

# PARKING STUDY

For

## City of Miami Beach

Design-Build Services for West Avenue Improvements

Phase II North of 14 St. and Phase II South of 14 St.

Project Nos. M-16002.001 and M-16002.002

Note by Stephan Ginez:

Loss Parking space North Project:

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- Page 12: 21

Total loss: 144

PREPARED BY:

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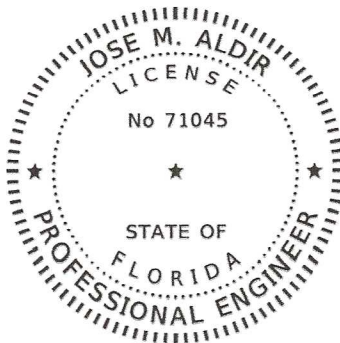
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Jose Aldir

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**Appendix 1 – Parking Spreadsheets**

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## 1. Introduction

West Avenue Phase II improvements is a design build project that will raise the elevation of West Ave, Bay Road, and all the adjacent roads within the West Avenue Neighborhood, including from 8 Street to Lincoln Road and from west of Alton Road to Biscayne Bay. The purpose of this project is to reduce the risk within the neighborhood. The project will include total reconstruction of the roadways, underground utility infrastructure improvements, a new drainage system, and a new street lighting system.

## 2. Purpose of the Study

Due to the reconstructed roadways, the signing and pavement markings will be replaced according to the approved roadway typical sections and to meet current City of Miami Beach, MUTCD, and County standards. The new roadway typical sections and pavement markings will affect the number of parking spaces within the affected areas. A parking study was requested by the City to compare the quantity of existing parking against the quantity of parking that will be provided by the reconstruction project. The City stipulated that the study should include the actual linear feet of existing parking as well as a count of the actual number of parked vehicles within the study area. The study should also include reasons for lost parking and possible mitigation strategies that could be used to regain some of the lost parking. The study area limits are listed below:

Street Name	From	To
West Avenue	6 Street	Lincoln Road
Bay Road	14 Street	Collins Canal
Lincoln Court	Lincoln Road	Collins Canal
Lincoln Road	Biscayne Bay	Alton Road
Lincoln Terrace	Biscayne Bay	Bay Road
16 Street	Biscayne Bay	Alton Road
15 Terrace	Bay Road	Alton Road
15 Street	Bay Road	Alton Road
Flamingo Way	Bay Road	West Avenue
14 Court	West Avenue	Alton Road
14 Terrace	Bay Road	West Avenue
14 Street	Biscayne Bay	Alton Road
13 Street	West Avenue	Alton Road
12 Street	West Avenue	Alton Road
11 Street	West Avenue	Alton Road
10 Street	West Avenue	Alton Road
9 Street	West Avenue	Alton Road
8 Street	West Avenue	Alton Road

### 3. Executive Summary

West Avenue Phase II improvements is a design build project that will raise the elevation of West Ave, Bay Road, and all the adjacent roads within the West Avenue Neighborhood between Biscayne Bay and Alton Road. Raising the elevation of the roadways and sidewalks is necessary to mitigate roadway deterioration and flooding caused by king tides and sea level rise. The higher roadway and sidewalk elevations will ensure that the roadways and sidewalks stay dry and walkable.

The roadway reconstruction concepts in this project were developed in close coordination with the residents of the area, including the NAVNA and WAVNA Neighborhood Associations. The reconstruction of the roadways provided an opportunity to improve the walkability and ambiance of the neighborhood by incorporating features such as bike lanes, traffic calming, tree canopy, decorative pavers, decorative lighting, and other features.

The North project study area currently has approximately 6661 LF of parking, 1428 LF of which violates current parking restrictions. The proposed current design provides approximately 4319 LF of parking. The approximate loss of parking between the existing (meeting current parking restrictions) and proposed is  $6661 \text{ LF} - 1428 \text{ LF} - 4319 \text{ LF} = 914 \text{ LF}$ . Of the 914 LF of lost parking, 474 LF is due to the addition of bike lanes.

The South project study area currently has approximately 3075 LF of parking, 735 LF of which violates current parking restrictions. The proposed current design provides approximately 1142 LF of parking. The approximate loss of parking between the existing (meeting current parking restrictions) and proposed is  $3075 \text{ LF} - 735 \text{ LF} - 1142 \text{ LF} = 1198 \text{ LF}$ . Of the 1198 LF of lost parking, 1011 LF is due to the addition of bike lanes.

A comparison of lost parking spaces is shown below converting the lineal feet of parking shown above into 22-ft long parking spaces.

Description	West Ave North	West Ave South
Existing LF	6661 LF	3075 LF
LF in Violation of standards	1428 LF	735 LF
Existing if 22 Ft Spaces	302 spaces	139 spaces
22 Ft Spaces in Violation	64 spaces	33 spaces
Existing "Legal" spaces	238 "Legal" spaces	106 "Legal" spaces
Proposed with 22 Ft spaces	196 spaces	51 spaces
Total Lost Parking in prop design	Total 42 spaces lost	Total 55 spaces lost
Lost Parking due to Bike Lane	21 spaces	45 spaces
Lost Parking not related to Bike Lane	21 spaces	10 spaces
Percent of Parking Lost	17.6%	51.8%

Proposed Parking loss is due to the Bike Lanes, additional landscaping, fire hydrants, and other design restrictions.

Mitigation strategies that can be implemented to recapture some of the lost parking include modifications of the proposed landscape, relocation of fire hydrants, and modifications of the proposed bike lanes, however further studies would be required to confirm if they are feasible and to determine how much parking can be recaptured. This study noted several CitiBike Stations that will be removed. The proposed design does not include any CitiBike Stations.

#### **4. Data Acquisition Methodology**

**CWI** assigned the data collection to a two-person team. The team performed a daytime field visit to measure the linear feet of existing public parking along all of the listed roads. The daytime field visit took place on Tuesday April 12, 2022 between the hours of 7:00 AM and 5:00 PM. A measuring wheel was used to measure the parking areas and the measurements were noted on 11" x 17" plans. The actual vehicles legally parked within the study limits were counted on Thursday April 14, 2022 between the hours of 8:00 PM and 11:00 PM. The results were noted on 11" x 17" plans.

Also noted were areas where individual parking spaces were delineated, special vehicle parking areas, i.e., motorcycle parking, areas identified as loading zones, special utilization areas, and others.

The field data was transferred to spreadsheets (one for the North project and one for the South project) which list all of the roadway segments within the study area. The proposed linear feet of parking and number of proposed marked parking spaces according to the latest signing and pavement marking plans on file were added to the spreadsheets. These spreadsheets are included in Appendix 1.

Information taken from the parking data was used to summarize the results of the parking study, along with reasons for parking losses and possible mitigation strategies that may be used to recapture parking. The study results are listed in the following section and are summarized street by street and segment by segment. Please refer to the Data Spreadsheets in Appendix 1 for more detailed information when needed.

#### **5. Study Results**

This section contains a street by street, segment by segment summary of the net change in parking, reasons for the change, and mitigation that may allow the recapture of some parking. The North Project is listed first, followed by the South Project.

**NORTH PROJECT**

**14<sup>th</sup> Street between Biscayne Bay and Bay Road**

There is a net loss of approximately 74 LF of existing parking. A review of the existing parking identified approximately 18 LF of parking that should not exist due to violations of clear sight restrictions at intersections. Removal of the landscape areas would provide space for additional parking.

Existing Parking LF	Actual Parked Vehicles	Proposed Parking LF	Proposed Parking Spaces
74	2	0	0

LOSS : 2

**14<sup>th</sup> Street between Bay Road and West Avenue**

The West Avenue Improvements project does not include this segment. Therefore, no changes to parking are proposed. A review of the existing parking identified approximately 5 LF of parking that should not exist due to the driveway safe sight triangle requirement.

Existing Parking LF	Actual Parked Vehicles	Proposed Parking LF	Proposed Parking Spaces
288	10	N/A	N/A

LOSS : 10

**14<sup>th</sup> Street between West Avenue and Alton Road**

The West Avenue Improvements project does not include this segment. Therefore, no changes to parking are proposed. A review of the existing parking identified approximately 40 LF of parking that should not exist due to sight restrictions at intersections (30 LF) and driveway safe sight triangle restrictions (10 LF).

Existing Parking LF	Actual Parked Vehicles	Proposed Parking LF	Proposed Parking Spaces
216 (Parallel) 158 (Angle)	19	N/A	N/A

LOSS : 19

**14<sup>th</sup> Terrace between Bay Road and West Avenue**

There is no existing or proposed parking along this segment.

**14<sup>th</sup> Court between West Avenue and Alton Road**

There is a net loss of approximately 92 LF of existing parking. A review of the existing parking identified 60 LF of parking that should not exist due to sight restrictions at intersections (55 LF) and driveway safe sight triangle restrictions (5 LF). The proposed parking is maximized and there are no mitigation strategies identified to increase parking.

Existing Parking LF	Actual Parked Vehicles	Proposed Parking LF	Proposed Parking Spaces
444	18	352	16

LOSS : 2

### Flamingo Way between Bay Road and West Avenue

There is a net loss of 37 LF of existing parking. A review of the existing parking identified 25 LF of parking that should not exist due to sight restrictions at intersections. Removal of the landscape areas would provide space for additional parking.

Existing Parking LF	Actual Parked Vehicles	Proposed Parking LF	Proposed Parking Spaces
37	1	0	0

LOSS: 1

### 15<sup>th</sup> Street between Bay Road and West Avenue

There was a net loss of approximately 47 LF of existing parking. A review of the existing parking identified 43 LF of parking that should not exist due to sight restrictions at intersections (13 LF) and driveway safe sight triangle restrictions (30 LF). The proposed parking is maximized and there are no mitigation strategies identified to increase parking.

Existing Parking LF	Actual Parked Vehicles	Proposed Parking LF	Proposed Parking Spaces
269	14	222	10

LOSS: 4

### 15<sup>th</sup> Street between West Avenue and Alton Road

There was a net loss of approximately 98 LF of existing parking. A review of the existing parking identified 92 LF of parking that should not exist due to sight restrictions at intersections (70 LF) and driveway safe sight triangle restrictions (22 LF). The proposed parking is maximized and there are no mitigation strategies identified to increase parking.

