

Liberty & Rockaway

Intersection Safety & Traffic Improvements

2010



Commissioner Janette Sadik-Khan New York City Department of Transportation
Office of Research, Implementation & Safety -- June 03, 2010 Presentation to CB10

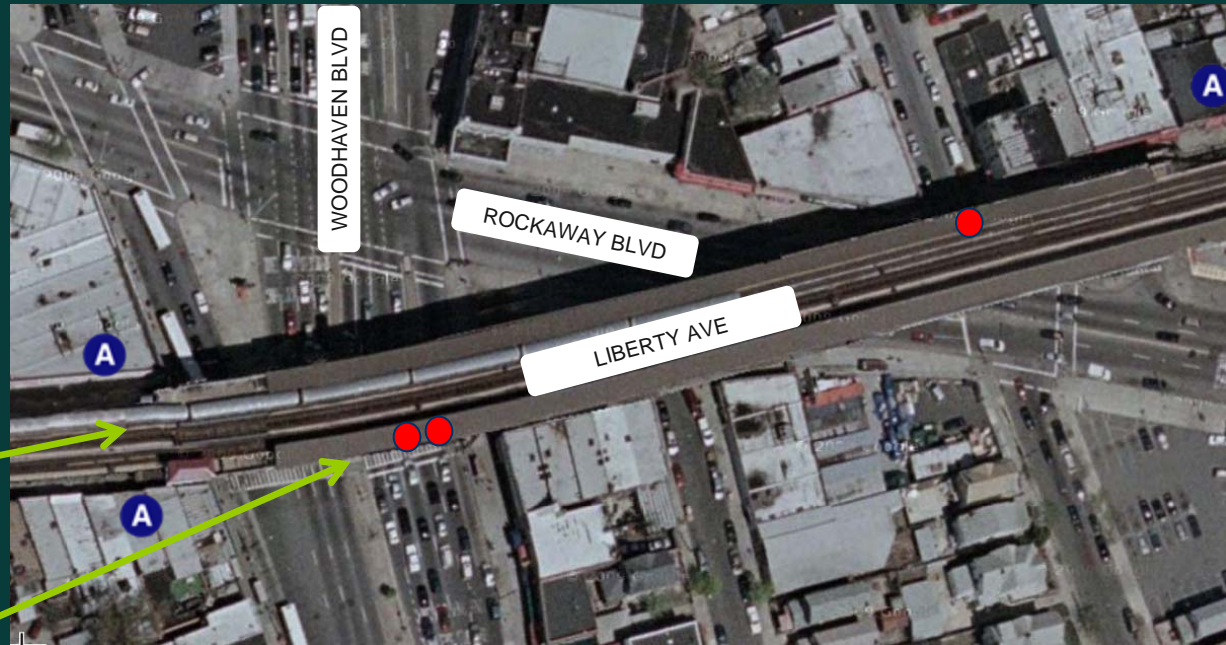


Project Background

- Child pedestrian fatality at Cross Bay Blvd and Liberty Ave in Jan 2009
- Cross Bay Blvd and Liberty Ave noted by NYPD as a challenging location
- Review requested by the Queens Borough Commissioner
- Within Woodhaven Boulevard Congested Corridor study area

Existing Conditions

- Rockaway Blvd subway station
- 7 bus lines
- High traffic volumes on Woodhaven/Cross Bay (over 2000 vph NB peak)
- Heavily congested intersections
- Complex intersection geometry
- Elevated train runs over Liberty Ave
- Busy commercial retail area
- Heavy pedestrian volume (including many children)

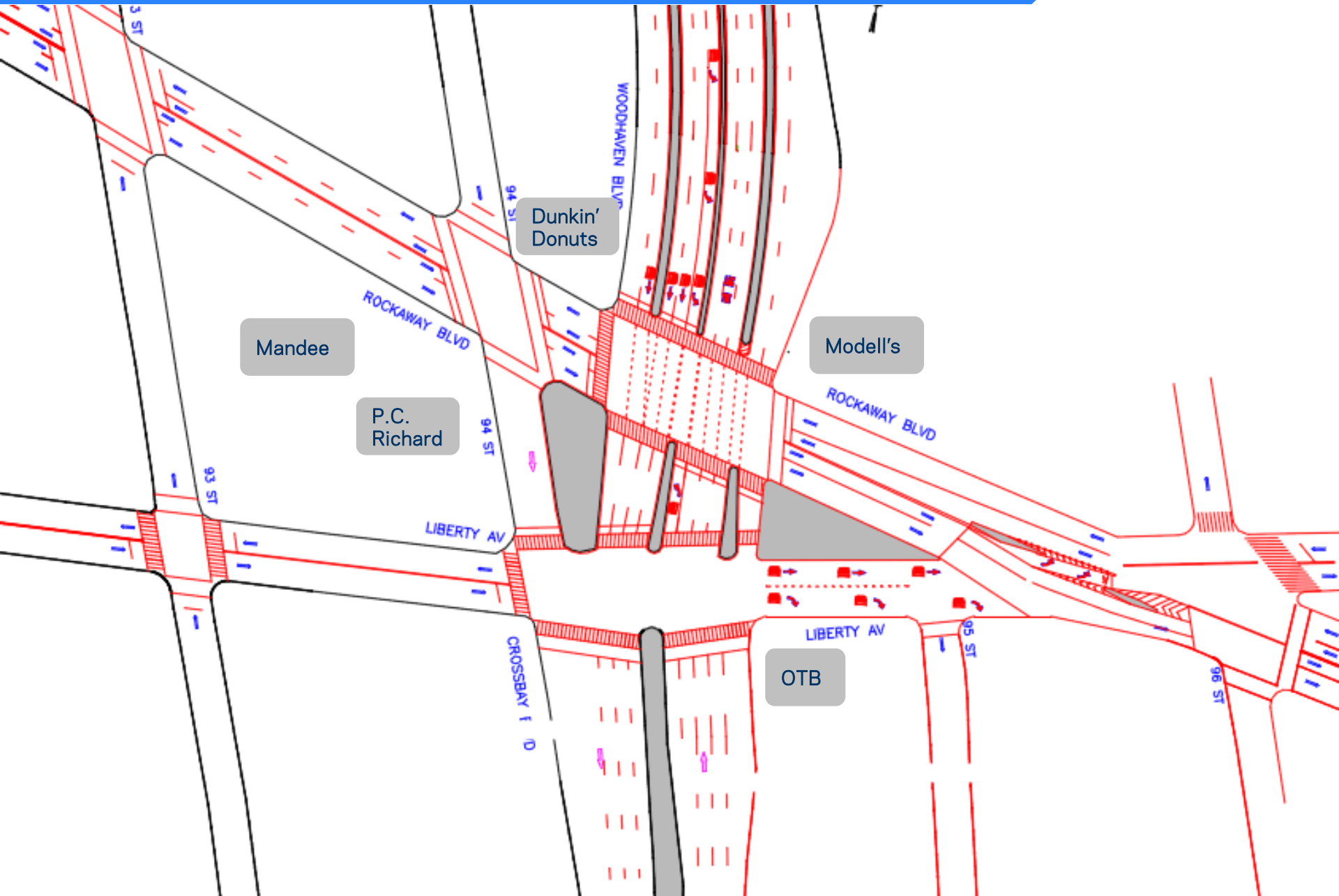


● Pedestrian Fatalities (2004-2009)

