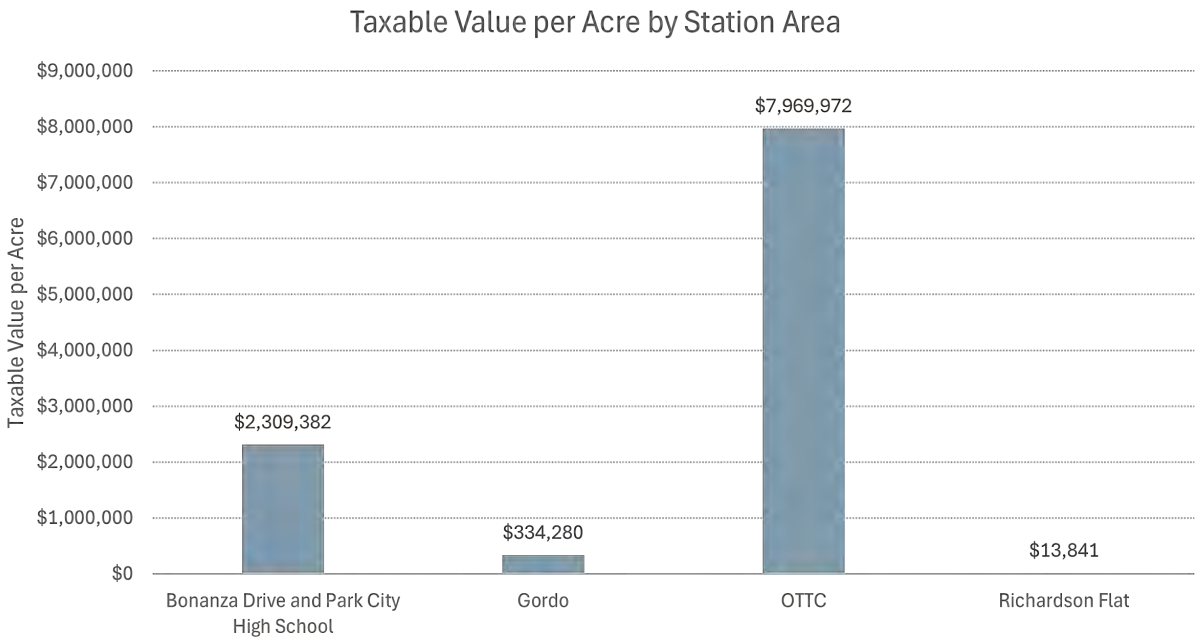
Figure 15. Taxable Value per Acre by Station Area



Source: Summit County Assessor, ZPFI.

The drastic differences in taxable value by station area is visually exhibited below as well.

Figure 16. Taxable Value per Acre by Station Area

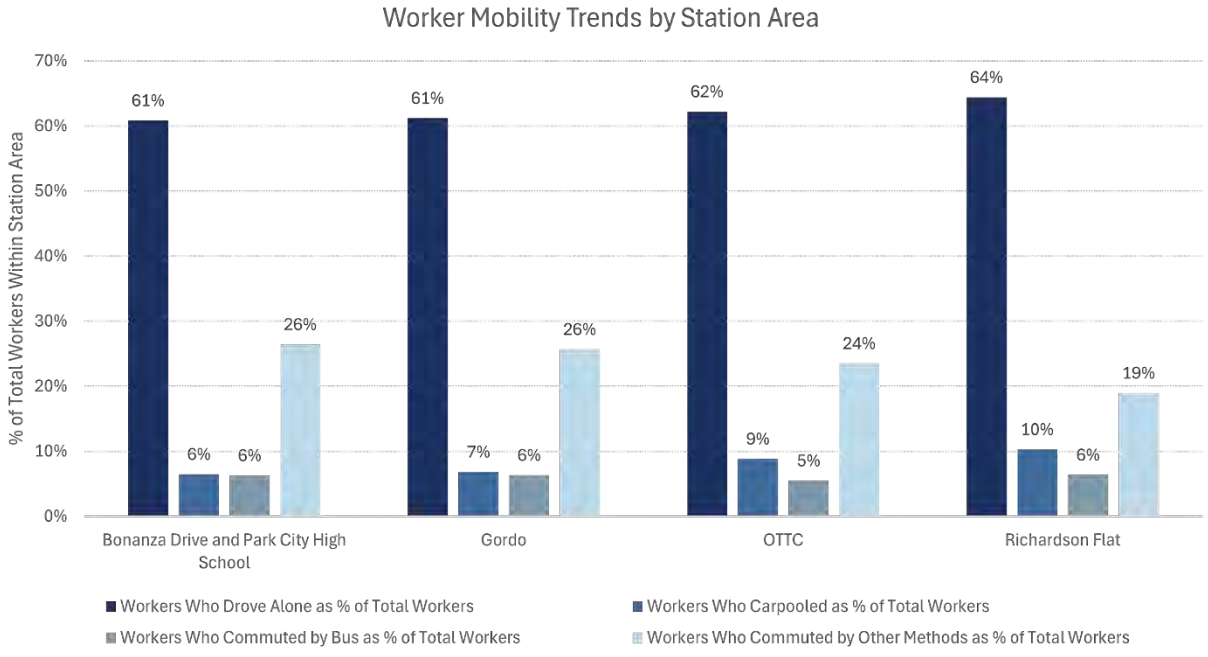


Source: Summit County Assessor, ZPFI.

1.9 WORKER MOBILITY TRENDS

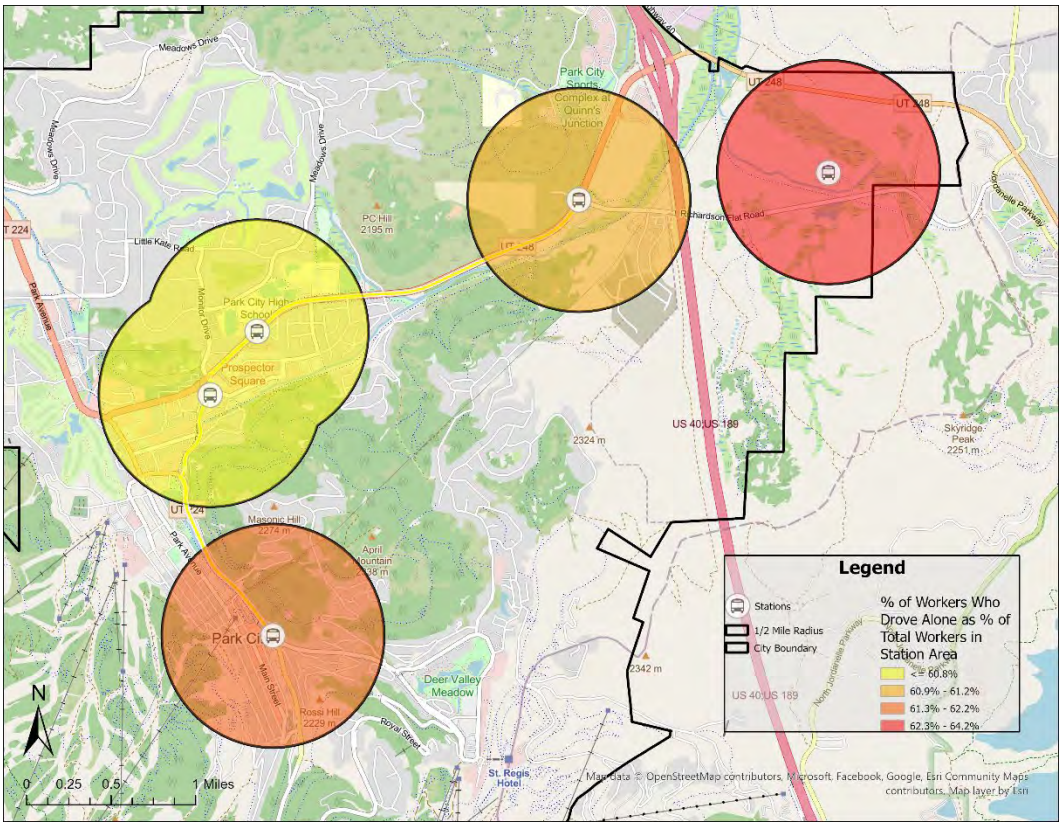
In addition to economic productivity trends, the ACS offers insights into worker mobility trends. We see from the analysis below that driving alone is the overwhelming method of commuting for workers within each station area. As a percentage of total workers, commuting by bus stands as the least used method. Other methods of commuting, such as walking or riding a bike, rank as the second most used method in each station area. ZPFI notes that as this information is derived from the ACS, it is not likely to reflect the patterns of seasonal visitors, who place high demands on Park City transportation options and roadways in the winter months.

Figure 17. Method of Commuting by Percentage of Total Workers by Station Area



Source: U.S. Census ACS 2023, ZPFI.

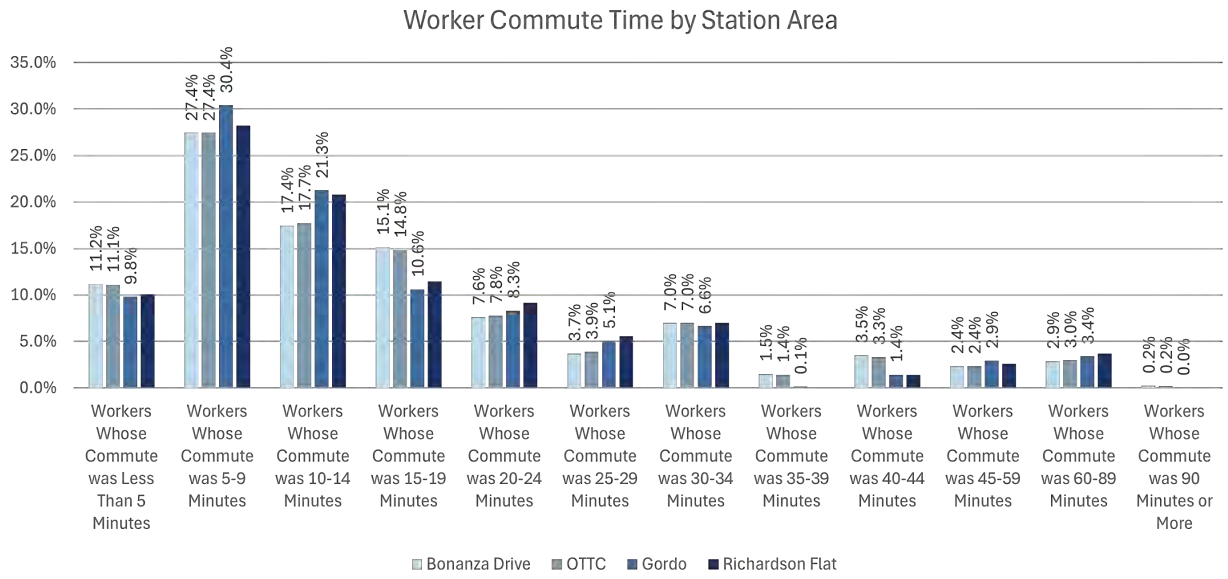
Figure 18. Resident Workers Who Drove Alone as a Percentage of Total Workers by Station Area



Source: U.S. Census ACS 2023, ZPFI.

Finally, we see that the majority of workers within the station areas themselves tend to have commute times less than 20 minutes. This means that residents who work in these areas are not likely to commute very far, or are able to work near where they live, a positive for their time efficiency. When comparing these trends to the data above, a general trend develops that workers who live in these station areas are likely to work near where they live and prefer to get to work by car.

Figure 19. Resident Worker Commute Time by Station Area



Source: U.S. Census ACS 2023, ZPFI.

1.10 POTENTIAL FOR HTRZS TO BENEFIT PROJECT

The Re-create 248 future project presents significant opportunities to create fast and efficient transit within Park City. The funds to support this project will come from a diverse array of tools including federal and local funding. Inasmuch as station areas will need to undertake infrastructure investments to support each stop, the State of Utah's Housing and Transit Reinvestment Zone Act (HTRZ) S.B. 217[5] could prove beneficial to the City in generating funds for grant matches or other infrastructure investments in the station areas. The requirements for a ELB-related project are highlighted below.

[5]Utah State Legislature, Utah Senate. S.B. 217 Housing and Transit Reinvestment Zone Act. https://le.utah.gov/~2021/bills/static/SB0217.html

Table 5. HTRZ Legislative Overview

	COMMUTER RAIL	LIGHT RAIL, ELB	ELB
% affordable housing required on developable acres	12%*	12%*	12%*
% affordable housing at 80% of AMI	9%	9%	9%
% affordable housing at 60% of AMI	3%	3%	3%
Residential % of developable land	51%	51%	51%
# DUs per acre	>=50	>=50	>=39
Mixed-use development required	Yes	Yes	Yes
Reasonable % of DUs >1 bdrm required	Yes	Yes	Yes
Radius from station	<=1/3 mile**	<=1/4 mile**and***	<=1/4 mile
Minimum acres	10	10	10
Maximum acres (noncontiguous)****	125	100	100
Property tax Increment capture	80%, 25 yrs max per parcel, 45-yr period	80%, 15 yrs max per parcel, 30-yr period	60%, 15 yrs max per parcel, 30-yr period
Sales tax increment capture	15% to TTIF	15% to TTIF	15% to TTIF
Maximum number of trigger dates for tax increment collection periods	3	3	3

Source: Utah State Legislature, Utah Senate. S.B. 217 Housing and Transit Reinvestment Zone Act.

*Note: *No affordable housing requirement if municipality or public transit county meets HUD requirements of < 60% AMI.*

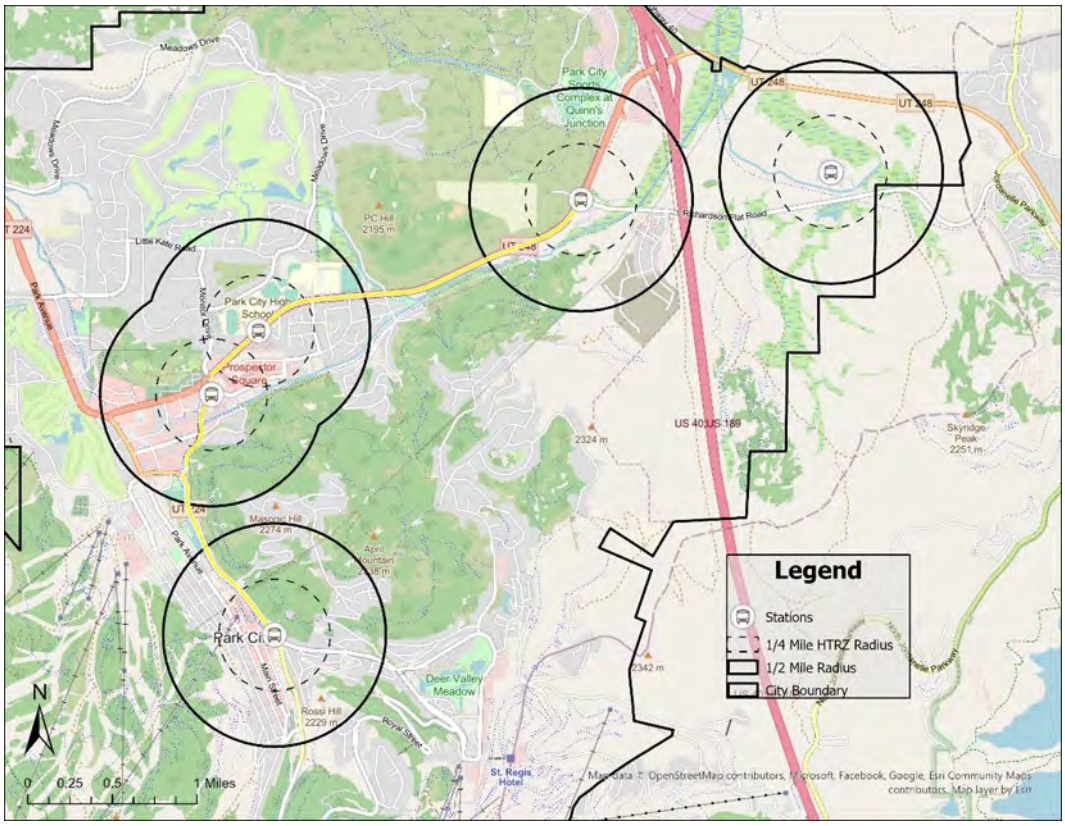
***For a city of the 1st class with a population >150,000, in a county of the 1st class, with commuter or light rail station located in an opportunity zone, radius can extend to ½ mile.*

****Radius extends to ½-mile in a master-planned development of >500 acres.*

*****Exceptions apply for two light rail stations located within a city of the third class if the two light rail stations are within a 0.95-mile distance on the same light rail line, then a single HTRZ can encompass both stations, not more than ¼ mile from the stations or rail line, and still not to exceed 100 acres.*

Lastly, given the State's requirement for HTRZ zones to be less than or equal to ¼ mile from a station, each station area would likely qualify for its own HTRZ, as depicted below.

Figure 20. HTRZ Legislative Overview



Source: Horrocks, ZPFI.

2 CONCLUSION

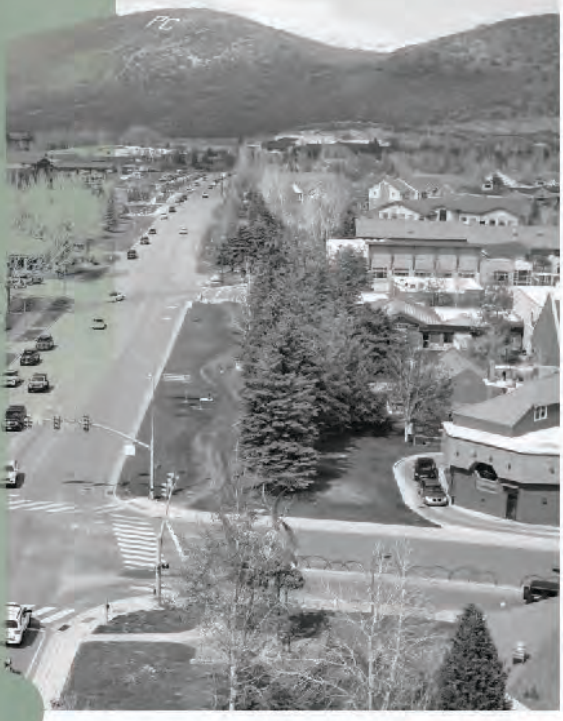
The Re-create 248 future transit project represents a transformative opportunity to enhance mobility, economic vitality, and sustainability within Park City and the SR-248 corridor. Analysis of station areas demonstrates that Bonanza Drive and Park City High School offer the highest concentration of population and employment, while OTTC provides unmatched commercial strength and taxable value per acre. Conversely, the Gordo and Richardson Flat area, though currently underdeveloped, presents significant potential for future investment and connectivity. Collectively, these stations will improve access to essential services, reduce reliance on single-occupancy vehicles, and support long-term growth aligned with FTA guidelines. Leveraging tools such as HTRZ remains an option for funding infrastructure and meeting affordability requirements. By integrating transit improvements with strategic land use planning, Re-create 248 can deliver a resilient, equitable, and economically vibrant transportation network for Park City's residents, workers, and visitors.

APPENDIX B: LEVEL 2 ENVIRONMENTAL SCREENING MEMORANDUM AND MAPBOOK

Re·create 248

LEVEL 2 ENVIRONMENTAL SCREENING REPORT

December 2025



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Acronyms and Abbreviations

APA	Agriculture Protection Area
CA	Conservation Agreement
CFR	Code of Federal Regulations
DEQ	Department of Environmental Quality
ELB	Exclusive-Lane Bus
EPA	Environmental Protection Agency
ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
FPPA	Farmland Protection Policy Act
GIS	Geographic Information Systems
IPaC	Information for Planning and Consultation
LPA	Locally Preferred Alternative
LRT	Light Rail Transit
LUST	Leaking Underground Storage Tank
NEPA	National Environmental Policy Act
NPL	National Priorities List
OTTC	Old Town Transit Center
PCMC	Park City Municipal Corporation
Rail Trail	Historic Union Pacific Rail Trail
Re-create 248	Re-create 248 Transit Study
ROW	Right-of-Way
UDOT	Utah Department of Transportation
UDWR	Utah Division of Wildlife Resources
UNHP	Utah Natural Heritage Program
USFWS	U.S. Fish and Wildlife Service
UST	Underground Storage Tank

1 PROJECT SUMMARY

Park City Municipal Corporation (PCMC), located in Summit County, Utah, in collaboration with the Utah Department of Transportation (UDOT), has initiated the Re-create 248 Transit Study (Re-create 248). This multi-step alternative evaluation study is aimed at enhancing reliable high-capacity transit service between US-40 and the Old Town Transit Center (OTTC) that can be advanced to the next phase of project development, which is a Federal Transit Authority (FTA) National Environmental Policy Act (NEPA)-level environmental study and preliminary engineering. This study, using a Level 1 (initial) and Level 2 (detailed) screening process, identifies the recommended locally preferred alternative (LPA) that includes a definition of areas to be served, transit mode/type of transit technology, and logical termini (project limits). Level 1 screening was completed in fall 2025.

2 STUDY AREA

The study area for Re-create 248 Level 2 comprises one on-corridor alignment with three alternatives (see the study area map in Figure 1):The on-corridor alignment follows SR-248 from Quinn's Junction to Bonanza Drive with a connection to Richardson Flat Park and Ride (Segment 1), continues along Bonanza Drive from SR-248 to Deer Valley Drive (Segment 2), and follows Deer Valley Drive from Bonanza Drive to the OTTC (Segment 3).

Figure 1. Study Area Map

Figure 1. Re-create 248 Level 2 Screening Study Area

3 EVALUATED ALTERNATIVES

Three alternatives were evaluated for the on-corridor alignment. These alternatives included light rail transit (LRT), side running exclusive-lane bus (SELB), and center running exclusive-lane bus (CELB). High-level footprints for these alternatives were initially recommended to advance to Level 1 Screening from the Purpose and Need Screening Report, which was published in January 2025 and can be found on the study website.

This Level 2 Screening is a secondary screening process that includes developing specific footprints and identifying impacts based on specific design plans for the three alternatives.

4 ENVIRONMENTAL SCREENING APPROACH

This memorandum is a high-level summary of environmental resources that may potentially be impacted by the alternatives. Each alternative was analyzed individually to determine potential impacts. This memo documents these potential impacts to inform future phases of work, particularly the NEPA environmental study.

No fieldwork was conducted as part of this analysis. Environmental resources were reviewed and evaluated using available Geographic Information Systems (GIS) data, aerial imagery, and environmental information from the SR-248 Environmental Assessment (2020). The following is a list of environmental resources that were identified as potentially influencing the alternatives analysis. During the future NEPA phase, additional environmental resources will be reviewed in greater detail.

Environmental resources that were evaluated as part of this Level 2 Screening included:

- Land Use and Zoning
- Right-of-Way (ROW) (acquisitions and relocations)
- Farmland
- Floodplains
- Wetlands and Waters of the U.S.
- Streams
- Hazardous Materials:
  - National Priorities List (NPL)
  - Underground Storage Tanks (USTs) and Leaking Underground Storage Tanks (LUSTs)
- Cultural
- Section 4(f)
- Section 6(f)
- Visual
- Social Environment
- Pedestrians and Bicyclists
- Air Quality
- Noise and Vibration
- Wildlife and Endangered Species

5 ENVIRONMENTAL CONSIDERATIONS

5.1 LAND USE AND ZONING

Land uses around the alternative include commercial, institutional, residential, and open space. Land use between US-40 and Wyatt Earp Way (on both sides of SR-248) is predominately designated as open space. At Round Valley Drive, the land on the north side of SR-248 is designated for open space and includes the Quinn's Junction Sports Complex and Park City Dog Park. Quinn's Junction Water Treatment Plant is located on the south side of SR-248 between Round Valley Drive and Richardson Flat Road. The Utah Film Studios is a large commercial parcel located on the south side of SR-248 between Round Valley Drive and US-40.

Land use on the south side of SR-248 changes to residential development between Wyatt Earp Way and Bonanza Drive. Between Wyatt Earp Way and Bonanza Drive, land use consists of residential development and public/quasi-public lands that include Park City High School, Park City Learning Center, Treasure Mountain Junior High School, McPolin School, and the Park City School District building.

Land use between SR-248 and Deer Valley Drive (on both sides of Bonanza Drive) includes commercial and residential development. The west side of Deer Valley Drive from Bonanza Drive to Marsac Avenue includes commercial and residential development as well as public lands (including City Park, Park City Skatepark, and Acoustic Park) and open space.

Current zoning data and general plans for Park City were reviewed to determine future land uses around the alternatives. Zoning within the study area includes commercial, recreational, and residential development.

Each of the on-corridor alternatives would convert land currently zoned for other uses into transportation facilities. This would not affect the land use characteristics within the study area because adjacent areas would continue to be used according to established zoning and general plan designations. Coordination with Park City would need to take place during the NEPA phase to ascertain planning and land use goals.

5.2 RIGHT-OF-WAY

Commercial impacts may potentially occur with each of the three alternatives. Horrocks analyzed GIS design plans and identified any building within 20 feet of the proposed alternatives as a commercial impact. The LRT alternative is potentially the most impactful, affecting eight commercial properties.

Potential right-of-way impacts are based on GIS data and limited design and are subject to change as additional information is gathered and design is advanced. Table 1 lists the potential number of potential commercial impacts by alternative (see attached mapbook).

Table 1. Potential Commercial Impacts by Alternative

	ON-CORRIDOR		
	LRT	SELB	CELB
Number of Potential Commercial Impacts	8	7	7

5.3 FARMLAND

The Farmland Protection Policy Act (FPPA) (7 Code of Federal Regulations [CFR] 358.2a) requires federal agencies to account for adverse effects on prime, unique, or statewide important farmland. Under the FPPA, the definition of prime, unique, or statewide important farmland excludes land already in, or committed to, urban development or water storage. Additionally, Utah Code Annotated Title 17, Chapter 81 allows for the formation of Agriculture Protection Areas (APAs), which grant additional protections to any agricultural land granted APA status.

A desktop analysis of the study area confirmed that the proposed project is not currently located in any officially designated Urbanized Areas and is therefore subject to the FPPA. There are no APAs along the evaluated alternatives. Table 2 lists the potential amount of farmland each alternative may affect. All the alternatives may affect farmland of statewide importance. The LRT and CELB alternatives impact the greatest amount of protected farmland (see attached mapbook).

Table 2. Potential Farmland Impacts by Alternative

RESOURCE	ON-CORRIDOR IMPACTS (ACRES)		
	LRT	SELB	CELB
Farmland (of Statewide Importance)	6.09	4.91	6.03

5.4 AQUATIC RESOURCES AND WATER QUALITY

Water resources in the study area include one creek, one ditch, and the Quinn's Junction Water Treatment Plant (see attached mapbook). There are no seeps or springs in the study area. Silver Creek traverses the south side of SR-248 next to the Rail Trail as well as along both the east and west sides of Bonanza Drive and Deer Valley Drive. Silver Creek is a tributary to the Weber River. The Pace Homer Ditch enters the study area near Wyatt Earp Way and then flows along the southern side of SR-248. Pace Homer Ditch is primarily used to convey PCMP irrigation water and eventually joins with Silver Creek.

Silver Creek is considered an impaired water for all designated beneficial uses (agricultural, cold water aquatic life, domestic water supply, secondary recreation), and a Total Maximum Daily

Loads (TMDL) is needed. The pollutants causing impairment in Silver Creek include dissolved arsenic, cadmium, dissolved oxygen, nitrate/nitrite, total dissolved solids (TDS), Zinc, and pH. Water quality concerns in the Silver Creek Watershed are focused on two metals: zinc and cadmium. Available data indicates that the metals of concern in this watershed are from historical mining activities in the Park City area. Elevated concentrations of zinc and cadmium were the cause for Silver Creek being assessed as not fully supporting its Class 3A beneficial use.

The Pace-Homer Ditch has not been assessed by the Division of Water Quality, and no water quality data for the ditch is available.

5.4.1 Floodplains

All alternatives may potentially impact identified Federal Emergency Management Agency (FEMA) regulatory floodways and FEMA Special Flood Hazard Areas. All alternatives would potentially impact floodplains near Bonanza Drive and the roundabout on Deer Valley Drive. All three alternatives would have similar impacts to mapped floodplains (see attached mapbook).

Table 3. Potential 100-Year Floodplain Impacts by Alternative

RESOURCE	ON-CORRIDOR IMPACTS (ACRES)		
	LRT	SELB	CELB
100-year Floodplain	2.13	2.19	2.09

5.4.2 Wetlands and Waters of the U.S.

Aquatic resources maps from the SR-248 Environmental Assessment (2020) were used to perform an analysis of potentially affected wetlands and Waters of the U.S. All alternatives may potentially affect wetlands. Table 4 shows the potential impacts in acres by alternative. All three alternatives would have similar impacts to wetlands and Waters of the U.S. (see attached mapbook).

Table 44. Potential Wetlands and Waters of the U.S. Impacts by Alternative

RESOURCE	ON-CORRIDOR IMPACTS (ACRES)		
	LRT	SELB	CELB
Wetlands	2.61	2.54	2.45

5.4.3 Streams

All alternatives may potentially affect streams, with the SELB alternative affecting the most linear feet of streams. Table 5 shows the potential impacts in linear feet for each alternative.

Table 55. Potential Stream Impacts by Alternative

RESOURCE	ON-CORRIDOR IMPACTS (LINEAR FEET)		
	LRT	SELB	CELB
Streams	6,302	6,731	6,182

5.5 HAZARDOUS MATERIALS

Hazardous materials sites in proximity to the alternatives were evaluated by reviewing records from the Utah Department of Environmental Quality (DEQ) and the Environmental Protection Agency (EPA). Sites that may pose a hazardous materials risk to the alternatives were reviewed based on the standard distances identified in Table 6.

Table 66. Potential Hazardous Materials Sites and Search Radius Distances

SITE TYPE	SEARCH RADIUS BEYOND ALTERNATIVES	DISCUSSION ITEMS
National Priorities List (NPL)	1 mile	NPL sites contain chemicals listed under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and have been identified as priorities for cleanup.
Underground Storage Tank (UST)	Study Area or Adjacent Property	UST sites are locations that are currently being or have been used to store petroleum products such as gasoline or diesel fuel.
Leaking Underground Storage Tank (LUST)	0.5 miles*	LUSTs are UST sites where a leak has been detected.

**Properties outside the study area alternatives that have been closed by DEQ with no evidence of contamination extending beyond the property boundary were not included.*

5.5.1 National Priorities List

The NPL is a tool that provides information needed to designate Superfund sites. All alternatives are within one mile of the Richardson Flat Tailing Superfund site, which contains about 7 million tons of tailings in the tailing impoundments and an unknown amount along Silver Creek. No alternatives will directly impact the NPL site.

5.5.2 Underground Storage Tanks and Leaking Underground Storage Tanks

Two UST sites and three LUST sites are in proximity to all alternatives. Land uses that may pose a hazardous materials risk include former gas stations and existing and former vehicle maintenance facilities. Direct impacts are anticipated to all these sites by each of the alternatives (see Table 7).

Table 7. Potential UST and LUST Site Impacts by Alternative

TYPE	SITE NAME	ADDRESS	DERR ID	ON-CORRIDOR IMPACTS		
				LRT	SELB	CELB
LUST	Ski Rail LLC	1555 Lower Iron Horse Loop	7000123	Direct Impact	Direct Impact	Direct Impact
UST	Maverick #317	1635 Bonanza Drive	7000065	Direct Impact	Direct Impact	Direct Impact
LUST	School Bus Garage	2250 E Hwy 248	7000037	Direct Impact	Direct Impact	Direct Impact
UST	The 1725 Bonanza Partnership	1725 Bonanza	7000121	Direct Impact	Direct Impact	Direct Impact
LUST	Bottom Vehicle Main Shop	1375 Munchin Ln	7000033	Direct Impact	Direct Impact	Direct Impact

5.6 CULTURAL RESOURCES

The National Historic Preservation Act (NHPA) of 1966 outlines the national policy and procedures regarding historic properties (e.g., districts, sites, buildings, structures, and objects included in or eligible for the National Register of Historic Places [NRHP]). Section 106 of the NHPA requires federal agencies to consider the effects of their undertakings on such properties by following regulation 36 CFR 800, which is issued by the Advisory Council on Historic Preservation (ACHP). If impacts to these resources result from the undertaking, agencies are required to seek ways to avoid, minimize, or resolve those effects that are considered adverse.

A total of three archaeological sites were noted to overlap with all alternatives. Two recent surveys were completed in this area in 2017 and 2021. Site 42SM183, the Union Pacific Railroad, has been recommended as eligible for the NRHP and is the only site which will need to be revisited and updated. Site 42SM561 (Bonanza Drive) was last updated in 2017, and site 42SM10 could not be relocated upon last recording in 1997.

A search of relevant records and literature from the Utah State Historic Preservation Office (SHPO) Historic Utah Buildings database was obtained to determine whether any buildings in the initial high-level study area have been previously documented and evaluated for NRHP eligibility. One historic property, Spriggs barn (2780 Highway 28), overlaps with all three alternatives. Spriggs Barn is eligible for the NRHP, but impacts are not anticipated.