Existing Parking LF	Actual Parked Vehicles	Proposed Parking LF	Proposed Parking Spaces
380 (Parallel) 10 (Perpendicular)	13 Cars & 6 Motorcycles	292	13

LOSS: 0

### 15<sup>th</sup> Terrace between Bay Road and West Avenue

There was a net loss of approximately 138 LF of existing parking. A review of the existing parking identified 131 LF of parking that should not exist due to sight restrictions at intersections (35 LF) and driveway safe sight triangle restrictions (96 LF). Removal of the landscape areas would provide space for additional parking.

Existing Parking LF	Actual Parked Vehicles	Proposed Parking LF	Proposed Parking Spaces
182	9	44	2

LOSS: 7

### 15<sup>th</sup> Terrace between West Avenue and Alton Road

There was a net loss of approximately 103 LF of existing parking. A review of the existing parking identified 90 LF of parking that should not exist due to sight restrictions at intersections (54 LF) and driveway safe sight triangle restrictions (36 LF). The proposed parking is maximized and there are no mitigation strategies identified to increase parking.

Existing Parking LF	Actual Parked Vehicles	Proposed Parking LF	Proposed Parking Spaces
402 (parallel) 9 (perpendicular)	20 Cars & 4 Motorcycles	308	13

LOSS: 7

LOSS PAGE: 19

**16<sup>th</sup> Street between Biscayne Bay and Bay Road**

The parking along this segment is perpendicular, private parking that is not being modified by this West Avenue Improvements project. Therefore, no changes to parking are proposed.

Existing Number of Perpendicular Parking Spaces
28

**16<sup>th</sup> Street between Bay Road and West Avenue**

LOSS : 0

There was a net gain of approximately 52 LF of parking. The area currently occupied by Citi Bike Station #156 is being repurposed as proposed parking. A review of the existing parking identified 114 LF of parking that should not exist due to sight restrictions at intersections (35 LF) and driveway safe sight triangle restrictions (79 LF). There are no mitigation strategies identified that can be used to recapture parking.

Existing Parking LF	Actual Parked Vehicles	Proposed Parking LF	Proposed Parking Spaces
282	15 Cars & 1 Motorcycle	230	10

LOSS : 5

**16<sup>th</sup> Street between West Avenue and Alton Road**

There was a net loss of approximately 90 LF of existing parking. A review of the existing parking identified 60 LF of parking that should not exist due to sight restrictions at intersections (35 LF) and driveway safe sight triangle restrictions (25 LF). There are no mitigation strategies identified that can be used to recapture parking.

Existing Parking LF	Actual Parked Vehicles	Proposed Parking LF	Proposed Parking Spaces
334	14	244	11

LOSS : 3

**Lincoln Terrace between Biscayne Bay and Bay Road**

There was a net loss of approximately 25 LF of existing parking. A review of the existing parking identified 50 LF of parking that should not exist due to sight restrictions at intersections. There are no mitigation strategies identified that can be used to recapture parking.

Existing Parking LF	Actual Parked Vehicles	Proposed Parking LF	Proposed Parking Spaces
463	19	438	N/A

LOSS : 19

**Lincoln Road between Biscayne Bay and Lincoln Court**

There was a net loss of approximately 86 LF of existing parking. A review of the existing parking identified 49 LF of parking that should not exist due to sight restrictions at intersections (39 LF) and driveway safe sight triangle restrictions (10 LF). There are no mitigation strategies identified that can be used to recapture parking.

Existing Parking LF	Actual Parked Vehicles	Proposed Parking LF	Proposed Parking Spaces
131 (Perpendicular)	14	21 (Parallel) 24 (Angle)	3

LOSS : 11

LOSS PAGE : 38



**Lincoln Road between Lincoln Court and Bay Road**

There was a net loss of approximately 38 LF of existing parking. A review of the existing parking identified 93 LF of parking that should not exist due to sight restrictions at intersections (75 LF) and driveway safe sight triangle restrictions (18 LF). There are no mitigation strategies identified that can be used to recapture parking.

Existing Parking LF	Actual Parked Vehicles	Proposed Parking LF	Proposed Parking Spaces
44 (Parallel) 97 (Perpendicular)	9	21 (Parallel) 82 (Angle)	8

LOSS: 1

**Lincoln Road between Bay Road and West Avenue**

There was a net loss of approximately 200 LF of existing parking. A review of the existing parking identified 75 LF of parking that should not exist due to sight restrictions at intersections (55 LF) and driveway safe sight triangle restrictions (20 LF). There are no mitigation strategies identified that can be used to recapture parking.

Existing Parking LF	Actual Parked Vehicles	Proposed Parking LF	Proposed Parking Spaces
235 (Parallel) 236 (Angle)	22	271 (Angle)	23

GAIN: +1

**Lincoln Road between West Avenue and Alton Road**

There was a net loss of approximately 82 LF of existing parking. A review of the existing parking identified 73 LF of parking that should not exist due to sight restrictions at intersections (45 LF) and driveway safe sight triangle restrictions (28 LF). There are no mitigation strategies identified that can be used to recapture parking.

Existing Parking LF	Actual Parked Vehicles	Proposed Parking LF	Proposed Parking Spaces
151 (Parallel) 202 (Angle)	14 Cars & 3 Motorcycles	84 (Parallel) 187 (Angle)	19

GAIN: +5

**Lincoln Court between Lincoln Road and Collins Canal**

There is no existing or proposed parking within this segment.

**Bay Road between 14<sup>th</sup> Street and 14<sup>th</sup> Terrace**

There was no net gain or loss of parking within this segment.

Existing Parking LF	Actual Parked Vehicles	Proposed Parking LF	Proposed Parking Spaces
154	5	154	7

GAIN: +2

TOTAL GAIN PAGE: +7

**Bay Road between 14<sup>th</sup> Terrace and Flamingo Way**

There was a net loss of approximately 48 LF of existing parking. A review of the existing parking identified 15 LF of parking that should not exist due to sight restrictions at intersections. There are existing above ground utility features (vaults, wells) that occupy areas that could potentially be used for parking. There are no mitigation strategies identified that can be used to recapture parking.

Existing Parking LF	Actual Parked Vehicles	Proposed Parking LF	Proposed Parking Spaces
178	8	130	6

LOSS: -2

**Bay Road between Flamingo Way and 15<sup>th</sup> Street**

There was a net gain of approximately 38 LF of parking. The area currently occupied by Citi Bike Station #154 is being repurposed as proposed parking. A review of the existing parking did not identify parking in violation of current standards. There may be opportunities to remove landscape areas to accommodate additional parking.

Existing Parking LF	Actual Parked Vehicles	Proposed Parking LF	Proposed Parking Spaces
185	10	223	10

LOSS: 0

**Bay Road between 15<sup>th</sup> Street and 15<sup>th</sup> Terrace**

There was no change in LF of parking. A review of the existing parking identified 36 LF of parking that should not exist due to sight restrictions at intersections. There may be opportunities to remove landscape areas to accommodate additional parking.

Existing Parking LF	Actual Parked Vehicles	Proposed Parking LF	Proposed Parking Spaces
219	10 Cars & 5 Motorcycles	219	10

LOSS: 0

**Bay Road between 15<sup>th</sup> Terrace and 16<sup>th</sup> Street**

There was a net loss of approximately 69 LF of parking. A review of the existing parking identified 27 LF of parking that should not exist due to sight restrictions at intersections. There are no mitigation strategies identified that can be implemented to add parking.

Existing Parking LF	Actual Parked Vehicles	Proposed Parking LF	Proposed Parking Spaces
175	8 Cars & 1 Motorcycle	106	5

LOSS: 3

**Bay Road between 16<sup>th</sup> Street and Lincoln Terrace**

There was a net loss of approximately 84 LF of parking. A review of the existing parking identified 26 LF of parking that should not exist due to sight restrictions at intersections (7 LF) and driveway safe sight triangle restrictions (19 LF). There are no mitigation strategies identified that can be implemented to add parking.

Existing Parking LF	Actual Parked Vehicles	Proposed Parking LF	Proposed Parking Spaces
106	5	22	1

LOSS: 4

TOTAL PAGE LOSS: 9

**Bay Road between Lincoln Terrace and Lincoln Road**

There was a net loss of approximately 102 LF of parking. A review of the existing parking identified **97 LF** of parking that should not exist due to sight restrictions at intersections (42 LF) and driveway safe sight triangle restrictions (55 LF). There are no mitigation strategies identified that can be implemented to add parking.

Existing Parking LF	Actual Parked Vehicles	Proposed Parking LF	Proposed Parking Spaces
218	17	116	5

Loss : 12

**Bay Road between Lincoln Road and Collins Canal**

There was a net loss of approximately 293 LF of parking. A review of the existing parking identified **190 LF** of parking that should not exist due to sight restrictions at intersections (32 LF) and driveway safe sight triangle restrictions (187 LF). There are no mitigation strategies identified that can be implemented to add parking.

Existing Parking LF	Actual Parked Vehicles	Proposed Parking LF	Proposed Parking Spaces
437	20 Cars & 6 Motorcycles	144	7

Loss : 13

**West Avenue between 14<sup>th</sup> Street and 14<sup>th</sup> Terrace**

There was a net loss of approximately 104 LF of parking. A review of the existing parking identified **54 LF** of parking that should not exist due to sight restrictions at intersections (25 LF) and driveway safe sight triangle restrictions (29 LF). There are no mitigation strategies identified that can be implemented to add parking based on the required bike facilities.

Existing Parking LF	Actual Parked Vehicles	Proposed Parking LF	Proposed Parking Spaces
192	7 Cars & 3 Motorcycles	88	4

Loss 3

**West Avenue between 14<sup>th</sup> Terrace and Flamingo Way**

There was a net loss of approximately 63 LF of parking. A review of the existing parking identified **10 LF** of parking that should not exist due to driveway safe sight triangle restrictions. There are no mitigation strategies identified that can be implemented to add parking based on the required bike facilities.

