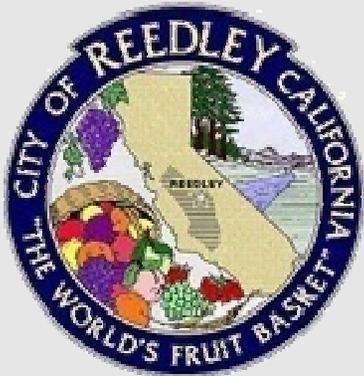


City of Reedley - Workshop

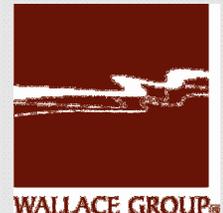


Project Status,
Design
Recommendations,
& Public Input

July 19, 2010



City of Reedley



Reed Avenue Improvement Project



Project Background

- Project need identified many years ago
- Significant grant funding secured in 2006
- Authorization to proceed in 2008
- Ready to move forward with apparent most feasible project alternative
- Experts to address the importance of existing palms, Reedley College, residential, and businesses
- Multiple meetings (3) with College officials
- Public open house on June 17, 2010
- Developed multiple alternatives
- Future meetings with key stakeholders to finalize project design details
- Design considerations



Existing Roadway Operations

Existing Traffic Demand Nearing Roadway Capacity

- 8,000 to 12,000 vehicles per day traveling Reed Avenue
- Manning intersection serves nearly 2,600 vehicles during the peak hours
- Queues develop from College traffic



Existing Roadway Operations

- Two intersections currently operate below the City's Level of Service standards
 - Parlier Avenue at Reed Avenue
 - Manning Avenue at Reed Avenue
- Excessive left-turn queue lengths at Manning Avenue at Reed Avenue
- Traffic signal warrants met for North Avenue at Reed Avenue
- Conflicting left-turn lanes for College driveways and local streets
- Closely-spaced intersections produce queuing issues on Reed Avenue



Future Traffic Volumes

Future Traffic Projections Based on Council of Fresno County Governments Regional Travel Demand Model

- Through traffic on Reed Avenue projected to increase by at least 33%
- 2030 General Plan shows expanded development on Reed Avenue on the north side of town
- Expansion of Reedley College will increase student traffic
- County/Caltrans roadway projects will provide increased access to Reed Avenue



Future Roadway Geometry

Lane Changes

- Growth of the community and the College will necessitate four lanes on Reed Avenue between Manning and the College main entrance
- Two lanes adequate north of the main College entrance

College Driveway Changes

- There are currently four College driveways providing access to two parking lots fronting Reed Avenue
- Consolidation and shifting of the College driveways will provide more orderly movement along Reed Avenue
- Alignment with local roads is essential to creating fewer conflict points
- Addition of a future College access point at Parlier Avenue will help separate College traffic traveling to/from the north and east



Roundabouts

Roundabout intersections offer several features which greatly differ from typical intersection control

Yield-at-Entry

- Vehicles approaching the intersection yield to traffic already inside the intersection, but are not required to stop completely

Traffic Deflection

- The deflection allows a clearer view of traffic within the roundabout
- Vehicles are required to slow down while entering due to the deflection



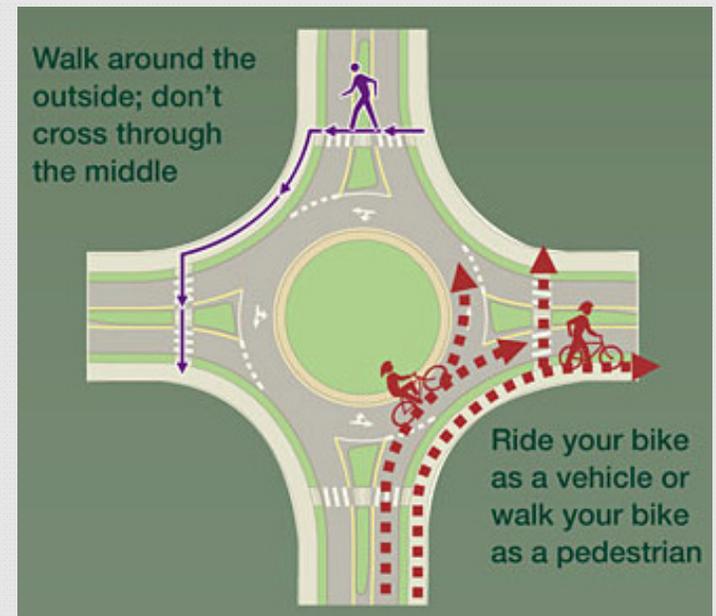


Roundabouts

Roundabout intersections offer several features which greatly differ from typical intersection control

Pedestrian and Bicycle Safety

- Pedestrians are only required to watch one direction of travel at a time while crossing at a roundabout
- Refuge islands provide shorter crossing areas
- Bicyclists may travel through the roundabout like a vehicle or cross as a pedestrian





Roundabouts

Roundabout intersections offer several features which greatly differ from typical intersection control

Environmental Benefits

- Less idling time means lower emissions and less fuel used
- Less paved area means more area for landscaping