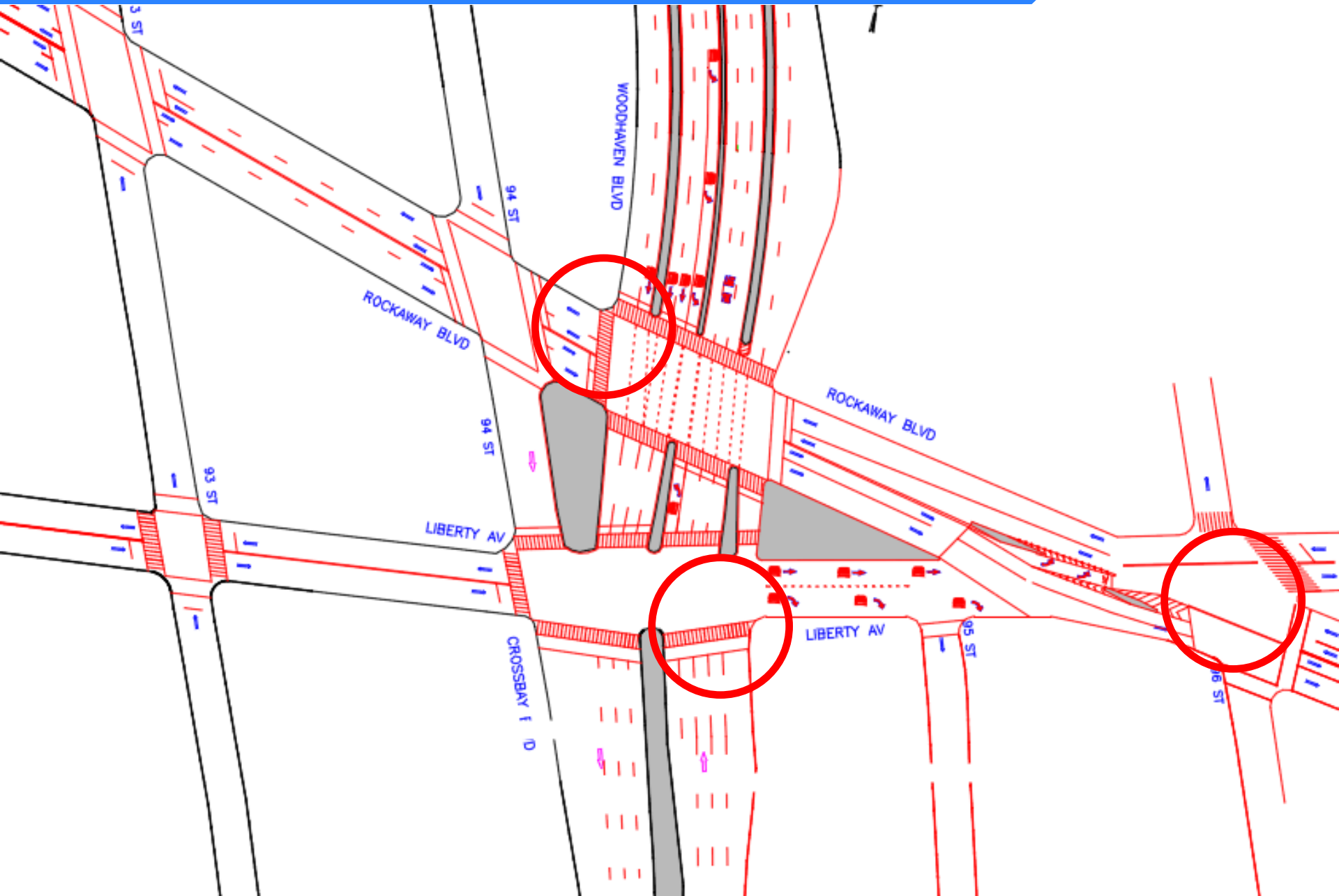
Severity-Weighted Injuries Intersection Ranking (Queens):
Rockaway & Woodhaven = 99th Percentile
Rockaway & 94th = 89th Percentile

Rockaway Blvd & Liberty Ave Between 94 th and 96 th Streets (2004-2008)		
	Total Injuries	Average Injury per Year
Pedestrian	13	2.6
Bicyclist	6	1.2
Motor Vehicle Occupant	188	37.6
Total Injuries	207	41.4