Existing Parking LF	Actual Parked Vehicles	Proposed Parking LF	Proposed Parking Spaces
63	3	0	0

Loss 3

**West Avenue between Flamingo Way and 15<sup>th</sup> Street**

There was a net loss of approximately 167 LF of parking. A review of the existing parking identified 45 LF of parking that should not exist due to sight restrictions at intersections (38 LF) and driveway safe sight triangle restrictions (7 LF). There are no mitigation strategies identified that can be implemented to add parking based on the required bike facilities.

Existing Parking LF	Actual Parked Vehicles	Proposed Parking LF	Proposed Parking Spaces
314	15	147	7

LOSS : 8

**West Avenue between 15<sup>th</sup> Street and 15<sup>th</sup> Terrace**

There was a net loss of approximately 192 LF of parking. A review of the existing parking identified 35 LF of parking that should not exist due to sight restrictions at intersections (25 LF) and driveway safe sight triangle restrictions (10 LF). There are no mitigation strategies identified that can be implemented to add parking based on the required bike facilities.

Existing Parking LF	Actual Parked Vehicles	Proposed Parking LF	Proposed Parking Spaces
320	15 Cars & 3 Motorcycles	128	6

LOSS 9

**West Avenue between 15<sup>th</sup> Terrace and 16<sup>th</sup> Street**

There was a net loss of approximately 96 LF of parking. A review of the existing parking identified 10 LF of parking that should not exist due to driveway safe sight triangle restrictions. current standards (list the standard). There are no mitigation strategies that can be implemented to add parking based on the required bike facilities.

Existing Parking LF	Actual Parked Vehicles	Proposed Parking LF	Proposed Parking Spaces
118	5	22	1

LOSS 4

**West Avenue between 16<sup>th</sup> Street and Lincoln Road**

There is no existing or proposed parking along this segment.

## SOUTH PROJECT

### 8<sup>th</sup> Street between West Avenue and Alton Road

There is a net loss of approximately 158 LF of existing parking. A review of the existing parking identified 107 LF of parking that should not exist due to sight restrictions at intersections (82 LF) and driveway safe sight triangle restrictions (25 LF). There are no mitigation strategies identified that can be implemented to add parking.

Existing Parking LF	Actual Parked Vehicles	Proposed Parking LF	Proposed Parking Spaces
436	21	278	12

### 9<sup>th</sup> Street between West Avenue and Alton Road

There is a net loss of approximately 88 LF of existing parking. A review of the existing parking identified 45 LF of parking that should not exist due to sight restrictions at intersections (35 LF) and driveway safe sight triangle restrictions (10 LF). The only mitigation identified for this segment is the relocation of the fire hydrant to an area within a parking restriction zone. Further analysis is required to determine if relocation of the fire hydrant is feasible.

Existing Parking LF	Actual Parked Vehicles	Proposed Parking LF	Proposed Parking Spaces
288 (Parallel) 20 (Perpendicular)	11 Cars & 1 Motorcycle	220	9

### 10<sup>th</sup> Street between Biscayne Bay and West Avenue

There is a net loss of approximately 119 LF of existing parking. A review of the existing parking identified 30 LF of parking that should not exist due to sight restrictions at intersections. Removal of the landscape areas would provide space for additional parking.

Existing Parking LF	Actual Parked Vehicles	Proposed Parking LF	Proposed Parking Spaces
119 (Perpendicular)	13	0	0

### 10<sup>th</sup> Street between West Avenue and Alton Road

There is no proposed work within this segment. The existing parking was documented as part of the data collection.

Existing Parking LF	Actual Parked Vehicles	Proposed Parking LF	Proposed Parking Spaces
61 (Parallel) 28 (Perpendicular) 107 (Angle)	8 Cars & 18 Motorcycles	N/A	N/A

### 11<sup>th</sup> Street between West Avenue and Alton Road

There is a net loss of approximately 88 LF of existing parking. A review of the existing parking identified 75 LF of parking that should not exist due to sight restrictions at intersections (60 LF) and driveway safe sight triangle restrictions (15 LF). Removal of the landscape areas would provide space for additional parking.

Existing Parking LF	Actual Parked Vehicles	Proposed Parking LF	Proposed Parking Spaces
259 (Parallel) 7 (Perpendicular)	5	178	7

### 12<sup>th</sup> Street between West Avenue and Alton Road

There is a net loss of approximately 153 LF of existing parking. The area currently occupied by Citi Bike Station #143 is being repurposed as proposed landscaping and parking. A review of the existing parking identified 150 LF of parking that should not exist since it blocks perpendicular parking in private property. Approximately 45 LF of existing parking should not exist due to sight restrictions at intersections (35 LF) and driveway safe sight triangle restrictions (10 LF).

Existing Parking LF	Actual Parked Vehicles	Proposed Parking LF	Proposed Parking Spaces
394	15	241	10

### 13<sup>th</sup> Street between West Avenue and Alton Road

There is a net loss of approximately 112 LF of existing parking. A review of the existing parking identified 78 LF of parking that should not exist due to sight restrictions at intersections (43 LF) and driveway safe sight triangle restrictions (35 LF). The proposed parking is maximized and there are no mitigation strategies identified to increase parking.

Existing Parking LF	Actual Parked Vehicles	Proposed Parking LF	Proposed Parking Spaces
250 (Parallel) 87 (Angle)	18	177 (Parallel) 48 (Angle)	12

### West Avenue between 6<sup>th</sup> Street and 8<sup>th</sup> Street

This segment is not included in the West Avenue Improvements project scope. The existing parking was documented to comply with the City's request.

Existing Parking LF	Actual Parked Vehicles	Proposed Parking LF	Proposed Parking Spaces
261 (Parallel) 25 (Angle)	12 Cars & 1 Motorcycle	N/A	N/A

### West Avenue between 8<sup>th</sup> Street and 9<sup>th</sup> Street

There is a net loss of approximately 144 LF of existing parking. A review of the existing parking identified 15 LF of parking that should not exist due to sight restrictions at intersections (5 LF) and driveway safe sight triangle restrictions (10 LF). There are no mitigation strategies identified that can be implemented to add parking based on the required bike facilities.

Existing Parking LF	Actual Parked Vehicles	Proposed Parking LF	Proposed Parking Spaces
144	6 Cars & 11 Motorcycles	0	0

### West Avenue between 9<sup>th</sup> Street and 10<sup>th</sup> Street

There is a net loss of approximately 332 LF of existing parking. A review of the existing parking identified 37 LF of parking that should not exist due to sight restrictions at intersections. There are no mitigation strategies identified that can be implemented to add parking based on the required bike facilities.

Existing Parking LF	Actual Parked Vehicles	Proposed Parking LF	Proposed Parking Spaces
310 (Parallel) 22 (Perpendicular)	14 Cars & 11 Motorcycles	0	0

### West Avenue between 10<sup>th</sup> Street and 11<sup>th</sup> Street

There is a net loss of approximately 190 LF of existing parking. A review of the existing parking identified 20 LF of parking that should not exist due to sight restrictions at intersections (15 LF) and driveway safe sight triangle restrictions (5 LF). There are no mitigation strategies identified that can be implemented to add parking based on the required bike facilities.

Existing Parking LF	Actual Parked Vehicles	Proposed Parking LF	Proposed Parking Spaces
190	7 Cars & 16 Motorcycles	0	0

### West Avenue between 11<sup>th</sup> Street and 12<sup>th</sup> Street

There is a net loss of approximately 209 LF of existing parking. A review of the existing parking identified 35 LF of parking that should not exist due to sight restrictions at intersections (20 LF) and fire hydrant parking restrictions (15 LF). There are no mitigation strategies identified that can be implemented to add parking based on the required bike facilities.

Existing Parking LF	Actual Parked Vehicles	Proposed Parking LF	Proposed Parking Spaces
209	4 Cars & 18 Motorcycles	0	0

**West Avenue between 12<sup>th</sup> Street and 13<sup>th</sup> Street**

There is a net loss of approximately 132 LF of existing parking. A review of the existing parking identified **38 LF** of parking that should not exist due to sight restrictions at intersections (13 LF) and driveway safe sight triangle restrictions (25 LF). There are no mitigation strategies identified that can be implemented to add parking based on the required bike facilities.

Existing Parking LF	Actual Parked Vehicles	Proposed Parking LF	Proposed Parking Spaces
132	6 Cars & 12 Motorcycles	0	0

**West Avenue between 13<sup>th</sup> Street and 14<sup>th</sup> Street**

There is a net loss of approximately 208 LF of existing parking. A review of the existing parking identified **60 LF** of parking that should not exist due to driveway safe sight triangle restrictions. There are no mitigation strategies identified that can be implemented to add parking based on the required bike facilities.

Existing Parking LF	Actual Parked Vehicles	Proposed Parking LF	Proposed Parking Spaces
208	7	0	0



## 6. Summary

West Avenue Phase II improvements is a design build project that will raise the elevation of West Ave, Bay Road, and all the adjacent roads within the West Avenue Neighborhood between Biscayne Bay and Alton Road. Raising the elevation of the roadways and sidewalks is necessary to mitigate roadway deterioration and flooding caused by king tides and sea level rise. The higher roadway and sidewalk elevations will ensure that the roadways and sidewalks stay dry and walkable.

The roadway reconstruction concepts in this project were developed in close coordination with the residents of the area, including the West Avenue Neighborhood Association. The reconstruction of the roadways provided an opportunity to improve the walkability and ambiance of the neighborhood by incorporating features such as bike lanes, traffic calming, tree canopy, decorative pavers, decorative lighting, and other features.

The North project study area currently has approximately 6661 LF of parking, 1428 LF of which violates current parking restrictions. The proposed current design provides approximately 4319 LF of parking. The approximate loss of parking between the existing (meeting current parking restrictions) and proposed is  $6661 \text{ LF} - 1428 \text{ LF} - 4319 \text{ LF} = 914 \text{ LF}$ . Of the 914 LF of lost parking, 474 LF is due to the addition of bike lanes.

