IX. Introductory Description of Alternatives

The following sections briefly describe each of the alternatives that have been considered for this corridor. Further development and analysis of the alternatives will begin in Section X, Preliminary Evaluation of Alternatives, which begins on page 138.

A. No Build

This alternative would leave St. Francis Drive as it is today. Maintenance would be continued, however no improvements to intersections or pedestrian and bicycle facilities would be implemented other than as normal and routine maintenance.

B. Lane Conversion to Reduce Number of Lanes

This alternative proposes a reduction in the number of lanes by one lane in each direction along the entire St. Francis Drive corridor. The reduction of one travel lane in each direction would be converted into a bike lane and an extended sidewalk and landscape area focusing on providing alternative modes of transportation. This would allow the pedestrian experience to be greatly improved, particularly north of Cerrillos Road because of the limited right-of-way.

The reduction of one lane in each direction would reduce and therefore set the vehicular capacity at a lower level than it is today. The intent of this alternative is to provide opportunities for and encourage alternative modes of transportation by providing multi-use paths within the right-of-way and connecting to other trail systems within Santa Fe at the expense of traffic operations. Traffic congestion would likely increase unless travel demand shifted to an alternate mode. Enhanced transit opportunities, both local and regional, would be required to be developed to accommodate the forecasted increase in travel demand. A representative plan view of this alternative is shown in Figure 35.

C. General Purpose Lane Addition

This alternative proposes widening of St. Francis Drive to add one additional general purpose lane in each direction throughout the entire length of the corridor.

Analysis presented in the previous sections indicates that to maintain normally accepted levels of service for vehicular operation most intersections along the corridor would require additional general purpose traffic lanes or minor street improvements. This alternative adds a travel lane on St. Francis Drive in lieu of minor street improvements. This initial screening seeks to determine the impacts resulting from these additional general purpose travel lanes.

It is recognized that this alternative focuses primarily on the vehicular mode (car, truck and bus) and would improve traffic operations at the expense of the bicyclist and pedestrian. This alternate also is at odds with the City of Santa Fe General plan objectives for transportation improvements which seek to promote alternative modes and discourage use of the automobile, as well as promoting development patterns that seek to bring the community together rather than adding distances between them. A representative plan view of this alternative is shown in Figure 36.

AGUA FRIA ST.

TYPICAL

ONLY

SCALE: 1"=100'

DUNLAP ST

ROYBAL ST

W MANHATTAN AVE

ST. FRANCIS DR

SEE BLOW UP

EXTENDED SIDEWALK
BIKE LANE
DRIVING LANE
DRIVING LANE

DRIVING LANE
DRIVING LANE
BIKE LANE
EXTENDED SIDEWALK

SEE FIGURE 46

SCALE: 1"=50'

LEGEND

APPROXIMATE RIGHT-OF-WAY LIMITS

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FIGURE 35
LANE CONVERSION TO
REDUCE NUMBER OF LANES

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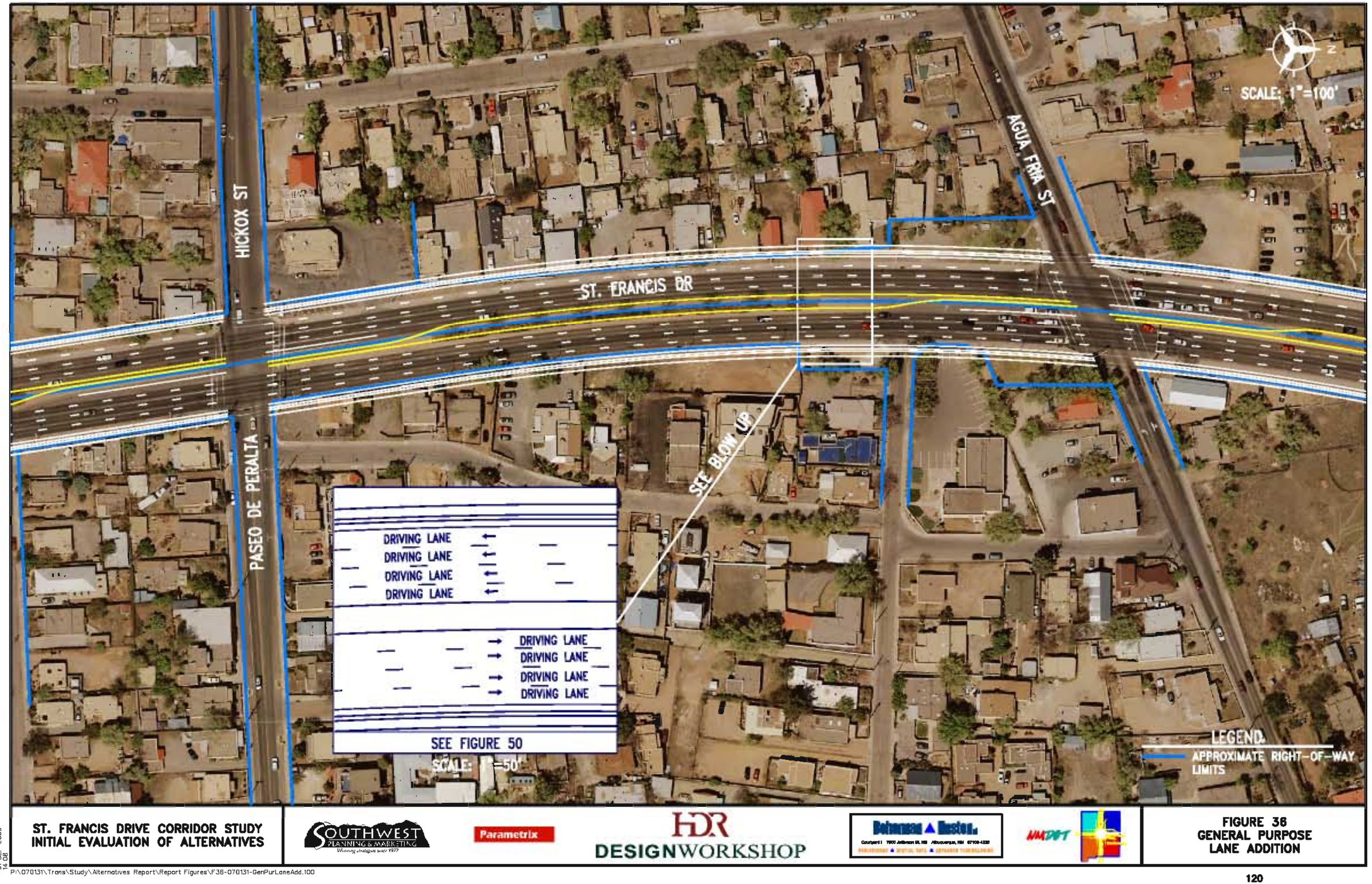