Agency consultation will need to occur with the SHPO to define the Area of Potential Effect (APE), identify historic properties, and determine effects that could result from the project. Other consulting parties, including the ACHP and Native American tribes, will need an opportunity to comment on the APE and the archaeological and architectural resources present in that area

5.7 SECTION 4(F)

Section 4(f) of the USDOT Act of 1966, as modified by Section 6009 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users and implemented in 23 CFR 774, protects public parks, recreation areas, historic properties, and wildlife or waterfowl refuges from use in a transportation facility. For a park, recreation area, or wildlife/waterfowl refuge to qualify for Section 4(f) protection, it must be both publicly owned and open to the public. Its major purpose and function must be that of a park, recreation area, or wildlife/ waterfowl refuge. Officials with jurisdiction of the property must also have determined it to be significant. Two public parks, Prospector Park and City Park, overlap with the SELB alternative. A 5- to 10-foot-wide strip of Prospector Park overlaps the design, totaling 3,560 sq ft. A 5-foot-wide strip of City Park also overlaps the design, totaling 2,985 sq ft.

Historic properties that are listed on or eligible for listing on the NRHP also qualify for Section 4(f) protection. Federal agencies make the determination of eligibility for historic properties in consultation with the Utah SHPO and other consulting parties through Section 106 of the NHPA review process. A desktop review of historic properties identified one historic property, Spriggs barn (2780 Highway 28), which overlaps with all three design alternatives. Spriggs Barn is eligible for the NRHP but impacts are not anticipated.

5.8 SECTION 6(F)

Section 6(f) properties are lands that were acquired or developed using Land and Water Conservation Funds (LWCF) and which are therefore required to remain indefinitely as public recreation areas. One Section 6(f) property (City Park) overlaps with the SELB alternative design footprint (see attached mapbook). Coordination with the Program Coordinator may be required, and a conversion of use document would be needed if impacts to the property are identified.

5.9 VISUAL

The study area encompasses a variety of viewsheds. The area east of Prospector Park represents typical views of the natural environment along SR-248. Wetlands covered with dense, low-lying green grasses separate the Rail Trail from SR-248. Silver Creek flows parallel to the trail, forming a narrow channel that empties into a large pond. A 10- to 15-foot gray, coarse retaining wall elevates SR-248 above the wetlands. The hillside above SR-248 is covered with natural grasses, dense sage brush, and pinyon-juniper woodlands towards the top. The base of the hill is cut back to accommodate SR-248. The top of the hill cut creates a clearly discernable line across the hill and is demarcated by an existing fence line. Below this line, the hillside is sparsely covered with native vegetation, and the soils have a rust-colored appearance.

The overall character of the cultural landscape along SR-248 is suburban with a mix of land uses. Buildings vary in height, size, and architectural style. An asphalt path parallels both sides of the road. The rugged Wasatch Mountains rise above the valley floor and dominate the landscape in the background.

The overall character of the cultural landscape along Bonanza Drive and Deer Valley Drive is suburban with a mix of land uses. Buildings vary in height, size, and architectural style. An asphalt path parallels the west side of both roadways. The Wasatch Mountains are visible to the west. The alternatives would not constitute an overall reduction in visual quality because developed areas near the proposed corridor are adjacent to residential and commercial development.

5.10 SOCIAL ENVIRONMENT

Park City is a resort town that experiences year-round tourism, with cyclical peaks associated with the ski season. Both year-round and seasonal residences make up the community in proximity to the alternatives. Housing in the area is a mix of single-family and multi-family apartment buildings and condominiums. Businesses are concentrated on the west end of the area and serve both the local community and tourists with hotels, restaurants, grocery markets, and convenience stores.

Community facilities in proximity to the alternatives include several parks, schools, a church, and a performing arts center. Parks and recreational facilities within the study area include Quinn's Sports Complex, Prospector Park, City Park, the Park City Skatepark, Acoustic Park, the Kearns Pathway, and the Historic Union Pacific Rail Trail (Rail Trail). The Rail Trail is an important recreational resource in the study area. It provides a non-motorized parallel east-west route from Bonanza Drive, continuing east beyond the study area boundary, and eventually terminating at Echo Reservoir. The Kearns Pathway is a multi-use path located parallel to SR-248 throughout the study area. The path provides the opportunity for active transportation and is used year-round by bicyclists and pedestrians. The Park City School District indicated that a large portion of students walk or bike along the Kearns Pathway to access the schools, primarily travelling from the nearby apartment and condominium complexes located along SR-248. No official Safe Routes to School program or maps currently exist for this area. There are three planned recreation facilities identified in the Mountain Recreation Facilities Master Plan 2017 located in the study area between US-40 and Bonanza Drive.

Four educational facilities and one administrative building exist within 1 mile of each other on the north side of SR-248. These facilities include Park City High School, McPolin Elementary School, Park City Learning Center (alternate school for grades 10–12), Treasure Mountain Middle School, and the Park City School District administrative building. These facilities also serve as community gathering places offering youth and adult continuing education opportunities, aquatic center programs, and after school programs. School fields also provide additional space for community recreational opportunities.

The George S. and Dolores Doré Eccles Center (Eccles Center) for the Performing Arts is a joint-use facility with the Park City School District and is co-located with Park City High School. The Eccles Center hosts plays, concerts, and speaker events year-round.

South of SR-248, directly across from Park City High School, is the Church of Jesus Christ of Latter-day Saints seminary building. A crosswalk is in place for students from Park City High School to cross SR-248, and a new underpass was constructed in 2019. Students in the ninth grade from Treasure Mountain Junior High School can access the seminary building using an underpass. No other churches or religious facilities are located in the study area.

Active transportation opportunities within the study area include sidewalks, trails, pathways, and bike routes. These opportunities also provide access to trails beyond the city limits.

Utilities in the study area include gas, electricity, water, and sewer. These utilities are located either in the SR-248 roadway footprint or next to the road. The Quinn's Junction Water Treatment Plant is located in the study area south of SR-248 at Richardson Flat Road. In general, SR-248 is considered a major emergency response route because it is a major arterial road that provides access to the Intermountain Health Care Park City Medical Center located at the east end of the study area on Round Valley Drive.

The proposed design alternatives would have limited impacts on the social environment. No housing units, schools, the Eccles Center, or the administrative building would be impacted by any alternative. Each alternative would require several commercial relocations affecting local businesses on the west end of the area (seven for the SELB, seven for the CELB, and eight for the LRT). Under the SELB alternative, minor impacts would occur to Prospector Park (3,560 square feet) and City Park (2,985 square feet); the other alternatives would not impact any parks. The Rail Trail would not be impacted by any of the proposed alternatives, but portions of the Kearns Pathway, which parallel Kearns Boulevard to the north and south, would be impacted by all alternatives. However, impacted locations would be reconstructed. Local area access would be maintained, and active transportation features, including crosswalks, sidewalks, and pathways would be replaced as part of each alternative. Specific utility impacts will be evaluated for each alternative during the NEPA phase.

5.11 PEDESTRIANS AND BICYCLISTS

Pedestrian and bicycle resources include sidewalks, pathways, bike lanes, and bike routes. The Park City Trails Master Plan Update (2008) identifies existing pedestrian and bicycle facilities in the study area as part of a "Spine System" that serves as the primary walking/biking route through the area. Together, the various sidewalks, trails, pathways, and routes which are made up of these systems provide an interconnected system for walking and biking through the community and for accessing trails beyond the city limits. In order for the Spine System to be fully functional, PCMC incorporates interconnected sidewalks and trails located along major thoroughfares including SR-248.

Numerous pedestrian and bicycle facilities have been constructed to facilitate inter- and intra-community connectivity in the study area. North-south bicycle facilities, including those along Monitor Drive, Comstock Drive, Sidewinder Drive, and Prospector Avenue, provide connectivity from both Kearns Pathway and the Rail Trail to SR-248. A designated east-west bicycle lane exists between Wyatt Earp Way and just west of Richardson Flat Road along SR-248. Pedestrians and bicyclists can move safely from the Kearns Pathway on the north side of SR-248 to the Rail Trail on the south side by way of tunnels at Comstock Drive and Richardson Flat Road. Sidewalk facilities are available on both sides of Bonanza Drive between SR-248 and Iron Horse Drive. Dedicated bike lanes are available on both sides of Bonanza Drive from SR-248 to Deer Valley Drive. The Kearns Pathway and Rail Trail both run parallel to SR-248 within the study area. A multi-use trail runs adjacent to the east side of Bonanza Drive between the Rail Trail and Iron Horse Drive, where it crosses to the west side of Bonanza Drive via an underpass. The path continues south along the west side of Bonanza Drive and Deer Valley Drive to Heber Avenue. Existing pedestrian and bicycle facilities are identified in Table 8.

Table 8. Pedestrian and Bicyclist Facilities in the Study Area

FACILITY NAME	DESCRIPTION	USER TYPE
Kearns Pathway	An asphalt paved shared-use path for biking, walking, and jogging.	Serves both recreational and commuter use, although primary use of trail is transportation. Classified as a Class 1 bicycle trail.
Historic Union Pacific Rail Trail (Rail Trail)	An asphalt paved shared-use path that parallels SR-248.	Serves both recreational and commuter use.
Multi-use Path	An asphalt paved shared-use path that parallels Bonanza Drive and Deer Valley Drive. Popular neighborhood resource for biking, walking, and jogging.	Serves both recreational and commuter use, although primary use of trail is transportation. Classified as a Class 1 bicycle trail.
Bicycle Lane	4 foot on-road bicycle lanes on SR-248 between Wyatt Earp Way and Round Valley Drive. 4-foot on-road bicycle lanes on Monitor Drive, Bonanza Drive, Prospector Avenue, and Sidewinder Drive.	Skilled cyclist riding with automobile traffic.
Crosswalk	Round Valley Drive	Pedestrian
Crosswalk	Park City High School/The Church of Jesus Christ of Latter-day Saints Seminary Building (with beacon)	Pedestrian
Crosswalk	Bonanza Drive and SR-248 intersection	Pedestrian
Crosswalk	Bonanza Drive and Munchkin Road intersection	Pedestrian
Crosswalk	Bonanza Drive and Iron Horse Drive intersection	Pedestrian

Underpass (Planned)	Comstock Drive	Pedestrian/cyclist link to Kearns Parkway
Underpass	Richardson Flat Road	Pedestrian/cyclist link to Kearns Parkway

The Historic Union Pacific Rail Trail will not be impacted by any of the alternatives, but portions of the multi-use path and Kearns Pathway will be impacted by all alternatives (see Table 9). All crosswalks, bicycle lanes, paths, and underpasses would be replaced as part of each alternative, and local area access would be maintained.

Table 9. Potential Pedestrian and Bicyclist Impacts by Alternative

RESOURCE	ON-CORRIDOR IMPACTS (ACRES)		
	LRT	SELB	CELB
Multi-use Path	0.37	0.2	0.23
Kearns Pathway (north of Kearns Blvd)	0.46	0.48	0.4
Kearns Pathway (south of Kearns Blvd)	0.28	0.2	0.26

5.12 AIR QUALITY

The National Ambient Air Quality Standards (NAAQS) define limits for ambient concentrations of regulated air pollutants. Areas that exceed the NAAQS for a certain pollutant are considered nonattainment areas. If a nonattainment area begins to comply with NAAQS limits, it is redesignated as a maintenance area.

The study area is in a part of Summit County that is in attainment for all criteria pollutants. As a result, there are no applicable regional conformity requirements, and no additional project-level analysis would be required for any of the alternatives during a future NEPA phase. An air quality summary memo would be provided.

5.13 NOISE AND VIBRATION

A noise and vibration screening was conducted to identify sensitive land uses in the study vicinity. The study area consists of residential neighborhoods and industrial, commercial, and community properties. In accordance with the Federal Transit Administration (FTA) Traffic Noise and Vibration Impact Assessment Manual (FTA Manual), most commercial and industrial uses are not considered noise sensitive. Businesses can be considered noise-sensitive if low noise levels are an important part of operations. The screening identified noise-sensitive land uses within the screening area, including one Category 1, numerous Category 2, and ten Category 3 noise-sensitive land uses. Noise-sensitive land use categories are defined as:

- Category 1 – High sensitivity land use types where quiet is an essential element of its intended purpose (e.g., outdoor amphitheaters, concert pavilions, recording studios, and concert halls).
- Category 2 – Residential buildings, including hotels and hospitals.
- Category 3 – Institutional land use types such as schools, libraries, theaters, churches, cemeteries, monuments, museums, campgrounds, and recreational facilities.

The Category 1 receiver is the Eccles Center on the Park City High School campus and is located 420 feet from SR-248.

The screening also identified vibration-sensitive land uses within the screening area, including numerous Category 2 and five Category 3 vibration-sensitive land uses within the screening area. Vibration-sensitive land use categories are defined as:

- Category 1 – High sensitivity land use types, including research and manufacturing facilities with vibration-sensitive equipment.
- Category 2 – Residential buildings, including hotels and hospitals.
- Category 3 – Institutions and offices, such as schools, churches, and doctor's offices.

A more formal and comprehensive noise and vibration analysis will be conducted during the NEPA phase to identify any noise or vibration impacts to the identified sensitive land-use areas.

5.14 WILDLIFE AND ENDANGERED SPECIES

Proposed, candidate, threatened, and endangered species are protected under the Endangered Species Act (ESA) of 1973 as amended (16 U.S.C. 1531 et seq.) and administered by the U.S. Fish and Wildlife Service (USFWS). The Migratory Bird Treaty Act of 1918 as amended (16 U.S.C. 703–712) prohibits taking any migratory birds, their eggs, feathers, or nests. The Bald and Golden Eagle Protection Act of 1940 affords additional protection to all bald and golden eagles. The migratory bird species protected by the Migratory Bird Treaty Act are listed in 50 CFR 10.13 and include waterfowl; songbirds; and species such as eagles, hawks, and owls, among others.

The Utah Division of Wildlife Resources (UDWR) of the Utah Department of Natural Resources has developed the Utah Sensitive Species list, which contains species that are categorized as "Species of Special Concern" and species that are "Conservation Agreement Species." Species included on this list have been identified as being vulnerable to population and/or habitat loss and may also be federally listed. Non-federally listed species included on the Utah Sensitive Species list are not afforded the same level of protection as those listed under the ESA; rather, the intent is to develop conservation and management measures such that federal listing is not necessary.

Of the habitat types present in the study area, raptors are most likely to nest and roost in the riparian scrub-shrub habitat. Power poles also serve as potential raptor nesting habitat throughout the study area. The other habitat types serve as foraging and migration habitat for raptor species. Because portions of the study area contain emergent marsh and open water, potential habitat use includes breeding, nesting, brood rearing, feeding, and shelter by migratory birds and waterfowl. However, the study area contains very little habitat, and the habitat that is present is adjacent to the existing road corridor.

The USFWS Information for Planning and Consultation (IPaC) resource list for the study area includes one threatened plant (Ute ladies'-tresses), two threatened mammal species (Canada lynx and Northern American wolverine), and one candidate for listing (monarch butterfly).

Ute ladies'-tresses is the only listed threatened or endangered species with the potential for suitable habitat occurring in the study area. Ute ladies'-tresses was recorded within 0.5 miles of the study area in 2023.There is suitable habitat within or near the study area for Canada lynx or Northern American wolverine. There may be suitable habitat within the study area for Monarch Butterfly. There are no designated or proposed critical habitat within the study area.

Information gathered from the Utah Natural Heritage Program (UNHP) has recorded occurrences of two species protected under a Conservation Agreement (CA), Bonneville cutthroat trout and Columbia spotted frog, within a 0.5-mile radius of the study area. Greater sage-grouse has also been recorded within 0.5 miles of the study area. There is the potential for suitable habitat for Bonneville cutthroat trout and Columbia spotted frog to occur in Silver Creek. The last recorded occurrence for Columbia spotted frog was 1931. No recorded date was given for Bonneville cutthroat trout. A greater sage-grouse lek is present approximately 2.6 miles east of the study area. However, the study area is not within a Greater Sage-grouse Management Area. The last recorded occurrence of greater sage-grouse within 0.5 miles of the study area was 2008.

During the NEPA process, a habitat assessment should be conducted to identify any suitable habitat for Ute ladies'-tresses in the study area that includes a 300-foot buffer to comply with USFWS survey protocol. If suitable habitat is identified within the study area or 300-foot buffer, presence/absence surveys will need to take place for three consecutive flowering seasons (August) and a Biological Assessment would need to be submitted to USFWS.

6 SUMMARY TABLES

Table 10 summarizes the potential ROW impacts by alternative. Table 11 summarizes the environmental resources that may be impacted, and Table 12 summarizes hazardous materials that may be impacted. More detailed analyses of impacts will be conducted during the NEPA process.

Table 10. Potential Property Impacts by Alternative

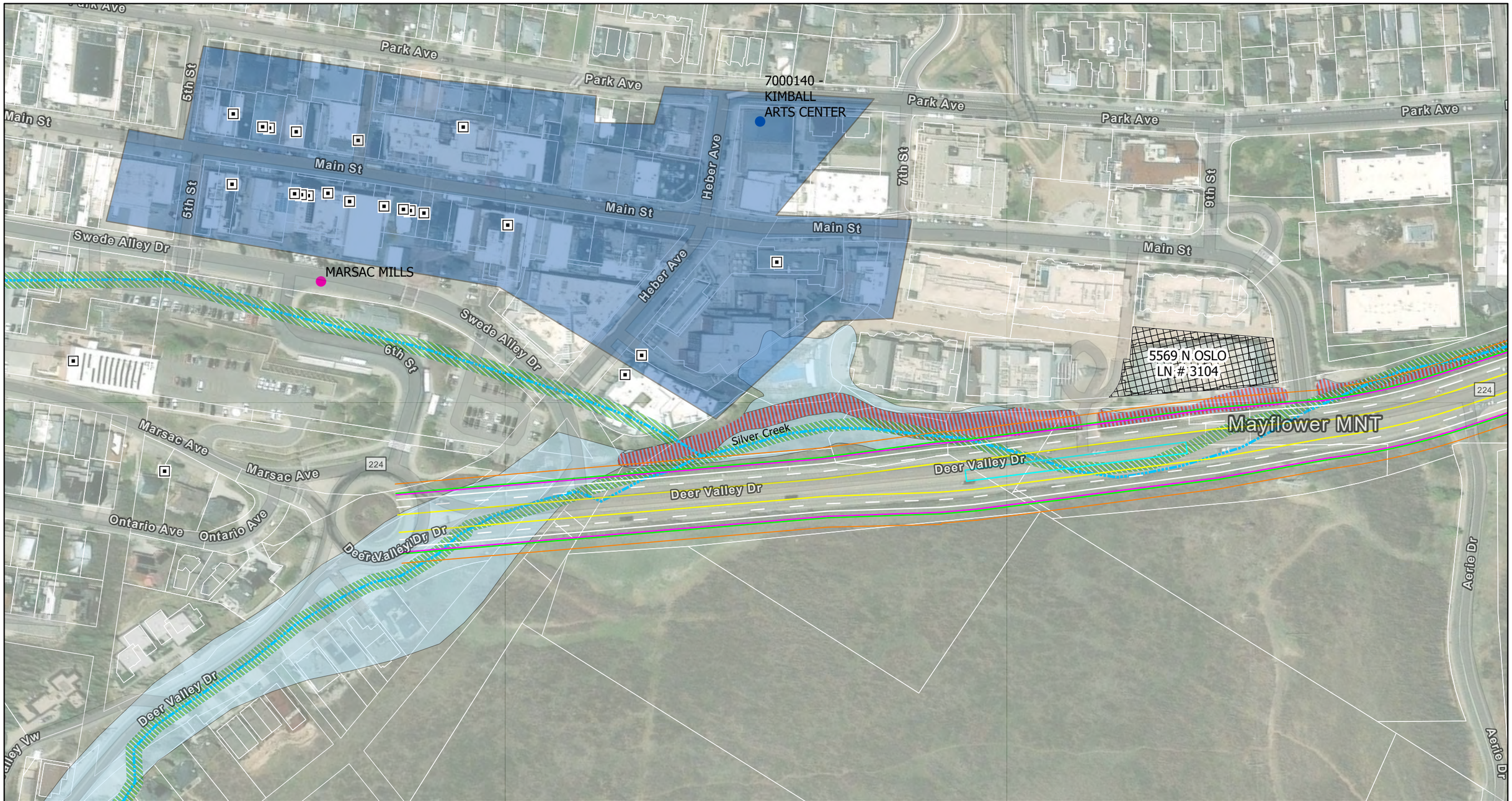
	ON-CORRIDOR		
	LRT	SELB	CELB
Number of Potentially Affected Parcels	8 commercial relocations	7 commercial relocations	7 commercial relocations

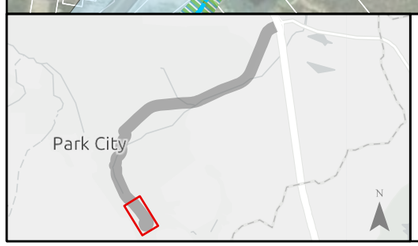
Table 11. Potentially Impacted Environmental Resources Listed by Alternative

ENVIRONMENTAL RESOURCE	MEASUREMENT OF IMPACTS	ON-CORRIDOR IMPACTS		
		LRT	SELB	CELB
Farmland (of Statewide Importance)	Acres	6.09	4.91	6.03
Wetlands	Acres	2.61	2.54	2.45
Streams	Linear Feet	6,302	6,731	6,182

Table 12. Potential Impacts to Hazardous Materials

TYPE	SITE NAME	ADDRESS	EPA ID/ DERR ID	ON-CORRIDOR IMPACTS		
				LRT	SELB	CELB
NPL	Richardson Flat Tailing Superfund Site	1 mile east of Park City near US-40 NW ¼ sec 1 T2S R 4E Park City, UT 84060	UTD980952840	0.0 acres	0.0 acres	0.0 acres
LUST	Ski Rail LLC	1555 Lower Iron Horse Loop	7000123	Direct Impact	Direct Impact	Direct Impact
UST	Maverick #317	1635 Bonanza Drive	7000065	Direct Impact	Direct Impact	No Direct Impact
LUST	School Bus Garage	2250 E Hwy 248	7000037	Direct Impact	Direct Impact	Direct Impact
UST	The 1725 Bonanza Partnership	1725 Bonanza	7000121	Direct Impact	Direct Impact	Direct Impact
LUST	Bottom Vehicle Main Shop	1375 Munchkin Ln	7000033	Direct Impact	Direct Impact	Direct Impact





- Hazardous Waste and Used Oil Facility
- National Priorities List
- Underground Storage Tank/Leaking Underground Storage Tank
- Superfund
- Tier 2
- Toxic Release Inventory
- Historic Structures Eligible for the NRHP
- Stream
- Farmland of Statewide Importance
- Historic District
- Regulatory Floodway
- Special Flood Hazard Area
- Richardson Flats Tailings Operable Units
- Section 6(f) Property
- Wetlands
- Potential Commercial Impacts (Light Rail)

N

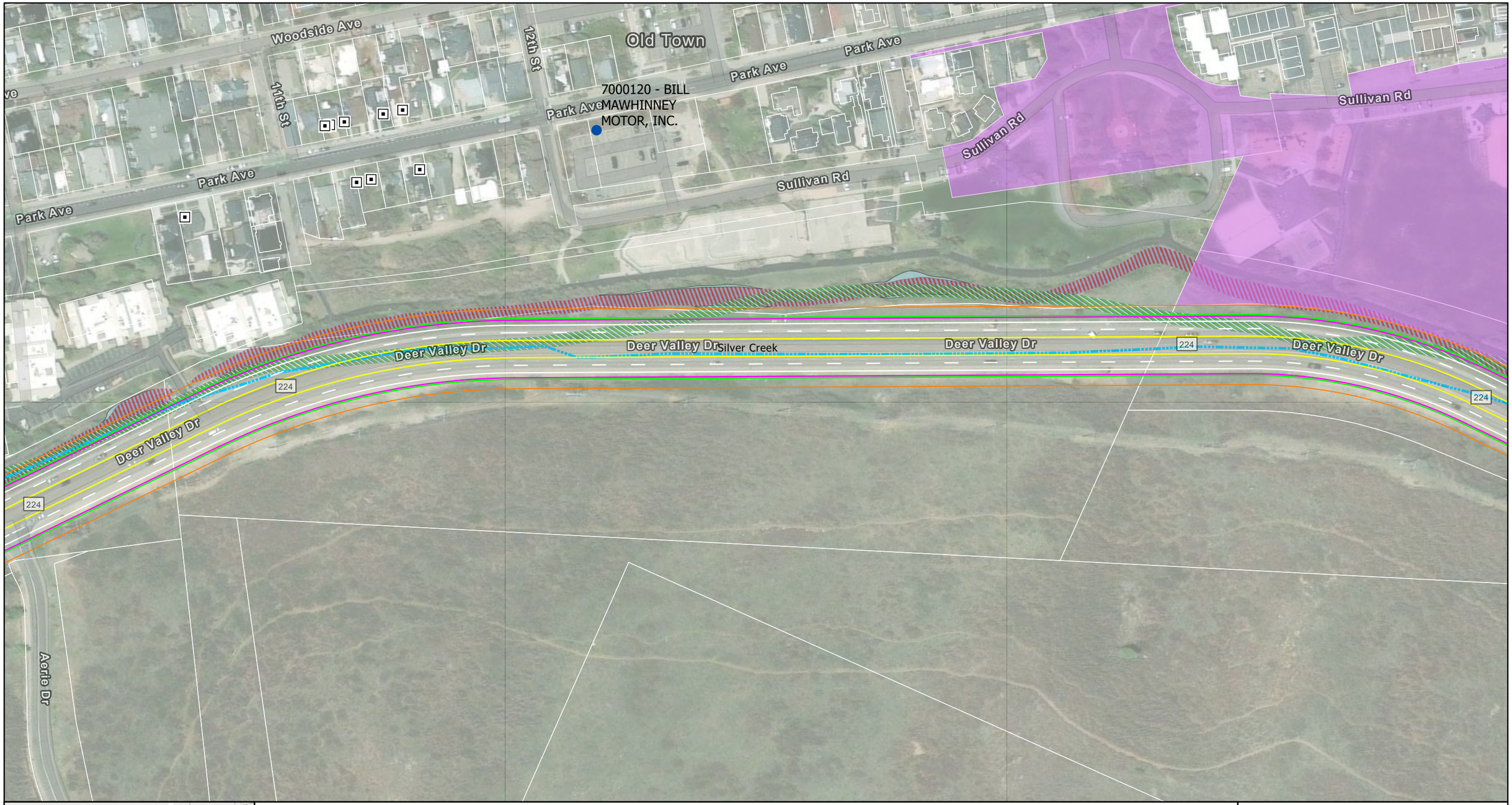
0 75 150 300 Feet

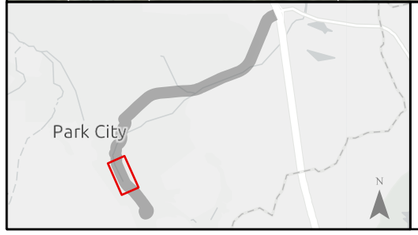
Re·create 248

Light Rail Alternative

Environmental Considerations

Map 1 of 9





- Hazardous Waste and Used Oil Facility
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- Regulatory Floodway
- Special Flood Hazard Area
- Richardson Flats Tailings Operable Units
- Section 6(f) Property
- Wetlands
- Potential Commercial Impacts (Light Rail)

N

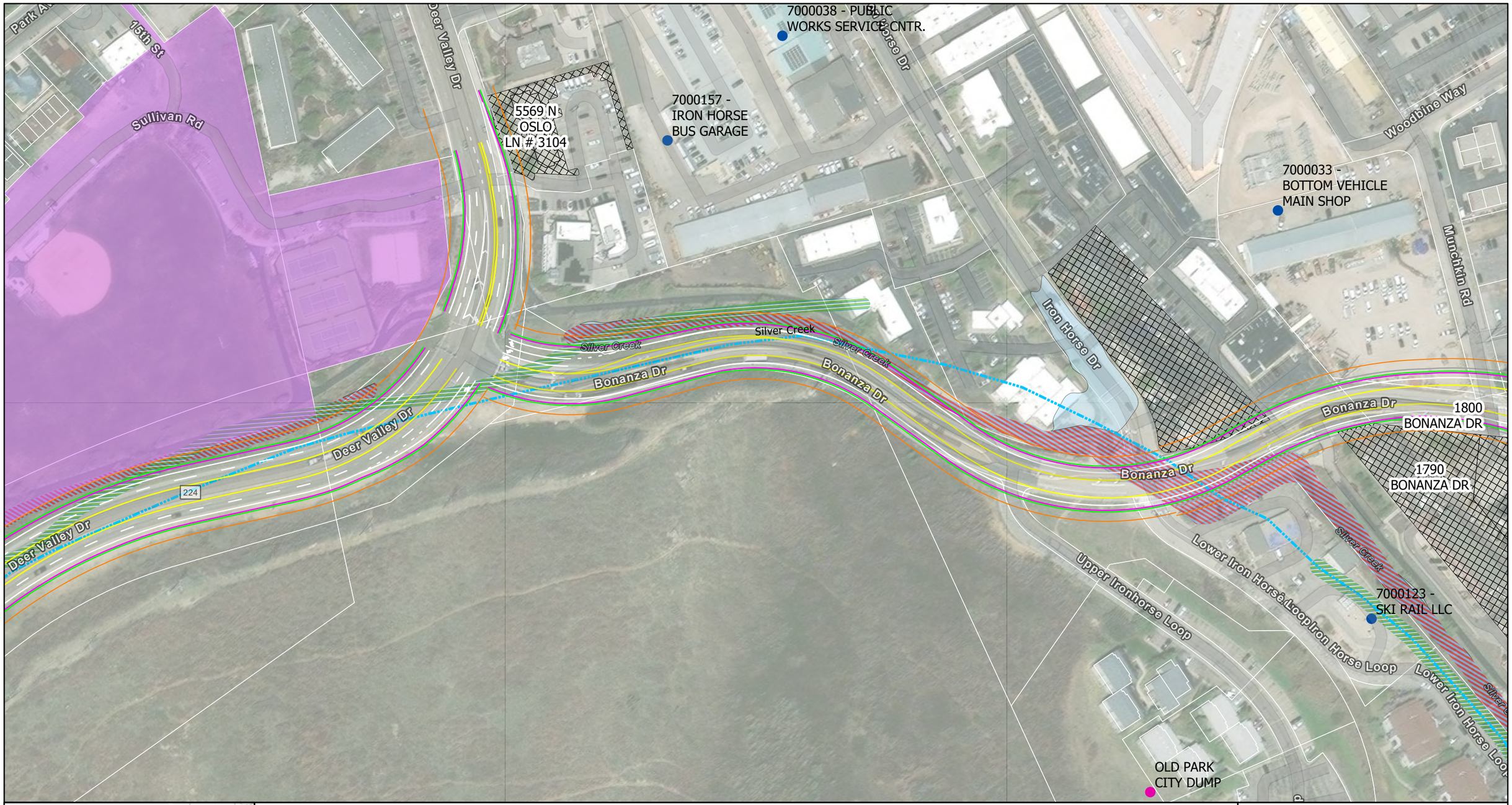
0 75 150 300 Feet

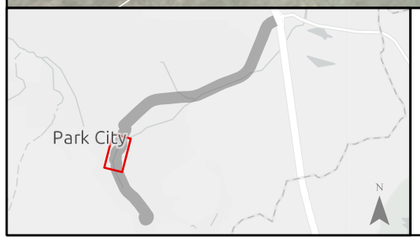
Re-create 248

Light Rail Alternative

Environmental Considerations

Map 2 of 9





- Hazardous Waste and Used Oil Facility
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- Tier 2
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- Stream
- Farmland of Statewide Importance
- Historic District
- Regulatory Floodway
- Special Flood Hazard Area
- Richardson Flats Tailings Operable Units
- Section 6(f) Property
- Wetlands
- Potential Commercial Impacts (Light Rail)