The South project study area currently has approximately 3075 LF of parking, 735 LF of which violates current parking restrictions. The proposed current design provides approximately 1142 LF of parking. The approximate loss of parking between the existing (meeting current parking restrictions) and proposed is  $3075 \text{ LF} - 735 \text{ LF} - 1142 \text{ LF} = 1198 \text{ LF}$ . Of the 1198 LF of lost parking, 1011 LF is due to the addition of bike lanes.

Mitigation strategies that can be implemented to recapture some of the lost parking include modifications of the proposed landscape, relocation of fire hydrants, and modifications of the proposed bike lanes, however further studies would be required to confirm if they are feasible and to determine how much parking can be recaptured. This study noted several CitiBike Stations that will be removed. The proposed design does not include any CitiBike Stations.

# APPENDIX 1

## Parking Spreadsheets

**WEST AVENUE IMPROVEMENTS - NORTH PROJECT**

Civil Works, Inc

May 10, 2020

Location Number	Street Name	Limits	Side	EXISTING										PROPOSED										Comments											
				Type of Parking					Spaces Occupied					Type of Parking					Net Gain/Loss of Parking [LF]																
				Parallel		Perpendicular		Angle	# of Marked Spaces	Cars	Motorcycle	LF	# of Marked Spaces	Parallel		Perpendicular		Angle	# of Marked Spaces	LF	# of Marked Spaces	LF	# of Marked Spaces		Parallel		Perpendicular		Angle	# of Marked Spaces					
				# of Marked Spaces	LF	# of Marked Spaces	LF	LF						# of Marked Spaces	LF	# of Marked Spaces	LF	# of Marked Spaces							LF	# of Marked Spaces	LF								
20	14 Ct	Between West Ave and Alton Road	South	100	4						5					87	4													1 Proposed Disabled Space. 2 Existing Motorcycle Spaces.					
21	14 Ct	Between West Ave and Alton Road	South			21	2			0																									
23	14 Ct	Between West Ave and Alton Road	South	104	4					6						84	4																		
<b>SUBTOTAL SOUTH SIDE OF 14 COURT=</b> BETWEEN WEST AVE AND ALTON ROAD				204	8	21	2	0	0	11	0	0	0	0	0	171	8	0	0	0	0	-33	0	-21	-2	0	0	0	0						
22	14 Ct	Between West Ave and Alton Road	North	100	5					3						94	4																		
24	14 Ct	Between West Ave and Alton Road	North	59	2					2						87	4																		
25	14 Ct	Between West Ave and Alton Road	North	60	3					2						0	0																		
<b>SUBTOTAL NORTH SIDE OF 14 COURT=</b> BETWEEN WEST AVE AND ALTON ROAD				219	10	0	0	0	0	7	0	0	0	0	0	181	8	0	0	0	0	-38	-2	0	0	0	0	0	0	0	0				
1	14 St	Between Biscayne Bay and Bay Road	South	44	2					1						0	0																		
2	14 St	Between Biscayne Bay and Bay Road	North	30	1					1						0	0																		
<b>SUBTOTAL 14 STREET=</b> Between Biscayne Bay and Bay Road				74	3	0	0	0	0	2	0	0	0	0	0	181	8	0	0	0	0	-74	-3	0	0	0	0	0	0	0	0				
3	14 St	Between Bay Road and West Ave	South	88	4					3						N/A	N/A																		
4	14 St	Between Bay Road and West Ave	South	44	2					1						N/A	N/A																		
<b>*SUBTOTAL SOUTH SIDE OF 14 STREET=</b> BETWEEN BAY ROAD AND WEST AVE				132	6	0	0	0	0	4	0	0	0	0	0	N/A	N/A	0	0	0	0	N/A	0	0	0	0	0	0	0	0	0	0			
5	14 St	Between Bay Road and West Ave	North	89	4					3						N/A	N/A																		
6	14 St	Between Bay Road and West Ave	North	45	2					2						N/A	N/A																		
7	14 St	Between Bay Road and West Ave	North	22	1					1						N/A	N/A																		
<b>*SUBTOTAL NORTH SIDE OF 14 STREET=</b> BETWEEN BAY ROAD AND WEST AVE				156	7	0	0	0	0	6	0	0	0	0	0	N/A	N/A	0	0	0	0	N/A	0	0	0	0	0	0	0	0	0	0	0		
8	14 St	Between West Ave and Alton Road	South					7	1	0																									
9	14 St	Between West Ave and Alton Road	South					65	5	5																									
10	14 St	Between West Ave and Alton Road	South					11	1	1																									
12	14 St	Between West Ave and Alton Road	South	109	5					4						N/A	N/A																		

Spaces Occupied: refers to actual vehicles parked on Thursday 04-14-2022 from 8:00 PM to 11:00 PM.  
\* Not included on the total

**WEST AVENUE IMPROVEMENTS - NORTH PROJECT**

Civil Works, Inc		EXISTING										PROPOSED										Comments
Location Number	Street Name	Limits	Side	Type of Parking			Spaces Occupied			Type of Parking			Spaces Occupied			Net Gain/Loss of Parking [LF]			Comments			
				Parallel	Perpendicular	Angle	Cars	Motorcycle	Parallel	Perpendicular	Angle	Parallel	Perpendicular	Angle	Parallel	Perpendicular	Angle					
				LF	# of Marked Spaces	LF	# of Marked Spaces	Angle	# of Marked Spaces	LF	# of Marked Spaces	Angle	LF	# of Marked Spaces	Angle	LF	# of Marked Spaces	Angle	LF	# of Marked Spaces	Angle	
<b>*SUBTOTAL SOUTH SIDE OF 14 STREET=</b>																						
BETWEEN WEST AVE AND ALTON ROAD																						
11	14 St	Between West Ave and Alton Road	North					75	7													
13	14 St	Between West Ave and Alton Road	North	5																		
<b>*SUBTOTAL NORTH SIDE OF 14 STREET=</b>																						
BETWEEN WEST AVE AND ALTON ROAD																						
30	15 St	Between Bay Road and West Ave	South	N/A																		
<b>SUBTOTAL SOUTH SIDE OF 15 STREET=</b>																						
BETWEEN BAY ROAD AND WEST AVE																						
31	15 St	Between Bay Road and West Ave	North																			
32	15 St	Between Bay Road and West Ave	North	175																		
<b>SUBTOTAL NORTH SIDE OF 15 STREET=</b>																						
BETWEEN BAY ROAD AND WEST AVE																						
33	15 St	Between West Ave and Alton Road	South	39	2																	
34	15 St	Between West Ave and Alton Road	South			10	2															
35	15 St	Between West Ave and Alton Road	South	19	1																	
37	15 St	Between West Ave and Alton Road	South	21	1																	
38	15 St	Between West Ave and Alton Road	South	64	3																	
<b>SUBTOTAL SOUTH SIDE OF 15 STREET=</b>																						
BETWEEN WEST AVE AND ALTON ROAD																						
36	15 St	Between West Ave and Alton Road	North	118	6																	
39	15 St	Between West Ave and Alton Road	North	119	6																	
<b>SUBTOTAL NORTH SIDE OF 15 STREET=</b>																						
BETWEEN WEST AVE AND ALTON ROAD																						
42	15 Ter	Between Bay Road and West Ave	South	64	N/A																	

Civil Works, Inc		WEST AVENUE IMPROVEMENTS - NORTH PROJECT																		May 10, 2020																				
Location Number	Street Name	Limits	Side	EXISTING									PROPOSED									Comments																		
				Type of Parking			Spaces Occupied			Type of Parking			Net Gain/Loss of Parking (LF)			Type of Parking			Net Gain/Loss of Parking (LF)																					
				Parallel	# of Marked Spaces	Angle	Perpendicular	Cars	Motorcycle	Parallel	# of Marked Spaces	Angle	Perpendicular	LF	Perpendicular	LF	Angle	Parallel	# of Marked Spaces	Perpendicular	LF		Angle	Parallel	# of Marked Spaces	Perpendicular	LF	Angle	# of Marked Spaces											
43	15 Ter	Between Bay Road and West Ave	South	36	N/A					2		0	0																											
<b>SUBTOTAL SOUTH SIDE OF 15 TERRACE=</b>				100	N/A	0	0	0	0	5	0	23	1	0	0	0	0	0	0	0	0	0	-36	N/A																
44	15 Ter	Between Bay Road and West Ave	North	17	N/A					1		0	0																											
45	15 Ter	Between Bay Road and West Ave	North	19	N/A					1		0	0																											
46	15 Ter	Between Bay Road and West Ave	North	46	N/A					2		21	1																											
<b>SUBTOTAL NORTH SIDE OF 15 TERRACE=</b>				82	0	0	0	0	0	4	0	21	1	0	0	0	0	0	0	0	0	0	-61	N/A																
<b>SUBTOTAL NORTH SIDE OF 15 TERRACE=</b>				100	5					5		93	4										-7	-1															One Proposed Handicap Parking	
48	15 Ter	Between West Ave and Alton Road	South	17	1					1		0	0																										Handicap	
50	15 Ter	Between West Ave and Alton Road	South	36	2					2		20	1																										Motorcycle Parking	
51	15 Ter	Between West Ave and Alton Road	South																																					
<b>SUBTOTAL SOUTH SIDE OF 15 TERRACE=</b>				163	8	9	2	0	0	8	4	113	5	0	0	0	0	0	0	0	0	0	-50	-3	-9	-2														One Proposed Handicap Parking
49	15 Ter	Between West Ave and Alton Road	North	117	6					6		93	4																											One Proposed Handicap Parking
52	15 Ter	Between West Ave and Alton Road	North	20	1					1		0	0																											
53	15 Ter	Between West Ave and Alton Road	North	102	5					5		102	4																											Freight Loading Zone
<b>SUBTOTAL NORTH SIDE OF 15 TERRACE=</b>				139	12	0	0	0	0	12	0	195	8	0	0	0	0	0	0	0	0	0	-44	-4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
56	16 St	Between Biscayne Bay and Bay Road	South	N/A	N/A					-		N/A	N/A																											Approx 182' of private parking. No changes
57	16 St	Between Biscayne Bay and Bay Road	North	N/A	N/A					-		N/A	N/A																										Approx 102' of private parking. No changes	
<b>SUBTOTAL 16 STREET=</b>				N/A	N/A	18	4	0	0	N/A	0	N/A	N/A	0	0	0	0	0	0	0	0	N/A	N/A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		Approx 284' of private parking. No changes
58	16 St	Between Bay Road and West Ave	South	149	N/A					7		115	5																											One Proposed Handicap Parking