Roundabouts facilitate constant movement of traffic through the intersection

- The goal is to keep all vehicles moving

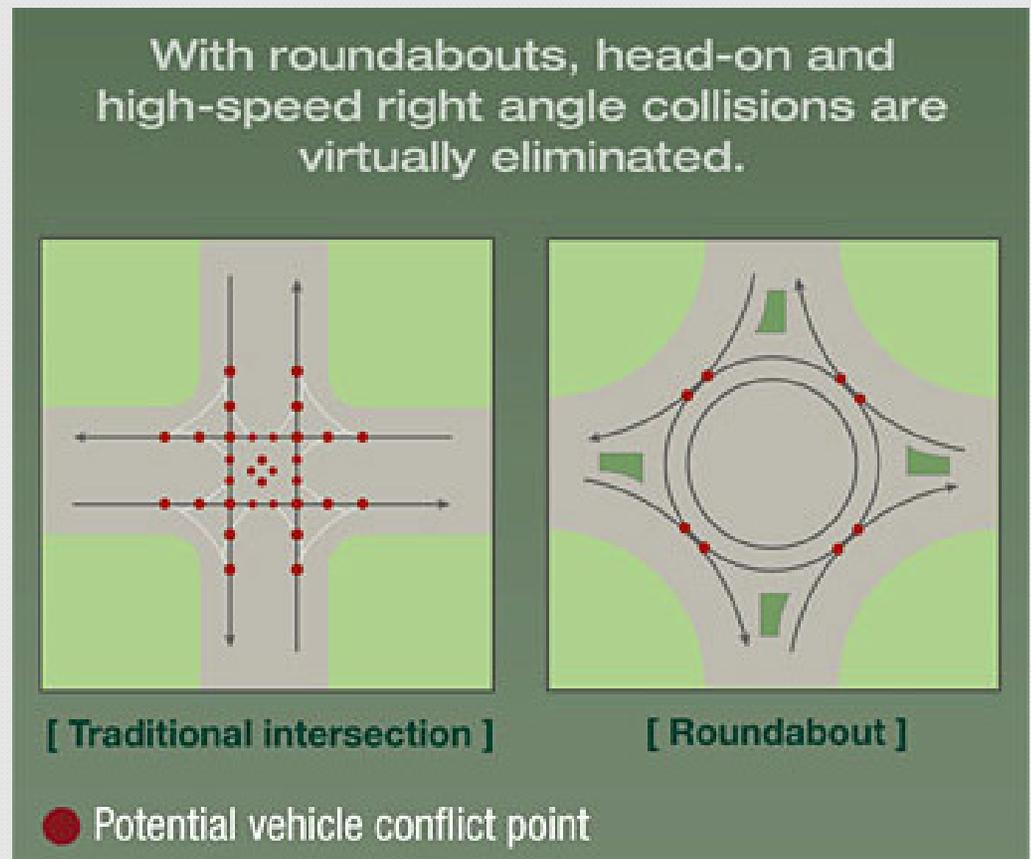


Roundabouts

Roundabouts provide efficient, safe, and cost effective alternatives to typical traffic control

Nationally conducted safety studies have shown that roundabouts experience lower accident rates

- Up to 39% fewer total accidents than signalized intersections
- Up to 76% fewer injury accidents than signalized intersections
- Up to 94% fewer fatal accidents than signalized intersections





Roundabouts

Roundabouts provide efficient, safe, and cost effective alternatives to typical traffic control

Roundabouts typically cost less than traffic signals

- Roundabouts typically cost less for construction, maintenance, repair, and accident costs
- Right-of-way costs may be higher for roundabouts since they are larger than a typical signalized intersection

Roundabouts can accommodate large vehicles

- With proper design, roundabouts can accommodate large truck—trailer combinations and emergency vehicles

Roundabouts provide for traffic calming in residential areas



Roundabouts in Reedley

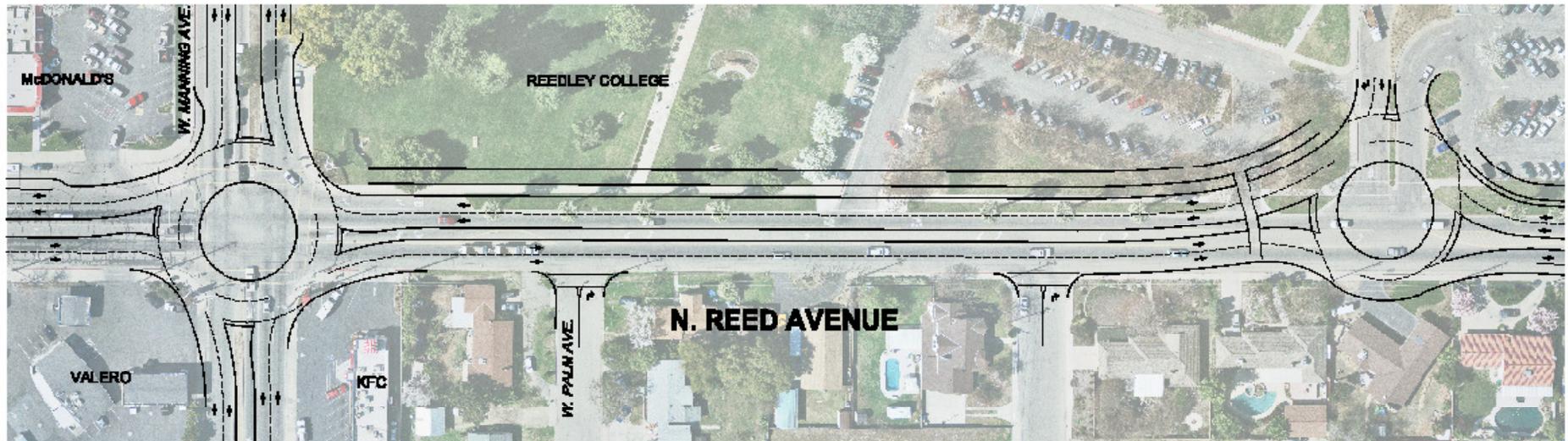
Conclusions from the Reed Avenue Roundabout Feasibility Study

- Roundabouts will work at many locations along Reed Avenue as alternatives to traffic signals and/or stop control and provide the following benefits:
- Lower cost
- Enhanced safety
- Better traffic flow
- Improved aesthetics
- Lower environmental impacts



Alternative - "A"

ALTERNATIVE "A"