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FIGURE 36
GENERAL PURPOSE LANE ADDITION

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D. Lane Conversion to Dedicated Bus Lane

This alternative proposes to convert one existing general purpose travel lane in each direction along the entire St. Francis Drive corridor into a dedicated bus lane. The bus lane will be restricted to buses at all times, however general purpose right turns would be allowed. The dedicated bus lane would be located on the outside lane for ideal passenger loading. Transit pre-emption, which allows the bus to change the traffic signal to green in order to improve transit travel time, is an option that could be implemented with this alternative.

The intent of this alternative is to provide and encourage transit use by providing a dedicated bus lane at the expense of traffic operations. This alternative would result in increased traffic congestion until sufficient travel demand shifted to the transit alternative. Enhanced transit opportunities, both local and regional, would be required to be developed to accommodate the expected increase in travel demand.

A representative plan view of this alternative is shown in Figure 37.

E. Transit Lane Addition

This alternative proposes the addition of a transit-only lane (with permitted general purpose traffic right turn movements) along the entire length of the corridor. This alternative seeks to maintain the exiting general purpose travel lanes for vehicular traffic while adding a new lane for transit service only. The additional transit lane would be on the outside lane, in order to allow the sidewalk to serve as a passenger loading zone. Transit pre-emption could also be considered.

A representative plan view of this alternative is shown in Figure 38.

F. Lane Conversion to Dedicated Commuter/HOV Lane

This alternative proposes to convert one general purpose travel lane in each direction along the entire St. Francis Drive corridor into a dedicated commuter/high occupancy vehicle (HOV) lane. The commuter lanes will be restricted to cars with 2 or more people during peak hours. The dedicated commuter lane would be located on the inside center lane to provide best through travel access. General purpose traffic wanting to turn left at locations with a left turn lane(s) would be allowed to cross the commuter lane to access the turn lanes. During peak hours when the commuter lane is restricted, left turns are only allowed in areas that have dedicated turn lanes.

The intent of this alternative is to provide and encourage carpooling by providing a dedicated commuter lane at the expense of general purpose traffic operations.

A representative plan view of this alternative is shown in Figure 39.