Location Number	Street Name	Limits	Side	EXISTING								PROPOSED								Comments							
				Type of Parking				Spaces Occupied				Type of Parking				Net Gain/Loss of Parking [LF]											
				Parallel	# of Marked Spaces	Perpendicular	Angle	Parallel	Cars	Motorcycle	Perpendicular	Angle	Parallel	LF	# of Marked Spaces	Perpendicular	LF	# of Marked Spaces	Angle		Parallel	LF	# of Marked Spaces				
59	16 St	Between Bay Road and West Ave	South	13	N/A						1																
60	16 St	Between Bay Road and West Ave	South	25	N/A						1																
<b>SUBTOTAL SOUTH SIDE OF 16 STREET=</b>				137	N/A	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<b>BETWEEN BAY ROAD AND WEST AVE</b>																											
61	16 St	Between Bay Road and West Ave	North	46	N/A						3																
62	16 St	Between Bay Road and West Ave	North	30	N/A						2																
63	16 St	Between Bay Road and West Ave	North	19	1						1	1															
<b>SUBTOTAL NORTH SIDE OF 16 STREET=</b>				95	N/A	0	0	0	0	0	6	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>BETWEEN BAY ROAD AND WEST AVE</b>																											
64	16 St	Between West Ave and Alton Road	South	118	6						6																
67	16 St	Between West Ave and Alton Road	South	58	N/A						0																
<b>SUBTOTAL SOUTH SIDE OF 16 STREET=</b>				176	N/A	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>BETWEEN WEST AVE AND ALTON ROAD</b>																											
65	16 St	Between West Ave and Alton Road	North	119	N/A						6	1															
66	16 St	Between West Ave and Alton Road	North	39	N/A						2	1															
<b>SUBTOTAL NORTH SIDE OF BAY ROAD=</b>				158	N/A	0	0	0	0	0	8	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>BETWEEN WEST AVE AND ALTON ROAD</b>																											
88	Bay Road	Between Collins Canal and Lincoln Rd	East	48	N/A						2																
89	Bay Road	Between Collins Canal and Lincoln Rd	East	20	N/A							4															
90	Bay Road	Between Collins Canal and Lincoln Rd	East	55	N/A						3																
91	Bay Road	Between Collins Canal and Lincoln Rd	East	44	N/A						3	1															
92	Bay Road	Between Collins Canal and Lincoln Rd	East	37	N/A						2																
93	Bay Road	Between Collins Canal and Lincoln Rd	East	18	N/A						1																
<b>SUBTOTAL EAST SIDE OF BAY ROAD=</b>				222	N/A	0	0	0	0	0	11	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>BETWEEN COLLINS CANAL AND LINCOLN ROAD</b>																											

**WEST AVENUE IMPROVEMENTS - NORTH PROJECT**

Civil Works, Inc

May 10, 2020

Location Number	Street Name	Limits	Side	EXISTING										PROPOSED										Comments							
				Type of Parking					Spaces Occupied					Type of Parking					Net Gain/Loss of Parking [LF]												
				Parallel	Perpendicular	Angle	LF	# of Marked Spaces	Cars	Motorcycle	Parallel	Perpendicular	Angle	LF	# of Marked Spaces	Parallel	Perpendicular	Angle	LF	# of Marked Spaces	Parallel	Perpendicular	Angle		LF	# of Marked Spaces					
94	Bay Road	Between Collins Canal and Lincoln Rd	West	28	1						0	0	0	0	0							-28	-1					Handicap			
95	Bay Road	Between Collins Canal and Lincoln Rd	West	24	N/A						1											-2	N/A					Existing Commercial Loading Zone			
96	Bay Road	Between Collins Canal and Lincoln Rd	West	30	N/A						2											-30	N/A								
97	Bay Road	Between Collins Canal and Lincoln Rd	West	17	N/A						1	1										-17	N/A								
98	Bay Road	Between Collins Canal and Lincoln Rd	West	75	N/A						3											-31	N/A								
99	Bay Road	Between Collins Canal and Lincoln Rd	West	17	N/A						1											-17	N/A								
100	Bay Road	Between Collins Canal and Lincoln Rd	West	24	N/A						1											-24	N/A								
<b>SUBTOTAL WEST SIDE OF BAY ROAD=</b>				215	N/A	0	0	0	0	0	9	1										66	3	0	0	0	0	0	0	0	
<b>BETWEEN COLLINS CANAL AND LINCOLN ROAD</b>																															
101	Bay Road	Between Lincoln Rd and Lincoln Ter	East	27	1						1											22	1						Existing Handicap		
102	Bay Road	Between Lincoln Rd and Lincoln Ter	East	24	N/A						1											0	0								
103	Bay Road	Between Lincoln Rd and Lincoln Ter	East	24	N/A						7											28	1								
104	Bay Road	Between Lincoln Rd and Lincoln Ter	East	26	N/A						1											0	0								
<b>SUBTOTAL EAST SIDE OF BAY ROAD=</b>				101	N/A	0	0	0	0	0	10	0											50	2	0	0	0	0	0	0	0
<b>BETWEEN LINCOLN ROAD AND LINCOLN TERRACE</b>																															
105	Bay Road	Between Lincoln Rd and Lincoln Ter	West	37	2						3											0	0								
106	Bay Road	Between Lincoln Rd and Lincoln Ter	West	80	4						4											66	3								
<b>SUBTOTAL WEST SIDE OF BAY ROAD=</b>				117	6	0	0	0	0	7	0												66	3	0	0	0	0	0	0	0
<b>BETWEEN LINCOLN ROAD AND LINCOLN TERRACE</b>																															
107	Bay Road	Between Lincoln Ter and 16 St	East	46	2						2											22	1								
108	Bay Road	Between Lincoln Ter and 16 St	West	60	3						3											0	0								
<b>SUBTOTAL SIDE OF BAY ROAD=</b>				106	5	0	0	0	0	5	0												22	1	0	0	0	0	0	0	0
<b>BETWEEN LINCOLN TERRACE AND 16 STREET</b>																															
109	Bay Road	Between 16 St and 15 Ter	East	46	N/A						2											42	2								

**Civil Works, Inc** **WEST AVENUE IMPROVEMENTS - NORTH PROJECT** **May 10, 2020**

Location Number	Street Name	Limits	Side	EXISTING												PROPOSED												Comments											
				Type of Parking						Spaces Occupied						Type of Parking						Net Gain/Loss of Parking [LF]																	
				Parallel			Perpendicular			Angle			Cars	Motorcycle	Parallel			Perpendicular			Angle			Parallel			Perpendicular			Angle									
				LF	# of Marked Spaces	# of Marked Spaces	LF	# of Marked Spaces	# of Marked Spaces	LF	# of Marked Spaces	# of Marked Spaces			LF	# of Marked Spaces	# of Marked Spaces	LF	# of Marked Spaces	# of Marked Spaces	LF	# of Marked Spaces	# of Marked Spaces	LF	# of Marked Spaces	# of Marked Spaces	LF		# of Marked Spaces	# of Marked Spaces	LF	# of Marked Spaces	# of Marked Spaces						
110	Bay Road	Between 16 St and 15 Ter	East	20	N/A							1				20	1																						
<b>SUBTOTAL EAST SIDE OF BAY ROAD=</b>				66	N/A	0	0	0	0	0	3	0				62	3	0	0	0	0	0	-4	N/A	0	0	0	0	0	0	0	0	0						
<b>BETWEEN 16 STREET AND 15 TERRACE</b>				109	N/A						5	1				44	2																						
111	Bay Road	Between 16 St and 15 Ter	West	109	N/A						5	1				44	2																						
<b>SUBTOTAL WEST SIDE OF BAY ROAD=</b>				109	N/A	0	0	0	0	0	5	1				44	2	0	0	0	0	0	-65	N/A	0	0	0	0	0	0	0	0	0	0					
<b>BETWEEN 16 STREET AND 15 TERRACE</b>				43	N/A						2					42	2																						
112	Bay Road	Between 15 Ter and 15 St	East	63	N/A						3	1				44	2																						
113	Bay Road	Between 15 Ter and 15 St	East	25	1						1	1				23	1																						
116	Bay Road	Between 15 Ter and 15 St	West	20	1						1					0	0																						
<b>SUBTOTAL EAST SIDE OF BAY ROAD=</b>				106	N/A	0	0	0	0	0	5	1				86	4	0	0	0	0	0	-20	N/A	0	0	0	0	0	0	0	0	0	0	0				
<b>BETWEEN 15 TERRACE AND 15 STREET</b>				32	N/A						1	3				88	4																						
114	Bay Road	Between 15 Ter and 15 St	West	25	1						1	1				23	1																						
115	Bay Road	Between 15 Ter and 15 St	West	20	1						1					0	0																						
117	Bay Road	Between 15 Ter and 15 St	West	36	N/A						2					22	1																				One Proposed Handicap Space		
<b>SUBTOTAL WEST SIDE OF BAY ROAD=</b>				113	N/A	0	0	0	0	0	5	4				133	6	0	0	0	0	0	20	N/A	0	0	0	0	0	0	0	0	0	0	0				
<b>BETWEEN 15 TERRACE AND 15 STREET</b>				44	N/A						2	1				44	2																						
118	Bay Road	Between 15 St and Flamingo Way	East	29	N/A						2					22	1																						
119	Bay Road	Between 15 St and Flamingo Way	East	73	N/A	0	0	0	0	0	4	1				66	3	0	0	0	0	-7	N/A	0	0	0	0	0	0	0	0	0	0	0	0				
<b>SUBTOTAL EAST SIDE OF BAY ROAD=</b>				112	N/A						6					157	7																						
<b>BETWEEN 15 STREET AND FLAMINGO WAY</b>				112	N/A	0	0	0	0	0	6	0				157	7	0	0	0	0	0	45	N/A	0	0	0	0	0	0	0	0	0	0	0	0	0		
<b>SUBTOTAL WEST SIDE OF BAY ROAD=</b>				20	N/A						1					20	1																						
<b>BETWEEN 15 STREET AND FLAMINGO WAY</b>				45	N/A						2					44	2																						
121	Bay Road	Between Flamingo Way and 14 Ter	East	65	N/A	0	0	0	0	0	3	0				64	3	0	0	0	0	-1	N/A	0	0	0	0	0	0	0	0	0	0	0	0	0			
122	Bay Road	Between Flamingo Way and 14 Ter	East	112	N/A						6					157	7																						
<b>SUBTOTAL EAST SIDE OF BAY ROAD=</b>				112	N/A	0	0	0	0	0	6	0				157	7	0	0	0	0	0	45	N/A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<b>BETWEEN 15 STREET AND FLAMINGO WAY</b>				20	N/A						1					20	1																						
<b>SUBTOTAL WEST SIDE OF BAY ROAD=</b>				45	N/A						2					44	2																						
<b>BETWEEN FLAMINGO WAY AND 14 TERRACE</b>				65	N/A	0	0	0	0	0	3	0				64	3	0	0	0	0	0	-1	N/A	0	0	0	0	0	0	0	0	0	0	0	0	0		

Spaces Occupied: Refers to actual vehicles parked on Thursday 04-14-2022 from 8:00 PM to 11:00 PM.

