

Agua Fria Ranch Parking Study

YOUNGTOWN, ARIZONA

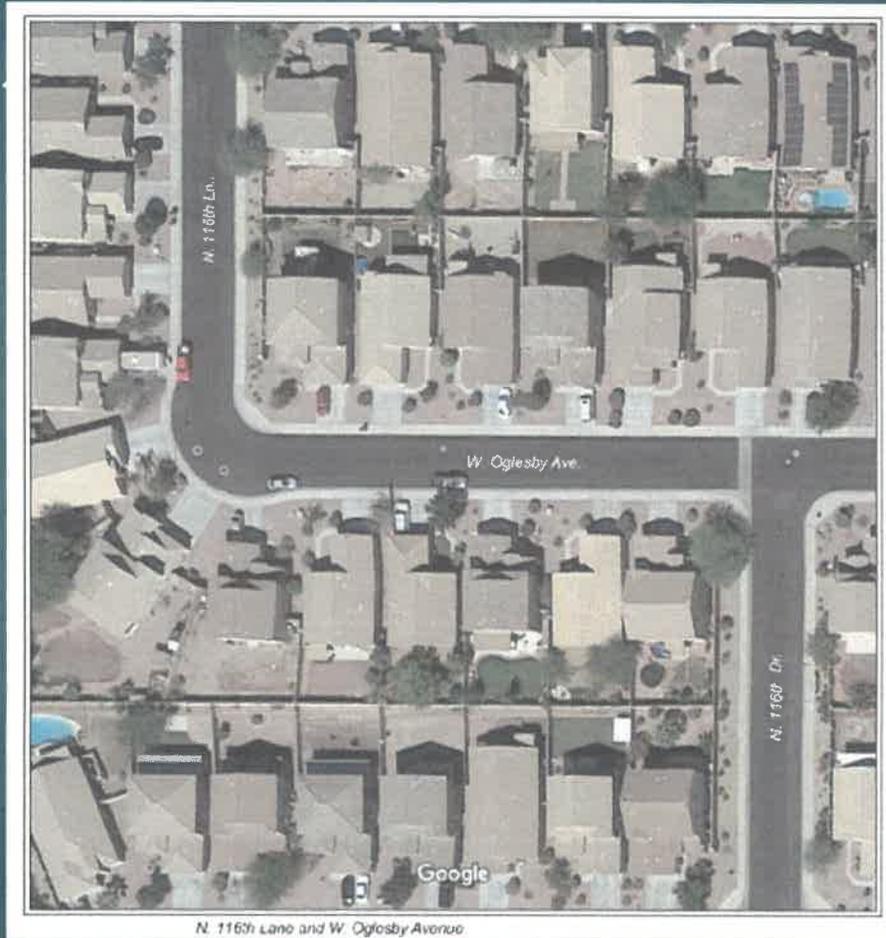
AUGUST 2017

Need For Study

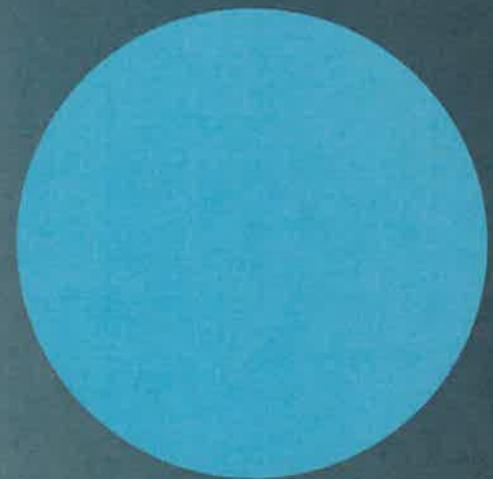


- Vehicles currently park along the local residential streets, often on both sides of the roadway
- This situation often hampers the ability of the local fire department to respond in a timely manner due to restricted maneuvering ability of the fire trucks
- A site visit was conducted in June of 2017 to verify where the problem areas were located
- After the field study, a review of existing documents was completed to help make recommendations to alleviate the problem
- The next two slides demonstrate the problems caused by vehicles parking on the street

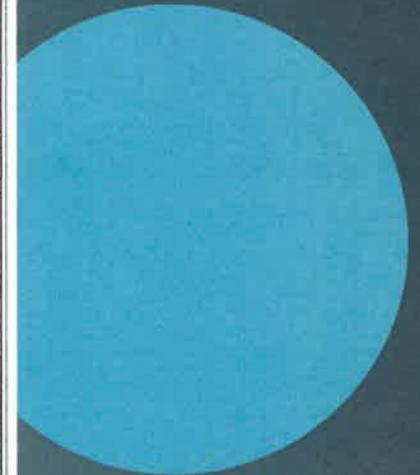
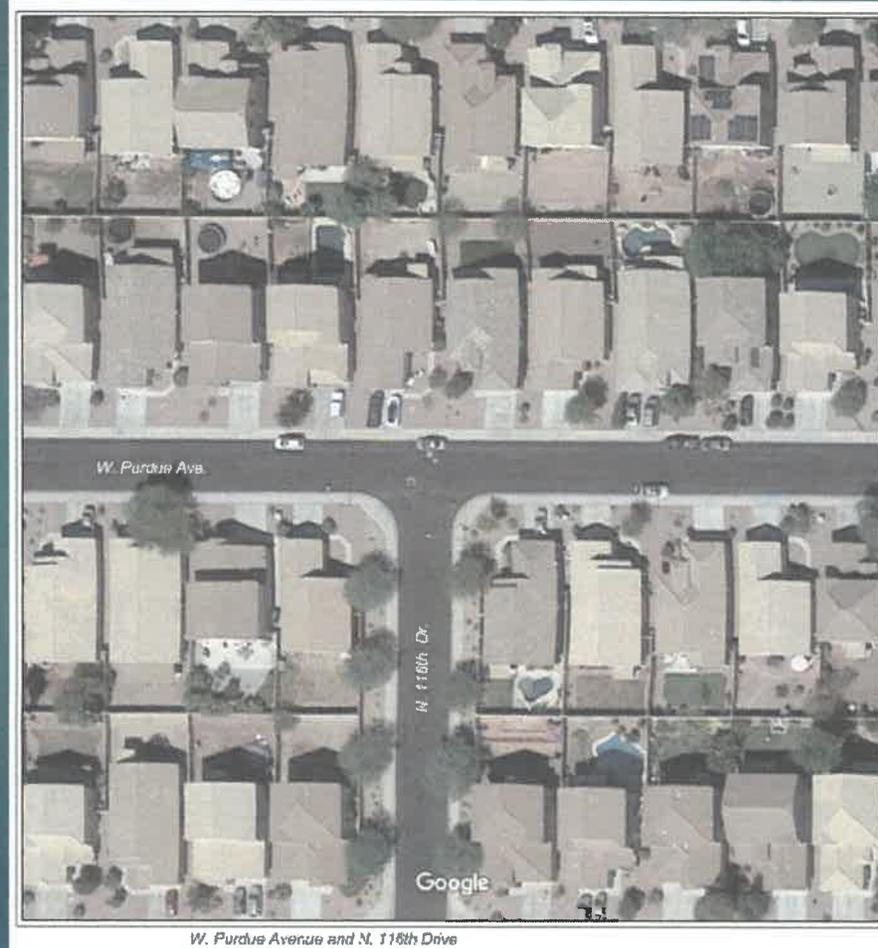
Aerial View N. 116th Lane and W. Oglesby



N. 116th Lane and W. Oglesby Avenue

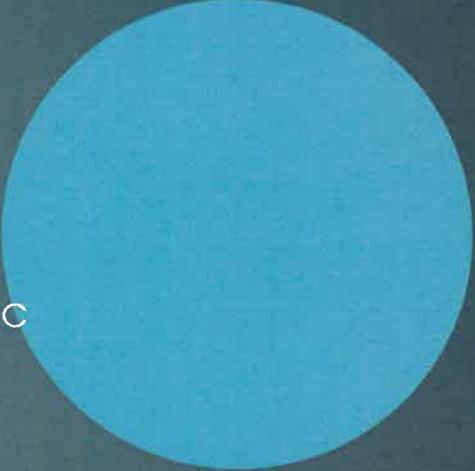


Aerial View W. Purdue Ave. and N. 116th Drive



International Fire Code



- No parking within 15 feet of a fire hydrant
 - No parking within 20 feet of a pedestrian crosswalk
 - No parking within 30 feet of a stop sign
 - Minimum recommended 96 foot diameter for a cul-de-sac
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Current Roadway Geometry



- Current Agua Fria Ranch subdivision roadways are 28 feet wide from curb to curb
 - Current knuckle or turn out areas are 37.9 feet wide from centerline radius curb to curb
 - Current cul-de-sacs have a centerline diameter curb to curb of 89 feet
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Fire Apparatus Maneuverability

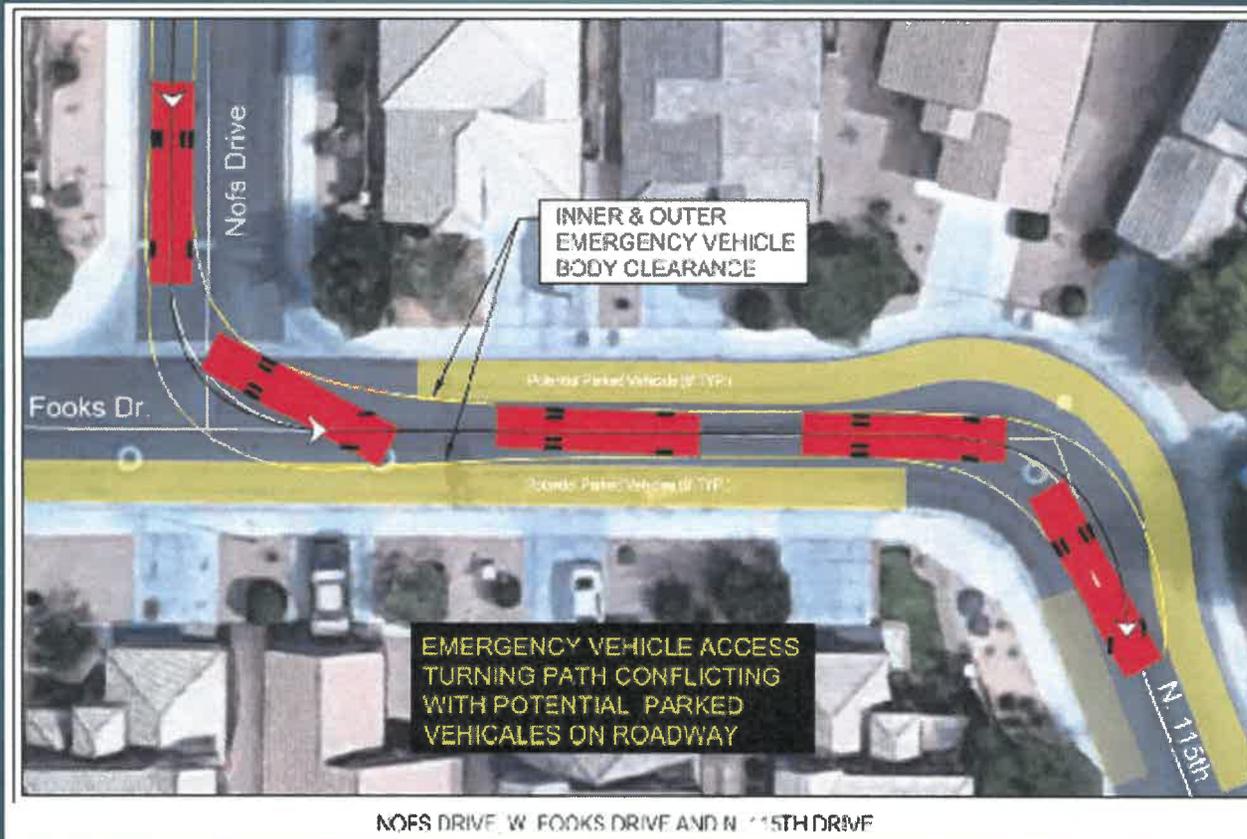
- Inside turning radius for fire trucks is 20 feet
- Outside turning radius for fire trucks is 45 feet
- Minimum clearance for ladder trucks from front bucket to front axle hub is 11.6 feet
- Vehicle overhang must be considered when turning a corner

Roadway Geometry Issues

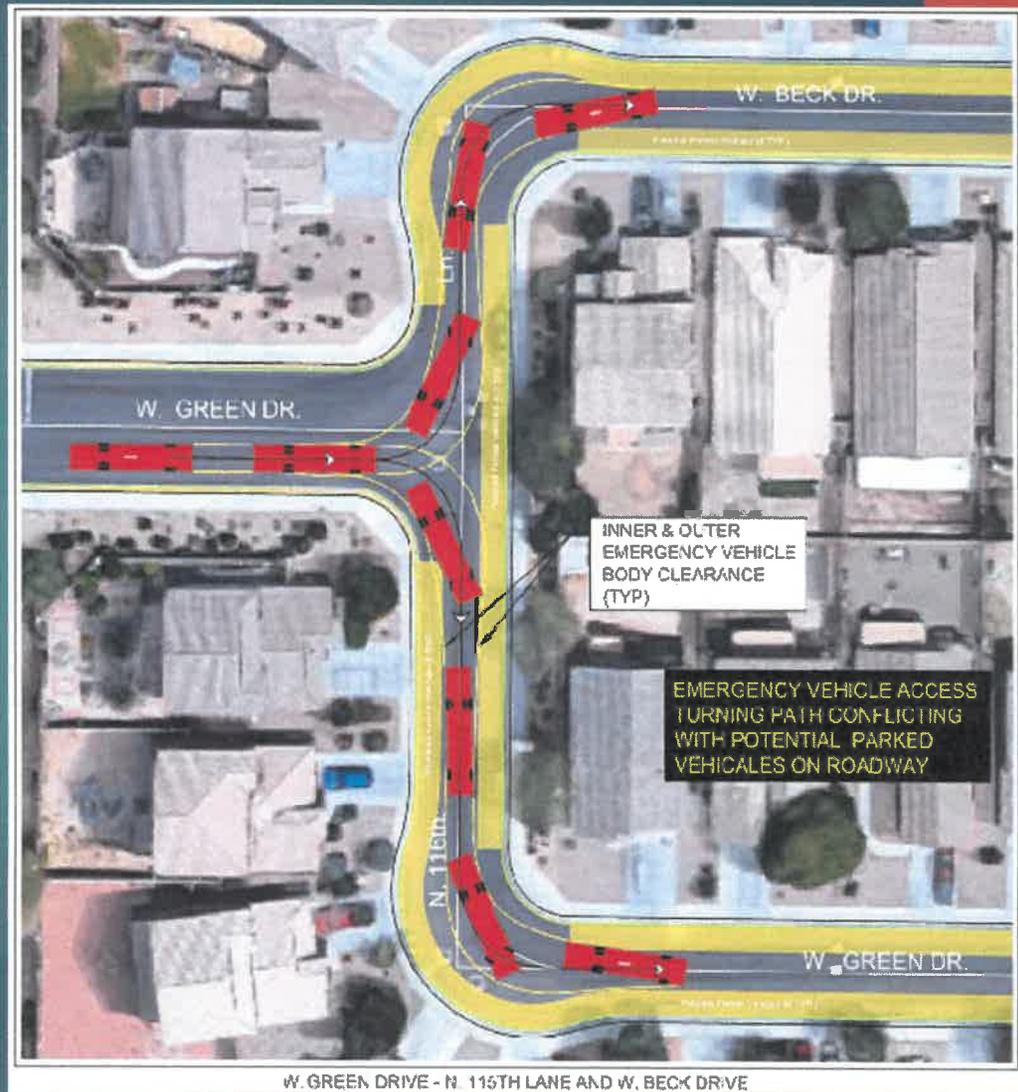


- Roadway widths throughout the subdivision are deficient in width for on street parking
- Roadways would need to be 32 feet wide but are only 28 feet wide, four feet too narrow for on-street parking
- Knuckles and turn outs are deficient in width for on-street parking
- Current knuckles are 37.9 feet wide and should be 44 feet wide
- Current cul-de-sacs are 89 feet wide and should be 96 feet wide

Fire Apparatus Maneuverability Conflicts with Parked Vehicles



Fire Apparatus Maneuverability Conflicts with Parked Vehicles

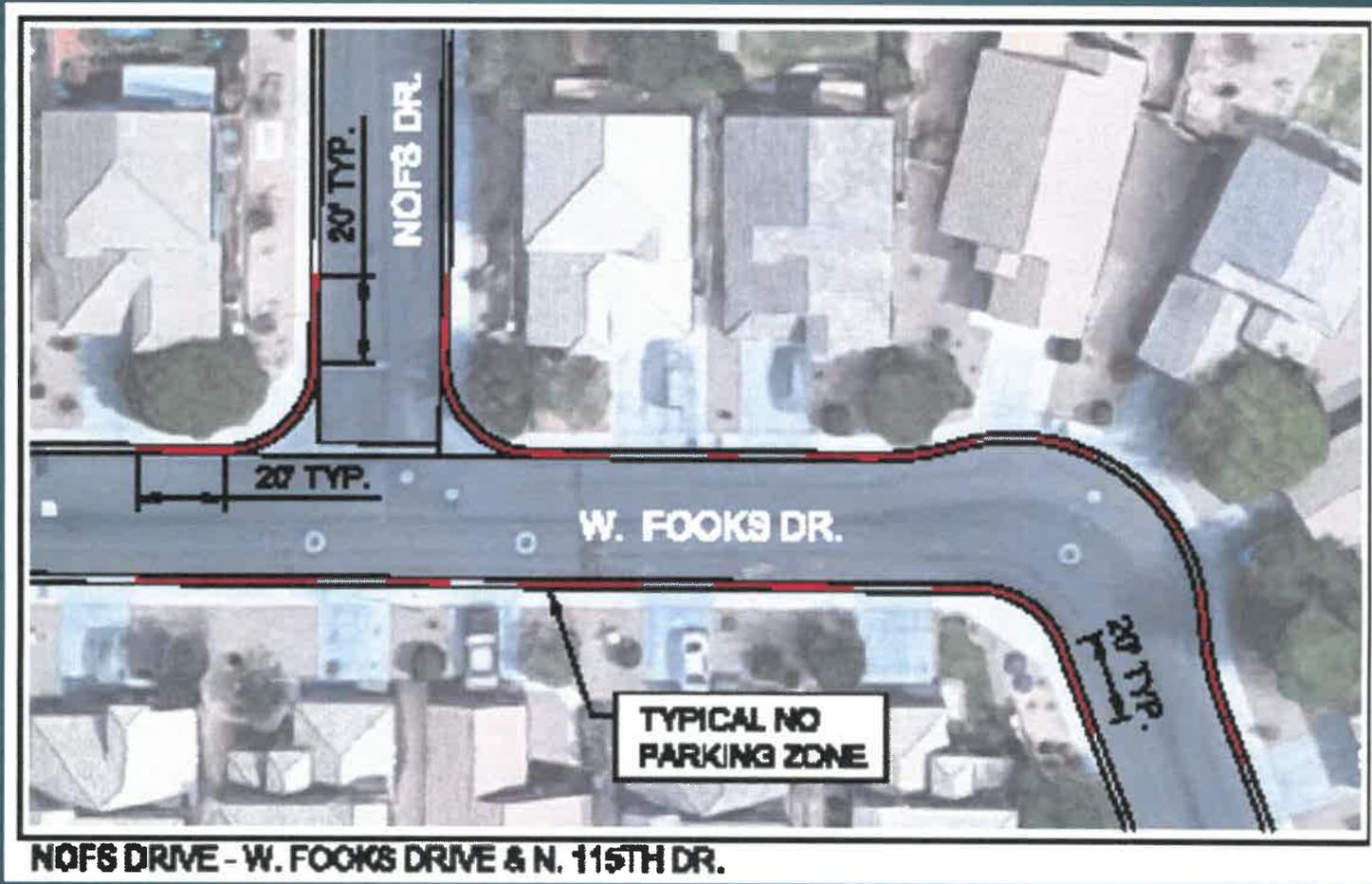


Recommendations



- The entire subdivision was subjected to the simulations in the previous slides to see where fire apparatus and parked vehicle conflicts exist
- Area highlighted in yellow in the previous slides demonstrate where these conflicts can potentially occur
- Based upon the computer modeled simulations utilizing the fire apparatus turning maneuverability and the simulated parked vehicles, a no parking scheme was developed
- This parking scheme consists of painting the curbs red throughout the subdivision in areas where potential conflicts may arise
- Other options considered but rejected were no parking signs and working with the HOA to implement further parking restrictions

Proposed No-Parking Paint Scheme



Proposed No-Parking Paint Scheme