N

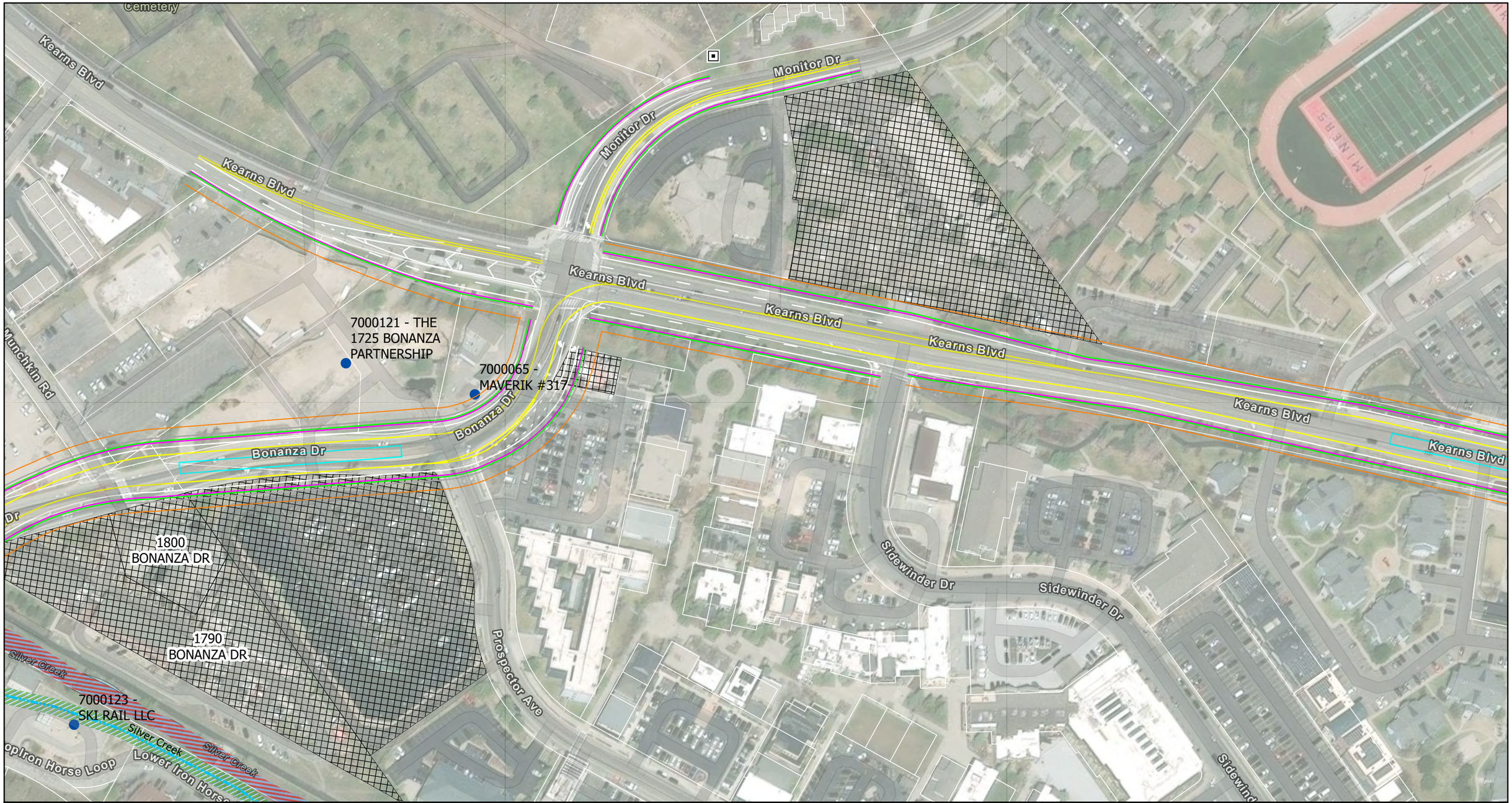
0 75 150 300 Feet

Re·create 248

Light Rail Alternative

Environmental Considerations

Map 3 of 9

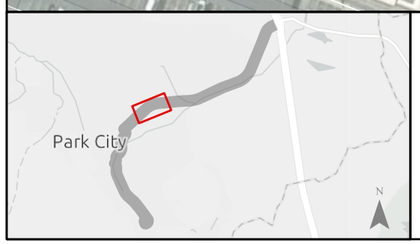


Re·create 248

Light Rail Alternative

Environmental Considerations

Map 4 of 9



- Hazardous Waste and Used Oil Facility
- National Priorities List
- Underground Storage Tank/Leaking Underground Storage Tank
- Superfund
- Tier 2
- Toxic Release Inventory
- Historic Structures Eligible for the NRHP
- Stream
- Farmland of Statewide Importance
- Historic District
- Regulatory Floodway
- Special Flood Hazard Area
- Richardson Flats Tailings Operable Units
- Section 6(f) Property
- Wetlands
- Potential Commercial Impacts (Light Rail)

N

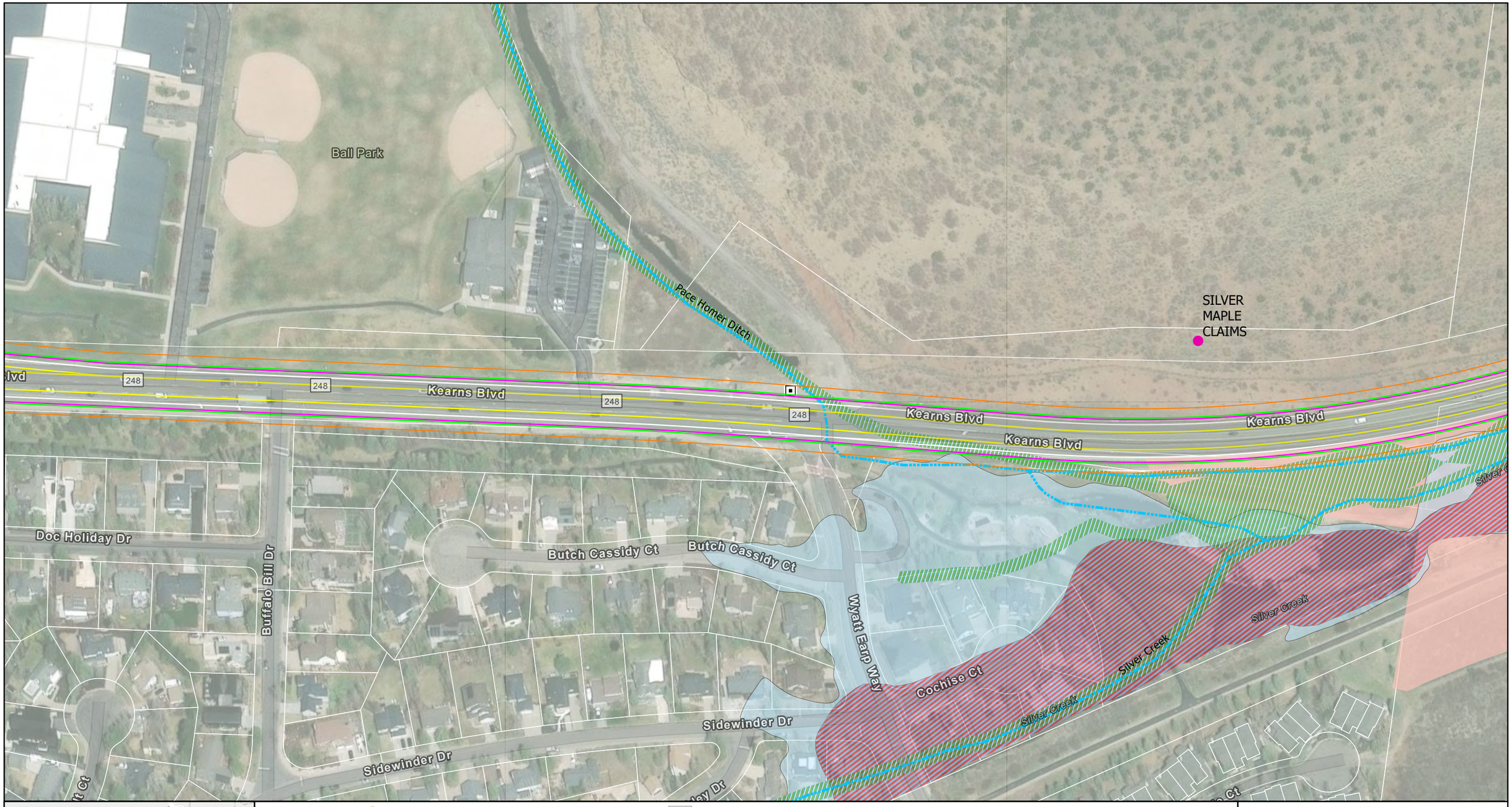
0 75 150 300 Feet

Re-create 248

Light Rail Alternative

Environmental Considerations

Map 5 of 9



N

- Hazardous Waste and Used Oil Facility
- National Priorities List
- Underground Storage Tank/Leaking Underground Storage Tank
- Superfund
- Tier 2
- Toxic Release Inventory
- Historic Structures Eligible for the NRHP
- Stream
- Farmland of Statewide Importance
- Historic District
- Regulatory Floodway
- Special Flood Hazard Area
- Richardson Flats Tailings Operable Units
- Section 6(f) Property
- Wetlands
- Potential Commercial Impacts (Light Rail)

0 75 150 300 Feet

Re-create 248

Light Rail Alternative

Environmental Considerations

Map 6 of 9

Kearns Blvd

Silver Creek

- Hazardous Waste and Used Oil Facility
- National Priorities List
- Underground Storage Tank/Leaking Underground Storage Tank
- Superfund
- Tier 2
- Toxic Release Inventory
- Historic Structures Eligible for the NRHP
- Stream
- Farmland of Statewide Importance
- Historic District
- Regulatory Floodway
- Special Flood Hazard Area
- Richardson Flats Tailings Operable Units
- Section 6(f) Property
- Wetlands
- Potential Commercial Impacts (Light Rail)

N

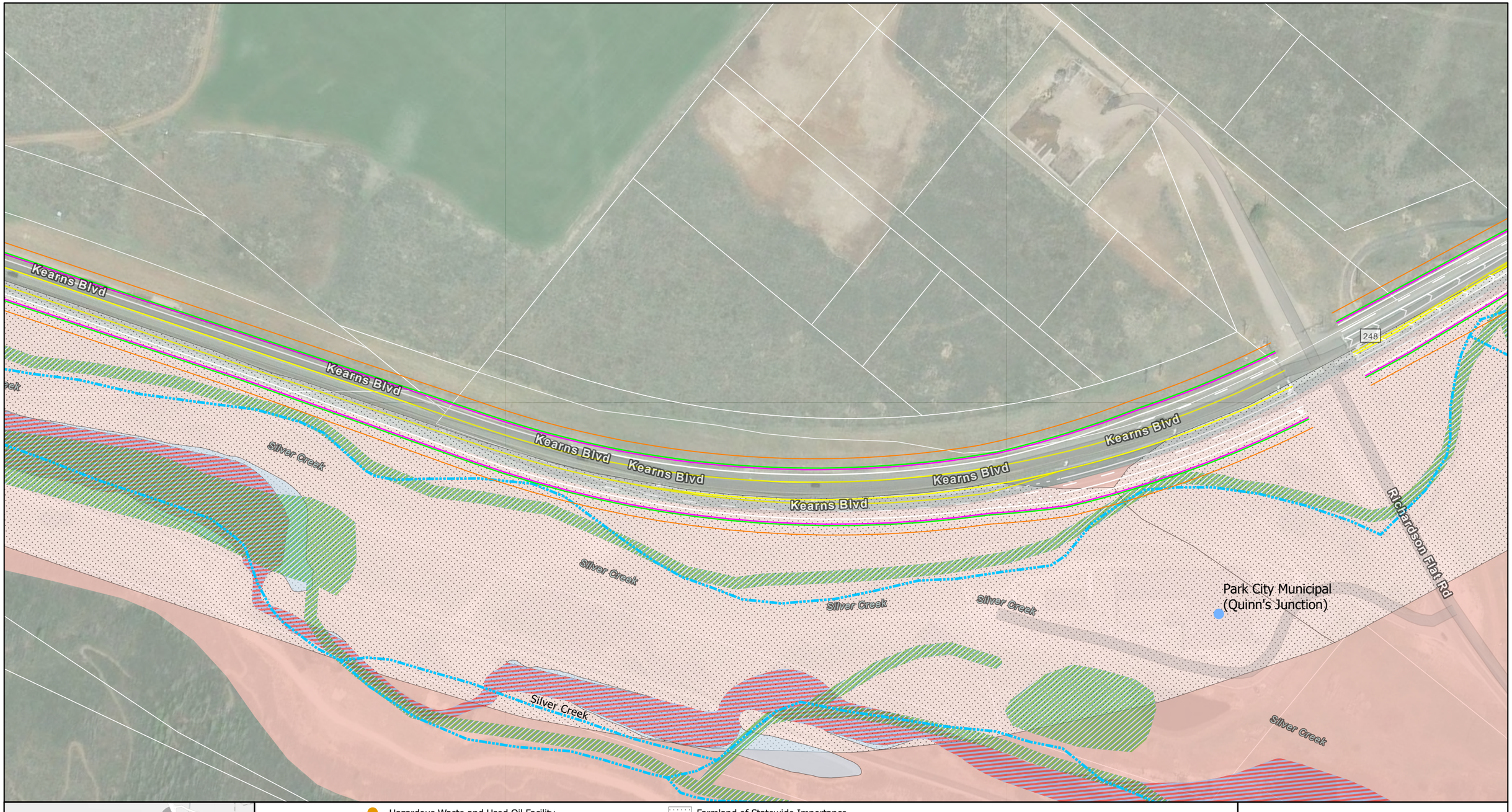
0 75 150 300 Feet

Re-create 248

Light Rail Alternative

Environmental Considerations

Map 7 of 9



Re·create 248

Light Rail Alternative

Environmental Considerations

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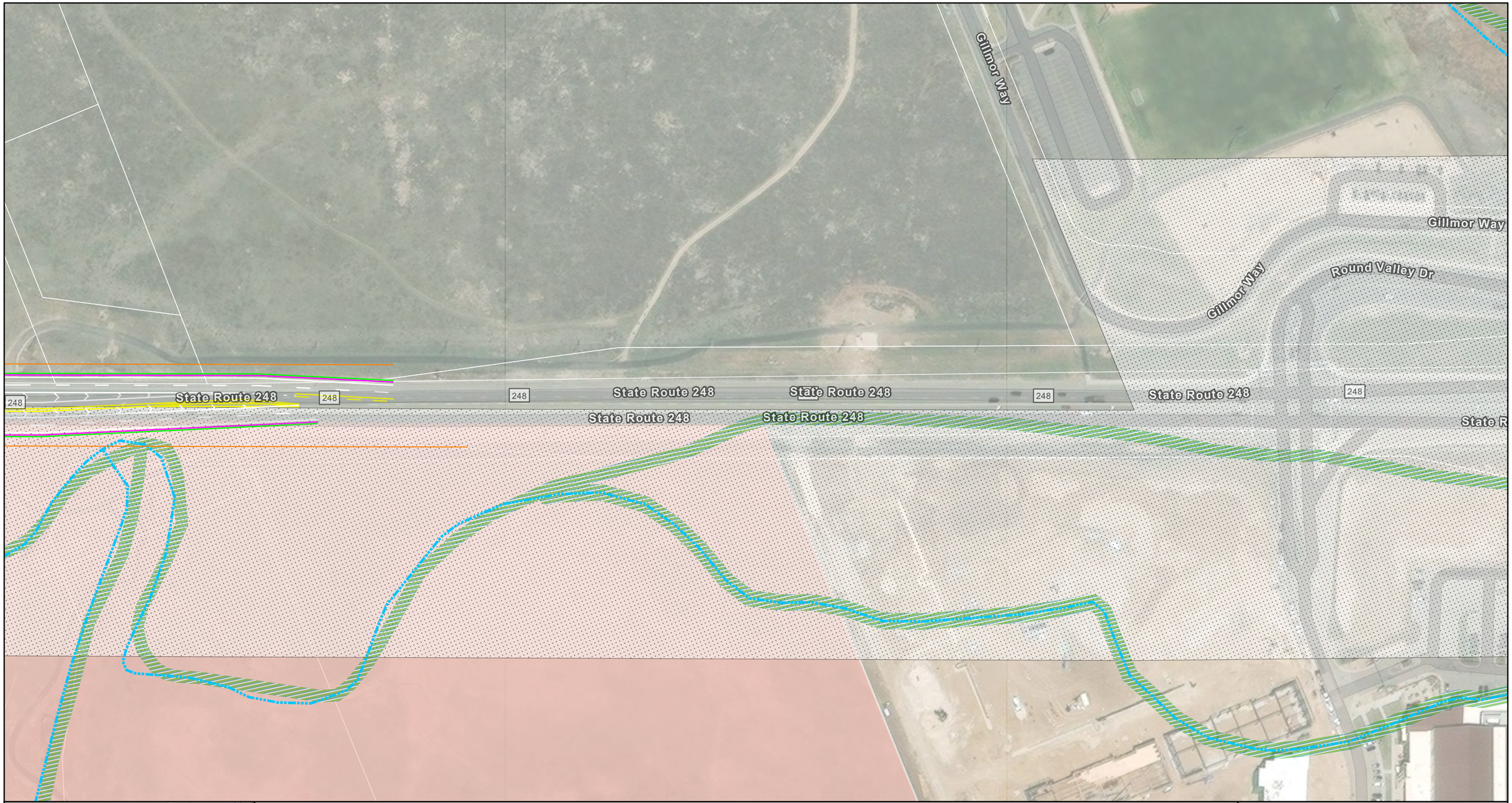

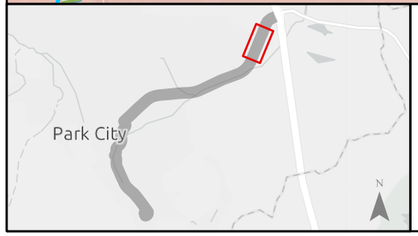

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- Potential Commercial Impacts (Light Rail)

N

0 75 150 300 Feet

Re·create 248

Light Rail Alternative

Environmental Considerations

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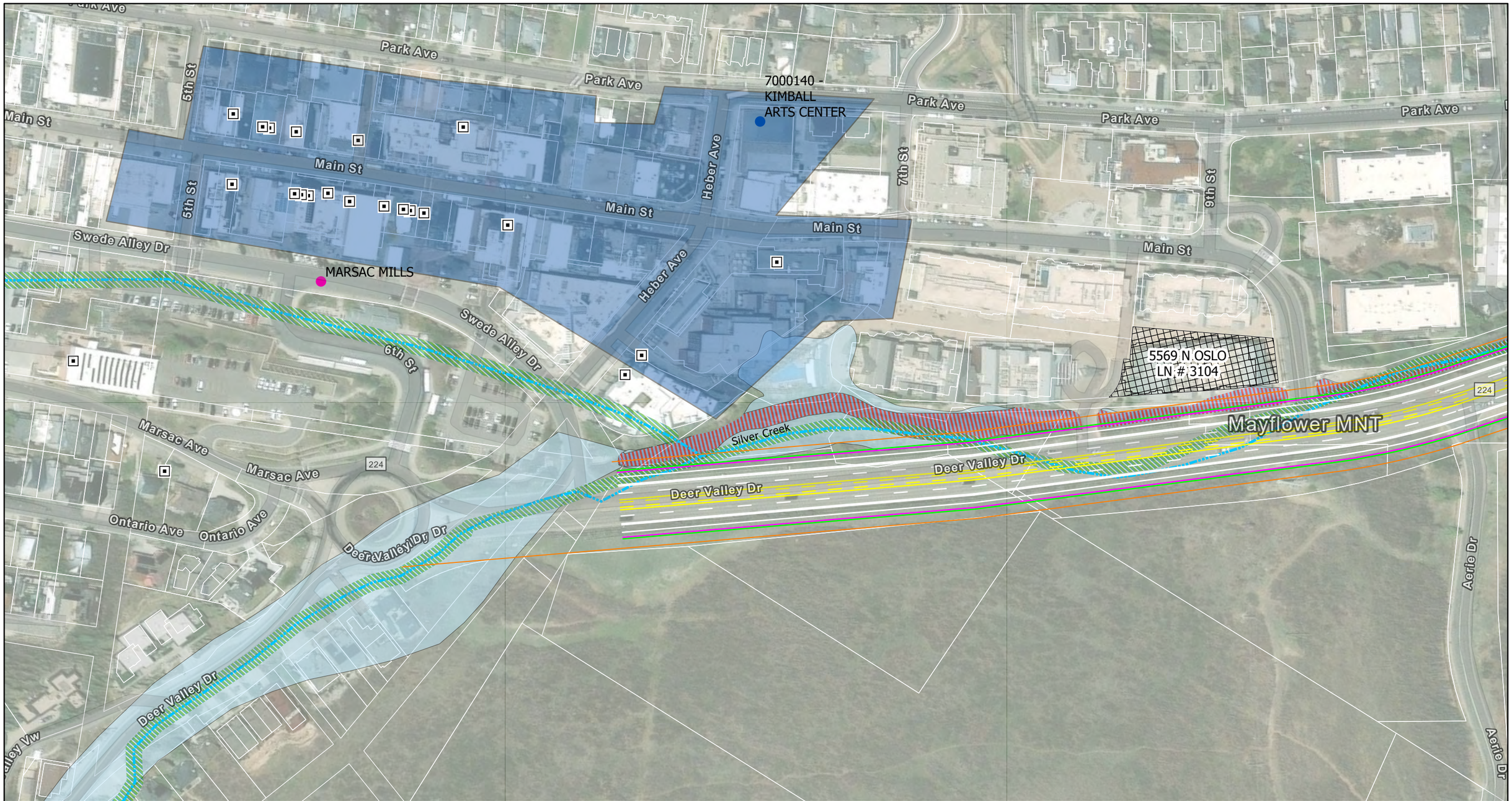

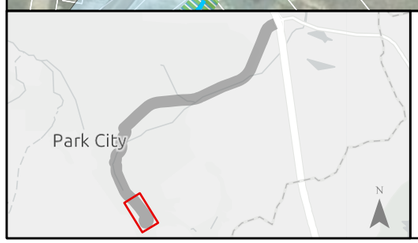

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- Potential Commercial Impacts (SELB)

0 75 150 300 Feet

Re-create 248

Side Running ELB Alternative

Environmental Considerations

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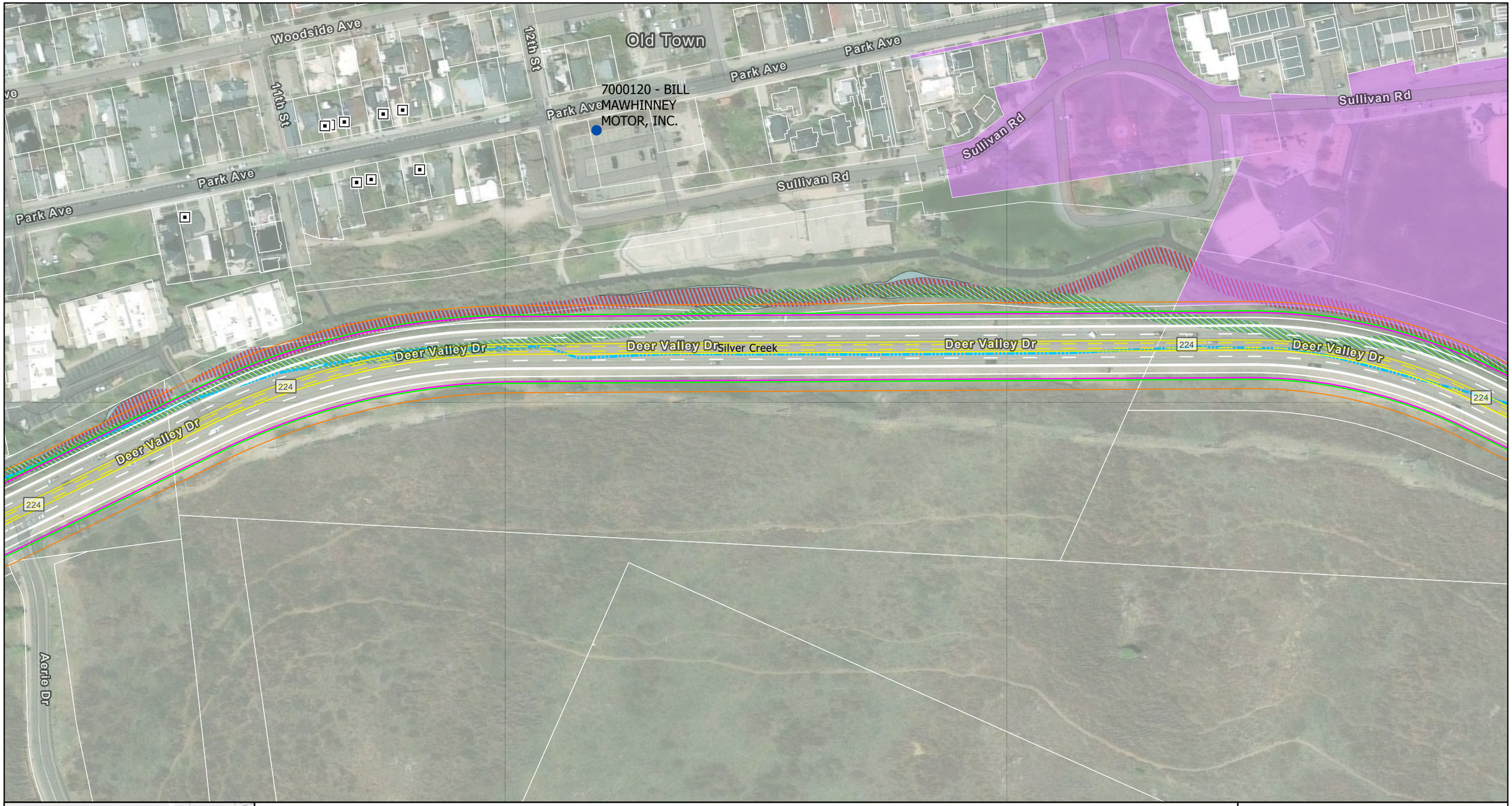

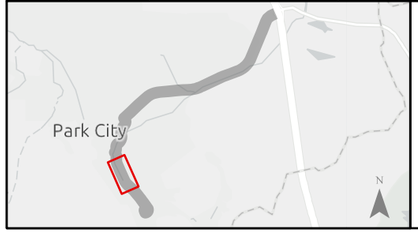

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- Potential Commercial Impacts (SELB)

N

0 75 150 300 Feet

Re-create 248

Side Running ELB Alternative

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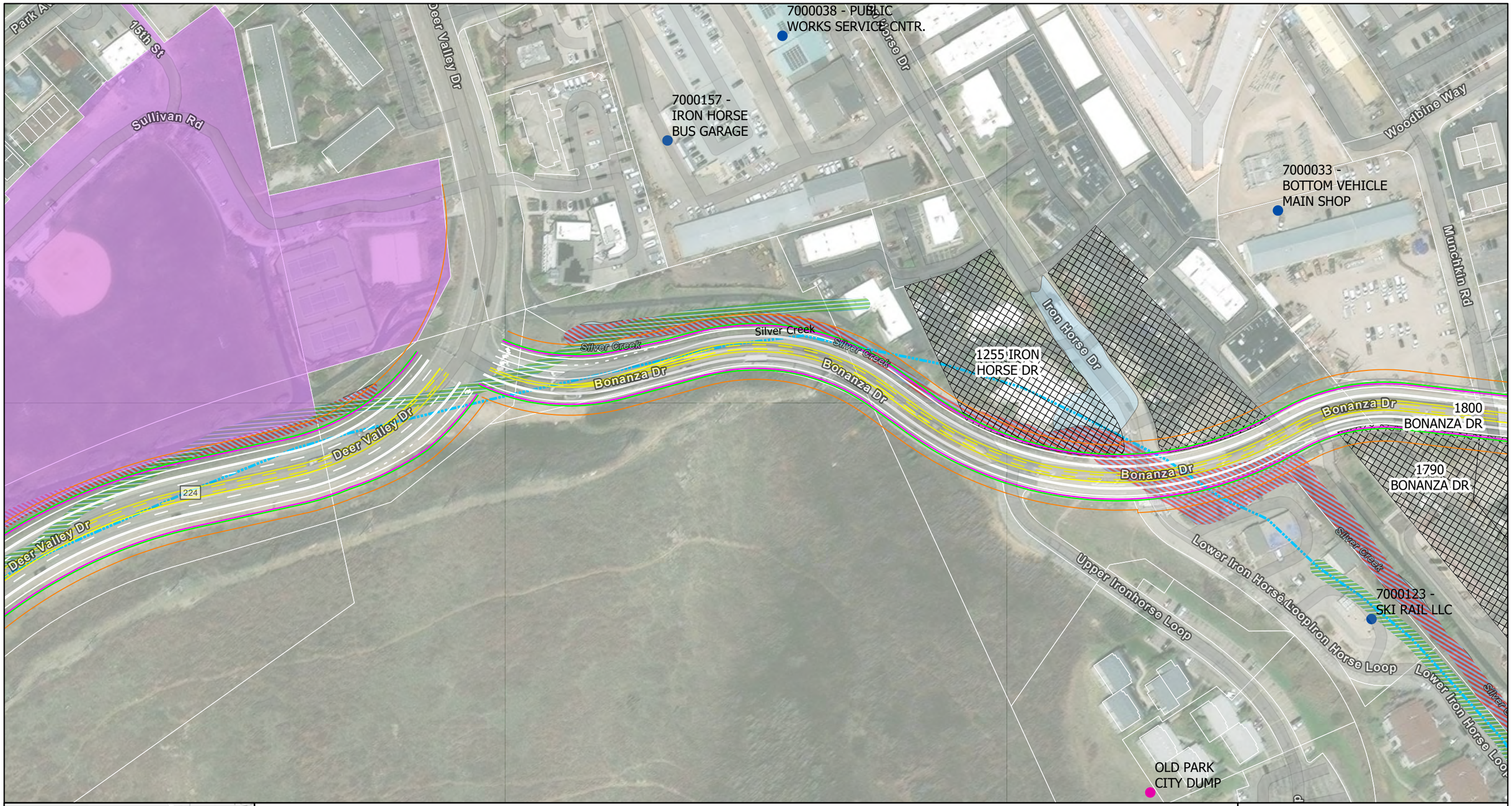

Re·create 248

Side Running ELB Alternative

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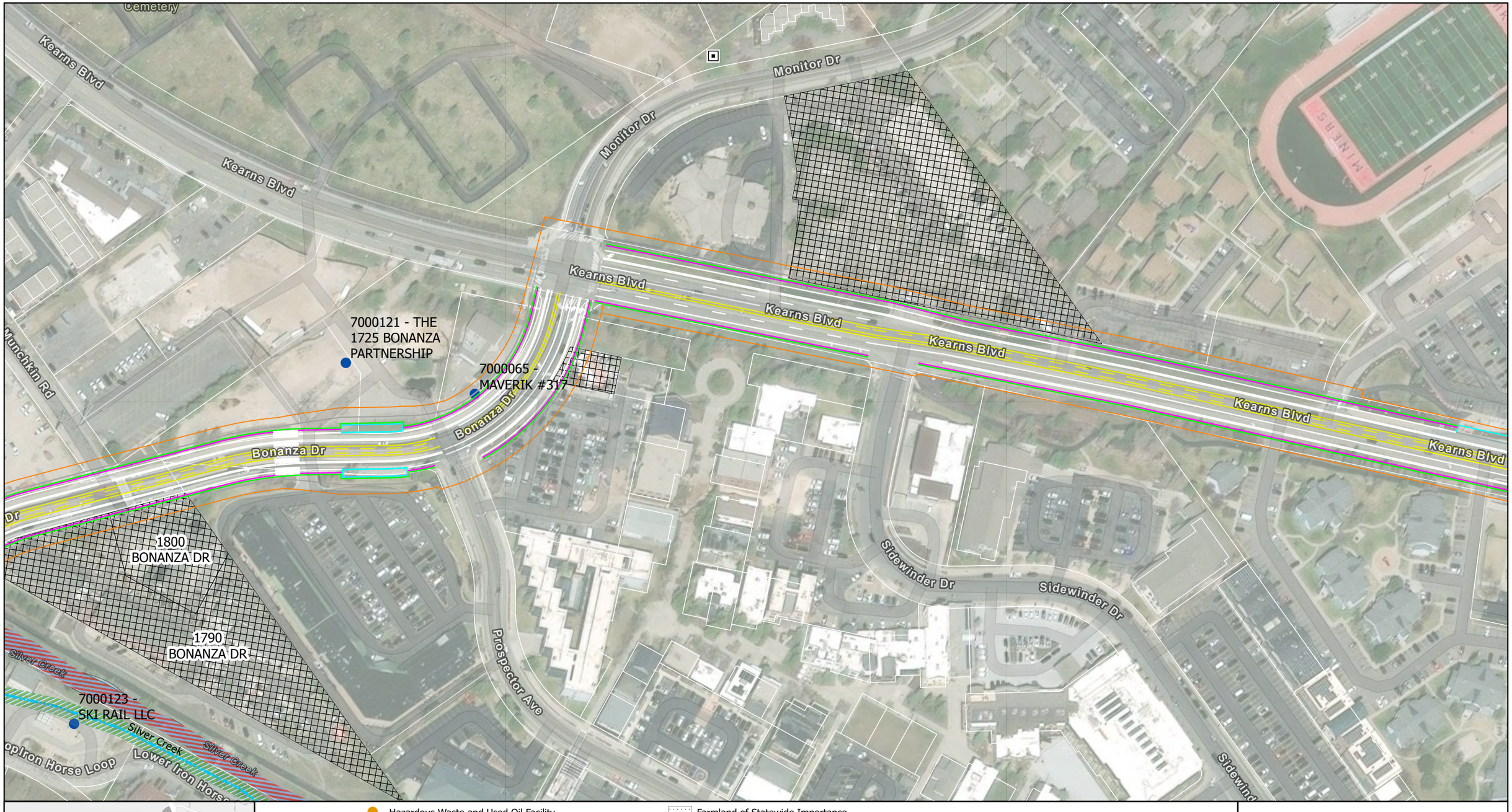