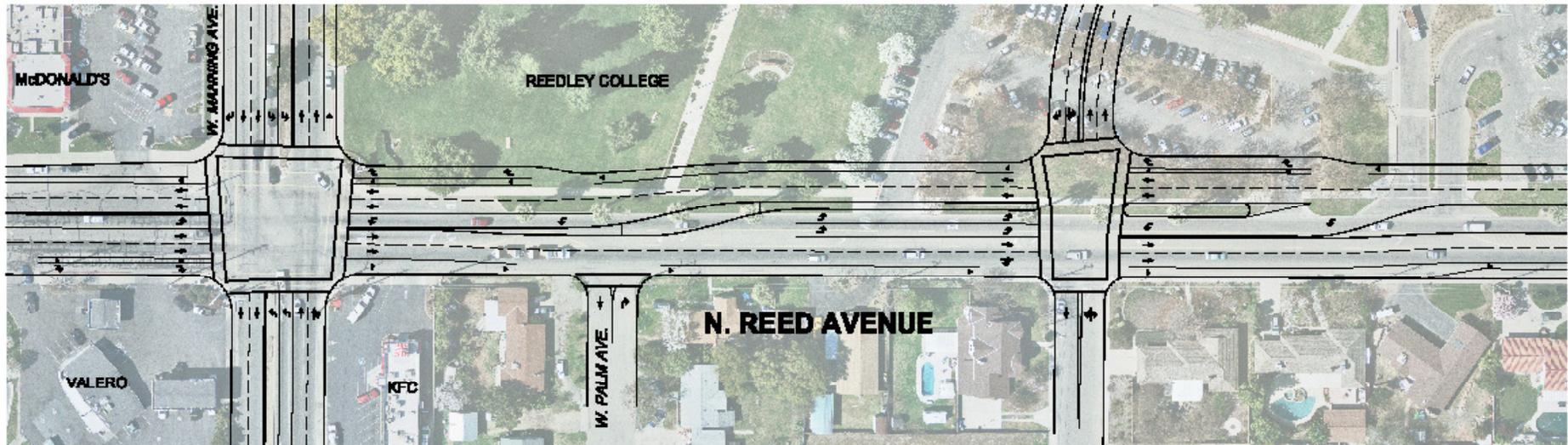
Alternative "A" - Roundabouts

- North, Manning, College, Kip Patrick, Parlier, & South
- Eliminates the need for additional turn lanes
- Existing driveways close to intersections



Alternative – “B”

ALTERNATIVE "B"



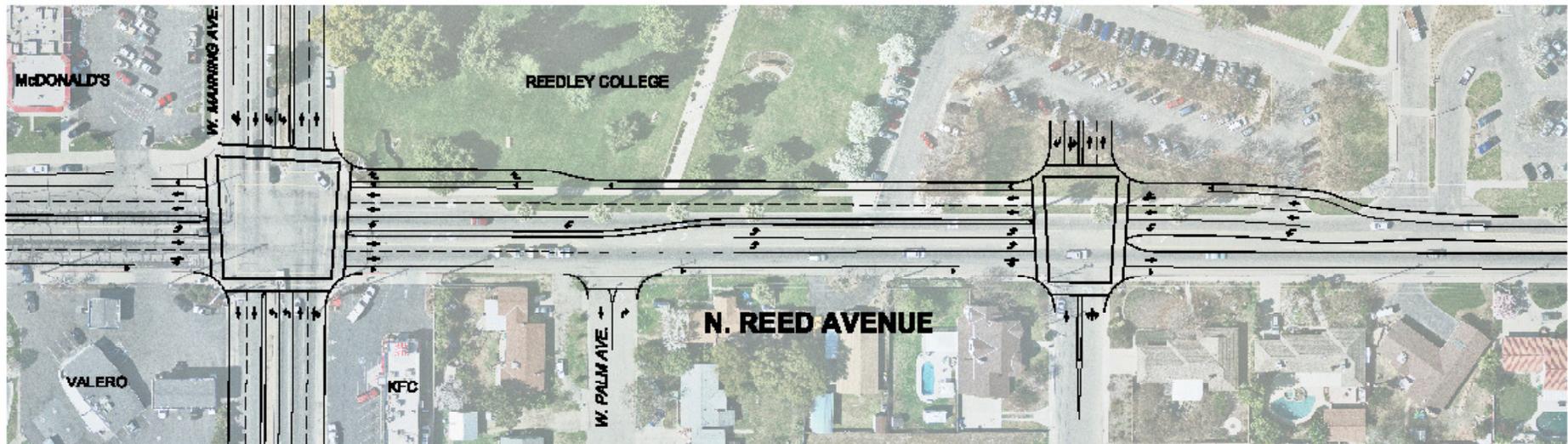
Alternative “B” – Four Lanes

- Aims to keep palm trees in median. Still affects many due to turn lanes
- Aligns College entrance with Ponderosa
- Impacts College parking lots



Alternative – “C”

ALTERNATIVE “C”