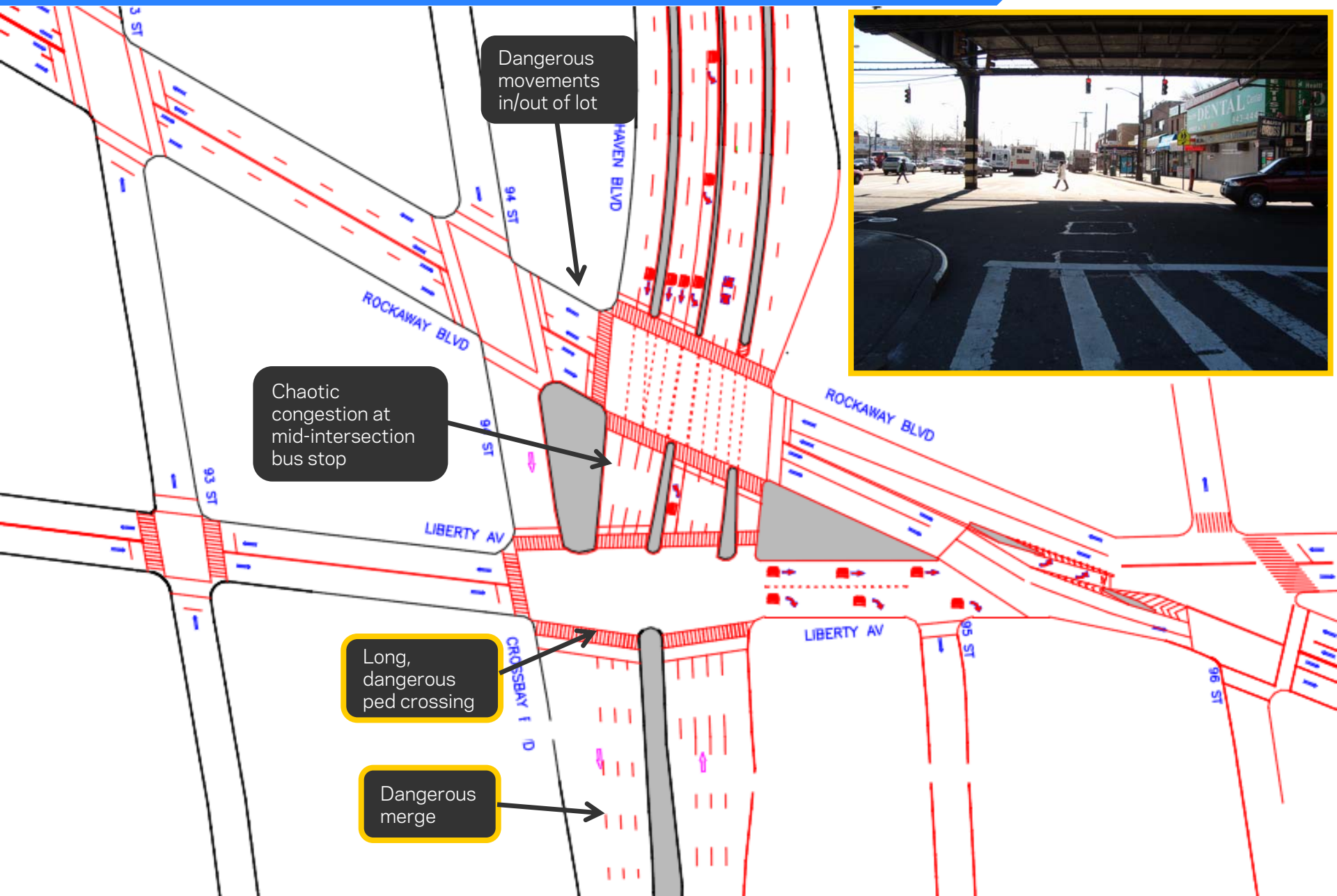
Existing Conditions



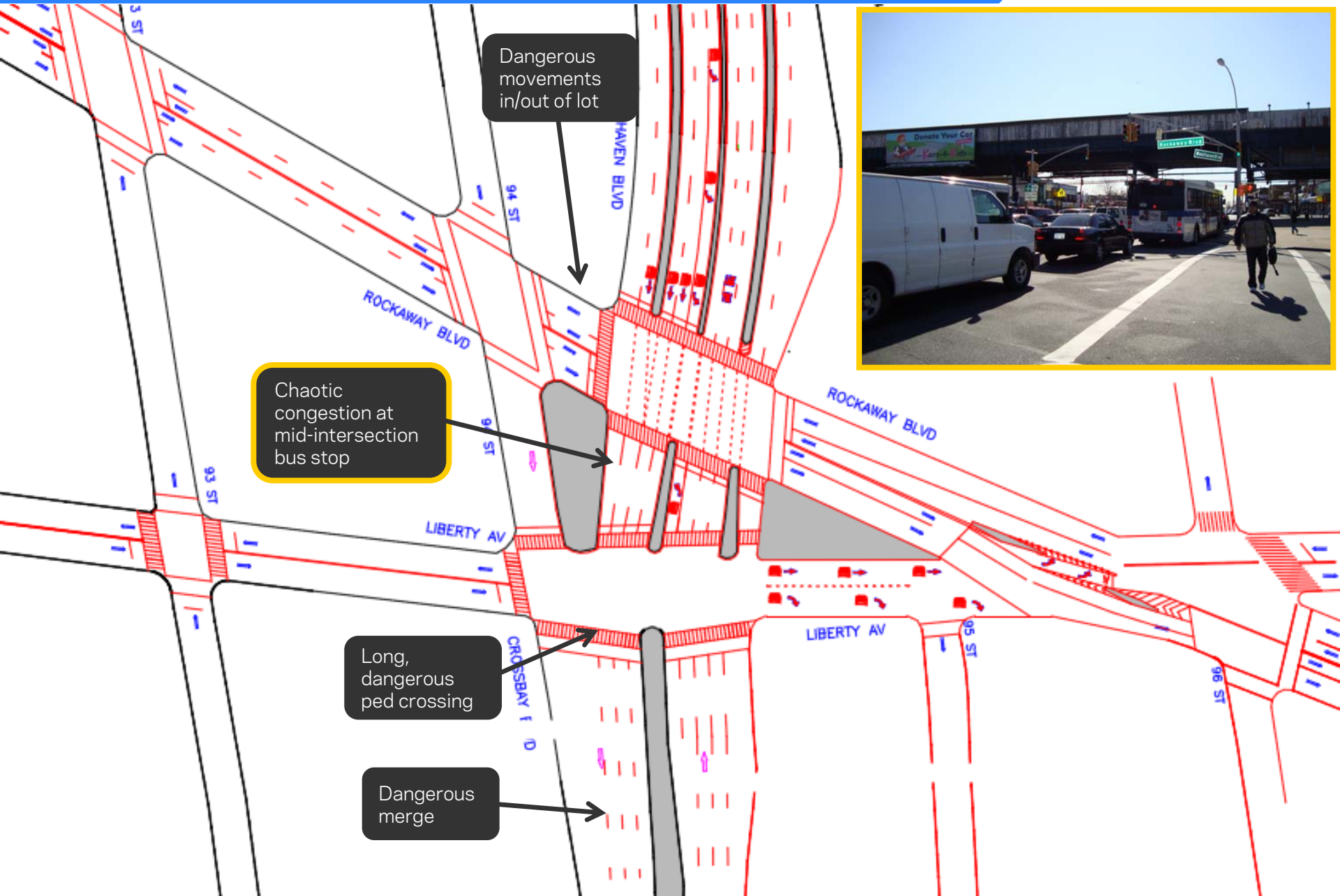
Existing Conditions: crash hotspots



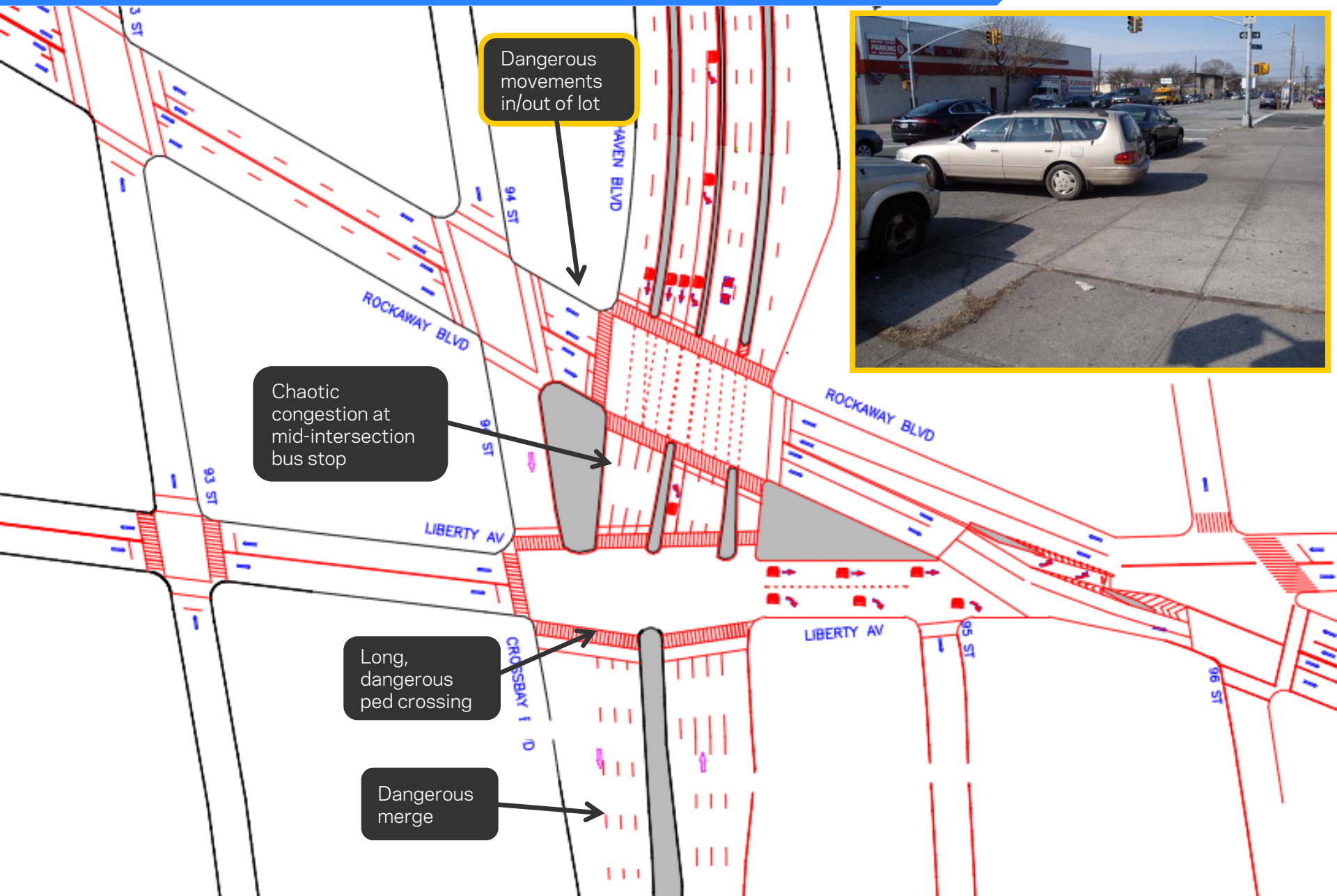