Re·create 248

Side Running ELB Alternative

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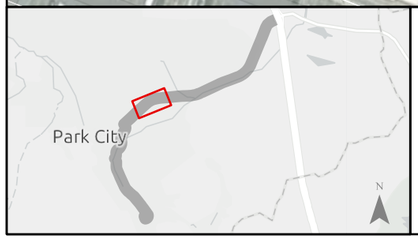

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0 75 150 300 Feet

Re-create 248

Side Running ELB Alternative

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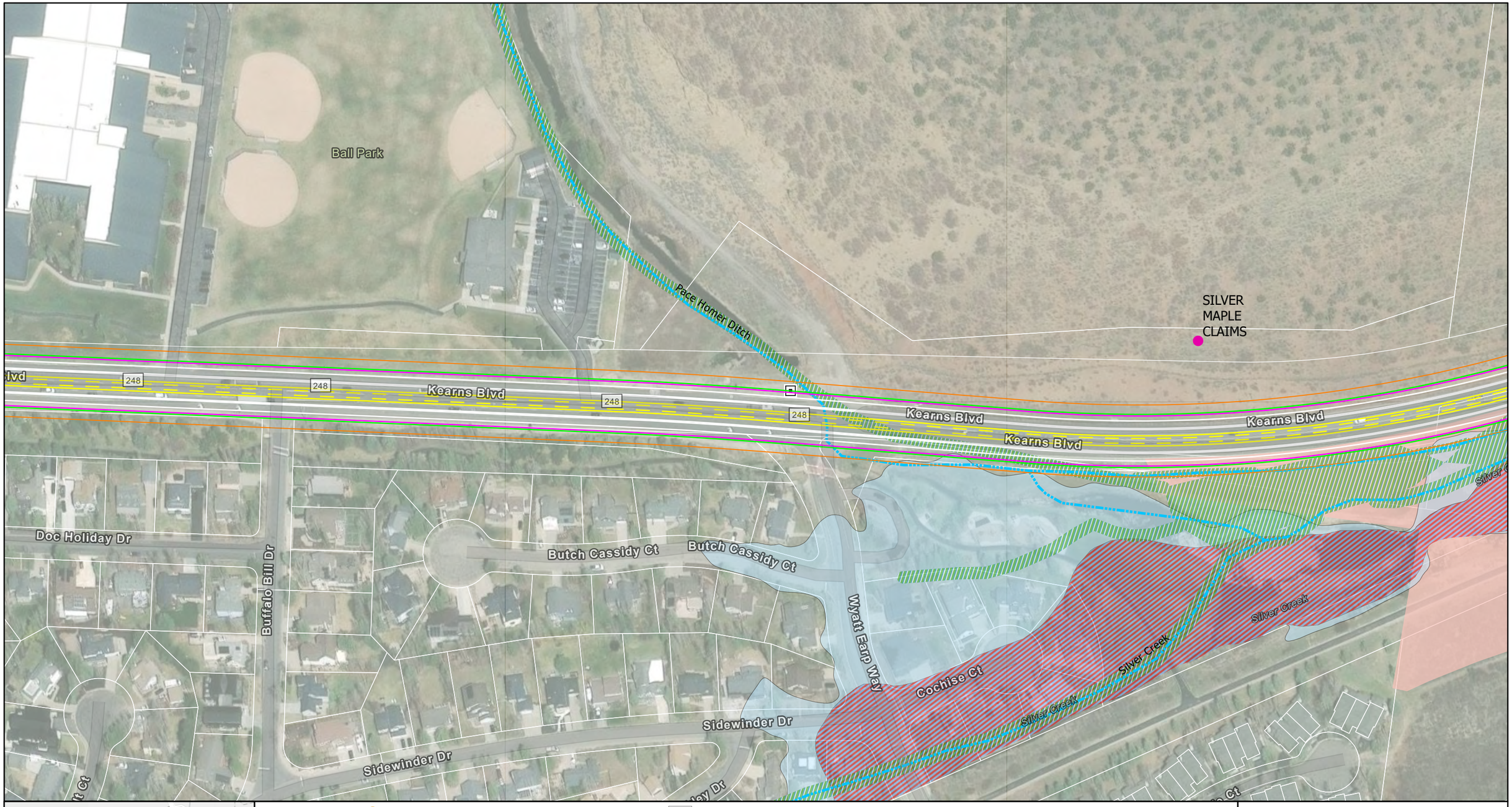

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0 75 150 300 Feet

Re-create 248

Side Running ELB Alternative

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Kearns Blvd
Kearns Blvd
Kearns Blvd
Kearns Blvd
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Kearns Blvd
Kearns Blvd
Silver Creek
Silver Creek
Silver Creek
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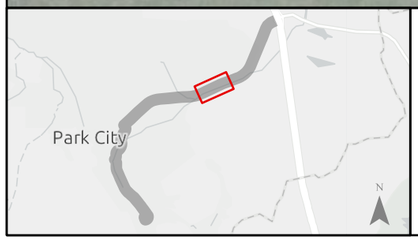

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0 75 150 300 Feet

re·create 248

Side Running ELB Alternative

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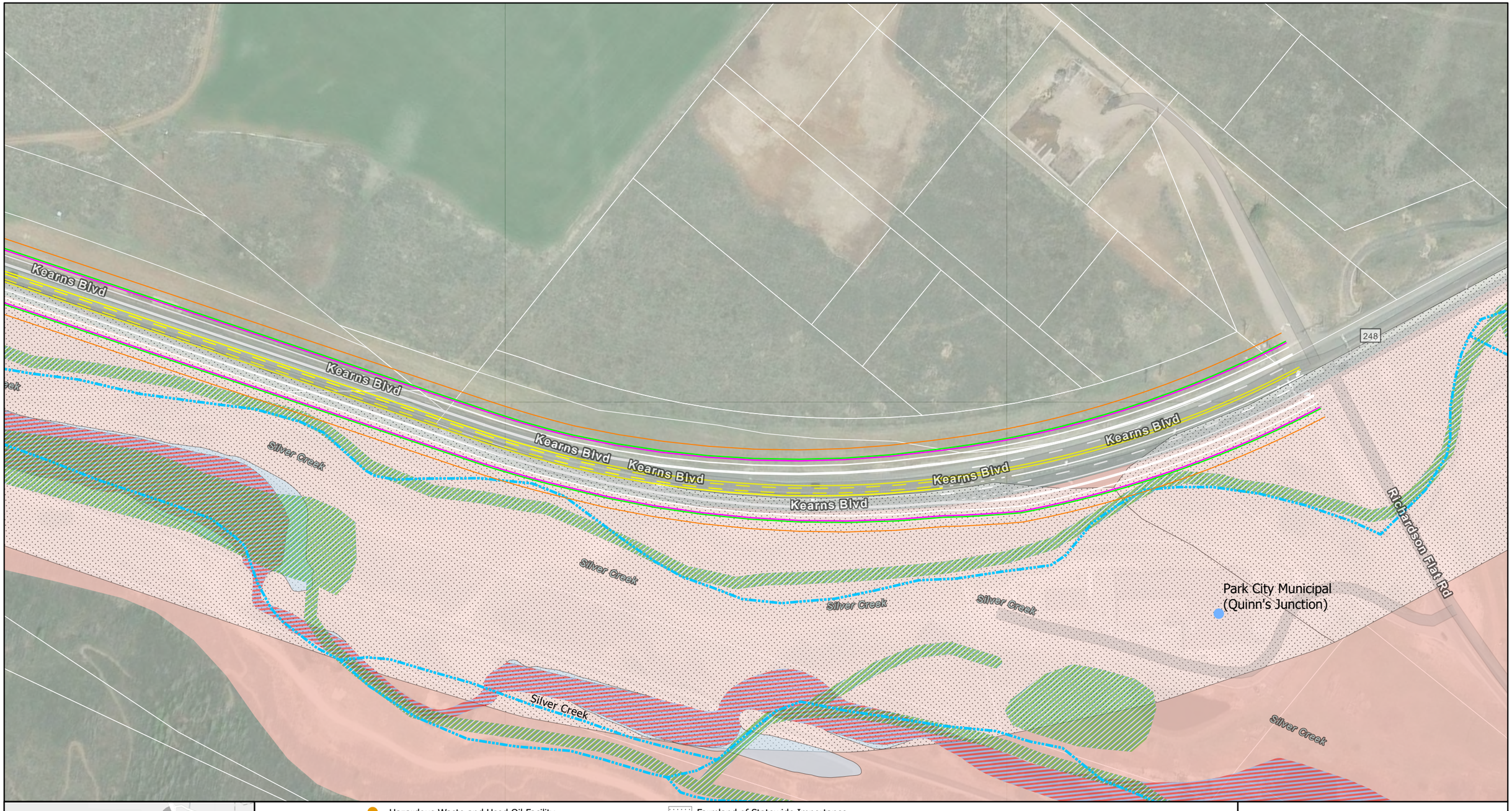

Re·create 248

Side Running ELB Alternative

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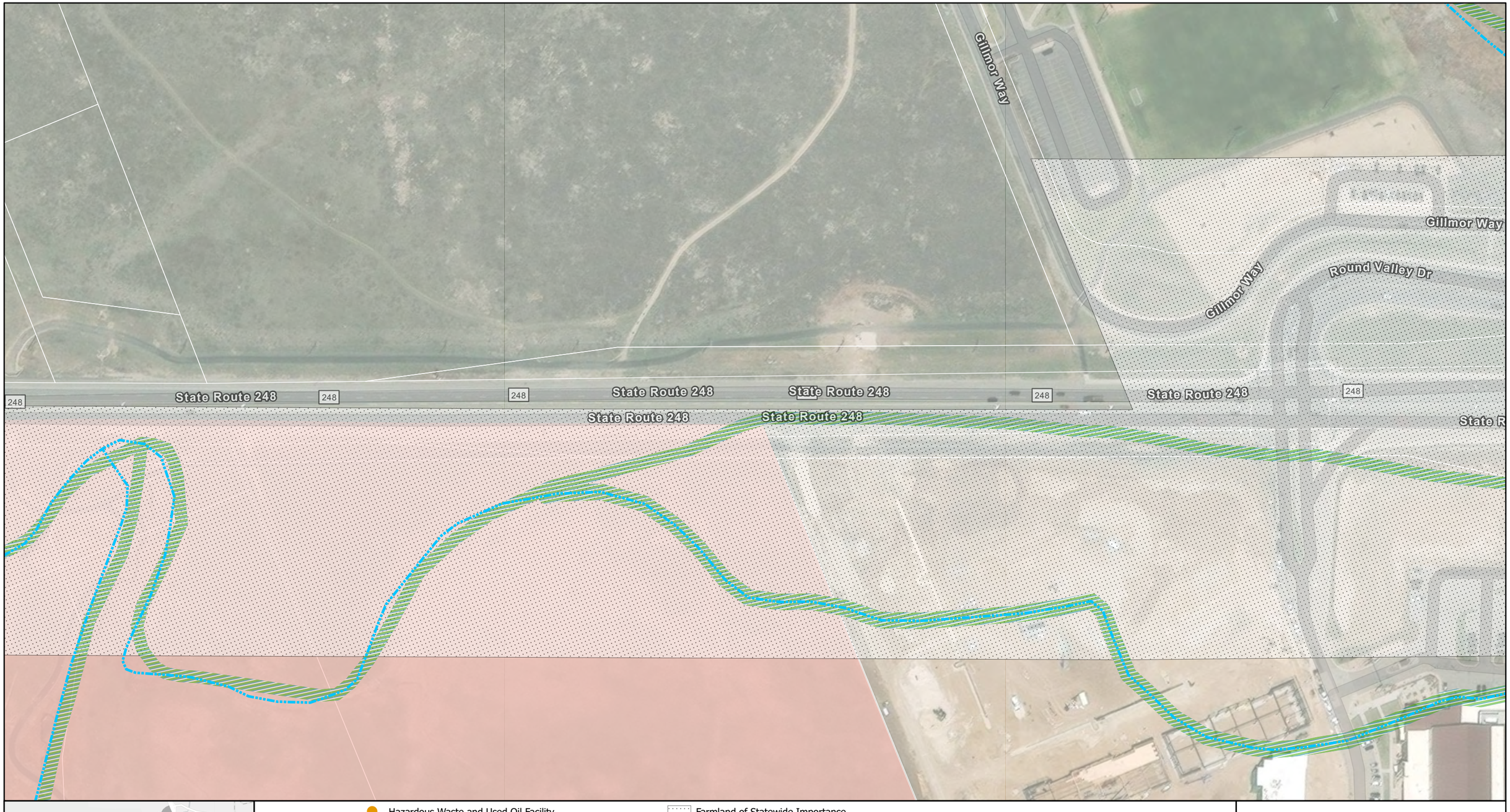

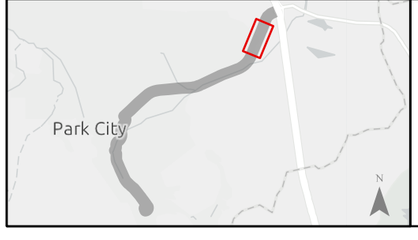

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0 75 150 300 Feet

Re·create 248

Side Running ELB Alternative

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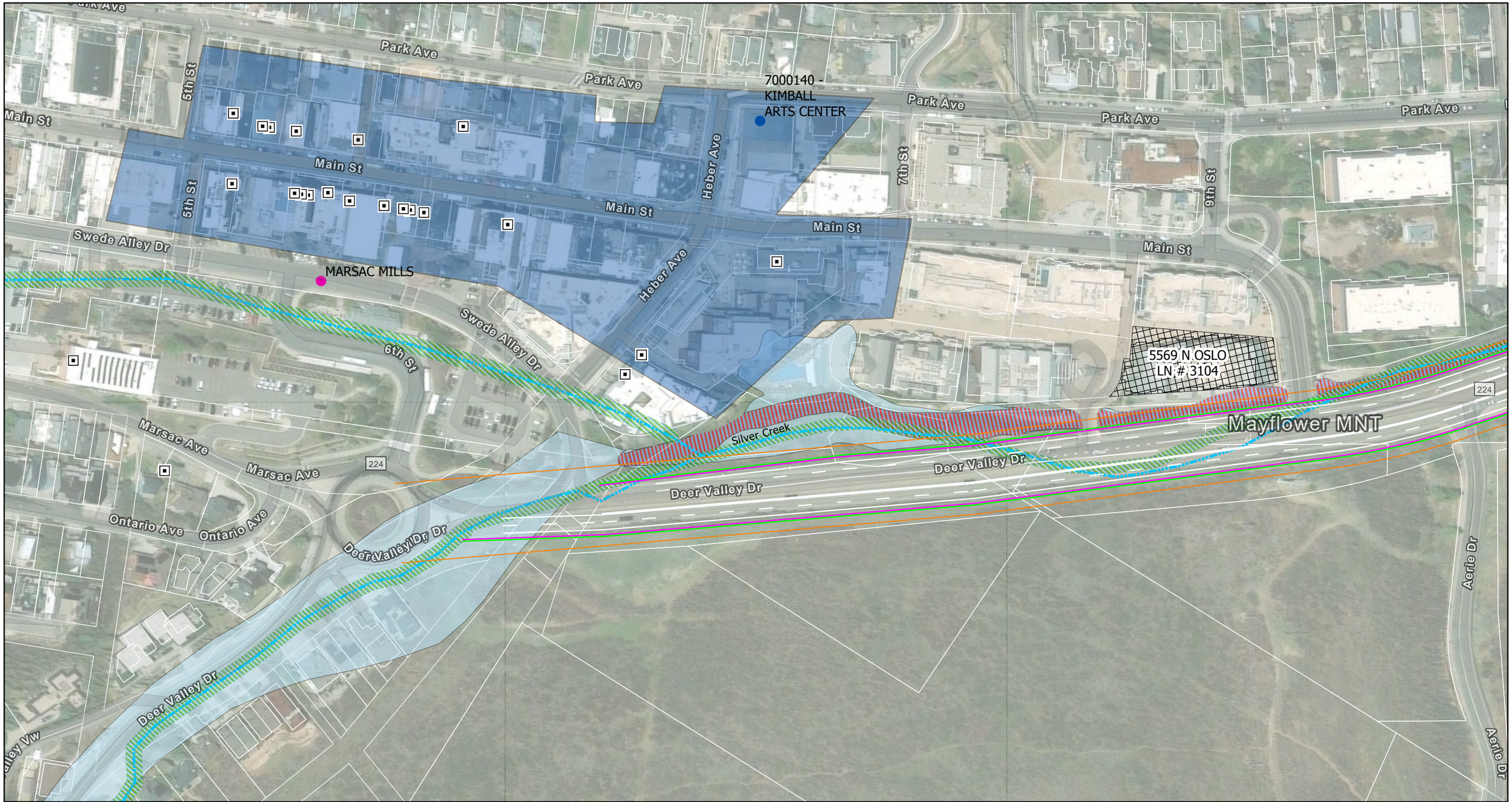

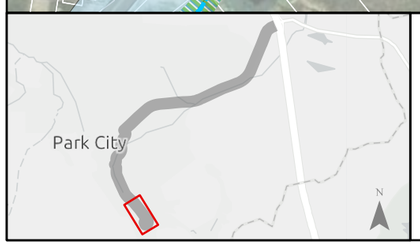

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N

0 75 150 300 Feet

Re-create 248

Center Running ELB Alternative

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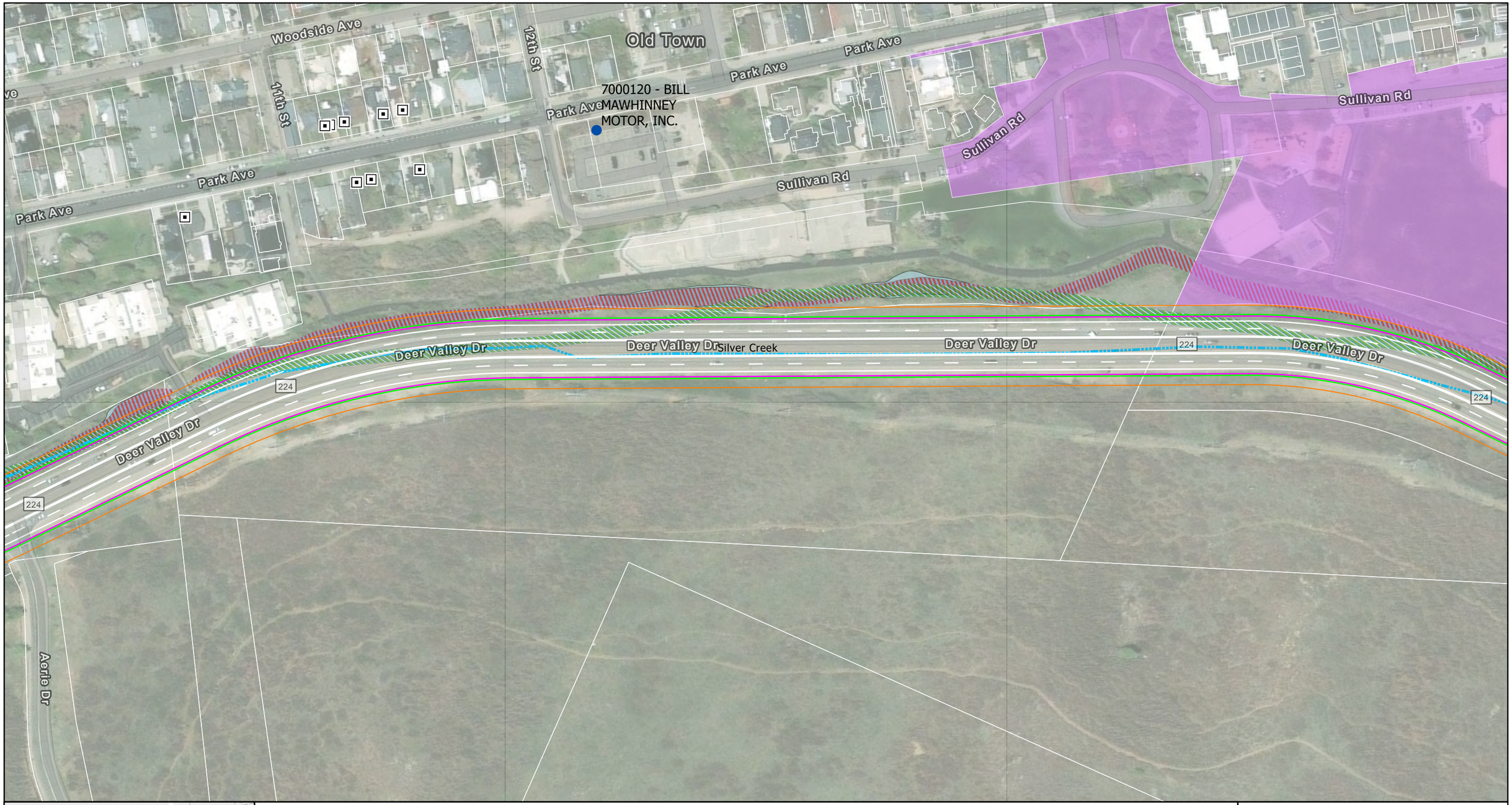

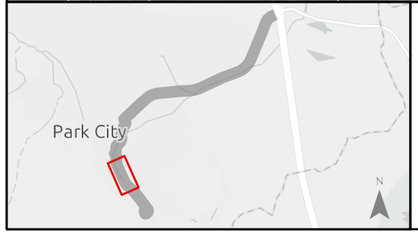

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0 75 150 300 Feet

Re-create 248

Center Running ELB Alternative

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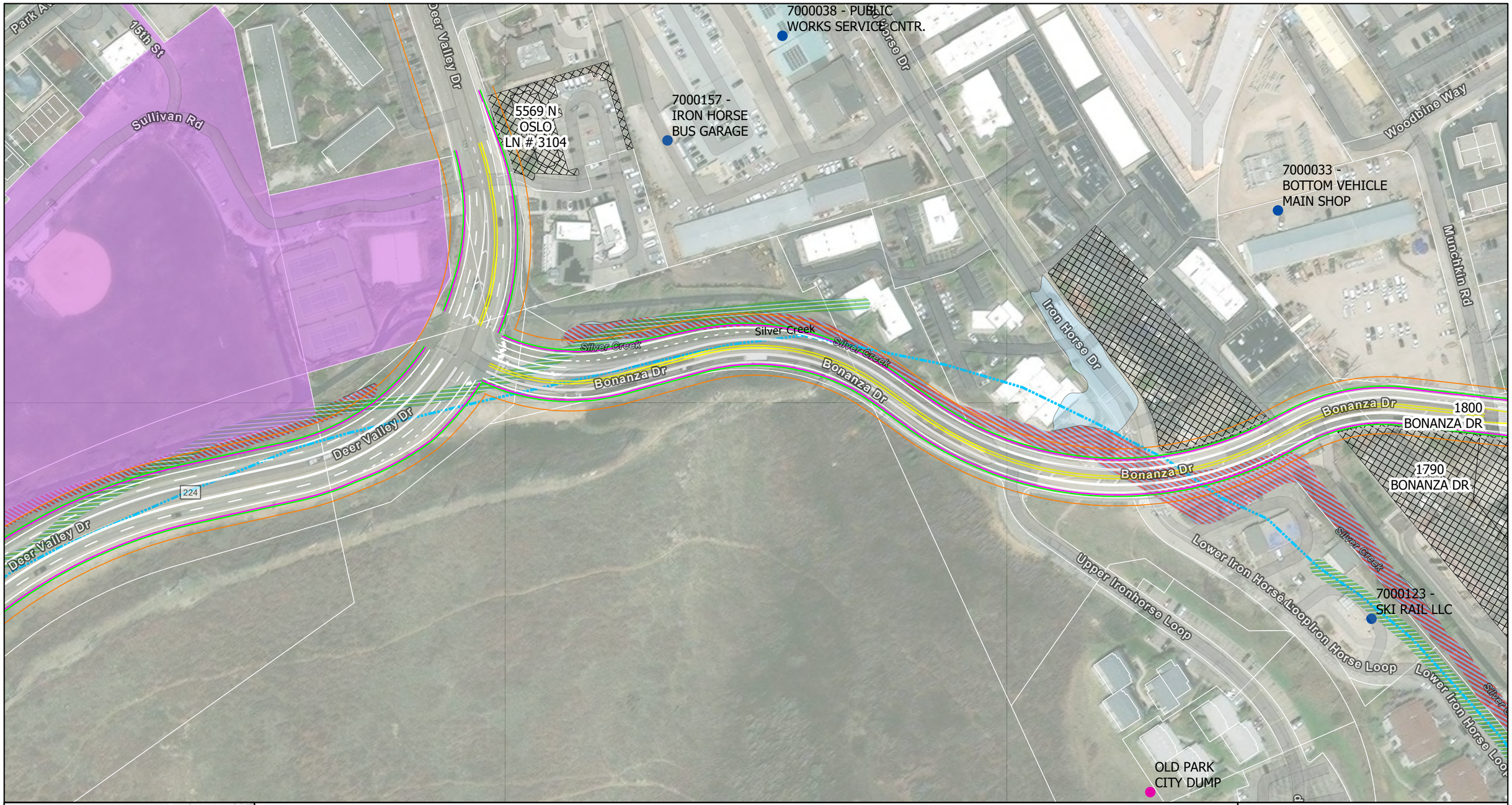

Re·create 248

Center Running ELB Alternative

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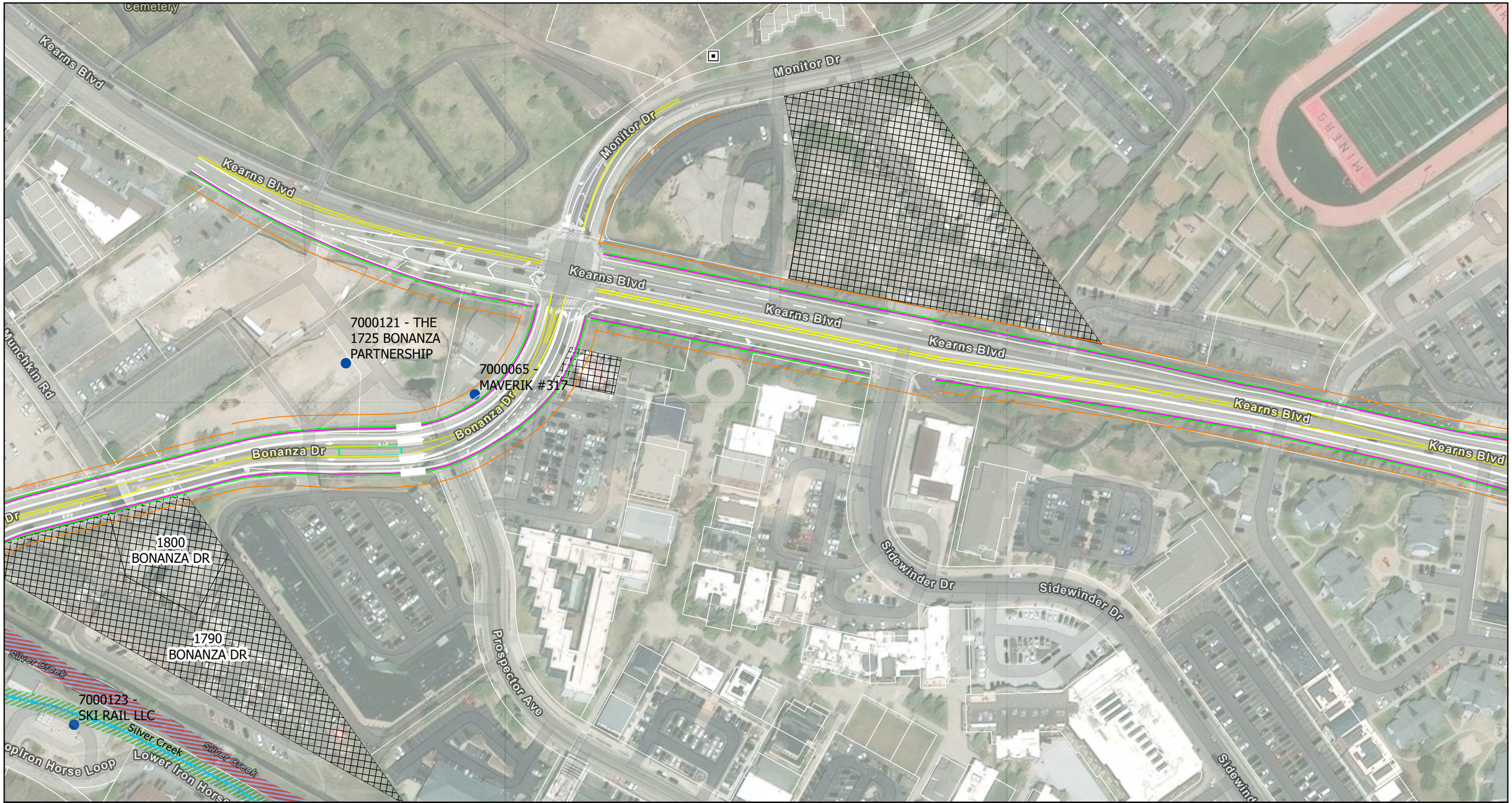

Re·create 248

Center Running ELB Alternative

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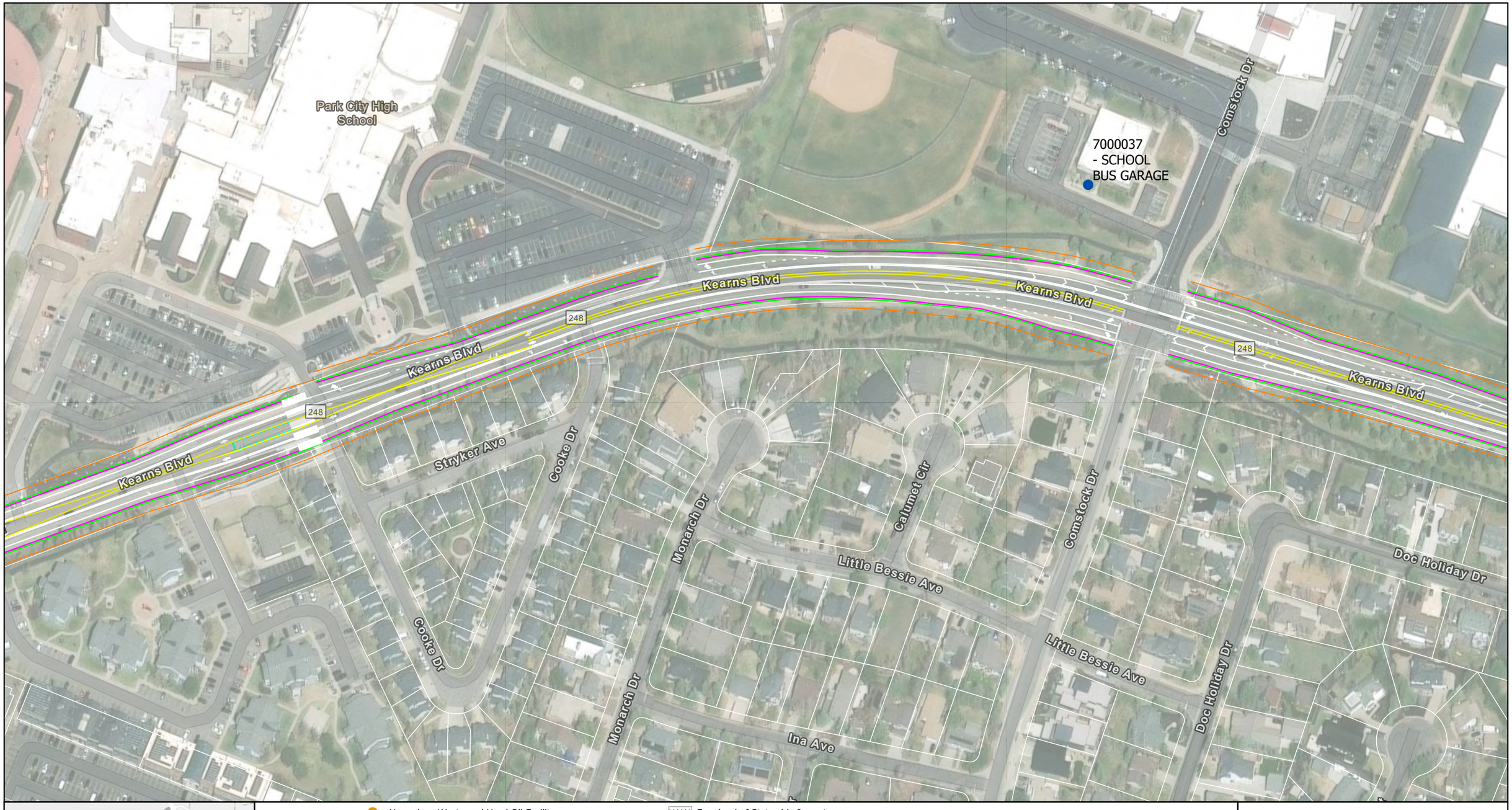