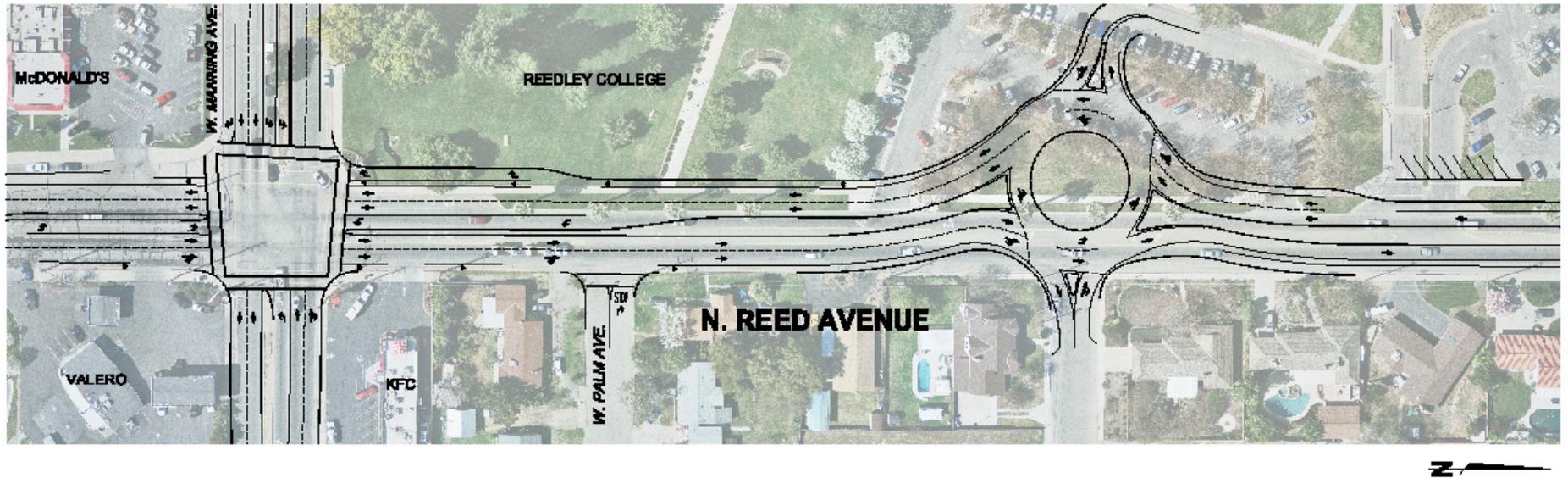
Alternative “C” – Two Lanes North/College

- Reduces impacts to the College
- Relocated northerly College entrance
- Moves easterly curb 4 feet to the east



Alternative – “D”

ALTERNATIVE "D"



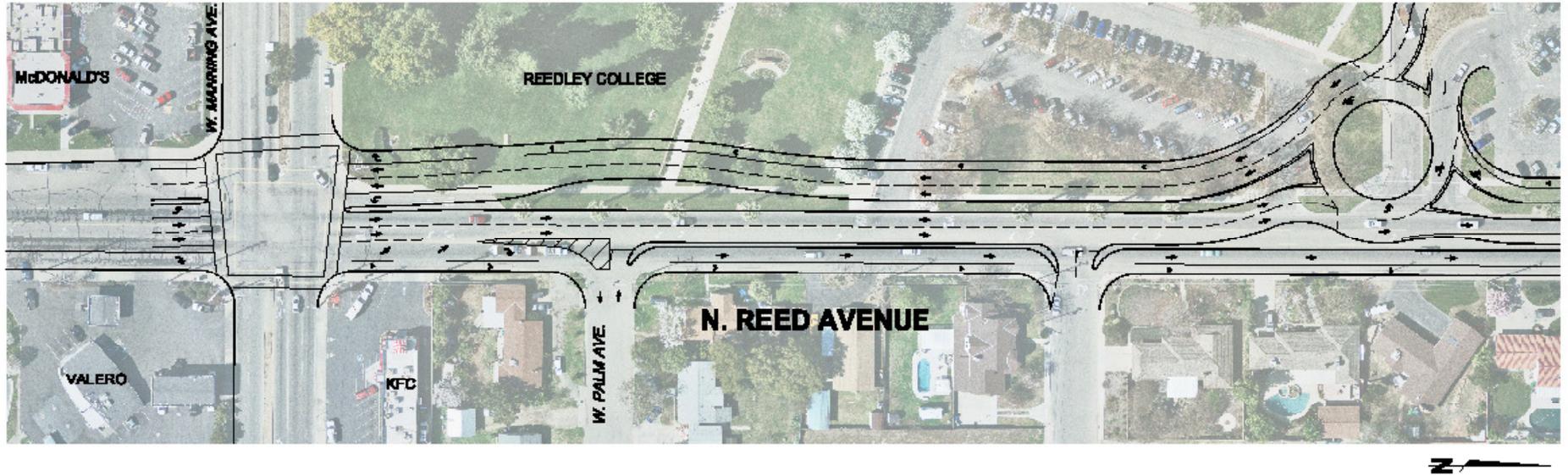
Alternative “D” – Roundabout at North & College

- Provided for parking on east side of Reed
- Not palm tree friendly



Alternative – “E”

ALTERNATIVE “E”



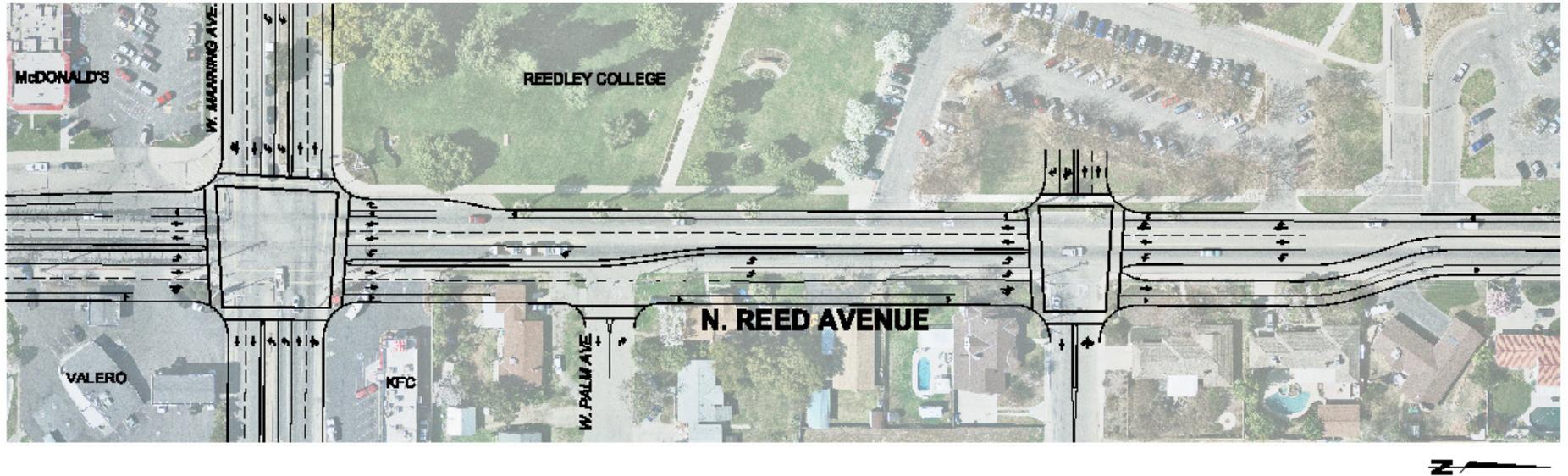
Alternative “E” – West Side Shift

- Realignment of roadway at Manning
- Palm trees in median
- Large impacts to the College