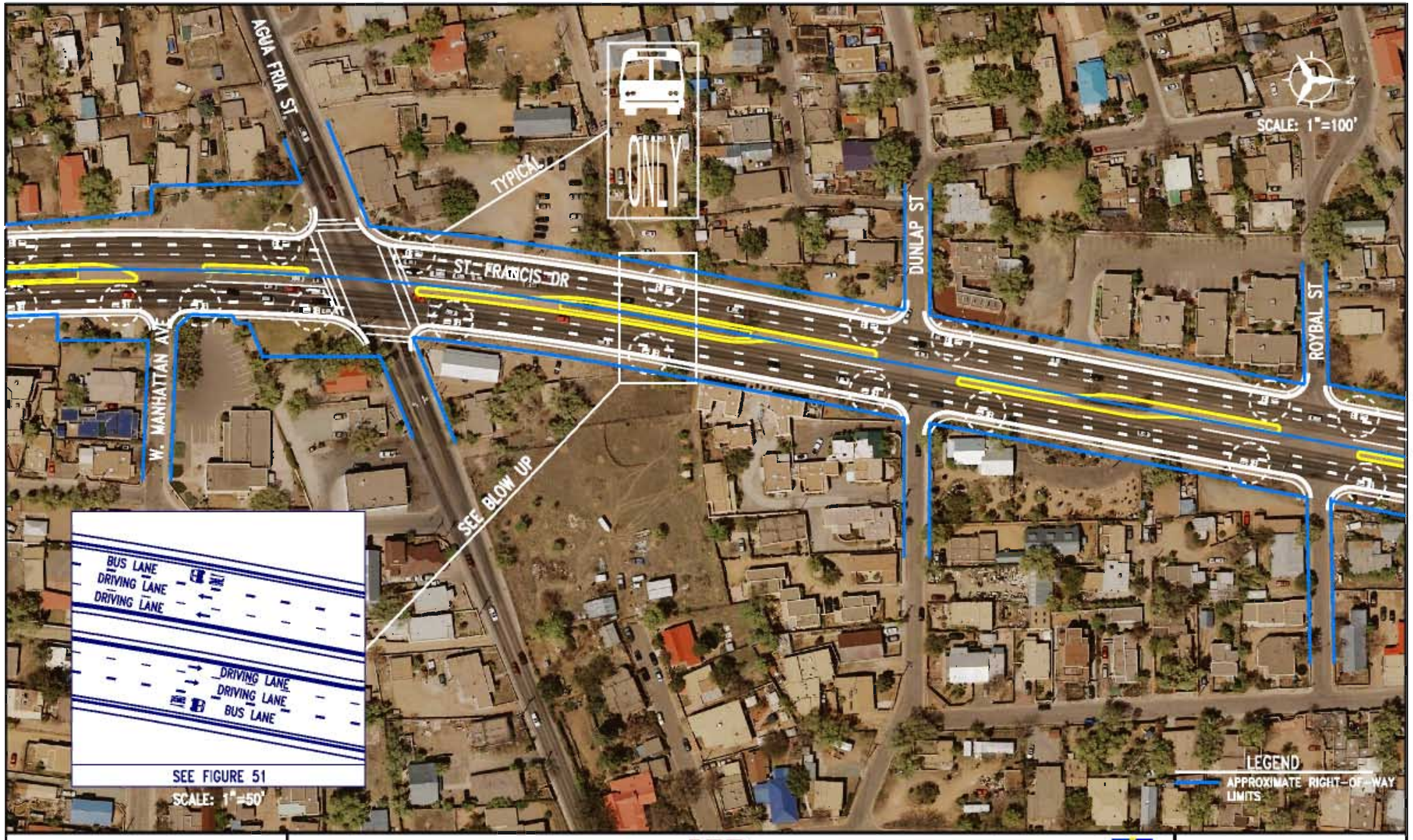

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FIGURE 37
LANE CONVERSION TO DEDICATED BUS LANE

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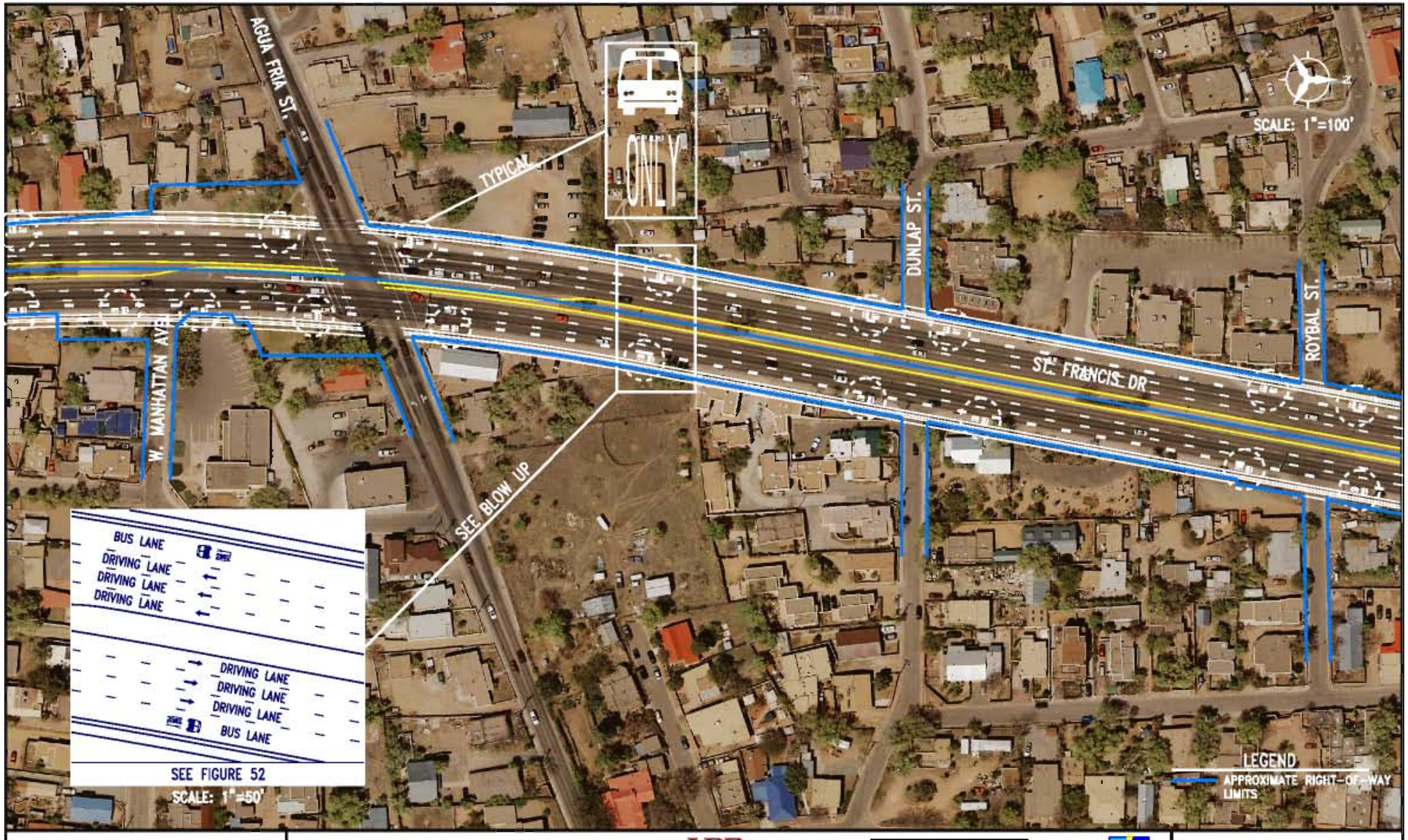

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FIGURE 38
TRANSIT LANE ADDITION