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Re-create 248

Center Running ELB Alternative

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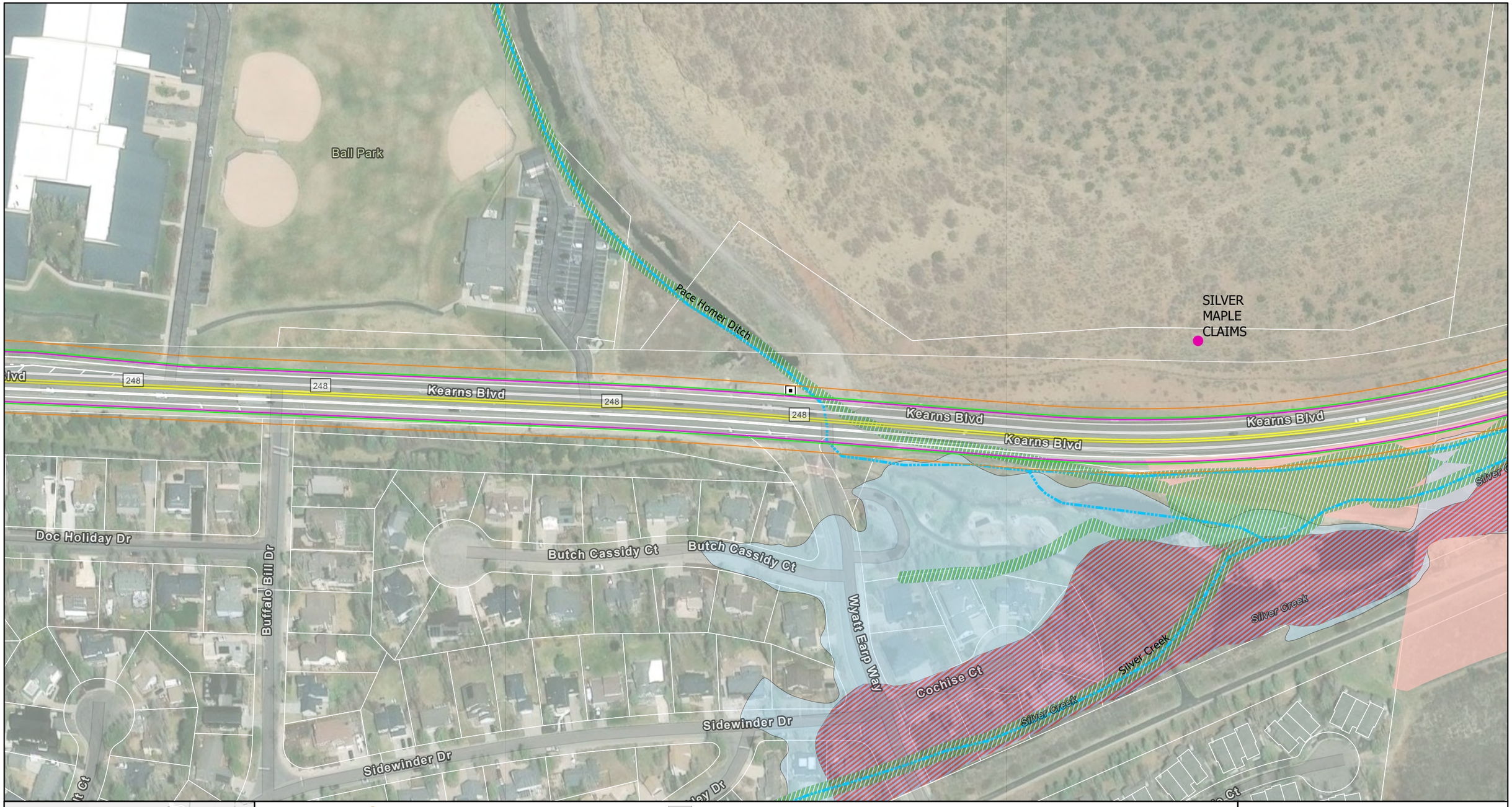

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0 75 150 300 Feet

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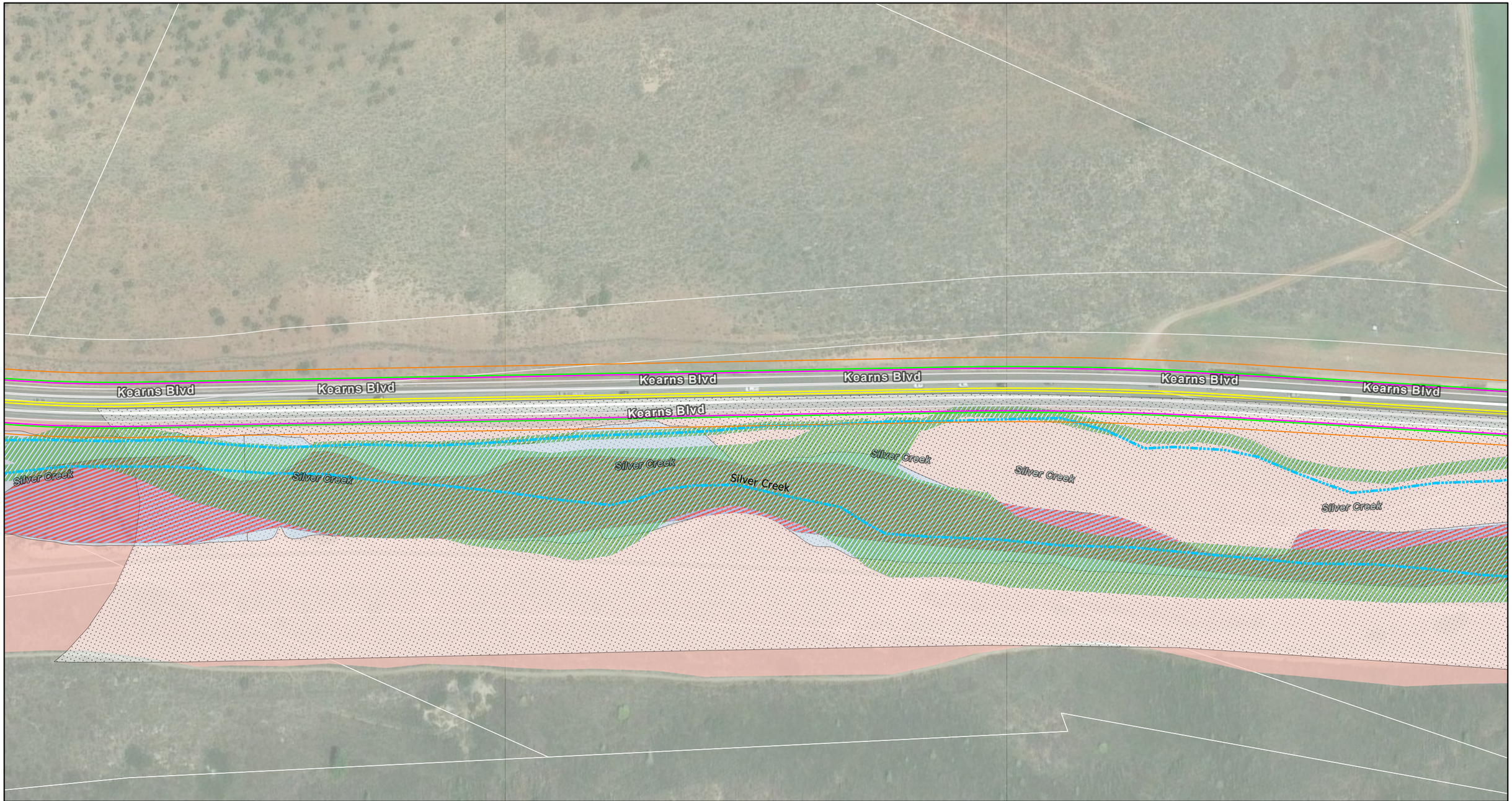

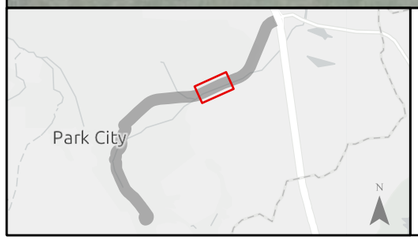

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0 75 150 300 Feet

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Center Running ELB Alternative

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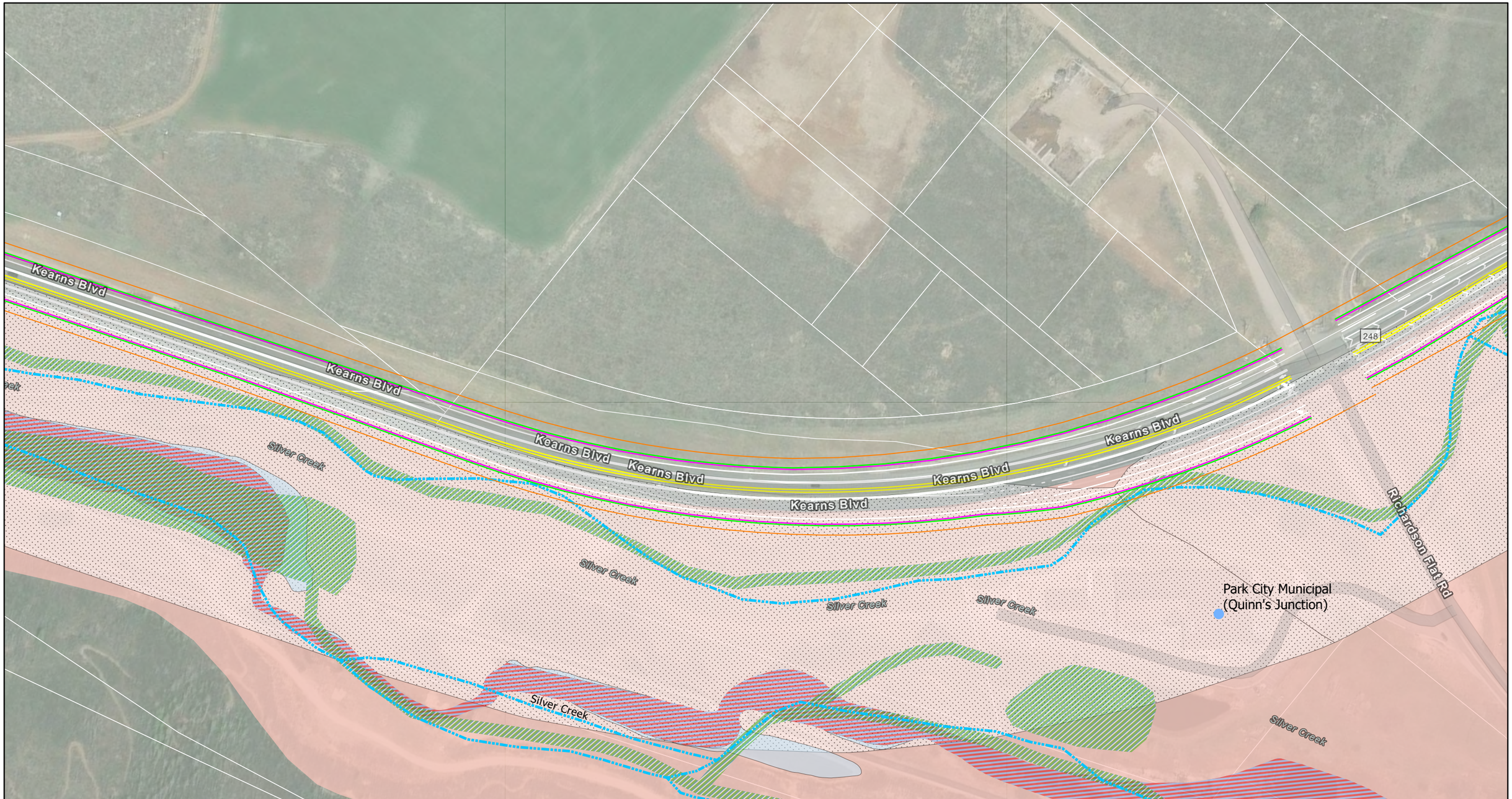

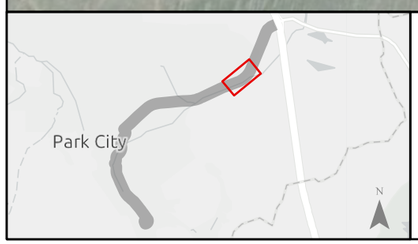

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N

0 75 150 300 Feet

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Center Running ELB Alternative

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Gillmor Way

Gillmor Way

Round Valley Dr

Gillmor Way

State Route 248

248

State Route 248

248

State Route 248

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State Route 248

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State Route 248

State Route 248

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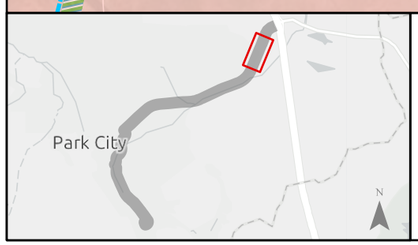

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N

0 75 150 300 Feet

Re-create 248

Center Running ELB Alternative

Environmental Considerations

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APPENDIX C: PRELIMINARY RIDERSHIP FORECAST MEMORANDUM

RSG
the science of insight®

PARK CITY RE-CREATE 248 STOPS MODELING

November 2025

Park City Municipal Corporation

Report Title:

Park City Re-Create 248 STOPS Modeling

Report Prepared by:

RSG

Report Prepared for:

Park City Municipal Corporation

For additional information regarding this report, or for questions about permissions or use of findings contained therein, please contact:

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55 Railroad Row, Suite 200
White River Junction, VT 05001
(802) 295-4999
www.rsginc.com

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1.0 PROJECT OVERVIEW

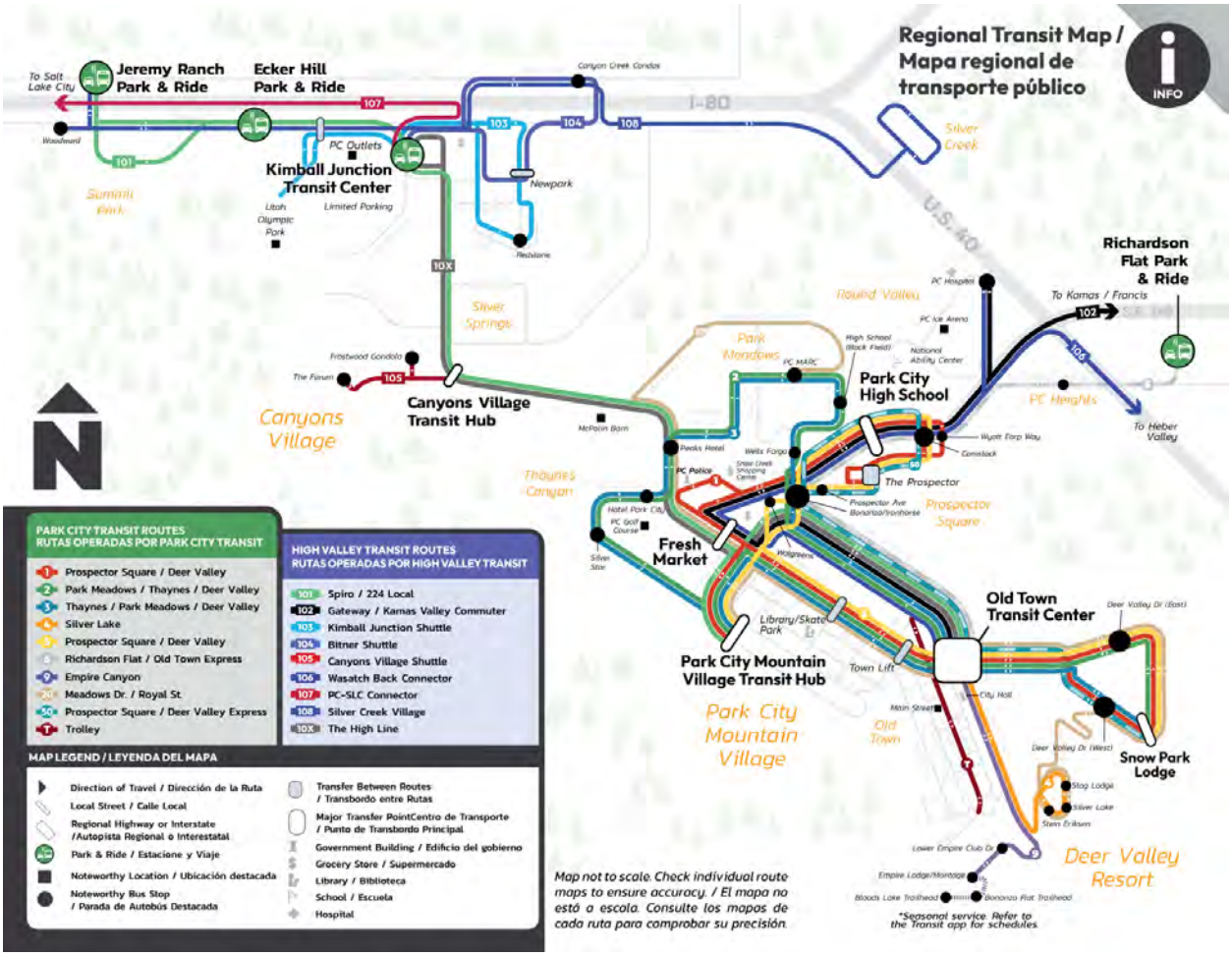
The Park City Municipal Corporation ("PCMC") in Park City, Utah is conducting the Recreate 248 Transit Study ("Study") to explore transit opportunities connecting travelers from east Summit County to Park City. The project corridor consists of SR-248, Bonanza Dr, and Deer Valley Dr and extends from Old Town Transit Center in downtown Park City to US-40 and Richardson Flat Park and Ride east of Park City, displayed in Figure 1. The corridor is a key east-west access corridor for Park City and connects key destinations in Park City, including downtown Park City and Park City High School.

The study involves exploring Exclusive-Lane Bus (ELB) or Light Rail (LRT) service along the project corridor. As shown in Figure 2, Park City is presently served by Park City Transit (PCT) and High Valley Transit (HVT). Many transit routes traverse parts of the project corridor, and PCT route 6 is the existing route that traverses the entire corridor and that the ELB will replace.

This report details the implementation of an FTA STOPS model for the ELB and LRT service along the project corridor for two frequency scenarios each.

FIGURE 1: RECREATE 248 TRANSIT STUDY PROJECT CORRIDOR

FIGURE 2: PARK CITY TRANSIT AND HIGH VALLEY TRANSIT ROUTE MAP



2.0 MODEL DEVELOPMENT

Simplified Trips on Projects Software (STOPS) is an FTA tool that allows transit agencies to evaluate ridership on a proposed system improvement with a reduced set of model inputs, mainly U.S. Census data, Metropolitan Planning Organization (MPO) demographic forecasts, and trip characteristics from an origin-destination survey. This simplified modeling framework is calibrated within the distinct regions of the United States to ensure model outputs are consistent with observed behavior in the modeled region.

The project team developed a synthetic STOPS model to forecast ridership on the proposed project in 2025 (base year) and in 2045 (future year). A synthetic model does not utilize a transit survey, but rather, uses the 2012-2016 Census Transportation Planning Products (CTPP) Journey-to-Work (JTW) flows to estimate travel demand.

2.1 STOPS INPUT DATA

The following section summarizes the various data inputs used in the Recreate 248 STOPS modeling effort.

Route and Stop Counts

The project team received PCT and HVT ridership counts from PCMC. The project team then conducted data processing to develop average weekday ridership count for the month of February 2025. This month of data is selected to represent the typical winter peak season in Park City without Sundance Festival travel, which occurs in January. Figure 3 shows seasonal variations in transit ridership

As shown in Table 1, the total average weekday ridership of both PCT and HVT is 16,293, with that of PCT being 8,616 and that of HVT being 7,678. This count does not include any gondolas in Park City.

The highest ridership routes are HVT Route 101 between downtown Park City and Jeremy Ranch Park & Ride (2,503), HVT Route 10X between downtown Park City and Kimball Junction Transit Center (2,386), and PCT Route 1 between Prospector Square and Deer Valley (2,260). PCT Route 6, the route to be replaced by ELB/LRT in the project corridor, has an average weekday ridership of 74.

FIGURE 3: SEASONAL VARIATIONS IN TRANSIT RIDERSHIP

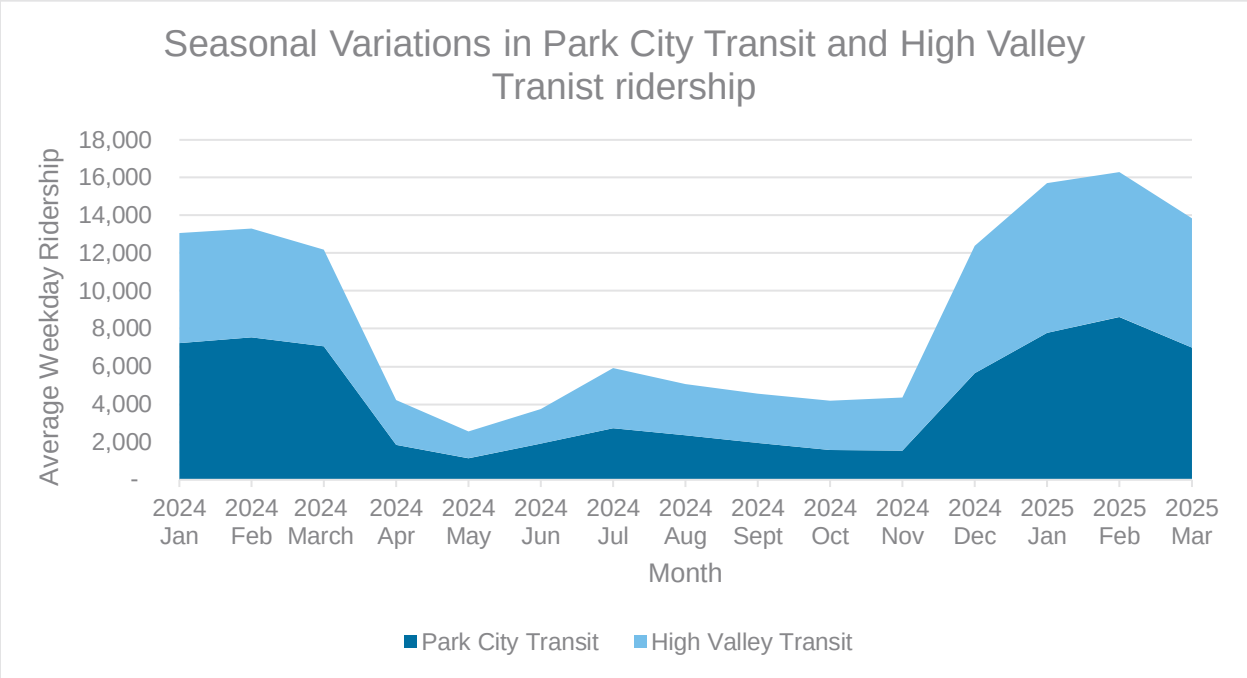


TABLE 1: AVERAGE WEEKDAY RIDERSHIP BY ROUTE (2025 FEB)

Park City Transit (PCT)		High Valley Transit (HVT)	
Routes	Ridership	Routes	Ridership
01 Red	2,260	101 Spiro / 224 Local	2,503
02 Green	1,300	102 Gateway / Kamas Valley Commuter	57
03 Blue	1,065	103 Kimball Junction Circulator	318
04 Orange	393	103b	28
05 Yellow	1,023	104 Bitner Connector	495
06 Express	74	105 Canyons Village Shuttle	418
07 Express	392	106 Wasatch Back Connector	267
07 Grey	475	107 PC-SLC Commuter	343
08 Brown	298	108 Silver Creek Village	337
08 Express	162	109	525
09 Purple	312	10X The High Line	2,386
20 Tan	88		
50 Teal	510		
Citywide	58		
Trolley	205		
Total	8,616	Total	7,678

GTFS Transit Services Data

The project team used existing GTFS data for both PCT and HVT. Section 3.0 describes this process in detail.

MPO Population and Employment

The project team downloaded MPO population and employment data for Summit County and Wasatch County from the Mountainland Association of Governments (MAG). Table 2 contains their respective population and employment numbers for 2024 and 2045. The STOPS model application sets 2024 population as the base year and 2045 as the horizon year. Both counties are expected to grow in population and employment by at least 20%. Notably, Wasatch County population is forecasted to grow by 64%, or an increase of almost 25,000 people. Over 15,000 of this increase is forecasted in the towns of Heber and Midway. Figure 4 displays population growth by TAZ, showing that much of the high growth TAZs are in and around Heber. Figure 5 shows employment growth by TAZ.

TABLE 2: POPULATION AND EMPLOYMENT GROWTH BY CITY 2024-2045

COUNTY	CITY	POP 2024	POP 2045	POP GROWTH	EMP 2024	EMP 2045	EMP GROWTH
Summit County	Park City	9,008	9,950	10%	18,096	21,752	20%
Summit County	Kamas	2,148	3,548	65%	1,483	1,784	20%
Summit County	Francis	1,870	3,243	73%	169	203	20%
Summit County	Oakley	1,674	2,948	76%	279	336	20%
Summit County	Coalville	1,634	2,521	54%	1,823	2,190	20%
Summit County	Henefer	903	1,468	63%	34	42	24%
Summit County	Balance of Summit County	26,766	30,747	15%	19,582	23,524	20%
Summit County	**Total**	**44,003**	**54,425**	**24%**	**41,466**	**49,831**	**20%**
Wasatch County	Heber	19,363	30,372	57%	11,104	14,343	29%
Wasatch County	Midway	6,951	11,206	61%	2,041	2,636	29%
Wasatch County	Hideout	1,165	2,190	88%	32	41	28%
Wasatch County	Daniel	965	1,945	102%	367	473	29%
Wasatch County	Charleston	753	1,504	100%	282	364	29%
Wasatch County	Wallsburg	349	371	6%	8	11	38%
Wasatch County	Independence	123	202	64%	3	4	33%
Wasatch County	Balance of Wasatch County	8,616	14,975	74%	2,795	3,613	29%
Wasatch County	**Total**	**38,285**	**62,765**	**64%**	**16,632**	**21,485**	**29%**
Total	***Total***	***82,288***	***117,190***	***42%***	***58,098***	***71,316***	***23%***

FIGURE 4: PROJECTED POPULATION GROWTH 2024-2045 BY TAZ

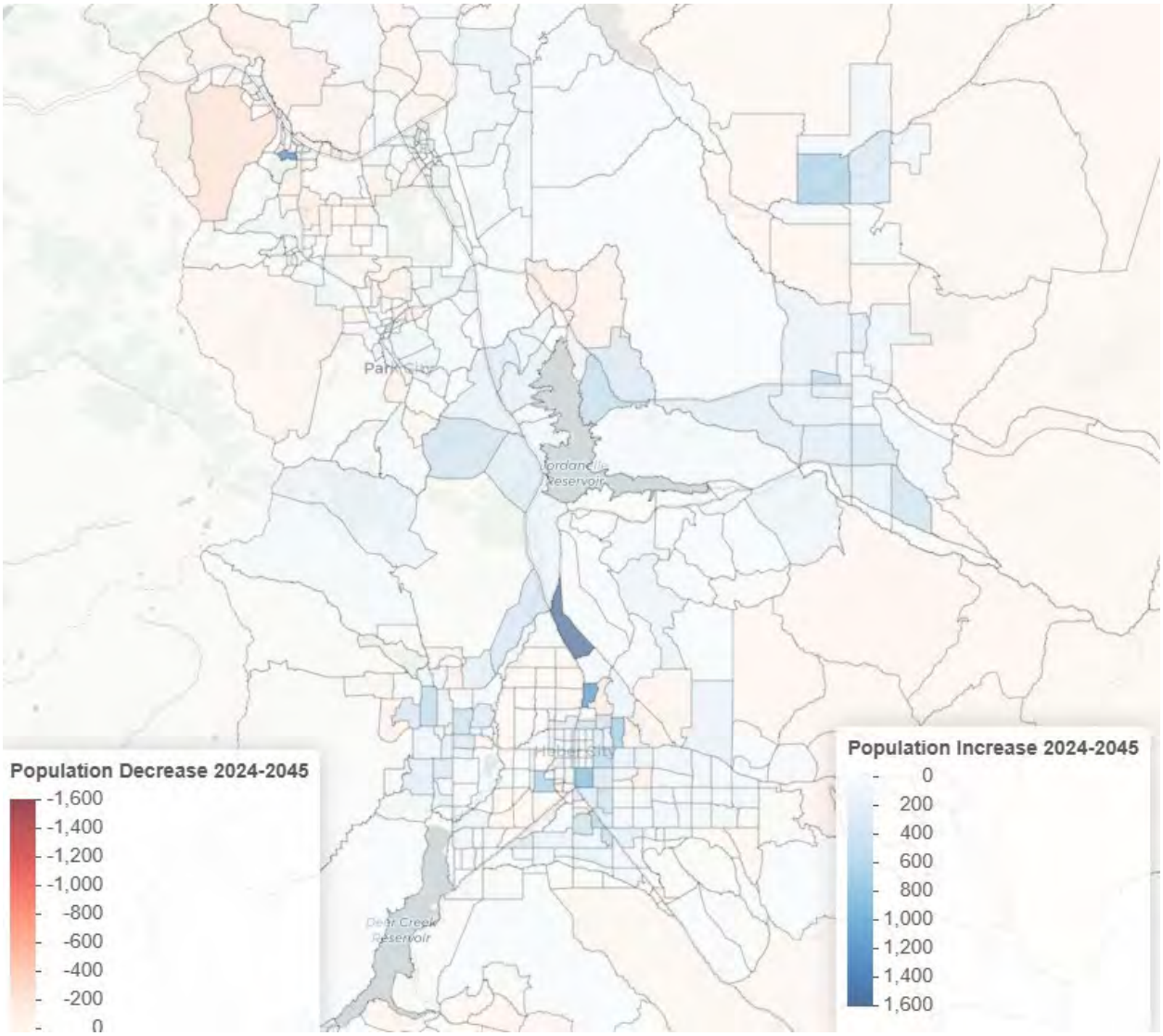
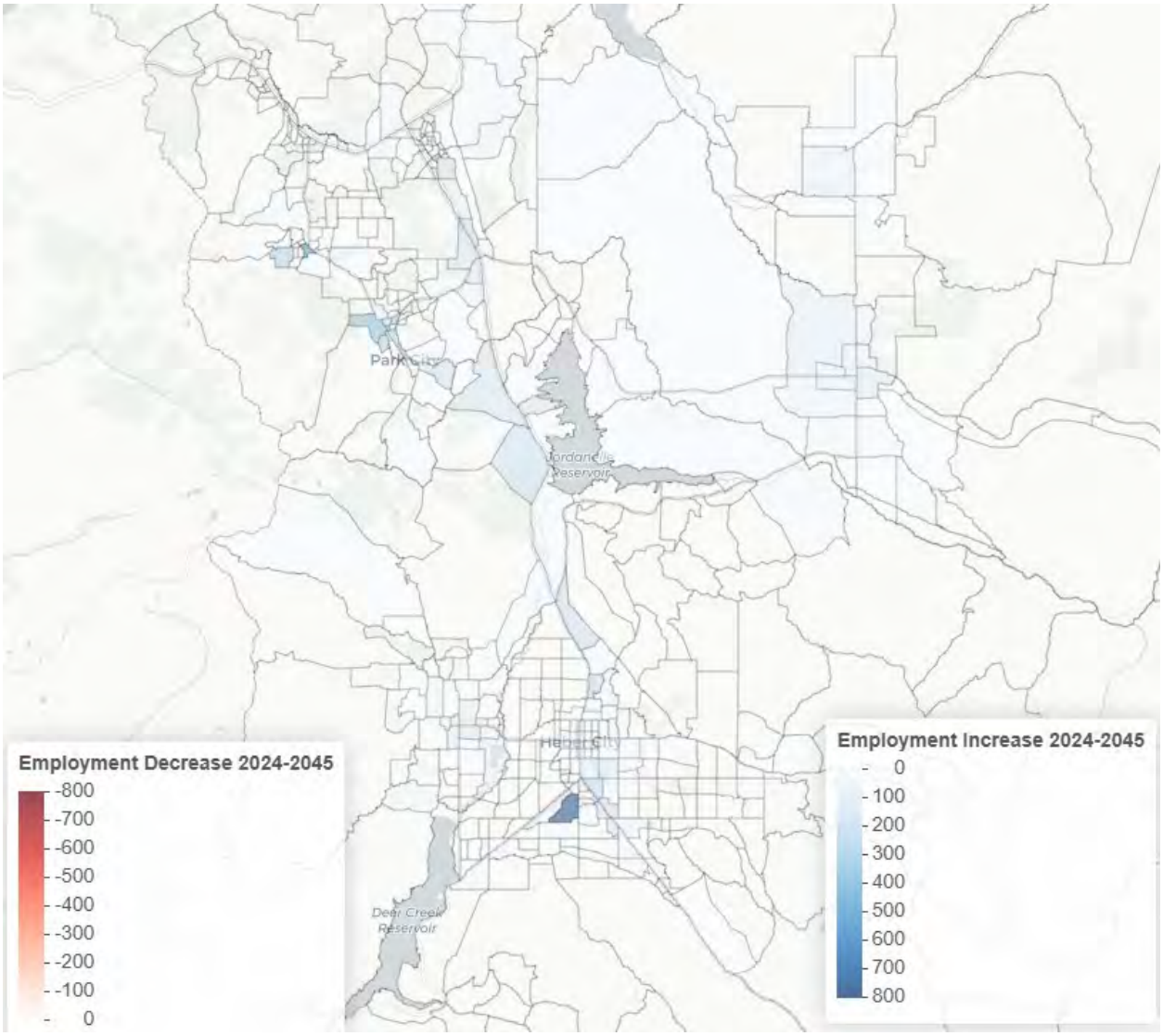


FIGURE 5: PROJECTED EMPLOYMENT GROWTH 2024-2045 BY TAZ



MPO Highway Skim File

The project team received highway skims from PCMC which provides travel distance and time between zones. The project team used the AM peak hour highway skims for STOPS modeling. With 2024 skims designated as current year, 2032 skims as operating year, 2042 skims as 10-year projections, and 2050 skims as 20-year projections.