Alternative – “F”

ALTERNATIVE “F”



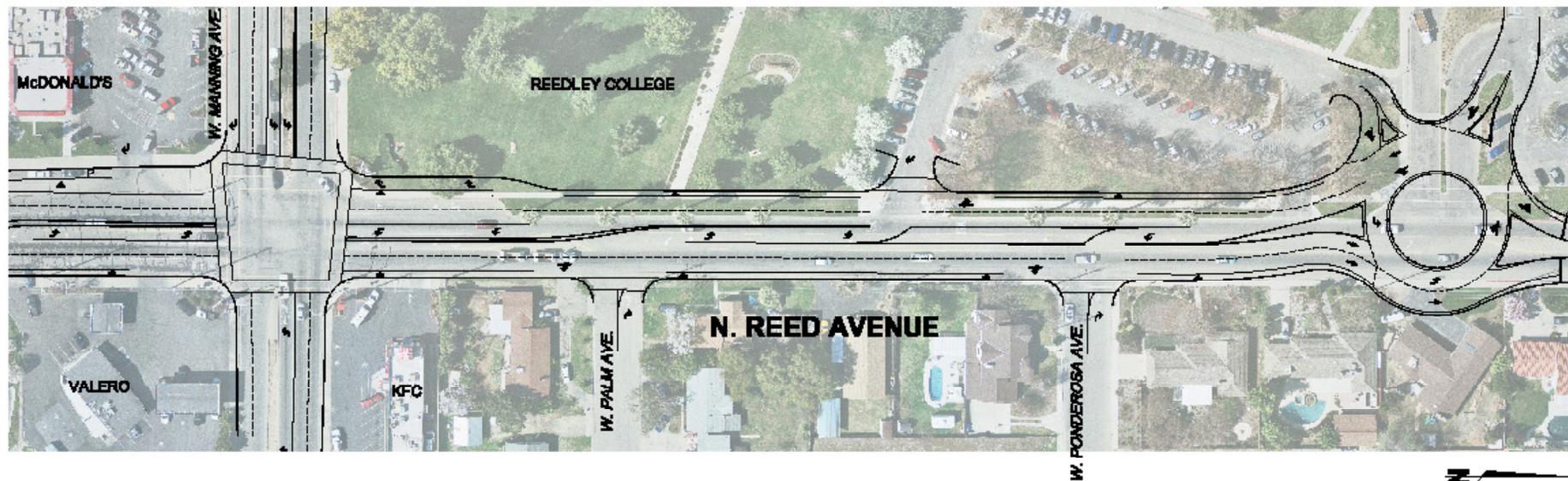
Alternative “F” – East Side Shift

- Westerly curb line to remain
- Large impacts to the local residences
- Impacts to commercial properties at Manning