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AGUA FRIA ST

TYPICAL

HOV

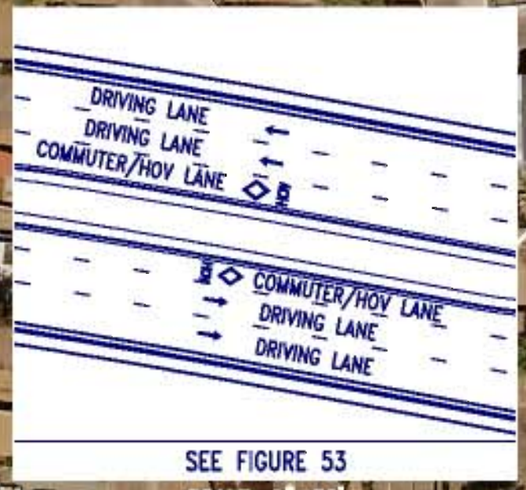
SCALE: 1"=100'

DUNLAP ST

ROYBAL ST

W MANHATTAN AVE

SEE BLOW UP



SEE FIGURE 53

SCALE: 1"=50'

LEGEND

APPROXIMATE RIGHT-OF-WAY LIMITS

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FIGURE 39
LANE CONVERSION TO
DEDICATED COMMUTER/HOV LANE

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G. Expressway with Frontage Roads

This alternative proposes the construction of a limited access expressway along the entire corridor. This alternative provides a pair of one-way frontage roads to connect the existing street network to the major interchanges.

The alternative would address the congestion that is expected to result from the increased travel demand, however would exacerbate the division that St. Francis Drive has brought to the community.

It is recognized that this alternative focuses primarily on the vehicular mode (car, truck and bus) and would improve traffic operations at the expense of the bicyclist and pedestrian due to additional crossing distances. This alternate also is at odds with the City of Santa Fe General plan objectives for transportation improvements which seek to promote alternative modes, as well as promoting development patterns that seek to bring the community together rather than adding distances between them. The interchanges would also create visual impacts.

A representative plan view of this alternative is shown in Figure 40.

H. Lane Conversion to Single Reversible Lane (through commuter traffic)

This alternative proposes to convert the median into a lane that is directional and reversible during peak hours and dedicated to serve the needs of commuters trying to get from I-25 to NM 599 and beyond. The single reversible lane would be located in the middle of the right-of-way. The median would be removed to allow for this lane.

This alternative would provide an additional through lane (the reversible lane) during the peak hours for through traffic. In the AM peak hour the reversible lane would be used for northbound traffic. In the PM peak hour the reversible lane would be used for southbound traffic.

During peak hours when the reversible lane is restricted, left turns are only allowed at intersections. During off-peak times the reversible lane would act as a two-way left turn lane. The intent of this alternative is to achieve traffic efficiency by providing an extra traffic lane during peak travel times. This alternative would require reconstruction of the roadway to remove the median for the reversible lane. Also, substantial additional signage and lighting would be required in order to properly sign this alternate so motorists would know what to do and when to do it. Also, depending on the configuration and operation of the reversible lane, an increase in head-on collisions is a distinct possibility with this alternative.

A representative plan view of this alternative is shown in Figure 41.

I. Lane Conversion to Single Reversible Lane (city commuter traffic)

This alternative proposes to convert one lane that is directional and reversible to serve the needs of commuters trying to get to the South Capitol Complex or downtown during peak hours. The single reversible lane would be located in the middle of the right-of-way. The median would be removed to allow for this lane.

During peak hours when the reversible lane is restricted, left turns are only allowed at intersections. The intent of this alternative is to achieve traffic efficiency by providing an extra traffic lane during peak travel times.

In this alternative the reversible lane would be split into two sections, a north and a south. The south section would extend from Sawmill Road to Alta Vista Street. In this section the reversible lane would be used for northbound traffic in the AM peak hour and southbound traffic in the PM peak hour.

The north section would extend from Alamo Drive to Hickox Street/Paseo de Peralta (South). In this section the reversible lane would be used for southbound traffic in the AM peak hour and northbound traffic in the PM peak hour.

A representative plan view of this alternative is shown in Figure 42.

This alternative would require reconstruction of the roadway to remove the median for the reversible lane. Also, substantial additional signage and lighting would be required in order to properly sign this alternate so motorists would know what to do and when to do it. Also, depending on the configuration and operation of the reversible lane, an increase in head-on collisions is a distinct possibility with this alternative.