Walk Shape File

The project team obtained a walk shapefile from FTA for use in STOPS modeling.

Census Travel Demand Data

The project team used the 2012-2016 American Community Survey (ACS) Census Transportation Planning Products (CTPP) data prepared by the FTA at the state level for use in STOPS modeling.

The existing transit survey data did not meet STOPS input requirements, so it was used only to assess model performance in the calibration stage.

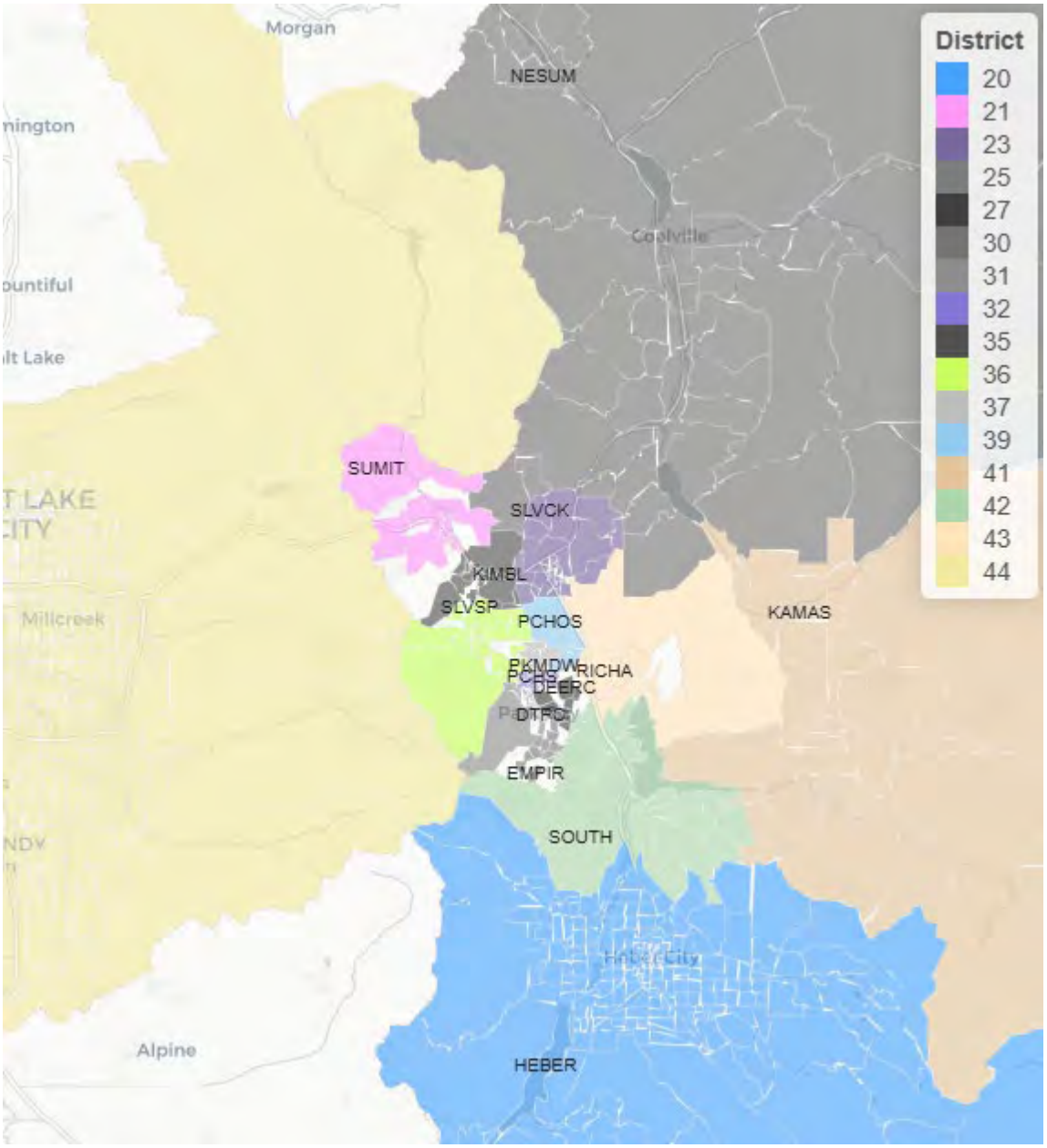
Zones

The project team used the MPO traffic analysis zones (TAZs) as the base zone system for STOPS modeling. These zones are more granular than the Census 2012-2016 ACS Zones. The project team then refined the zone system by selectively subdividing zones and removing uninhabited mountain areas from the zone system. Further subdivision increases geographical granularity in key areas such as downtown Park City and are intended to improve the modelling of transit access. Selective area removal prevents instances of population and employment placed in unrealistic areas.

Districts

Districts are groups of zones used for STOPS model calibration. Districts should generally observe natural and jurisdictional boundaries and represent areas with similar levels of transit service and accessibility. The zones and districts are shown in Figure 6.

FIGURE 6: MAP OF STOPS DISTRICTS



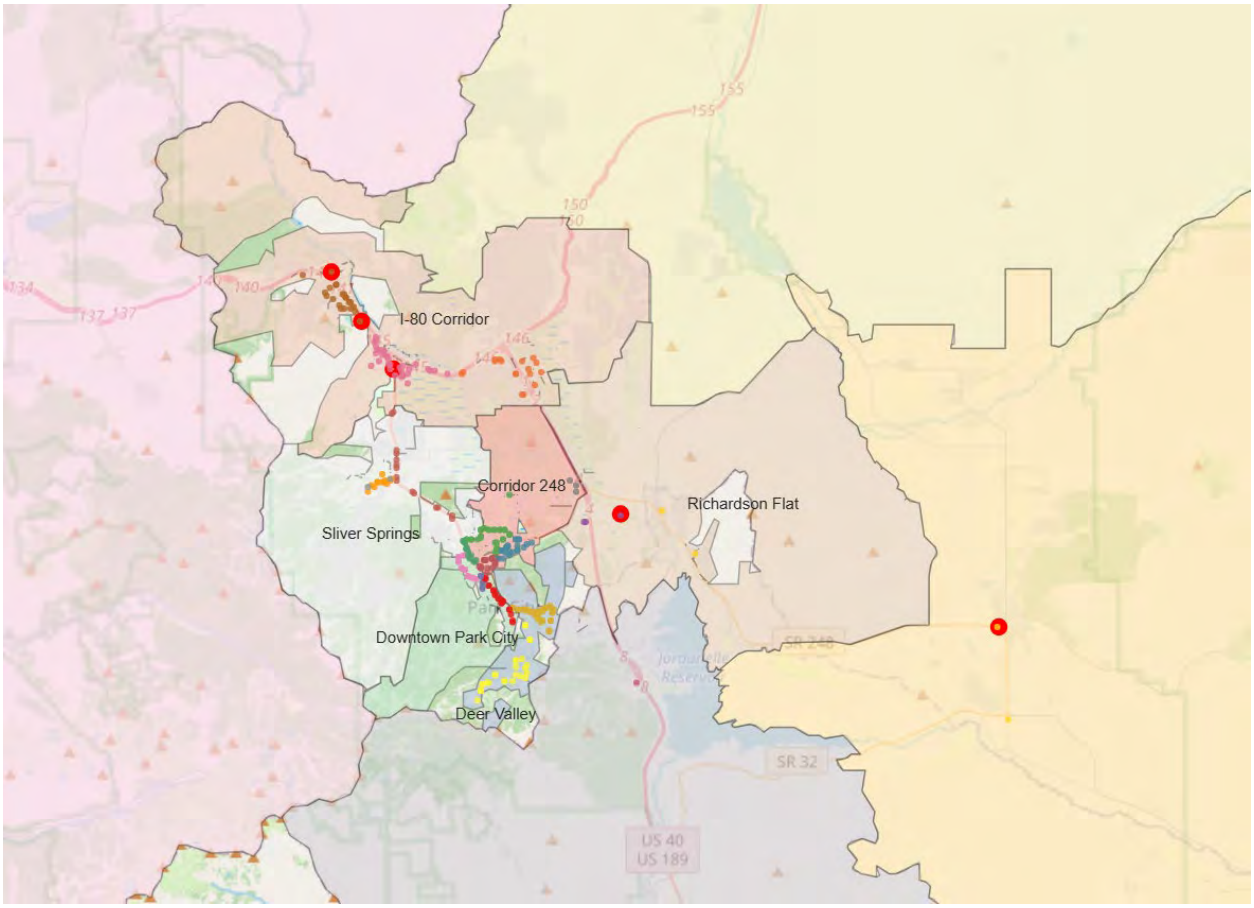
Superzones and Markets

The project team also developed “superzones,” which represent general geographical areas of interest and are used for reporting. Table 3 shows the correspondence of STOPS districts to superzones. Figure 7 shows the superzone structure used.

TABLE 3: SUPERZONE - DISTRICT CORRESPONDENCE TABLE

DISTRICT	DISTRICT NAME	SUPERZONE
20	HEBER	Heber-South
21	SUMIT	I-80 Corridor
23	SLVCK	I-80 Corridor
25	EMPIR	Deer Valley
27	DEERC	Deer Valley
30	NESUM	North
31	DTPC	Downtown Park City
32	PCHS	Corridor 248
35	KIMBL	I-80 Corridor
36	SLVSP	Silver Springs
37	PKMDW	Corridor 248
39	PCHOS	Corridor 248
41	KAMAS	Kamas
42	SOUTH	Heber-South
43	RICHA	Richardson Flat
44	SLC	Salt Lake City

FIGURE 7: MAP OF SUPERZONES USED FOR PRODUCTION-ATTRACTION TABLES



In addition to superzones, the project team further consolidated the superzone to superzone structure into “Markets.” These markets describe general transit flows in the region such as trips that start and end within park city or trips from Salt Lake City to the general downtown Park City and ski resort area. Table 4 shows the superzone combinations that define all of the markets.

TABLE 4: MARKET DEFINITIONS

SUPERZONE 1	SUPERZONE 2	MARKET
I-80 Corridor	Downtown Park City	I-80 (Kimball) - Park City/Resorts
I-80 Corridor	Corridor 248	I-80 (Kimball) - Park City/Resorts
I-80 Corridor	Silver Springs	I-80 (Kimball) - Park City/Resorts
I-80 Corridor	Deer Valley	I-80 (Kimball) - Park City/Resorts
Corridor 248	Downtown Park City	248 Corridor - Park City/Resorts
Corridor 248	Corridor 248	248 Corridor - Park City/Resorts
Corridor 248	Silver Springs	248 Corridor - Park City/Resorts
Corridor 248	Deer Valley	248 Corridor - Park City/Resorts
Downtown Park City	Downtown Park City	Within Downtown
Downtown Park City	Deer Valley	Downtown Park City - Resorts
Downtown Park City	Silver Springs	Downtown Park City - Resorts
Heber-South	Downtown Park City	Other - Park City/Resorts
Heber-South	Corridor 248	Other - Park City/Resorts
Heber-South	Silver Springs	Other - Park City/Resorts
Heber-South	Deer Valley	Other - Park City/Resorts
North	Downtown Park City	Other - Park City/Resorts
North	Corridor 248	Other - Park City/Resorts
North	Silver Springs	Other - Park City/Resorts
North	Deer Valley	Other - Park City/Resorts
Kamas	Downtown Park City	Other - Park City/Resorts
Kamas	Corridor 248	Other - Park City/Resorts
Kamas	Silver Springs	Other - Park City/Resorts
Kamas	Deer Valley	Other - Park City/Resorts
Richardson Flat	Downtown Park City	Richardson Flat - Park City/Resorts
Richardson Flat	Corridor 248	Richardson Flat - Park City/Resorts
Richardson Flat	Silver Springs	Richardson Flat - Park City/Resorts
Richardson Flat	Deer Valley	Richardson Flat - Park City/Resorts
Deer Valley	Deer Valley	Downtown Park City - Resorts
Silver Springs	Silver Springs	Downtown Park City - Resorts
I-80 Corridor	I-80 Corridor	Within I-80 Corridor
Salt Lake City	Downtown Park City	Salt Lake City - Park City/Resorts
Salt Lake City	Corridor 248	Salt Lake City - Park City/Resorts
Salt Lake City	Silver Springs	Salt Lake City - Park City/Resorts
Salt Lake City	Deer Valley	Salt Lake City - Park City/Resorts
Salt Lake City	Salt Lake City	SLC-Other
Salt Lake City	I-80 Corridor	SLC-Other
Salt Lake City	Heber-South	SLC-Other
Salt Lake City	Kamas	SLC-Other
Salt Lake City	Richardson Flat	SLC-Other

2.2 STOPS PARAMETERS AND CALIBRATION

Table 5 shows the parameters used for STOPS modeling. Most of the parameters are commonly used default values. Two significant modifications were made:

1. The partial fixed guideway setting is set to 0.2 for Exclusive-Lane Bus (ELB) and 0.7 for Light rail (LRT). These are commonly used values for these service types.

2. The Count Factor Limit is adjusted from 1.5 (default) to 5.0. This accounts for additional calibration typically required for synthetic models.

TABLE 5: STOPS PARAMETERS

STOPS PARAMETER	SETTING
STOPS Mode	1 (Synthetic)
CTPP Calibration Approach	02 Prod and Attraction Dist.
Group Calibration Approach	12 - OD Matrix Adj. (Rte&Stop)
GTFS Connectors	01 Default
Fraction of Transfer Penalty	1.0
Additional PNR Penalty	0.0
Full Fixed Guideway Setting	1.0
Partial Fixed Guideway Setting	0.2 for ELB, 0.7 for LRT
Ratio of Unlinked to Linked Transit Trips	1.4
Walk Weight	1.0
KNR Transit, PNR Transit, and PNR Bus	1.0
Auto Time Adjustment Factor	1.0
Auto Constant	0.0
PNR and Calibration Settings	v2.52 defaults
Count Factor Limit	5.0

The project team tested multiple model configurations containing different geographies. Initial modelling efforts include only Summit County and Wasatch County, and were unable to generate a reasonably calibrated model, particularly with respect to route counts and station group boardings. This is likely due to the limitations of using the 2012-2016 ACS CTPP instead of a transit survey for generating travel demand in STOPS modeling. The 2012-2016 ACS CTPP is a pre-COVID work-trip based approach that is not representative of the unique Park City travel market, which includes substantial leisure travel.

The project team found that including the travel demand of Salt Lake County led to a better calibration. This inclusion captured more trips from Salt Lake County to Park City, a key market for the Richardson Flat Park and Ride. However, it had the unintended effect of introducing travel demand within Salt Lake County into the project corridor and ridership forecast. These trips were obviously unreasonable and significantly impacted model outputs.

Recognizing the limitations of travel demand data, the project team determined that including Salt Lake County travel demand into STOPS modeling was necessary at this stage. Where possible, the project team removed trips within Salt Lake County from the results in this report.

The results, therefore, carry uncertainty and represent a high-level estimate of potential transit demand for early planning stages. Improved STOPS modeling is necessary for FTA CIG grant applications and other implementation efforts and should be conducted in the next phase of study.

Transit Market Comparison to Onboard Survey

The best known understanding of transit patterns (Origin location to Destination Location or Production Location to Attraction Location) comes from a systemwide survey conducted in 2019. This survey was not conducted with rigorous origin-destination study standards and therefore is not ideal to use as a reference for trip patterns. A primary issue is the origin and destination location questions were unclear and could have easily been understood as board and alight location. However, a comparison between the STOPS results and the survey is the best comparison we have for transit flows.

Table 6 shows the distribution of survey trips Park City markets in the modeled “existing scenario”. The modeled distribution of trips across Park City markets generally align with survey findings, with key markets being 248 Corridor – Park City, Downtown Park City – Resorts, and I-80 (Kimball) – Park City. The model has a much higher number of transit trips between zones that don’t include the downtown Park City area, particularly trips within the I-80 corridor and within the Silver Springs district. These trips likely didn’t register in the survey as most people answering the survey questions answered with their board/alight stop rather than the area from which they were actually coming from or going to, or may be a result of changes to the transit network between 2019 and 2025. The main takeaway from this comparison is that the model does a reasonable job representing the 3 largest non-other markets. Table 7 shows the full production/attraction table for the survey (realistically an origin-destination table) and Table 8 shows the full production/attraction table for the existing STOPS model.

TABLE 6: TRANSIT ORIGIN-DESTINATION DEMAND CALIBRATION

PARK CITY MARKETS	2019 SURVEY (WINTER WEEKDAY)		MODEL ESTIMATE (EXISTING CONDITION)	
I-80 (Kimball) - Park City/Resorts	92	23%	2,288	17%
Richardson Flat - Park City/Resorts	4	1%	194	1%
Salt Lake City - Park City/Resorts	1	0%	300	2%
Other - Park City/Resorts	7	2%	972	7%
248 Corridor - Park City/Resorts	113	28%	2,485	19%
Downtown Park City - Resorts	109	27%	2,643	20%
Within Downtown	45	11%	793	6%
Other (Intra-SLC trips removed)	31	8%	3,626	27%
Total	*402*	*100%*	*13,301*	*100%*

TABLE 7: SURVEY OD TABLE

PRODUCTION \ ATTRACTION SUPERZONE	NORTH	SALT LAKE CITY	I-80 CORRIDOR	SILVER SPRINGS	KAMAS	RICHARDSON FLAT	CORRIDOR 248	DOWNTOWN PARK CITY	DEER VALLEY	HEBER-SOUTH	*TOTAL*
North											*0*
Salt Lake City									1		*1*
I-80 Corridor			15	11	1	1	10	13	2		*53*
Silver Springs			15	5			6	15	1		*42*
Kamas							1				*1*
Richardson Flat											*0*
Corridor 248			9	2	2	2	9	15	8		*47*
Downtown Park City			11	15	2	2	37	45	24		*136*
Deer Valley			21	8	1		36	45	10		*121*
Heber-South							1				*1*
TOTAL	*0*	*0*	*71*	*41*	*6*	*5*	*100*	*133*	*46*	*0*	*402*

TABLE 8: EXISTING MODEL OD TABLE

PRODUCTION \ ATTRACTION SUPERZONE	NORTH	SALT LAKE CITY	I-80 CORRIDOR	SILVER SPRINGS	KAMAS	RICHARDSON FLAT	CORRIDOR 248	DOWNTOWN PARK CITY	DEER VALLEY	HEBER-SOUTH	*TOTAL*
North	0	15	64	176	1	2	16	40	41	0	*355*
Salt Lake City	0	-	50	54	0	0	27	38	31	7	*207*
I-80 Corridor	0	390	1,083	608	0	5	262	416	519	2	*3,285*
Silver Springs	0	40	315	1,296	4	0	336	882	431	0	*3,304*
Kamas	0	18	11	1	14	5	50	24	95	9	*227*
Richardson Flat	0	0	15	4	8	0	62	23	105	9	*226*
Corridor 248	0	56	36	348	0	0	417	76	470	0	*1,403*
Downtown Park City	0	44	79	306	0	0	630	793	712	0	*2,564*
Deer Valley	0	10	53	14	0	0	208	224	519	0	*1,028*
Heber-South	0	43	19	45	1	1	38	62	380	113	*702*
TOTAL	*0*	*616*	*1,725*	*2,852*	*28*	*13*	*2,046*	*2,578*	*3,303*	*140*	*13,301*

**Removed SLC-SLC trips*

3.0 EXISTING, NO-BUILD AND BUILD SCENARIOS

This section details the existing, no-build, and build GTFS networks used as inputs to the STOPS model.

3.1 EXISTING

The existing scenario represents the existing condition and is used for STOPS model calibration. The existing model year uses February 2025 transit services and ridership counts. This includes all existing winter PCT and HVT routes. The existing scenario does not include any proposed ELB/LRT improvements.

The project team obtained existing winter GTFS files from PCMC and HVT. The service day used for STOPS modeling is February 5, 2025 (Wednesday).

3.2 NO-BUILD

The no-build scenario in the current year is identical to the existing scenario. The 2045 horizon year no-build scenario retains the existing network and assumes no proposed improvements while accounting for population and employment growth alongside any changes to auto travel times between the base year and the future year. The no-build scenario serves as a counter-factual in evaluating the performance of the proposed improvements.

3.3 BUILD

The build scenarios reflect the proposed improvements both the current year and horizon year (2045). Four scenarios/alternatives are modeled, as listed in Table 9, covering two modes and two service headways for the proposed route. All alternatives have the same proposed route serving four stations: Richardson Flat Park & Ride, Park City High School, Bonanza and Prospector Ave, and Old Town Transit Center (OTTC).

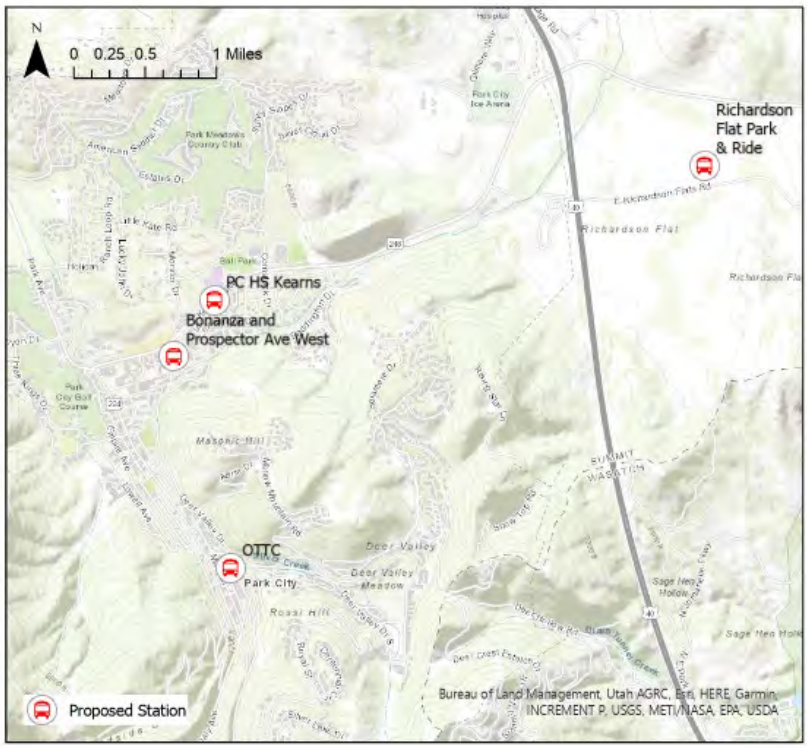
Exclusive Lane Bus (ELB) and Light Rail (LRT) services are assumed to have the same travel speed, covering the 4.7 mile route in 12-13 minutes between 6am and 11:30pm. STOPS accounts for their differences through the use of Partial Fixed Guideway (PFG) Factor, which is set of 0.2 for ELB and 0.7 for LRT. A higher PFG factor is used to represent a higher attractiveness of the service beyond travel speed. This encompasses factors typically associated with fixed guideway transit services such as more visibility to occasional travelers, reliability, improved amenities.

In all the build scenarios, the existing PCT Route 6 is assumed to be replaced by the improved service. Project station locations are displayed on a map in Figure 8.

TABLE 9: BUILD ALTERNATIVES

MAJOR FEATURE	ALT 1: ELB10	ALT 2: LRT10	ALT 3: ELB30	ALT 4: LRT30
Mode	ELB	LRT	ELB	LRT
Partial Fixed Guideway Factor	0.2	0.7	0.2	0.7
Headway	10 mins	10 mins	30 mins	30 mins
Richardson Flat to OTTC Travel Time	13 mins	13 mins	13 mins	13 mins
OTTC to Richardson Flat Travel Time	12 mins	12 mins	12 mins	12 mins

FIGURE 8: PROJECT STATION LOCATIONS (SAME FOR ALL ALTERNATIVES)



4.0 RIDERSHIP RESULTS

This section includes STOPS model results for the 2025 base year and the 2045 future year. Table 10 and Table 14 outline high-level ridership statistics in the 2025 base year and 2045 future year for all four build alternatives. Intra-Salt City Lake trips were manually removed from these statistics (around 700 unlinked trips and 1,400 linked trips).

The model results represent average daily ridership in the month of February, the peak month for ridership in Park City.

The model results suggest that the project would carry 800-3,400 average weekday riders in the existing year and 900-3,200 average weekday riders in the future year depending on the scenario. More than half of these trips are from existing transit riders who switched from another route. The model suggests that the project would generate 100-1,040 new riders in the existing year and 110 - 990 new riders in the future year.

Model results are more dependent on the transit mode than frequency. Both LRT alternatives are projected to carry more riders than either of the ELB alternatives, and LRT alternatives are expected to generate a higher proportion of new riders. This result relies on the assumption that LRT is more desirable than ELB even when they have the same travel time and frequency. It should be noted that the model was not calibrated using any non-bus fixed-guideway ridership counts. The model may overestimate the impact of LRT desirability on ridership.

The following is a description of each metric reported for analysis:

- Linked Transit Trips represent the total number of projected transit trips, inclusive of Park City Transit, High Valley Transit, Canyon Village Chair Lift, and exclusive of other transit operators, and any projects trips traveling both to and from Salt Lake City.
- Unlinked Transit Trips represent the number of projected boardings across all included transit services.
- Incremental Transit Trips measure the difference in transit trips between the no-build scenario and the build scenario. This represents the additional transit trips induced by the proposed project.
- “Linked Trips on Project” measures the number of trips on the proposed project. This includes both new riders and existing riders that would switch from another route (such as PCT Route 6).

While the results provide high level analysis of project ridership, the project team strongly recommends developing a model that is based on a quality onboard origin-destination survey to refine these results.

4.1 CURRENT YEAR RESULTS

This section presents ridership results for the current year scenarios. Current year high level results are located in Table 10, while Table 11 shows current year results by markets, and Table 12 contains current year results by route. Current year project STOPS boardings can be found in Table 13.

TABLE 10: CURRENT YEAR HIGH LEVEL RESULTS

2025 AVERAGE WEEKDAY RESULTS	ELB10	LRT10	ELB30	LRT30
Linked Transit Trips*	13,500	14,346	13,399	14,023
Unlinked Transit Trips*	19,742	21,262	19,573	20,419
Incremental Transit Trips: Linked*	190	1,040	100	720
Incremental Transit Trips: Unlinked*	300	1,800	100	1,000
Linked Trips on Project*	1,600	3,400	800	2,400
Change in Vehicle-Miles*	-189	-1,429	-87	-730

**Removed SLC-SLC trips*

TABLE 11: CURRENT YEAR RESULTS BY MARKETS (10 MINUTE HEADWAY SCENARIOS)

PARK CITY MARKETS	SURVEY	EXISTING MODEL	NO-BUILD	ELB 10 INCREMENTAL	ELB10 ON PROJECT	LRT10 INCREMENTAL	LRT10 ON PROJECT
I-80 (Kimball) - Park City/Resorts	92	2,288	2,288	17	144	132	425
Richardson Flat - Park City/Resorts	4	194	194	14	78	55	136
Salt Lake City - Park City/Resorts	1	300	300	5	99	56	162
Other - Park City/Resorts	7	972	972	83	543	306	903
248 Corridor - Park City/Resorts	113	2,485	2,485	63	659	386	1,361
Downtown Park City - Resorts	109	2,643	2,643	2	14	40	158
Within Downtown	45	793	793	0	2	5	18
Other	31	3,626	3,626	6	109	55	192
Total	*402*	*13,301*	*13,301*	*190*	***1,648***	*1,035*	***3,355***

**Removed SLC-SLC trips*

TABLE 12: CURRENT YEAR RESULTS BY ROUTE

ROUTE NAME	COUNT	EXISTING	NO BUILD CURRENT	ELB10 CURRENT	LRT10 CURRENT	ELB30 CURRENT	LRT30 CURRENT
--lift-Ski Lift	0	2,110	2,110	2,092	2,096	2,104	2,104
--1-Prospector Square / Deer V	2,259	2,076	2,076	1,931	1,739	1,986	1,758
--101-Spiro / 224 Local	2,503	2,729	2,729	2,680	2,709	2,731	2,667
--102-Gateway / Kamas Valley C	56	152	152	132	124	140	131
--103-Kimball Junction Circula	318	281	281	281	281	281	281
--103B-Kimball Junction Circul	28	13	13	13	13	13	13
--104-Bitner Connector	494	385	385	385	382	385	383
--105-Canyons Village Shuttle	417	196	196	196	196	196	196
--106-Wasatch Back Connector	267	294	294	300	299	300	301
--107-PC-SLC Commuter	342	1,979	1,979	2,017	2,210	2,007	2,092
--108-Silver Creek Village	337	680	680	690	692	676	667
--10X-The High Line	2,386	2,358	2,358	2,629	2,624	2,612	2,561
--Trolley	205	202	202	203	200	202	200
--2-Park Meadows / Thaynes / D	1,299	1,087	1,087	889	801	1,045	887
--20-Meadows Dr. / Royal St.	87	86	86	76	75	82	81
--109-Snowball Express	525	599	599	297	290	314	309
--3-Thaynes / Park Meadows / D	1,065	1,029	1,029	933	815	994	858
--4-Silver Lake	393	388	388	455	560	454	566
--5-Prospector Square / Deer V	1,022	986	986	937	796	930	790
--50-Prospector Sq / Deer Vall	509	471	471	326	219	377	247
--06 ELB	0	0	0	2,111		1,139	
--6-Richardson Flat / Old Town	74	274	274	0	0	0	0
--7-Richardson Flat / PC Mtn.	867	992	992	326	245	666	616
--8-Richardson Flat / Deer Val	460	459	459	212	174	333	272
--9-Empire Canyon	311	294	294	318	349	293	292
--90-Citywide	58	0	0	0	0	0	0
--06 LRT	0	0	0		4,061		2,832

TABLE 13: CURRENT YEAR PROJECT STOP BOARDINGS

STATION BOARDINGS	ELB10	LRT10	ELB30	LRT30
Richardson Flat Park and Ride	469	918	283	684
PC HS	198	437	130	346
Bonanza and Prospect	319	701	123	513
OTTC	665	1,304	293	899
Total	1,651	3,359	828	2,442

**Removed SLC-SLC trips*

4.2 HORIZON YEAR RESULTS

This section presents ridership results for the horizon year (2045) scenarios. In terms of trips on project and incremental trips, horizon year results do not differ drastically from current year results. This is somewhat unexpected, and it is likely that to produce better results, a more robust incremental STOPS model application based on a recent origin-destination survey may be needed.