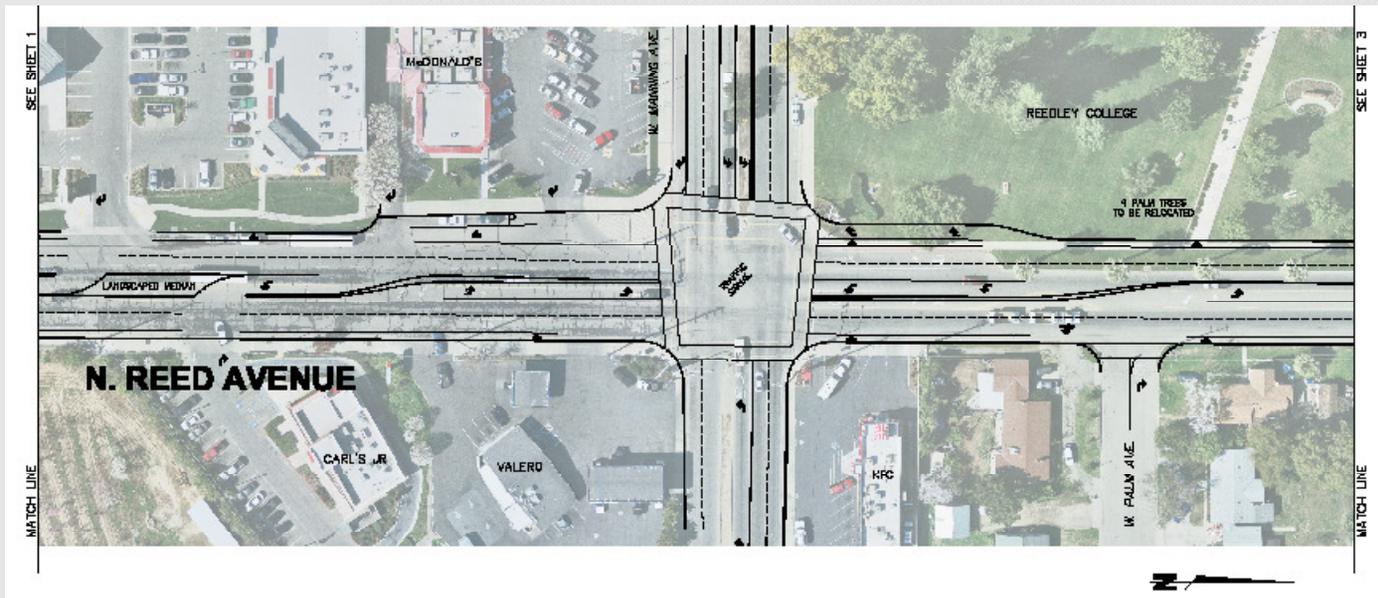
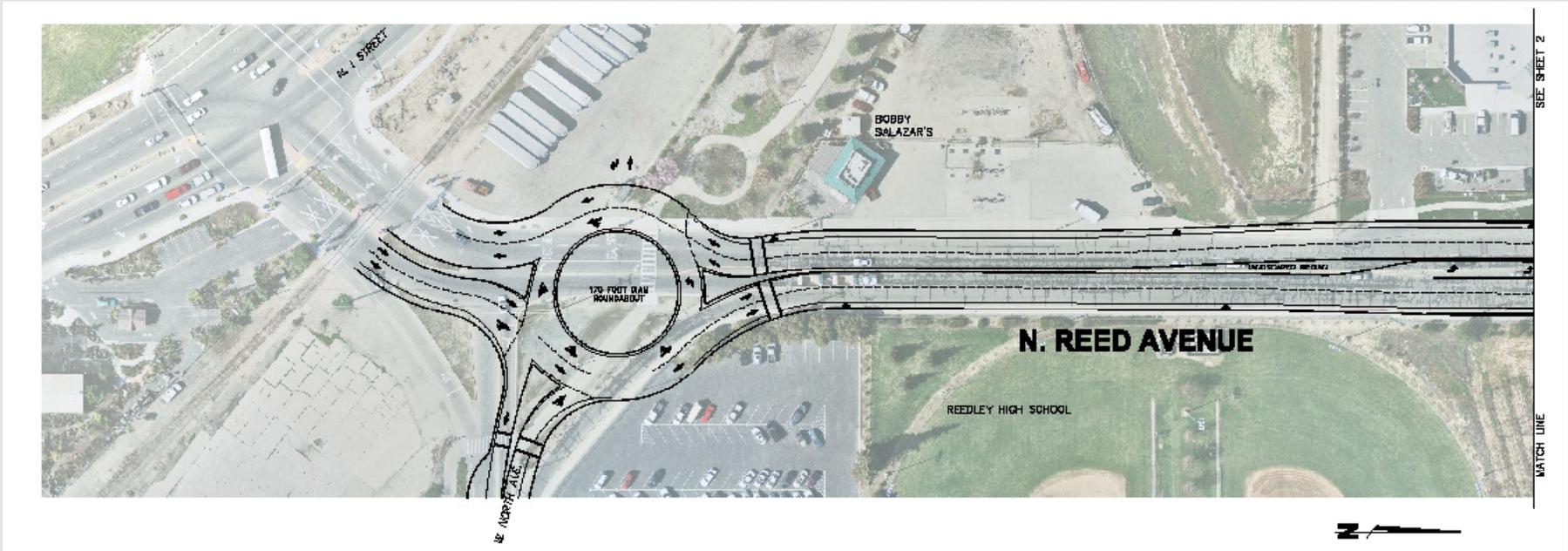
Most Feasible Alternative - "G"

ALTERNATIVE "G"