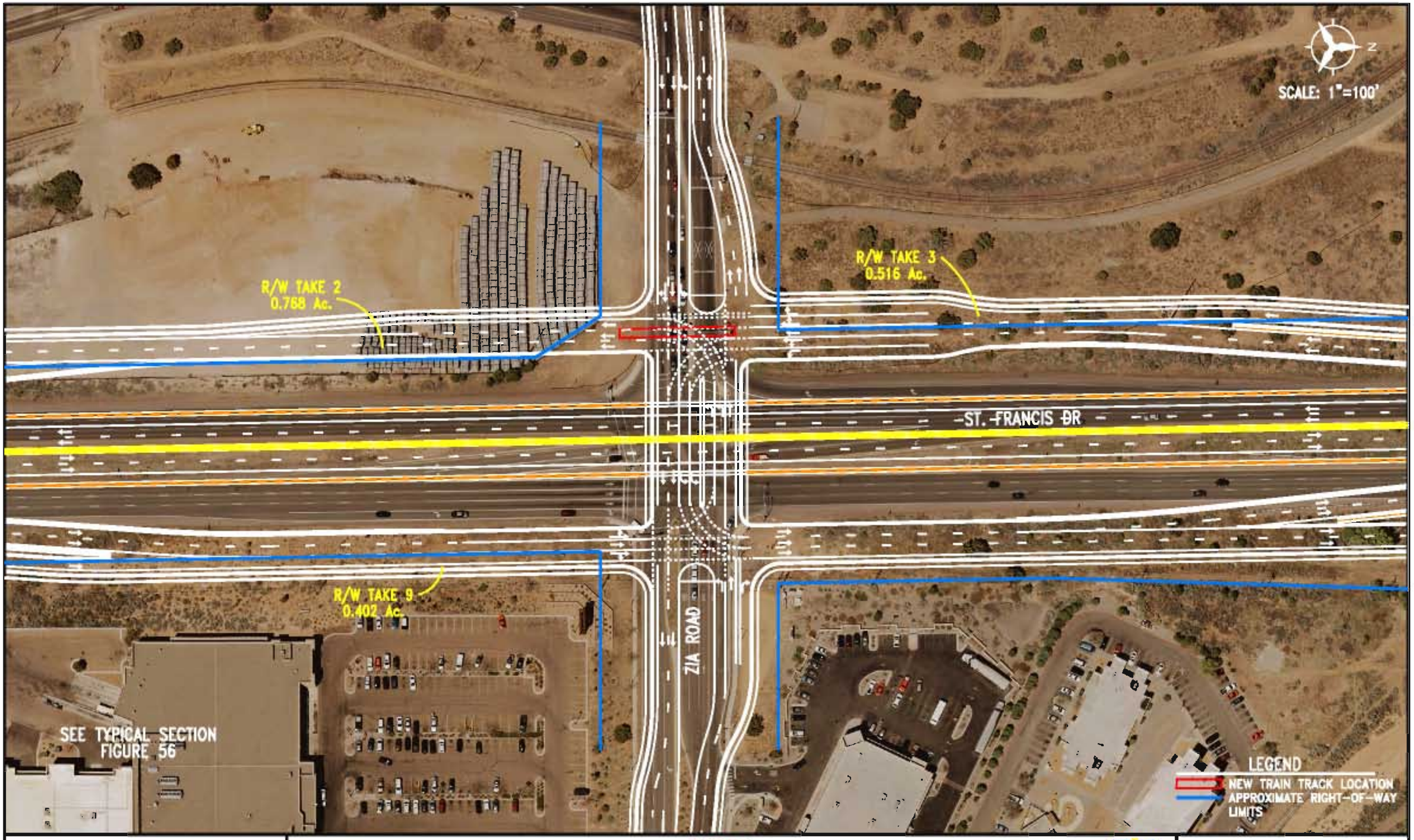

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FIGURE 40
EXPRESSWAY WITH FRONTAGE ROAD

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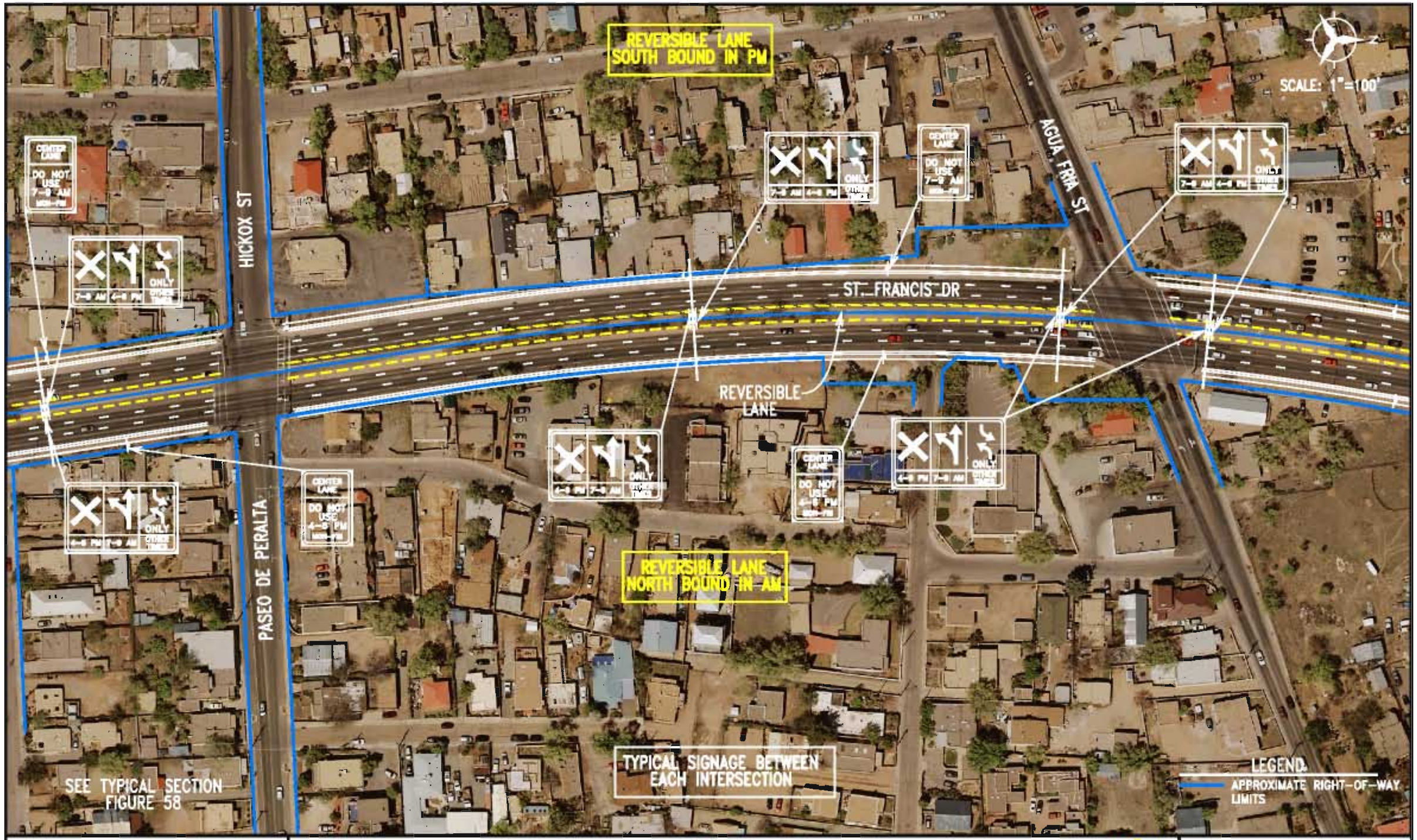

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FIGURE 41
LANE CONVERSION
TO REVERSIBLE LANE
(THROUGH COMMUTER TRAFFIC)

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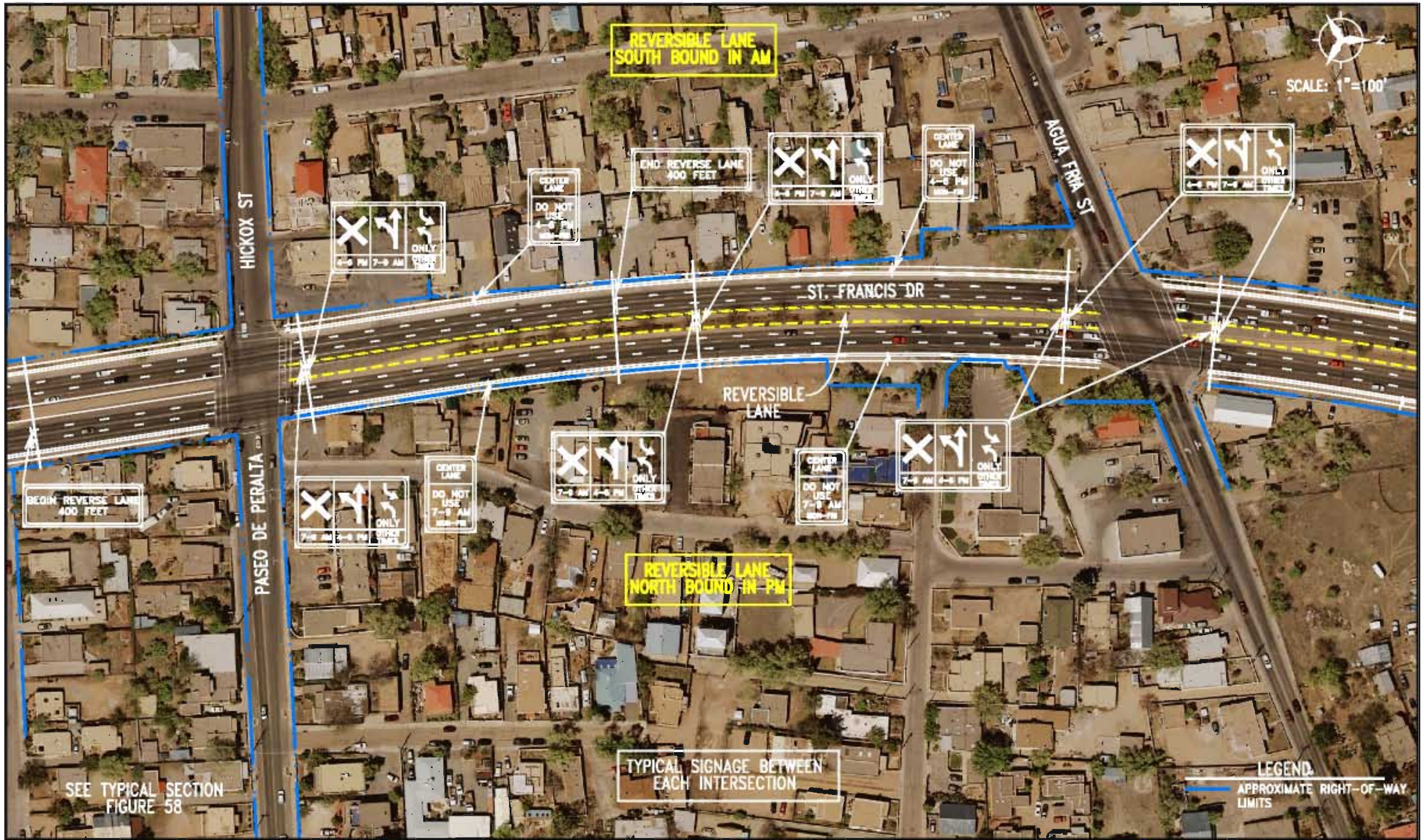

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FIGURE 42
LANE CONVERSION TO REVERSIBLE LANE (CITY TRAFFIC COMMUTER)

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J. Split-Level Expressway

This alternative proposes the construction of a limited access split-level expressway located above the existing roadway. The existing St. Francis Drive could be reduced in section as the upper level expressway would remove a large amount of through traffic. This alternative would provide just five interchanges along the corridor, in addition the I-25 and NM 599.

The reduced requirement for through traffic lanes on St. Francis Drive would allow for expanded urban design, pedestrian, and bicyclist opportunities.

It is recognized that this alternative focuses primarily on the vehicular mode (car, truck and bus) and would improve traffic operations at the expense of the bicyclist and pedestrian due to additional crossing distances. This alternate also is at odds with the City of Santa Fe General plan objectives for transportation improvements which seek to promote alternative modes, as well as promoting development patterns that seek to bring the community together rather than adding distances between them. This alternative also runs contrary to the goals of the Highway Corridor Plan and would create visual impacts.

A representative plan view of this alternative is shown in Figure 43.

K. Reduced Lane Width

This alternative proposes to keep all existing travel lanes and to make all lanes a consistent width of 10.5' – 11.0'. Any right-of-way gained through the reduction of lane width will be replaced by bike lanes, sidewalks and landscape focusing on providing alternative modes of transportation. The addition of bike lanes, sidewalks and landscape will allow the pedestrian experience to be improved especially north of Cerrillos Road because of the limited right-of-way.

Although the capacity will remain the same, the intent of this alternative is to provide and encourage alternative modes of transportation by providing multi-use paths within the right-of-way and connecting to other trails within Santa Fe. The reduced lane widths may improve pedestrian safety due to the possibility of lower vehicular speeds; however there may be an increase in vehicular sideswipe crashes due the reduced lane width.

A representative plan view of this alternative is shown in Figure 44.

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FIGURE 43
SPLIT-LEVEL EXPRESSWAY

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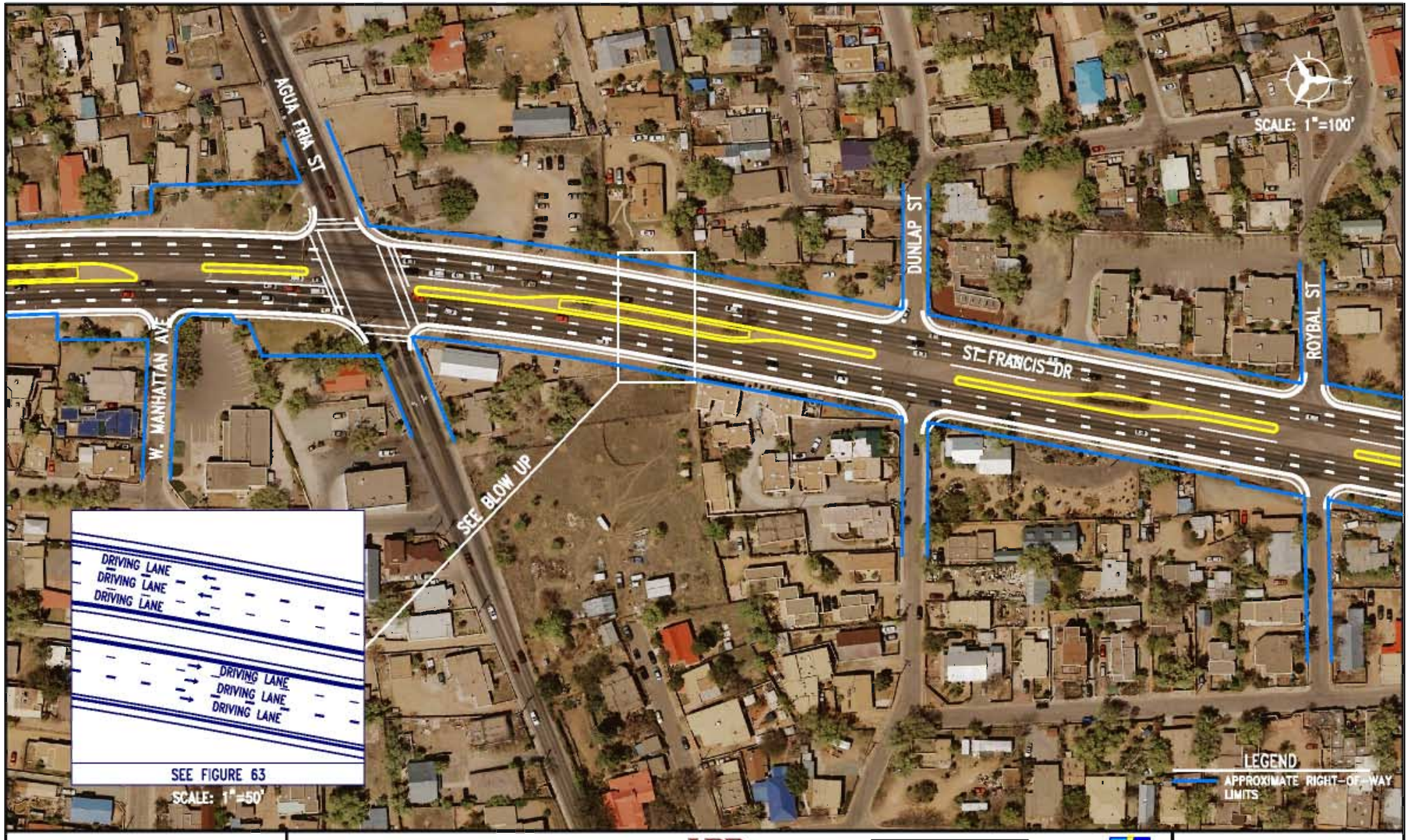

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FIGURE 44
REDUCED LANE WIDTH

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L. Intersection Improvements

This alternative proposes the construction of targeted improvements at specific locations where they are necessary to improve traffic operations and enhance pedestrian crossings. This alternative includes other limited improvements such as reducing curb radii or adding an additional turn or through lane at the intersection, to complete intersection reconstruction to roundabouts or isolated grade separated interchanges.

This alternative responds to the future expected travel demand while limiting the impacts to specific locations along the corridor. This alternative would also, to the maximum extent possible, incorporate urban design components to improve the pedestrian, bicyclists, and street experience. Right-of-way acquisitions would be kept to a minimum with this alternative.

It is recognized that this alternative focuses primarily on the vehicular mode (car, truck and bus) and would improve traffic operations at the expense of the bicyclist and pedestrian due to additional crossing distances. However portions of the improvements from this alternative could improve pedestrian and bicycle visibility through the use of bulb-outs, reducing the radius on the corners of the intersections where improvements are constructed, improved pedestrian signal timing and signal head, bicycle signal detection, etc.

M. Access Control

This alternative would seek to improve traffic flow by improving access control (removing median breaks or excessive driveways).

Analysis presented in the previous sections indicates that there are a significant number of driveways onto St. Francis Drive (see Figure 19, page 48). The vast majority of these driveways are for single ownership parcels and do not lend themselves to removal or consolidation via frontage roads due to the limited right-of-way.

N. Complete Streets

This alternative proposes to create “Complete Streets” along the entire St. Francis Drive corridor through the addition of landscaped medians, landscaped shoulders, multi-use paths, site furnishings, pedestrian lighting and modified intersections. It is recognized that this concept primarily focuses on pedestrian connectivity and street aesthetics and has no impact on accommodating future travel demand. Capacity would not increase or change unless combined with other alternatives. This alternative allows for St. Francis Drive to act as a more cohesive community element and entrance into Santa Fe seeking to bring the neighborhoods and community together rather than separating them.

The primary focus of this alternative is on alternative modes of transportation (bike and pedestrian) and creating pedestrian friendly linkages between the two sides of St. Francis Drive. The effectiveness of

this alternative is restricted by the limited right-of-way, especially north of San Mateo Rd. The Complete Street concept could, and should, be incorporated with other alternatives, specifically the lane conversion or lane removal concepts, allowing the focus to be on alternative modes of transportation.

A representative plan view of this alternative is shown in Figure 45.

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FIGURE 45
COMPLETE STREETS ALTERNATIVE

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O. Trail Connectivity

This alternative proposes to create and enhance the pedestrian and bicycle trail and path connectivity along the corridor and enhance linkages to other trails in Santa Fe and the surrounding neighborhoods. A continuous multi-use path either in the median or along the edges of the roadway would be added and/or enhanced for the entire length of the corridor. New trail connections will also link east/west crossings along the entire corridor. This multi-use path is intended mainly for pedestrians and bicycles. Specifically, the multi-use path would connect to other trail networks in Santa Fe such as the River Trail, Acequia Trail, Rail Trail, and Arroyo Chamiso Trail, as well as linking into the proposed St. Francis Drive trail between Zia and St. Michaels. For best connectivity to trail systems, it is recommended that grade separated crossings are implemented along the corridor similar to the proposed Arroyo Chamiso crossing just north of Zia on St. Francis Drive.

The primary focus of this alternative is on enhancing and encouraging alternative modes of transportation (bike and pedestrian) and creating linkages between the two sides of St. Francis Drive. However this alternative is restricted by the limited right-of-way especially north of San Mateo Road. This concept primarily focuses on connectivity and aesthetics and will have limited impact on vehicular capacity. Capacity would not increase or change unless combined with other alternatives or a substantial amount of traffic transfers to bicycle or pedestrian modes.

This alternative could be incorporated with other alternatives, specifically the lane conversion or lane removal concepts, allowing the focus to be on the alternative modes of transportation.

P. Enhanced Transit Service

This alternative proposes a detailed study evaluating local rail service from NM 599 to the Santa Fe Depot to accommodate local Santa Fe residents and commuters. According to the 2000 census data, 84% of jobs in Santa Fe are worked by people living in Santa Fe County (Table 2). With the strong local workforce, a local Rail Runner service could provide an alternative mode of transportation potentially decreasing traffic congestion along St. Francis Drive and other routes throughout the City, while also reducing the parking demands downtown. This service would be provided using the same track as the NM Rail Runner Express service to Albuquerque. The new local rail service would run during off-peak express service times and may require additional trains.

In addition to the local rail service, this alternative proposes that an additional Santa Fe Trails bus route servicing Eldorado be studied for viability. This route would exit off I-25 onto St. Francis Drive with stops at key locations including Zia and Siringo Roads, the South Capitol Station, the Railyard and Downtown Transit Mall, and the De Vargas Mall. An alternative route would be to use Old Pecos Trail to serve Downtown.

According to the 2005-2007 American Community Survey data, only 1.5% of the people in the City of Santa Fe and the Santa Fe Metro area used public transportation as a means to get to work (Table 3).

Additionally, only 2.9% of the people walked to work and only 2.0% of the people took a taxicab, motorcycle, bicycle or other means as a way to get to work. Eighty-nine percent of people drove a car, truck or van to work with 74% of the total number of people commuting to work driving alone. The intent of this alternative is to provide additional means of alternative modes of transportation to help entice Santa Fe residents and commuters to utilize public transportation, decrease dependence on the automobile and balance the need for expanded transportation capacity while enhancing the character of the community.

This alternative focuses on decreasing the number of vehicles using St. Francis Drive and the entire City street system by providing opportunities for alternative modes of transportation and therefore potentially improving traffic operations due to the reduced number of commuter vehicles travelling downtown.

Q. Transportation System Management

Transportation system management refers to measures designed to improve traffic operations by more efficiently utilizing the existing transportation network. An example of this would be developing a new traffic signal timing plan for the corridor to reflect changing conditions. Incorporating the corridor into a regional Intelligent Transportation System network could also squeeze improvements in operation without the investment of constructing roadway improvements.

Transportation demand management is also sometimes considered a transportation systems management approach. Transportation demand management focuses on reducing peak-hour trips through various mechanisms, such as employer-subsidized carpooling or transit incentives, to increased costs for parking, in order to discourage single occupant vehicle commuting.