Existing Conditions: issues



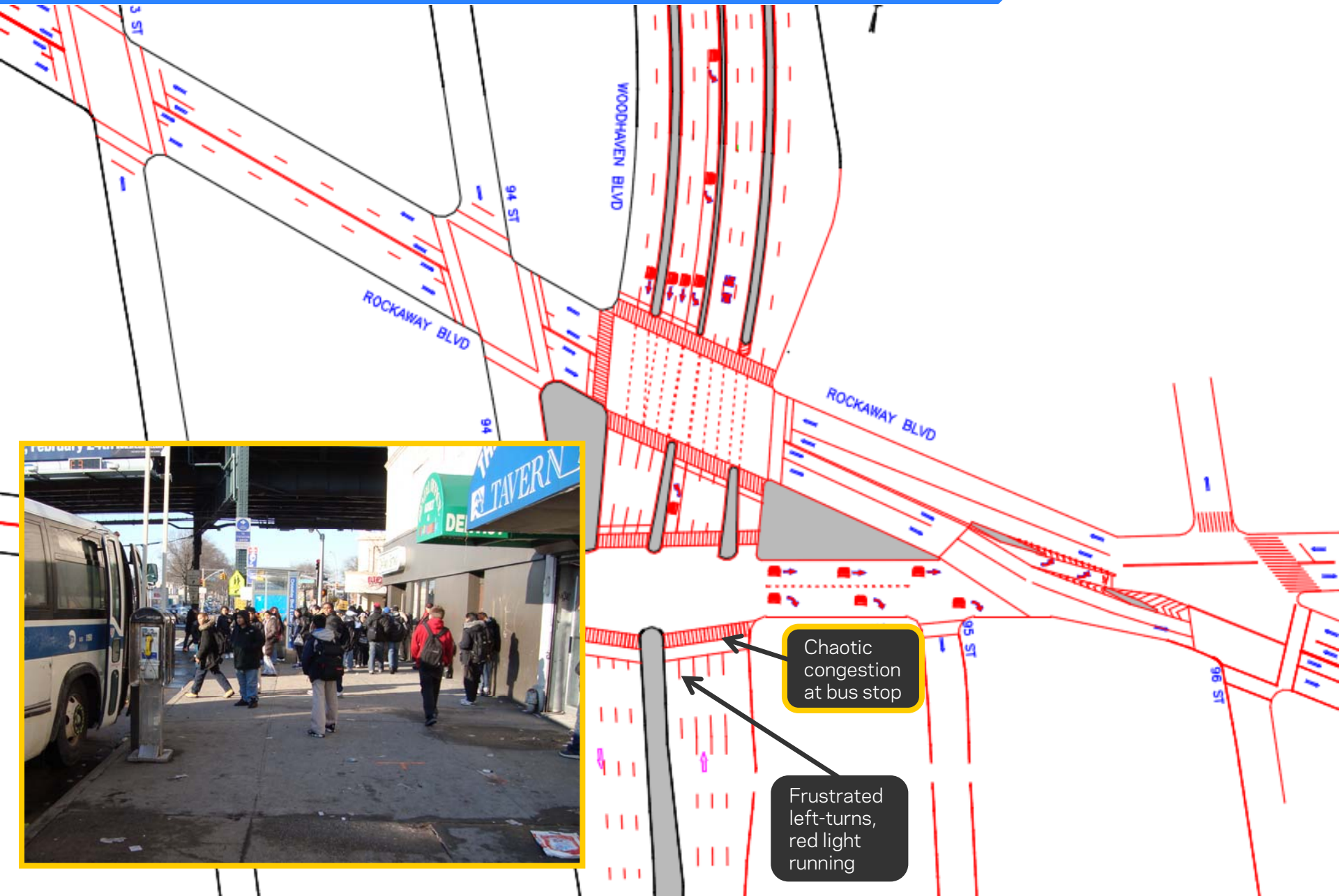
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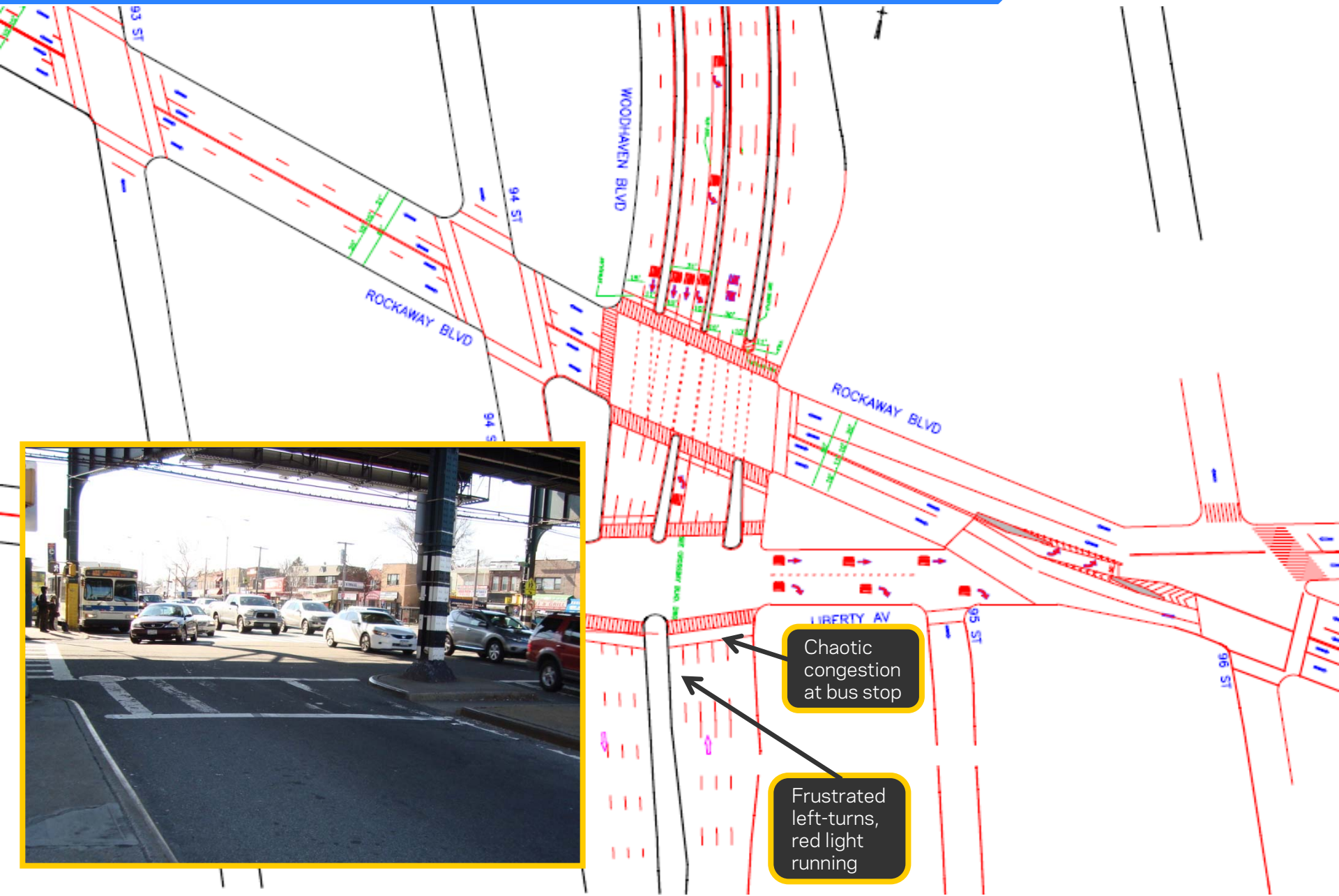
Existing Conditions: issues