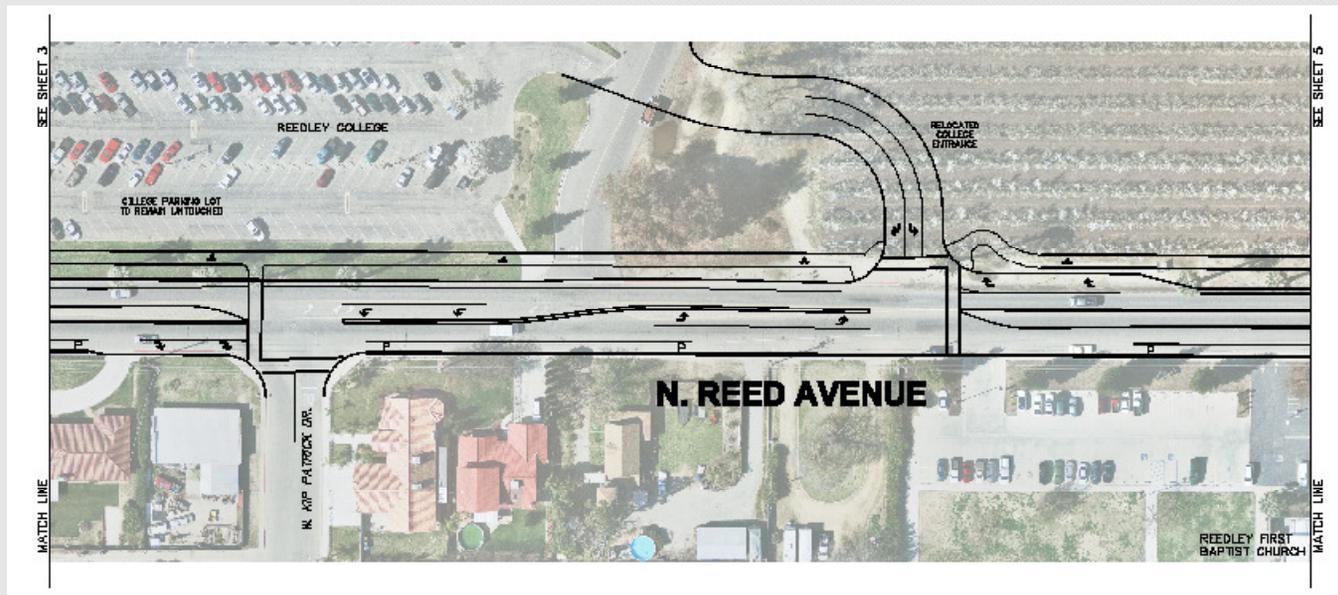
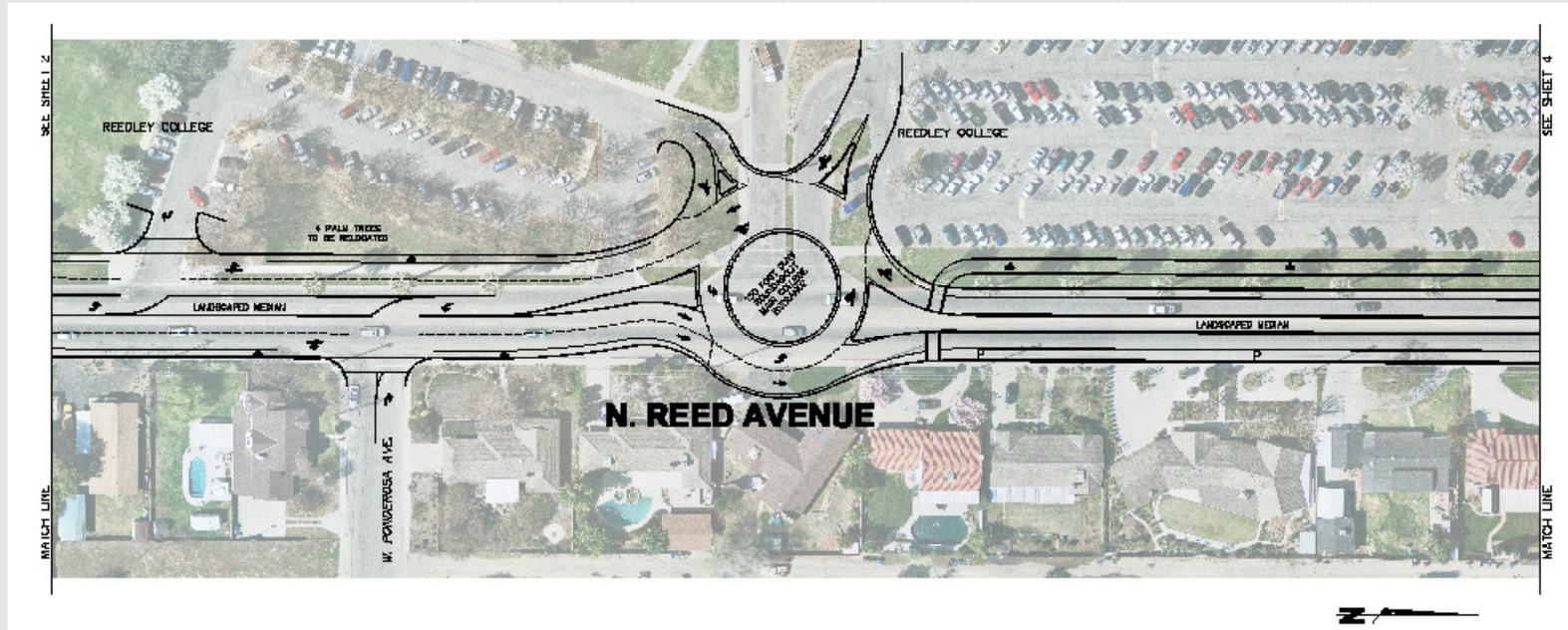


Most Feasible Alternative - "G"



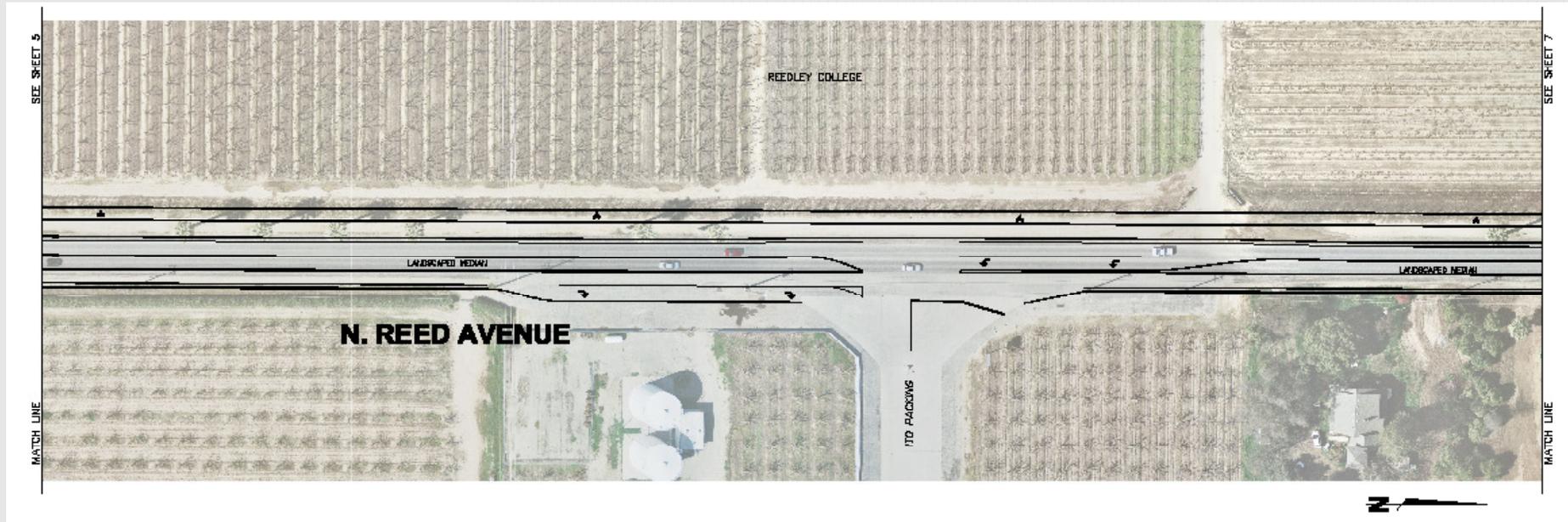
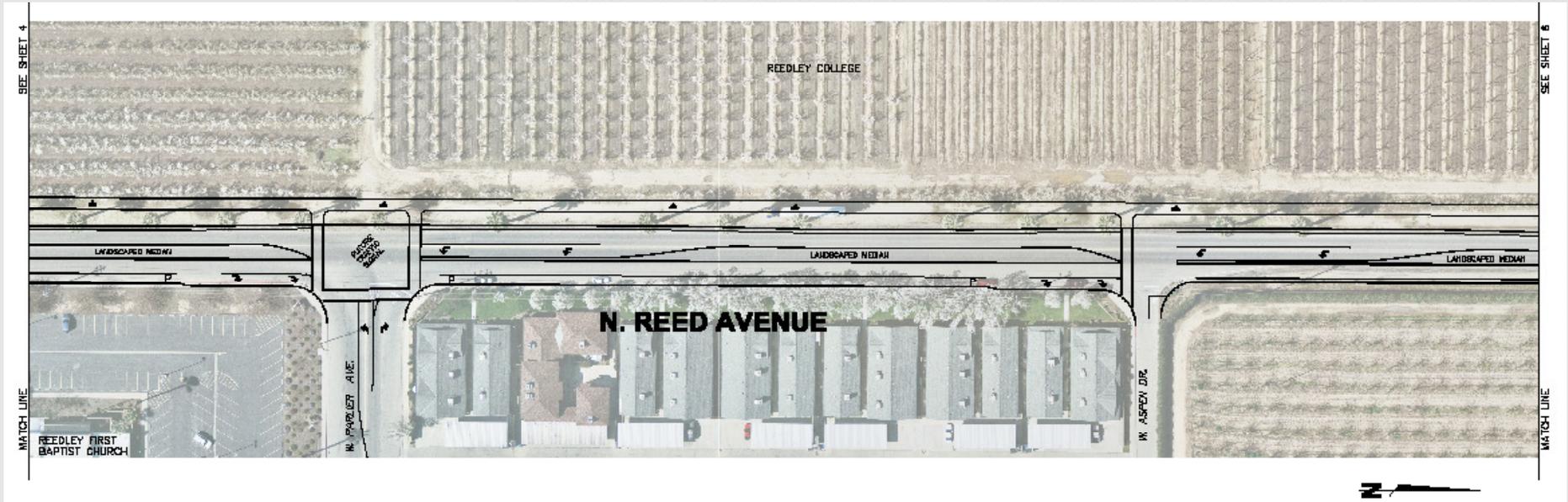