TABLE 14: HORIZON YEAR HIGH LEVEL RESULTS

2045 AVERAGE WEEKDAY RESULTS	ELB10	LRT10	ELB30	LRT30
Linked Transit Trips*	15,219	16,012	15,120	15,714
Unlinked Transit Trips*	22,250	23,942	22,109	23,062
Incremental Transit Trips: Linked*	200	990	110	690
Incremental Transit Trips: Unlinked*	300	2,000	200	1,100
Linked Trips on Project*	1,600	3,200	900	2,300
Change in Vehicle-Miles*	-800	-2,789	-479	-1,761

**Removed SLC-SLC trips*

TABLE 15: HORIZON YEAR RESULTS BY MARKET

PARK CITY MARKETS	SURVEY	EXISTING MODEL	NO-BUILD	ELB 10 INCREMENTAL	ELB10 ON PROJECT	LRT10 INCREMENTAL	LRT10 ON PROJECT
I-80 (Kimball) - Park City/Resorts	92	2,288	2,427	11	102	86	294
Richardson Flat - Park City/Resorts	4	194	226	14	92	62	167
Salt Lake City - Park City/Resorts	1	300	360	3	77	42	129
Other - Park City/Resorts	7	972	1,234	123	763	421	1,234
248 Corridor - Park City/Resorts	113	2,485	2,754	43	455	274	956
Downtown Park City - Resorts	109	2,643	2,352	1	16	36	137
Within Downtown	45	793	895	0	2	5	20
Other	31	3,626	4,767	8	126	67	225
Total	*402*	*13,301*	*15,015*	*203*	***1,633***	*993*	***3,162***

**Removed SLC-SLC trips*

TABLE 16: HORIZON YEAR RESULTS BY ROUTE

ROUTE NAME	COUNT	EXISTING	NO BUILD (HORIZON YEAR 2045)	ELB10 (HORIZON YEAR 2045)	LRT10 (HORIZON YEAR 2045)	ELB30 (HORIZON YEAR 2045)	LRT30 (HORIZON YEAR 2045)
--lift-Ski Lift	0	2,110	3,027	3,003	3,006	3,020	3,020
--1-Prospector Square / Deer V	2,259	2,076	3,150	2,932	2,780	3,021	2,818
--101-Spiro / 224 Local	2,503	2,729	2,738	2,695	2,765	2,753	2,702
--102-Gateway / Kamas Valley C	56	152	158	139	132	147	138
--103-Kimball Junction Circula	318	281	330	330	330	330	330
--103B-Kimball Junction Circul	28	13	19	19	19	19	19
--104-Bitner Connector	494	385	315	315	312	315	313
--105-Canyons Village Shuttle	417	196	217	217	217	217	217
--106-Wasatch Back Connector	267	294	339	346	344	347	348
--107-PC-SLC Commuter	342	1,979	2,288	2,333	2,558	2,320	2,416
--108-Silver Creek Village	337	680	769	774	775	766	759
--10X-The High Line	2,386	2,358	2,824	3,191	3,239	3,145	3,145
--Trolley	205	202	214	214	212	214	213
--2-Park Meadows / Thaynes / D	1,299	1,087	886	776	709	854	760
--20-Meadows Dr. / Royal St.	87	86	65	47	47	49	49
--109-Snowball Express	525	599	565	253	253	261	262
--3-Thaynes / Park Meadows / D	1,065	1,029	852	767	679	827	709
--4-Silver Lake	393	388	325	439	636	438	640
--5-Prospector Square / Deer V	1,022	986	1,005	973	803	970	797
--50-Prospector Sq / Deer Vall	509	471	327	229	152	259	170
--06 ELB	0	0	0	2,139		1,243	
--6-Richardson Flat / Old Town	74	274	368	0	0	0	0
--7-Richardson Flat / PC Mtn.	867	992	1,165	394	296	780	722
--8-Richardson Flat / Deer Val	460	459	526	261	231	373	316
--9-Empire Canyon	311	294	217	237	262	216	215
--90-Citywide	58	0	0	0	0	0	0
--06 LRT	0	0	0		3,958		2,755

TABLE 17: HORIZON YEAR PROJECT STOP BOARDINGS

STATION BOARDINGS	ELB10 (2045)	LRT10 (2045)	ELB30 (2045)	LRT30 (2045)
Richardson Flat Park and Ride	565	1,052	366	802
PC HS	150	334	99	254
Bonanza and Prospect	245	539	99	396
OTTC	675	1,252	347	881
Total	1,634	3,177	910	2,332

**Removed SLC-SLC trips*

4.3 DETAILED CURRENT YEAR PRODUCTION-ATTRACTION TABLES

This section includes superzone to superzone production-attraction tables for the current year results. Future year results are not included in this section because the patterns do not differ enough for such results to add value.

Table 18 through Table 21 show Linked Trips on Project for each of the scenarios. “Linked Trips on Project” measures the number of trips on the proposed project. This includes both new riders and existing riders that would switch from another route (such as PCT Route 6).

TABLE 18: CURRENT YEAR LINKED TRIPS ON PROJECT ELB 10

PRODUCTION \ ATTRACTION SUPERZONE	NORTH	SALT LAKE CITY	I-80 CORRIDOR	SILVER SPRINGS	KAMAS	RICHARDSON FLAT	CORRIDOR 248	DOWNTOWN PARK CITY	DEER VALLEY	HEBER-SOUTH	TOTAL
North	0	3	6	2	1	1	17	29	22	1	*82*
Salt Lake City	0	-	26	20	0	0	28	26	25	8	*133*
I-80 Corridor	0	0	0	0	0	1	84	33	25	0	*143*
Silver Springs	0	0	0	0	0	0	21	13	4	0	*38*
Kamas	0	4	9	1	4	0	40	27	69	4	*158*
Richardson Flat	0	0	3	2	0	0	27	20	29	3	*84*
Corridor 248	0	0	2	1	0	0	63	24	188	0	*278*
Downtown Park City	0	0	0	0	0	0	300	2	0	0	*302*
Deer Valley	0	0	0	0	0	0	62	1	0	0	*63*
Heber-South	0	15	9	6	1	0	24	72	234	6	*367*
TOTAL	*0*	*22*	*55*	*32*	*6*	*2*	*666*	*247*	*596*	*22*	*1,648*

**Removed SLC-SLC trips*

TABLE 19: CURRENT YEAR LINKED TRIPS ON PROJECT LRT 10

PRODUCTION \ ATTRACTION SUPERZONE	NORTH	SALT LAKE CITY	I-80 CORRIDOR	SILVER SPRINGS	KAMAS	RICHARDSON FLAT	CORRIDOR 248	DOWNTOWN PARK CITY	DEER VALLEY	HEBER-SOUTH	*TOTAL*
North	0	7	8	3	1	1	28	56	42	1	*147*
Salt Lake City	0	-	37	28	0	0	43	54	37	9	*208*
I-80 Corridor	0	0	0	0	0	2	168	147	106	0	*423*
Silver Springs	0	0	0	0	0	0	48	102	24	0	*174*
Kamas	0	8	14	1	5	0	60	45	114	6	*253*
Richardson Flat	0	0	6	3	0	0	45	35	53	7	*149*
Corridor 248	0	0	4	2	0	0	223	48	360	0	*637*
Downtown Park City	0	0	0	0	0	0	521	18	19	0	*558*
Deer Valley	0	0	0	0	0	0	159	18	19	0	*196*
Heber-South	0	33	13	11	1	0	39	103	401	9	*610*
TOTAL	*0*	*48*	*82*	*48*	*7*	*3*	*1,334*	*626*	*1,175*	*32*	*3,355*

**Removed SLC-SLC trips*

TABLE 20: CURRENT YEAR LINKED TRIPS ON PROJECT ELB 30

PRODUCTION \ ATTRACTION SUPERZONE	NORTH	SALT LAKE CITY	I-80 CORRIDOR	SILVER SPRINGS	KAMAS	RICHARDSON FLAT	CORRIDOR 248	DOWNTOWN PARK CITY	DEER VALLEY	HEBER-SOUTH	*TOTAL*
North	0	1	2	1	1	1	13	23	13	1	*56*
Salt Lake City	0	-	10	2	0	0	21	15	10	8	*66*
I-80 Corridor	0	0	0	0	0	1	56	16	4	0	*77*
Silver Springs	0	0	0	0	0	0	23	7	1	0	*31*
Kamas	0	2	0	0	3	0	33	23	30	4	*95*
Richardson Flat	0	0	1	0	0	0	21	17	18	3	*60*
Corridor 248	0	0	0	0	0	0	45	18	43	0	*106*
Downtown Park City	0	0	0	0	0	0	79	1	0	0	*80*
Deer Valley	0	0	0	0	0	0	33	1	0	0	*34*
Heber-South	0	3	2	2	1	0	18	63	130	6	*225*
TOTAL	*0*	*6*	*15*	*5*	*5*	*2*	*342*	*184*	*249*	*22*	*830*

**Removed SLC-SLC trips*

TABLE 21: CURRENT YEAR LINKED TRIPS ON PROJECT LRT 30

PRODUCTION \ ATTRACTION SUPERZONE	NORTH	SALT LAKE CITY	I-80 CORRIDOR	SILVER SPRINGS	KAMAS	RICHARDSON FLAT	CORRIDOR 248	DOWNTOWN PARK CITY	DEER VALLEY	HEBER-SOUTH	*TOTAL*
North	0	1	3	1	1	1	24	51	32	1	*115*
Salt Lake City	0	-	12	3	0	1	38	46	23	9	*132*
I-80 Corridor	0	0	0	0	0	2	133	118	73	0	*326*
Silver Springs	0	0	0	0	0	0	54	81	13	0	*148*
Kamas	0	2	1	1	4	0	55	40	69	6	*178*
Richardson Flat	0	0	2	1	0	0	41	32	36	7	*119*
Corridor 248	0	0	0	0	0	0	188	40	193	0	*421*
Downtown Park City	0	0	0	0	0	0	373	12	17	0	*402*
Deer Valley	0	0	0	0	0	0	129	13	16	0	*158*
Heber-South	0	5	3	3	1	0	34	92	296	9	*443*
TOTAL	*0*	*8*	*21*	*9*	*6*	*4*	*1,069*	*525*	*768*	*32*	*2,442*

**Removed SLC-SLC trips*

Table 22 through Table 25 show Incremental Linked Trips for each of the scenarios. Incremental Linked Trips measure the difference in linked transit trips between the no-build scenario and the build scenario. This represents the additional transit trips induced by the proposed project.

TABLE 22: CURRENT YEAR INCREMENTAL LINKED TRIPS ELB 10

PRODUCTION \ ATTRACTION SUPERZONE	NORTH	SALT LAKE CITY	I-80 CORRIDOR	SILVER SPRINGS	KAMAS	RICHARDSON FLAT	CORRIDOR 248	DOWNTOWN PARK CITY	DEER VALLEY	HEBER-SOUTH	*TOTAL*
North	0	0	0	0	0	0	4	4	3	0	*11*
Salt Lake City	0	-	0	-9	0	0	5	5	4	1	*6*
I-80 Corridor	0	0	0	0	0	0	13	3	1	0	*17*
Silver Springs	0	0	0	0	0	0	2	2	-1	0	*3*
Kamas	0	0	1	0	1	0	5	9	13	1	*30*
Richardson Flat	0	0	0	-1	0	0	4	7	4	0	*14*
Corridor 248	0	0	0	0	0	0	8	3	13	0	*24*
Downtown Park City	0	0	0	0	0	0	31	0	0	0	*31*
Deer Valley	0	0	0	0	0	0	6	0	0	0	*6*
Heber-South	0	1	0	-5	0	0	4	17	29	*2*	*48*
TOTAL	*0*	*1*	*1*	*-15*	*1*	*0*	*82*	*50*	*66*	*4*	*190*

**Removed SLC-SLC trips*

TABLE 23: CURRENT YEAR INCREMENTAL LINKED TRIPS LRT 10

PRODUCTION \ ATTRACTION SUPERZONE	NORTH	SALT LAKE CITY	I-80 CORRIDOR	SILVER SPRINGS	KAMAS	RICHARDSON FLAT	CORRIDOR 248	DOWNTOWN PARK CITY	DEER VALLEY	HEBER-SOUTH	*TOTAL*
North	0	3	3	1	0	0	12	22	13	0	*54*
Salt Lake City	0	-	8	-1	0	0	19	24	14	1	*65*
I-80 Corridor	0	0	0	0	0	1	64	45	22	0	*132*
Silver Springs	0	0	0	0	0	0	13	29	4	0	*46*
Kamas	0	2	5	0	2	0	22	24	42	2	*99*
Richardson Flat	0	0	1	0	0	0	20	20	15	2	*58*
Corridor 248	0	0	1	0	0	0	68	16	69	0	*154*
Downtown Park City	0	0	0	0	0	0	172	5	3	0	*180*
Deer Valley	0	0	0	0	0	0	48	5	3	0	*56*
Heber-South	0	12	4	-2	0	0	15	46	111	5	*191*
TOTAL	*0*	*17*	*22*	*-2*	*2*	*1*	*453*	*236*	*296*	*10*	*1,035*

**Removed SLC-SLC trips*

TABLE 24: CURRENT YEAR INCREMENTAL LINKED TRIPS ELB 30

PRODUCTION \ ATTRACTION SUPERZONE	NORTH	SALT LAKE CITY	I-80 CORRIDOR	SILVER SPRINGS	KAMAS	RICHARDSON FLAT	CORRIDOR 248	DOWNTOWN PARK CITY	DEER VALLEY	HEBER-SOUTH	TOTAL
North	0	0	0	0	0	0	2	2	1	0	*5*
Salt Lake City	0	-	-1	-4	0	0	3	3	2	1	*4*
I-80 Corridor	0	0	0	0	0	0	9	1	0	0	*10*
Silver Springs	0	0	0	0	0	0	2	1	-1	0	*2*
Kamas	0	0	0	0	0	0	3	6	4	1	*14*
Richardson Flat	0	0	0	0	0	0	2	5	3	0	*10*
Corridor 248	0	0	0	0	0	0	6	3	2	0	*11*
Downtown Park City	0	0	0	0	0	0	6	0	0	0	*6*
Deer Valley	0	0	0	0	0	0	3	0	0	0	*3*
Heber-South	0	1	0	-2	0	0	2	11	16	2	*30*
TOTAL	*0*	*1*	*-1*	*-6*	*0*	*0*	*38*	*32*	*27*	*4*	*95*

**Removed SLC-SLC trips*

TABLE 25: CURRENT YEAR INCREMENTAL LINKED TRIPS LRT 30

PRODUCTION \ ATTRACTION SUPERZONE	NORTH	SALT LAKE CITY	I-80 CORRIDOR	SILVER SPRINGS	KAMAS	RICHARDSON FLAT	CORRIDOR 248	DOWNTOWN PARK CITY	DEER VALLEY	HEBER-SOUTH	TOTAL
North	0	0	1	0	0	0	11	19	10	0	*41*
Salt Lake City	0	-	1	-3	0	0	16	18	7	1	*40*
I-80 Corridor	0	0	0	0	0	1	50	34	14	0	*99*
Silver Springs	0	0	0	0	0	0	14	21	2	0	*37*
Kamas	0	1	0	0	2	0	19	20	25	2	*69*
Richardson Flat	0	0	0	0	0	0	17	17	10	2	*46*
Corridor 248	0	0	0	0	0	0	56	13	31	0	*100*
Downtown Park City	0	0	0	0	0	0	103	3	3	0	*109*
Deer Valley	0	0	0	0	0	0	36	3	3	0	*42*
Heber-South	0	2	0	-2	0	0	13	37	78	5	*133*
TOTAL	*0*	*3*	*2*	*-5*	*2*	*1*	*335*	*185*	*183*	*10*	*716*

**Removed SLC-SLC trips*

Table 26 through Table 29 show change in vehicle miles traveled (VMT) for each of the scenarios. STOPS calculates change in VMT based on a reduction in transit trips – assuming that the trip would have been made with driving if it were not made in transit. The VMT is calculated based on incremental transit trips and is therefore the change in VMT between the no-build and build scenarios.

TABLE 26: CURRENT YEAR CHANGE IN VMT ELB 10

PRODUCTION \ ATTRACTION SUPERZONE	NORTH	SALT LAKE CITY	I-80 CORRIDOR	SILVER SPRINGS	KAMAS	RICHARDSON FLAT	CORRIDOR 248	DOWNTOWN PARK CITY	DEER VALLEY	HEBER-SOUTH	*TOTAL*
North	0	-4	-1	1	-1	1	-19	40	-13	-3	*1*
Salt Lake City	0	-	27	-57	0	6	20	90	77	-3	*160*
I-80 Corridor	0	0	0	0	-1	0	141	148	130	0	*418*
Silver Springs	0	0	0	0	0	0	15	19	-20	0	*14*
Kamas	0	-5	-5	-1	3	1	-6	-59	-119	8	*-183*
Richardson Flat	0	0	-1	6	0	0	-23	-35	-30	-4	*-87*
Corridor 248	0	0	0	0	0	0	-5	-7	-43	0	*-55*
Downtown Park City	0	0	0	0	0	0	-45	1	0	0	*-44*
Deer Valley	0	0	0	0	0	0	-21	0	0	0	*-21*
Heber-South	0	-26	0	13	-1	0	-2	-136	-274	15	*-411*
TOTAL	*0*	*-35*	*20*	*-38*	*0*	*8*	*55*	*61*	*-292*	*13*	*-208*

**Removed SLC-SLC trips*

TABLE 27: CURRENT YEAR CHANGE IN VMT LRT 10

PRODUCTION \ ATTRACTION SUPERZONE	NORTH	SALT LAKE CITY	I-80 CORRIDOR	SILVER SPRINGS	KAMAS	RICHARDSON FLAT	CORRIDOR 248	DOWNTOWN PARK CITY	DEER VALLEY	HEBER-SOUTH	TOTAL
North	0	-30	-9	-6	-2	0	-83	-21	-73	-6	*-230*
Salt Lake City	0	-	134	-1	0	6	60	204	107	-5	*505*
I-80 Corridor	0	0	0	0	-2	-2	180	543	463	-1	*1,181*
Silver Springs	0	0	0	0	1	0	42	180	5	0	*228*
Kamas	0	-37	-43	-3	8	1	-77	-177	-407	3	*-732*
Richardson Flat	0	-1	-23	-1	0	0	-94	-104	-111	-29	*-363*
Corridor 248	0	0	-8	-1	0	0	-38	-29	-201	0	*-277*
Downtown Park City	0	0	0	0	0	0	-250	25	2	0	*-223*
Deer Valley	0	0	0	0	0	0	-146	9	4	0	*-133*
Heber-South	0	-208	-9	9	-2	0	-10	-355	-990	37	*-1,528*
TOTAL	*0*	*-276*	*42*	*-3*	*3*	*5*	*-416*	*275*	*-1,201*	*-1*	*-1,572*

**Removed SLC-SLC trips*

TABLE 28: CURRENT YEAR CHANGE IN VMT ELB 30

PRODUCTION \ ATTRACTION SUPERZONE	NORTH	SALT LAKE CITY	I-80 CORRIDOR	SILVER SPRINGS	KAMAS	RICHARDSON FLAT	CORRIDOR 248	DOWNTOWN PARK CITY	DEER VALLEY	HEBER-SOUTH	TOTAL
North	0	-1	1	2	0	1	-10	27	-14	-3	*3*
Salt Lake City	0	-	-12	-25	0	0	11	46	53	-3	*70*
I-80 Corridor	0	0	0	0	0	0	133	73	18	0	*224*
Silver Springs	0	0	0	0	0	0	5	5	-24	0	*-14*
Kamas	0	-3	3	0	1	1	1	-43	-36	8	*-68*
Richardson Flat	0	0	0	3	0	0	-13	-24	-21	-4	*-59*
Corridor 248	0	0	1	1	0	0	-3	-6	-12	0	*-19*
Downtown Park City	0	0	0	0	0	0	-9	0	0	0	*-9*
Deer Valley	0	0	0	0	0	0	-11	0	0	0	*-11*
Heber-South	0	-9	-2	13	0	0	-1	-84	-145	15	*-213*
TOTAL	*0*	*-13*	*-9*	*-6*	*1*	*2*	*103*	*-6*	*-181*	*13*	*-96*

**Removed SLC-SLC trips*

TABLE 29: CURRENT YEAR CHANGE IN VMT LRT 30

PRODUCTION \ ATTRACTION SUPERZONE	NORTH	SALT LAKE CITY	I-80 CORRIDOR	SILVER SPRINGS	KAMAS	RICHARDSON FLAT	CORRIDOR 248	DOWNTOWN PARK CITY	DEER VALLEY	HEBER-SOUTH	*TOTAL*
North	0	-5	-2	-1	-1	0	-69	-16	-58	-6	*-158*
Salt Lake City	0	-	3	-16	0	-3	50	173	74	-5	*276*
I-80 Corridor	0	0	0	0	-1	-2	230	447	325	-1	*998*
Silver Springs	0	0	0	0	1	0	8	153	-8	0	*154*
Kamas	0	-15	1	-2	6	1	-64	-149	-222	3	*-441*
Richardson Flat	0	-1	-7	1	0	0	-79	-87	-80	-29	*-282*
Corridor 248	0	0	1	1	0	0	-25	-23	-101	0	*-147*
Downtown Park City	0	0	0	0	0	0	-151	16	-2	0	*-137*
Deer Valley	0	0	0	0	0	0	-107	8	2	0	*-97*
Heber-South	0	-40	-8	9	-1	0	-8	-284	-674	37	*-969*
TOTAL	*0*	*-61*	*-12*	*-8*	*4*	*-4*	*-215*	*238*	*-744*	*-1*	*-803*

**Removed SLC-SLC trips*

5.0 CONCLUSIONS

This section summarizes the main conclusions from this modelling process. STOPS modeling in the Park City area was relatively difficult, primarily due to the lack of sufficient on-board origin-destination study. Because of this, the models needed to rely on STOPS synthetic mode which relies on the CTPP journey-to-work transit flows in the Park City area. These flows are problematic for several reasons including (1) they represent the time period from 2012-2016, nearly 10 years ago, (2) they are based on work travel which may be less relevant to the Park City transit system and (3) the FTA has started to suggest that project sponsors do not use the synthetic mode of STOPS. That said, the models produced here reasonably represent current transit patterns to the best of our understanding particularly as related to existing route counts.

Overall, the synthetic STOPS model provides a reasonable representation of observed transit activity in the study area for early planning purposes. Using recent route- and stop-level ridership counts, the model generally replicates existing route totals and stop boardings, supporting its use for high-level comparisons across alternatives.

At the market level, modeled origin–destination patterns generally align with the 2019 winter survey for the largest transit flows. However, this comparison should be interpreted cautiously because the survey questions did not clearly distinguish between origin/destination locations and board/alight locations, which may contribute to differences between the survey and modeled results.

The model is less reliable for behavioral dimensions that were not well supported by available data or are not well represented by synthetic demand inputs. In particular, trip purpose is not well captured, given that Park City travel includes substantial seasonal and leisure travel that may not align with STOPS' regionally calibrated assumptions and the survey's trip-purpose questions were not collected to origin–destination study standards. Similarly, access mode results should be interpreted with caution because the model was not calibrated to access mode, and the available survey data did not provide a robust basis for doing so.

Finally, the modeling configuration that best matched observed conditions required including Salt Lake County demand, which introduced some unreasonable intra-Salt Lake City trips. These were removed from reported summaries where feasible, but their presence underscores the uncertainty associated with the synthetic approach and reinforces that results should be treated as high-level estimates suitable for early-stage planning.

The main takeaways from the STOPS modeling process should be as follows:

- This modeling effort is likely not rigorous enough to submit results for FTA funding
- A future model should be built with a quality on board origin destination study underpinning a STOPS model incremental mode

- The trips-on-project and incremental trips results are likely reasonable. The study team believes this to be true because the majority of the trips-on-project are generally replacing existing transit trips, and the trips patterns in the exiting model, particularly around Park City, reasonably approximate the trip patterns from the OD survey. A small amount of incremental trips should be expected, as the new service will be faster, more frequent and perceived as better than existing service.
- The model should not be interpreted as having a great picture of the park and ride landscape, including the amount of park and ride vs drop-off trips and the origin locations of Park and Ride trips.

APPENDIX D: PRELIMINARY CAPITAL AND OPERATING COSTS

Re-create 248 Transit Study
Summary of ROM Capital Cost Estimates by Alternative
12/1/2025

	Light Rail (Center-Running)	Exclusive-Lane Bus (Center-Running)	Exclusive-Lane Bus (Side-Running)
Base Construction Cost for 2030 construction year (includes 30% contingency)	$387,000,000.00	$317,000,000.00	$233,000,000.00
Construction Cost per Mile Low Range (2030 Construction Year)	$65,000,000.00	$53,000,000.00	$39,000,000.00
Construction Cost per Mile High Range (2030 Construction Year)	$121,000,000.00	$99,000,000.00	$73,000,000.00
Construction Cost Low Range (2030 Construction Year)	$291,000,000.00	$238,000,000.00	$175,000,000.00
Construction Cost High Range (2030 Construction Year)	$542,000,000.00	$444,000,000.00	$327,000,000.00

Preliminary construction costs do not include vehicle costs, maintenance facility costs, right-of-way costs, professional services (NEPA/Preliminary Engineering, or Final Design).

** potential vehicle cost ROM	$72M	$0M	$0M
** potential maintenance facility cost ROM	$25M to $45M	$0M	$0M
*** potential ROW cost ROM	$9M to $12M	$7M to $9M	$7M to $9M
**** potential professional services ROM	$40M	$33M	$25M

Low range per mile is -25% of base construction cost divided by 4.5 miles
High range per mile is +40% of base construction cost divided by 4.5 miles

Low range is -25% of base construction cost
High range is +40% of base construction cost

Re-create 248 Transit Study
Summary of Summary of Operating Cost Estimates by Mode
12/1/2025

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source: National Transit Summaries and Trends 2018 Edition

Publication is one of the FTA's National Transit Database Annual Data Products. Reflects data from agencies operating in an Urbanized Area (UZA). UZA is a densely populated area of 50,000 people or more.

https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/ntd/data-product/134401/2018-ntst_1.pdf

Cost per hour (operating expense/total vehicle revenue hour) **Exhibit 32**

BRT	LRT	
$197.42	$312.09	average cost per hour in 2018

Operating expenses include vehicle operations, vehicle maintenance, facility maintenance, general administration
ex: driver labor, fuel/energy, vehicle maintenance, tires, general admin salaries, ticketing/fare collection, security)

LRT = 1.58 X more expensive to operate per vehicle revenue hour

Cost per mile (operating expense/total vehicle revenue mile)(range of average costs across agencies)

BRT	LRT	
$11-16	$14-29	
$13.5	$21.5	avg. of above range

LRT = 1.59 x more expensive to operate per vehicle revenue mile

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source: APTA 2025 Public Transportation Fact Book

https://www.apta.com/wp-content/uploads/APTA-2025-Public-Transportation-Fact-Book.pdf

Operating Costs Among Modes (cost per vehicle revenue mile), 2023 **Figure 32**

All Bus Modes	LRT/ Streetcar
$14	$28

LRT = 2x more expensive to operate per vehicle revenue mile

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source: 2018 Valley to Mountain Alternatives Analysis - SR-224

Operating Cost Estimate (cost per mile)

BRT	LRT

$8	$18

LRT = 2.25x more expensive to operate per revenue mile

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source: COTA East-West Corridor High Capacity Transit Plan Initial Screening- 2021
https://linkuscolumbus.com/wp-content/uploads/2021/04/COTA_East-West-HCT-Initial-Screening_Final.pdf

Typical Operating Cost per Hour **Table 6**
(source NTD - Transit Agency Profiles FY 2019)

BRT	LRT
$100-$199	$200-400

LRT = 2 x more expensive to operate per hour

National Weighted Average Operating Cost per Hour (FY19) **Table 6**
(source NTD - Transit Agency Profiles FY 2019)

BRT	LRT
$170	$330

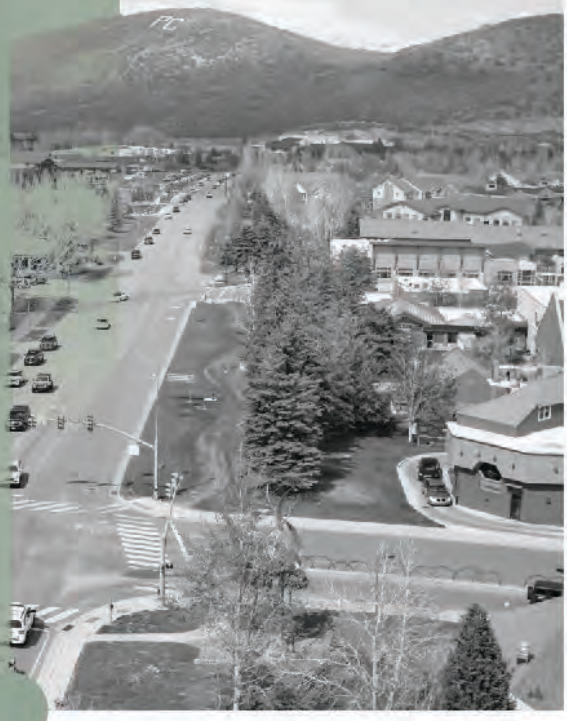
LRT = 1.94 x more expensive to operate per hour

APPENDIX E: NOISE AND VIBRATION MEMORANDUM

Re·create 248

NOISE AND VIBRATION SCREENING ASSESSMENT

November 2025



Re·create 248

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Acronyms and Abbreviations

ELB	Exclusive-Lane Buses
FTA	Federal Transit Administration
HVT	High Valley Transit
LPA	locally preferred alternative
LRT	Light Rail Transit
OTTC	Old Town Transit Center
PCMC	Park City Municipal Corporation
PCT	Park City Transit
Rail Trail	Historic Union Pacific Rail Trail
Re-create 248	Re-create 248 Transit Study
SRTP	Short Range Transit Plan
UDOT	Utah Department of Transportation

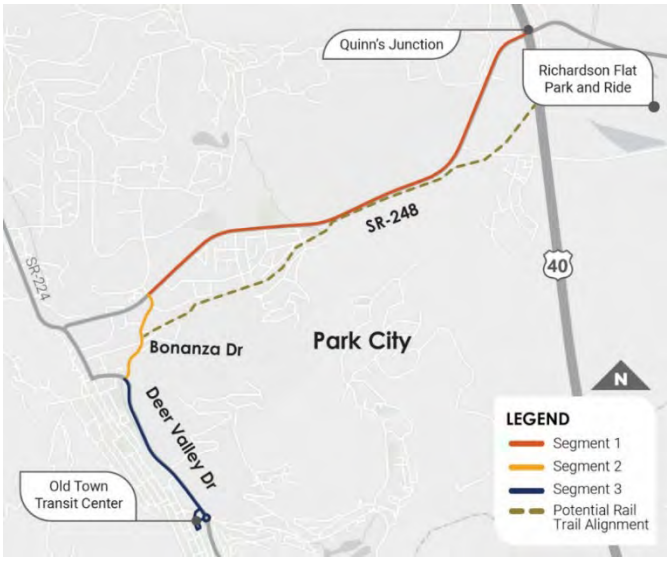
1 INTRODUCTION AND SUMMARY

1.1 INTRODUCTION

Park City Municipal Corporation (PCMC), located in Summit County, UT, in collaboration with the Utah Department of Transportation (UDOT), has initiated the Re-create 248 Transit Study (Re-create 248). The study is aimed at enhancing reliable high-capacity transit service along the SR-248 corridor, Bonanza Drive, and Deer Valley Drive that can be advanced to the next phase of project development: a National Environmental Policy Act (NEPA)-level environmental study and preliminary engineering. This study will identify a locally preferred alternative (LPA) that will include a definition of areas to be served, transit mode/type of transit technology, and logical termini (project limits).

The study area for Re-create 248 is along SR-248 from Quinn's Junction to Bonanza Drive with a connection to Richardson Flat Park and Ride (Segment 1), Bonanza Drive from SR-248 to Deer Valley Drive (Segment 2), and Deer Valley Drive from Bonanza Drive to the Old Town Transit Center (OTTC) (Segment 3).

Figure 1. Noise and Vibration Screening Results



1.2 SUMMARY OF RESULTS

The results of the screening assessment indicate that there would be the potential for noise impacts for both the Exclusive-Lane Buses (ELB) and Light Rail Transit (LRT) alternatives, but the number of potential noise impacts is approximately double for the LRT alternative. For vibration, there would be no potential impacts for the ELB alternative, but there would be the potential for vibration impacts for the LRT alternative.

2 METHODOLOGY

The noise and vibration assessment for the SR 248 project followed the screening procedures contained in Section 4.3 (noise) and Section 6.3 (vibration) of the Federal Transit Administration (FTA) noise and vibration guidance manual (FTA 2018). The screening procedure is designed to identify locations where a proposed project has the potential to create noise or vibration impacts. If no noise- or vibration-sensitive land uses are present within the screening distances for the proposed project, then no further assessment is necessary. For locations with noise- or vibration- sensitive land uses within the screening distances, further assessments are required to determine the potential for impact during the environmental phase of the project.

It is important to note that locations identified in this assessment are not noise or vibration impacts, but locations with the potential for impact. This information can be used to identify locations where additional assessment should be conducted and can also be used to provide an order of magnitude comparison between alternatives or transit modes.

2.1 NOISE

For the noise screening assessment, the methodology takes into account the FTA noise impact criteria, the type of project utilizing standard operational assumptions and places all noise sensitive land uses in a single category. The screening distances are shown in Table 4-7 in the FTA guidance manual for a variety of project types. The “unobstructed” distance is used in areas where there are no defined rows of buildings that would provide shielding of noise for buildings behind them, and the “intervening buildings” distance is used when there is a row of buildings identified within the screening distance that would provide some noise shielding. The noise screening distances, and equivalent FTA project types for each alternative are shown in Table 1.

2.2 VIBRATION

For the vibration screening assessment, the methodology takes into account the vibration impact criteria, the type of project utilizing standard operational assumptions and the sensitivity of the nearby buildings. The screening distances are shown in Table 6-8 in the FTA guidance manual. For rubber-tired vehicles, such as ELB, vibration is typically not a concern, unless the project is in close proximity to highly sensitivity vibration locations, which are not present near this project. For LRT, the screening distances are different for Category 2 (residences) and Category 3 (institutional) buildings. The vibration screening distances are shown in Table 1.

Table 1. Noise and Vibration Screening Distances

TRANSPORTATION MODE	FTA NOISE PROJECT TYPE	NOISE SCREENING DISTANCE UNOBSTRUCTED, FT	NOISE SCREENING DISTANCE INTERVENING BUILDINGS, FT	FTA VIBRATION TYPE	VIBRATION SCREENING DISTANCE CATEGORY 2, FT	VIBRATION SCREENING DISTANCE CATEGORY 3, FT
Exclusive Bus Lanes	ELB	200	100	Bus Projects*	--	--
Light Rail	LRT	350	175	LRT	150	100
*Vibration impacts are unlikely for projects that involve rubber-tire vehicles.						