Chaotic congestion at bus stop

Frustrated left-turns, red light running

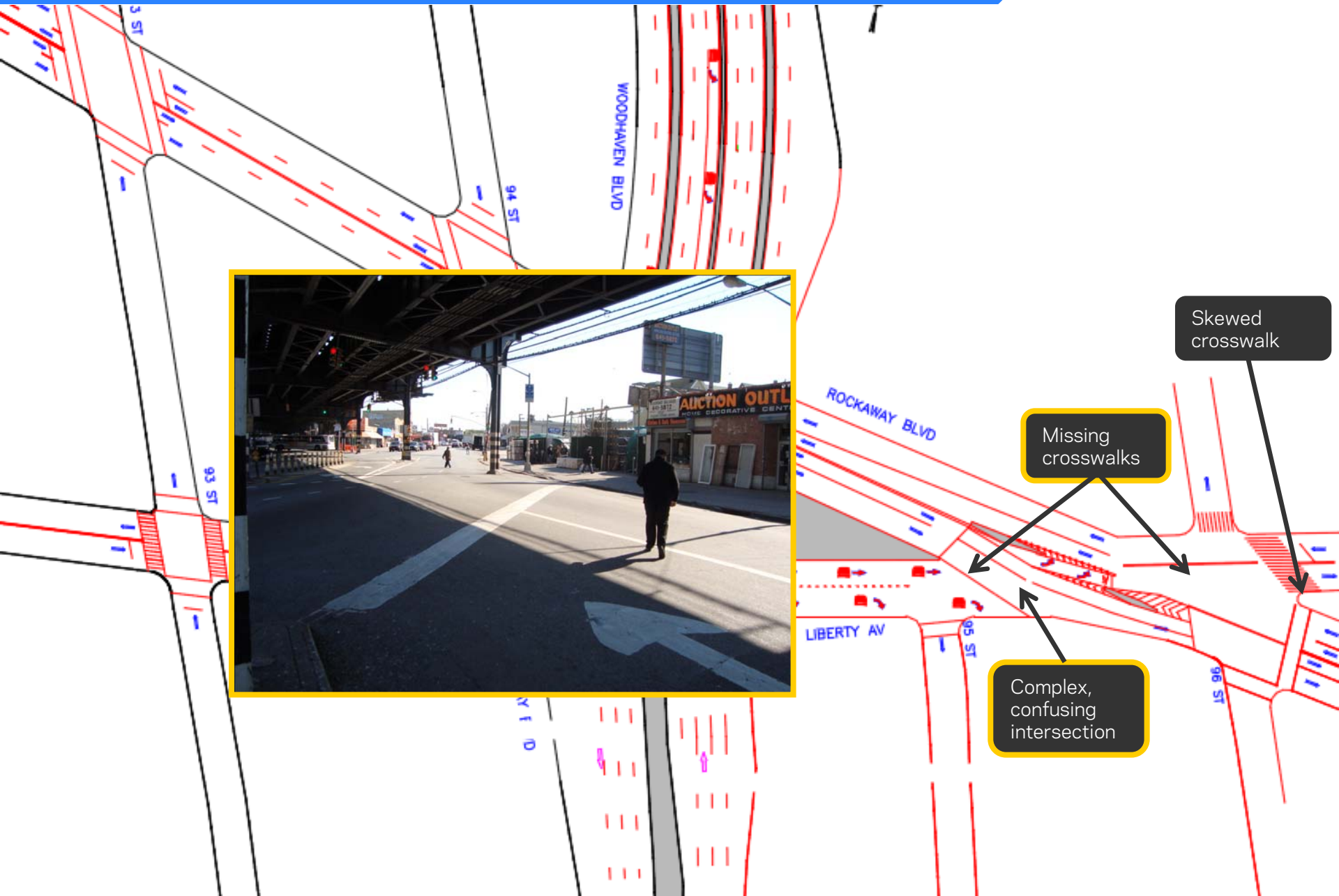
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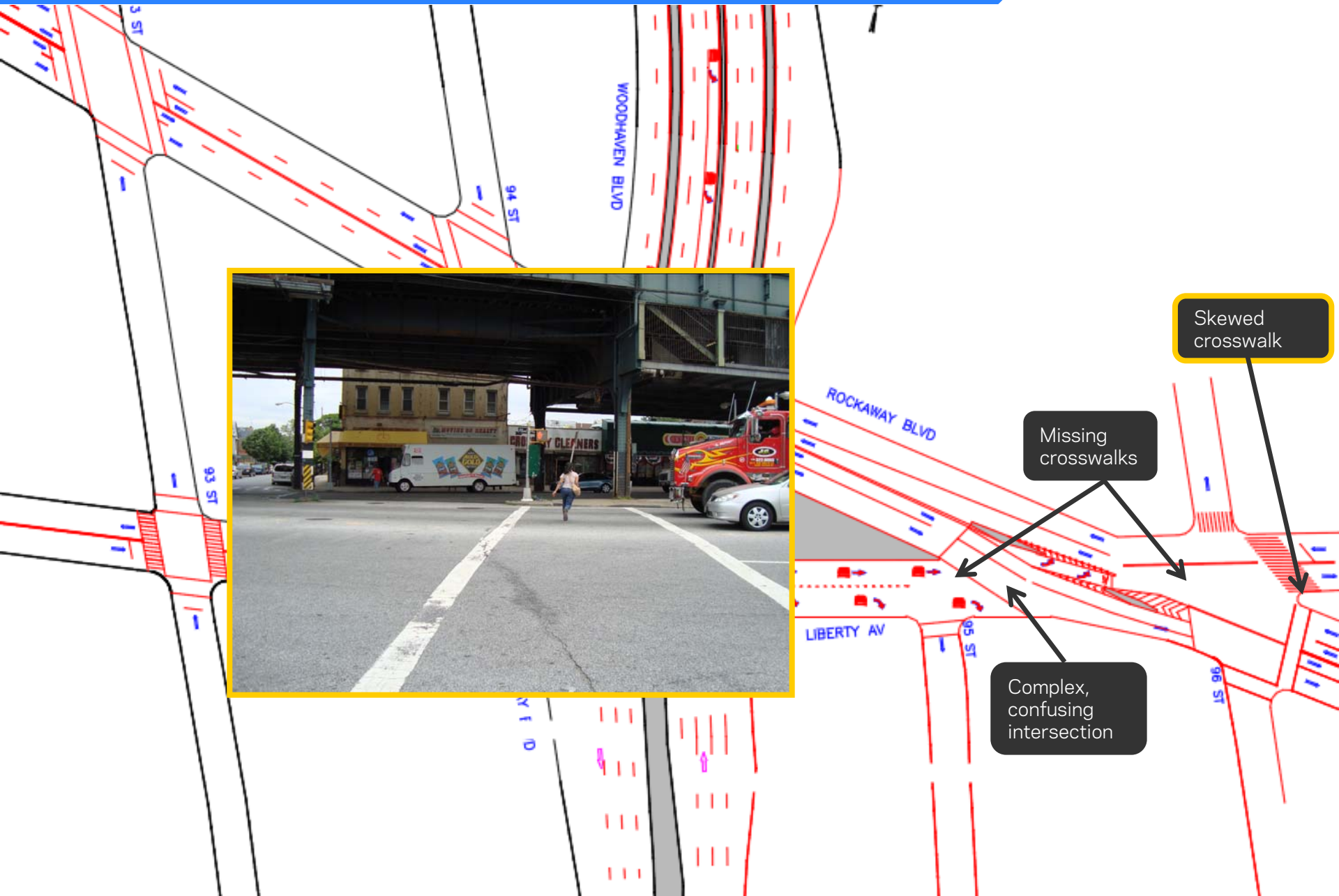


Skewed crosswalk

Missing crosswalks

Complex, confusing intersection

Existing Conditions: issues



Skewed crosswalk

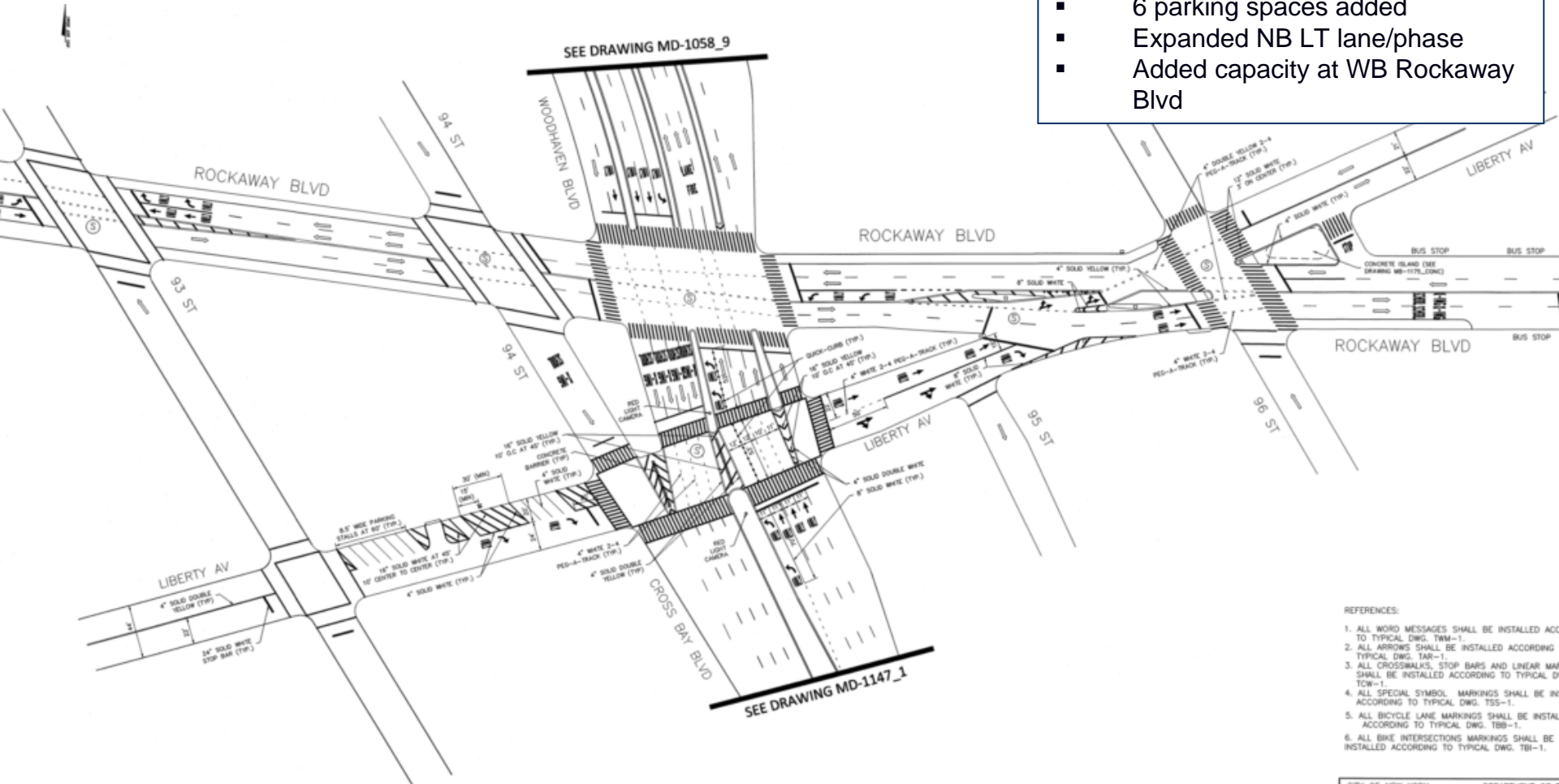
Missing crosswalks

Complex, confusing intersection

Proposal: Crossbay/Woodhaven

Key Changes

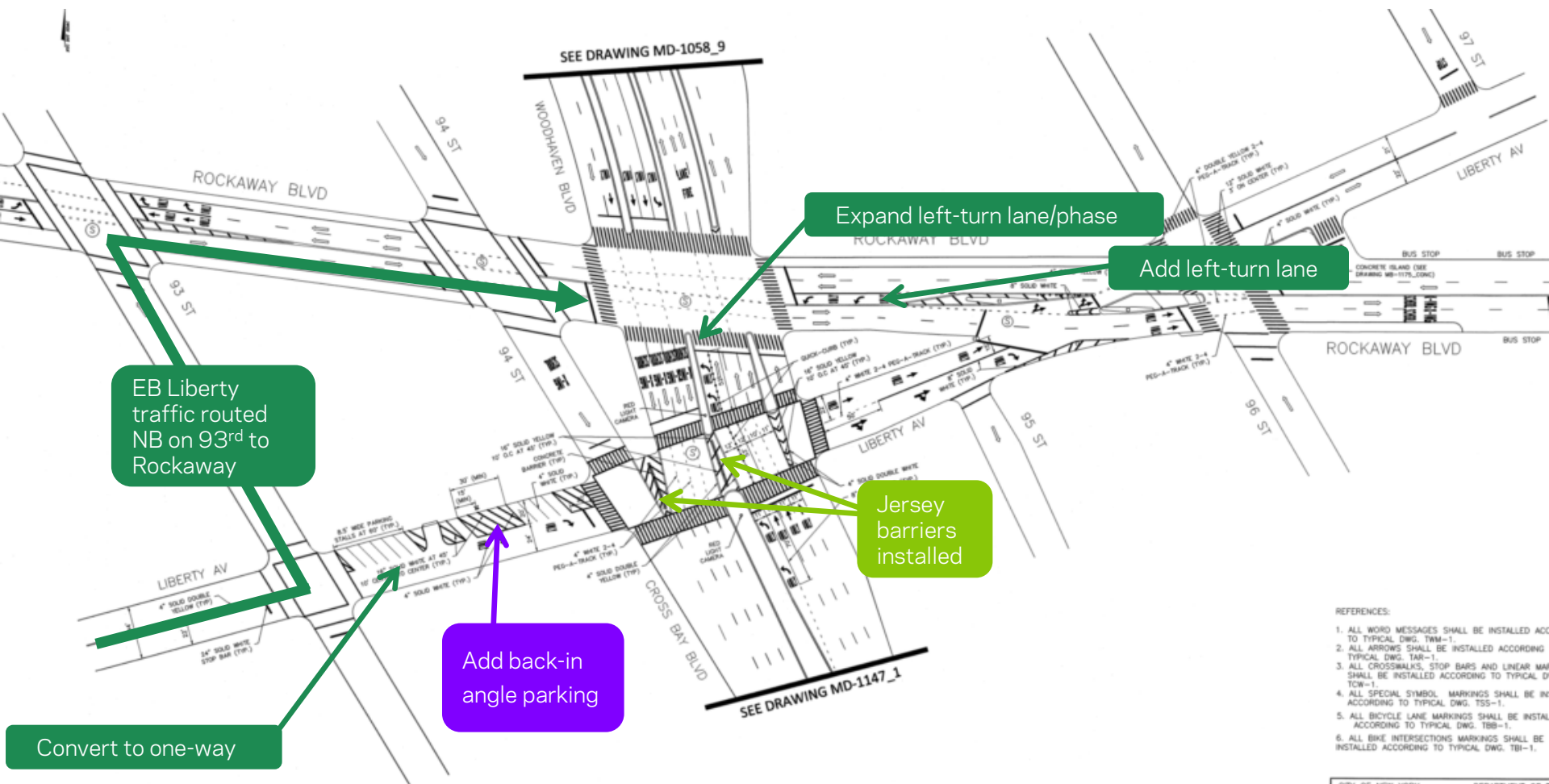
- One block of Liberty Ave converted to one-way, forced to turn right at Crossbay
- 6 parking spaces added
- Expanded NB LT lane/phase
- Added capacity at WB Rockaway Blvd



REFERENCES:

1. ALL WORD MESSAGES SHALL BE INSTALLED ACCORDING TO TYPICAL DWG. TWM-1.
2. ALL ARROWS SHALL BE INSTALLED ACCORDING TO TYPICAL DWG. TAR-1.
3. ALL CROSSWALKS, STOP BARS AND LINEAR MARKINGS SHALL BE INSTALLED ACCORDING TO TYPICAL DWG. TOW-1.
4. ALL SPECIAL SYMBOL MARKINGS SHALL BE INSTALLED ACCORDING TO TYPICAL DWG. TSS-1.
5. ALL BICYCLE LANE MARKINGS SHALL BE INSTALLED ACCORDING TO TYPICAL DWG. TBB-1.
6. ALL BIKE INTERSECTIONS MARKINGS SHALL BE INSTALLED ACCORDING TO TYPICAL DWG. TBI-1.

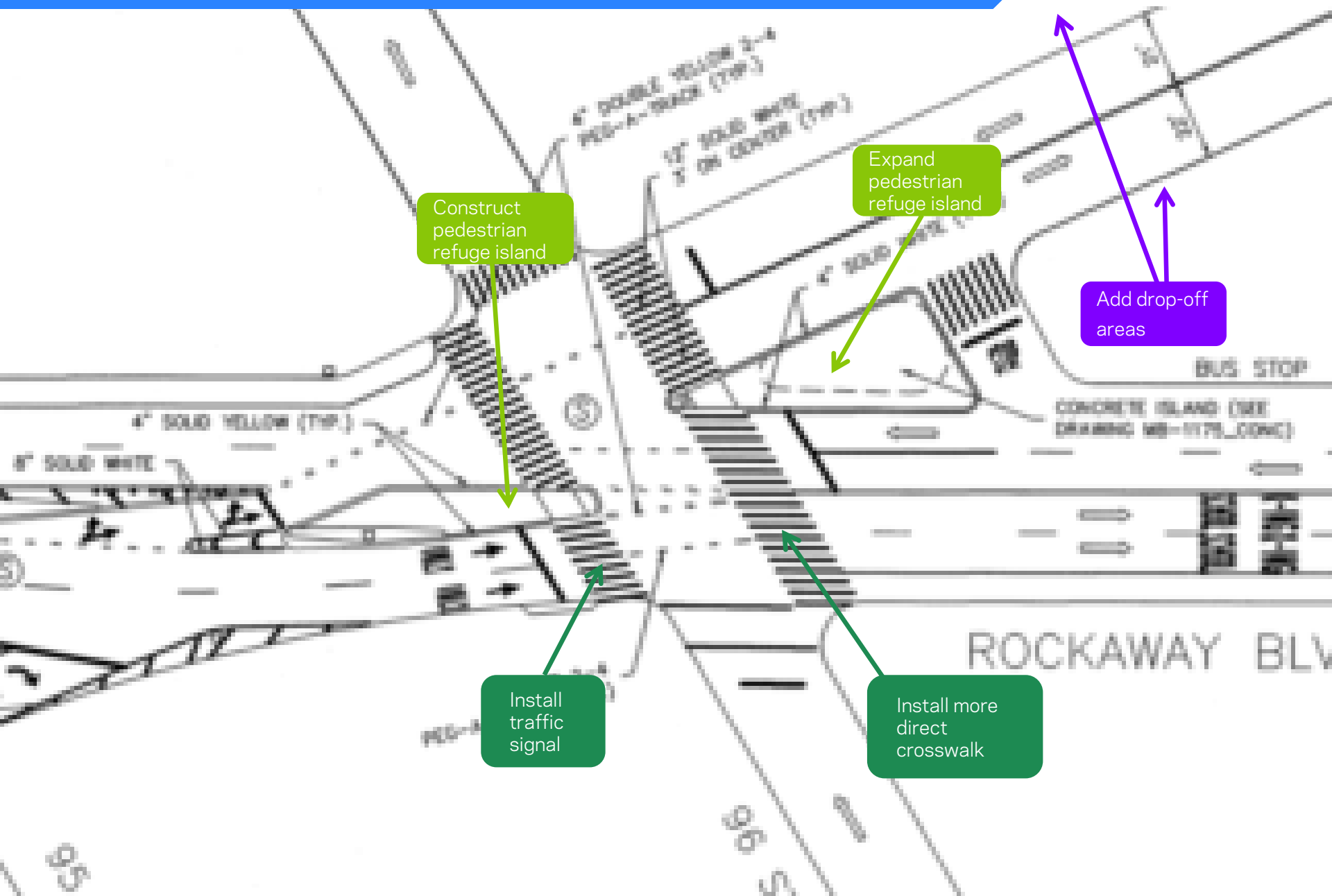
Proposal: Crossbay/Woodhaven



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Proposal: Rockaway/Liberty