\* Not included on the total





**WEST AVENUE IMPROVEMENTS - NORTH PROJECT**

May 10, 2020

Location Number	Street Name	Limits	Side	EXISTING										PROPOSED										Comments		
				Type of Parking					Spaces Occupied					Type of Parking					Net Gain/Loss of Parking [LF]							
				Parallel		Perpendicular		Angle	# of Marked Spaces	Cars	Motorcycle	Parallel		Perpendicular		Angle	# of Marked Spaces	LF	# of Marked Spaces	Parallel		Perpendicular			Angle	# of Marked Spaces
				LF	# of Marked Spaces	LF	# of Marked Spaces	LF				# of Marked Spaces	LF	# of Marked Spaces	LF	# of Marked Spaces				LF	# of Marked Spaces	LF	# of Marked Spaces		LF	
<b>SUBTOTAL NORTH SIDE OF LINCOLN ROAD=</b> BETWEEN LINCOLN COURT AND BAY ROAD				0	0	0	0	97	8	7	0	0	0	0	0	0	0	0	0	0	0	0	-15	-1	One Proposed Handicap Parking	
75	Lincoln Rd	Between Bay Road and West Ave	South					137	7	7														Proposed Spaces include one handicap parking		
76	Lincoln Rd	Between Bay Road and West Ave	South	39	2					3												57	7			
77	Lincoln Rd	Between Bay Road and West Ave	South	59	3					2												-59	-3	Freight Loading Zone		
<b>SUBTOTAL SOUTH SIDE OF LINCOLN ROAD=</b> BETWEEN BAY ROAD AND WEST AVE				98	5	0	0	137	7	12	0	0	0	0	0	0	0	0	0	0	0	0	-34	1	One Proposed Handicap Parking	
78	Lincoln Rd	Between Bay Road and West Ave	North					99	8	8																
79	Lincoln Rd	Between Bay Road and West Ave	North	137	2					2												-137	-2			
<b>SUBTOTAL NORTH SIDE OF LINCOLN ROAD=</b> BETWEEN BAY ROAD AND WEST AVE				137	2	0	0	99	8	10	0	0	0	0	0	0	0	0	0	0	0	0	-27	-2	Motorcycle Parking	
80	Lincoln Rd	Between West Ave and Alton Road	South	15	3																	-15	-3			
81	Lincoln Rd	Between West Ave and Alton Road	South	22	1					1												-22	-1			
83	Lincoln Rd	Between West Ave and Alton Road	South	47	2					2												37	2			
84	Lincoln Rd	Between West Ave and Alton Road	South	57	3					1												-67	-3	Taxi Zone		
<b>SUBTOTAL SOUTH SIDE OF LINCOLN ROAD=</b> BETWEEN WEST AVE AND ALTON ROAD				151	9	0	0	0	0	4	3	0	0	0	0	0	0	0	0	0	0	0	-67	-5	35 are reserved for restaurant tables (4 Spaces). Proposed Spaces include one 14' are used to have restaurant tables (1 Space).	
82	Lincoln Rd	Between West Ave and Alton Road	North					97	7	3																
85	Lincoln Rd	Between West Ave and Alton Road	North					105	8	7																
<b>SUBTOTAL NORTH SIDE OF LINCOLN ROAD=</b> BETWEEN WEST AVE AND ALTON ROAD				0	0	0	0	202	15	10	0	0	0	0	0	0	0	0	0	0	0	0	0	-15	0	
86	Lincoln Ter	Between Biscayne Bay and Bay Road	South	221	N/A					12												-12	N/A			
87	Lincoln Ter	Between Biscayne Bay and Bay Road	North	242	N/A					7												-13	N/A			
<b>SUBTOTAL LINCOLN TERRACE=</b> BETWEEN BISCAYNE BAY AND BAYROAD				463	N/A	0	0	0	0	19	0	0	0	0	0	0	0	0	0	0	0	0	-25	N/A		
14	West Ave	Between 14 St and 14 Ter	West	23	N/A					0												-23	N/A			
15	West Ave	Between 14 St and 14 Ter	West	19	N/A					0												-19	N/A			











Civil Works, Inc **WEST AVENUE IMPROVEMENTS - SOUTH PROJECT** May 10, 2020

Location Number	Street Name	Limits	Side	EXISTING										PROPOSED										Comments				
				Type of Parking					Spaces Occupied		Type of Parking					Net Gain/Loss of Parking [UF]												
				Parallel	Perpendicular	Angle	FT	# of Marked Spaces	Cars	Motorcycle	Parallel	Perpendicular	Angle	FT	# of Marked Spaces	Parallel	Perpendicular	Angle	FT	# of Marked Spaces	Parallel	Perpendicular	Angle		FT	# of Marked Spaces		
<b>SUBTOTAL EAST SIDE OF WEST AVE=</b> Between 11 St and 12 St				209	4	0	0	0	0	0	4	18	0	0	0	0	0	0	0	-209	N/A	0	0	0	0	0	0	Only 4 spaces are currently marked
53	West Ave	Between 12 St and 13 St	East	66	N/A						4								-66	N/A								
54	West Ave	Between 12 St and 13 St	East	46	N/A						1	12							-46	N/A								
55	West Ave	Between 12 St and 13 St	East	20	1						1								-20	-1							Passenger Loading Zone	
<b>SUBTOTAL EAST SIDE OF WEST AVE=</b> Between 12 St and 13 St				132	1	0	0	0	0	0	6	12	0	0	0	0	0	0	-132	N/A	0	0	0	0	0	0	0	Only 1 space is currently marked
62	West Ave	Between 13 St and 14 St	East	65	N/A						3								-65	N/A								
63	West Ave	Between 13 St and 14 St	East	47	N/A						2								-47	N/A								
64	West Ave	Between 13 St and 14 St	East	31	N/A						2								-31	N/A								
<b>SUBTOTAL EAST SIDE OF WEST AVE=</b> Between 13 St and 14 St				143	N/A	0	0	0	0	0	7	0	0	0	0	0	0	0	-143	N/A	0	0	0	0	0	0	0	
65	West Ave	Between 13 St and 14 St	West	65	N/A						0								-65	N/A								
<b>SUBTOTAL WEST SIDE OF WEST AVE=</b> Between 13 St and 14 St				65	N/A	0	0	0	0	0	0	0	0	0	0	0	0	0	-65	N/A	0	0	0	0	0	0	0	

Spaces Occupied: Refers to actual vehicles parked on Thursday 04-14-2022 from 8:00 PM to 11:00 PM.  
\* Not included on the total



## **APPENDIX 2**

# **Parking Restriction Standards**

## The 2021 Florida Statutes

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[Title XXIII](#)  
MOTOR VEHICLES

[Chapter 316](#)  
STATE UNIFORM TRAFFIC CONTROL

[View Entire Chapter](#)

### **316.1945 Stopping, standing, or parking prohibited in specified places.—**

(1) Except when necessary to avoid conflict with other traffic, or in compliance with law or the directions of a police officer or official traffic control device, no person shall:

(a) Stop, stand, or park a vehicle:

1. On the roadway side of any vehicle stopped or parked at the edge or curb of a street.
2. On a sidewalk.
3. Within an intersection.
4. On a crosswalk.
5. Between a safety zone and the adjacent curb or within 30 feet of points on the curb immediately opposite the ends of a safety zone, unless the Department of Transportation indicates a different length by signs or markings.
6. Alongside or opposite any street excavation or obstruction when stopping, standing, or parking would obstruct traffic.
7. Upon any bridge or other elevated structure upon a highway or within a highway tunnel.
8. On any railroad tracks.
9. On a bicycle path.
10. At any place where official traffic control devices prohibit stopping.
11. On the roadway or shoulder of a limited access facility, except as provided by regulation of the Department of Transportation, or on the paved portion of a connecting ramp; except that a vehicle which is disabled or in a condition improper to be driven as a result of mechanical failure or crash may be parked on such shoulder for a period not to exceed 6 hours. This provision is not applicable to a person stopping a vehicle to render aid to an injured person or assistance to a disabled vehicle in obedience to the directions of a law enforcement officer or to a person stopping a vehicle in compliance with applicable traffic laws.
12. For the purpose of loading or unloading a passenger on the paved roadway or shoulder of a limited access facility or on the paved portion of any connecting ramp. This provision is not applicable to a person stopping a vehicle to render aid to an injured person or assistance to a disabled vehicle.

(b) Stand or park a vehicle, whether occupied or not, except momentarily to pick up or discharge a passenger or passengers:

1. In front of a public or private driveway.
2. Within 15 feet of a fire hydrant.
3. Within 20 feet of a crosswalk at an intersection.
4. Within 30 feet upon the approach to any flashing signal, stop sign, or traffic control signal located at the side of a roadway.
5. Within 20 feet of the driveway entrance to any fire station and on the side of a street opposite the entrance to any fire station within 75 feet of such entrance (when property signposted).
6. On an exclusive bicycle lane.
7. At any place where official traffic control devices prohibit standing.