Most Feasible Alternative - "G"



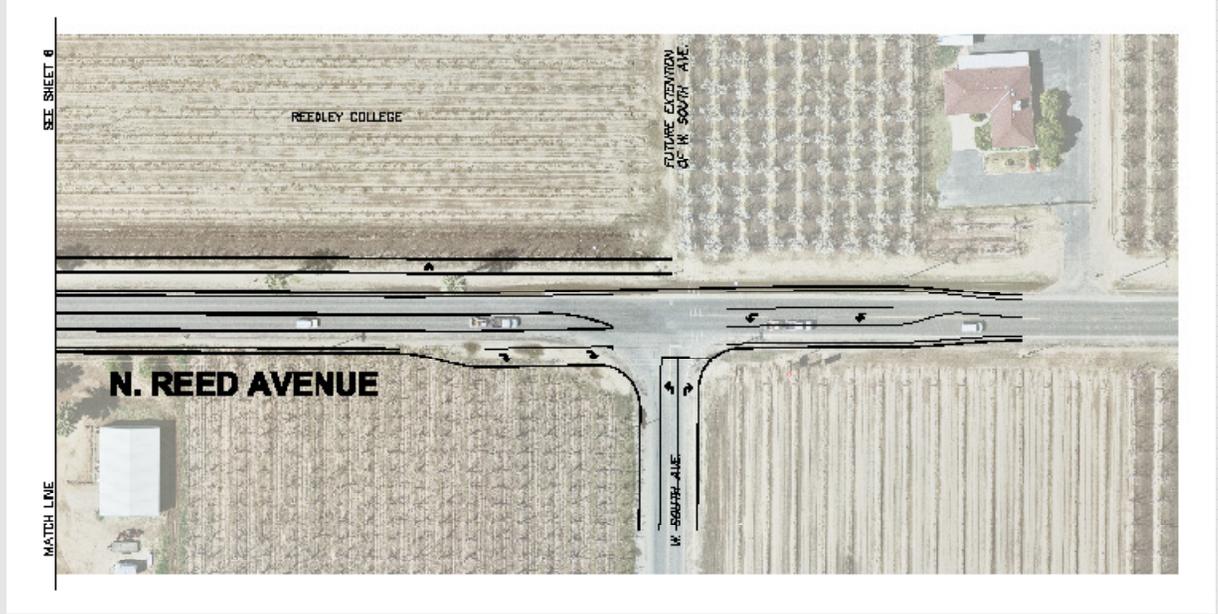


Most Feasible Alternative - "G"





Most Feasible Alternative - "G"





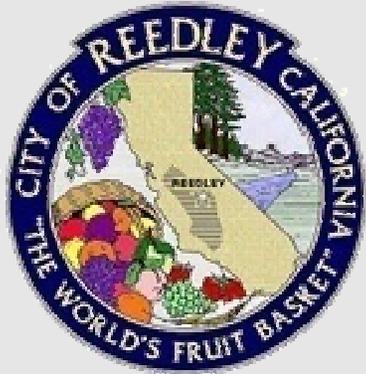
Most Feasible Alternative - Design Features

Through the process of study, development of alternatives, and discussions with stakeholders, the most feasible design features include:

- A roundabout at Reed and North
- A four-lane divided section from North to the College entrance
- A fully signalized intersection at Reed and Manning
- A roundabout at the main College entrance
- A two-lane divided section, with bike lanes and left and right turn lanes, from the College entrance to South Avenue
- Relocation of approximately 8 palm trees, others are to remain in place



Closing Statements



City of Reedley

Open Forum Questions