Construct pedestrian refuge island

Expand pedestrian refuge island

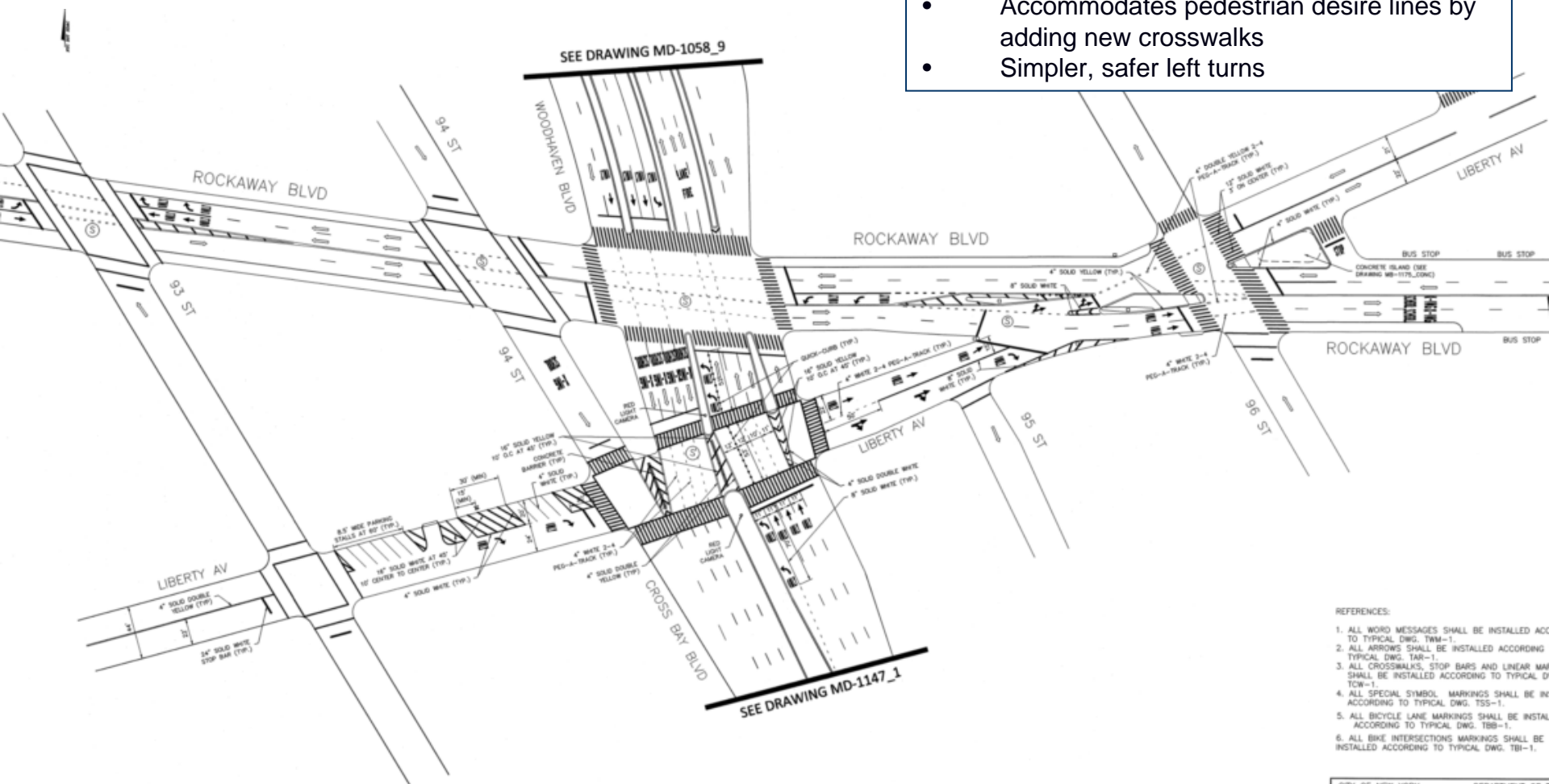
Add drop-off areas

Install traffic signal

Install more direct crosswalk

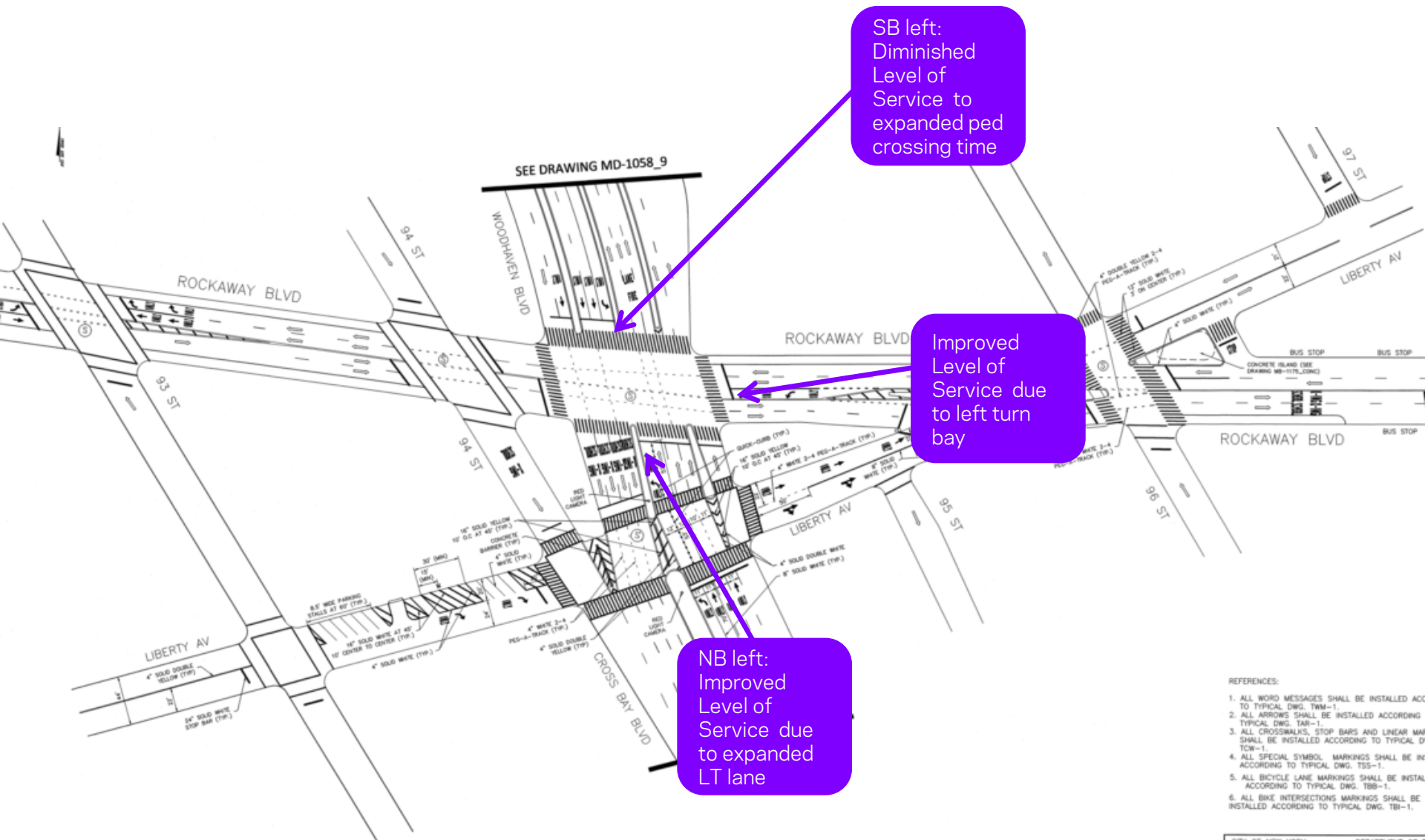
Project Benefits

- Reduces vehicle/pedestrian conflicts
- All intersections crossable at 3.5 feet/sec
- Protects pedestrians from traffic by installing refuge islands
- Accommodates pedestrian desire lines by adding new crosswalks
- Simpler, safer left turns



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Traffic Impacts



Parking Impacts

- 2 metered spots removed
- 8 metered spots added
- **Total: +6 metered parking spaces gained**