Source: FTA, 2018

3 RESULTS

The screening assessment was carried out for noise for both the ELB and LRT alternatives for the proposed project. Noise and vibration sensitive land use within 350 feet of the alternatives (the largest screening distance) was identified through a combination of GIS review and a windshield survey of the area. Noise and vibration sensitive land uses included single-family and multi-family residences, schools, and a museum. The screening distances shown in Table 1 were applied for both the ELB and LRT alternatives, and the number of sensitive receptors within the screening distances were tabulated.

3.1 EXCLUSIVE BUS LANES (ELB)

The results of the screening assessment for ELB are shown in Figures 2 through 4 and summarized in Table 2. The results show that there are 66 noise sensitive receptors and no vibration sensitive receptors within the screening distances. The receptors include Treasure Mountain Junior High School, The Church of Jesus Christ of Latter-day Saints Seminary, PC Tots, Parkside Apartments, Aspen Village Apartments, Park Regency Resort, Town Pointe Condos, Park Station Condominiums, Marriot Summit Watch, Deer Valley Den, Main & SKY Park City Utah, Studio 580, the Park City Museum and single-family residences.

3.2 LIGHT RAIL ALTERNATIVE (LRT)

The results of the screening assessment for LRT are shown in Figures 5 through 7 for noise and Figures 8 through 10 for vibration and summarized in Table 2. The results show that there are 138 noise sensitive receptors and 40 vibration sensitive receptors. The receptors within the noise screening distance include all the receptors identified for the ELB alternative and the Park City Learning Center, Park City High School, and Coalition Lodge. The receptors within the vibration screening distance include Aspen Village Apartments, Town Pointe Condos, Park Station Condominiums, Marriot Summit Watch, Main & SKY Park City Utah, Studio 580, the Park City Museum and single-family residences.

Table 2. Noise and Vibration Screening Results

ALTERNATIVE	NOISE SENSITIVE RECEPTORS WITHIN SCREENING DISTANCE	VIBRATION SESITIVE RECEPTORS WITHIN SCREENING DISTANCE
Dedicated Bus Lanes	66	0
Light Rail	138	40

Source: CSA, 2025

4 NEXT STEP

The next step in the noise and vibration analysis will be to conduct an FTA noise and vibration impact assessment for the alternative chosen during this stage of the project. Depending on the alternative selected, noise and vibration measurements may be conducted to characterize the existing conditions. The noise and vibration assessment will include the number and type of vehicles, hours of operation, headways, speeds, detailed location of the guideway/lane and other operational information. The results of the assessment will be used to determine the locations and severity of any noise or vibration impacts and any potential mitigation measures, if required.

REFERENCES

Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual, FTA Report No. 0123, September 2018.

Figure 2. ELB Noise Receptors 1 of 3

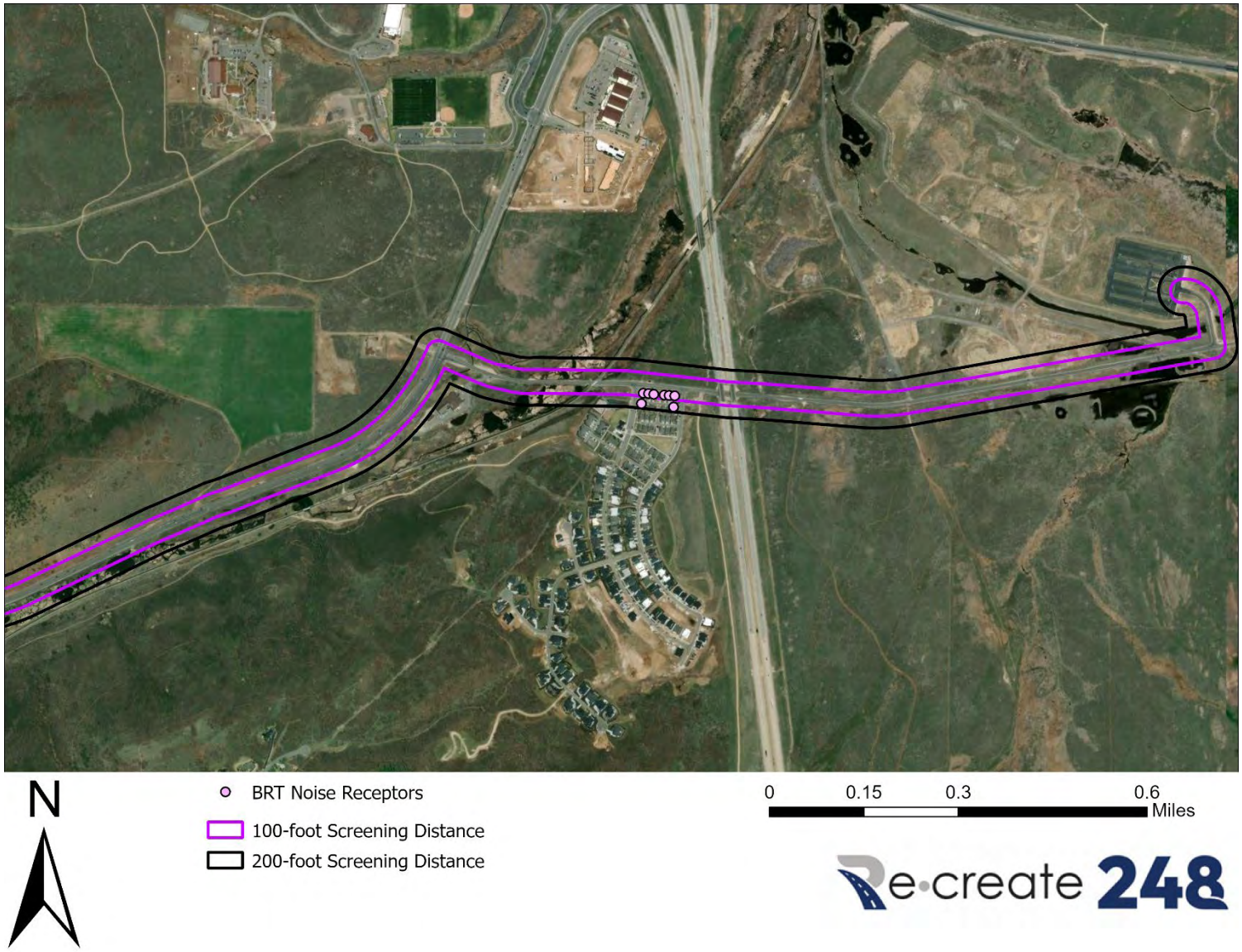


Figure 3. ELB Noise Receptors 2 of 3

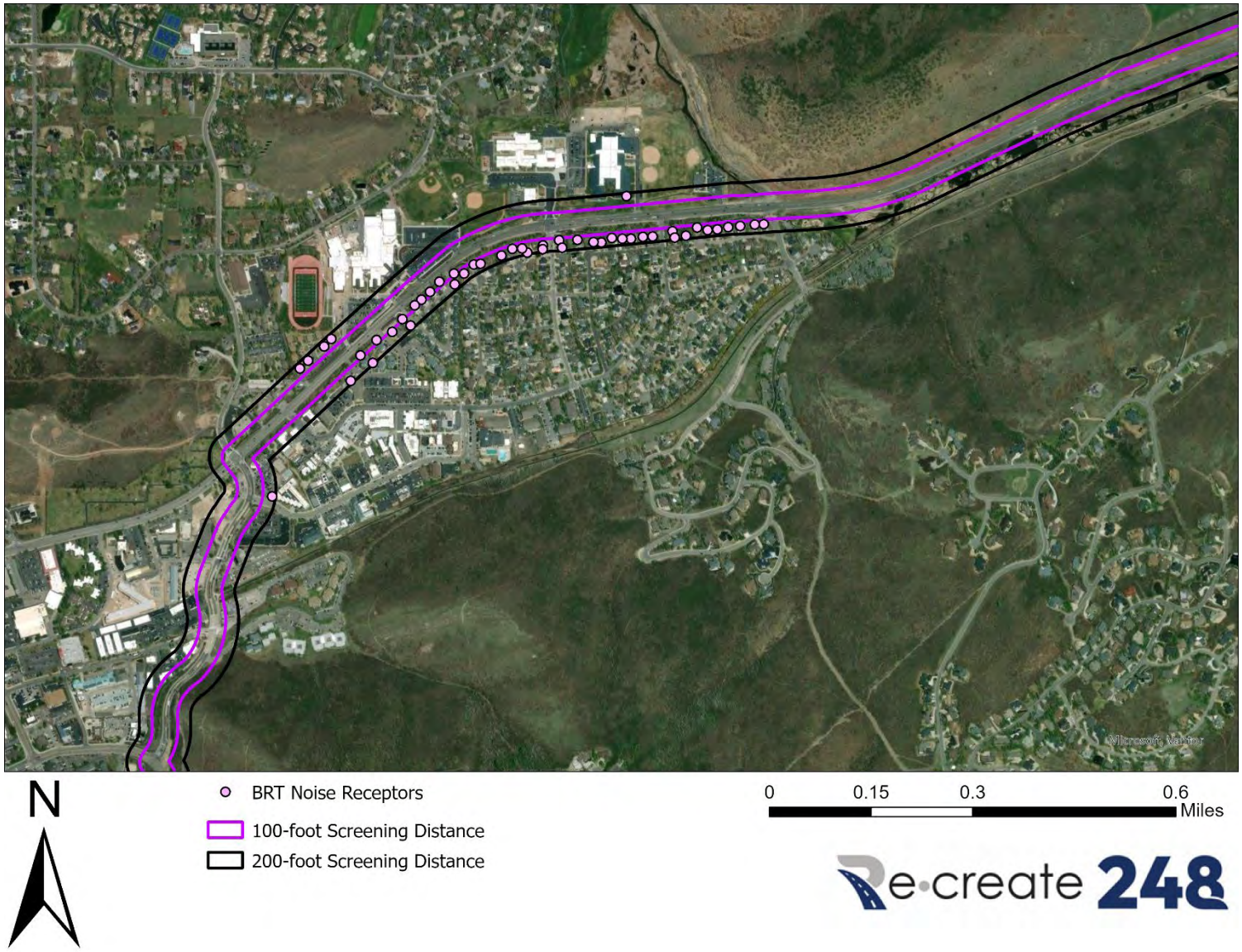


Figure 4. ELB Noise Receptors 3 of 3

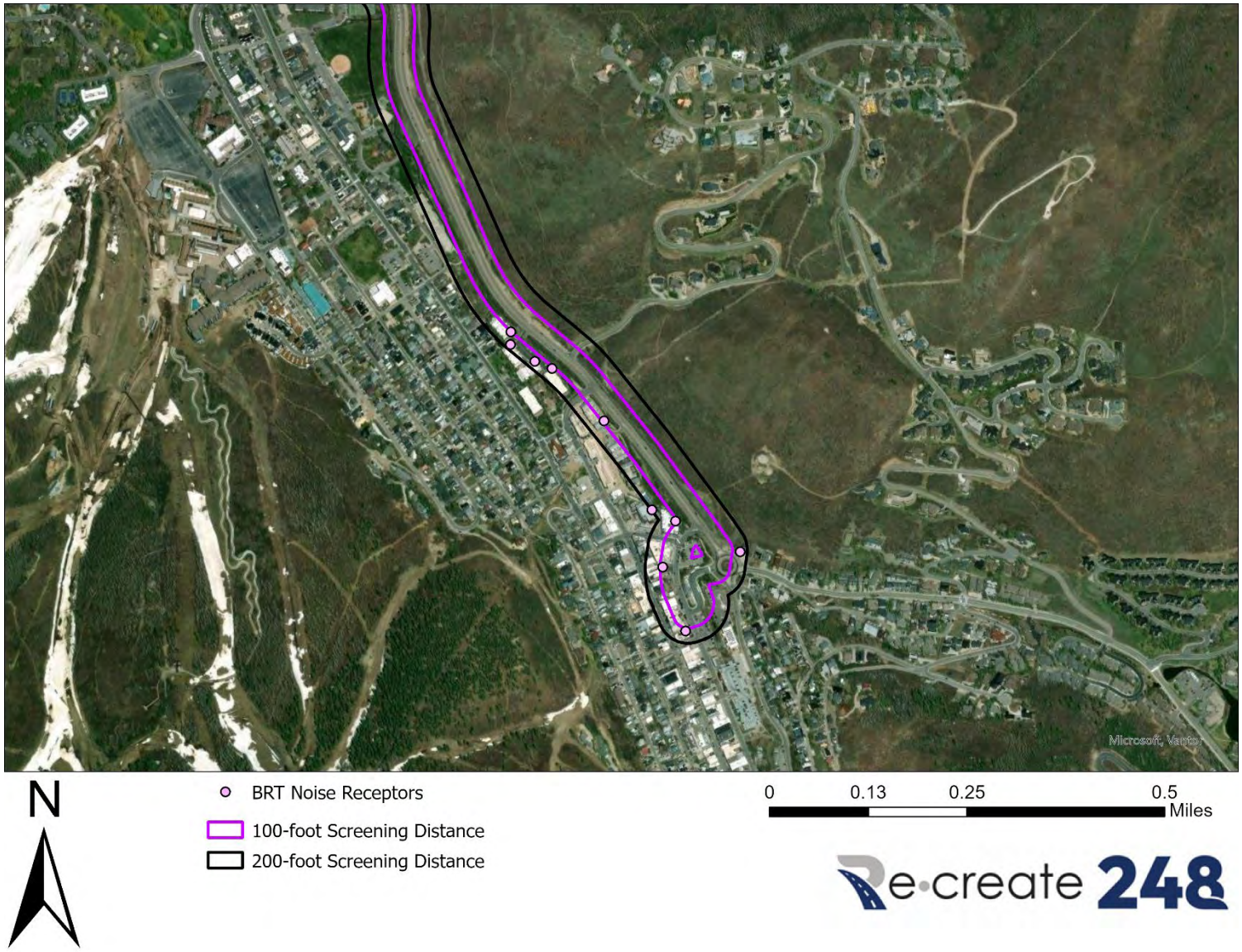


Figure 5. LRT Noise Receptors 1 of 3

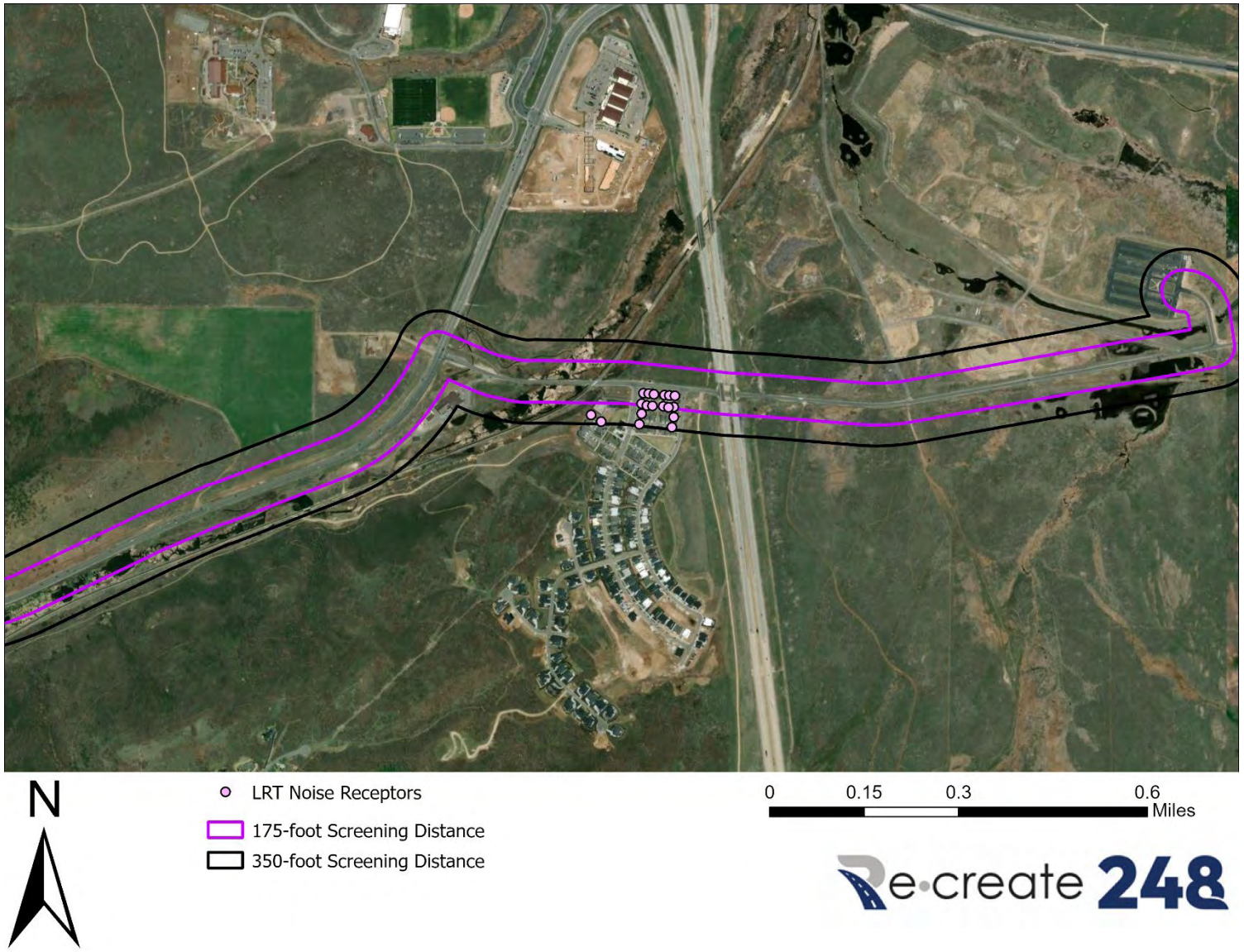


Figure 6. LRT Noise Receptors 2 of 3

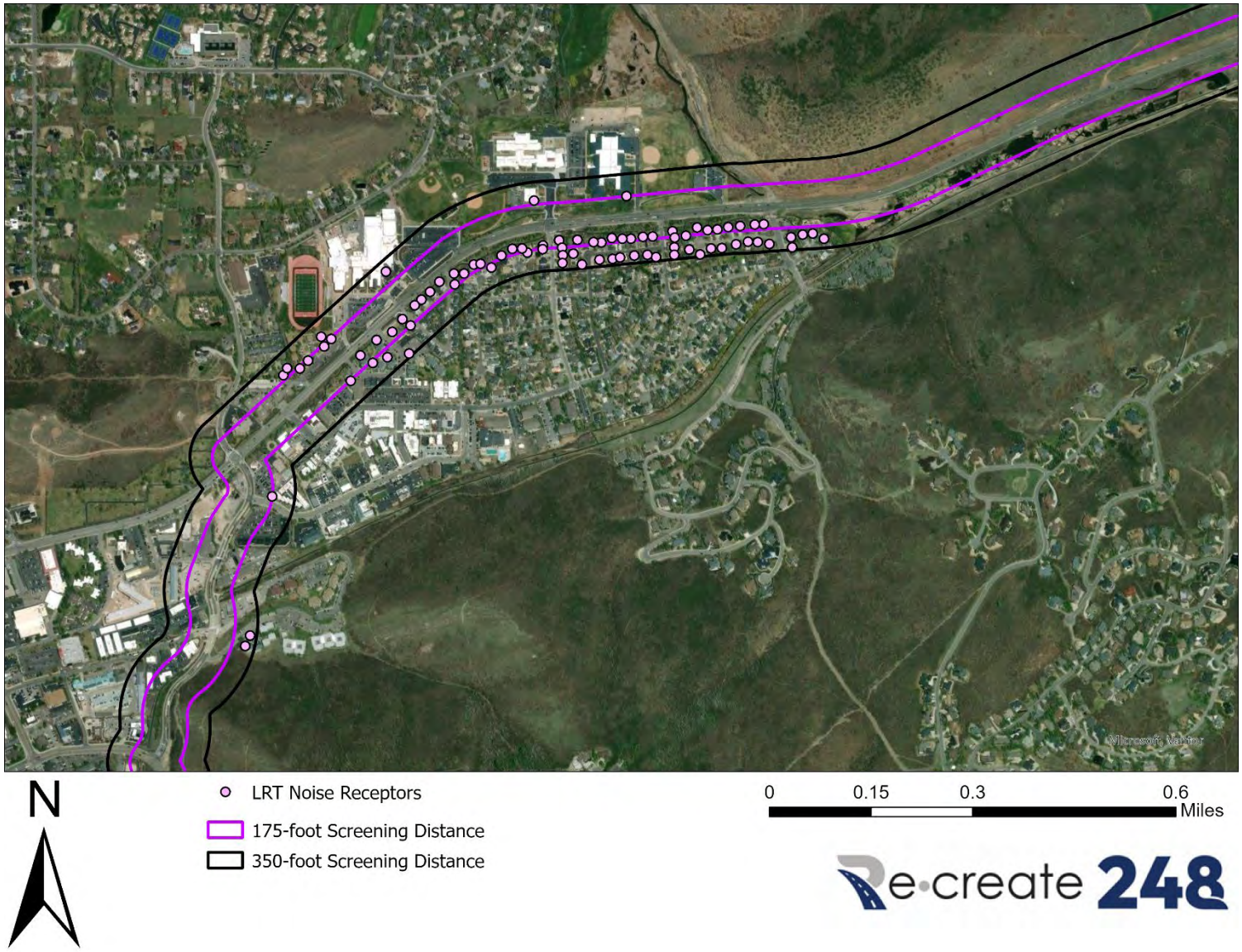


Figure 7. LRT Noise Receptors 3 of 3

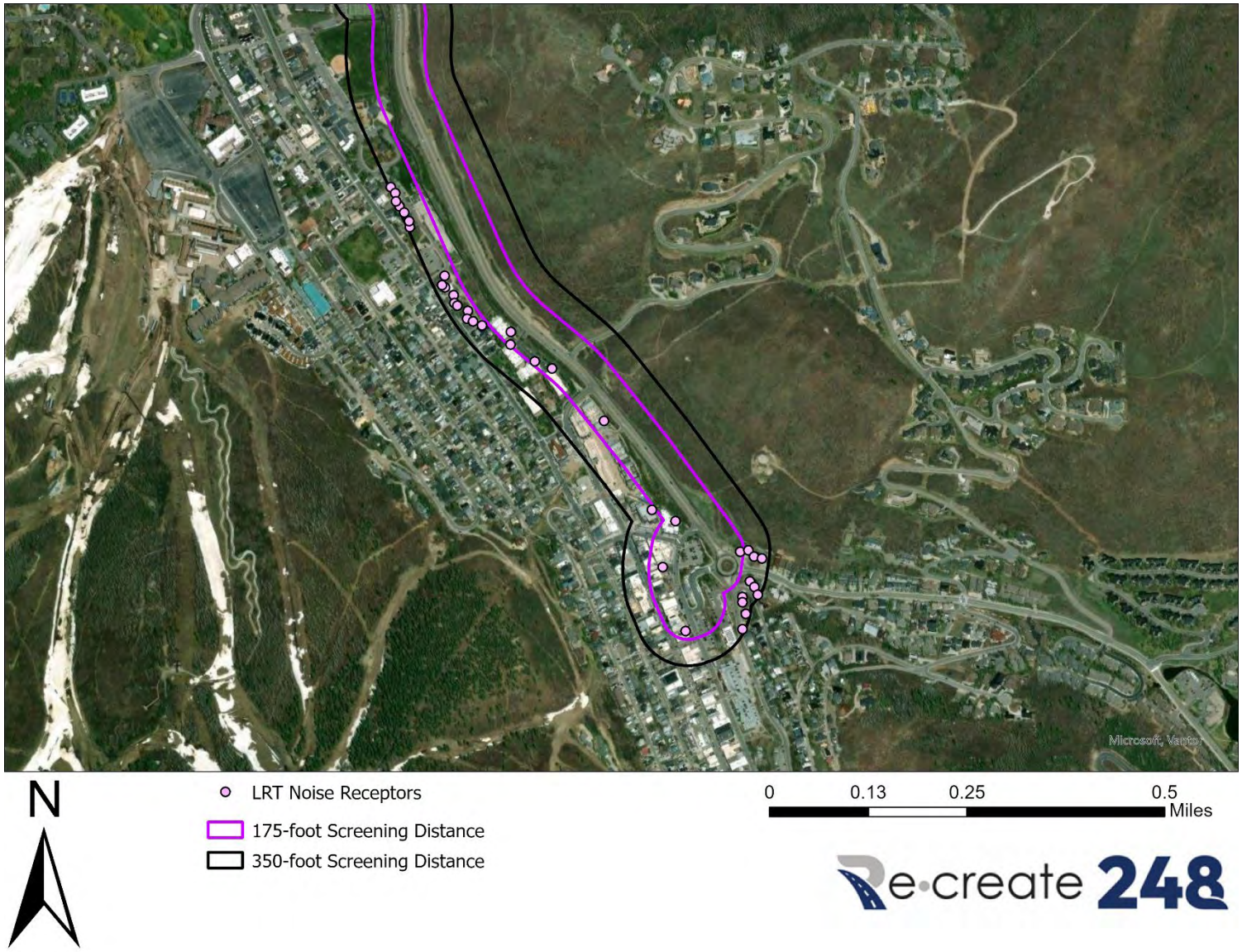


Figure 8. LRT Vibration Receptors 1 of 3

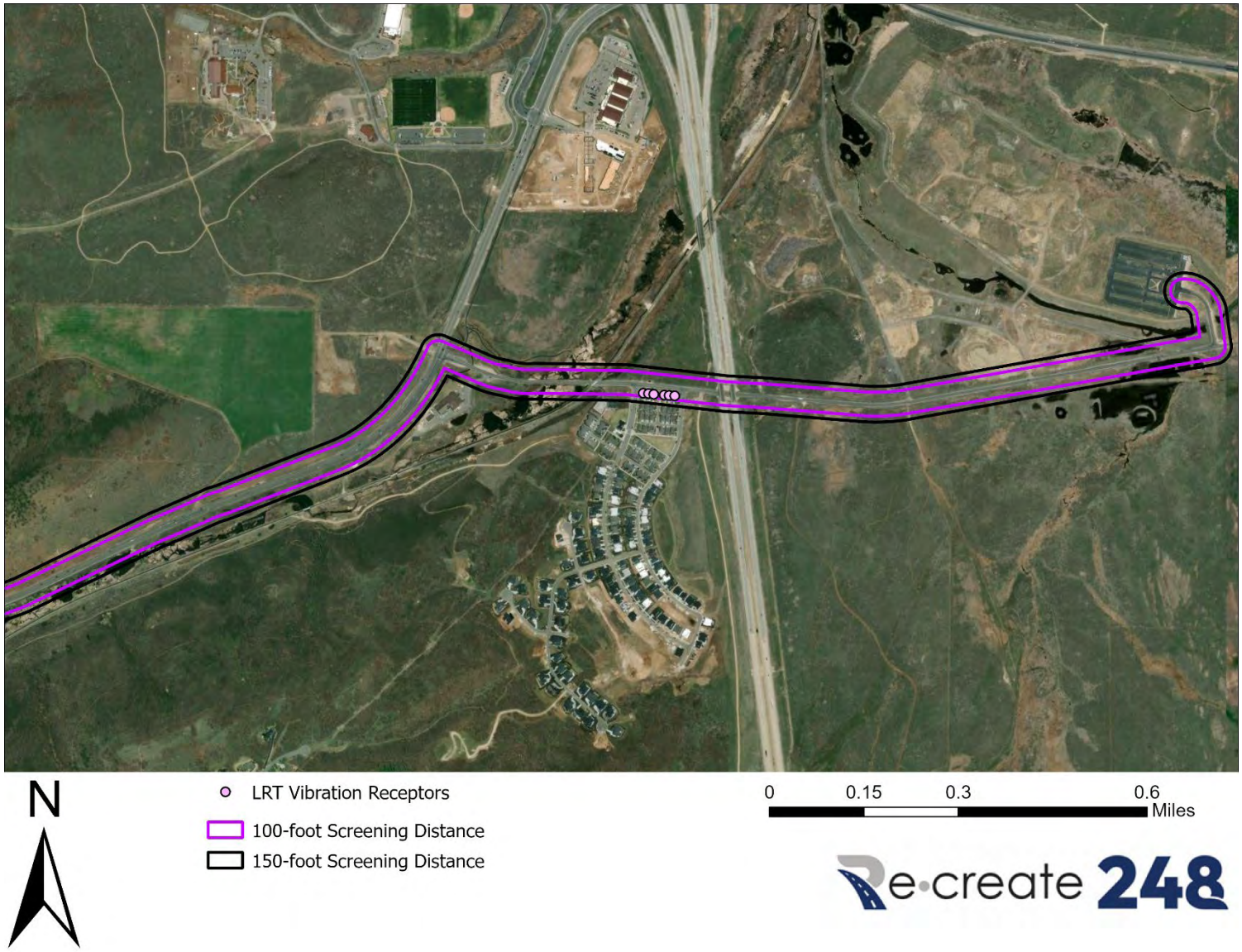


Figure 9. LRT Vibration Receptors 2 of 3

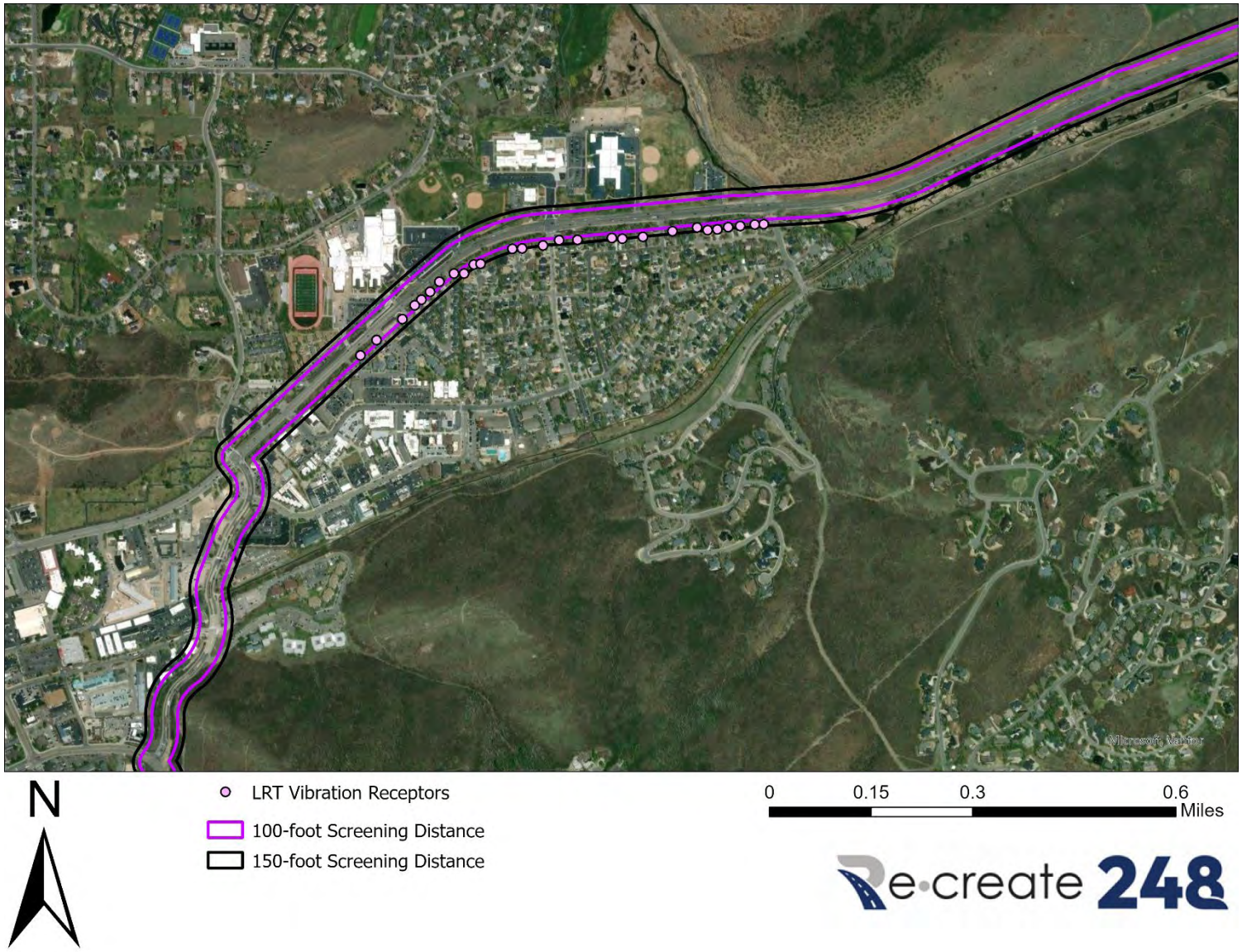


Figure 10. LRT Vibration Receptors 3 of 3