(c) Park a vehicle, whether occupied or not, except temporarily for the purpose of, and while actually engaged in, loading or unloading merchandise or passengers:

1. Within 50 feet of the nearest rail of a railroad crossing unless the Department of Transportation establishes a different distance due to unusual circumstances.

2. At any place where official signs prohibit parking.

(2) No person shall move a vehicle not lawfully under his or her control into any such prohibited area or away from a curb such a distance as is unlawful.

(3) A law enforcement officer or parking enforcement specialist who discovers a vehicle parked in violation of this section or a municipal or county ordinance may:

(a) Issue a ticket form as may be used by a political subdivision or municipality to the driver; or

(b) If the vehicle is unattended, attach such ticket to the vehicle in a conspicuous place, except that the uniform traffic citation prepared by the department pursuant to s. [316.650](#) may not be issued by being attached to an unattended vehicle.

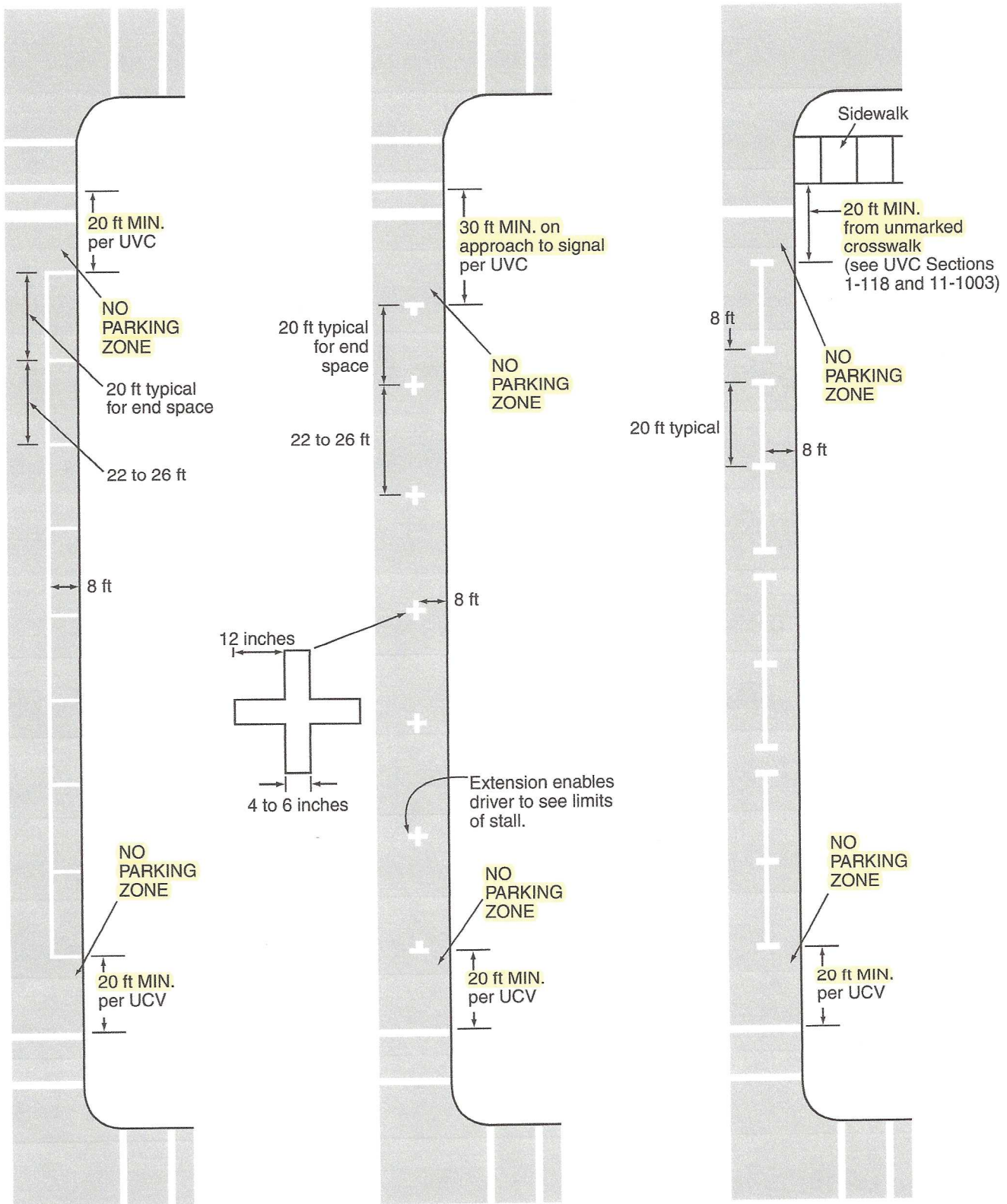
The uniform traffic citation prepared by the department pursuant to s. [316.650](#) may not be issued for violation of a municipal or county parking ordinance.

(4) A violation of this section is a noncriminal traffic infraction, punishable as a nonmoving violation as provided in chapter 318.

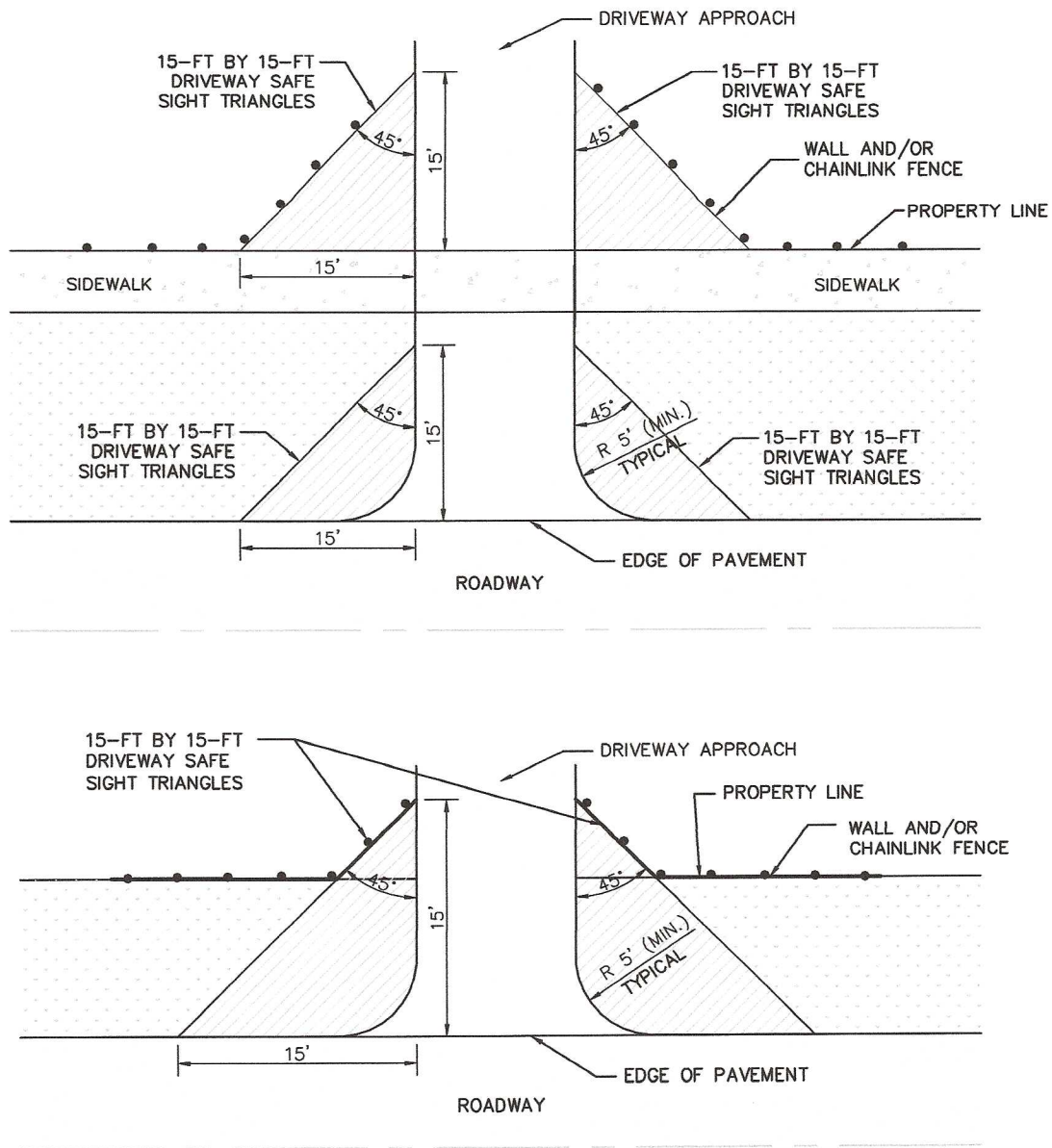
**History.**—s. 1, ch. 71-135; s. 1, ch. 76-31; s. 2, ch. 78-52; s. 1, ch. 79-403; s. 2, ch. 80-316; s. 5, ch. 83-68; s. 5, ch. 84-309; s. 1, ch. 85-81; s. 2, ch. 88-91; s. 317, ch. 95-148; s. 143, ch. 99-248.

