FINAL RECOMMENDATIONS

LAS OLAS COMMUNITY TRANSPORTATION PLAN

Prepared for:
City of Fort Lauderdale

040111001
June 12, 2000
© Kimley-Horn and Associates, Inc.

Kimley-Horn
and Associates, Inc.

Kimley-Horn
and Associates, Inc.

FINAL RECOMMENDATIONS

LAS OLAS COMMUNITY TRANSPORTATION PLAN

Prepared for:
City of Fort Lauderdale

040111001
June 12, 2000
© Kimley-Horn and Associates, Inc.

INTRODUCTION

Residents and business located east of U.S. 1 in the area known as the Las Olas Community have expressed concerns over the amount of roadway congestion and cut-through traffic in the area. Kimley-Horn and Associates, Inc. has completed a transportation plan for the Las Olas Community at the request of the City of Fort Lauderdale. This plan includes input from City staff, a Citizen's Advisory Committee, and individual residents and business owners obtained during a number of community meetings and workshops.

The study area for the transportation plan was focused primarily on the area bordered on the north by Broward Boulevard, on the south by Las Olas Boulevard, on the west by Federal Highway, and on the east by the Intracoastal Waterway. The intent of the transportation plan is not to maximize the throughput of vehicles, but to manage the existing traffic levels and maintain a livable, sustainable community.

The plan is conceptual in nature. Various elements of the plan would require further detailed design before implementation. Recommendations include the use of traffic calming measures such as strategic signing, landscaping, medians, raised intersections, and paver treatments to encourage slower speeds and discourage through traffic. Additionally, intersection modifications are recommended to improve the efficiency of the existing roadway network. Existing roadway capacity constraints can be relieved and traffic calming measures can be constructed to ensure a steady, consistent flow of vehicular traffic through the area. Desired byproducts of this are increased, sustainable economic development and an increase in non-motorized travel. The overall plan is illustrated on Exhibit 1.

TRAFFIC CALMING MEASURES

The Institute of Transportation Engineers defines traffic calming as follows: *Traffic calming is the combination of mainly physical measures that reduce the negative effects of motor vehicle use, alter driver behavior, and improve conditions for non-motorized street users*. Traffic calming generally focuses on lowering vehicle speeds and reducing traffic volumes by encouraging vehicular trips to use alternate routes better suited for moving traffic. With lower vehicular speeds and reduced cut-through volumes, the area's environment becomes more hospitable to local businesses, residents, and pedestrians. A number of traffic calming measures are recommended in the Las Olas Community Transportation Plan. They are outlined below and illustrated in the overall plan (Exhibit 1).

- **Median islands** – median islands provide a safe refuge for pedestrians crossing mid-block and an opportunity for landscaping. New median islands are proposed in the two-way left-lane on Broward Boulevard and at several locations on east Las Olas Boulevard. On-street (24-hour) parking would have to be removed from one side of Las Olas Boulevard in blocks where median islands are proposed on east Las Olas Boulevard. However, off-peak parking could be allowed at these locations. Exhibits 2 and 3 illustrate the modifications required with the median islands proposed on Las Olas Boulevard.
- **Landscaping** – landscaping in medians and on the roadside narrows the visibility triangle, causing drivers to slow down. Consistent landscaping would help define the area as a livable community and area roadways would look more like local streets to commercial and "first time" traffic.
- **Paver treatments** – pavers create a textured roadway surface. Drivers tend to react when crossing pavers because the texture causes vibrations in the vehicle.

The textures also identify the location as a place for pedestrians as well as vehicles and enhance the appearance of the street. At-grade paver treatments are recommended at the school crossing on Broward Boulevard east of 10th Avenue (estimated construction cost $10,000). At-grade pavers are also recommended for the three intersections on 15th Avenue between Broward Boulevard and Las Olas Boulevard (estimated construction cost $20,000 each intersection). See Exhibit 4. They can also be used in the left turn lanes between the proposed median islands on Broward Boulevard to increase the community "feel" of the roadway and decrease the wide expanses of pavement.

- **Raised intersections** – raised intersections are up to six inches higher than the rest of the street bringing them to the same elevation as the sidewalk. They use paver treatments and are ramped along all intersection approaches providing a greater incentive to the driver to slow speeds. Raised intersections also raise the elevation of pedestrians, especially school-age children, increasing their visibility to drivers. Exhibit 5 illustrates a typical raised intersection, recommended for 12 locations within the neighborhood (estimated construction cost $45,000 each intersection; $540,000 for all twelve).
- **Gateway features** – focal points surrounding the community would define the area as a community, not a trafficway for moving traffic. These features need to be designed with community identity in mind and may include landscaping, walls, sculptures, fountains, and so on.
- **Tourist Oriented Directional Signage** – distinctive signs surrounding the community would seek to route heavy commercial and "first time" cut-through traffic around the Las Olas Community, while routing consumers to the Las Olas shopping district.

INTERSECTION MODIFICATIONS

Cost-effective modifications were identified at three intersections in the Las Olas Community where significant capacity constraints exist. Travel through the community is generally unimpeded except at the signalized intersections of Broward Boulevard & 8th Avenue, Broward Boulevard & 15th Avenue, and Las Olas Boulevard & 15th Avenue. Because of delays caused by capacity constraints at these locations, some vehicles are diverted to local streets such as 12th, 13th, and 16th Avenues. Specific modifications to these signalized intersections are recommended in order to adequately serve the traffic demand. These modifications are meant to relieve existing capacity constraints while minimizing the potential for attracting new traffic. The recommended modifications are illustrated in the attached exhibits. These modifications were conceptually designed to identify any fatal flaws to their possible implementation. More issues associated with these modifications may be revealed during more detailed design efforts.

Broward Boulevard & 8th Avenue

Significant queues exist northbound at this intersection during the PM peak hour for vehicles turning left onto westbound Broward Boulevard. Restriping the south leg to provide a designated left-turn lane and a shared left and right-turn lane will provide more storage and allow more green time to be allotted to major eastbound and westbound traffic flows. See Exhibits 6 and 7. Minor modifications to the west leg of the intersection will be necessary in order to provide adequate pavement width and radius to receive both left-turn lanes, including the removal of a concrete median and restriping eastbound lanes. Estimated construction cost is $50,000.

Broward Boulevard & 15th Avenue

Similarly, it is recommended that the south leg of the intersection of Broward Boulevard & 15th Avenue be modified to serve heavy left turn volumes during peak hours. The existing pavement will have to be widened to provide a single southbound lane and two northbound lanes – one designated left-turn lane and one shared left, through, and right-turn lane. Sufficient right-of-way exists to provide for three lanes of traffic. See Exhibits 8, 9, and 10. The west leg of the intersection will also have to be modified in order to provide sufficient pavement width and radius to receive dual left-turn traffic. The existing sidewalk on the north side of the west leg will have to be relocated to the right-of-way line. The landscape strip on the south side of the west leg will have to be removed. Some right-of-way acquisition will be necessary – the southwest quadrant will require a corner clip in order to provide adequate sidewalk width and space for the relocated signal pole. Estimated construction cost is $135,000.

Las Olas Boulevard & 15th Avenue

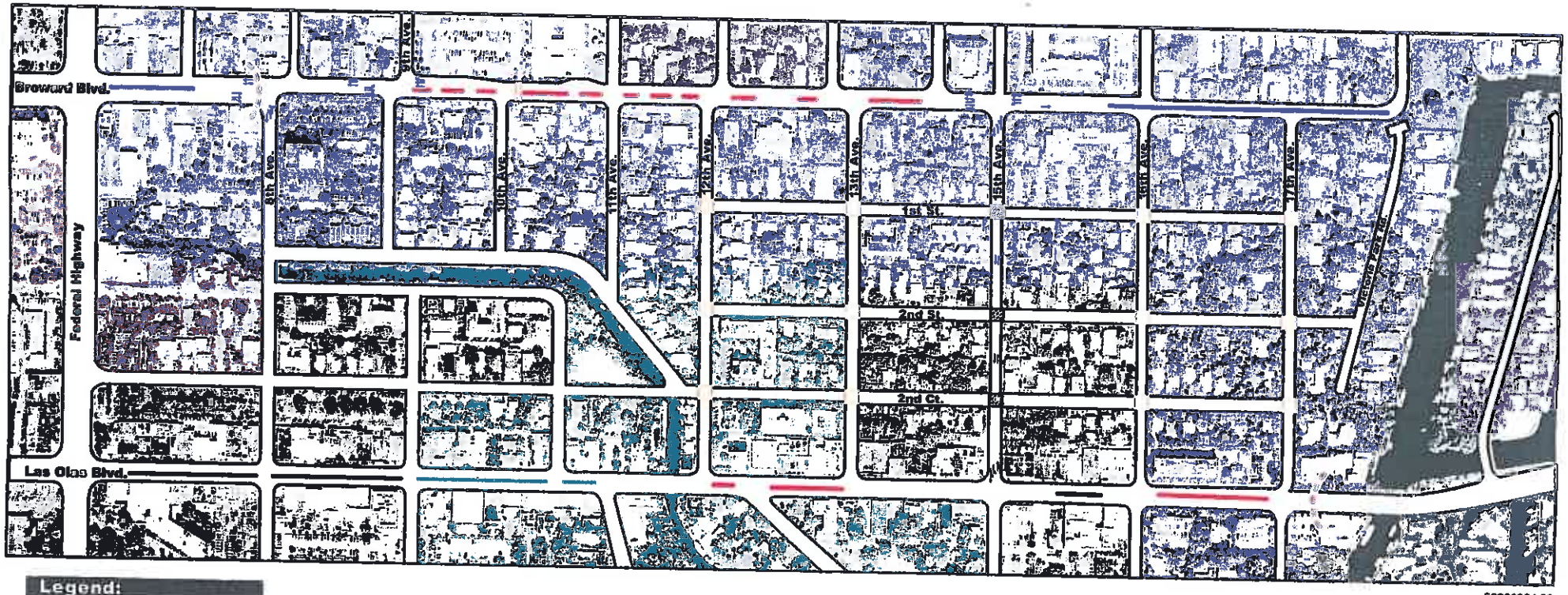
Dual southbound left-turn lanes are recommended on the north leg of the intersection to serve heavy volumes found during peak hours. As with the intersection of Broward Boulevard & 15th Avenue, the existing pavement will have to be widened to provide for three lanes of traffic within the existing right-of-way. It will be necessary to remove some on-street parking on the south side of the east leg in order to provide adequate width to receive dual left-turn traffic. See Exhibits 11, 12, and 13. The radius of the curb-line in the northeast quadrant will have to be increased to avoid conflicts with the southbound left-turn traffic, so a small portion of the sidewalk on the corner will be removed. Furthermore, a minor right of way corner clip may be necessary at this location. Estimated construction cost is $100,000.

SUMMARY

The recommended conceptual transportation plan for the Las Olas Community is shown in Exhibit 1 and includes traffic calming measures aimed at enhancing the area and mitigating the adverse impacts of traffic. The plan also includes proposals for operational modifications to address identified congestion points and smooth traffic passage on the streets identified as carrying the greatest volumes of traffic.

The plan has received extensive public consultation and debate and we believe that it is widely supported and represents a good basis for the future of the transportation system in the Las Olas Community.

Las Olas Community Transportation Plan Recommendations



Legend:

- Traffic Lanes
- Pedestrian Crossing
- Raised Intersection
- At Grade Paver Treatments
- Proposed Median
- Existing Median
- Urban Gateway Feature

11/19/99
Project No.: 040111001.1004

The City of Fort Lauderdale

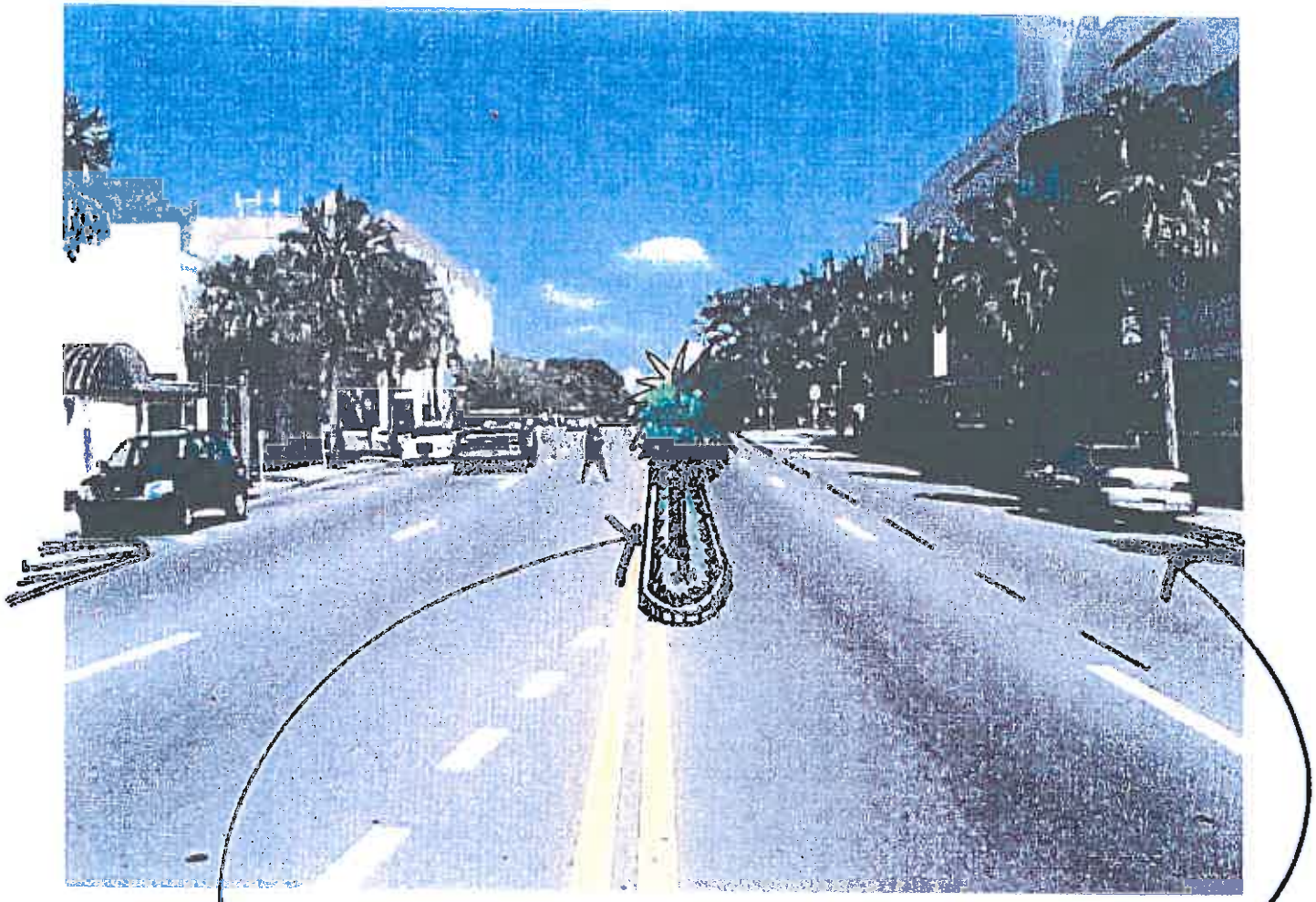
Exhibit 1

Kimley-Horn and Associates, Inc.

The City of Fort Lauderdale

Exhibit 2

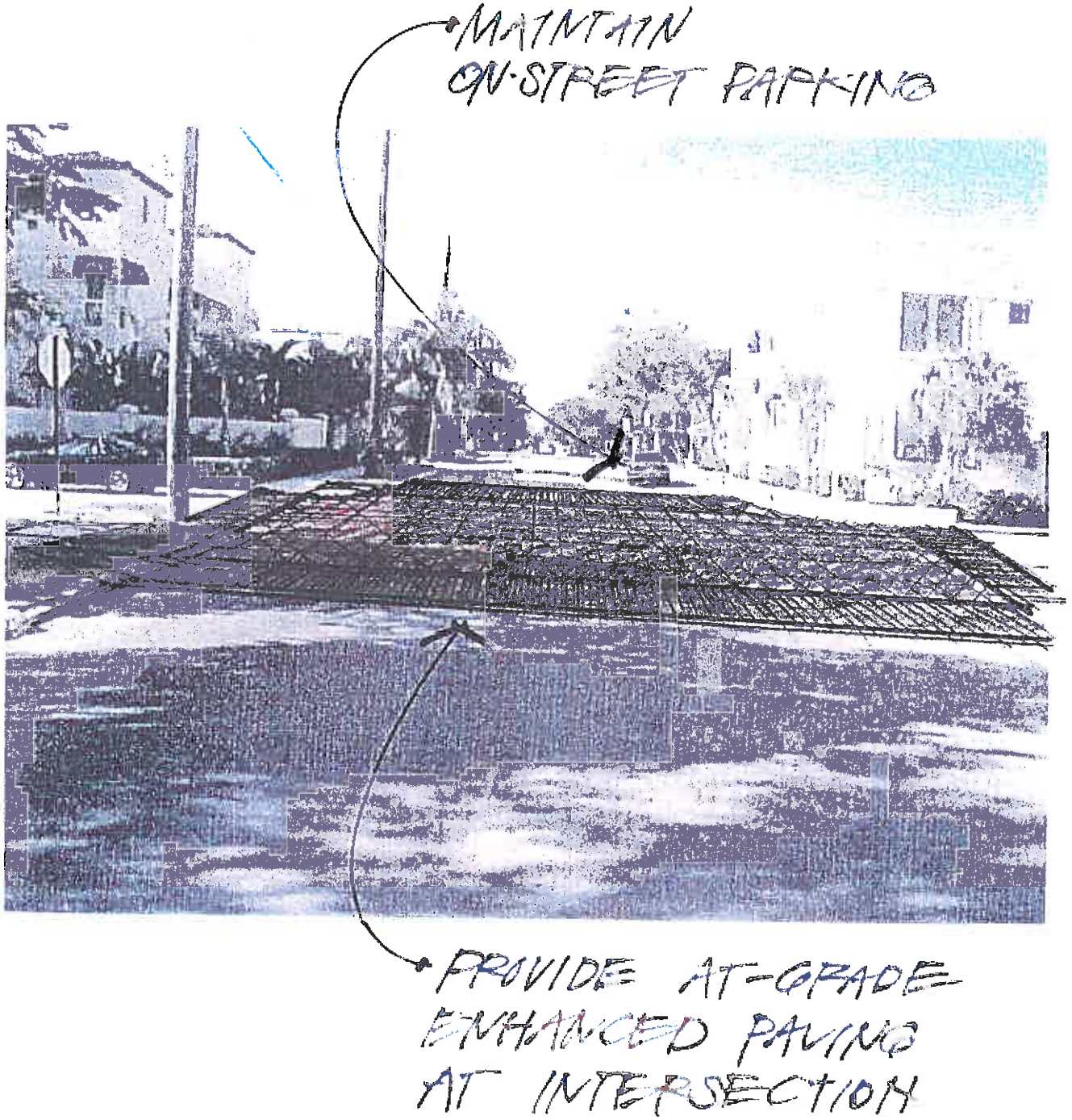
Kimley-Horn and Associates, Inc.



The City of Fort Lauderdale

Exhibit 3

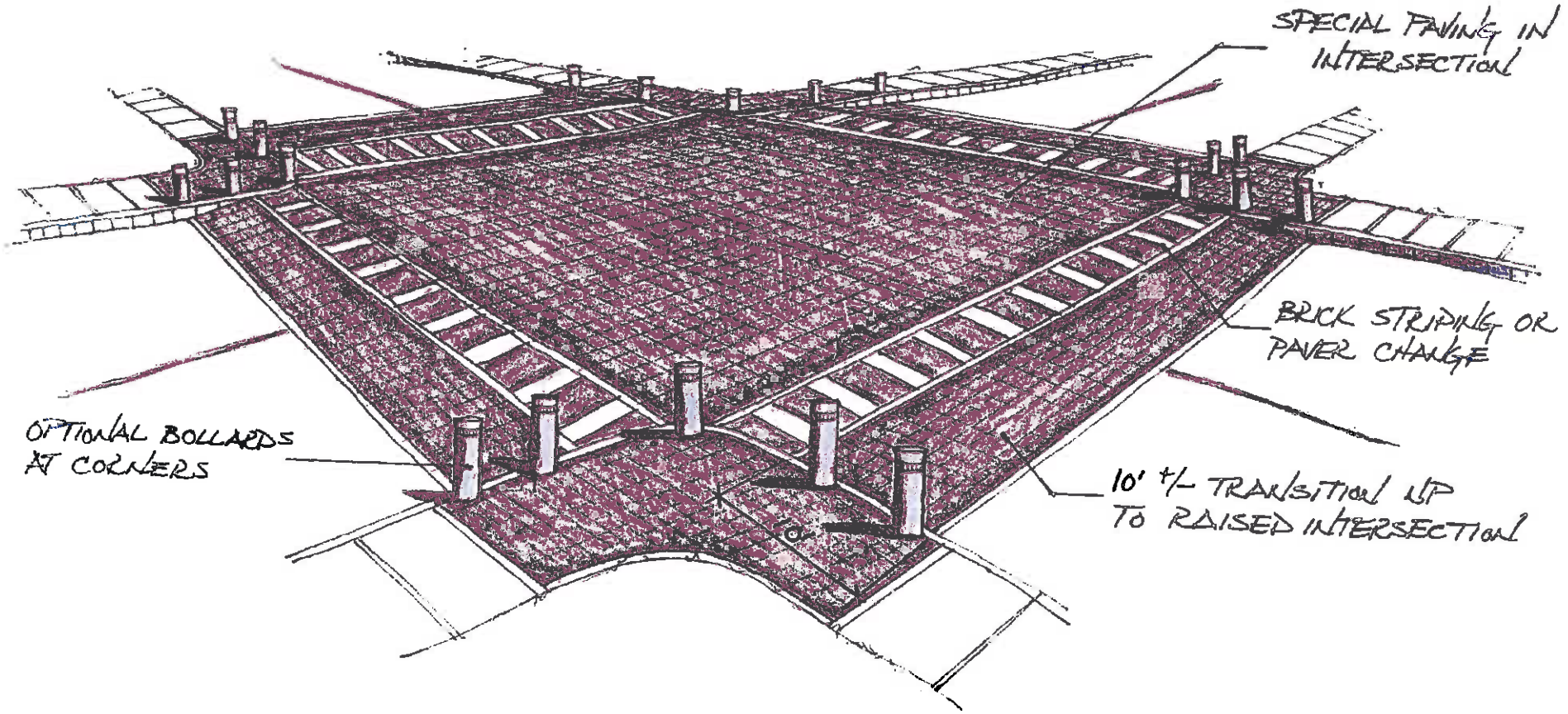
Kimley-Horn and Associates, Inc.



The City of Fort Lauderdale

Exhibit 4

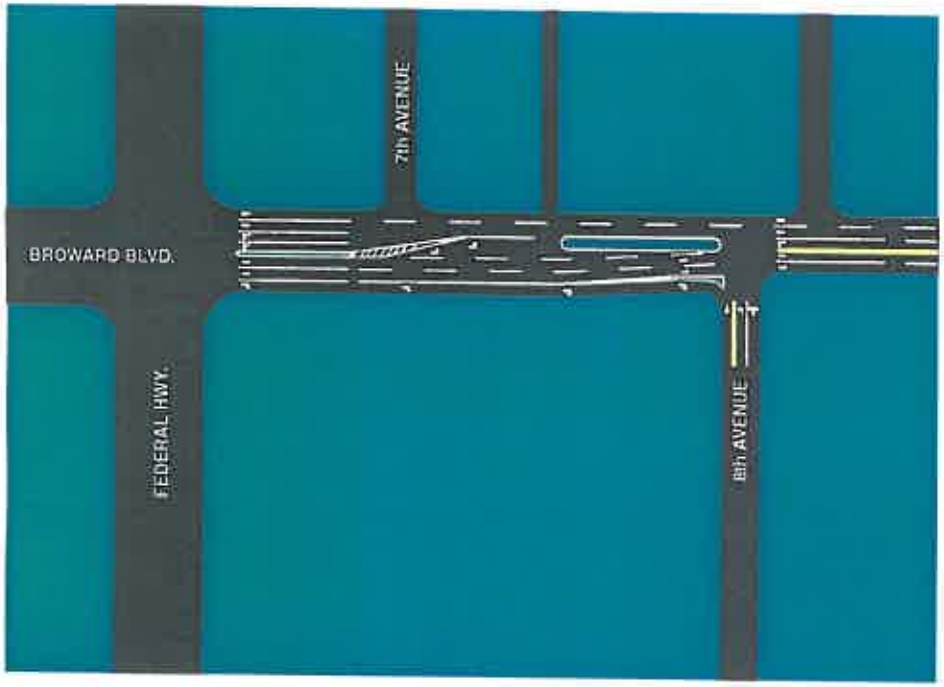
Kimley-Horn and Associates, Inc.



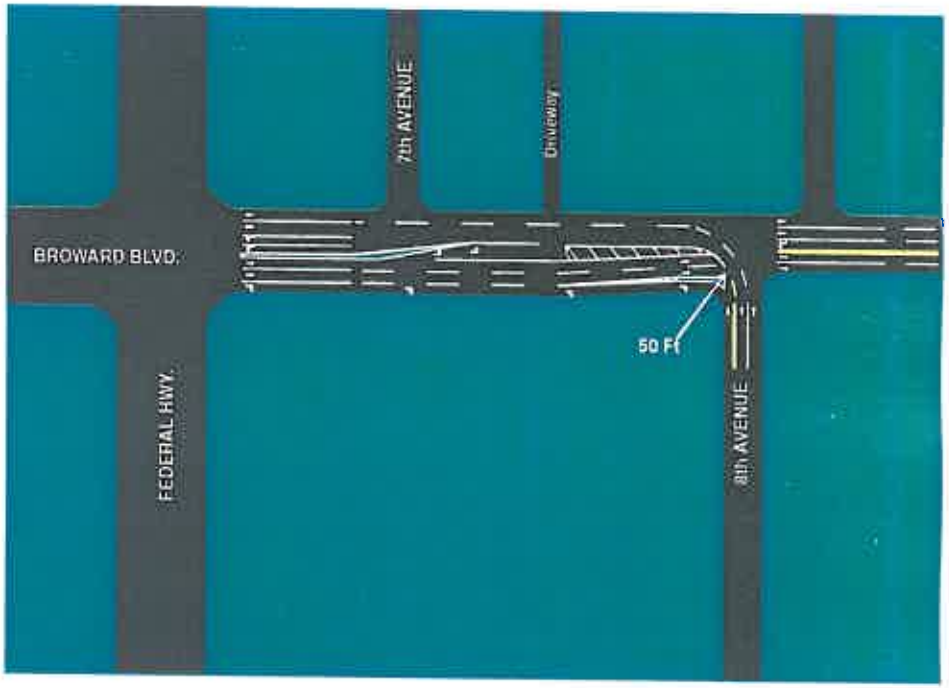
TYPICAL RAISED INTERSECTION

N.T.S.

8th AVENUE and BROWARD BLVD.



Existing Conditions



Future Conditions

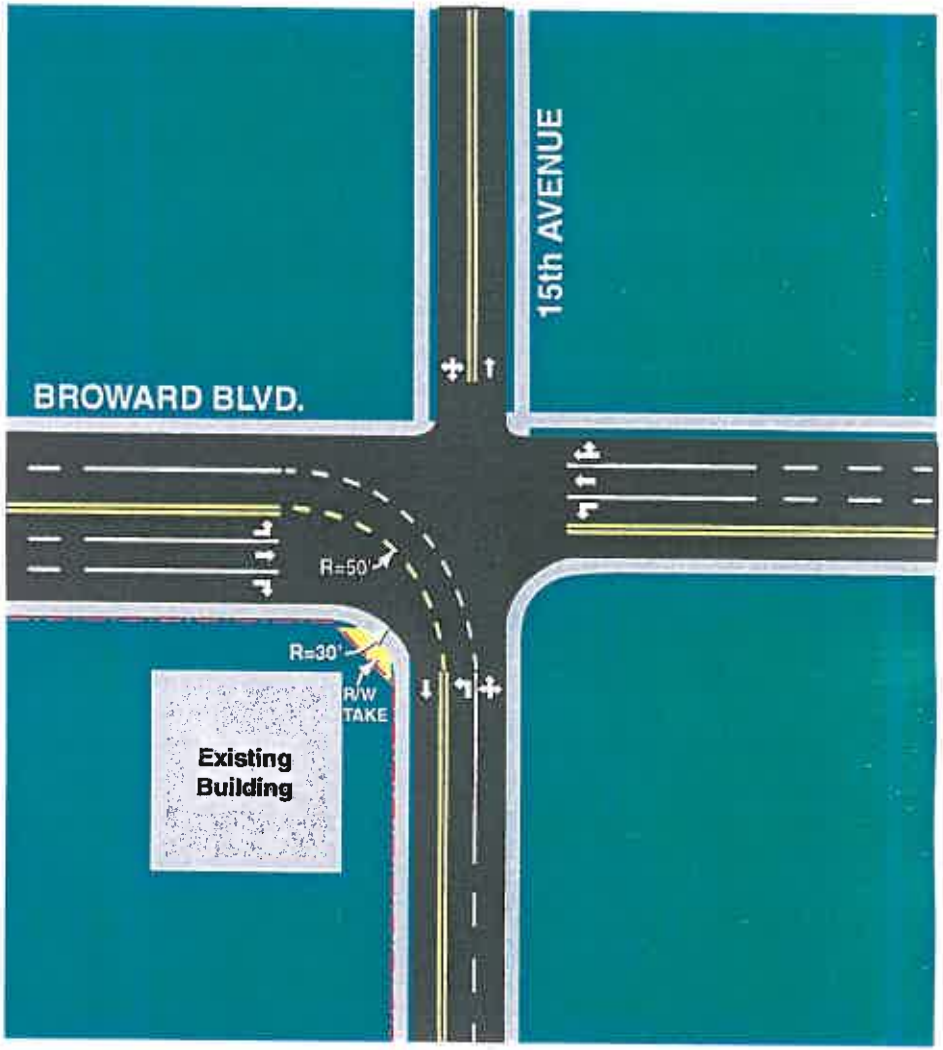
The City of Fort Lauderdale

Exhibit 7

Kimley-Horn and Associates, Inc.

15th AVENUE and BROWARD BLVD.

Existing Conditions



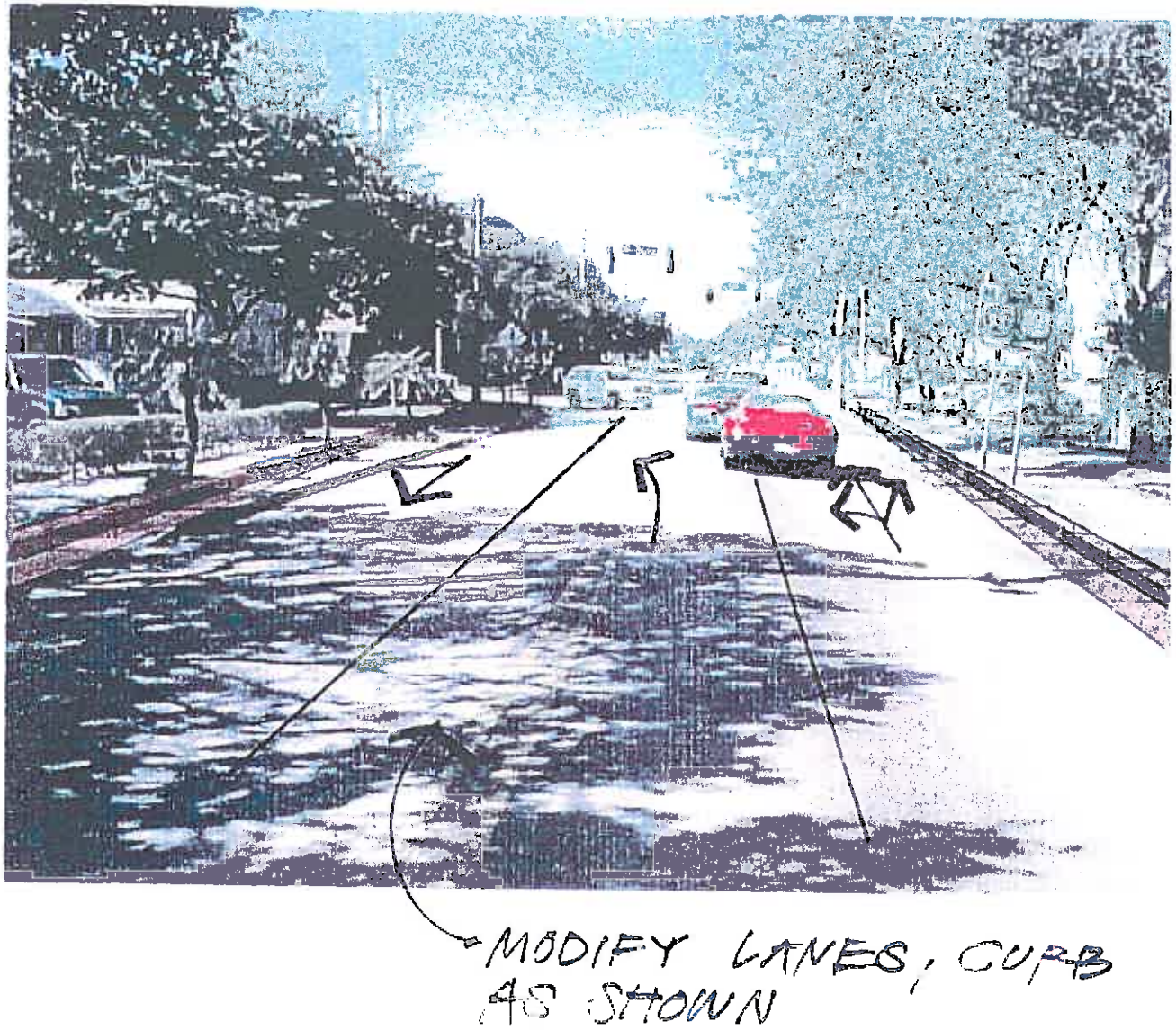
Future Conditions

The City of Fort Lauderdale

Exhibit 8

Kimley-Horn and Associates, Inc.

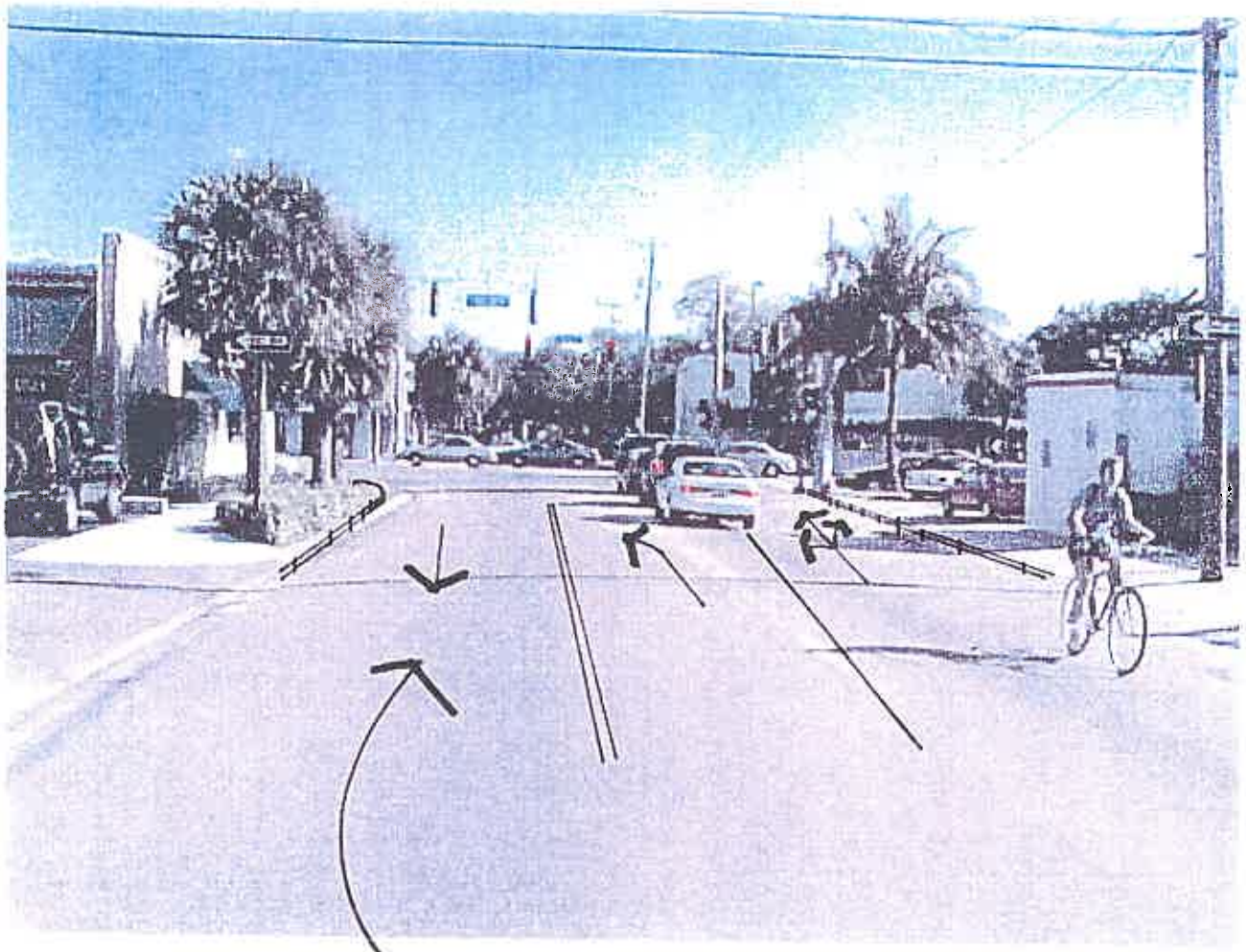

16' LANE WIDTHS
MODIFY LANE CONFIGURATIONS AS SHOWN


-MODIFY LANES, CURB
AS SHOWN

15th AVENUE and LAS OLAS BLVD.

Existing Conditions

Future Conditions


ADJUST LANES/CURBS
AS SHOWN

REMOVE EXISTING SIGNAL POLE, COMBINE W/ LIGHT POLE

ADJUST LANE CONFIGURATIONS AS SHOWN

The City of Fort Lauderdale

Exhibit 13

Kimley-Horn and Associates, Inc.