**Note.**—Former s. 316.160.

Figure 3B-21. Examples of Parking Space Markings



F:\WORK\B\ACAD-DWG-STANDARDS\CMB - STANDARD - DETAILS\Public Works Manual (2015)\CMB - Roadway Details\Roadway Details.dwg

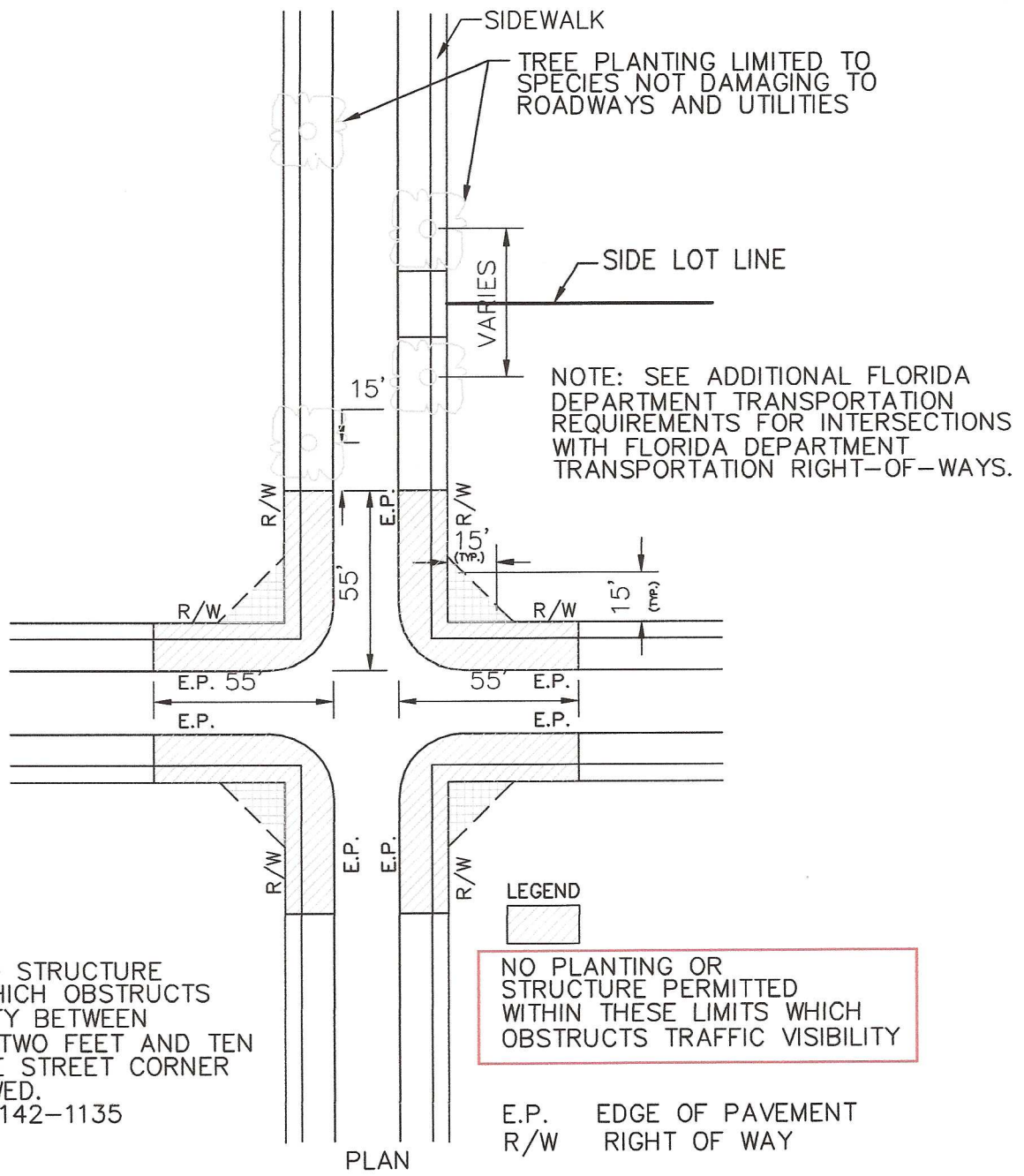


THE HEIGHT OF FENCES, WALLS, BUS SHELTERS AND HEDGES SHALL NOT EXCEED 2 FEET IN HEIGHT WITHIN FIFTEEN (15) FEET OF THE EDGE OF DRIVEWAY LEADING TO A PUBLIC RIGHT-OF-WAY.

THE SAFE SIGHT DISTANCE TRIANGLE AREA SHALL NOT CONTAIN OBSTRUCTIONS TO CROSS-VISIBILITY AT A HEIGHT BETWEEN 2 FEET AND 6 FEET ABOVE PAVEMENT. POTENTIAL OBSTRUCTIONS INCLUDE, BUT ARE NOT LIMITED TO STRUCTURES, GRASS, GROUND COVERS, SHRUBS, VINES, HEDGES, TREES, ROCKS, WALLS AND FENCES.

DRIVEWAY SAFE SIGHT TRIANGLE  
N.T.S.

F:\WORKS\B\ALL\CAD-DWG\STANDARDS\CMB - STANDARD - DETAIL\S\Public Works Manual (2015)\CMB Roadway Details\Roadway Details.DWG

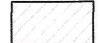


LEGEND



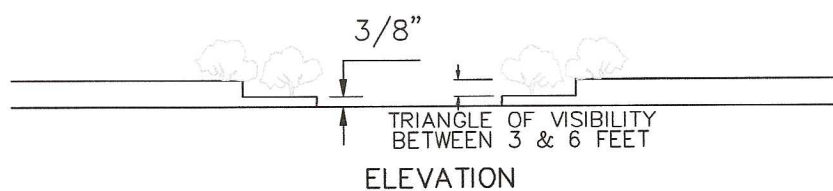
AREA WHERE NO STRUCTURE OR PLANTING WHICH OBSTRUCTS TRAFFIC VISIBILITY BETWEEN THE HEIGHT OF TWO FEET AND TEN FEET ABOVE THE STREET CORNER GRADE IS ALLOWED.  
CITY CODE SEC 142-1135

LEGEND



NO PLANTING OR STRUCTURE PERMITTED WITHIN THESE LIMITS WHICH OBSTRUCTS TRAFFIC VISIBILITY

E.P. EDGE OF PAVEMENT  
R/W RIGHT OF WAY



SIGHT RESTRICTIONS AT INTERSECTIONS WITH NO DEDICATED RADII  
N.T.S.

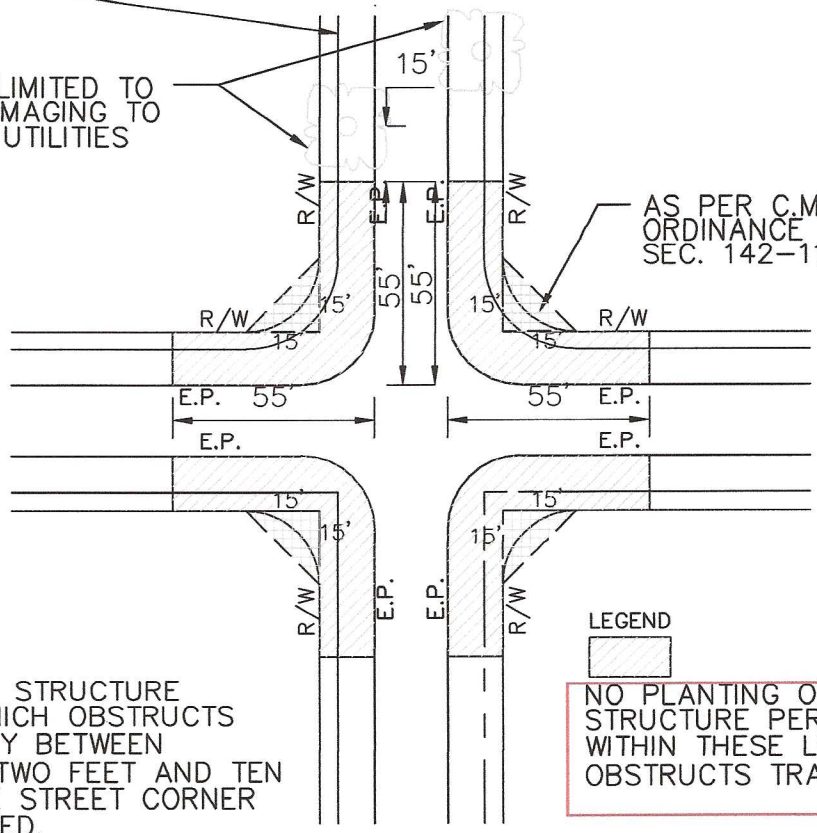
APPROVED	REVISED
	09/12/2003
	10/13/2003
03/05/2003	04/22/2005
	12/2006

F:\WORK\ALL\CAD-DWG\STANDARDS\CMB - STANDARD\_DETAIL\Public Works Manual (2015)\CMB Roadway Details\Roadway Details.DWG

SIDEWALK

TREE PLANTING LIMITED TO SPECIES NOT DAMAGING TO ROADWAYS AND UTILITIES

AS PER C.M.B. ORDINANCE 89-2665 SEC. 142-1135



LEGEND



AREA WHERE NO STRUCTURE OR PLANTING WHICH OBSTRUCTS TRAFFIC VISIBILITY BETWEEN THE HEIGHT OF TWO FEET AND TEN FEET ABOVE THE STREET CORNER GRADE IS ALLOWED. CITY CODE SEC 142-1135

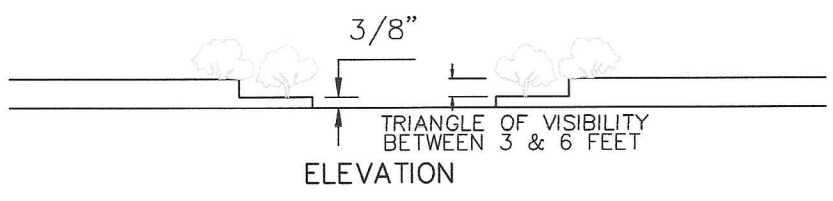
LEGEND



NO PLANTING OR STRUCTURE PERMITTED WITHIN THESE LIMITS WHICH OBSTRUCTS TRAFFIC VISIBILITY

PLAN

E.P. EDGE OF PAVEMENT  
R/W RIGHT OF WAY



ELEVATION

NOTE:

FOR 30 M.P.H. RESIDENTIAL STREETS. SEE ADDITIONAL FLORIDA DEPARTMENT OF TRANSPORTATION REQUIREMENTS FOR INTERSECTIONS WITH FLORIDA DEPARTMENT OF TRANSPORTATION RIGHT-OF-WAYS.

SIGHT RESTRICTIONS AT INTERSECTIONS WITH DEDICATED RADII  
N.T.S.

APPROVED

03/05/2003

REVISED

09/12/2003  
10/13/2003  
04/22/2005  
12/2006

TITLE: